Grayson County Metropolitan Planning Organization (MPO)

TECHNICAL ADVISORY COMMITTEE
AGENDA

Wednesday, September 18, 2024 @ 9:00 am
Texas Department of Transportation
3904 S US 75, Sherman, Texas 75090

Please visit our MPO website www.gcmpo.org for background materials under the "Committees/Meetings" link or under "News and Announcements" at our home page.

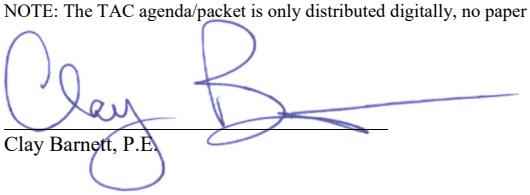
I. Call to order
II. Acknowledgment of Quorum by Chairman
III. Public Comment Period
IV. Consider approval of the minutes of the MPO TAC meeting of July 17, 2024
☑ Action ☐ Information
V. Review a Nondiscrimination Statement and Recommend Approval of a Resolution Adopting the Nondiscrimination Statement to the Policy Board
☑ Action ☐ Information
VI. **PUBLIC HEARING:** Review the Annual Listing of Obligated Projects (ALOP) and Recommend Approval of the ALOP to the Policy Board
☑ Action ☐ Information
VII. **PUBLIC HEARING:** Review the 2050 Metropolitan Transportation Plan (MTP) and Recommend Approval of a Resolution Adopting the 2050 MTP to the Policy Board
☑ Action ☐ Information
VIII. Announcements
(Informal Announcements, Future Agenda Items, and Next Meeting Date)
- MPO Policy Board Next meeting October 2, 2024
- TAC Next meeting November 20, 2024
- Freight Advisory Committee Next meeting TBD

IX. Adjournment

All meetings of the Grayson County Metropolitan Planning Organization (MPO) and Technical Advisory Committee (TAC) are open to the public. The MPO is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal opportunity for effective communications will be provided upon request. Please contact Clay Barnett at (903) 328-2090 at least 24 hours in advance if accommodation is needed.

The above notice was posted at the Grayson County Courthouse in a place readily accessible to the public and made available to the Grayson County Clerk on or before September 13, 2024.

NOTE: The TAC agenda/packet is only distributed digitally, no paper copies will be sent. If you need a printed copy, please contact MPO staff.



Clay Barnett, P.E.

Grayson County Metropolitan Planning Organization (MPO)
TECHNICAL ADVISORY COMMITTEE

Wednesday, July 17, 2024 @ 9:00 am
Texas Department of Transportation
3904 S US 75, Sherman, Texas 75090

Committee Members Present:

Clay Barnett, P.E., Chairman	Grayson County MPO
Rob Rae, AICP	City of Sherman
Mary Tate	City of Denison
Bill Benton	Grayson County
Alex Glushko, AICP for Len McManus, P.E.	City of Van Alstyne
Noel Paramanantham, P.E. for Aaron Bloom, P.E.	TxDOT Sherman Area Engineer

Committee Members Absent:

None

Non-Voting Members Present:

Hanna Hutcheson	Federal Highway Administration (FHWA)
Shannon Hawkins	TxDOT TPP Division

Non-Voting Members Absent:

Shellie White	Texoma Area Paratransit System (TAPS)
Michelle Bloomer	Federal Transit Administration (FTA)

Guests Present:

Steven Flores	Huitt-Zollars
Grace Zaborski	Huitt-Zollars
Lane Jones	City of Van Alstyne
Bob Johnson, P.E.	City of Van Alstyne
Tara Payne, P.E.	McManus & Johnson Consulting Engineers

I. Call to Order

Mr. Barnett called the meeting to order at 9:07 a.m.

II. Acknowledgement of Quorum by Chairman

Mr. Barnett declared a quorum of the Policy Board present.

III. Public Comment Period

Tara Payne, P.E. asked about the Shared Use Path #4 and whether it would be specifically mentioned in the MPO. Mr. Barnett responded stating that it will be placed in the state TIP under group projects rather than specifically identified in the Grayson County MPO TIP. Tara Payne, P.E. asked if there would be any correspondence coming from TxDOT. Mr. Barnett replied that

they should notify the City of Van Alstyne that the project will be included in the 2025-2028 State TIP. Tara Payne, P.E. stated she would follow-up on it with TxDOT.

IV. Consider approval of the minutes of the MPO TAC meeting of April 17, 2024

Mr. Barnett inquired if all members had reviewed the minutes from the previous Policy Board meeting on April 17, 2024. Motion to approve by Mary Tate, seconded by Bill Benton. Motion carries.

V. Review the 2024 Grayson County Thoroughfare Plan and Recommend Approval of a Resolution Adopting the 2024 Grayson County Thoroughfare Plan to the Policy Board

Mr. Barnett introduced the 2024 Grayson County Thoroughfare plan and stated that a notice was published on July 7, 2023 to the County Judge, all high-ranking members of city staff and the interested parties list, as well as the local media, Chambers of Commerce and local emergency response agencies, local tourism departments, Greyhound and TCOG regarding the updates to the thoroughfare plan. Mr. Barnett stated that comments regarding the thoroughfare plan were received until 2:00 p.m. on August 18, 2023 and were made a part of the public record and available for review upon request. Mr. Barnett mentioned a request from the county they've been working on for the past 9 months, but they would still need to discuss more details. Mr. Barnett added that Grayson County had recently requested some changes after the close of the public comment period, but progress on their requested changes would be delayed until October 1 and the start of the new fiscal year at which time discussion on how to address the requested changes could resume. Ms. Tate asked what the timeline is for the thoroughfare plan to be approved. Mr. Barnett responded stating Sherman's comments can resolved quickly, but Grayson County has had some discussion around the fast-growing areas that will need to be resolved prior to final adoption of the Thoroughfare Plan. Mr. Benton asked if those were the only comments from municipalities. Mr. Barnett responded stating that there have been several comments from several small towns that were resolved prior to the close of the public comment period. He gave an example of some comments that were addressed from the City of Collinsville. Mr. Rae suggested that Grayson County should be responsible for funding any necessary changes. Mr. Barnett requested that they table the item until the comments made by Grayson County could be resolved. Ms. Tate stated that the issue with the county's comments is the timing and lack of forewarning relative to the other city's comments. Mr. Rae stated that there are some minor differences between the MPO's thoroughfare plan and their respective city's thoroughfare plan that would need to be addressed in order to prevent confusion on which plan is enforceable.

Motion to table recommending Approval of a Resolution Adopting the 2024 Grayson County Thoroughfare Plan to the Policy Board was made by Mr. Benton, seconded by Ms. Tate. Motion carried.

VI. 2050 Metropolitan Transportation Plan Workshop #2

Mr. Barnett stated that this is the first July TAC meeting in 5 years, but that it was needed in order to adopt a new MTP prior to the current MTP expiring on December 1st. Mr. Barnett stated that the objectives of the second MTP workshop are to introduce plans, goals and timelines, share

comments and feedback from the first public meeting, share the current public survey completion statistics, discuss notable improvements to be included in the Bicycle Pedestrian Plan, and discuss the project solicitation process. A presentation was given, which is attached to the minutes and incorporated herein.

Ms. Zaborski introduced the second of three 2050 MTP Workshops and explained the objectives previously stated by Mr. Barnett. Ms. Zaborski introduced the MTP chapters, and reviewed the MTP update timeline.

Ms. Zaborski then explained the means of getting public feedback, which includes a dot chart where stickers were placed based on questions about the conditions, safety, and values, as well as an online survey which asked a series of questions regarding demographic and traffic concerns, and transportation mode choices. Ms. Zaborski noted that most of the survey responses had almost the same number of agree and disagree votes, except the questions regarding the safety of walking, crossing the street, and bicycling which had a larger share of disagree votes. Ms. Zaborski also noted that there was slight increase in people choosing public busses for transportation. Mr. Barnett added that there were about 280 complete responses, and about 500 incomplete responses, so combining the survey with TAPS resulted in the survey being too long.

Ms. Zaborski introduced the Bicycle and Pedestrian Improvements Draft which included maps for urban trails, regional trails, and sidewalk analysis. Ms. Zaborski added that the urban trails align with the parks and trails plans for both Sherman and Denison, and the regional trails are connected to the urban trails and align with the TxDOT Tourism Trails Study. Ms. Zaborski continued stating that the sidewalk analysis was completed within a five-mile boundary of school zones. Mr. Rae asked if the 2022 Trail Master Plan for Sherman would be incorporated, and Ms. Zaborski responded yes. Mr. Barnett asked if the layers were received from the City of Sherman, Ms. Zaborski responded yes. Ms. Tate asked the same question, and Ms. Zaborski responded stating that they have the 2018 Parks and Trails layers, but still need the updated 2022 version. Mr. Glushko stated that Van Alstyne does not have the updated layers as well, but will be ready the next time they call for it. Ms. Zaborski asked if there have been any notable bicycle or pedestrian infrastructure improvement not included in the considered documents. Ms. Tate responded stating they had just completed a sidewalk and street assessment that could be beneficial. Mr. Glushko responded stating they have an exhibit showing several phases of the shared use path which includes a preliminary inventory of sidewalks that hasn't been reviewed yet.

Ms. Zaborski introduced the next chapter of the MTP, the Complete Street Assessment which is a new requirement for MTP updates. Ms. Zaborski stated that this chapter is fiscally constrained, and lays the groundwork for future studies and explained that it is an acknowledgement of how streets may benefit from a complete street framework and a discussion on how that might be implemented in a broad sense. Ms. Tate stated that she had the conceptual drawings and data for Spur 503 if needed. Ms. Zaborski stated that this chapter will explain and model the complete street framework, and select 3 roadways for complete street consideration with suggested alterations. She explained how it is a suggestion for future consideration, rather than a declaration. Mr. Barnett stated that more roads may be added to the existing list as needed, which includes Spur 503, FM 120, and SH 91. SH 84 (between US 75 and US 69) and SH 91 (between Spur 503 and SH 84) are also being considered. Mr. Barnett stated that these roads would need to be mapped,

and which roads are underutilized relative to its size. Mr. Glushko asked if FM 121 east of Van Alstyne up to US 75 would be included, and Mr. Barnett responding FM 121 wouldn't apply since the objective of the chapter is determining which roads would need a reduction in size.

The next section of the MTP workshop is Project Solicitation and Prioritization Updates. The project ranking was done through a program called Decision Lens which uses data from roadways in order to prioritize project based on metrics such as safety, congestion, environmental concerns etc. Mr. Barnett explained that this body has usually scored, ranked, and decided which projects to present to the Policy Board, where they decide whether to use the list or not. Mr. Barnett explained the rules for project funding; they have $8.2 million to spend on MPO projects and the next years funding would be used if the budget is surpassed, you can skip a single project but not make larger changes to the order of the list. Mr. Barnett then proceeded to explain the format of the project ranking table, as well as the information within each column. Mr. Barnett also stated that some of the projects are general improvements, rather than adding capacity which is usually what Cat 2 funds are used for. Mr. Barnett noted the total cost of all the projects submitted comes to about $684 million, and with the first 10 years of the MPO funds spent, only some of the projects will be funded 10 years from now. Mr. Rae asked if this was the ranking that came straight from Decision Lens. Mr. Barnett responded explaining the final score was derived by dividing the raw Decision Lens score by one minus the percent of local funding and 9.88% if the city provides the engineering. Mr. Rae stated that he would prefer more regionally significant projects to take priority, whether in Denison, Sherman, or Van Alstyne and Mr. Barnett agreed but noted that outside of US 75 and US 82, regionally significant becomes more difficult to define. Ms. Tate stated she would like to prioritize the interests of the entire region rather than individual areas, and Mr. Rae added US 75 and US 82 projects are good for the county. Mr. Barnett stated he was hoping TxDOT would submit some projects on US 82, and Mr. Paramanantham responded saying they will in the future, but their main focus is on US 75, which will be in good shape in the next 5 years. Mr. Paramanantham also stated another roadway which has become a main focus for TxDOT is US 377. Mr. Paramanantham continued stating there will be a TxDOT corridor study from the Red River to the Rio Grande for US 377, and the congestion found on US 377 will improve its significance. Mr. Paramanantham explained he is picking projects with the highest likelihood of being funded. Mr. Benton stated the importance of US 75 and FM 121 interchange due to large amounts of traffic and is questioning it's ranking. Mr. Barnett responded that the statistics for the cross street of FM 121 was used due to a majority of traffic on US 75 not using FM 121. Mr. Johnson asked how recent the data is, and Mr. Barnett responded stating that it is continuously updated by TxDOT. Mr. Benton states that his main concern is the prioritization of others projects taking precedent over the intersection of US 75 and FM 121, as well as the shrinkage of the project scale. Mr. Johnson stated his concern is that Grayson County's population has been growing at a rate of 10%-12%, and that the scores and over all funding does not reflect that. Mr. Glushko stated that Van Alstyne would prioritize the FM 121 and US 75 intersection over the SH 5 projects ranked above it and asks how Sherman and Denison would feel about reprioritizing the list. Mr. Jones stated his concern about the traffic regarding the intersection, especially when school starts again. Mr. Jones stated that retailers are waiting for the intersection project to be completed to start building in that area. Mr. Barnett states that data for the growth in homes and properties has to occur prior to showing up in TxDOT's system, and that roadway funding needs to take a more collaborative approach from regional entities. Mr. Johnson stated that the funding would be better used to fund the construction of the intersection rather than a U-turn. Mr. Paramanatham agreed

and stated that TxDOT's main is focus is going to finishing the upgrades for US 75 before funding goes towards smaller projects. He continued by stating all of US 75 is funded for the next 10 years except for segment 6, from Loy Lake to FM 120. Mr. Barnett asked if that segment should be the number one priority. Mr. Barnett also asked how many years of funding should be allocated to the project. Mr. Paramanatham responded stating yes, and 5 years with about 50% of the MPO funding and the remainder from the Commission. Mr. Rae asked where the US 75 segment 6 project is on the list, and Mr. Barnett responded that it is not on the list, but Denison has committed some local funds. Mr. Barnett stated that progress will be difficult without regional contributors, whether local government or private entities. The committee agreed that Segment 6 should be the top priority funded project. Mr. Rae stated that Grayson County should match the funds Van Alstyne is contributing, which is $4.5 million. The committee agreed that the US 75/FM 121 interchange should be the second highest priority project for funding. Mr. Rae stated that Sherman's biggest concern is the project on FM 1417, between US 75 and the high school. He stated the design on the project has been finished, and the city is acquiring the right of way, but there are no construction dollars. He stated there is about 10% funding from Sherman, and they're looking for about 15% from the MPO. The committee agreed that FM 1417 from US 75 to SH 56 should be the third highest priority project for funding. Mr. Paramanantham stated that TxDOT is looking into the future of whether US 82 should stay a four-lane road, or be upgraded to 6 lanes. Mr. Rae states that they added to their CIP a traffic study on the western side of Sherman to find the best way to handle the traffic on arterials connected to US 82. Mr. Paramanantham stated that the focus of the Commission is to upgrade US 82 from 2 lanes to 4 lanes and add frontage roads. The committee agreed that adding frontage roads along US 82 between FM 1417 and SH 289 and adding two interchanges should be the fourth highest priority project for funding.

Mr. Johnson asked Mr. Paramanantham if there is any process to speed up the process of funding projects. Mr. Paramanantham responded saying there is a large number of projects in Texas that are unfunded, but the state legislators did increase the funding available. The larger cities are going to take priority since funding is based on the number of lane miles, and there is not much more funding that will be able to be given other then what is current.

Mr. Barnett states that there will future stakeholder meetings regarding the MTP, and a draft will be released for public comment early September.

VII. Announcements

Mr. Barnett stated that the MPO Policy Board meeting will be on August 7th, and the TAC meeting will be September 18th. Mr. Barnett stated that TxDOT will have a call for projects for another charging station. The first call was limited to being located within one mile of the county courthouse, and along the US 75 corridor. The second call will not be as limited in its location.

VIII. Adjournment

Having no further business to discuss, Mr. Barnett adjourned the meeting at 11:33 a.m.

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Clay Barnett, P.E., Chairman, GCMPO Technical Advisory Committee

2050 Metropolitan Transportation Plan

Technical Advisory Committee

Workshop #2

Objectives:

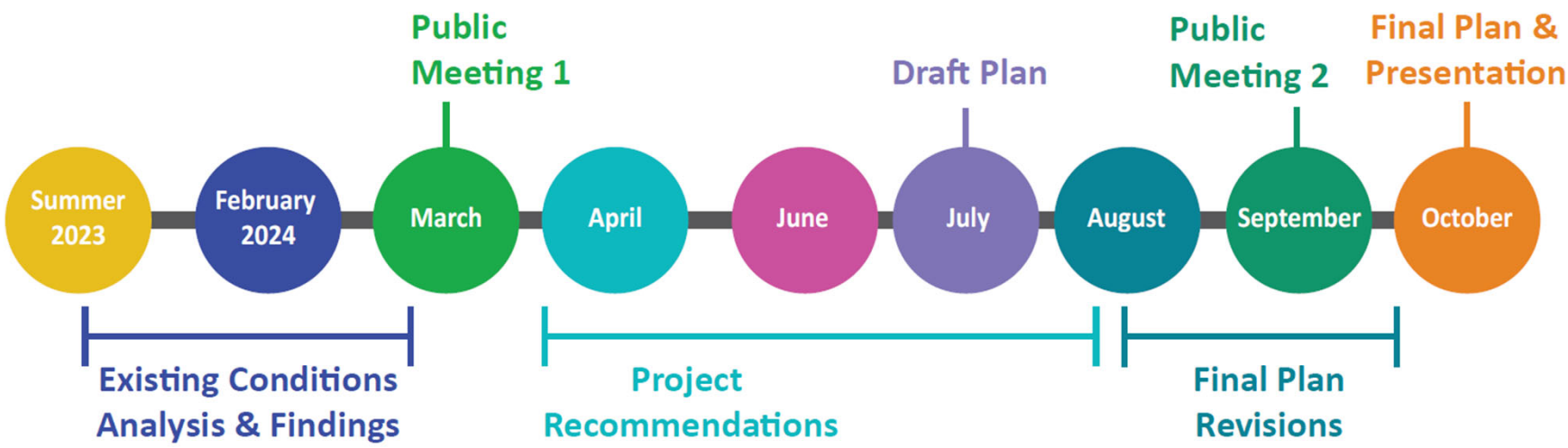
1. Review MTP goals, plans, and timelines
2. Share outcomes from the first (1st) public meeting
3. Share survey response data
4. Discuss bicycle and pedestrian improvements
5. Share Complete Street Assessment progress
6. Discuss the status of project solicitation and prioritization

Review MTP Goals, Plans, and Timelines

2050 MTP Chapters:

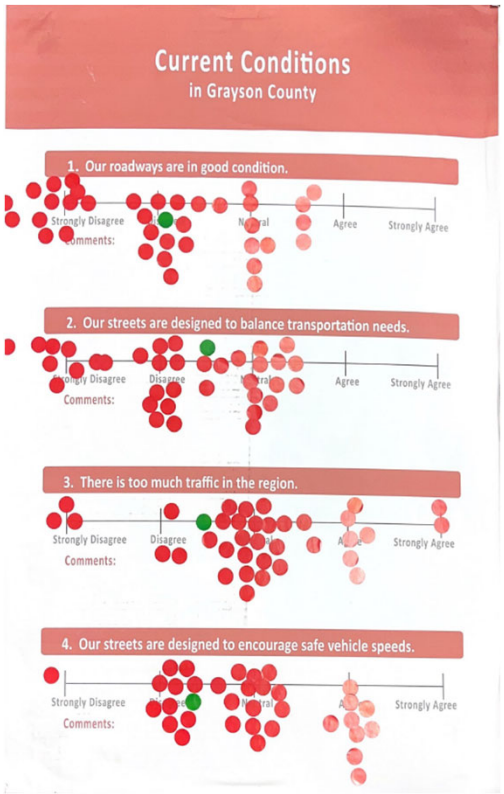
- Introduction
- Mobility Conditions
- Public Involvement
- Goals and Action Steps
- Environmental Justice, Resiliency, and Land Use
- Mobility Analysis
- Complete Streets Assessment
- Bicycle and Pedestrian Plan
- Financial Plan and Mobility Projects

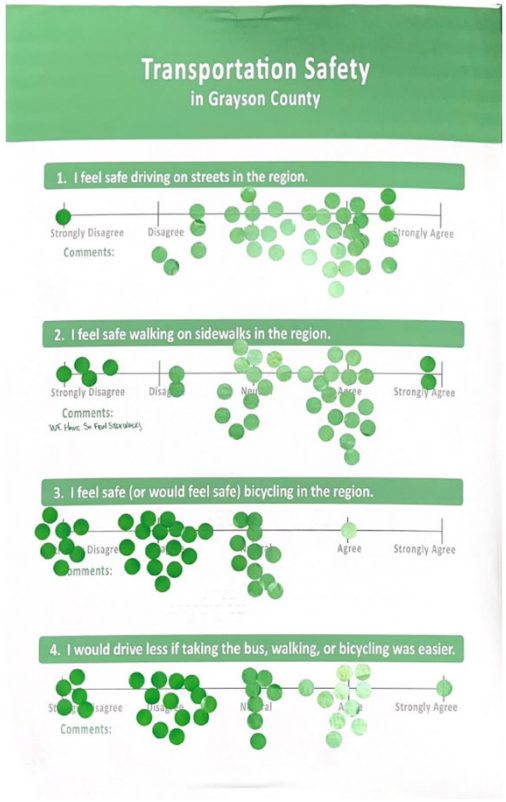
MTP Update Timeline

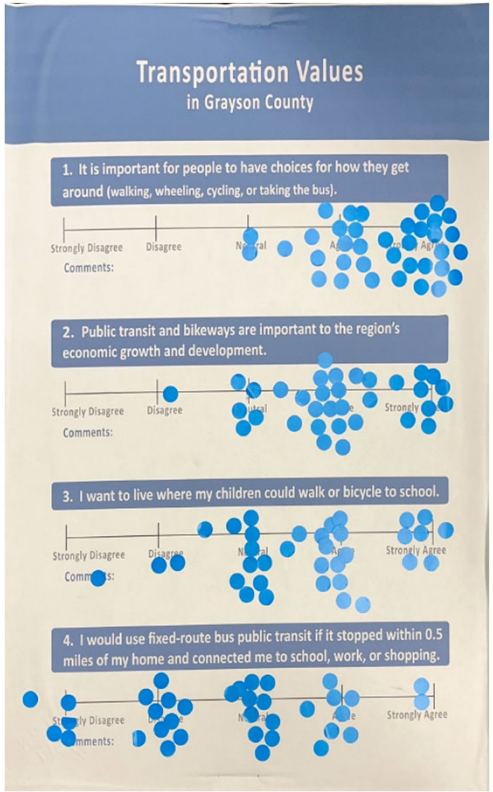


Public Meeting 1 Results

Conditions, Safety, and Values







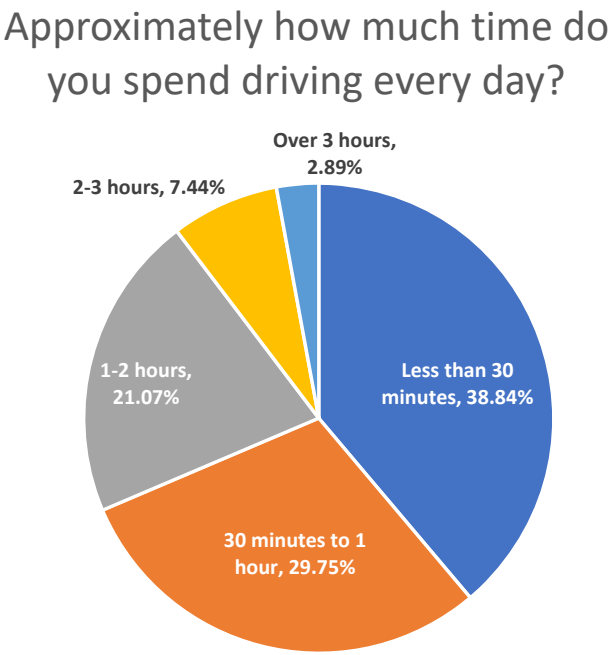
Survey Results

Demographic Data

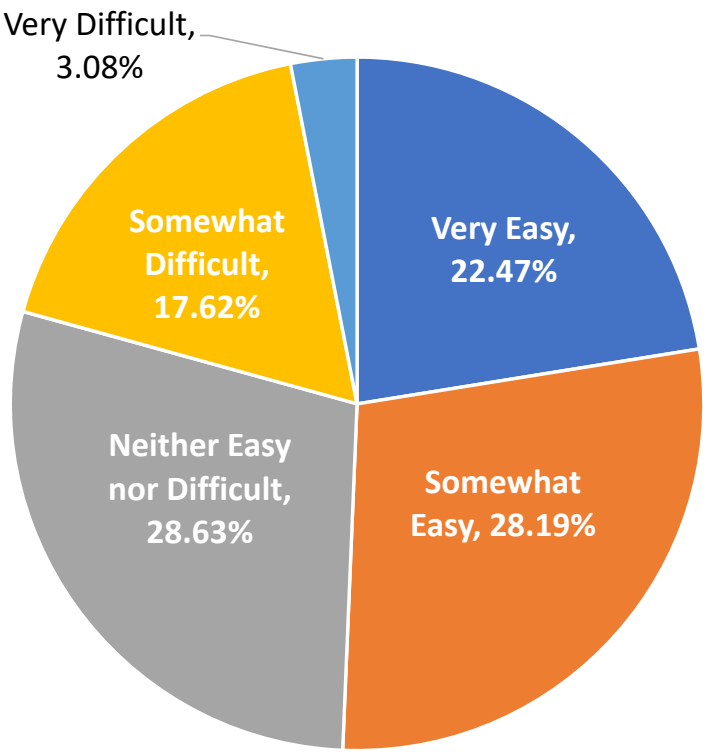
272 Responses

81.25% live in a zip code that falls within Grayson County

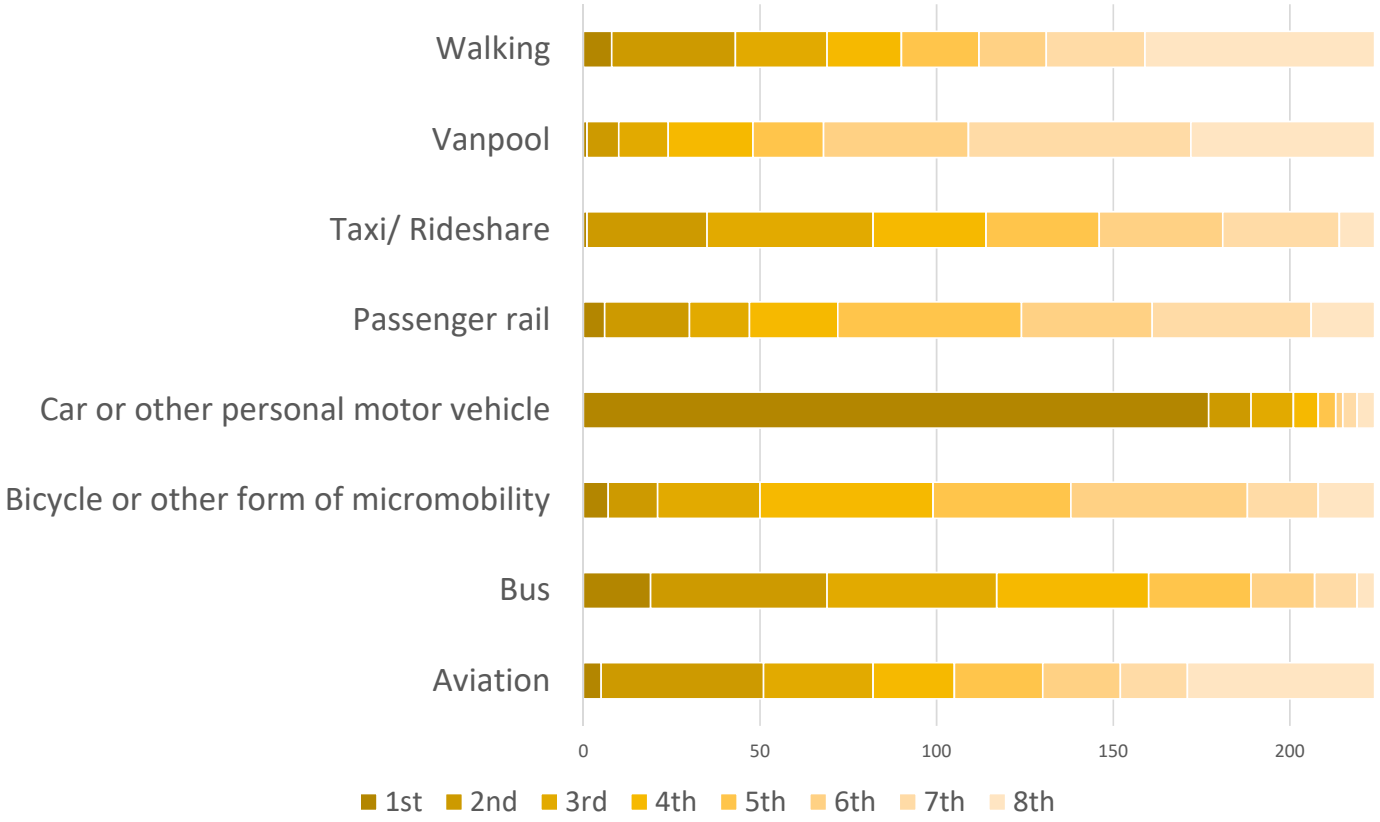
89.34% frequently travel within Grayson County



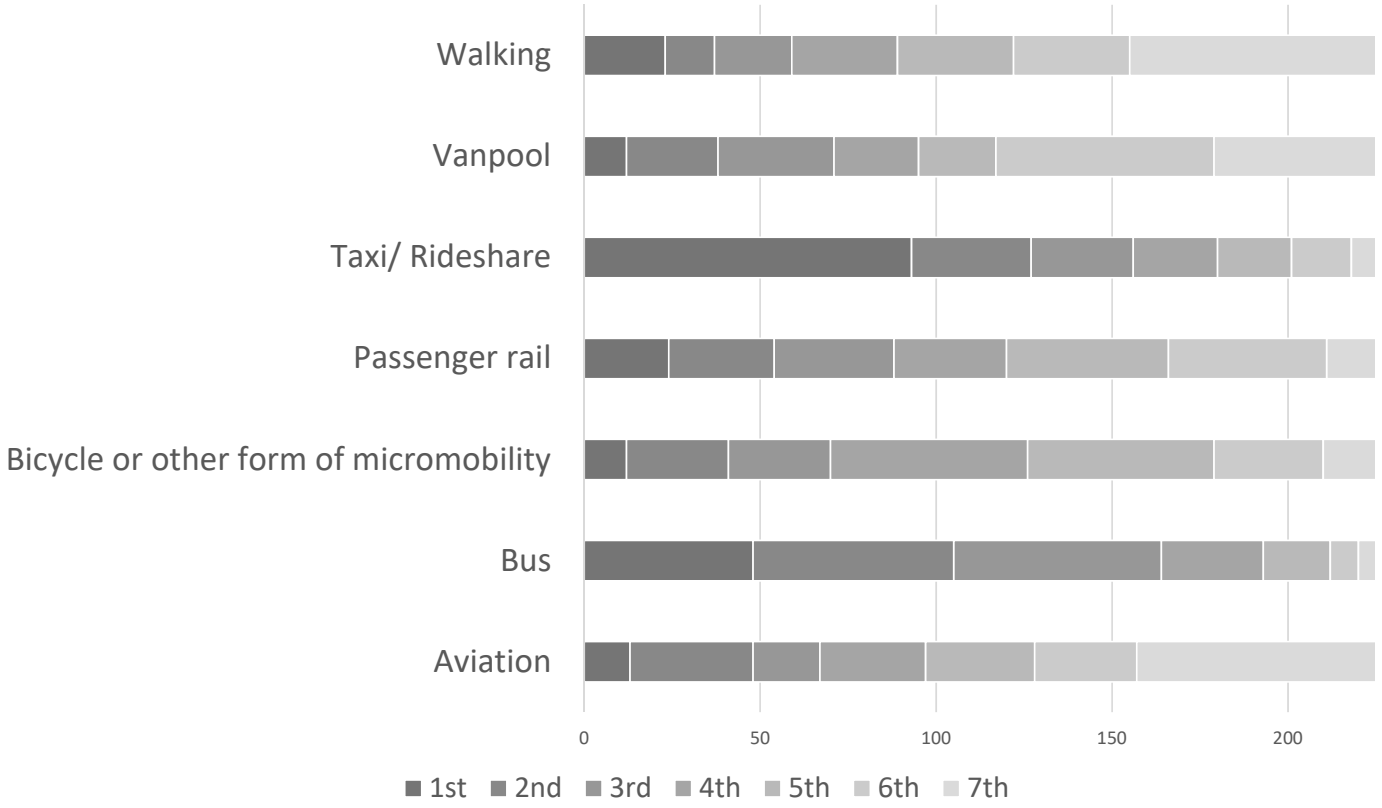
Difficulty Reaching Destinations in Grayson County



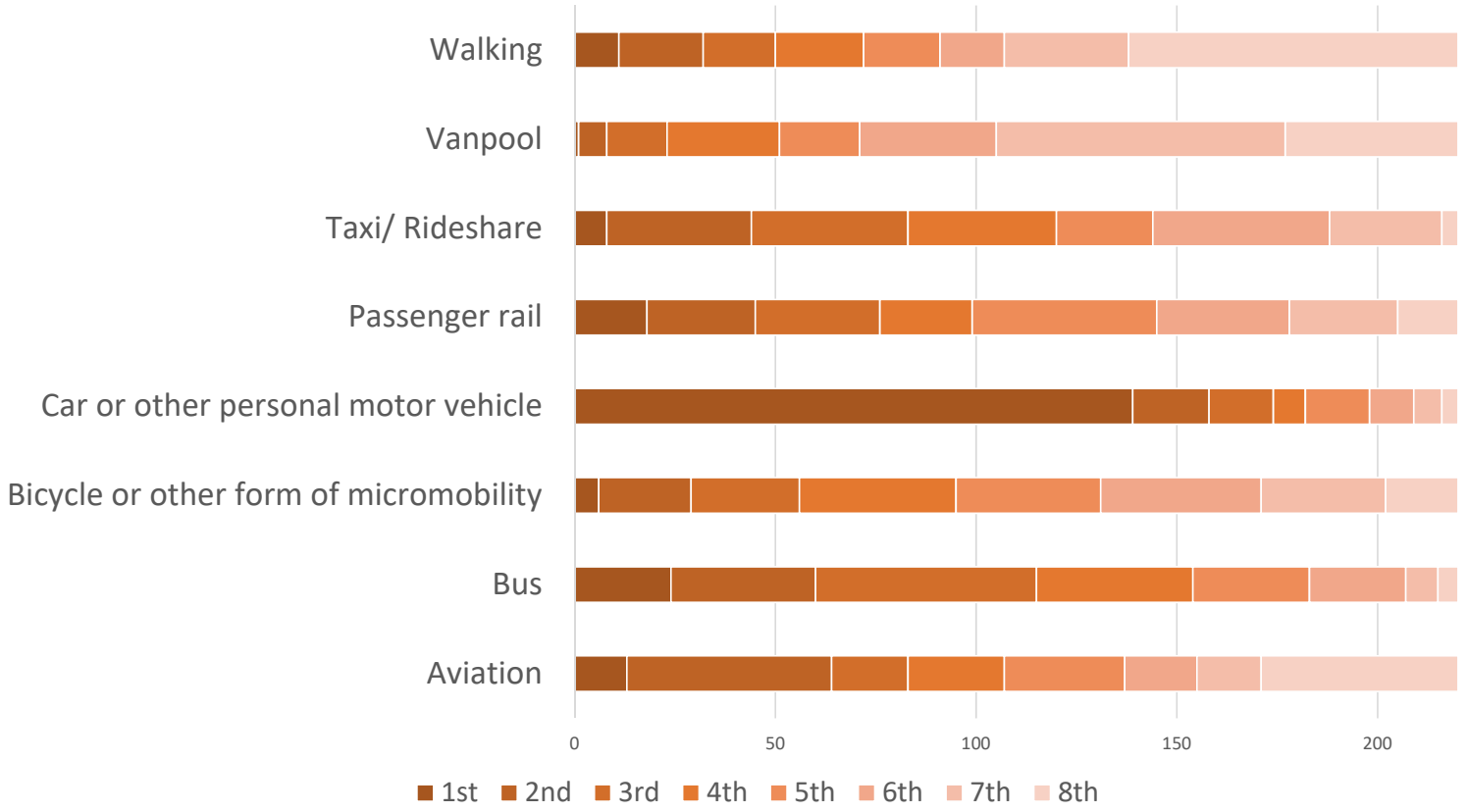
Rank the importance of the following transportation modes:



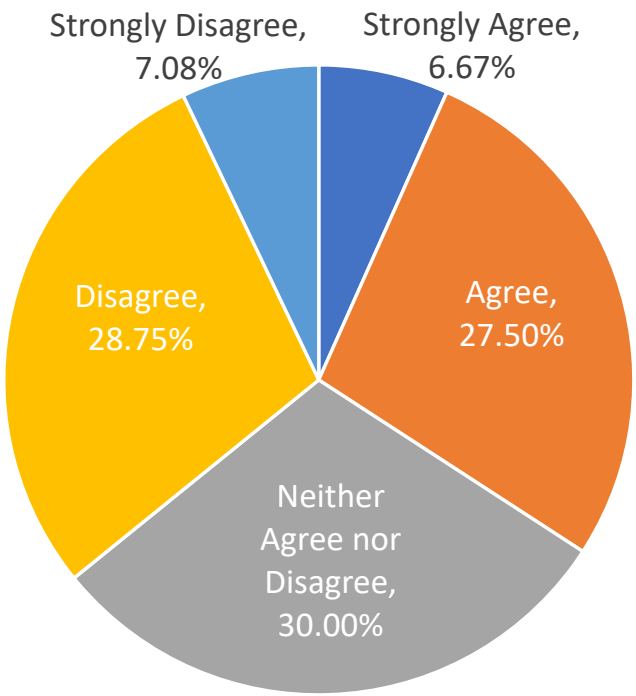
Rank your most important mode of transportation if unable to use your personal vehicle:



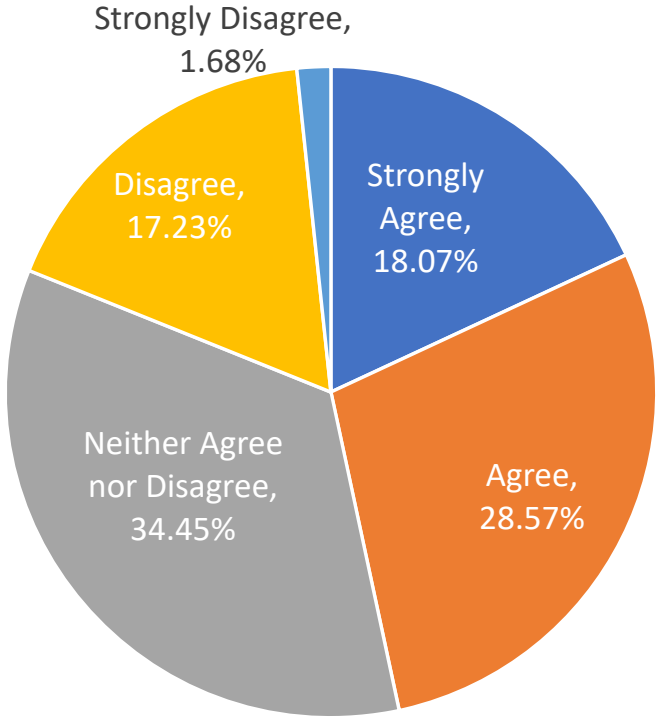
Rank your most important modes of transportation in the next 25 years:



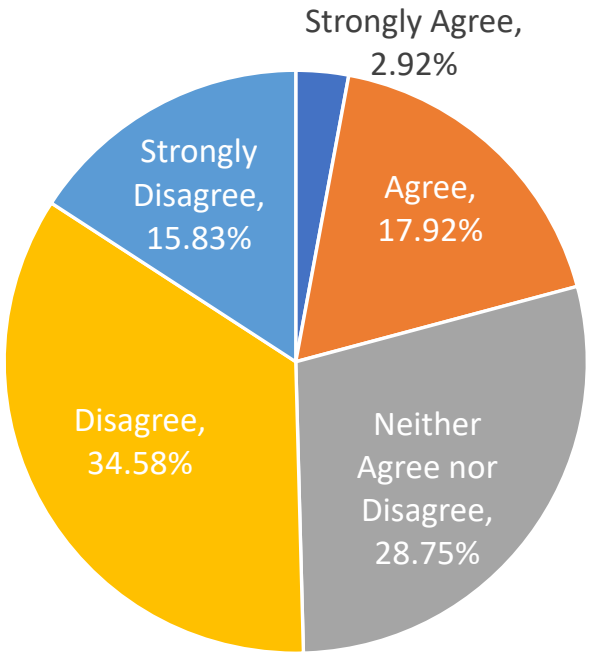
Driving in Grayson County is Safe



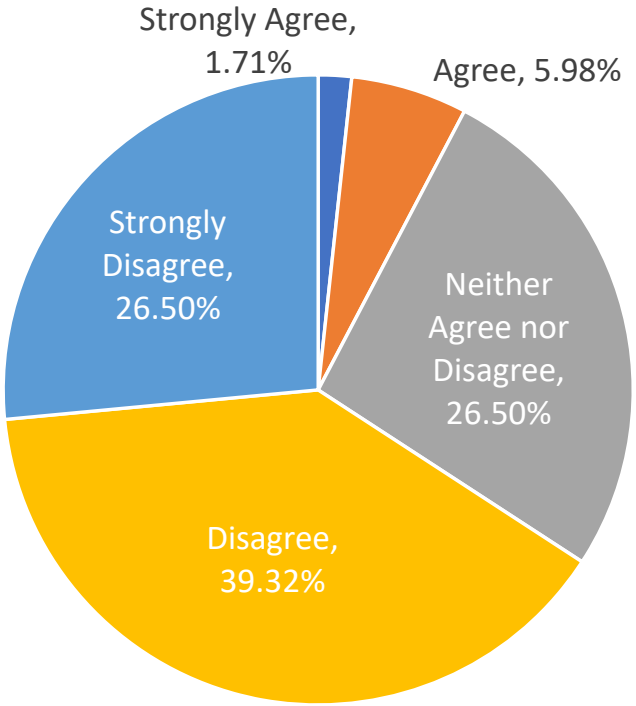
There is Too Much Traffic in Grayson County



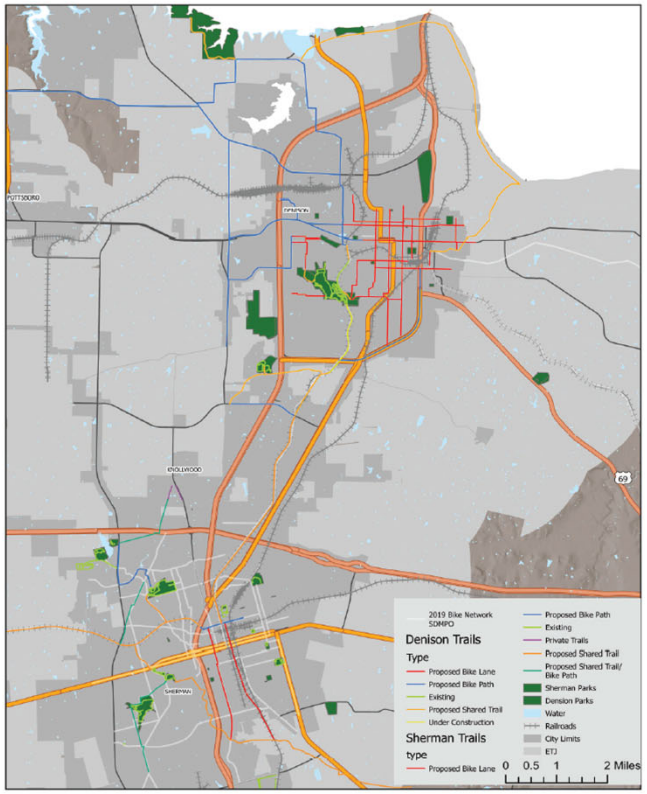
Walking on the Sidewalks and Crossing the Street in Grayson County is Safe



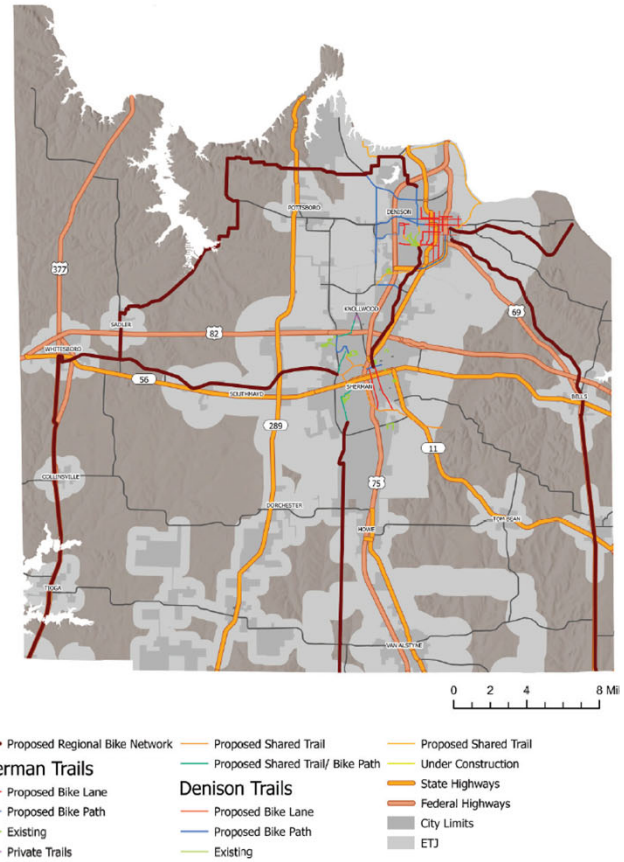
Bicycling in Grayson County is Safe



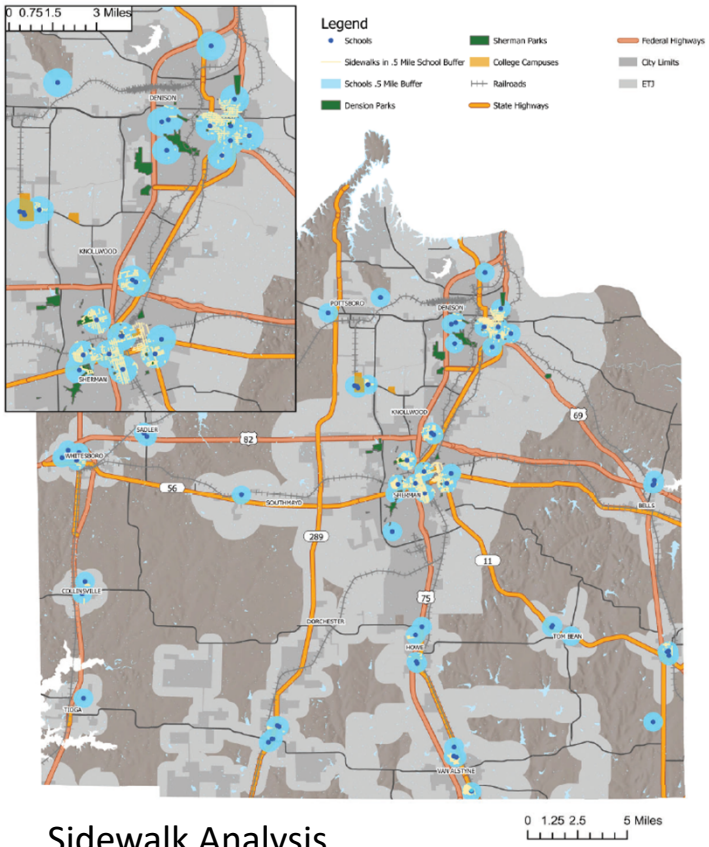
Bicycle and Pedestrian Improvements



Urban Trails



Regional Trails



Sidewalk Analysis

Bicycle and Pedestrian Plan

Documents Considered:

- Past MPO Bicycle and Pedestrian Plan Documentation
- Sherman
  - Sherman Tomorrow Comprehensive Plan, 2022
  - City of Sherman Parks, Recreation, and Open Space Master Plan, 2017
  - Sherman Tomorrow: Trails for Our Future, 2022
- Denison
  - City of Denison Comprehensive Plan, 2018
  - City of Denison: Urban Parks and Trails Master Plan, 2022
- Van Alstyne
  - Van Alstyne Parks Master Plan, 2019
- TxDOT
  - 2050 Connecting Texas Transportation Plan
  - Texas Bicycle Tourism Trails Study, 2018

Have there been any notable bicycle or pedestrian infrastructure improvements not included in the considered documents?

May Include:

- Major sidewalk addition projects
- Updates to bicycle or pedestrian signage and wayfinding
- Other bicycle planning endeavors

Currently Recognized:

- FM 1417 sidewalk construction
- Denison Main Street
- Whitesboro Main Street

Complete Streets Assessment

Complete Streets Chapter

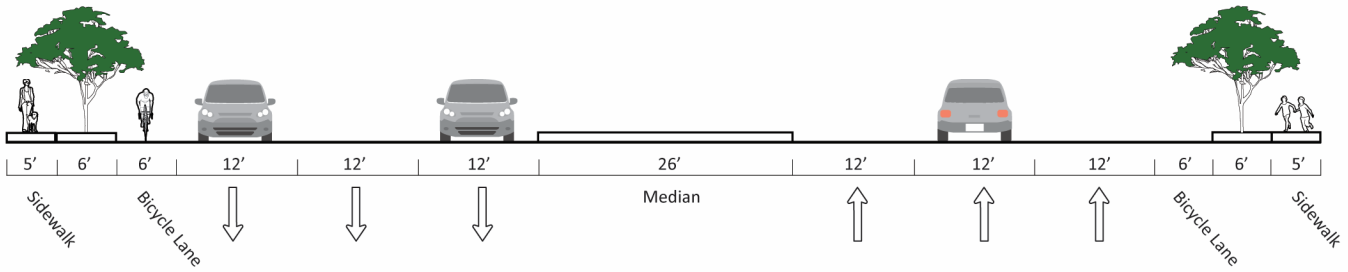
This is the first year that a Complete Streets Analysis chapter will be integrated into the MTP.

This chapter is fiscally constrained and lays the groundwork for future study.

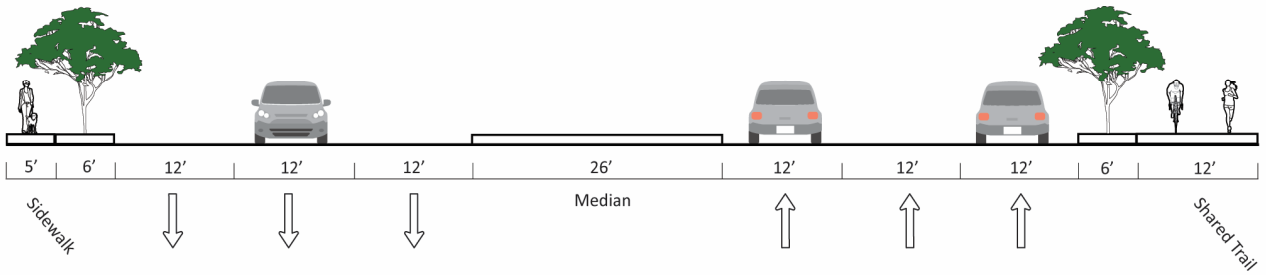
- Explaining & modeling the complete street framework
- Selecting 3 roadways for complete street consideration with suggested alterations

Complete Street Roadway Examples

Bicycle Lane Complete Street Cross-Section



Shared Trail Complete Street Cross-Section



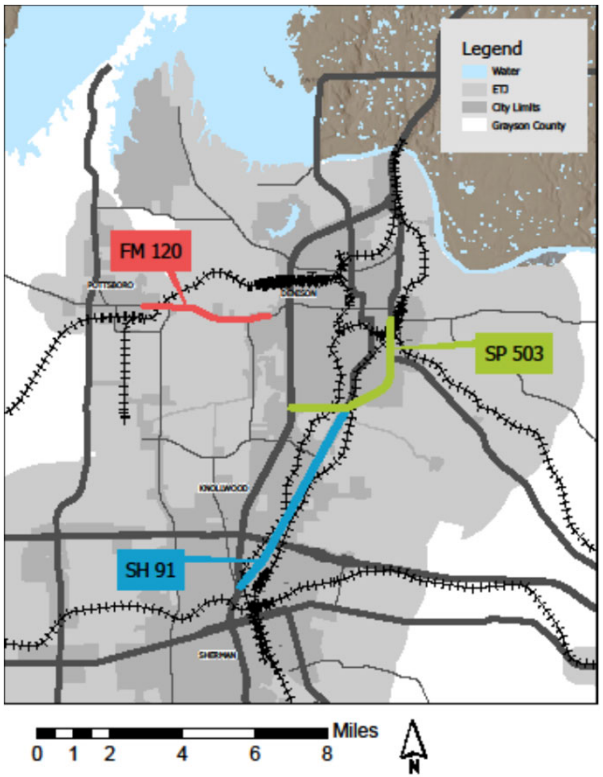
Selected Roadways for Complete Street Consideration*

-Spur 503
-FM-120
-SH-91

Also Considering:

- SH 84 (between US 75 and US 69)
- SH 91 (between Spur 503 and SH 84)

*Not a comprehensive list of roadways that might benefit from a complete streets analysis framework



Project Solicitation & Prioritization Updates

FY	City	Highway	From	To	Description	Estimated Constr. Cost	Decision Lens Score	Providing Engineering	Committed Local Match
2025	Denison	FM 120	RR at Katy Depot	8th Street	Railroad crossing improvements, drainage improvements, curb and gutter, sidewalk and crosswalk improvements	$4,800,000	0.255	9.88%	10.00%
2025	Denison	FM 120	York	Armstrong	Drainage improvements at Maurice and Morton, curb and gutter, sidewalk and crosswalk improvements, railroad crossing improvements	$10,500,000	0.239	9.88%	10.00%
2025	Van Alstyne	SH 5	County Line Road	FM 121	Expand/extend existing roadway to create bypass (3 lanes)	$11,000,000	0.259	9.88%	0.00%
2025	Van Alstyne	SH 5	FM 121	Spence Road	Expand/extend existing roadway to create bypass (2 lanes)	$3,000,000	0.259	9.88%	0.00%
2025	Sherman	US 75	Shepherd	FM 1417	WIDEN AND RECONSTRUCT SERVICE ROADS	$41,750,000	0.254	0.00%	0.00%
2025	Denison	SH 91	Spur 503	Main	Drainage improvements, modernize signals, add a bike/pedestrian path, asphalt and striping improvements, streetlighting improvements	$15,000,000	0.162	9.88%	10.00%
2025	Denison	FM 84	Highway 69	FM 84	Add a 10' pedestrian and bike path to the south side of the road to connect housing centers to major employer locations	$8,000,000	0.156	9.88%	10.00%
2025	Sherman	FM 1417	SH 56	Park	WIDEN EXISTING FREEWAY	$10,900,000	0.166	0.00%	10.00%
2025	Sherman	US 75	FM 1417	N. Travis St	WIDEN AND RECONSTRUCT SERVICE ROADS	$54,050,000	0.184	0.00%	0.00%
2025	Van Alstyne	US 75	FM 121 Intersection		Upgrade intersection to full interchange	$50,000,000	0.166	0.00%	9.00%

2025	Denison	SH 91	Martin Luther King	E. of Highway 75	Add a 10' bike/pedestrian path to the SW side of the road, crosswalk and modern stoplight addition at MLK/91, lighting improvements	$13,000,000	0.142	9.88%	10.00%
2025	Denison	Spur 503	SH 91	Highway 69	Create 4 lanes with a wide median for future 6 lane expansion, reconfiguring exits, decrease in roadway footprint, improve access for development	$22,000,000	0.156	0.00%	10.00%
2025	Denison	FM 84	Highway 75	Lil Ol' Road	Widen to 5 lanes, add a bike/pedestrian path, street lighting, asphalt and striping improvements, 84/75 intersection improvements, signal modernization	$12,000,000	0.136	9.88%	10.00%
2025	Denison	FM 84	Lil Ol' Road	N. of Elm Ridge Road	Widen to 4 lanes, add a bike/pedestrian path, street lighting, asphalt and striping improvements, 84/75 intersection improvements, signal modernization	$18,000,000	0.136	9.88%	10.00%
2025	Denison	FM 406	FM 84	Katy Lane	Create 4 lanes, traffic signal improvements, intersection improvements, paving and striping	$9,800,000	0.130	9.88%	10.00%
2025	Van Alstyne	US 75	County Line Road Intersection		Upgrade intersection to full interchange	$30,000,000	0.161	0.00%	0.00%
2025	Van Alstyne	US 75	Spence Road Intersection		Upgrade intersection to full interchange	$45,000,000	0.161	0.00%	0.00%
2025	Van Alstyne	US 75	Farmington Road Intersection		Upgrade intersection to full interchange	$45,000,000	0.161	0.00%	0.00%
2025	Van Alstyne	US 75	Hodgins Road Intersection		Upgrade intersection to full interchange	$45,000,000	0.161	0.00%	0.00%

2025	Sherman	FM 1417	W. Travis	US 75	WIDEN EXISTING FREEWAY	$22,875,000	0.143	0.00%	10.00%
2025	Sherman	US 82	FM 1417	FM 131	WIDEN EXISTING FREEWAY	$5,600,000	0.147	0.00%	0.00%
2025	Sherman	US 82	at Lonestar Parkway (Plainview)		NEW INTERCHANGE	$4,550,000	0.139	0.00%	0.00%
2025	Sherman	US 75	N. Travis St	US 82	WIDEN AND RECONSTRUCT SERVICE ROADS	$22,200,000	0.130	0.00%	0.00%
2025	Sherman	US 82	SH 289	FM 1417	CONSTRUCT FRONTAGE ROADS	$29,300,000	0.128	0.00%	0.00%
2025	Sherman	US 75	FM 1417	W. Travis St	CONSTRUCT NORTH B EXIT RAMP	$3,000,000	0.128	0.00%	0.00%
2025	Sherman	FM 1417	Park	W. Travis St	WIDEN EXISTING FREEWAY	$6,900,000	0.105	0.00%	10.00%
2025	Sherman	US 82	Lamberth Rd	FM 1417	WIDEN EXISTING FREEWAY	$8,580,000	0.103	0.00%	0.00%
2025	Sherman	FM 1417	US 75	Luella	WIDEN EXISTING FREEWAY	$12,050,000	0.085	0.00%	10.00%
2025	Sherman	FM 131	at US 82		RECONSTRUCT INTERCHANGE	$6,300,000	0.090	0.00%	0.00%
2025	Sherman	FM 131	US 82	Taylor St	WIDEN EXISTING FREEWAY	$5,400,000	0.087	0.00%	0.00%
2025	Van Alstyne	FM 121	US 75	SH 5	Expand/extend existing roadway to create bypass (6 lanes)	$13,000,000	0.077	9.88%	0.00%
2025	Sherman	FM 131	Taylor St	College St	WIDEN EXISTING FREEWAY	$3,800,000	0.085	0.00%	0.00%
2025	Sherman	FM 1417	Luella	SH 11	WIDEN EXISTING FREEWAY	$13,850,000	0.084	0.00%	0.00%
2025	Sherman	FM 131	North Creek	FM 691	WIDEN EXISTING FREEWAY	$6,000,000	0.084	0.00%	0.00%
2025	Sherman	FM 131	US 82	North Creek	WIDEN EXISTING FREEWAY	$3,300,000	0.083	0.00%	0.00%
2025	Van Alstyne	FM 121	US 75	Hackberry Road	Expand/extend existing roadway to create bypass (2 lanes)	$5,000,000	0.073	9.88%	0.00%
2025	Van Alstyne	Fm 121	Hackberry Road	Farmington Road	Expand/extend existing roadway to create bypass (2 lanes)	$5,000,000	0.073	9.88%	0.00%
2025	Van Alstyne	FM 121	Farmington Road	Gunter Curve	Expand/extend existing roadway to create bypass (2 lanes)	$8,000,000	0.073	9.88%	0.00%
2025	Sherman	SH 56	at SH 56		RECONSTRUCT INTERCHANGE	$6,250,000	0.068	0.00%	10.00%
2025	Denison	Spur 503	Highway 75	SH 91	Create 4 lanes with a wide median for future 6 lane expansion, reconfiguring exits, decrease in roadway footprint, improve access for development	$16,000,000	0.066	0.00%	10.00%

2025	Sherman	US 82	at Friendship Rd		NEW INTERCHANGE	$3,400,000	0.067	0.00%	0.00%
2025	Van Alstyne	FM 121	SH 5	Lincoln Park	Expand/extend existing roadway to create bypass (2 lanes)	$4,000,000	0.060	9.88%	0.00%
2025	Van Alstyne	FM 121	Lincoln Park	FM 121	Expand/extend existing roadway to create bypass (2 lanes)	$4,000,000	0.060	9.88%	0.00%
2025	Van Alstyne	FM 3133	US 75	Chapman Road	Expand/extend existing roadway to create bypass (2 lanes)	$14,000,000	0.058	9.88%	0.00%
2025	Sherman	SH 56	Friendship Rd	Case Rd	WIDEN EXISTING FREEWAY	$2,500,000	0.058	0.00%	0.00%

Questions?

GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION (MPO)
TECHNICAL ADVISORY COMMITTEE (TAC)
AGENDA ITEM V
ACTION ITEM

September 18, 2024

Review a Nondiscrimination Statement and Recommend Approval of a Resolution Adopting a Nondiscrimination Statement to the Policy Board

BACKGROUND:

As a best practice, staff recommends the Policy Board adopt a Nondiscrimination Statement. The Nondiscrimination Statement will be included in update to the Public Participation Plan, Title VI/Nondiscrimination Plan and Limited English Proficiency Plan.

ACTION REQUESTED:

Recommend Approval of a Resolution Adopting a Nondiscrimination Statement to the Policy Board

ATTACHMENTS: *click underlined items for attachment*

- *Resolution 2024-06*

STAFF CONTACT: Clay Barnett, P.E., 903.328.2090, cbarnett@huitt-zollars.com

RESOLUTION NO. 2024-06

A RESOLUTION OF THE POLICY BOARD OF THE GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION, ADOPTING A NONDISCRIMINATION STATEMENT

WHEREAS, the Grayson County Metropolitan Planning Organization, which is the metropolitan planning organization (MPO) for the Sherman-Denison Metropolitan Area, has the responsibility under the provisions of 23 CFR 450.306 for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and,

WHEREAS, the Grayson County MPO is a sub recipient of federal financial assistance and must comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. §2000d et seq., 78 stat. 252, prohibits discrimination on the basis of race, color, national origin); 49 CFR Part 21 (entitled Nondiscrimination In Federally-Assisted Programs of the Department of Transportation-Effectuation of Title VI of The Civil Rights Act of 1964); 23 CFR Part 200 (FHWA's Title VI/Nondiscrimination Regulation); 28 CFR Part 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964), and Texas Administrative Code §9.4, Civil Rights – Title VI Compliance; and

WHEREAS, the following Executive Orders place further emphasis on preventing discrimination based on race and national origin: Executive Order 12898, 3 CFR 859 (1995), entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"; and Executive Order 13166, 3 CFR 289 (2001), entitled "Improving Access to Services for Persons with Limited English Proficiency."

NOW, THEREFORE, BE IT RESOLVED BY THE POLICY BOARD OF THE GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION, that the following Nondiscrimination Statement is hereby adopted: "The Grayson County MPO, as a sub recipient of federal financial assistance and under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person shall on the grounds of race, religion (where the primary objective of the financial assistance is to provide employment per 42 U.S.C. §2000d-3), color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any MPO programs or activities."

ADOPTED in Regular Session on this the 2nd day of October, 2024.

GRAYSON COUNTY MPO

BY: _____
ROBERT CRAWLEY, CHAIRMAN

I hereby certify that this resolution was adopted by the Policy Board of the Grayson County Metropolitan Planning Organization in regular session on October 2, 2024.

BY: _____
CLAY BARNETT, P.E., EXECUTIVE DIRECTOR

GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION (MPO)
TECHNICAL ADVISORY COMMITTEE (TAC)
AGENDA ITEM VI
ACTION ITEM

September 18, 2024

PUBLIC HEARING: Review of the Annual Listing of Obligated Projects (ALOP) and Recommend Approval of the ALOP to the Policy Board

BACKGROUND:

The **Annual Listing of Obligated Projects** (ALOP) is a requirement established through Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users (SAFETEA - LU). It has been continued in the Infrastructure Investment and Jobs Act (IIJA) with the added requirement that it comply with same public participation requirements as the adoption of a Transportation Improvement Program (TIP).

This list should be submitted to TxDOT by December 15th each year. It should include both highway and transit projects that received funding during the previous fiscal year. The ALOP should be compiled in conjunction with the TxDOT District Office and Transit Providers. The purpose of this list is to update the public and everyone involved in the planning process on the projects that are being funded within the MPO study area. The list is to be made available to the public through the MPO's web site www.gcmpo.org.

ACTION REQUESTED:

Recommend Approval of the FY 2023 ALOP to the Policy Board

ATTACHMENTS: *click underlined items for attachment*

- *FY 2023 ALOP*

STAFF CONTACT: Clay Barnett, P.E., 903.328.2090, cbarnett@huitt-zollars.com

GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION

FY 2023

ANNUAL LISTING OF OBLIGATED PROJECTS

FEDERAL FUNDS OBLIGATED REPORT

Submitted to the Texas Department of Transportation – August 30, 2024
Approved by the Policy Board on October 2, 2024

"Obligation" and Reimbursement of Federal Funds

Funding for projects is programmed or reserved until a project is "obligated". Obligation is a way of ensuring that actual cash is available to pay for project expenditures. Obligation of funds occurs on a project phase basis (i.e. design, right of way or construction). Key activities under each phase will trigger obligation of funds. Typically these are critical points at which commitments are made, but expenditures have yet to start. Such items as advertisement of consultant or construction contracts and preparing offers for property acquisition are actions which will obligate funds.

Before an agency can obligate funds, it must have approval to do so. In the case of highway and/or streets projects, the authority to approve the obligation of funds is passed from the Federal Highway Administration (FHWA) on to the Texas Department of Transportation (TxDOT). TxDOT has specific processes that must be followed for an agency to get to a point in which funds can be obligated. These vary depending on the program, but generally include submitting a "project authorization request" and/or entering into an Agreement with TxDOT. For transit related projects, the lead agency for the project must transmit specific information directly to the Federal Transit Administration (FTA).

Once an agency has authorization to proceed with a project, it can obligate funds. Every federal program will have specific time limits in which funds must be obligated.

Federal funding is typically transferred to an agency on a reimbursement basis. Therefore, the agency must ensure it has adequate cash flows to cover planned project expenditures. Typically once expenditures are incurred, the agency can request reimbursement for those costs. If the agency is required to provide matching monies to the federal funds, those must also be expended. Once the project is complete, the lead agency may have to conduct an audit to ensure funds were spent in accordance with the grant or funding program guidelines.

This document was developed by the Grayson County MPO for informational purposes and is not warranted for any other use. The information contained in the document was provided to Grayson County MPO by the Texas Department of Transportation and the transit provider in the Grayson County MPO region.

Documentation regarding the public participation process can be found in Appendix A. A public hearing was held on September 18, 2024. There were no members of the public who attended the public hearing that wished to comment on the Annual Listing of Obligated Projects for Fiscal Year 2023.

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Highway Projects

Federal-Aid Project Number:
1902268

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
2455-01-031	SD2018-2A	SDMPO	C, E, R

Project Name/Facility:	Limits:	Funding Categories:
FM 1417	From: US 82 To: TAYLOR STREET	1, 11, 3LC, 4U

Project Description:
WIDEN FROM 2-LN TO 4-LN

Amount of Federal Funding Programmed in MPO TIP:	$12,508,882.00
Amount of Federal Funding Obligated in Fiscal Year:	
Amount of Federal Funding Remaining and Available for Subsequent Years:	

Federal-Aid Project Number:
1902268

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
2455-01-034	SD2018-2B	SDMPO	C, E, R

Project Name/Facility:	Limits:	Funding Categories:
FM 1417	From: TAYLOR STREET To: SH 56	1

Project Description:
WIDEN FROM 2-LANE TO 4-LANE, RECONST INTERCHANGE AT SH 56, REPLACE BRIDGE AT SAND CREEK

Amount of Federal Funding Programmed in MPO TIP:	$7,203,086.00
Amount of Federal Funding Obligated in Fiscal Year:	$15,179,337.43
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Highway Projects

Federal-Aid Project Number:
2016622

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0729-01-039	SDHWY086	SDMPO	C, E, R

Project Name/Facility:	Limits:	Funding Categories:
FM 121	From: 1200 FT WEST OF FM 3356 To: JIM JONES ROAD	1, 11

Project Description:
WIDEN NON-FREEWAY

Amount of Federal Funding Programmed in MPO TIP:	$9,242,420.00
Amount of Federal Funding Obligated in Fiscal Year:	$5,407,908.41
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

Federal-Aid Project Number:
2020008

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0047-02-150	US75-GAP2	SDMPO	C, E, R

Project Name/Facility:	Limits:	Funding Categories:
US 75	From: SH 91 To: 0.651 MI S OF CENTER STREET	12, 3LC, 4R, 4U, 6

Project Description:
RECONSTRUCT AND WIDENING FROM 4-LN TO 6-LN

Amount of Federal Funding Programmed in MPO TIP:	MOD
Amount of Federal Funding Obligated in Fiscal Year:	
Amount of Federal Funding Remaining and Available for Subsequent Years:	

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Highway Projects

Federal-Aid Project Number:
2020008

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0047-03-087	US75-GAP1	SDMPO	C, E, R

Project Name/Facility:	Limits:	Funding Categories:
US 75	From: 0.651 MI S OF CENTER STREET To: FM 1417	12, 3LC, 4R, 4U, 6

Project Description:
RECONSTRUCT AND WIDENING FROM 4-LN TO 6-LN

Amount of Federal Funding Programmed in MPO TIP:	MOD
Amount of Federal Funding Obligated in Fiscal Year:	
Amount of Federal Funding Remaining and Available for Subsequent Years:	

Federal-Aid Project Number:
2020008

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0047-18-083	US75-US82	SDMPO	C, E, R

Project Name/Facility:	Limits:	Funding Categories:
US 75	From: AT US 82 To:	4R

Project Description:
WIDEN FRONTAGE ROADS AND RECONFIGURE RAMPS

Amount of Federal Funding Programmed in MPO TIP:	MOD
Amount of Federal Funding Obligated in Fiscal Year:	$1,000,000.00
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Grouped Projects

Federal-Aid Project Number:
1702403

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0901-19-190			C

Project Name/Facility:	Limits:	Funding Categories:
CR	From: BNSF DOT 672079F RRMP 656.35 To: FEDERAL SIGNAL PROGRAM	8

Project Description:
INSTALL RAILROAD LIGHTS AND GATES

Amount of Federal Funding Programmed in MPO TIP:	$292,301.00
Amount of Federal Funding Obligated in Fiscal Year:	$292,301.00
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

Federal-Aid Project Number:
2016434

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0901-19-179			C, E

Project Name/Facility:	Limits:	Funding Categories:
CR	From: CR 830-2 To: AT BRUSHY CREEK	6

Project Description:
BRIDGE REPLACEMENT

Amount of Federal Funding Programmed in MPO TIP:	MOD
Amount of Federal Funding Obligated in Fiscal Year:	$368,581.55
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Grouped Projects

Federal-Aid Project Number:
2020392

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0009-08-032			C, E

Project Name/Facility:	Limits:	Funding Categories:
SH 24	From: FM 499 To: IH 30	1

Project Description:
PREVENTIVE MAINTENANCE

Amount of Federal Funding Programmed in MPO TIP:	$1,197,722.91
Amount of Federal Funding Obligated in Fiscal Year:	$1,197,722.91
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

Federal-Aid Project Number:
2021793

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0316-03-010			C, E

Project Name/Facility:	Limits:	Funding Categories:
FM 1753	From: FM 1897 To: FM 120	1

Project Description:
REHABILITATE EXISTING ROADWAY

Amount of Federal Funding Programmed in MPO TIP:	MOD
Amount of Federal Funding Obligated in Fiscal Year:	$3,000,000.00
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Grouped Projects

Federal-Aid Project Number:
2022167

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0045-06-055			C, E

Project Name/Facility:	Limits:	Funding Categories:
SH 56	From: SL 205	1
	To: US 82	

Project Description:
HAZARD ELIMINATION & SAFETY

Amount of Federal Funding Programmed in MPO TIP:	$5,790,636.37
Amount of Federal Funding Obligated in Fiscal Year:	$5,790,636.37
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

Federal-Aid Project Number:
2022168

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0009-13-179			C, E

Project Name/Facility:	Limits:	Funding Categories:
IH 30	From: SH 24 (SFR)	1
	To: HOPKINS COUNTY LINE	

Project Description:
PREVENTIVE MAINTENANCE

Amount of Federal Funding Programmed in MPO TIP:	$1,554,086.90
Amount of Federal Funding Obligated in Fiscal Year:	$1,554,086.90
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Grouped Projects

Federal-Aid Project Number:
2022196

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0009-06-052			C, E

Project Name/Facility:	Limits:	Funding Categories:
SH 66	From: FM 6	1
	To: US 69	

Project Description:
PREVENTIVE MAINTENANCE

Amount of Federal Funding Programmed in MPO TIP:	$2,400,357.98
Amount of Federal Funding Obligated in Fiscal Year:	$2,400,357.98
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

Federal-Aid Project Number:
2022395

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0045-03-055			C, E

Project Name/Facility:	Limits:	Funding Categories:
SH 56	From: AT POST OAK CREEK	6
	To: .	

Project Description:
BRIDGE MAINTENANCE

Amount of Federal Funding Programmed in MPO TIP:	$312,603.09
Amount of Federal Funding Obligated in Fiscal Year:	$312,603.09
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Grouped Projects

Federal-Aid Project Number:
2022530

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0081-08-011			C, E

Project Name/Facility:	Limits:	Funding Categories:
BU 377B	From: US 377 N	1
	To: US 377 S	

Project Description:
PREVENTIVE MAINTENANCE

Amount of Federal Funding Programmed in MPO TIP:	$3,712,721.73
Amount of Federal Funding Obligated in Fiscal Year:	$3,712,721.73
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Bicycle & Pedestrian Projects

Federal-Aid Project Number:
2021597

CSJ Number:	MPO Project ID:	Sponsor:	Phase of Work:
0047-03-096		OTHER (CITY) -	C, E

Project Name/Facility:	Limits:	Funding Categories:
SH 5	From: NEWPORT DR AT PARTIN ELEMENTARY SCHOOL	9
	To: 0.645 MI S OF FM 3133 AT MOORE PARK	

Project Description:
BICYCLE AND PEDESTRIAN IMPROVEMENTS

Amount of Federal Funding Programmed in MPO TIP:	MOD
Amount of Federal Funding Obligated in Fiscal Year:	$602,520.58
Amount of Federal Funding Remaining and Available for Subsequent Years:	$0.00

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Transit Projects

				YOE = Year of Expenditure
General Project Information			**Funding Information (YOE)**	
Project Sponsor	Texoma Area Paratransit System		**Federal Funding Category**	**5307**
MPO Project Information (reference number, etc.)	21SDHBUS23		**Federal (FTA) Funds**	$64,279
			State Funds from TxDOT	$0
			Other Funds	$16,070
Apportionment Year	2023		**Fiscal Year Cost**	**$80,349**
Project Phase	N/A			
Brief Project Description	Planning (80/20)		**Total Project Cost**	$80,349
			Trans. Dev. Credits Requested	$0
Sec 5309 ID Number			**Trans. Dev. Credits Awarded (Date & Amount)**	$0
Amendment Date & Action				
General Project Information			**Funding Information (YOE)**	
Project Sponsor	Texoma Area Paratransit System		**Federal Funding Category**	**5307**
MPO Project Information (reference number, etc.)	21SDHBUS23		**Federal (FTA) Funds**	$334,715
			State Funds from TxDOT	$214,310
			Other Funds	$120,405
Apportionment Year	2023		**Fiscal Year Cost**	**$669,430**
Project Phase	N/A			
Brief Project Description	Operating (50/50)		**Total Project Cost**	$669,430
			Trans. Dev. Credits Requested	$0
Sec 5309 ID Number			**Trans. Dev. Credits Awarded (Date & Amount)**	$0
Amendment Date & Action				
General Project Information			**Funding Information (YOE)**	
Project Sponsor	Texoma Area Paratransit System		**Federal Funding Category**	**5307**
MPO Project Information (reference number, etc.)	21SDHBUS23		**Federal (FTA) Funds**	$178,590
			State Funds from TxDOT	$0
			Other Funds	$44,648
Apportionment Year	2023		**Fiscal Year Cost**	**$223,238**
Project Phase	N/A			
Brief Project Description	Preventative Maintenance (80/20)		**Total Project Cost**	$223,238
			Trans. Dev. Credits Requested	$0
Sec 5309 ID Number			**Trans. Dev. Credits Awarded (Date & Amount)**	$0
Amendment Date & Action				

FY 2023 Annual Project Listing
Grayson County Metropolitan Planning Organization

Transit Projects

				YOE = Year of Expenditure
General Project Information			**Funding Information (YOE)**	
Project Sponsor	Texoma Area Paratransit System		**Federal Funding Category**	**5307**
MPO Project Information (reference number, etc.)	21SDHBUS23		**Federal (FTA) Funds**	$1,500,000
			State Funds from TxDOT	$0
			Other Funds	$0
Apportionment Year	FY2020/FY2021		**Fiscal Year Cost**	**$1,500,000**
Project Phase	N/A			
Brief Project Description	Capital (80/20)		**Total Project Cost**	$1,500,000
			Trans. Dev. Credits Requested	$300,000
Sec 5309 ID Number			**Trans. Dev. Credits Awarded (Date & Amount)**	$0
Amendment Date & Action				
*** These 5307 funds will be used for the TAPS Admin Building located at 6104 Texoma Parkway, Sherman, TX. TXDOT will be furnishing $3,000,000 of Rural 5339 funds.**				
General Project Information			**Funding Information (YOE)**	
Project Sponsor	Texoma Area Paratransit System		**Federal Funding Category**	**5339**
MPO Project Information (reference number, etc.)	21SDHBUS23		**Federal (FTA) Funds**	$150,000
			State Funds from TxDOT	$0
			Other Funds	$0
Apportionment Year	2023		**Fiscal Year Cost**	**$150,000**
Project Phase	N/A			
Brief Project Description	Bus Acquisition or Bus Facility (80/20)		**Total Project Cost**	$150,000
			Trans. Dev. Credits Requested	$22,500
Sec 5309 ID Number			**Trans. Dev. Credits Awarded (Date & Amount)**	$0
Amendment Date & Action				

APPENDIX A – PUBLIC INVOLVEMENT DOCUMENTATION

GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION (MPO)
TECHNICAL ADVISORY COMMITTEE (TAC)
AGENDA ITEM VII
ACTION ITEM

September 18, 2024

PUBLIC HEARING: Review the 2050 Metropolitan Transportation Plan (MTP) and Recommend Approval of a Resolution Adopting the 2050 MTP to the Policy Board

BACKGROUND:

The Grayson County MPO is required to update its MTP every five (5) years. The MTP is a comprehensive planning document which will guide the development of transportation facilities and services over the next twenty-five (25) years to best serve citizens within Grayson County.

The draft 2050 MTP was released for public review and comment on September 3, 2024. A public hearing will be held in conjunction with the TAC meeting.

Comments may be submitted by email to: cbarnett@huitt-zollars.com. All comments must be received by 2:00 pm on September 30, 2024, to be included in the public record. The draft 2050 MTP will be placed before the GCMPO Policy Board at its Wednesday, October 2, 2024, meeting for approval.

ACTION REQUESTED:

Recommend Approval of the Resolution Adopting the Draft 2050 MTP to the Policy Board.

ATTACHMENTS: *click underlined items for attachment*

- *Resolution 2024-07*

STAFF CONTACT: Clay Barnett, P.E., 903.328.2090, cbarnett@huitt-zollars.com

RESOLUTION NO. 2024-07

A RESOLUTION OF THE POLICY BOARD OF THE GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION, ADOPTING THE 2050 METROPOLITAN TRANSPORTATION PLAN

WHEREAS, 23 Code of Federal Regulations (CFR) Subpart C – Metropolitan Transportation Planning and Programming requires Metropolitan Planning Organizations (MPOs) to develop a Metropolitan Transportation Plan (MTP) that meets the requirements of 23 CFR part 450.322 related to the development and content of the MTP; and

WHEREAS, 43 Texas Administrative Code (TAC) Section 16.53 requires that the MTP be based on the funding assumptions and forecasts set forth in TAC §16.151 and §16.152 as well as reasonably expected local funding options and contingent state, federal, and local funding sources in accordance with federal regulations; and

WHEREAS, federal, state, regional, and local agencies and organizations concerned with transportation planning in the MPO boundary have cooperatively developed the MTP to satisfy all federal planning requirements; and

WHEREAS, a draft copy of the MTP was made available to the public for review and comment for twenty-one (21) days or longer in accordance with the MPO's Public Participation Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE POLICY BOARD OF THE GRAYSON COUNTY METROPOLITAN PLANNING ORGANIZATION:

PART 1: That the 2050 Metropolitan Transportation Plan is hereby adopted in accordance with Exhibit "A" attached hereto and incorporated herein.

PART 2: That this Resolution shall take effect on October 2, 2024.

ADOPTED in Regular Session on this the 2nd day of October, 2024.

GRAYSON COUNTY MPO

BY: _____
ROBERT CRAWLEY, CHAIRMAN

I hereby certify that this resolution was adopted by the Policy Board of the Grayson County Metropolitan Planning Organization in regular session on October 2, 2024.

BY: _____
CLAY BARNETT, P.E., EXECUTIVE DIRECTOR

RESOLUTION NO. 2024-07
EXHIBIT “A”

Connecting the County: 2050 Metropolitan Transportation Plan

Grayson County MPO

Connecting the County:
2050 Metropolitan Transportation Plan
Grayson County MPO

Connecting the County:
2050 Metropolitan Transportation Plan
Grayson County MPO

Unapproved: Open for Public Comment

MPO Policy Board

MPO Technical Advisory Committee

Prepared For:
Grayson County MPO

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Phone: (903) 328-2090 Fax: (903) 328-2089

Prepared By:
Huitt-Zollars, Inc.

Contents


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ACADEMY

1. Introduction

Introduction

A Metropolitan Transportation Plan (MTP) is a comprehensive plan intended to predict transportation needs in the future. The Grayson County MPO MTP predicts transportation needs within 25 years and is updated every 5 years. An MTP includes current transportation facilities, performance measures and targets, proposed activities to reach those targets, and a financial plan for those activities. The MTP is developed through the cooperation of the local municipalities such as Sherman and Denison, transportation agencies such as TxDOT, local citizens through the public involvement process, and the Grayson County MPO.

The Grayson County MPO (GCMPO) is a Metropolitan Planning Organization (MPO). MPOs are regional agencies formed to coordinate transportation planning in their assigned regions in order to improve the transportation of people and goods within and through the region. MPOs are formed under the Federal Highway Administration (FHWA) in all metropolitan areas with at least 50,000 residents. The GCMPO is made up of the Policy Board and the Technical Advisory Committee.

The Policy Board creates policies to guide the MPO and approves the MPO's plans and programs. The Board includes the Grayson County Judge, the mayors of Sherman and Denison, the TxDOT Paris District Engineer, the mayor of a rotating small city in the county. A representative of the Texoma Area Paratransit System (TAPS) serves an ex-officio role on the board.

The Technical Advisory Committee develops the MPO's plans and programs and makes recommendations regarding them to the Policy Board. It is made up of professional employees or consultants who represent Grayson County, the cities of Sherman, Denison, and the small city represented in the Policy Board. The MPO Chairman and the TxDOT Sherman Area Engineer are also on the committee.

The Grayson County MPO had the bounds of its planning area expanded to the entirety of Grayson County in 2016, as shown in Figure 1.1. The MPO area now includes the following municipalities:

- Bells
- Collinsville
- Denison
- Dorchester
- Gunter
- Howe
- Pilot Point
- Pottsboro
- Sadler
- Sherman
- Southmayd
- Tioga
- Tom Bean
- Van Alstyne
- Whitesboro
- Whitewright

The most recent federal legislation that significantly changed the operation of MPOs is MAP-21, the FAST Act, and the Infrastructure Investment and Jobs Act, established in that order.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires MPOs to use performance-based planning by establishing performance targets for MTPs. These targets are established to measure the success of reaching various goals set by MAP-21, including: Safety; Infrastructure Condition; Congestion Reduction; System Reliability; Freight Movement and Economic Vitality; Environmental Sustainability; and Reduced Project Delivery Delays.

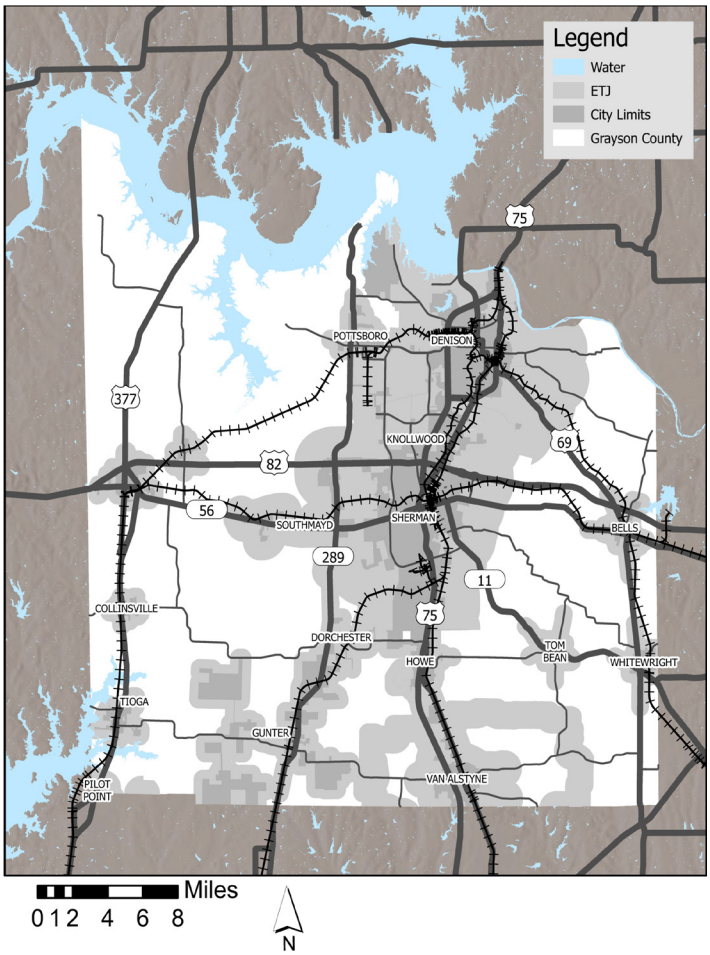

Figure 1.1. Grayson County MPO Boundaries

The Fixing America's Surface Transportation Act (FAST Act) expanded on the requirements in MAP-21. The FAST Act set aside Transportation Alternatives (TA) funds to be distributed to small-scale projects such as trails and bicycle and pedestrian infrastructure. The TA funds are distributed to each State, and each state distributes the funds to individual projects. The FAST Act also requires MPOs to consider the resilience and reliability of the transportation system, stormwater mitigation, and enhancing travel and tourism in its processes and recommendations.

The Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL) was passed in 2021 and provided additional funding to transportation projects. It requires MPOs to consider the equitable and proportional representation of the population in designating representatives. The IIJA also requires at least 2.5% of the MPO budget to be used for safe and accessible options for multiple modes of transit.


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2. Mobility Conditions

Mobility Conditions

Understanding the current state of the mobility conditions within a transportation network is essential to the efficacy of comprehensive mobility plans. Thorough analyses of mobility conditions include analyzing commuting statistics, daily vehicle miles traveled (DVMT), mean travel times, traffic congestion, safety statistics, and utilizing the Travel Demand model. This information helps MPOs build a strategic plan to address and prioritize certain transportation projects over others.

The Travel Demand model incorporates various mathematical data sets to reflect the current state of the transportation needs of a municipality. The Grayson County Metropolitan Planning Organization (GCMPO) model is based on that created by TxDOT.

The most recent iteration of the GCMPO's regional travel demand model utilized data from 2018 to predict transportation trends and needs in 2023, 2033, and 2050. One of the key takeaways from this model is the predicted increase in Grayson County's population and the updated demand this larger population will place on county roadways.

Commuting Characteristics

One of the most critical aspects of transportation planning is understanding how people commute to work in and out of the county. According to the 2020 US Census Origin-Destination Statistics, over 27,000 employees live in Grayson County and work outside of the County. About 19,000 employees who work in the county live outside of it and 18,895 both live and work in Grayson County.

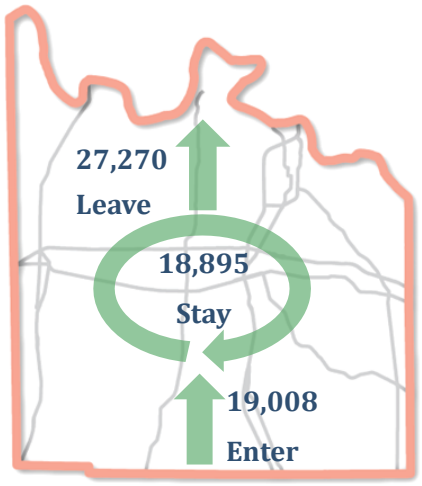


Figure 2.1. Grayson County Commuting Statistics

This distribution is unusual, especially considering that most of the population and employment opportunities in the county are located in urban centers and thus would have a significant commute. Most of the outgoing and incoming commuters are likely traveling between the Sherman-Denison area and the DFW Metroplex along US 75.

According to the Texas Department of Transportation (TxDOT), in 2021 an average of about 55,000 vehicles traveled between Grayson and Collin counties using US-75 every day, and about 36,000 motor vehicles each day used US-75 to travel to and from Oklahoma. Due to of the large number of commuters likely going to and from the Metroplex and the significant traffic along the corridor, US 75 is an extremely vital roadway to Grayson County.

According to the US Census 2021 American Community Survey, approximately 78% of employees travel to work in a single-passenger vehicle, another 11% carpool, and another 8% work from home; use of personal vehicles is by far the most common method of transportation to work in Grayson County. It is important to note that only 3% of employees traveling to work by means other than personal automobiles does not necessarily mean that only 3% of funding should go toward those modes of transportation; if more funding is put towards projects that allow these modes of transportation, they will likely receive more use.

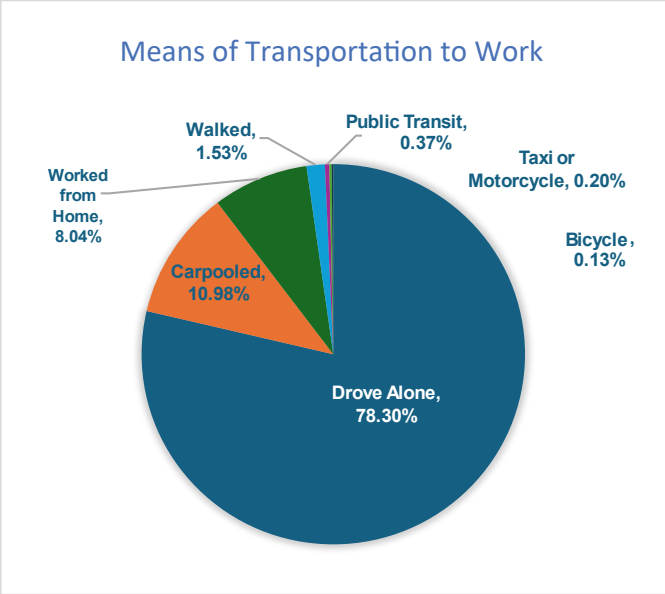


Figure 2.2. Means of Transportation to Work
Source: U.S. Census

Daily Vehicle Miles Traveled (DVMT)

Another important metric of mobility is Daily Vehicle Miles Travelled (DVMT). DVMT is the average number of miles traveled by vehicles in an area. This reflects the demand for roadways in the region, allows accurate estimates of maintenance costs, and reveals more accurate emission data.

In 2021, Grayson County had an average DVMT of 4.55 million. TxDOT projected that between 2010 and 2040, the DVMT in Grayson County would increase by 62%. However, between 2010 and 2021 it already increased by 36%; if this trend of DVMT growth were to continue, the DVMT would increase by over 200% between 2010 and 2040

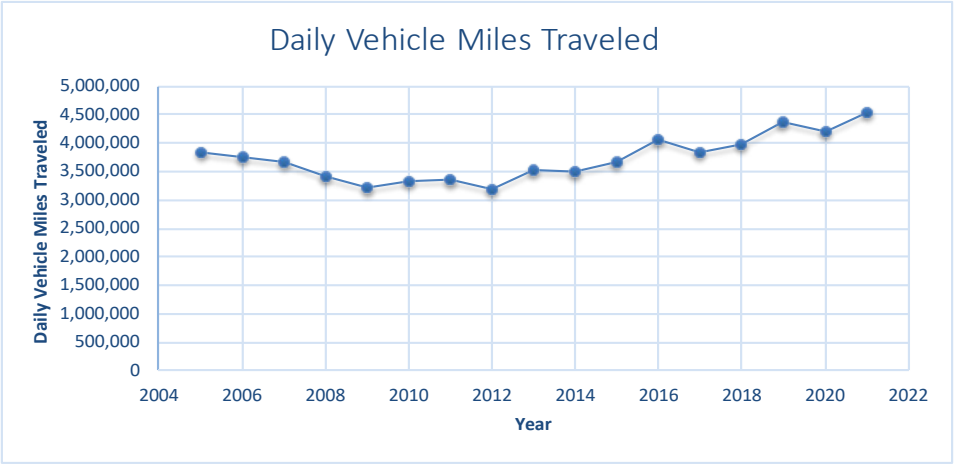


Figure 2.3. Grayson County Vehicle Miles Traveled
Source: U.S. Census ACS 2021 5-Year

Mean Travel Times

Another important statistic for mobility is the Mean Travel Time to Work. Mean Travel Time is highly connected to mobility and roadway usage costs. If there is poor mobility, the Mean Travel Time increases; if people generally live further from work, the Mean Travel Time increases and more demand is put on the thoroughfares, reducing mobility. Higher Mean Travel Times also lead to higher maintenance costs and larger economic costs due to lost time of workers.

According to the Census ACS 2021, the Mean Travel Time to Work in Grayson County is 25.2 minutes, just below the statewide average of 25.9 minutes. A comparison to other areas in Texas is shown in Figure 2.4.

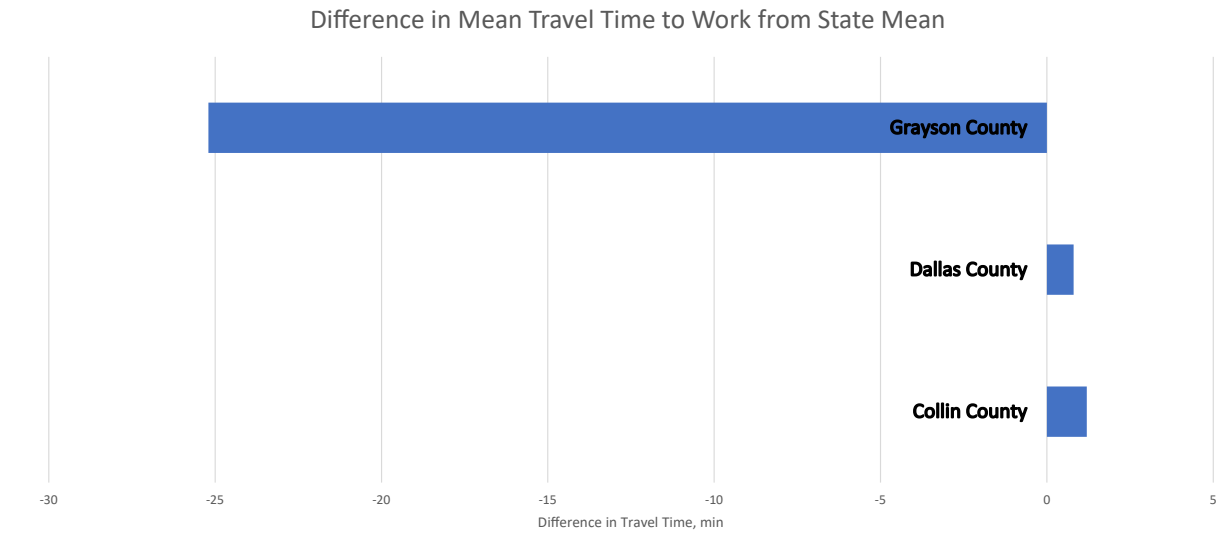


Figure 2.4. Mean Travel Time Chart
Source: U.S. Census ACS 2021

Congestion

Congestion is another metric of mobility. Congestion, unlike the other metrics, has a variety of methods of calculation; methods to determine how "full" a roadway is varies from speed-based to volume-based. TxDOT calculates congestion using the "Car-Space" method, which estimates the average amount of space between vehicles on the 30th most busy day of the year. The less space there is, the more congested the roadway.

Currently, the only congested roadway in Grayson County is Highway 75, which is moderately congested, or has an average space between vehicles between 175 and 350 feet, throughout the county.

In 2039, Grayson County is projected to have multiple congested sections of Highway 75 with less than 175 feet between vehicles. Highway 277 in Pilot Point, Highway 82 in Sherman, part of FM 1417 in Sherman, and a small portion of FM 120 in Denison are projected to be moderately congested. These projected sections should be areas of focused improvement, especially as population is expected to grow in Grayson County, meaning more cars on the already-congested roadways.

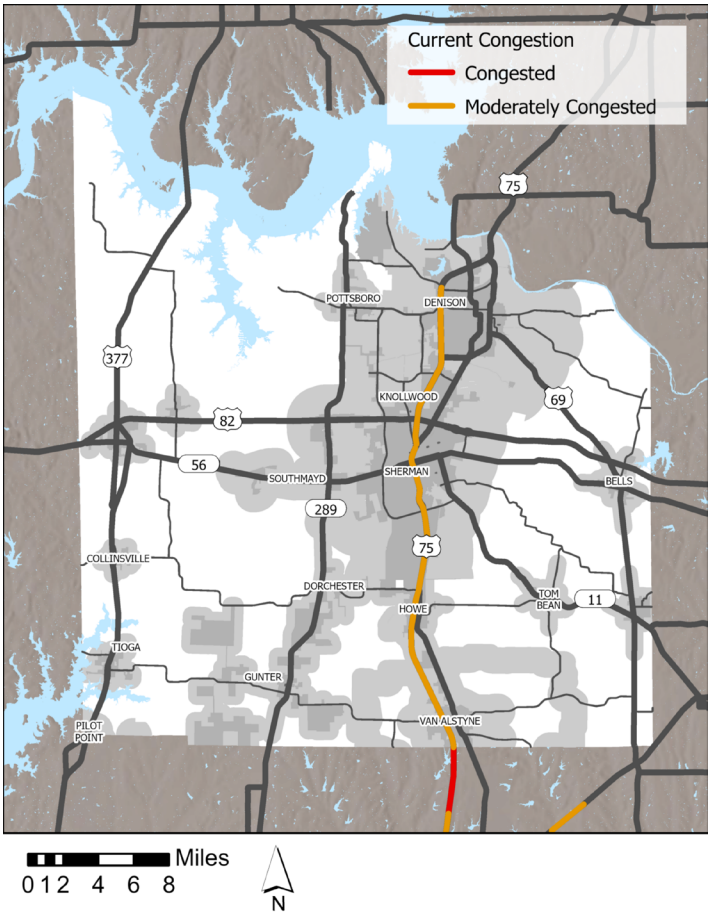


Figure 2.5. Current Traffic Congestion (2019)
Source: TxDOT

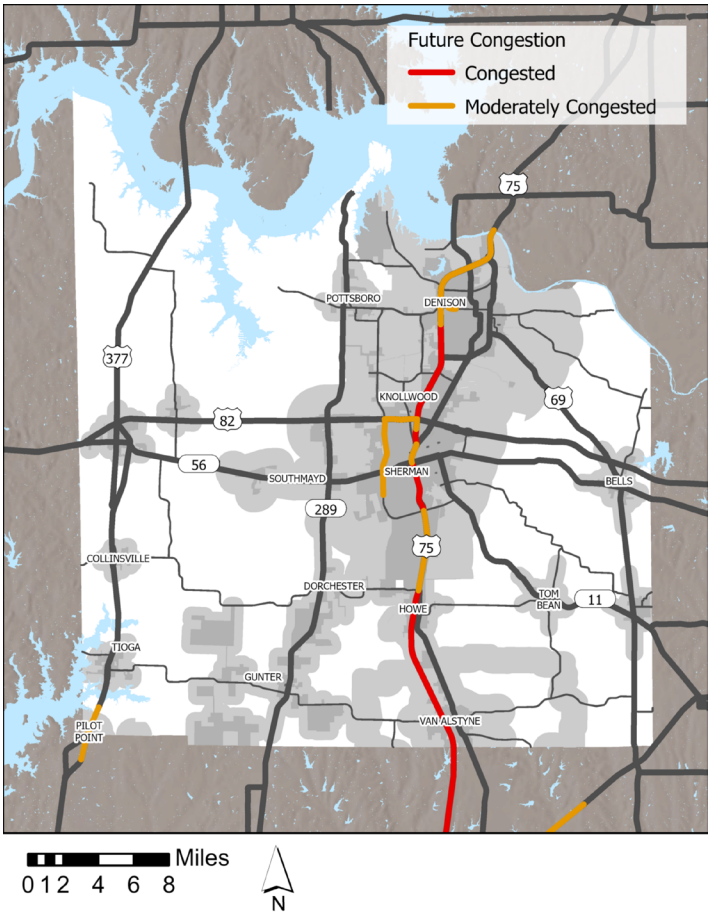


Figure 2.6. Future Traffic Congestion (2039)
Source: TxDOT

Travel Demand Model

Transportation planning relies on an updated Travel Demand Model (TDM) to effectively plan for new transportation infrastructure projects. This model is a planning framework employed by most MPOs across the country to develop an understanding of transportation needs and traffic issues experienced in a particular area to address urban and regional growth demands and to create an effective traffic management system.

The model sources a variety of up-to-date numerical data to generate a comprehensive plan, address current transportation network problems, and influence future policy aimed at solving those issues.

The TDM typically follows a 4-step modeling process that analyzes trip generation and distribution, which identifies the number of trips made and the destinations of those trips, the mode of transportation choice, and the trip assignment which aims to predict the route the commuter will take. These data sets help MPOs accurately assess and predict current and future transportation needs.

The GCMPO and TxDOT collaborate to generate a thorough TDM. According to TxDOT, the travel demand modeling process follows several important steps. TxDOT first develops traffic analysis zones (TAZs) which are updated and modified before each decennial census. After establishing TAZs, TxDOT works to map major roadways and gather data required to code the road network.

While there are many important components of a travel demand model, it relies on two main sets of data to accurately predict future traffic: demographics and roadway characteristics.

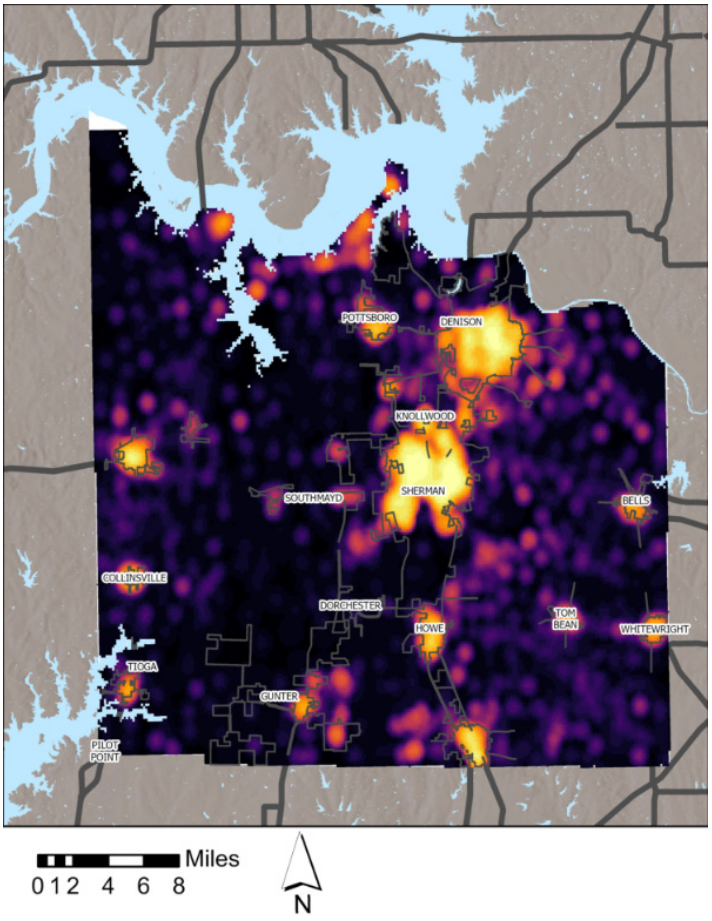


Figure 2.7. Population Heatmap
Source: U.S. Census

Demographics

Demographics are ultimately population-based, and the population of Grayson County is changing. According to the US Census, the population of the county between 2017 and 2021 increased from 131,140 to 139,336; this is an annual growth rate of about 1%. As the DFW Metroplex expands, this growth rate may increase. While most of the population is in Sherman and Denison, growth may move towards cities such as Van Alstyne that are closer to the Metroplex.

Collecting trip generation data is essential to TxDOT's modeling process which involves analyzing socio-economic data and travel behavior. Another important step in this process includes analyzing trip distribution data which looks at trip length frequency distribution, zone radii which measures the trip distance in minutes traveled from the center point, and bias factors.

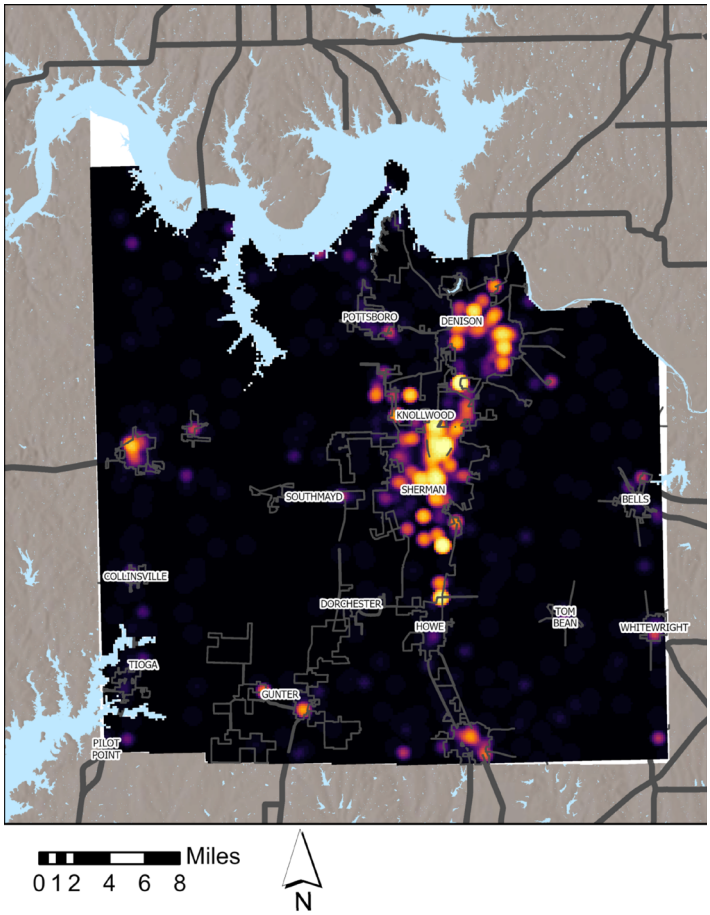


Figure 2.8. Employment Heatmap
Source: U.S. Census

Functional Classification

One of the most central inputs to the Travel Demand Model (TDM) is the functional classification of roadways. The TDM uses the functional classification of road networks to predict the flow of traffic and the most popular routes taken. Roads are classified by their capacity, speed limit, and their connectivity to the entire roadway network. The functional classification of a roadway is effectively the role it serves in the transportation system. Local roads allow access to homes and businesses but do not carry enough traffic to justify being included in the TDM. Collectors effectively "gather" traffic from local roads and direct it to arterials. Arterials are the main thoroughfares that carry traffic for long distances through the county. The functional classification of a roadway, along with whether it is in a rural or urban area, determines its width and speed.

Roadway Characteristics

Another key component in the functional characteristics of roadway networks and the TDM is an evaluation of roadway characteristics. This evaluation aids in predicting travel patterns and road user behavior to effectively inform and influence transportation planning and infrastructure development.

This evaluation includes updated information on roadway functionality classifications which look at speed limits and type of road (i.e. principal arterial, major collector, local road, etc.).

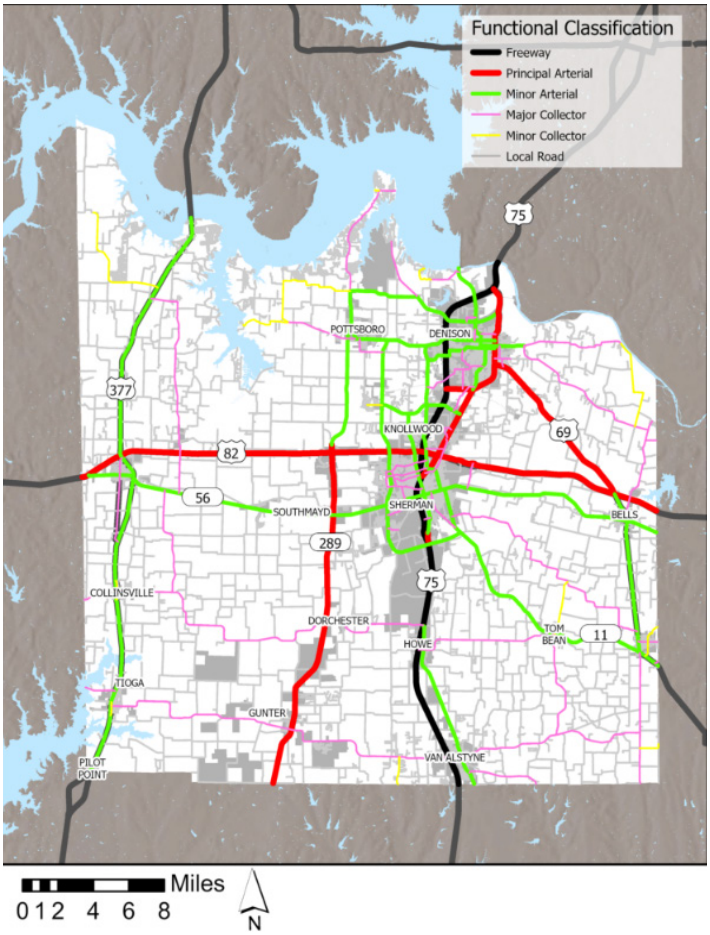


Figure 2.9. Functional Classification
Source: GCMPO

Safety

Safety is one of, if not the, highest priority in transportation design; unsafe design could easily lead to the deaths of or severe injury to members of the public. According to the Bureau of Transportation Statistics, over 35,000 people have died in motor vehicle accidents each year since 2015. According to TxDOT, there has not been a day in Texas without a traffic fatality since November 7, 2000. Aside from the clear importance of preserving human lives and quality of life, safety also has a significant effect on mobility and the economy.

A higher rate of traffic accidents slows mobility and is detrimental to the economy. Traffic accidents slow traffic and frequent crashes can increase congestion patterns. Decreasing the likelihood of crashes and improving access to emergency vehicles help minimize time spent in traffic due to roadway accidents.

Traffic crashes also impact the economy in the region; crashes involve several factors that harm the economy in the region, including:

- Cumulative man-hours lost due to traffic delays
- Cost of vehicle repairs
- Emergency response costs
- Medical costs
- Loss of ability to work due to disability or death

The estimated societal costs due to motor vehicle accidents are shown in Figure 2.10., which specifies total cost based on the overall severity of their traffic-related incident between the years of 2018-2022. These costs are based on a statistical estimate and do not factor in the immeasurable value of a human life; the cost of a fatality is based on statistical data on the compensation of workers in high-risk jobs.

The Federal Highway Administration (FHWA) created estimates for these crash costs and based their calculations on the physical impacts like financial losses and intangible consequences such as the physical and emotional pain caused by traffic-related injuries and fatalities.

According to data provided by TxDOT and the National Safety Council (NSC), the economic loss of all motor vehicle crashes has greatly increased over the past 20 years with around $20.7 billion in financial losses to $56.2 billion in losses in 2023.

Crash Societal Costs Chart

Crash Severity	Cost Per Injury	2018-2022 Total Crashes	Total Cost (2018-2022)
Fatality	$11,295,400	28	$316,271,200
Debilitating Injury	$655,000	179	$117,245,000
Non-Debilitating Injury	$198,500	779	$154,631,500
Possible Injury	$125,600	816	$102,489,600
Non-Injury	$11,900	2,745	$32,665,500
Total	-	**4,547**	**$723,302,800**

Figure 2.10. Crash Societal Costs
Source: American Community Survey

Crash Rates

A simple method of measuring safety is by studying crash rates. Crash rates are the number of crashes per 100 million Vehicle Miles Travelled or VMT. Crashes per 100 VMT are calculated by dividing the number of crashes in an area by the total number of miles traveled by vehicles in the observed area. This metric is useful for general comparison but does not differentiate between the severity of crashes.

The 3-year moving average crash rate has been decreasing since 2017; in Grayson County in 2017, there was a 3-year moving average crash rate of 136 crashes per 100 million VMT which decreased to 131 per 100 million VMT in 2021.

Grayson County has a lower crash rate than the whole of Texas, as shown in Figure 2.11. Regardless of how Grayson County compares to any other geography, it is important to continue to reduce the crash rate even further.

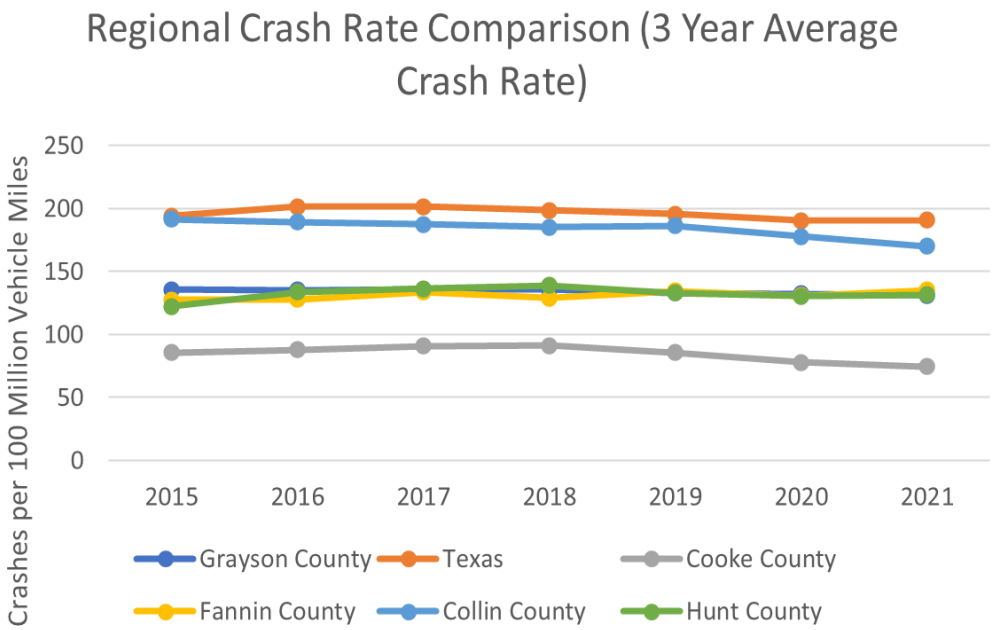


Figure 2.11. Regional Crash Rate Comparison
Source: American Community Survey

Fatal Crashes

Fatal crashes are the most important to consider; reducing the number of deaths due to motor vehicles is clearly of utmost importance. Between 2018 and 2022, there were 117 fatal crashes in Grayson County. About 20% of these took place between 11 PM and 4 AM. The locations of fatal collisions in the county are shown in Figure 2.12.

Incapacitating Crashes

TxDOT classifies an incapacitating injury as any injury that prevents a person from doing their day-to-day activities, such as affecting their ability to walk, drive, or work. Incapacitating injuries have a detrimental impact on the quality of life of roadway users and therefore they are considered to be a high priority. Between 2018 and 2022, there were 492 crashes in Grayson County with incapacitating injuries. Their locations are shown in Figure 2.13.

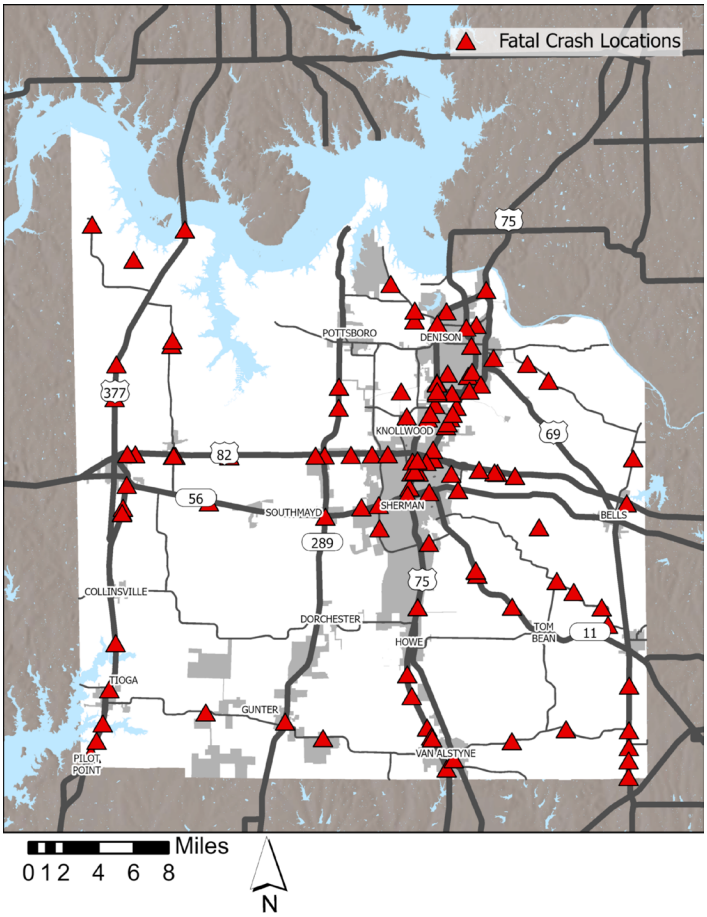


Figure 2.12. Fatal Crash Locations
Source: TxDOT

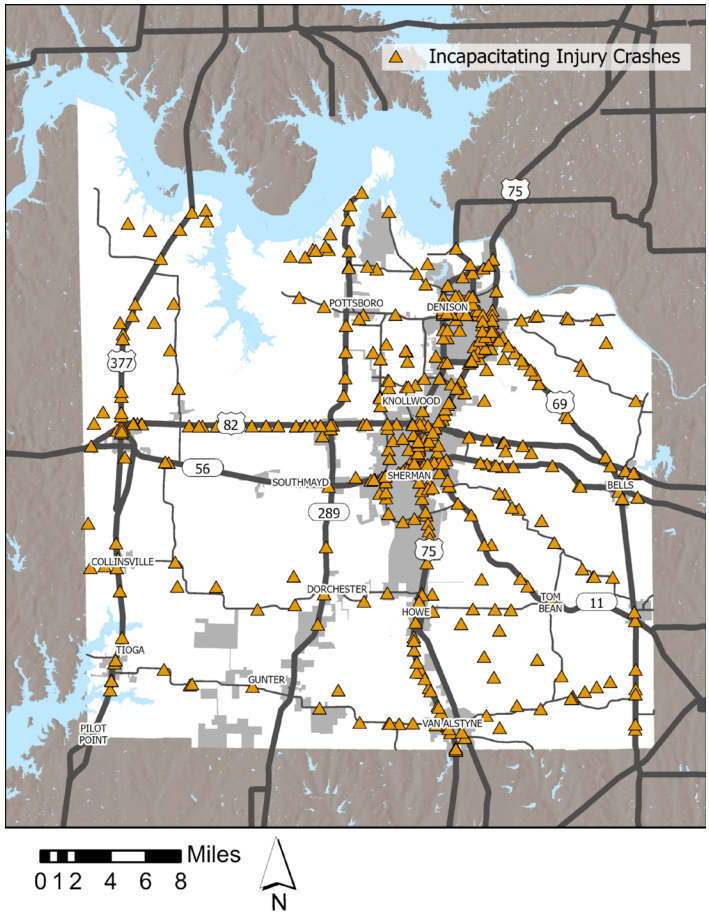


Figure 2.13. Incapacitating Crash Locations
Source: TxDOT

Bicycle and Pedestrian Crashes

It is important to note crashes that involve bicycles and pedestrians for a variety of reasons. Namely because bicyclists and pedestrians are not nearly as well protected and thus are much more likely to experience severe harm in an accident; while 6% of crashes in Grayson County cause fatal or incapacitating injuries, 40% of crashes involving bicyclists and pedestrians cause fatal or incapacitating injuries. Another reason is to avoid putting disadvantaged populations at higher risk; low-income households may not be able to afford a vehicle and so they are more likely to walk or bike where they need to go.

In Grayson County between 2018 and 2022, there were 144 crashes involving pedestrians and bicyclists. The locations of these crashes are shown in Figure 2.14.

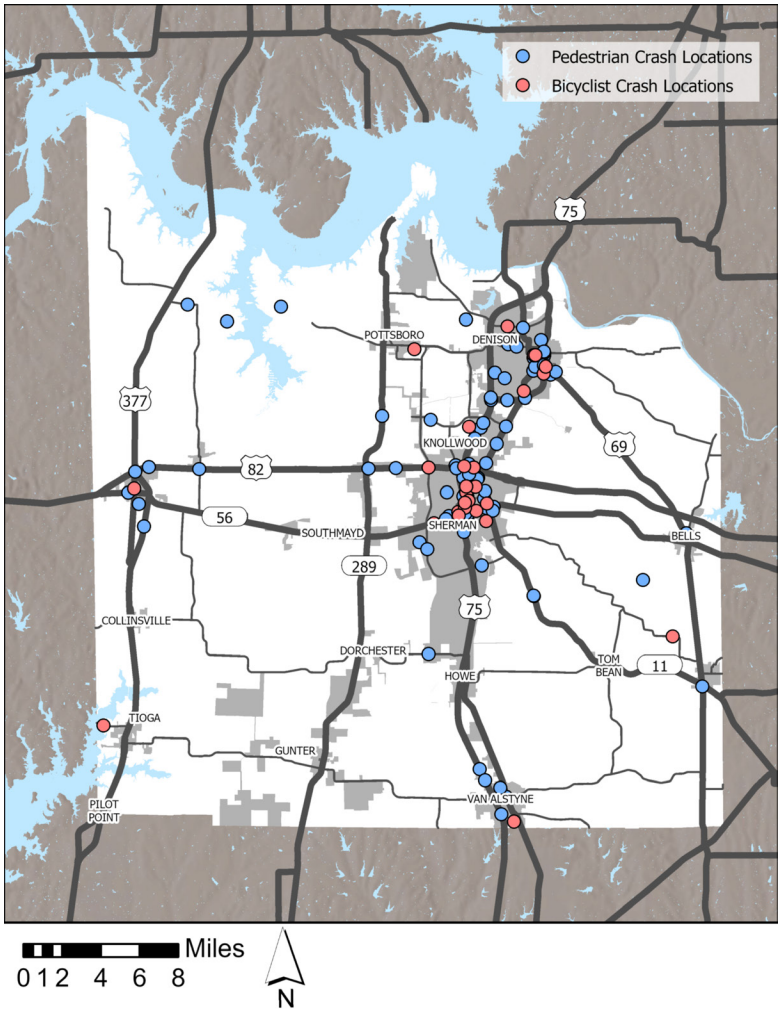


Figure 2.14. Bicycle and Pedestrian Crash Locations
Source: TxDOT

Crash Hot Spots

Using the location of crashes, the corridors and intersections with the highest rate of accidents can be identified. These corridors and intersections should be a high priority for safety improvement. It is important to also consider the traffic volumes on the roadways; for instance, US 75 experiences the most traffic of any corridor in the County, so it can be safer per driver while still having a large total number of accidents.

The traffic-volume-adjusted crash hotspots are shown on Figure 2.15. Note that some outliers exist in the map where one or two crashes happened on a very low-traffic intersection (Notably in Howe).

Identifying crash spots helps traffic planners effectively address the most critical issues in roadway networks by proposing effective countermeasures to reduce future potential crashes along these corridors. Outlined in the Strategic Highway Safety Plan (SHSP) the Highway Safety Improvement Program (HSIP) helps identify these corridor hot spots and proposes effective improvements to target driver and pedestrian safety.

Some of these improvements include but are not limited to installing speed safety cameras, improving street lighting, roadway widening, and implementing road diets which is a traffic safety measure that involves removing or repurposing traffic lanes to change the roadway configuration.

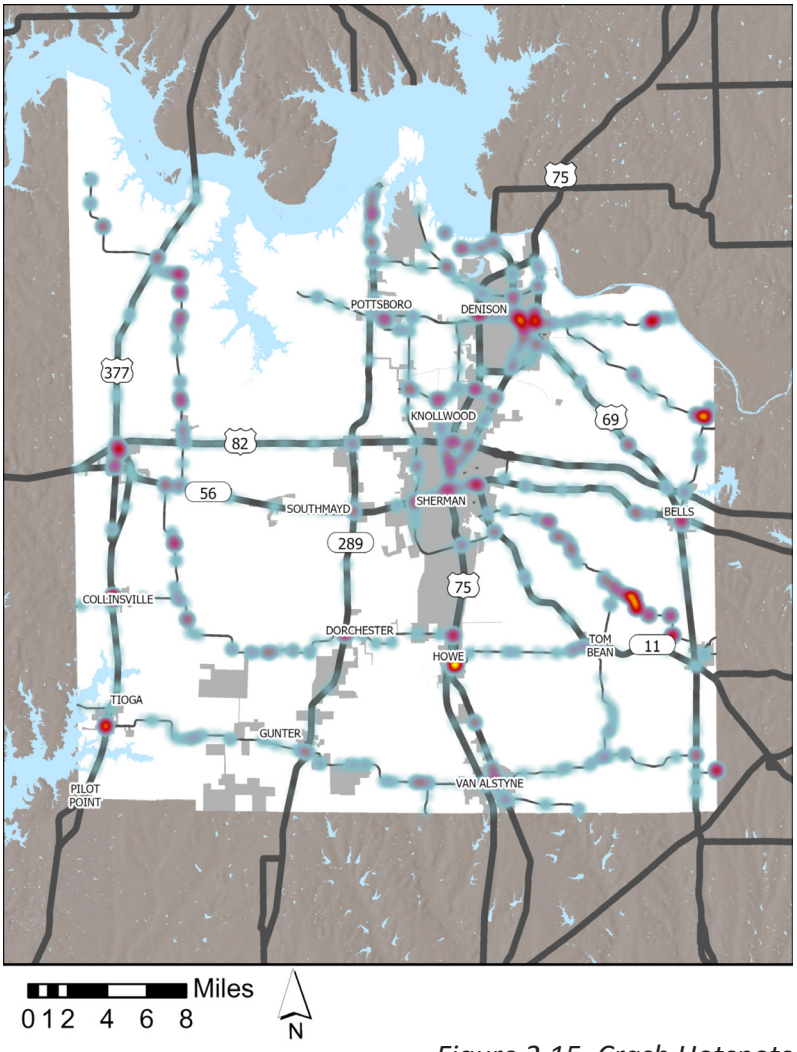


Figure 2.15. Crash Hotspots
Source: TxDOT

Corridor Hot Spots

The crash rates most directly show which corridors need attention. Because of the large traffic volumes, most of Highways 75 and 82 are not hot spots despite the large overall quantity of crashes. Some corridors with high crash rates include:

A. FM 697 between Whitewright and TX 11
B. FM 289 North of FM 120
C. All of FM 901
D. FM 902 between FM 901 and US 75
E. TX 91 between FM 120 and TX 503
F. TX 91 between FM 691 and US 75

Intersection Hot Spots

Intersections are the most common places for vehicles to crash. The intersections with the most crashes should be identified and made primary targets for improvement. Some of the intersections with high crash rates include:

1. US 75 at FM 121 in Van Alstyne
2. US 75 at Houston and Lamar in Sherman*
3. SH 56 at FM 1417 in Sherman
4. US 75 at US 82 in Sherman*
5. US 75 at FM 691 in Denison*
6. US 75 at FM 120 in Denison
7. FM 120 at FM 91 in Denison
8. US 82 at US 377 in Whitesboro
9. US 75 at Texoma Parkway in Sherman*
10. US 69 at TX 56 in Bells

Some of these hot spots are undergoing construction to improve their safety, and others have proposed projects to address safety. Corridor and Intersection Hot Spots are noted in Figure 2.16.

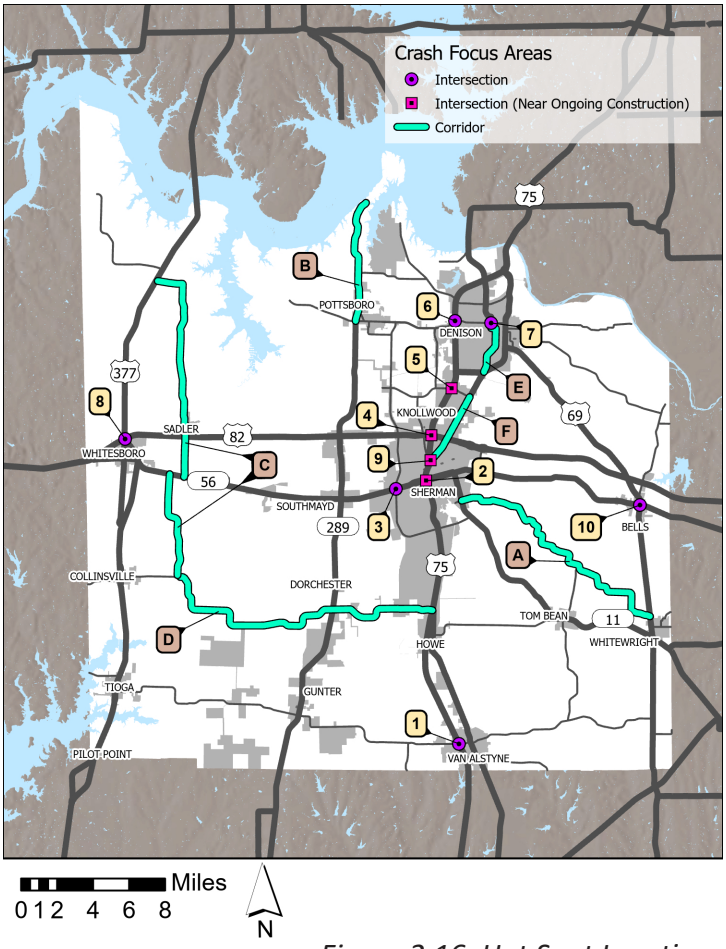


Figure 2.16. Hot Spot Locations
Source: GCMPO

Public Transportation

There is currently only one form of public transportation in Grayson County. The Texoma Area Para-Transit System (TAPS) is a curb-to-curb transit system with over 180 buses and vans. TAPS serves Clay, Cooke, Fannin, Grayson, Montague, and Wise Counties. TAPS has no fixed-route bus services, but rather a call center that must be used to schedule rides at least 48 hours in advance.

TAPS exists to serve people who are dependent on public transportation, due to financial hardship, medical needs, or a lack of a driver's license.

TAPS currently operates with a public-private partnership with Transdev to provide on-demand services and has an agreement to do so through February 2026. The primary source of funding that TAPS receives comes from section 5307 of the Urbanized Area Formula Funding grant program which directly provides public transit funding in urban areas with over 200,000 residents. In urban areas of less than 200,000 residents, 5307 grant funding is disbursed to local MPOs.

Figure 2.17. TAPS Main Office in Sherman

Grayson County Thoroughfare Plan

A Thoroughfare Plan is a plan of proposed and current roadways to establish clear routes from one place to another in an observed area. While cities and counties often have individual thoroughfare plans, the Grayson County MPO's Thoroughfare Plan is coordinated with those of Denison and Sherman. The goal is to have a plan for future development that maximizes the lengths of thoroughfares; by minimizing the number of road changes to get from place to place and maximizing the design speed of thoroughfares, a Thoroughfare Plan ensures development does not disrupt mobility.

The Thoroughfare Plan is a collaboration between city, county, state, and national planning entities and it has undergone several changes as Grayson County roadways evolve and improve. The version of the plan presented below is anticipated to be approved in the fall of 2024.

This new thoroughfare prepares for development throughout the county while preserving mobility. A significant alignment to note is that of the proposed tollway, which is further discussed in Chapter 6.

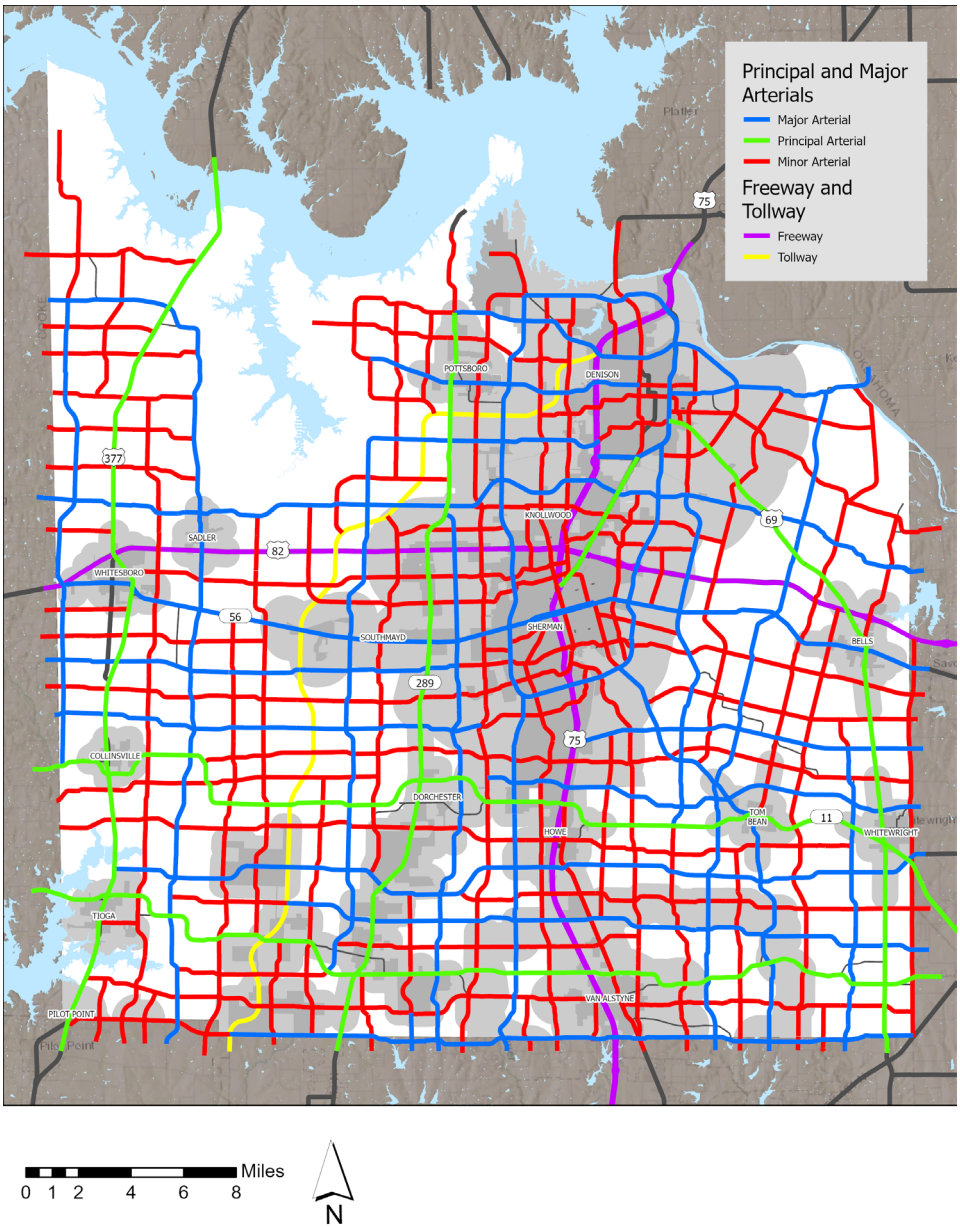


Figure 2.18. Thoroughfare Plan
Source: GCMPO

Freight Plan

The Grayson County Freight Mobility Plan was completed in September 2020. It used traffic data and stakeholder involvement to create a set of recommendations for infrastructure, policy, and economic development. The Freight Mobility Plan determined that while the freight mobility in the county was strong, it could be improved by replacing low-clearance bridges, improving pavement conditions, and improving east-west connectivity.

The majority of freight in the county moves by trucks via US 75 and thus it is key to freight mobility in the county. While US 75 is in good condition and is improving, the reliance on US 75 could be detrimental if growth creates congestion or if a natural disaster were to temporarily block the US highway.

A significant amount of freight in the county moves via rail. Grayson County has two Class I railroads and two short-line railroads. The Class I railroads are each operated by separate companies, Union Pacific (UP) and BNSF. Both short-line railroads are operated by Genesee & Wyoming. Most railroads in the area run North to South, providing access to Oklahoma and creating connections to DFW. The Texas Northeastern Railroad (TNR) is a short-line railroad that goes East from Sherman but has multiple gaps in service outside of the county.

There is also freight access from the two airports in the county. The North Texas Regional Airport (NTRA or GYI) is located Northwest of Sherman and Southwest of Denison and was built from the former Perrin Air Force Base. It has two open runways: a 9000-foot runway that can operate large aircraft and another 4000-foot runway that is only open during the day and mostly serves smaller aircraft. The NTRA has several hangars available to rent along with over 300 acres of land ready to be built on.

The Sherman Municipal Airport (SWI or KSWI) is owned by the City of Sherman and has a 4000-foot runway with a weight limit of 19,000 lbs. Due to this, the airport primarily serves small to medium-sized commercial and private passenger aircraft. The airport lacks the necessary infrastructure to support large-scale freight, however smaller shipments are possible. The majority of Texoma air freight shipments come through DFW and GYI.

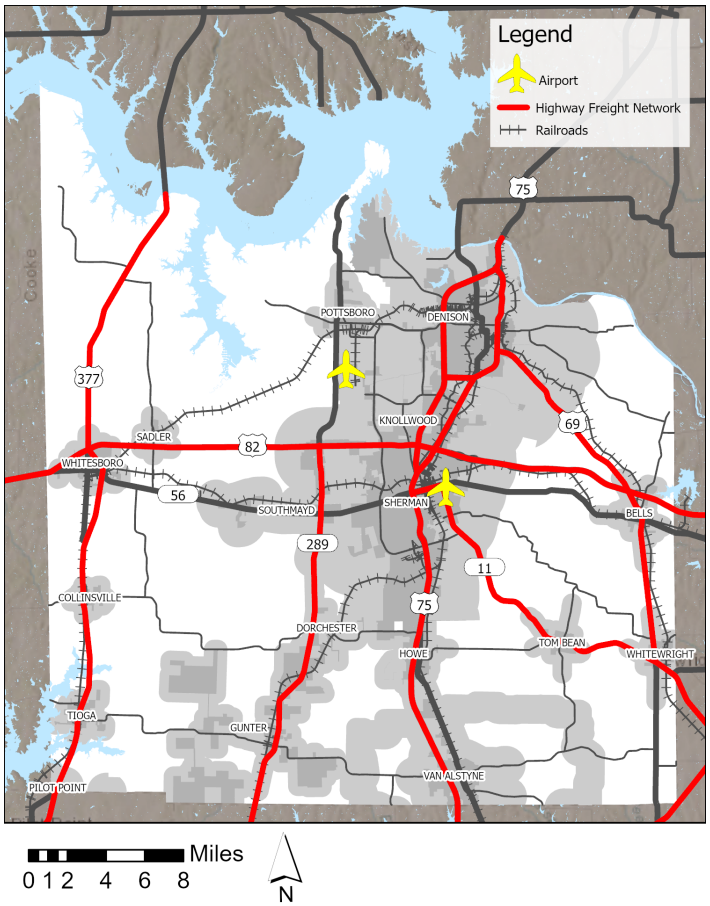


Figure 2.19. Freight Mobility Plan
Source: GCMPO

Bicycle and Pedestrian Facilities

An updated Bicycle and Pedestrian Plan has been developed in accordance with the 2050 MTP update and is included in Chapter 8 of this document. The plan, like that included in the 2040 MTP update, focuses on existing conditions in the higher-density bicycle networks within Sherman and Denison. However, the updated plan does also consider conditions across the entirety of Grayson County, especially in the areas surrounding schools. Chapter 8 includes summaries of existing bicycle and pedestrian planning efforts, including the Sherman and Denison Parks and Trails Plans.

Since the adoption of the 2045 MTP update, one of the greatest advancements in bicycle facilities has been the development and expansion of the trail network. These trails have increased both accessibility and connectivity throughout the county. Additionally, there have been increased efforts focusing on strategic planning for the future development of the park and trail system in Grayson County. These planned bicycle routes and trails are indicated in Figure 2.19.

The expansion of the Katy Trail is a key part of Denison's broader initiative to expand its existing park and recreational infrastructure while also connecting important points of interest around the city. This paved trail follows along the MKT historic railway, and it intends to connect the Texoma Medical Center to the north side of Waterloo Lake. As of 2022, Phase I of the Katy Trail has been completed and its success has indicated the benefits of continuing to expand and connect the Grayson County trail network.

Current bicycle and pedestrian facilities and plans for further investment across Grayson County are discussed in Chapter 8, as well as maps that include both existing conditions and areas for further consideration.

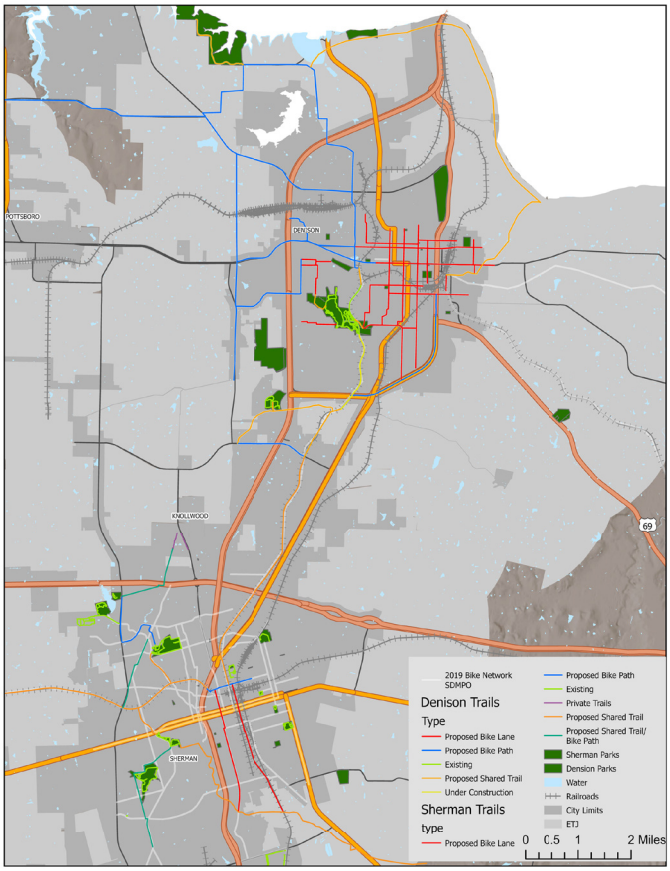


Figure 2.20. Existing and Proposed Bicycle Trails
Source: GCMPO


SHERMAN
SENIOR CENTER
VETERANS
Current Conditions
Transportation Safety
Transportation Values

3. Public Involvement Process

Public Involvement Process

Public involvement is an integral part of the MTP update process. The needs and priorities of residents may change over time, so the collection of public input must be a continuous, comprehensive, and cooperative process to ensure that everyone's voice is considered and the MTP reflects current community needs and desires. To do this, a combination of public events, stakeholder interviews, and an online survey were conducted. Stakeholders included city department heads, county elected officials, regional economic development representatives, and the TxDOT Paris District Engineer. These stakeholders provided a breadth of knowledge that supported the community responses from the public events and the online survey.

Public Involvement Goals

The stated goals for the public involvement efforts for the 2050 MTP Update are as follows:

- Early and continuous involvement
- Reasonable public availability of technical data and other information
- Collaborative input on alternatives, evaluation criteria, and mitigation needs
- Open public meetings where matters related to transportation policies programs, and projects are being considered
- Open access to the decision-making process prior to closure

Purpose of Stakeholder and Agency Outreach

Outreach to stakeholders and agencies is important in the process of data-gathering., These individuals weave technical expertise with their lived experience using county transportation systems and conversations with county residents they represent. These stakeholders and agency representatives can share their valuable knowledge on the existing transportation network, how transportation in Grayson County can be difficult, and how it might be improved.

Stakeholder outreach consisted of two efforts: three (3) workshops with the MPO Technical Advisory Committee, and one-on-one stakeholder meetings.

Public Involvement Events

There were (2) public meetings held in Grayson County to share the MTP update process and garner public input and feedback on the plan's goals, objectives, and policies. Members of the public were invited to attend these events, which occurred in the evening in public spaces. These events were advertised in compliance with the MPO's Public Participation Plan.

Meeting public involvement goals throughout the MTP update process was of the utmost importance, and for this reason, meetings were scheduled after working hours in accessible locations. To ensure that language was not a barrier to participation, translated Spanish options were provided for both printed and online surveys. Public events integrated both online and physical input opportunities for participants to submit feedback anonymously.

Outreach Schedule

The detailed schedule of public involvement efforts was presented in the first public meeting and to MPO Technical Advisory Committee. Public involvement began with Public Meeting One (1) on March 21st and ended with Public Meeting Two (2) on **ADD DATE OF FINAL EVENT.**

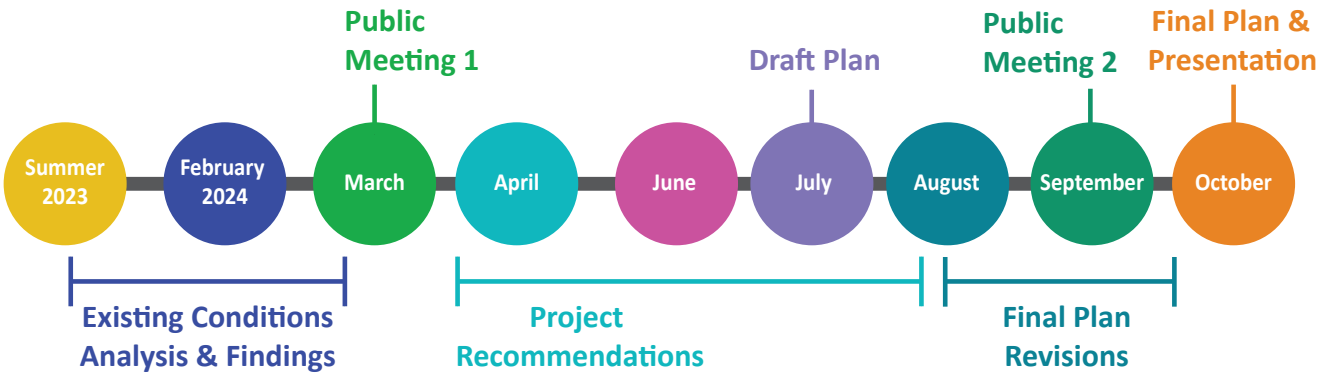


Figure 3.1. Outreach Schedule

Stakeholder Outreach

Stakeholders were identified based on representative populations and Technical Advisory Committee Members, many of whom were already familiar with the goals and plans of the MTP and MPO.

Within the six (6) interviews conducted, stakeholders discussed many topics, including alternative transportation options, county growth and development, specific projects, and transportation funding pathways and limitations. From these discussions, there were five (5) major takeaways.

Figure 3.2. TxDOT Sherman Area Engineer and Maintenance Facility

1. Transportation options have varied connotations among stakeholders, with different approaches to mode use and expansion. There is a general curiosity about alternative transportation options, particularly regarding further study of a TAPS fixed-route system.
2. Stakeholders agree that many projects need to take place for roadways to meet population needs in the coming years. All stakeholders discussed ongoing improvements along US Highway 75, including increased capacity needs for the highway and surrounding arterials.
3. There is state funding set aside for road widening, but aside from potential bonds and grants for additional local projects, there is no funding specifically set aside for transportation growth. There is a general sentiment that current funding levels are not enough to meet needs moving forward, and that current project funding seems reactive to transportation needs and not anticipatory of population growth.
4. Additional funding sources for future improvements include bonds, the utilization of state and federal funding where applicable, potential tollway revenue, and the potential impact fee funding from new development.
5. Stakeholders voiced that we can best prepare for future transportation needs by:

    a. Attempting to accurately model growth

    b. Conducting studies with TAPS to determine service level need for public transit

    c. Navigating ETJ annexation and the complications that arise from development in ETJs

        i. Potentially requiring impact or infrastructure fees

        ii. Utilizing new development as an opportunity for regional revenue via sales tax

    d. Collaborating with an engaged MPO Policy Board

    e. Increasing and optimizing public outreach to better sample population needs

From these interviews, the MTP preparation team was better able to tailor Public Meeting 2 presentation materials to garner further public input on these topics that are top-of-mind with leaders in the county.

1st Public Meeting: Thursday, March 21, 2024

This first public meeting was held on Thursday, March 21st, 2024 at the Sherman Senior Center. Goals for this first meeting included:

- Share steps and timeline for the MPO update process.
- Review existing conditions findings and maps.
- Collect feedback on transportation conditions in Grayson County.
- Share transportation survey and collect responses.
- Share ways for attendees to stay involved via sign-in, survey, or Public Meeting 2.

The event was set up in a workshop style. After an initial introductory presentation, participants were invited to walk through the room to view data and provide feedback as they wished.

Advertising the Meeting

Meeting information was advertised across various platforms in both online and print format, as well as in social media posts.

March 11, 2024

Facebook and X (formerly Twitter) posts shared advertising both public meeting and online survey information.

March 14, 2024

Media Press Release to the Herald Democrat news outlet.

Meeting Agenda

6:00-6:30pm

Sign-In and Registration

6:30-7:00pm

Welcoming Remarks and Introductory Presentation

7:00-7:15pm

Q&A and Next Steps

7:15-8:00pm

Open Workshop Circulation

8:00pm

End of Meeting & Closing Remarks

Figure 3.3. Public Meeting 1

Workshop Stations

The majority of Public Meeting 1 consisted of an open time slot for meeting attendees to circulate around the room and participate in four (4) different stations, three (3) of which encouraged active feedback opportunities. Stations and associated findings are described below.

Existing Conditions Station

This station was the introductory element of Meeting 1, consisting of 6 graphs representing findings from the Existing Conditions section of this plan. The maps shown included:

- MPO Boundaries
- Current congestion
- Predicted Congestion
- Crash Heatmap
- Bicycle and Pedestrian Crashes Map
- Thoroughfare Plan

The goal for this station was to provide a frame of reference for attendees to cite when making comments on transportation conditions, safety, values, and challenges. By presenting existing conditions data, participants could make informed comments and provide feedback that represented both statistical findings and personal experience.

Figure 3.4. Public Meeting 1 Existing Conditions

Challenges Station

This station prioritized the collection of feedback on location-based challenges within the county. A large map was provided, and participants were given numbered colorful dot stickers to mark areas of concern. Concerns were color-coded by type: Roadway, Intersection, Transit, Bikeways, and Safety.

Meeting attendees would place a numbered, colored sticker that aligned with their concern type and would then write the specific challenge or concern in the blank corresponding section to the right of the map. Identified challenges were considered in the project selection process.

Open Comments Station

For additional thoughts that participants might not have been able to indicate through the Challenges or Questions Stations, there were several additional "open comment" opportunities. The first option for comments was a blank poster with some thought-provoking guiding questions. Participants could write any thoughts in the blank section of the poster.

The second option for open comments was in a pre-meeting word-cloud generator where participants could use their phone to submit three (3) words to "Describe Transportation in Grayson County". There were eight responses submitted and they were displayed in a word cloud projected in the front of the room prior to the introductory presentation.

Figure 3.5. Public Meeting 1 Open comments Word Cloud Results

Transportation Conditions, Safety, and Values Station

This station included three (3) posters that collected opinions from event participants on three transportation categories: current conditions, safety, and overall values.

The posters collected engagement with these topics through a series of four (4) questions per poster. Each poster focused on one of these categories. To respond to each question, meeting attendees were provided stickers, which they could place along a feeling thermometer below each question that ranged from "Strongly Disagree" to "Strongly Agree". 36 participants provided feedback on their transportation feelings on these boards.

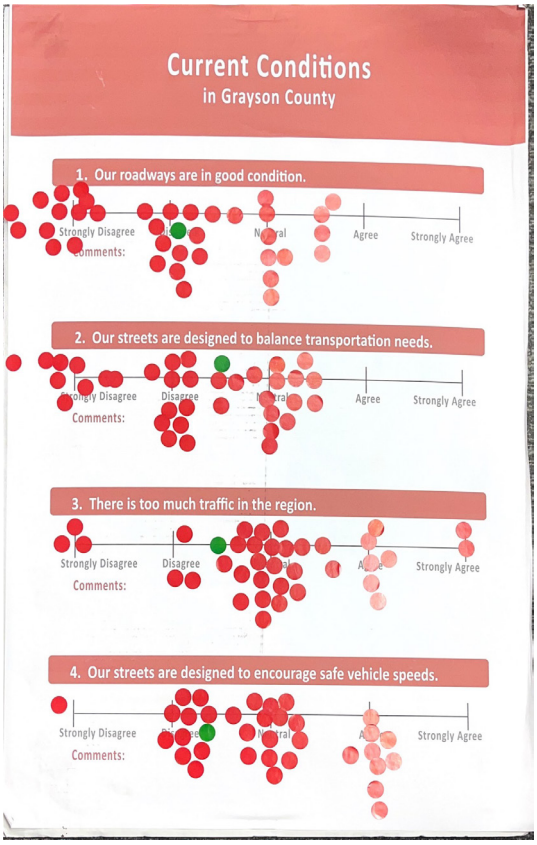


Figure 3.6. Public Meeting 1 Current Conditions Results

The current conditions responses from participants ranged from neutral to negative. The majority of participants found roadways to be neutral to poor condition. They also felt neutral to negative on whether roads are designed to balance transportation needs. The majority of participants felt neutral about traffic and whether current roadway design is encouraging safe vehicle speeds in the region.

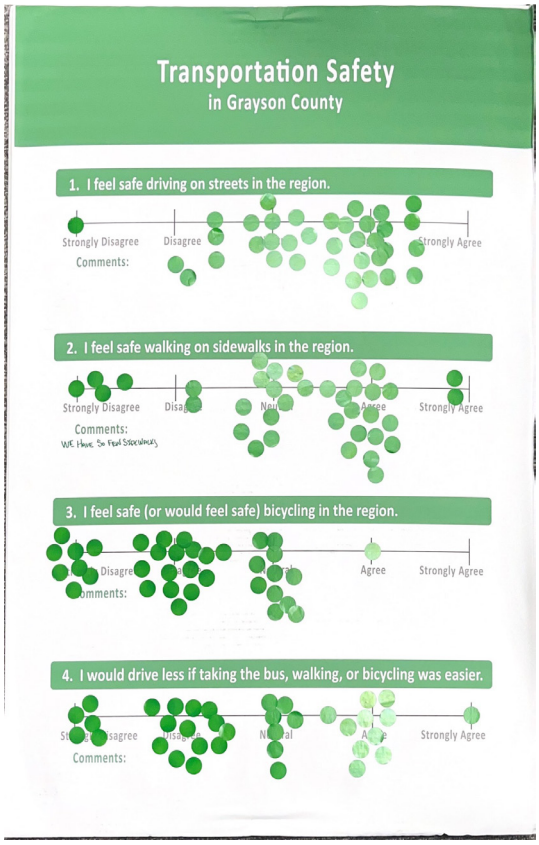


Figure 3.7. Public Meeting 1 Transportation Safety Results

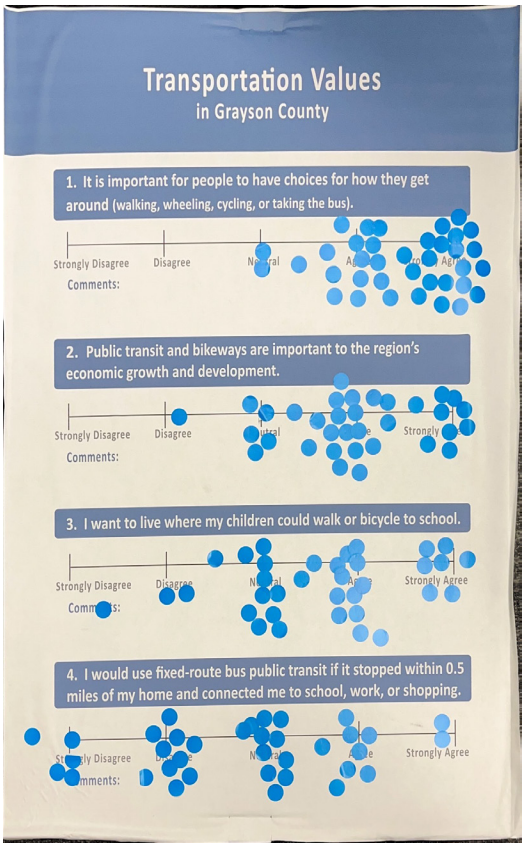


Figure 3.8. Public Meeting 1 Transportation Values Results

The majority of participants feel relatively safe driving on streets and walking on sidewalks in the region. However, participants perceived cycling in the region to be more dangerous. Responses on whether participants would drive less if alternate forms of transportation were easier were mixed, with a majority (8 more responses) leaning toward disagree and strongly disagree as opposed to agree or strongly agree.

The majority of responders felt neutral on or agreed with the statements that: it is important for people to have transportation choices, public transit and bikeways are important to the region's economic growth and development, and that they want to live where their children can walk or bicycle to school. The final question on whether responders would use fixed-route bus public transit if it stopped within 0.5 miles of the responders' home and connected to school, work, or shopping. This question has split responses, with 10 agreeing or strongly agreeing, and 15 disagreeing or strongly disagreeing. 11 felt neutral on this topic.

Summary of Meeting 1 Findings

From this meeting there were three (3) major takeaways:

1. Participants believe that roadway conditions and intersections need to be improved.
2. Residents believe alternative transportation choices are important and roadways cannot currently balance transportation needs
3. Responders do not have a consensus on whether they would drive less if alternative transportation options (transit, walking, or cycling) were easier and safer.

Figure 3.9. Public Meeting 1

2nd Public Meeting: DATE TBD

More information will be available following the second public meeting.

Online Engagement

The Grayson County MPO partnered with TAPS To ensure accessibility to those who may not have internet access, survey materials were made available in multiple locations, both online and physical. Instructions on how to acquire printed survey copies were provided in survey advertisements.

The first section of the online survey included questions from TAPS that gathered information on transportation habits, dependency on others, and factors that prevent individuals from driving.

The second part of the survey collected data specifically from those in Grayson County.

Survey Results

The online survey was open for responses from March 8, 2024, until June 30, 2024. At that time, 272 responses were collected. Of these responses, 81.25% of responders live in a zip code that falls within Grayson County and 89.34% of responders frequently travel within Grayson County.

Of the questions not related to TAPS public transit, individuals who frequently travel within Grayson County were asked questions that gauge public opinion on transportation habits, preferences, and expectations.

On current travel habits, most (38.84%) responders reported that they travel less than 30 minutes every day, with over half of responders (68.59%) driving less than 1 hour each day. Over half (50.66%) of responders also reported that reaching destinations in Grayson County is somewhat easy or very easy. Only 3.08% found reaching destinations very difficult.

Figure 3.10. Daily Time Spent Driving Survey Results

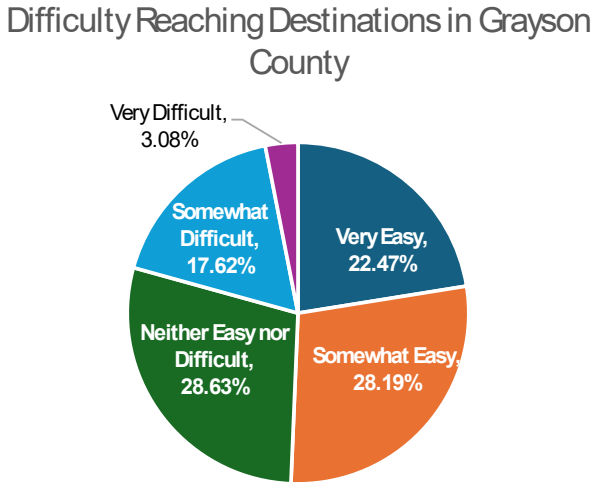


Figure 3.11. Difficulty Reaching Destinations Survey Results

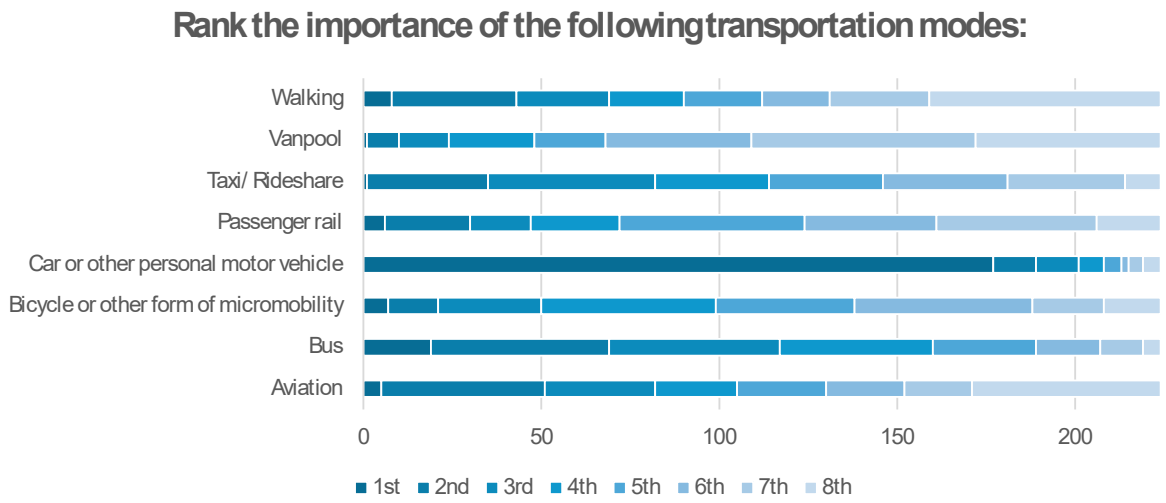


Figure 3.12. Ranked Transportation Modes Survey Results

On transportation mode preferences, survey responders ranked 8 transportation types, both for how important they are to the responder currently, and how important they expect them to be in the next 25 years. For both of these questions, car or other personal motor vehicle was the most preferred by a large margin. In the current importance ranking, 177 responders (65.07%) ranked personal motor vehicle as the #1 most important mode of transportation.

In ranking one's expected most important mode of transportation in 25 years, personal motor vehicles once again were the most popular, with 139 (48.16%) individuals ranking it as their most important mode. Responders were more open to other modes of transportation within the next 25 years, with bus, aviation, passenger rail, walking, and taxi/rideshare all receiving more #1 ranking positions than in current importance rankings.

Notably, bus is the most common second and third choice today and is the most popular third choice (following aviation) in the next 25 years, indicating that survey respondents view bus transportation as a relatively important transportation need today and in the future. Bus is also the second-most, first ranked choice of transportation today if a car is unavailable (second to taxi/rideshare).

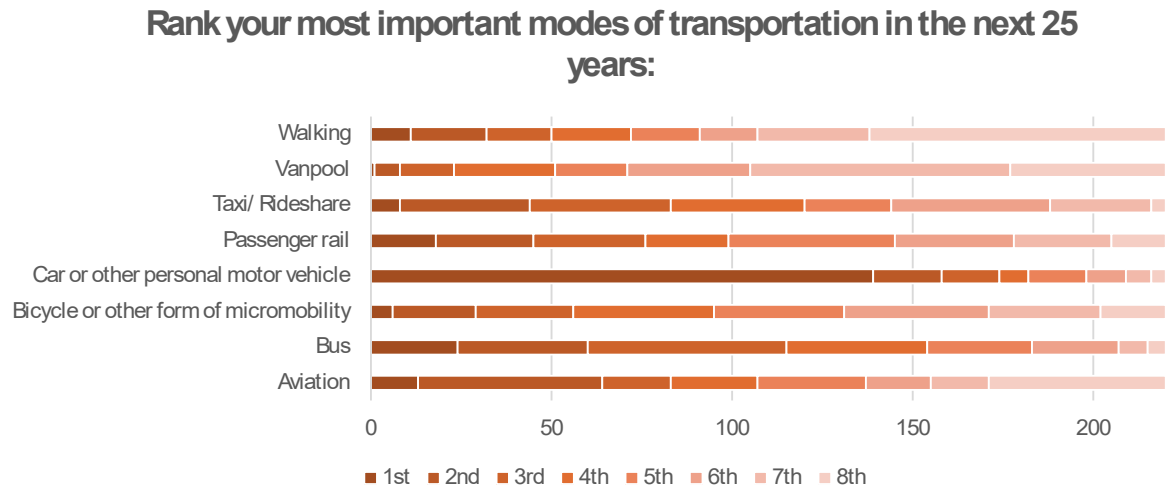


Figure 3.13. Ranked Transportation Modes in 25 Years Survey Results

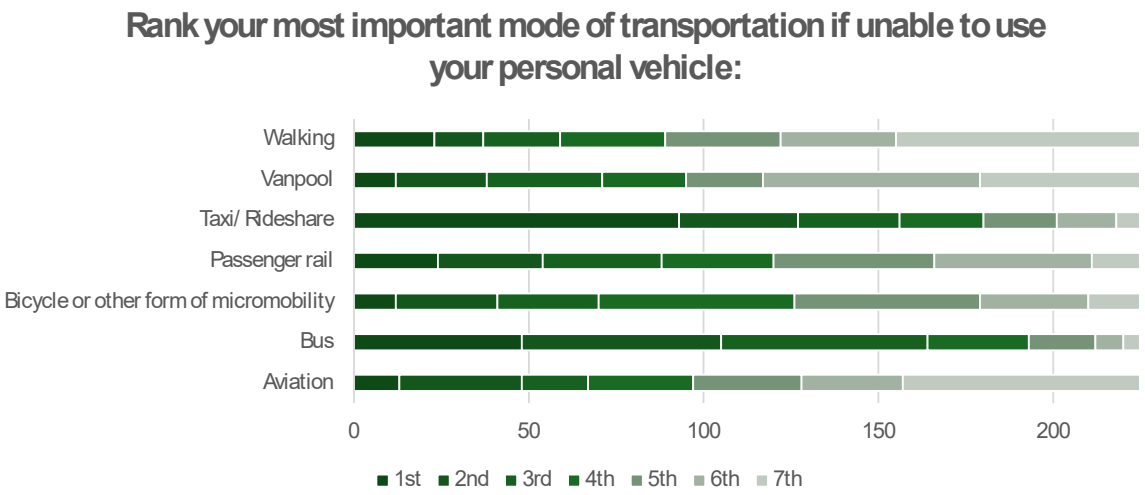


Figure 3.14. Ranked Transportation Modes No Personal Vehicle Survey Results

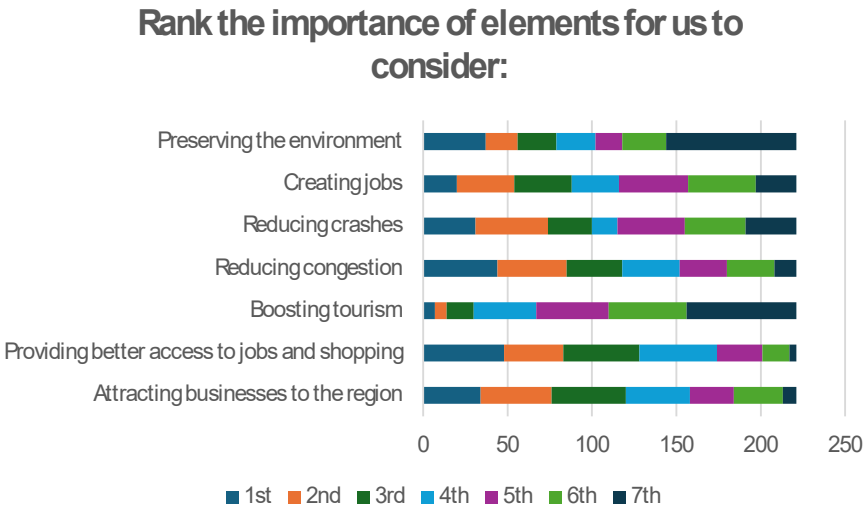
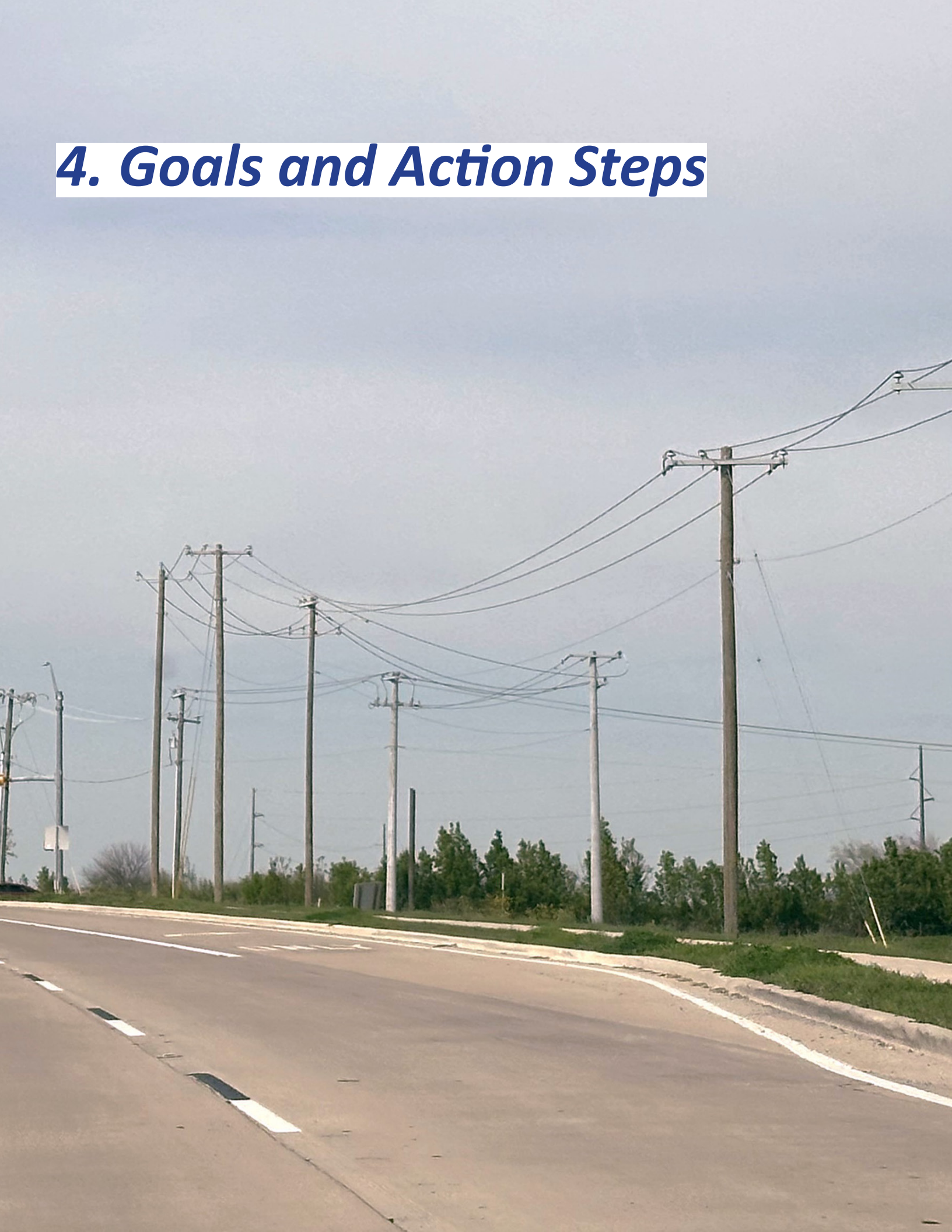


Figure 3.15. Ranked Elements of Importance Survey Results

Survey respondents were near split on their top priority among preserving the environment, creating jobs, reducing crashes, reducing congestion, boosting tourism, providing access to jobs/shopping, and attracting businesses to the region. With 22% of respondents selecting "Providing better access to jobs and shopping" and 20% of respondents responding "Reducing congestion" it is clear the economic impacts of transportation access as well as delays related to congestion are top priorities.

After removing those categories, "reducing crashes", and "attracting businesses to the region" are the next most common, continuing the theme of economic development but also indicating concerns for roadway safety. Notably, "boosting tourism" and "preserving the environment" were consistently ranked the lowest among respondents.

4. Goals and Action Steps



Goals and Action Steps

Establishing clear goals and action steps is an essential component of any effective MTP. One of the primary roles of the MTP is to guide planning and provide a clear framework for prioritizing projects and measuring the future success of projects. The goals are informed by the previously updated MTP and further by federal guidelines outlined in the MAP-21 program, FAST Act, and Bipartisan Infrastructure Law. This section will not only define the success metrics for projects outlined within the MTP but also determine a set prioritization of projects. The goals and action steps are created to guide transportation planning decisions, ensuring all project stakeholders understand the key objectives and how they are prioritized within the framework.

The goals and action steps present feasible project goals and their associated action steps needed to be taken to see the project goal to its completion. These goals focus on improving existing and supporting future transportation needs in an MPO. The action steps offer a framework to monitor progress and make informed decisions about project prioritization. It offers a systematic planning approach for the MTP to remain focused on its primary objectives. The goals for the 2050 MTP update are detailed below by performance measure, with the corresponding action steps to achieve the overall vision and goals set by the MPO.

Safety

The region's transportation system should strive to reduce crashes for both motorized and non-motorized users.

Reduce Vehicular Crash Rates

- Identify crash hot spots
- Implement projects in the areas determined to have the highest density of crashes and county-wide policies to reduce crash rates
- Identify projects that have unsafe conditions on high-speed facilities such as freeways and highways including on-ramps and off-ramps
- Support efforts of TxDOT and local agencies to upgrade all road facilities to reasonable safety standards wherever potentially hazardous conditions exist, and where feasible to maintain adequate shoulders to allow emergency vehicles to bypass traffic congestion

Create Comfortable Bike and Walking Spaces

- Identify policies that improve safety for bicyclists and pedestrians within the walking shed of elementary and middle schools
- Prioritize transportation improvements that increase safety for vulnerable users such as pedestrians, bicyclists, disabled travelers, and children
- Support local agencies to incorporate safety features into the design and maintenance of transportation facilities, including lighted streets, walkways, and bikeways, clearing brush and debris away from walkways and bikeways, and provision of security personnel at transit stations and centers

Promote Coordination of Safety Initiatives

- Partner with railroads to increase awareness of railroad-crossing safety issues
- Encourage enforcement of TxDOT's access management policy for all arterial roads within the region

Preservation

The region's transportation system should preserve and enhance existing facilities while improving system efficiency and operations.

Maintain Existing Facilities

- Invest in technologies that enhance the network and improve network efficiency
- Maximize the existing transportation system by improving system operation and reducing vehicle demand
- Encourage pavement management systems in each jurisdiction to ensure an adequate level of maintenance and preservation of existing transportation facilities

Increase Resiliency and Reliability of the System

- Improve the resiliency and reliability of the transportation system and reduce or mitigate storm-water impacts of surface transportation and reduce risk from natural disasters

Connectivity

Enhance Connectivity

- Increase lane miles of connectivity within the region
- Target truck system routes for improvement in accordance with the GCMPO Freight Plan
- Increase lane miles of connectivity within the region
- Improve multimodal connectivity options including bicycle, sidewalk, and transit infrastructure

Congestion Reduction

The region's transportation system should strive to improve the person-capacity of congested corridors.

Reduce and Prevent Congestion

- Maintain reasonable levels of service for all modes of travel
- Maintain and improve intersection level of service
- Design roadway improvements along truck routes for the vehicles using the facilities
- Review corridor and network signalization to ensure traffic is flowing as smoothly as possible

Effect on Economic Development

The transportation system should strive to increase the economic vitality of the region.

Encourage Economic Growth

- Provide transportation projects that improve both regional and neighborhood vitality
- Partner with local agencies and jurisdictions to provide enhanced transportation services such as regional transit to improve global and regional competitiveness

Ensure the Freight Network is Reliable

- Follow the recommendations as laid out by the GCMPO freight plan
- Consult with economic development partners to identify the transportation needs of businesses the County
- Install signage and wayfinding

Effect on the Environment

Transportation improvements should be focused on reducing environmental impacts.

Protect Environmental Resources and Exposure to Hazards

- Protect air and water quality, manage stormwater runoff, and preserve green space in all transportation network design
- Continue to encourage the use of alternative fuels
- Review and if necessary modify environmental documents for major transportation improvement projects to ensure alternatives and mitigation measures being studied are consistent with the Metropolitan Transportation Plan
- Support local and state actions to minimize the risk of transporting hazardous materials through heavily populated, congested, and environmentally sensitive areas
- Support efforts of local agencies and TxDOT to locate new transportation systems in places that minimize environmental and socioeconomic impacts

Community Support

Early and continuous public involvement must occur throughout planning processes

Collect and Consider Public Input

- Project selection must incorporate public input from events, surveys and other forms of communication.
- Events must be held at times and locations that are accessible to community members
- Planning decisions reflect citizens' anticipated needs as collected through public involvement efforts

Transportation Choices

The region's transportation system should be enhanced to improve mobility options for all transportation users.

Increase Overall Transportation Choices

- Incorporate multi-modal street improvements through context-sensitive design
- Provide adequate transportation facilities and services to serve areas of existing and planned higher-density, mixed-use development

Create Connected and Comfortable Bicycle and Pedestrian Amenities

- Identify ways to include pedestrian and bicycle accommodations with roadway improvements
- Promote system-wide ADA compliance with TxDOT and local jurisdictions
- Support efforts of TxDOT and local agencies to construct continuous bicycle and pedestrian facilities that are sufficiently wide and clearly marked, and to maintain them to reasonable safety standards

Improve Transit Services

- A transit needs study for the area should be conducted
- Promote increased connectivity between rural and urban transit activities
- Explore Park and Ride options for commuters to the DFW area and DFW airport
- Coordinate with Texoma Area Paratransit System (TAPS) to provide on-demand transit

Performance Targets

MPOs are responsible for setting clear performance goals and targets to guarantee the efficacy of the suggested mobility improvements in their jurisdiction and they are required to work in direct coordination with TxDOT's performance measure targets. TxDOT has developed a series of standards and performance targets for statewide transportation improvement projects. The MPO has adopted its own performance measure targets, which are updated continuously according to TxDOT standards.

There are three different performance measures that TxDOT and local MPOs are required to comply with:

Safety Performance Measures (PM1)

Safety performance measures account for the total number of traffic fatalities and critical injuries, fatalities per 100 million vehicle miles traveled, and the total number of non-motorized fatalities and other serious injuries. This data helps MPOs make informed decisions supporting countermeasure infrastructure projects that directly address the primary safety issues facing road users.

Pavement and Bridge Condition Performance Measures (PM2)

Pavement and bridge condition performance measures include an evaluation of:

- Percentage of Interstate System pavement in good condition
- Percentage of Interstate System pavement in poor condition
- Percentage of Non-Interstate National Highway System pavement in good condition
- Percentage of Non-Interstate National Highway System pavement in poor condition
- Percentage of Bridge Deck on the National Highway System in good condition
- Percentage of Bridge Deck on the National Highway System in poor condition

System Performance Measures (PM3)

System Performance measures include an evaluation of the National Highway System and Non-Interstate Highway Travel Time Reliabilities. The concept of Travel Time Reliability is essential in addressing road-use consistency and predictability.

Transit Asset Management (TAM) Plan

The Transit Asset Management Plan is a requirement for agencies that own, operate or manage assrts that provide public transportation services and receive federal funding. This plan is updated every four years and must:

- Outline how people, processes, and tools come together to address asset management policy and goals
- Provide accountability and visibility for furthering understanding of leveraging asset management practices
- Support planning, budgeting, and communications to internal and external stakeholders

Public Transportation Agency Safety Plan (PTASP)

The Public Transportation Agency Safety Plan is developed by agencies operating public trnasportation using federal funding from the FTA Urbanized Area Formula Grants. This plan requires agencies to develop an Agency Safety Plan (ASP) that includes a Safety Management System (SMS). These documents outline processes and procedures related to safety of the drivers of and the passengers on public transit.

Prioritization of MTP Projects

The prioritization process for MTP projects in Grayson County is an important and required step in the project selection process because of its performance-based approach. TxDOT has developed several methods to maximize the efficiency in the project prioritization process. Among these approaches, TxDOT relies on its online software program known as Decision Lens to assist local MPOs and contractors around the state with project prioritization.

Decision Lens is a powerful software tool that offers a purpose-built framework in which MPOs can make planning decisions based on a specific set of traffic-related data inputted into its system. The program takes in specific sets of data associated with the indicative criteria and other related indicators to generate a project prioritization report that weights projects based on local preferences. In 2022, the Grayson County MPO adopted the previously mentioned performance measures and their Decision Lens weighting as indicated in Figure 4.1.

CRITERIA	CRITERION %	SUBCRITERIA		% OF TOTAL
SAFETY	28.00%	Crash Count 25%	Estimated Impact on Fatal and Serious Injury Crashes 50%	3.5000%
			Estimated Impact on Total Crashes 50%	3.5000%
		Crash Rate 25%	Estimated Impact on Fatal and Serious Injury Crash Rate 50%	3.5000%
			Estimated Impact on Total Crash Rate 50%	3.5000%
		Societal Cost Savings 25%		7.0000%
		Safety Importance 25%	Safety Project Classification Y/N 50%	3.5000%
			Evacuation Route Y/N 50%	3.5000%
PRESERVATION	18.58%	Bridge Condition 50%	Reduction in Structurally Deficient Deck Area 50%	4.6450%
			Deck Area Receiving Preventive Maintenance 50%	4.6450%
		Pavement Condition 50%	Reduction in Poor Lane Miles (by Ride Score) 25%	2.3225%
			Lane Mile Receiving Preventive Maintenance (by Ride Score) 25%	2.3225%
			Reduction in Poor Lane Miles (by Distress Score) 25%	2.3225%
			Lane Miles Receiving Preventive Maintenance (by Distress Score) 25%	2.3225%

Figure 4.1 Project Selection Chart

CRITERIA	CRITERION %	SUBCRITERIA		% OF TOTAL
CONGESTION	17.12%	Congestion Reduction 100%	Benefit Congestion Index - Auto 50%	8.5600%
			Benefit Congestion Index - Truck 50%	8.5600%
CONNECTIVITY	12.02%	Enhanced Connectivity 100%	Congestion/Connectivity Related Y/N 25%	3.005%
			Trunk System Route Y/N 25%	3.005%
			Intermodal Connector Y/N 25%	3.005%
			Lane Miles of New Connectivity 25%	3.005%
ECONOMIC	8.74%	Economic Importance 50%	National Highway System (NHS) Route Y/N 33.34%	1.4570%
			National Highway Freight Network (NHFN) Y/N 33.33%	1.4565%
			Energy Sector Route Y/N 33.33%	1.4565%
		System Usage 50%	Base ADT 50%	2.1850%
			Base ADTT 50%	2.1850%
ENVIRONMENT	4.64%	Environmental Related Program Y/N 50%		2.3200%
		Environmental Mitigation Cost 50%		2.3200%
CRITERIA	CRITERION %	SUBCRITERIA		% OF TOTAL
TRANSPORTATION CHOICES	3.90%	Pedestrian and Bicycle Accommodations 50.0%	Accesses schools, parks, large employer, multifamily or mixed-use residential, or shopping Y/N 25.00%	0.4875%
			Population densities in surrounding area 25.00%	0.4875%
			Access to transit stops Y/N 25.00%	0.4875%
			Serves both bicyclists and pedestrians Y/N 25.00%	0.4875%
		Project Included in the Bicycle and Pedestrian Plan (BPP) Y/N 50.0%		1.9500%
COMMUNITY SUPPORT	7.00%	Survey Results 100%		7.0000%

The results from Decision Lens will be divided by the percent of TxDOT funds allocated to the project to arrive at the Final Score for the project in accordance with the following formula:

$$Final\ Score = \frac{Result\ from\ Decision\ Lens}{1 - Local\ Contribution\ (Percent)}$$

Figure 4.1 Project Selection Chart (cont.)

Other Transportation Plans in the County

2022-2026 Texoma Region Coordinated Human Services Transportation Plan

In 2022, the Texoma Council of Governments (TCOG) adopted the 2022-2026 Texoma Region Coordinated Human Services Transportation Plan. This plan was created to ensure that everyone in the county has access to transportation, especially seniors, those with disabilities, and those living in low-income households.

The primary goals of this plan are to:

- Enhance the quality of the customer's travel experience
- Expand the availability of services, especially to those who are underserved
- Establish and sustain communications and decision-making mechanisms among sponsors and stakeholders to guide plan implementation effectively

Sherman Comprehensive Plan 2022

In 2022, the City of Sherman created a comprehensive plan to guide growth and development for the next ten years. This comprehensive plan included a number of goals and strategies relevant to the MTP, including:

- Strategy 1.3a: Promote a diversity of residential building types, lot sizes and density ranges in new neighborhoods or areas designated as higher density.
- Strategy 1.4d: Encourage more urban-level density near walkable amenities such as downtown lofts, vertical mixed-use structures, and multi-family apartments when reviewing development proposals.
- Strategy 2.5a: Pursue the creation of gateway entry features along US 75 northbound and southbound into the City of Sherman to help delineate and brand the community.
- Strategy 3.1b: In conjunction with street rehabilitation or other public improvement projects, construct or reconstruct sidewalks where they do not exist or are in poor condition (particularly adjacent to schools, parks, public buildings, and Austin College).
- Strategy 3.1f: Ensure connectivity of the street network for effective police and emergency response.
- Strategy 3.1h: Prioritize bicyclist and pedestrian safety by providing more locations for cyclists and pedestrians to safely cross the major corridors and separating or buffering cyclists and pedestrians from vehicular traffic whenever possible.
- Strategy 3.1j: Pursue access management policies and regulations to reduce conflict points and enhance traffic flow and safety on major thoroughfares. Update relevant development codes to ensure developers provide alternate travel routes within the overall street network to relieve the traffic burden on major arterials.
- Strategy 3.2h: Add specific pedestrian and bicycle criteria to the site plan review process when large commercial sites are proposed. These criteria may include the designation of pedestrian connections to surrounding developments, internal pedestrian and bicycle circulation, bike parking locations, and parking lot safety.

Sherman Comprehensive Plan 2022 (cont.)

- Strategy 3.3c: Continue to advocate for US 75 reconstruction to upgrade various on and off-ramps to contemporary design standards that improve traffic flow and safety. Also, ensure that any improvement of US 75 to interstate standards maintains the same level of accessibility to the heart of Downtown. Entrances and exits to US 75 are the lifeblood of Sherman's economic engine, so any loss of accessibility could have detrimental effects upon local mobility and business operations.
- Strategy 3.4a: Explore ways the City can support expanded local transit services, especially to benefit the area's senior population and households without automobiles.
- Strategy 3.4b: Consider potential transit service options to Blalock Industrial Park and Grayson Community College given their relatively remote locations. Given limited resources and the high cost of providing transit/shuttle service, the City should consider forming a partnership with the County and/or Austin College or local employers to provide a service that would be mutually beneficial to all.
- Strategy 3.5: Build a safe, connected community-wide system of trails that create linkages to greenspaces, parks, neighborhoods, and local destinations.

Denison Comprehensive Plan 2018

In 2018, the City of Denison adopted a comprehensive plan to guide development, zoning ordinances, and infrastructure. This comprehensive plan was based on a number of goals relevant to this MTP, including:

- Connect streets across railroads, per the Master Thoroughfare Plan
- Create a master plan of multiuse trails that connect key nodes within the City, including parks, downtown, historic sites, commercial and employment centers, and residential areas.
- Plan and prioritize the following items:
  1. Direct connection for vehicles from Downtown to Eisenhower State Park for tourists
  2. Seamless vehicle connection from US 75 to Downtown
  3. Hike and bike trail system connecting major job centers and recreational facilities
  4. Bike path connections from neighborhoods to Downtown
  5. Incentivize "Complete Streets" designs for new and renovated streets whenever possible
  6. Develop a plan for access and driveway management along existing and new commercial corridors, including cross-access requirements.

5. Environmental Justice, Resiliency, and Land Use

Environmental Justice, Resiliency, and Land Use

Environmental Justice and Resiliency are key considerations for the MTP. By recognizing social, economic, and environmental vulnerabilities, we can ensure our transportation systems best serve Grayson County communities.

Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, along with several subsequent policies and strategies, require transportation planning to consider Environmental Justice. Environmental Justice is defined by that executive order as the fair treatment and involvement of all people in developing environmental laws and policies. The US Department of Transportation describes fair treatment as ensuring that no population is disproportionately affected by the environmental impacts of transportation decisions and policies. In other words, minorities, members of low-income households, and members of other protected classes should be intentionally included in transportation planning and should not bear an unequal environmental or economic burden for transportation projects.

The transportation planning process should strive to include and consider members of minority, non-English-proficient, disabled, and low-income populations. In order to achieve this goal, the demographics of the county must be acknowledged to ensure that they are properly included and considered in planning efforts.

Age

According to Figure 5.1, it is apparent that about 22% of the population in Grayson County are below the age of 18, approximately 60% are between the ages of 18-64, and about 17% of residents are over the age of 65. The data represented in the pie chart below is from Northwestern University and it reflects the age demographics presented by the Census Reporter which is not directly affiliated with the US Census report but helps effectively represent ACS data.

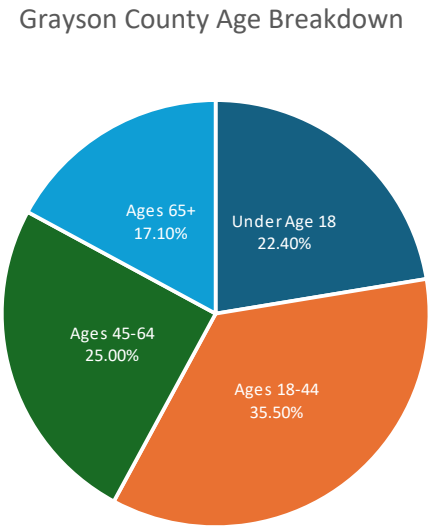


Figure 5.1. Age Demographics
Source: U.S. Census

Minorities

A racial or ethnic minority is defined by the FTA as an identification of individuals who are American Indian/ Alaska Native, Asian, Black or African American, Hispanic or Latino, and/or Native Hawaiian/ Pacific Islander. The census similarly defines a minority as any group other than non-Hispanic white.

About 30% of Grayson County's residents are minorities. As shown in FIgure 5.3, there are concentrations of minorities in Sherman and Denison, with some areas in Sherman being made up of over 70% minorities.

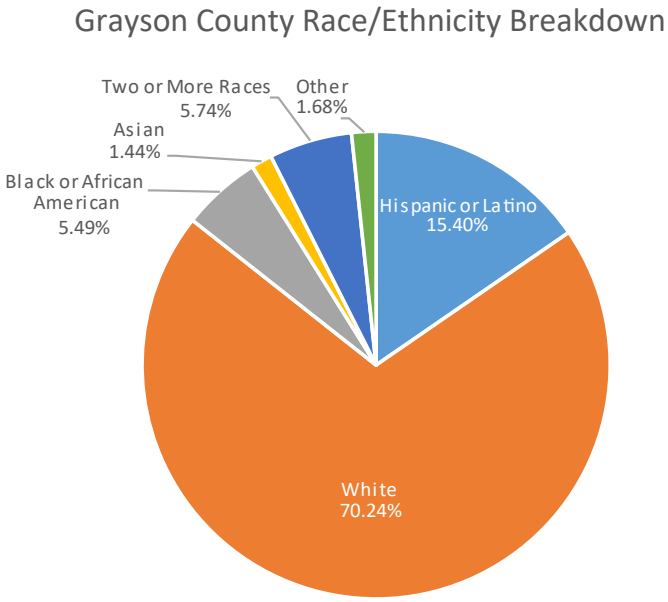


Figure 5.2. Race and Ethnicity Demographics
Source: U.S. Census

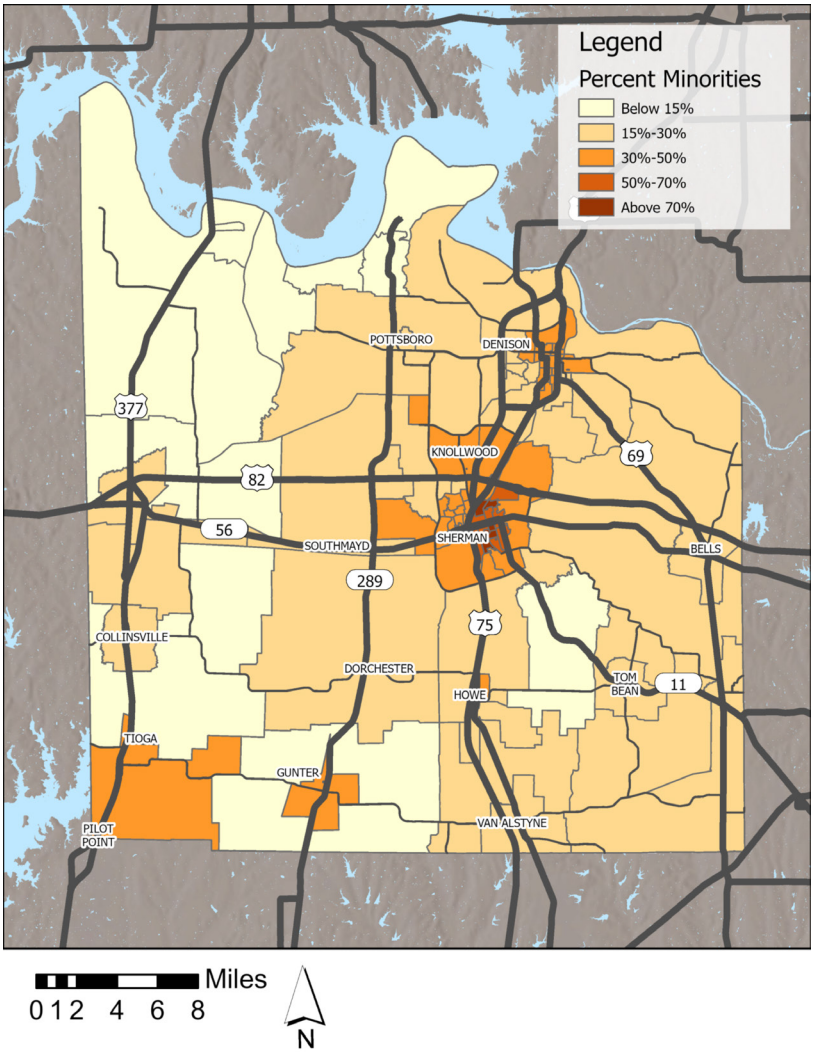


Figure 5.3. Percent Minorities
Source: U.S. Census

Limited English Proficiency

People with a limited ability to speak English can have difficulty providing input into transportation planning. Many planning documents, such as this one, are written in English. It is important to ensure these populations are included by utilizing the skills of translators and other means. The 2050 MTP survey was provided in both English and Spanish, collecting public input in both languages.

The US Census gathers data on English proficiency; the data is split into the population that speaks English very well and those that do not. Limited English proficiency includes those who do not speak English as their primary langauge and have issues speaking, reading, writing or understadning English.

About 4% of the population of Grayson County has limited English proficiency. There is a higher concentration of people with limited English proficiency around Sherman; over 20% of the population in some areas of Sherman have limited English proficiency.

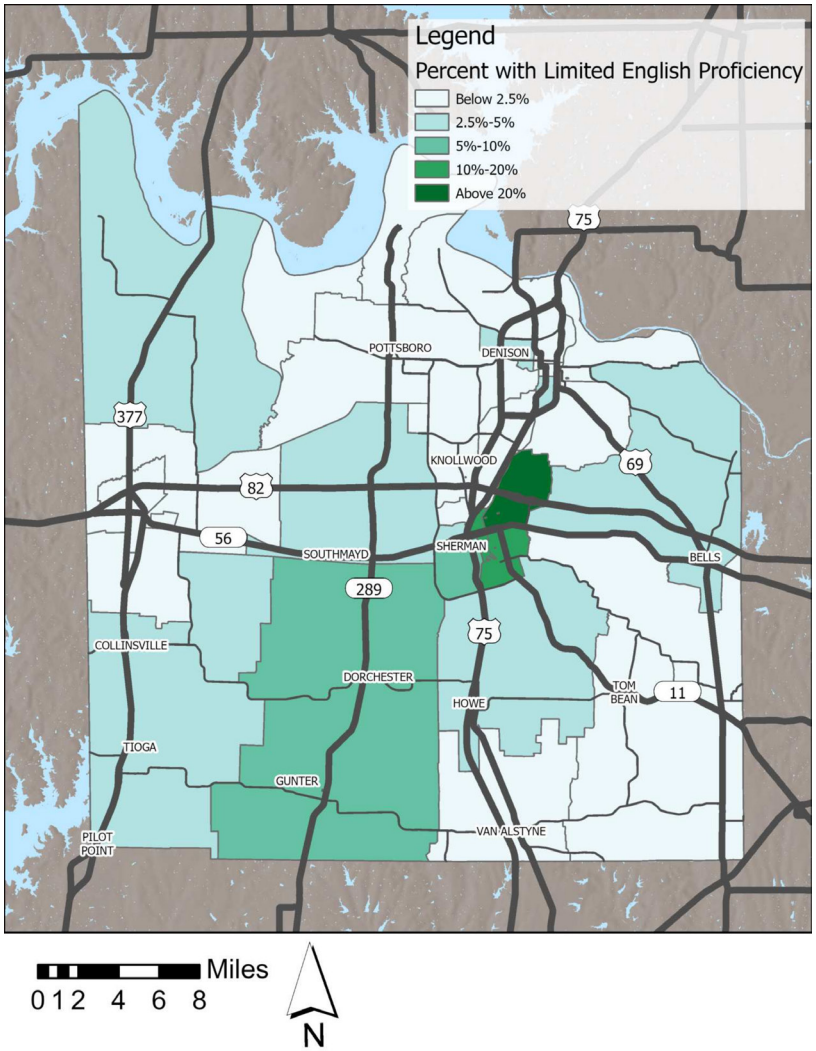


Figure 5.4. Percent Limited English Proficiency
Source: U.S. Census

Disability

The Census Bureau considers a person to have a disability if they have difficulty with hearing, vision, self-care, independent living, cognitive difficulty, or ambulatory difficulty.

People with disabilities may be unable to drive a vehicle; planning transportation solely around automobiles takes away their mobility. Understanding where disabled people live can help determine where alternative modes of transportation are needed. About 13% of the population of Grayson County is disabled. There are concentrations in Sherman, Denison, and around Whitesboro.

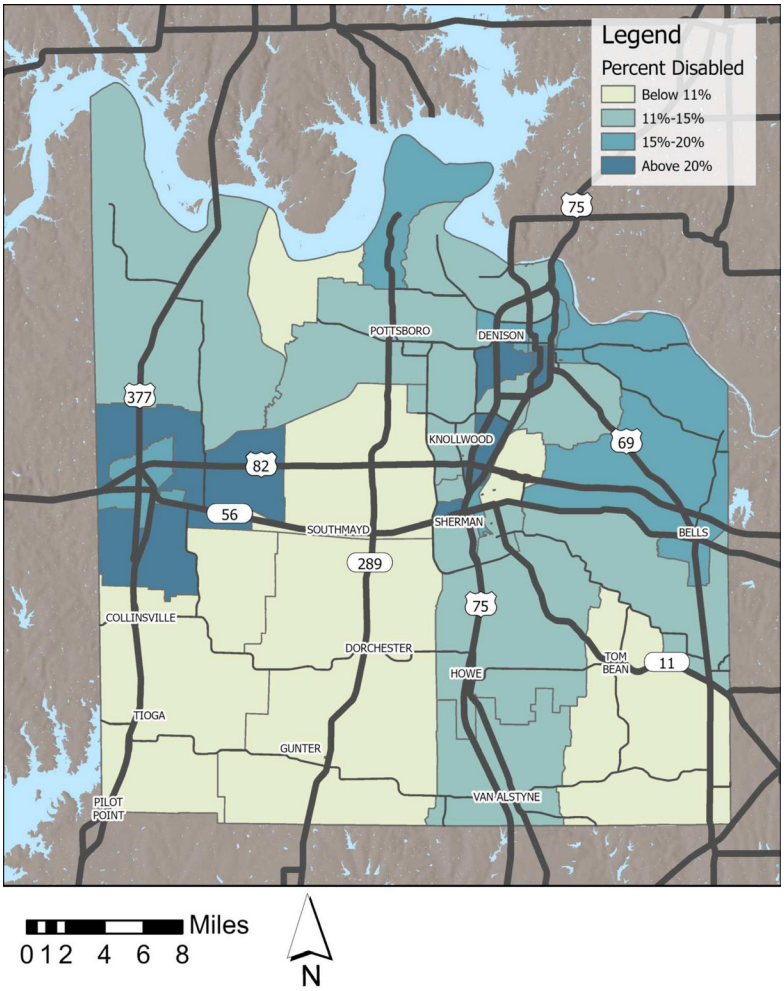


Figure 5.5. Percent Disabled
Source: U.S. Census

Low-Income

The median household income of Grayson County is $62,919. For the state of Texas, this median number is $66,963. People with a lower income may have difficulty participating in transportation planning; they often have limited access to information, may have limited time due to working multiple jobs, and have limited ability to attend public meetings held on both weekdays and weekends. This limited ability to contribute should be addressed, whether by more direct methods of information dissemination or through alternative methods of transportation planning contribution.

Areas with high concentrations of low-income households are often disproportionately affected by transportation planning. New development has often occured where land has lower value, due to the lower land acquisition costs and historic attempts to revitalize or enhance lower-income regions. However, this can lead to issues of dispancement or restricted access to integral services. Recognizing ways to meet transportation needs without negatively impacting low-income resident's properties or roadway access is extremely important.

10.4% of the people in Grayson County are below the poverty line, with largest concentrations of low-income households in Denison.

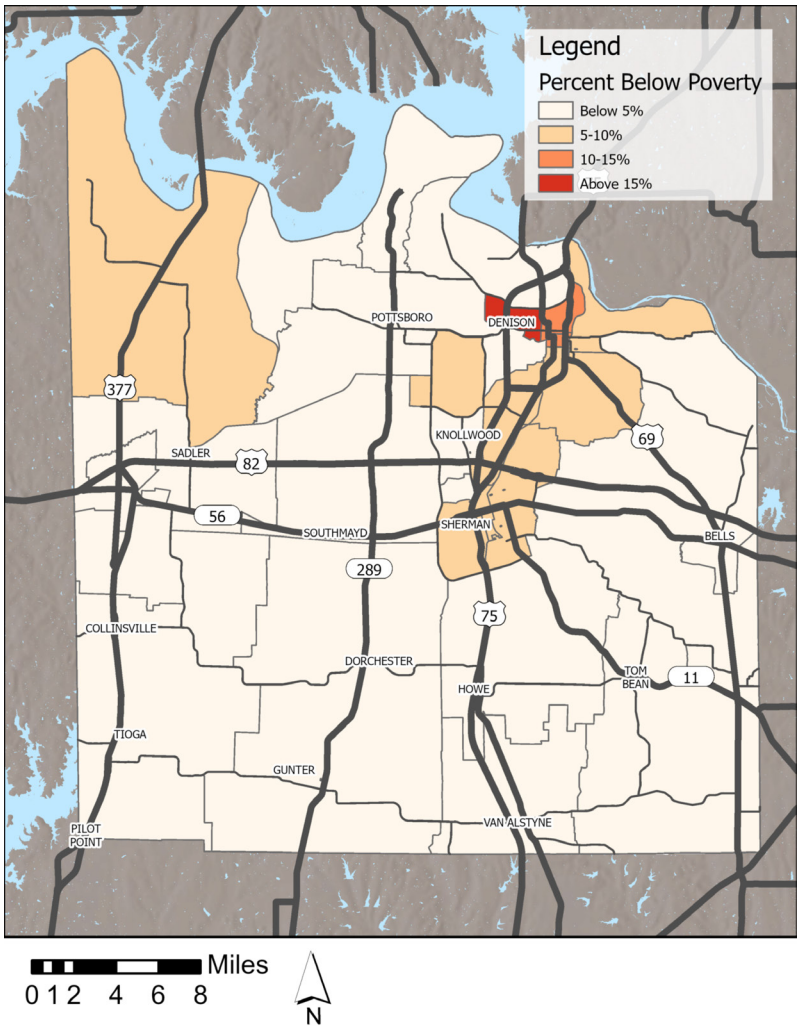


Figure 5.6. Percent Below Poverty Line
Source: U.S. Census

Resiliency

One of the goals established by the Federal Fixing America's Surface Transportation (FAST) Act is to ensure resilient infrastructure. In 2021, the US DOT created a Climate Action Plan as a result of Executive Order 14008. One of the primary goals of the Climate Action Plan is to ensure that infrastructure is resilient to the changing conditions of climate change. As defined by the executive order, resiliency is "the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions." These disruptions are most often caused by natural disasters. It is a priority to ensure that in the inevitable case of a natural disaster, Grayson County's transportation infrastructure is resilient enough to avoid severely debilitating the County.

Natural disasters in the area may come in a few different forms. Earthquakes, while uncommon, could still potentially damage bridges and roadways. In the past 10 years, 7 tornadoes have touched down in Grayson County; tornadoes can damage infrastructure and block roadways. Flooding is a potential issue in the county, as are ice and snowstorms. By preparing and planning infrastructure to be resilient against these natural disasters, their impact can be mitigated.

Floods

Floods are natural disasters that have a relatively high likelihood of occurring and cause widespread effects.

The 100-year flood plain is the area we can expect to be flooded in a storm with an intensity seen, on average, only about once in one hundred years. Roads that go below these flood plains would be impassable during a flood and would cut off access in the middle of a crisis. These roads are called low water crossings; Ten exist in the county, as shown in Figure 5.8. Eliminating these crossings and avoiding the creation of any additional low-water crossings ensures the area is more resilient against flooding.

It is also important to know which properties are located in a 100-year flood zone. To protect resident safety, maintenance of proper emergency access to these properties is essential in the case of flooding.

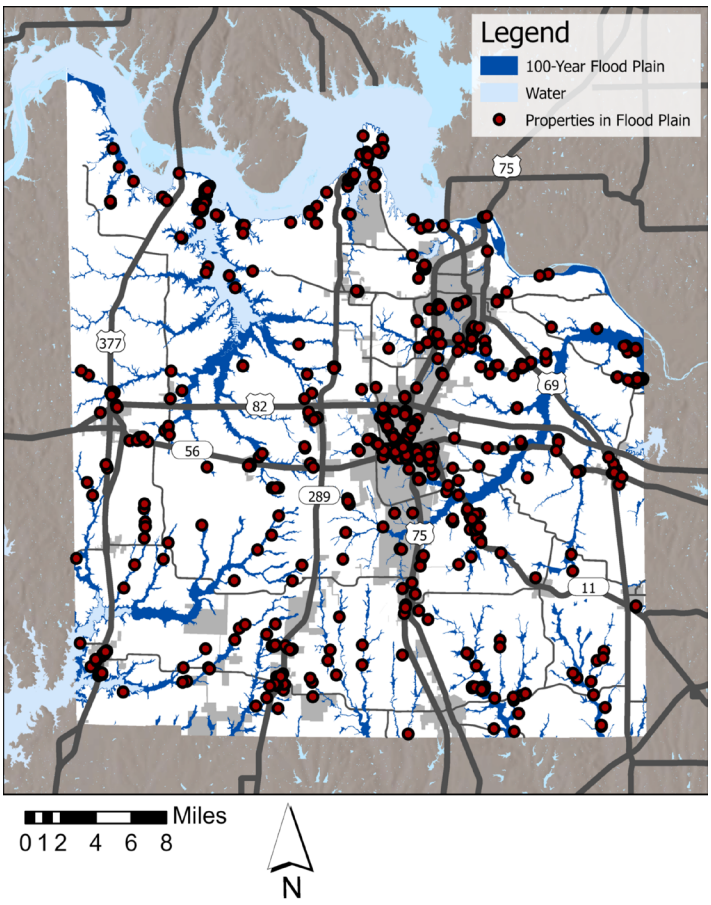


FIgure 5.7: Properties in Floodplain
Source: GCMPO

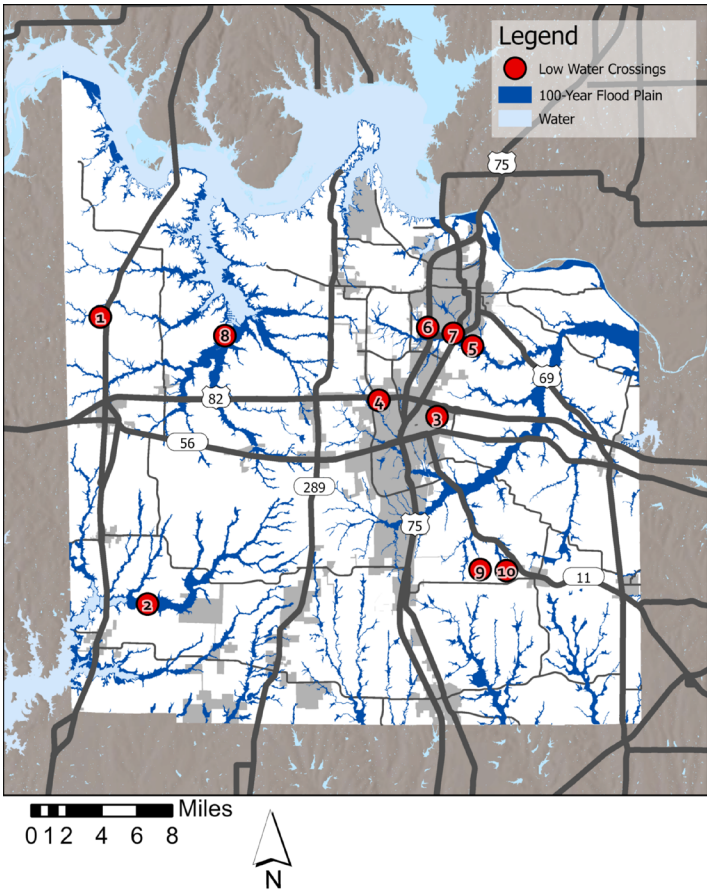


Figure 5.8: Low Water Crossings
Source: TNRIS

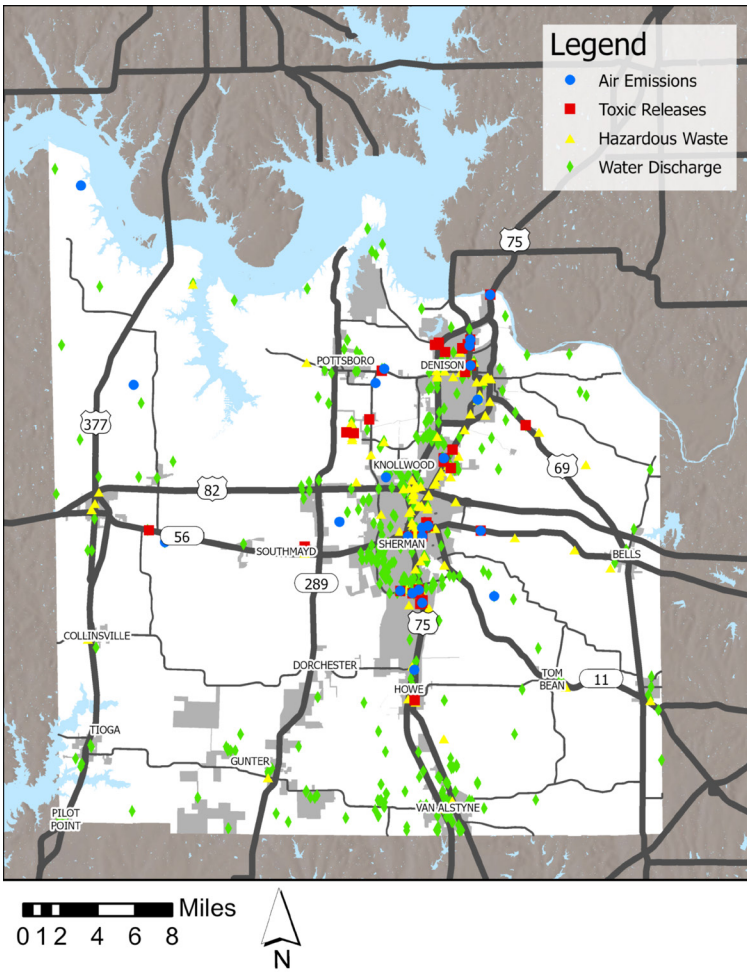
Low Water Crossings – Grayson County			
ID	Location	ID	Location
1	Knight Road at Sandy Creek Draw	6	Loy Lake Road at Loy Creek
2	Horseshoe Road at Range Creek	7	Flowers Drive at Waterloo Creek
3	Tuck Street at Calf Street	8	Bennet Lane at Big Mineral Creek
4	Cypress Grove Road at Post Oak Creek	9	Mary Fitch Road at Cedar Creek
5	Fannin Avenue at Iron Ore Creek	10	Mary Fitch Road at Cedar Creek (Position not exact)

Figure 5.9. Low Water Crossings Table
Source: TNRIS

Environmental Hazards

It is unlikely that an emergency involving an environmental hazard will directly damage roadway infrastructure. However a hazardous emergency could have secondary effects that affect mobility, such as requiring the shut-down of a roadway segement to protect the safety of the public. Additionally, it is important to provide sufficient access for emergency response vehicles to respond in the case of a hazardous emergency.

The Environmental Protection Agency (EPA) tracks sources of potential contaminants, including water discharge sites, air emissions, toxic releases, and hazardous waste sites. These locations are not currently dangerous. however, in the case of an accident, these locations have the potential to cause harm to either the environment or individuals. Ensuring there is sufficient access to these sites, shown in Figure 5.10, is important to ensure a timely response to an environmental crisis in the County.



5.10. Environmental Hazards
Source: EPA


NO TURN ON RED
ONE WAY
DO NOT ENTER
Houston St
Sherman 100 W

6. Mobility Analysis

Mobility Analysis

Roadways

Roadways are currently the most important and widely used form of transportation in the County. Therefore, the majority of transportation funding in the County is put towards roads. Roadways have high usage, securing them a priority status when planning for future mobility improvements.

Freeways and Tollways

Currently, the only complete freeway is US 75, going North-South through the County. However, progress has been made on the planning and construction phases of the US 82 freeway spanning 575 miles creating connections between 48 Texas cities spanning in the Northern Texoma counties of Texas. To date, construction and feasibility studies are underway in Grayson County.

There are currently no tollways in Grayson County. However, there are currently plans to construct an extension to the Dallas North Tollway through Grayson County. The tollway would provide greater access to Grayson County from the Metroplex and would allow through traffic to bypass the development and traffic along most of the length of US 75 in Grayson County. The alignment of this tollway, which is included in the Thoroughfare Plan, is shown in Figure 6.1.

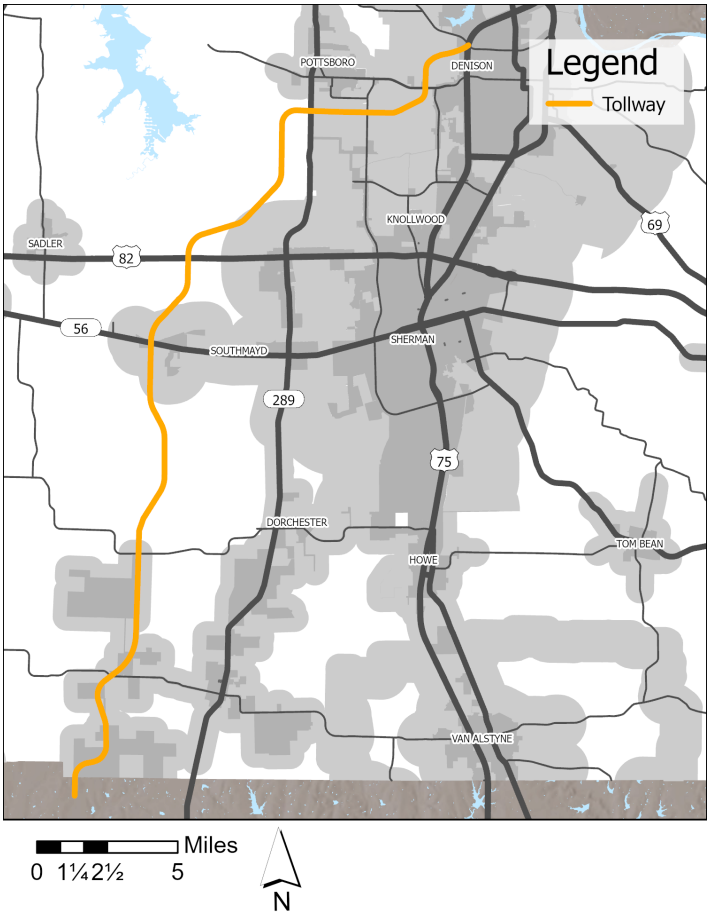


Figure 6.1. Proposed Tollway
Source: GCMPO

Arterials and Collectors

Arterials are roads that are meant to allow connectivity between areas. Generally, smaller arterials lead into larger arterials that are meant to carry the traffic of longer trips. The Grayson County MPO uses three types of arterials: Principal, Major, and Minor. Minor arterials have a right of way (ROW) of 86 feet and 4 lanes. Principal and major arterials have a ROW of 110 feet to allow for 6 lanes; the difference between the two is that principal arterials have controlled access with right turn lanes.

There are 6 current or planned principal arterials in Grayson County:

- Texoma Parkway
- US 69
- TX 160
- US 377
- TX 289
- FM 121 with a section of new road bypassing Van Alstyne
- A new road using parts of TX 11 and FM 902

Some of these principal arterials need additions in order to allow sufficient mobility; many of these, especially those involving farm roads, have sudden 90-degree turns that do not allow traffic to move fast enough. Additionally, new lanes will need to be added to most of these to bring them up to capacity.

Collectors are roads that collect traffic from local roads and move them to arterials. New collectors are usually created for and funded by new development; these collectors are typically designed as part of new development.

Intersections

Intersections are one of the most critical aspects of both safety and mobility; a poorly designed or over-capacity intersection can cause both traffic delays and increased crashes. Additionally, crashes in intersections are more common and thus cause additional traffic delays.

Residents have expressed concern over fatalities and major injuries that have occurred at key intersections in Grayson County. With population growth expected to surge over the next couple of decades, intersection planning measures are necessary to provide a safe and maintained roadway network.

Thoroughfare Plan

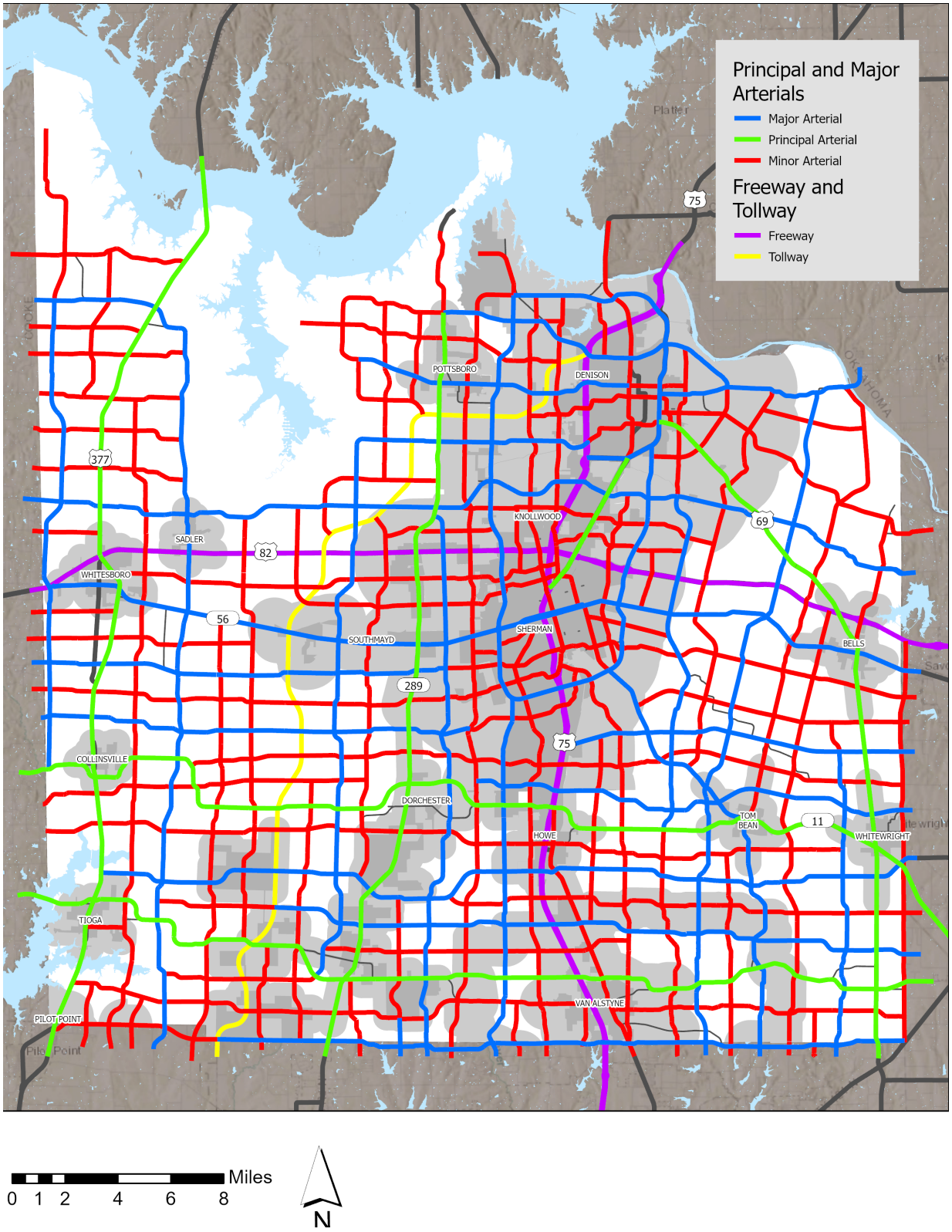


Figure 6.2. Thoroughfare Plan
Source: GCMPO

Freight Movement

The movement of freight through the County is essential to the economy of the region. While some freight in the region is transported via rail, the vast majority is moved through the county via truck; roadways are currently the most essential asset for freight movement.

In 2020, the MPO updated the Freight Mobility Plan. This plan identified issues with freight mobility in the County and proposed solutions. According to the Freight Mobility Plan, the majority of truck traffic in the County goes through US 75, with an average of over 7500 trucks each day. US 82 is also another significant freight corridor, with an average of 2200 trucks using it each day.

The pavement conditions in Grayson County are below what is typical for the State; 24% of road miles in Grayson County are considered medium rough while it is only 10% for Texas as a whole. Additionally, a significant portion of US 75 north of Sherman is considered rough; rough roadways, especially when they experience high amounts of truck traffic, have reduced safety and generally slow truck traffic.

Additionally, there are bridges in Grayson County with low clearances; this makes some roads impassable for freight, especially those with large loads. The county has some bridges with clearance under 13'6", which is the Federal minimum; bridges with less clearance may be impassable for many trucks. While US 75 and US 82 are free of these, they have bridges with clearance below 16'6", which was the TxDOT minimum prior to increasing to 18'6" in 2020. Some oversized freight cannot pass with that clearance. Additionally, there were 5 bridges in poor condition and 21 that were load-restricted.

The Freight Mobility Plan identified priorities for freight in the County. For roadways, it recommended the prioritization of completing improvements on US 75 and improving the mobility of other highways. It also recommended some specific priorities for rail lines, specifically an issue with G & W railroad's intersection with the BNSF line and the difficulty of turning their trains around. Air cargo infrastructure was not considered a priority.

The plan also identified specific recommendations, which it split into transportation solutions and economic development solutions.

The transportation solutions include:

- Continuing to engage freight stakeholders
- Reducing the impacts of oversize/overweight vehicles
- Pursuing strategic land use and "smart growth"
- Supporting infrastructure connections to other markets

The economic development recommendations include:

- Increasing rail access and traffic
- Leveraging the airport for growth
- Study manufacturing and logistics-based development opportunities
- Prioritizing workforce development

Public Transit

It is important to have alternative methods of transportation in Grayson County. Infrastructure for biking and walking, discussed in Chapter 8, are useful for local transit, but people often need to travel longer distances to get to work and appointments. Personal motor vehicles are not an option for everyone, whether due to the cost of car ownership, disability, age, or lack of a license. Public transit is necessary to allow these populations mobility and freedom of movement.

Currently, the only form of public transportation in Grayson County is the Texoma Area Para-transit System (TAPS). TAPS provides curb-to-curb bus service that must be scheduled via phone call at least 48 hours in advance. There is currently no fixed-route bus service provided by TAPS. TAPS splits its budget granting 35% of funding towards urban areas and 65% to rural areas of the county. Under the TAPS program, a route is considered rural if the destination or origin is rural.

The limited capacity and lack of fixed-route service leaves gaps in coverage; the system makes it difficult to rely on public transportation as the only option for transportation to and from work each day. Additionally, the limited availability of public transportation affects areas that traditionally have lower car ownership, such as retirement homes and colleges. A fixed-route bus service may help alleviate issues.

Another issue is the lack of public transit to the DFW Metroplex or Oklahoma. TAPS does not provide service to the Metroplex, where a large portion of the population commutes to and from. If someone with a job in the Metroplex is suddenly unable to drive, due to injury or car issue, their options are extremely limited. Even if TAPS did serve the Metroplex, the aforementioned issue of commuting every day without fixed-route bus service would still provide a challenge.

Figure 6.3. TAPS Vehicle
Source: Dallas Morning News


STUDEBAKER

7. Complete Streets Assessment

Complete Streets

Complete Streets is a planning framework that encourages a holistic analysis of transportation planning, where streets balance multiple types of use including drivers, cyclists, and pedestrians. A complete streets assessment does not mean that every street is analyzed and planned to serve every function, but rather that there are opportunities for some streets to have multiple transportation uses that coexist and connect individuals within a city, town, or county.

A complete streets analysis considers what populations are served by the roadway and accounts for multimodal street use. The goal of a complete streets analysis is to identify possible roadway improvements that meet population needs by providing diverse transportation options as well as improve the safety of the street.

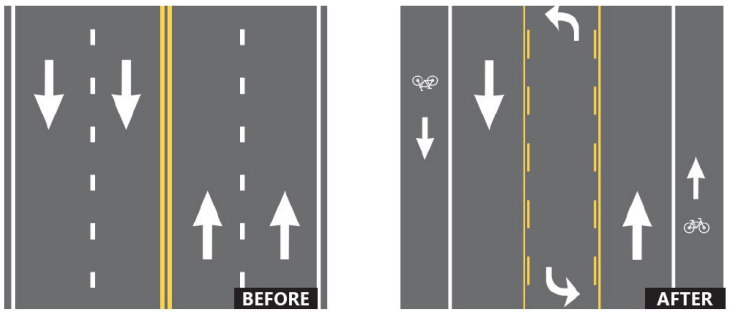


Figure 7.1. Road Diet Example
Source: FHWA

Creating Complete Streets

There are multiple ways that streets can be shaped to meet the complete street criteria of balancing modes and serving residents. One of these is the implementation of pedestrian and bicycle amenities, as discussed in Chapter 8 Bicycle and Pedestrian Plan.

An additional complete streets approach is a roadway reconfiguration, also known as a "road diet". A roadway reconfiguration is implemented when multi-lane roadways are restructured to improve safety, reduce traffic, and increase access for all roadway users. This is commonly achieved by reducing a vehicle through lane and installing a continuous center turn lane. A typical example is a conversion from a 4-lane, undivided roadway to a 3-lane roadway with a center turn lane (as shown in Figure 7.1.). Road diets are also compatible with the addition of bicycle lanes and paths, on-street parking, and/or islands for safe pedestrian crossing. Road diets improve safety and reduce vehicle delays by reducing complexity on the roadway by providing dedicated space for turning and for slower moving traffic.

Also included in complete streets analyses are studies on how public transit can be better integrated into roadway design. Tools used for transit improvement include dedicated bus lanes, bus-only turn lanes, or transit priority signals. While these amenities are not applicable in Grayson County, a fixed-route TAPS study might include consideration of transit right-of-way improvements.

Wayfinding and comprehensive signage are other important elements of a complete street. By clearly indicating which roadways are shared with cyclists and which intersections permit pedestrian crossings, all road users become more aware of their surroundings, allowing them to react to situations appropriately.

Complete streets are roadways that provide safe traffic speeds, pedestrian crossing opportunities, and multimodal network connectivity for pedestrians and cyclists. Roadway changes that support these goals are considered part of the complete streets planning approach.

Benefits of Complete Streets

The goal of this assessment is to identify key areas where Grayson County may improve street use opportunities. These improvements might include increased bicycle and pedestrian access points on high-demand roadways, decreased bicycle and pedestrian crashes, and decreased traffic-related crashes for motorists.

Improving street safety allows more Grayson County residents to use streets to walk, bicycle, and drive to destinations. Active transportation modes like walking and biking allow increased daily physical activity. Active transportation has a significant positive impact on physical and mental health and results in environmental and economic benefits on an individual and county-wide level. The specific benefits of cycling and walking will be discussed in the Chapter 8 Bicycle and Pedestrian Plan (pages 108-109).

By implementing traffic-calming measures, traffic speeds on roadways are more consistent and predictable for drivers and others utilizing a shared roadway. Pedestrians and cross-street motor vehicles are not faced with attempting to quickly cross four lanes of high-speed traffic without the appropriate signage or traffic signal. Motor vehicles can make safer left turns using the dedicated turn lane while remaining aware of shared roadway conditions, such as oncoming cyclists.

The Complete Streets approach also contributes to economic vitality, as mixed-use buildings and businesses are more likely to position themselves along lower-speed roadways that promote foot traffic and provide on-street parking for residents and visitors. Slower speeds and parking along business-lined streets encourage motor vehicle passengers to easily recognize and support local businesses.

Identified Roadways

Drafted in conjunction with the Bicycle and Pedestrian Plan, this Complete Streets assessment identifies roadways that might be improved by the implementation of a road diet or shared use with alternative transportation methods. These locations were identified due to their current status as high-speed multilane roadways where current traffic numbers do not reflect the high-capacity lane structure.

The majority of these considered roadways run adjacent to other high-capacity highways and arterials that contribute to low traffic numbers on the alternate route. These roadways are especially desirable for road diets as vehicles that are traveling across the county will not be significantly detoured by any changes made along the lower-traffic roads and benefits will encourage further use of these roadways by those walking, traveling by bicycle, or those whose final destination is a business or other building along the identified roadway.

The following is a non-comprehensive list of streets that may be appropriate to study the impacts of a road diet. This is the initial identification of roadways that fit within the complete streets framework. Further study may identify additional roadways that the complete streets framework can be applied to and improved by.

State Highway (SH) Spur 503 (South Eisenhower Pkwy)

This highway section considered for a complete streets analysis runs between US-75 and US-69, crossing State Highway 91. Originally part of US-75, the segment was replaced by the Katy Memorial Freeway, which runs west of Denison and was subsequently reclassified to its current spur status in 1972. The Spur was extended to US-69 in 1994.

Built to support substantial traffic as part of US-75, Spur 503 is currently underutilized. The four-lane roadway runs in two directions with a substantial median in the center. Frontage roads run alongside the Spur, but are used infrequently. Between US-75 and US-69, the roadway has a sizable median, which may be used for road widening in the future.

With median space for road expansion, there are alternative uses for the spaces to the left and right of these major roads. The specific complete street recommendations for Spur 503 include the addition of two bicycle lanes, one in each direction. Additionally, a shared-use path for cyclists, pedestrians, and hikers could alternatively be implemented to service those not traveling by car. This complete street concept would be supplemental the proposed bicycle paths mentioned in the GCMPO's Bicycle and Pedestrian plan.

This adjustment may also be implemented north of Denison, from Walker Street to US-75. This portion of the roadway also includes a wide median and underutilized roadway. By reducing traffic leading into and out of Denison, vehicles will be more aware of their speed, and urban surroundings, preparing them to decrease their speed and stop for pedestrians walking through Denison's downtown.

An Existing Conditions Memo was produced in February of 2024 for a .2 mile segment of Austin Avenue (SH Spur 503) from Bullock St to Murray St. In the memo, it is indicated that a complete street cross section could be facilitated with existing ROW and is desirable to support economic revitalization on the corridor. In addition to the memo, four roadway design concepts were provided that propose major improvements to the intersection of US Hwy 69 and Austin Ave (SH Spur 503) to reallocate existing free-flow slip lines to space for commercial development as well as construct an improved pedestrian realm with a shared use path.

Figure 7.2. Spur 503

Farm To Market Road (FM) 120

FM 120 is a four-lane roadway that runs two-way traffic between Willow Spring and Denison crossing through Pottsboro. This road has a median between Pottsboro and Denison. Once in Denison, the road loses its median and merges with West Morton Street becoming an urban roadway.

This roadway also features a wide median that allows for the roadway to be expanded up to 6 lanes. With additional green space on either side of the roadway, there is capacity for restructuring that integrates alternative transportation methods. The roadway can be reduced from over 300' wide to 160'. With this reduction, protected bicycle lanes can be implemented on the roadway itself or an adjacent shared use path could be implemented.

State Highway (SH) 91 (Texoma Parkway)

Texoma Parkway is an urban four-lane two-way state highway. The Texoma Parkway serves as a northward connection through Sherman and Denison to Oklahoma's adjacent SH-91. The roadway serves as a major commercial strip, with businesses and shopping centers lining the road north of Sherman up into Denison.

The commercially viable highway might be improved by a road diet reconfiguration. The roadway has considerable storm drain infrastructure along the roadway shoulder. This infrastructure could be shifted below a raised protected hike/bike shared trail on the left side of the roadway, still providing the necessary drainage while taking up significantly less space along the roadway shoulder. With a roadway width of 160' wide, there would be capacity for two, one-way bicycle lanes on either side of the roadway or a shared use path.

Figure 7.3. State Highway 91

Additional Considerations

In addition to these three roadways, additional consideration might be given to the following roadways, which were submitted by community stakeholders for consideration within the MTP:

- SH 84, specifically between US 75 and US 69
- SH 91, an extended portion between Spur 503 and SH 84

While these projects are not studied in detail, future planning may determine whether these highways would benefit from one of the complete street implementations described in the following section.

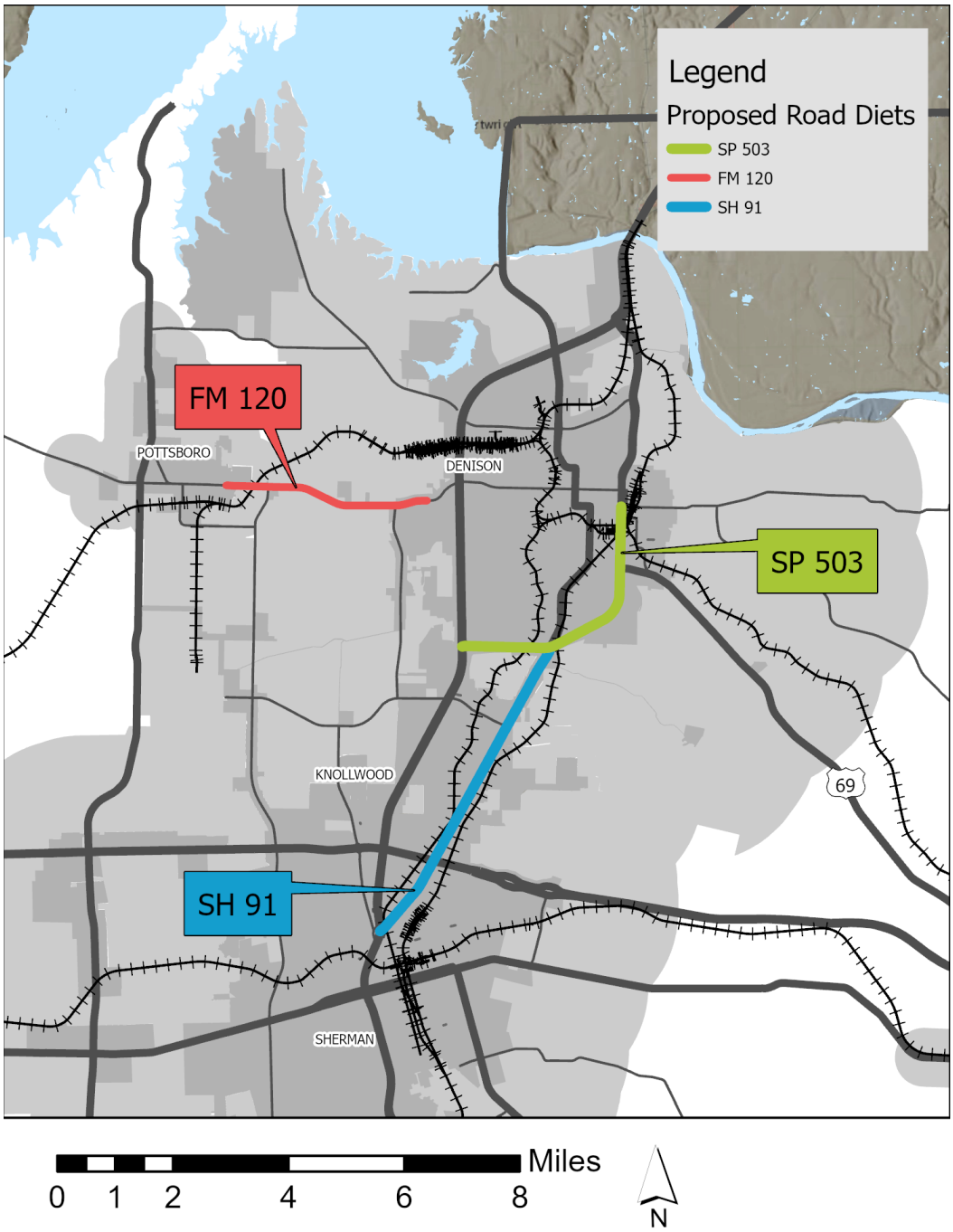


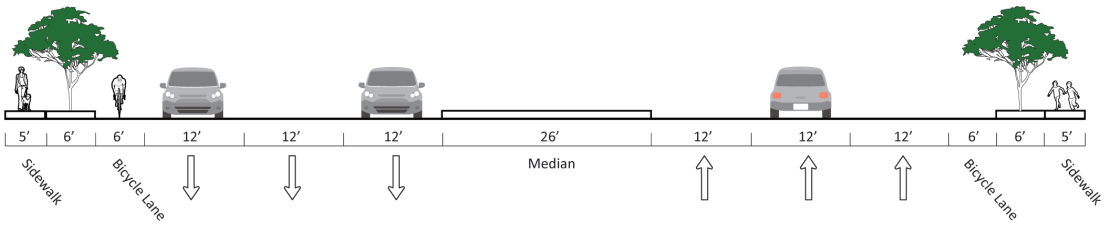
Figure 7.4. Road Diet Proposed Locations
Source: GCMPO

Implementation

Figure 7.3 displays the ways in which the above major arterial roadways may be adjusted to include complete street characteristics, such as bicycle lanes, sidewalks, and a shared use hike/bike path.

This cross-section model reflects Grayson County roadway standards and supports the feasibility of complete street scenarios on 160’ roadways that maintain lane widths and increase multimodal transportation options on these major arterial roadways.

Bicycle Lane Complete Street Cross-Section



Shared Use Path Complete Street Cross-Section

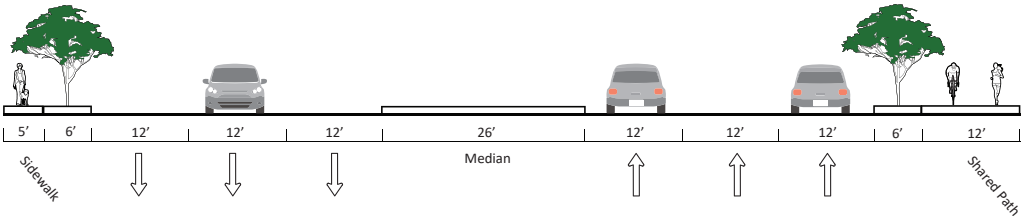


Figure 7.5. Major Arterial Cross-Sections
Source: GCMPO

Funding Opportunities

Funding related to bicycle improvements is further detailed in Chapter 8: Bicycle and Pedestrian Plan.

The majority of complete street funding opportunities exist at the federal level. The Bipartisan Infrastructure Law (BIL) created and expanded funding opportunities for infrastructure projects across the country. These opportunities include the Federal Transit Administration Grant Programs, the Highway Safety Improvement Program, the Congestion Mitigation and Air Quality Improvement Program, Surface Transportation Block Grant Program, Transportation Alternatives, the Recreational Trails Program, the Safe Streets and Roads for All Grant Program, and the Active Transportation Infrastructure and Investment Program, to name a few.

While the application requirements and timelines for these grants differ, they provide further funding opportunities in the pursuit of complete streets. Not all of the aforementioned federal grants will be applicable depending on what amenities are planned for Grayson County's complete streets but grant requirements and applicability may be a factor in the further planning phases of complete street concepts. More information on federal grant funding for safe streets can be found at this link

State and local funding may be available depending on a variety of factors including the complete street projects' location and use. Projects constructed within school zones may be applicable for Safe Routes to School (SRTS) funding through the Texas Department of Transportation. More information on state, local and private funding opportunities for bicycle and pedestrian street amenities is detailed in the following chapter, Chapter 8: Bicycle and Pedestrian Plan.

8. Bicycle and Pedestrian Plan

Bicycle and Pedestrian Plan

Grayson County is seeing population growth, new development, and increased demand for transportation options aside from personal motor vehicles. There has been an increased desire for cycling and walking routes as an alternative to short automobile trips, especially within city centers and between popular destinations. By addressing this demand through investment in bicycle and pedestrian amenities, Grayson County can provide safe, sustainable means of transportation for community members.

While Grayson County is geographically large, its cities and town centers are dense and may be navigable via bicycle or foot traffic. Prioritizing alternate transportation options can serve residents and tourists alike as they live active, healthy lives. This plan will discuss these opportunities for alternative transportation in greater detail, centering on connectivity and safe access to important destinations. Grayson County has an extensive network of parks, schools, employers, and recreation facilities that, when accessible, could contribute further to the economic, environmental, and social well-being of Grayson County.

Walking, running, and cycling are often used for exercise along familiar routes. However, when a pedestrian or cyclist finds themselves off the expected trail, they may put themselves in harm's way by attempting to navigate routes that are not safe or accommodating for non-motorized vehicles. By building out a connective network of balanced street types, residents of Grayson County can navigate the region without putting their health and safety at risk.

This Bicycle and Pedestrian Plan examines existing planning measures undertaken by a variety of local governments and stakeholders, building upon this work by identifying opportunities for additional investment on both urban and regional levels.

Cycling opportunities are identified based on a demand analysis that considers daily locations individuals may wish to travel between as well as population density, exploring safe ways to connect residents between their home's front door and their final destination. The other factors considered in this planning analysis are safety and comfort. Based upon identified crash sites, roadways, speed limits, traffic, and additional conditions, these actors are a large indicator of what needs must be met for cyclists of various skill levels. Ensuring safety along popular routes is of the utmost importance, and this analysis seeks to identify said routes and prioritize investment in safety measures moving forward.

Pedestrian and short-distance bicycle opportunities are based upon a study of pedestrian walkways within a .5-mile radius of schools in Grayson County. The 2045 Metropolitan Transportation Plan, adopted in 2019, identified gaps in connective sidewalk access within a .5-mile vicinity of schools in Sherman and Denison, and this plan aims to expand that analysis to schools across the entirety of the County. Alternative transportation options for school access can help students and families build healthy habits while also encouraging safe avenues of independence for older students who may walk home from school with siblings or friends. Pedestrian-oriented transportation options are not only for students but also can increase the desirability of a neighborhood for current and future residents of all ages.

Regional Bicycle and Pedestrian Planning

There have been an increased number of efforts focused on bicycle and pedestrian planning within Grayson County over the past ten (10) years. This 2050 Metropolitan Transportation Plan's Bicycle and Pedestrian Plan is a continuation of these efforts, building upon adopted plans from the MPO, the Cities of Sherman, Denison, and Van Alstyne, and the Texas Department of Transportation. To best address identified regional needs and priorities, existing plans have been considered in the development of the 2050 Bicycle and Pedestrian Plan. Important information from existing plans and takeaways from the culmination of said plans are included below.

Grayson County MPO

The first Sherman-Denison-Howe MPO Bicycle and Pedestrian Mobility Plan was created in 1998 following the 1991 Intermodal Surface Transportation Efficiency Act, which set aside funding and emphasized the importance of intermodal regional planning efforts.

The most recent Bicycle and Pedestrian Plan was developed in 2019. This plan was included as a chapter in the Metropolitan Planning Organization's 2040 Metropolitan Transportation Plan. At the time, the study focused specifically on Sherman and Denison, proposing pedestrian and bicycle connectivity options throughout and between both cities. Unlike previous MPO plans, streets for bicycle consideration were selected not only based on width characteristics, but also their ability to contribute to a bicycle network that fits a variety of characteristics including access, density, right of way, and facility type. The plan also included a framework for corridor selection and policy recommendations. These recommendations have been instrumental for the trail and bicycle planning efforts of cities in Grayson County, and the 2040 Bicycle and Pedestrian Plan is referenced as one of the guiding documents for route consideration in the 2022 Sherman Tomorrow: Trails for our Future Plan.

The City of Sherman

The Sherman Tomorrow Comprehensive Plan, adopted in October 2022, acts as the framework guiding city planning with aims to increase future development and growth efforts within Sherman. The plan outlines several important goals which include: meeting housing needs by providing a diverse mix of housing that promotes quality affordable living options, effectively managing land use and design, promoting mobility with Sherman's diverse transportation network outlined in their Thoroughfare Plan, and improving the overall quality of life for Sherman residents. The primary goal of the plan is to prepare for expected growth while also maintaining the "small-town charm" often associated with the City of Sherman and meeting the needs of the city.

The Comprehensive Plan acts as a guide for future development with its in-depth needs assessment that outlines the existing issues facing the city and its improvement recommendations. Recent large investments in manufacturing facilities across Sherman and surrounding cities in Grayson County indicate an expected massive boost to its economic and population growth. The Plan recognizes these investments and poses them as an opportunity for not only economic but also social growth. The Plan identifies the core concerns of residents, which include

1. A lack of diverse and affordable housing options,
2. Future plans for land use & design,
3. A lack of balanced and diverse transportation options, and
4. A lack of available amenities that promote healthy and quality living in Sherman.

The Plan presents a "Framework for the Future" and Implementation Plan to address concerns associated with housing, land use, mobility, and the overall livability of Sherman. Mobility strategies within the framework include proactive planning for a multimodal transportation system and the creation of a safe community-wide trail system.

The City of Sherman (cont.)

The City of Sherman: Parks, Recreation, and Open Space Master Plan, adopted in May of 2017, aims to address the city's growing needs including improving the city's park space, and recreation areas, and expanding the existing trail network. The Plan serves as a general framework for city planning encompassing a needs assessment, improvement recommendations, and an implementation plan.

This Plan seeks to provide residents and visitors of Sherman with passive and active recreational facilities as well as expanding alternative transportation options which include improving the trail network to increase hiking and biking connectivity throughout the city.

The primary recommendations outlined in this plan involve the development of new trails, expansion of the park system, and improvements to existing park facilities. The Ten-Year Action Plan proposed within the Master Plan identifies the various improvements and developments that should be made to enhance Sherman's recreational and transportation infrastructure. Specific recommended improvements include expanding the existing trail system, developing additional neighborhood parks, and improving existing parks with the construction of new amenities like public restrooms, pavilions, and new playground equipment. The plan also emphasized the growing interest in integrating greenbelts and open natural spaces to support both recreational and the environmental conservation of the city's natural beauty. It is recommended that these open areas should be connected by a trail system that will also connect other various parts of the city including points of interest, existing recreational facilities, and these open natural areas.

The 2022 Sherman Tomorrow: Trails for our Future addresses specific trail needs, including the guiding principles of trails in the city being connected, natural, safe, and intentionally designed. The plan covers the existing city trails within the city and identifies a series of proposed trails that expand and connect the existing network. Proposed trails include surface trails ranging from 10' to 12', side paths along roadways, and protected bike lanes. Trails connect downtown Sherman and parks, with the Sherman Katy trail extension connecting downtown Sherman and Denison and serving as the link for a multicity trail network in the region. These trails are highlighted on Figure 8.2.

The City of Denison

The City of Denison Comprehensive Plan was adopted in December of 2018 and acts as a guide for city planning and development efforts. The Comprehensive Plan addresses planning categories including community, history, housing, transportation, infrastructure, downtown, development and redevelopment, economy, tourism and recreation, landscape and open space, and education. The Plan reviews actions under each of these categories, addressing tools and projects that will become a part of Denison's planning future. For transportation, actions include the expansion of trail networks that connect key locations such as parks, downtown, educational and employment sites, and residential areas. Actions also include utilizing "complete" street designs whenever possible.

The Denison Master Thoroughfare Plan within the Comprehensive Plan includes this complete streets approach. Issues discussed in the Plan include increasing connectivity within the city, planning for future growth, integrating land use and transportation, regional access, financial viability, the addition of alternative transportation options in a car-oriented city, the creation of connective networks between visitor locations, and the need for redevelopment and revitalization of TX 91 and Spur 503, including more pedestrian-friendly streets.

Pedestrian and Cyclist-related Thoroughfare System recommendations include the redevelopment of Main and Burnett Streets to be high activity and pedestrian-friendly, upgrading FM 84 and Texoma Drive as a scenic corridor, preserving existing waterways as linkages for a trail system. Relevant planning policies include the when-possible avoidance of road widening within and outside the city's core, consideration of pedestrian and bicycle facilities when approaching

street reconstruction projects, and the limitation of new driveways that might increase collision risk.

The Comprehensive Plan also notes that "all new development should include connectivity to hike and bike trails" as a continuous network throughout the city. Types of bicycle connectivity are proposed as either a shared trail, bike path adjacent to the thoroughfare, or bike lanes running on the street. The Plan outlines guidelines for land use and development, which prioritizes the preservation of the natural landscape

New development is discussed as an opportunity to build out the "Neighborhood Concept" which includes connective networks of streets or trails between subdivisions and walkable open space that aligns with the Parks and Trails Master Plan.

The City of Denison: Urban Parks & Trails Master Plan was adopted in April of 2022 to highlight the existing park and trail network in Denison, identify areas of improvement, and provide recommendations aimed at solving the issues currently facing the city. The primary goal of this Master Plan is to provide a blueprint focused on improving the overall quality of life of residents, encouraging alternative modes of transportation, and fostering economic and social growth throughout the city with hopes of transforming the city into a more accessible, sustainable, and efficient urban environment.

Within this plan is a detailed overview of the strategy to improve upon and expand the existing bicycle network and propose new amenities including but not limited to developing new bike lanes to ensure the safety of cyclists, constructing shared-use lanes to serve both cyclists and drivers indicated through the use of proper pavement markings and/or signage, and creating designated bicycle parking areas to help encourage residents and visitors to consider biking as a viable transportation option. The public also expressed a strong interest in integrating natural open spaces into the City of Denison and creating connections between existing trails.

The Plan highlights specific improvements like the completion of the multi-use Katy Trail which would not only increase the total coverage of Denison's trail system but also act as a backbone trail connecting to parks and other trails within the Cities of Denison and Sherman. Phase I of the Katy Trail has proven the benefits of a successful interconnected trail network, and the plan recommends the expansion of this trail to connect a wider portion of the city.

Figure 8.1. Waterloo Lake Regional Trail

The City of Van Alstyne

The Van Alstyne Master Plan was adopted in April of 2019 with the primary goal of expanding the city's parks system, improving recreational facilities, and emphasizing the integration of bicycle and pedestrian infrastructure to provide residents and visitors with alternative transportation options. The specific recommendations mentioned in the plan also recognize the potential for future economic and social growth in the region which may be complimented by further investment in alternative transportation systems.

The Master Plan identifies major points of improvement in its needs assessment. It utilizes a current inventory analysis and public input to determine the specific needs for Van Alstyne's recreational and transportation infrastructure. Resident feedback on a survey indicated a strong interest in an interconnected trail system to link neighborhoods, parks, and other points of interest. The survey also highlighted the need for the development of more picnic areas, benches, lighting, and natural trails. The needs assessment emphasized the importance of not only meeting the needs and interests of the public but also maintaining existing facilities and infrastructure.

This plan outlines specific recommendations aimed at expanding and improving Van Alstyne's recreational and transportation infrastructure. Some recommendations include improving the city's existing trail network and connecting different parts of Van Alstyne with the creation of new bike routes and expansion of the city's trail system. Another key recommendation is to expand existing and develop new park facilities. The plan recommends specific improvements like the installation of a better lighting network and the construction of new park and recreation facilities like a dog park and an outdoor aquatic center. According to the plan, the existing park network is fragmented, and it recommends developing linear parks alongside natural corridors to connect various parts of the city and protect the natural environment. The plan also recommends acquiring land specifically in the northern and downtown areas of the city for future park and transportation development. Finally, the plan also recommends securing funding, including funding opportunities in both the public and private sectors.

The Texas Department of Transportation (TxDOT)

The Texas Department of Transportation provides several resources for bicycle and pedestrian planning and has also developed its own bicycle and pedestrian section of the 2050 Texas Transportation Plan. Within this section, TxDOT commits to improving the bicycle and pedestrian network and supporting local efforts. A state effort highlighted in this plan is the development of long-distance bikeways in the 2018 Texas Bicycle Tourism Trails Study, which proposed a state-wide network of regional bicycle routes with connecting and cross-state spurs. This effort would be a collaboration with cities, counties, and MPOs to build out a bicycle network that would encourage long-distance bicycle mobility for dedicated cyclists traveling across the state and increase tourism and bicycle connectivity.

Bicycle Tourism Trails Example Network

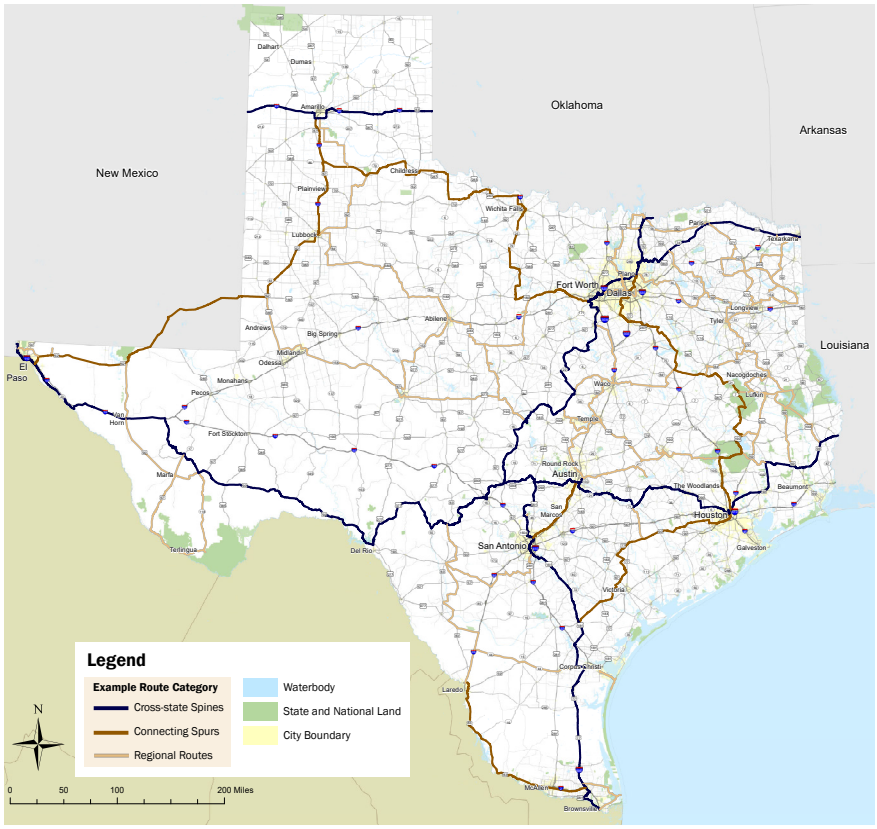


Figure 8.2. TxDOT Bicycle Tourism Trails Example Network

Summary of Plans

These plans are a gauge of where county stakeholders are planning to improve bicycle and pedestrian amenities in the coming years via networks of bicycle infrastructure, sidewalks, and trails. By integrating these plans' existing projects, frameworks, and goals into the MPO's Bicycle and Pedestrian Plan, we can collaboratively assess ways to address pedestrian and cyclist demand. Elements covered by each plan include maintenance and expansion of existing trail networks as well as the creation of new trails that connect parks, city centers, and other popular landmarks where possible.

Parks and Trails plans also discuss a growing resident desire for walkable and bikeable streets and neighborhoods. As Grayson County grows in population, vibrant walkable streets transform Grayson into a county that is pleasant to visit and explore as a tourist or resident. Protecting and showcasing Grayson County's natural beauty is discussed as a paramount priority in each of these local plans.

Planning efforts discussed within the summarized documents include a mix of bicycle and pedestrian amenities. Denison and Sherman are continuing the expansion of trail networks to create connective throughways for cyclists, hikers, and pedestrians.

Existing and Planned Amenities

This map summarizes the current planning efforts for trails and bicycle lanes in Grayson County. Currently, Sherman and Denison are the only municipalities in the county to have mapped plans for parks and trail projects. However, Van Alstyne has been expanding connectivity via the expansion of sidewalks and has recognized the need to expand bike routes and trails.

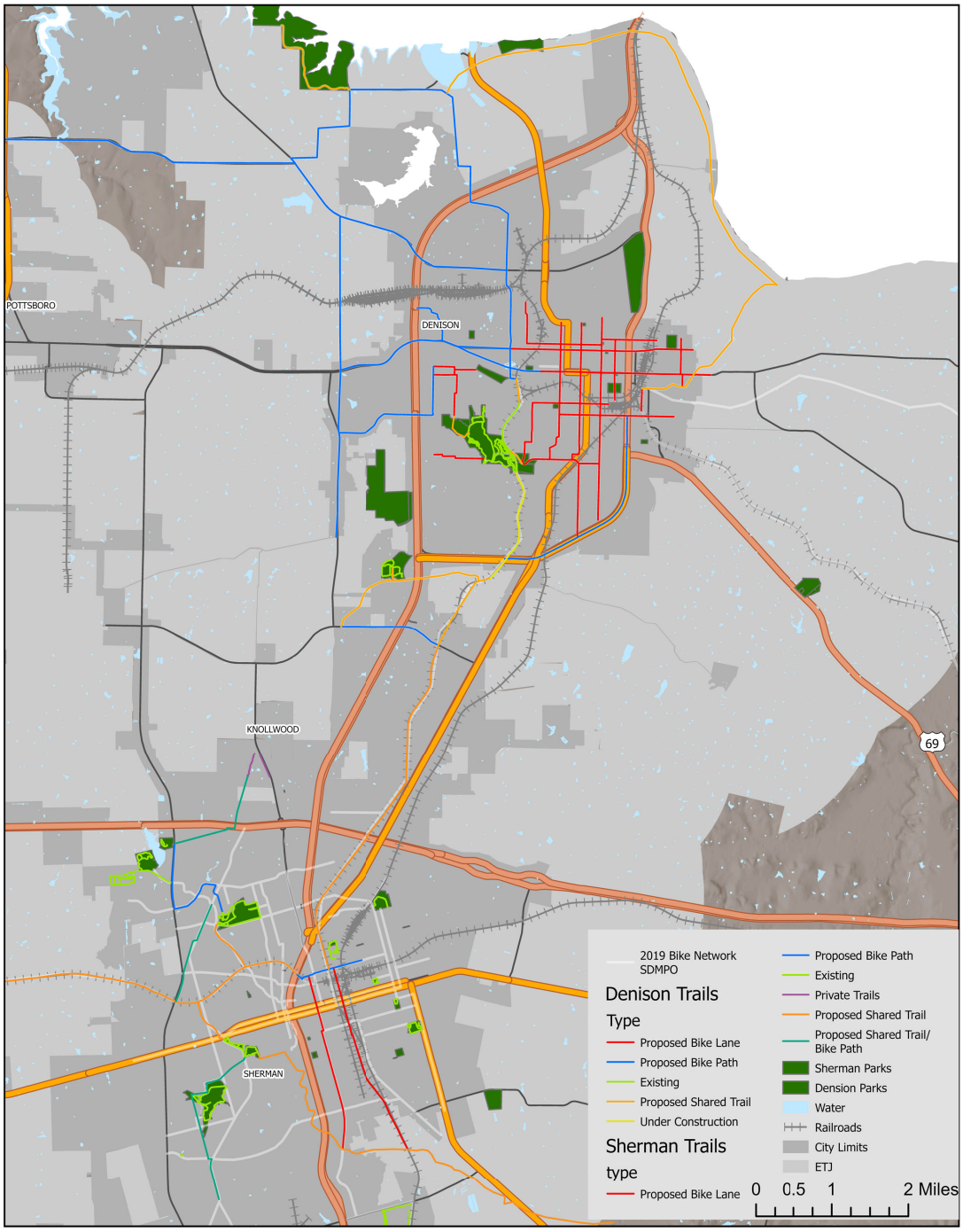


Figure 8.3. Existing and Proposed Trails

Methodology and Planning Process

Bike Demand Analysis

Identifying demand is a key element of developing a recommended bicycle network. Considering high-demand roadways when studying multimodal transportation is imperative, as investment and project consideration can reflect actual cyclist needs. Targeting high-demand routes as a factor for investment consideration serves the greatest population of existing cyclists and also encourages new cyclists to navigate the route safely and decreases automobile congestion.

The demand analysis shown in Figure 8.2 was created using a combination of population and notable location data. Most bicycle trips start and end at the home. By taking population density into account, we can anticipate demand for those riding their bicycles around their neighborhood and to nearby destinations.

Locations considered when developing this analysis include schools, college and university campuses, parks, museums, civic buildings, and employment centers. Areas with more destinations within a close walkable or bikeable range were given greater consideration for facilities, as connections within these locations would serve a greater number of cyclists, even younger riders or those uncomfortable traveling far distances.

Locations Considered in Demand Analysis

- Schools
- Major Employers
- Government Buildings
- Public Safety Locations
- College and University Campuses
- Hospitals
- Libraries
- Museums/ Notable Historic Locations
- Parks

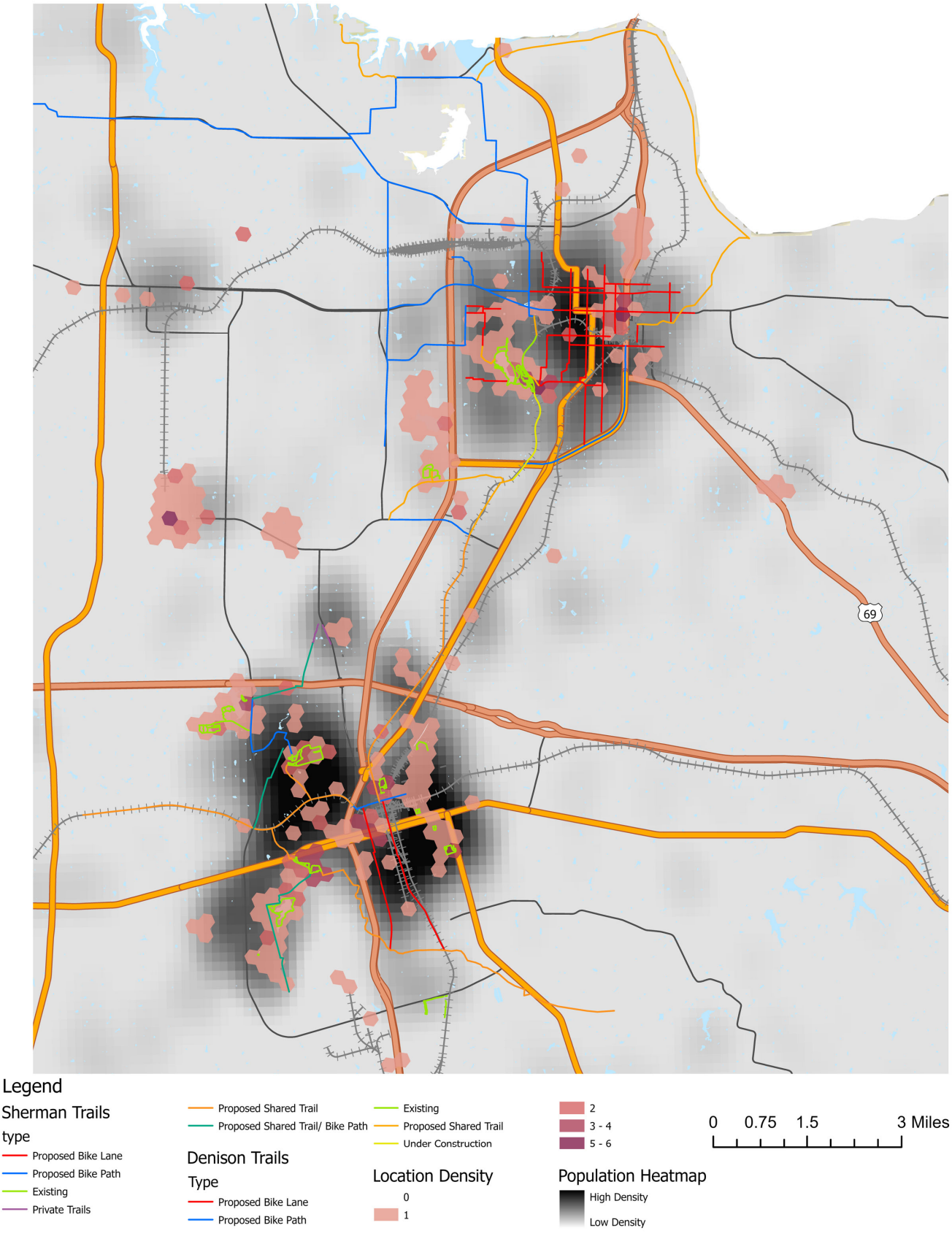


Figure 8.4. Demand Analysis

Comfort and Safety Analysis

As noted in public engagement results in Chapter 3, the majority of survey responders do not find cycling in Grayson County to be safe. Increasing safety measures for cyclists along dangerous roadways reduces risks for both cyclists and encourages new riders to travel via bicycle. Safety measures may include the creation of protected bikeways or bike paths along high-speed corridors to maintain connectivity while reducing safety risks.

This analysis utilizes street conditions and crash data to identify corridors throughout the county that may pose safety risks to cyclists. Conditions considered risks include congested roadways, vehicle lane number, high speeds, overpasses/underpasses, and railroad crossings. This map also identifys crash sites for cyclists, pedestrians, and motor vehicles, as areas with multiple crashes within the past 4 years may indicate risky conditions.

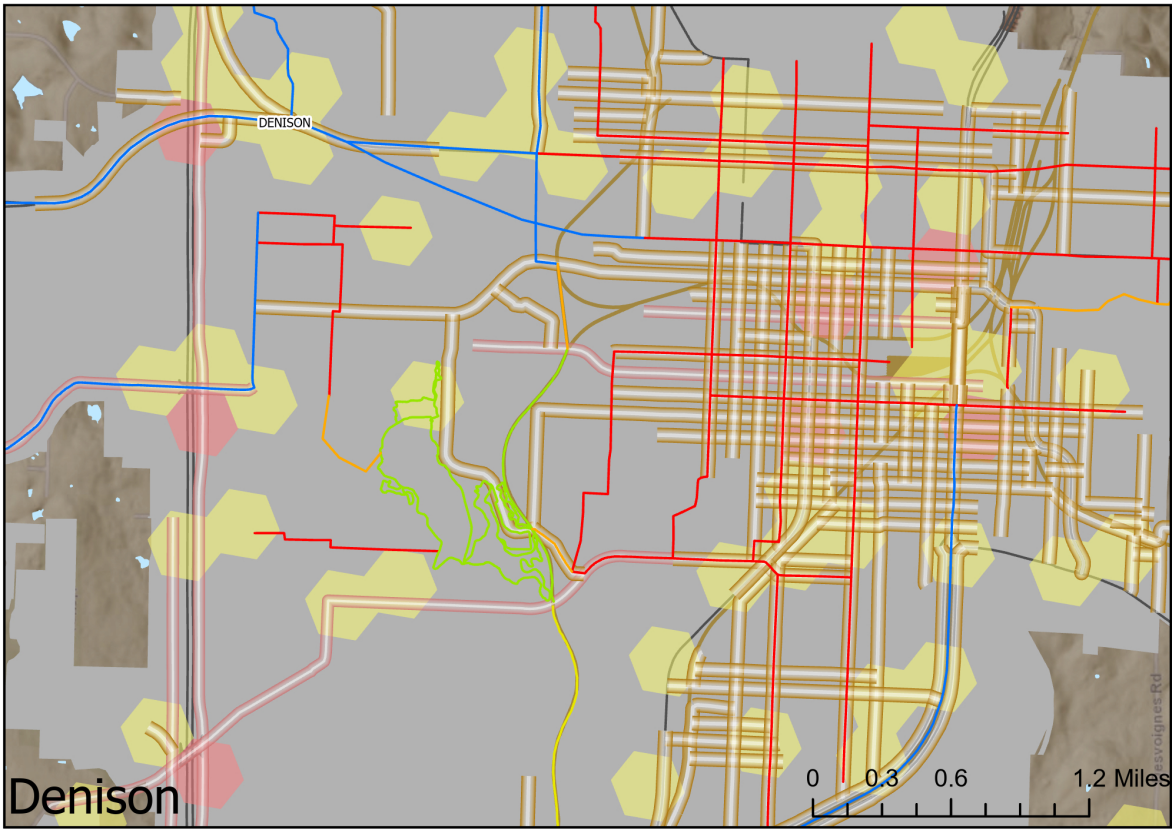
The comfort and safety map ranks roadway segments in Grayson County and identifies streets that may benefit from additional safety measures.

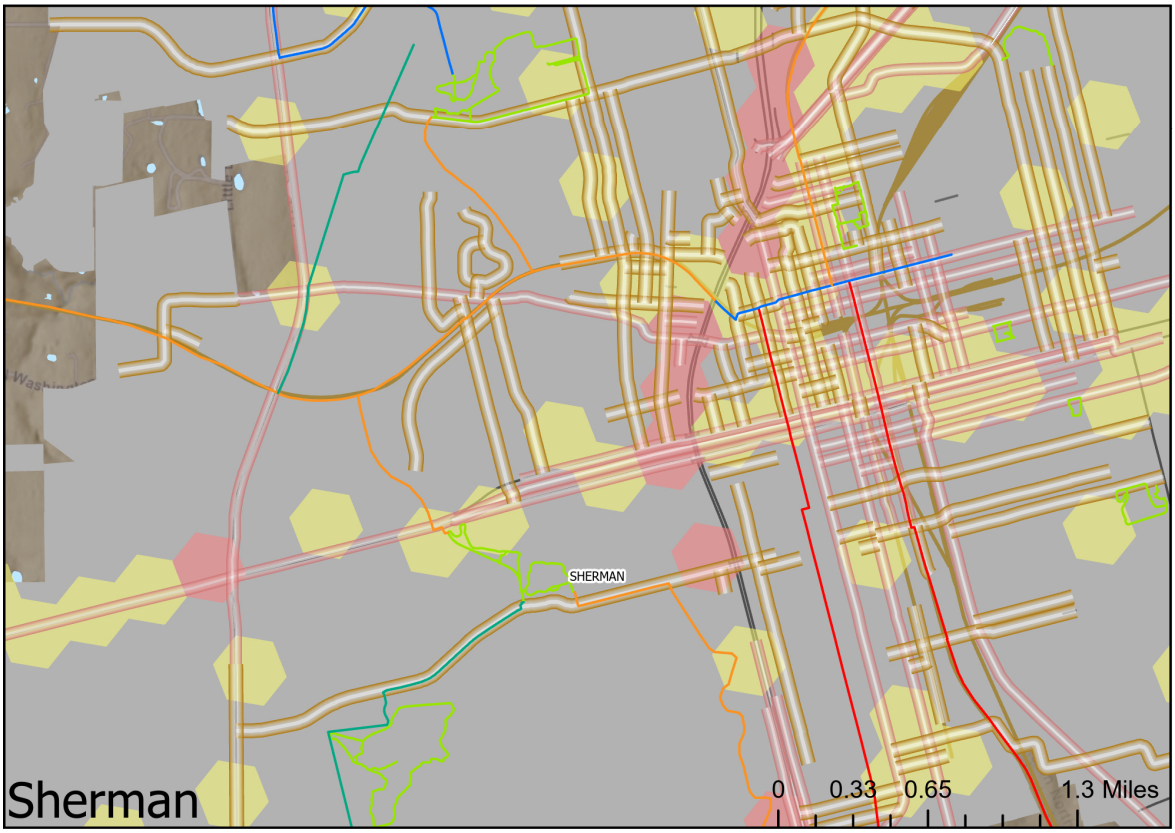
Within the Comfort and Safety Analysis shown in Figure 8.3, crash locations from between 2018-2022 are shown in a hexagonal tessellation. Frequent crash areas (more than 3 reported crashes) are noted in red hexagons. Areas where no crashes have been reported are represented in green. Areas that have had between one to three reported crashes are represented with yellow hexagons.

Roadways that have multiple hazards are highlighted in orange and red, with Sherman and Dension bikeways layered on top for comparison.

- Hazards considered include:
- Congestion
- Overpasses/Underpasses
- Multiple Lanes
- High speeds
- Railroad Crossings

Roadway segments that pose the greatest risk are highligted in red and fall within a red hexagonal area. The majority of these segments are along highways and high-speed arterial roads. Roadways that are highlighted in orange do pose minor risk due to roadway conditions, but may still be considered for bicycle infrastructure improvements.





Legend

Denison Trails
- Proposed Bike Lane
- Proposed Bike Path
- Existing
- Proposed Shared Trail
- Under Construction

Sherman Trails
- Proposed Bike Lane
- Proposed Bike Path
- Existing
- Private Trails
- Proposed Shared Trail
- Proposed Shared Trail/ Bike Path

Roadway Conditions
- No Hazards
- Few Hazards
- Many Hazards

Crash Regions
- No Recent Crashes
- Few Recent Crashes
- Many Recent Crashes

Figure 8.5. Comfort and Safety Analysis

Sidewalk Analysis

Sidewalks play an integral role in overall accessibility between nearby locations. It provides accessible transportation options for short-distance transportation. In urban areas especially, sidewalks contribute to the creation of populous, vibrant city centers. However, gaps in sidewalk networks discourage walking between locations and can pose safety risks as pedestrians must walk along the roadway. Many streets in Grayson County do not have sidewalks and identifying where the addition of sidewalks may be necessary is a goal of the plan.

While there is currently no comprehensive sidewalk inventory of Grayson County, a partial study of the majority of sidewalks within a .5 radius of schools in Sherman and Denison was conducted for the 2040 MTP Update. This plan expands that study to all schools within Grayson County. Evaluating gaps in sidewalk connectivity within this greater range allows a fuller view of sidewalk conditions in urban and rural parts of the county.

Schools and Sidewalks - Sherman Region

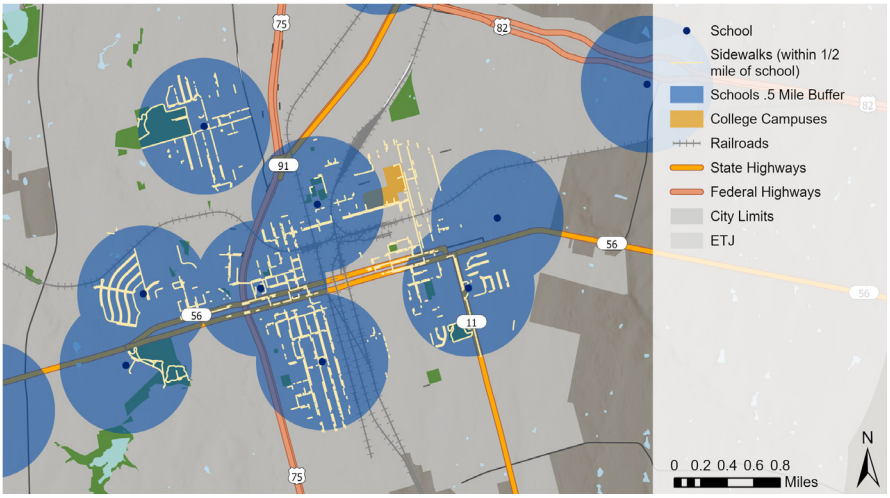


Figure 8.6. Sherman Sidewalk Analysis

Schools and Sidewalks - Whitesboro Region

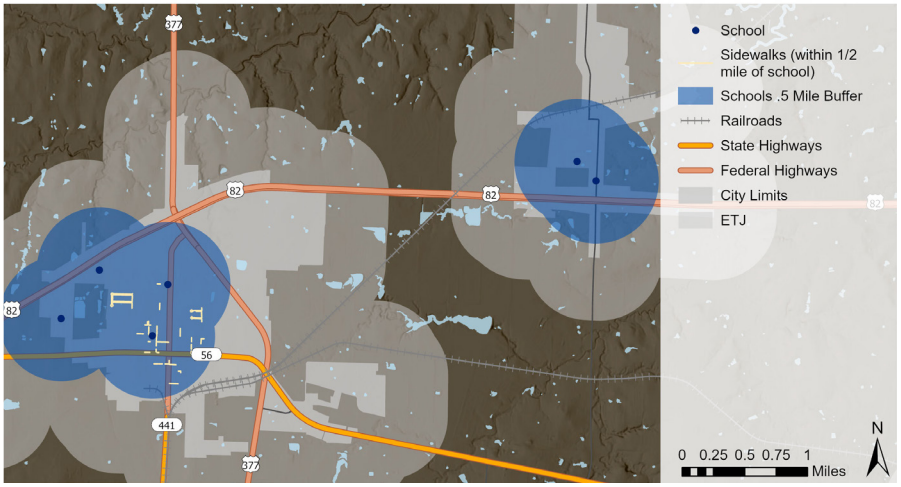


Figure 8.7. Whitesboro Sidewalk Analysis

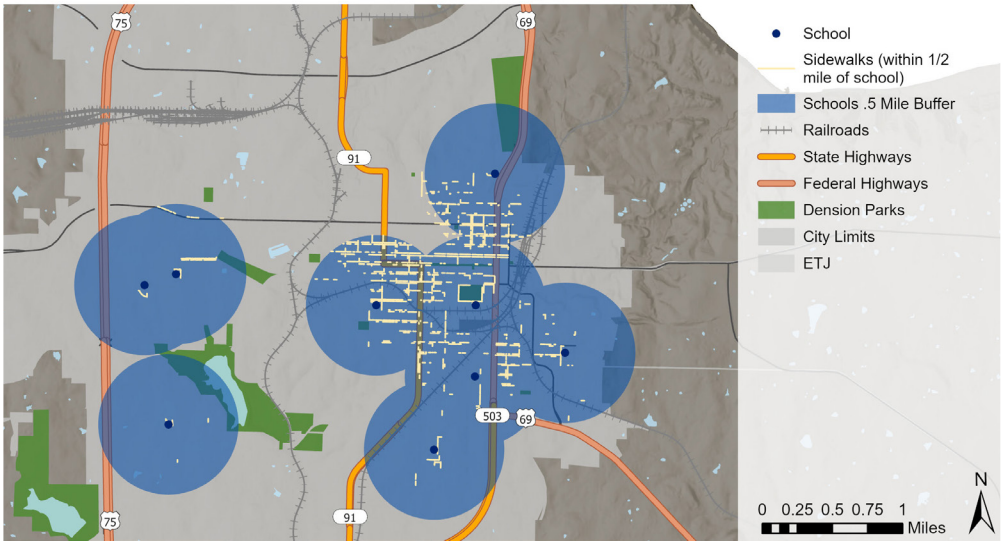


Figure 8.8. Denison Sidewalk Analysis

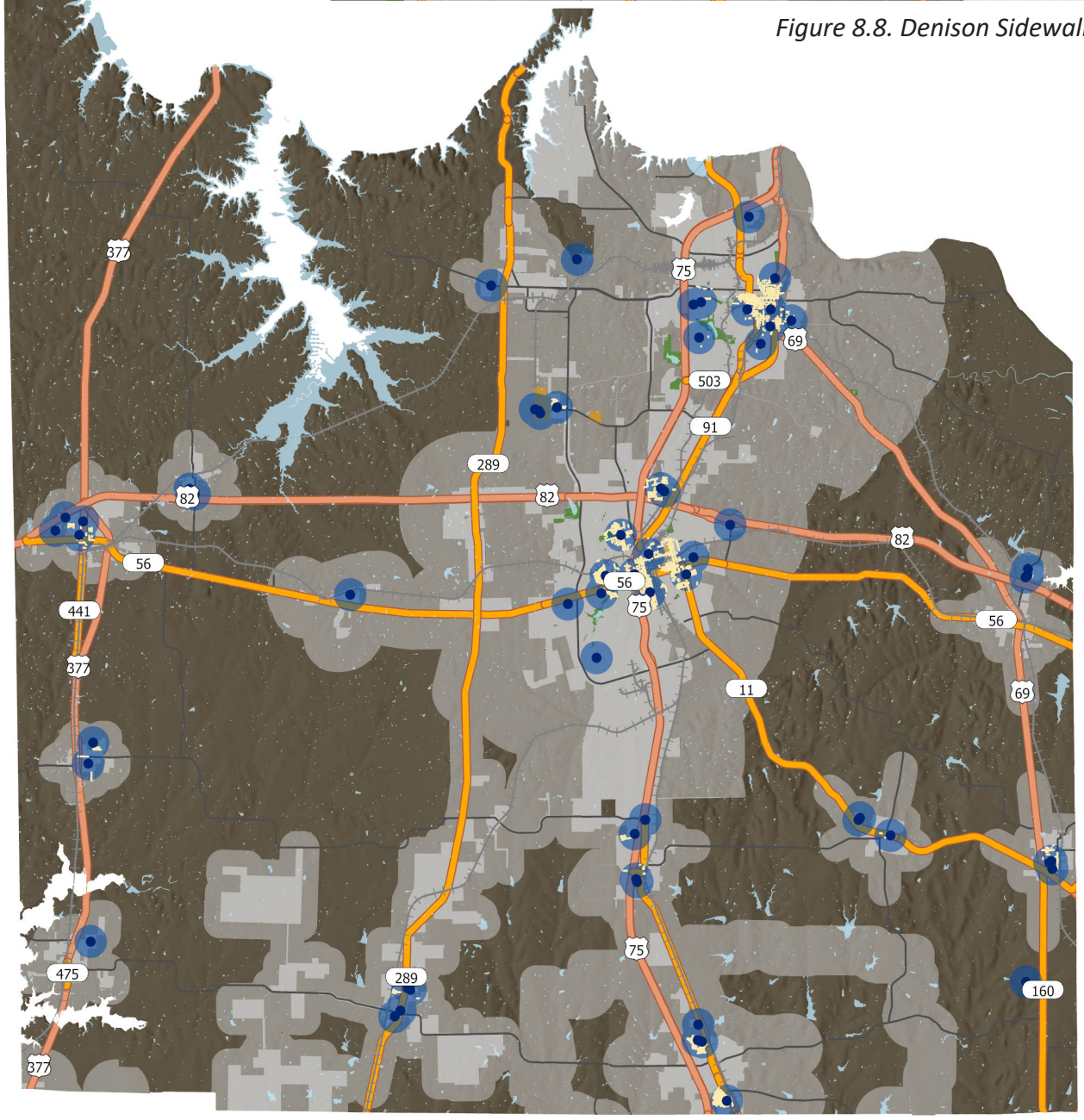


Figure 8.9. Sidewalk Analysis

Big Ideas

After assessing demand, safety, and sidewalks, there are some larger takeaways that can be made regarding the existing bicycle and pedestrian networks in Grayson County. Each of these "big ideas" inform the creation of the updated recommended bicycle and pedestrian improvements.

Bicycle and Pedestrian Access to Schools

As a growing number of younger families move to Grayson County, alternative modes of transportation are becoming increasingly popular, especially around school zones. Parents have expressed a need for safer commuting options like walking and biking. City plans have emphasized the importance of open cooperation with schools and local school districts to promote safe commutes to and from school for all children. The Texas Department of Transportation published the Safe Routes to School (SRTS) guidance plan in 2009 to provide a guiding document that aligned with the 2005 Federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users Act (SAFETEA-LU). SRTS sets aside funding to support projects that encourage safe walking and cycling routes for students traveling to elementary and middle school.

Alternative school access options are not only a priority for the state, but for individuals in Grayson County as indicated in public outreach events (see chapter 3).

The sidewalk assessment of access to schools indicates that schools in the more urbanized parts of Grayson County have relatively good sidewalk networks. This connectivity can be seen in figures 8.6.-8.8. Notably, the sidewalk analysis shows a disparity between the urbanized and rural schools in Grayson County, where the schools in more rural environments have limited or no sidewalk connectivity. This lack of connectivity limits the way students and staff can access the schools, and creates dangerous commutes for those who do not have access to a vehicle.

Bicycle & Pedestrian Access to Popular Destinations

Schoolchildren and families of young children are not the only people who may want safe trails and sidewalks for travel. Cycling has become a more popular hobby for exercise and travel within the past 10 years, especially in locations where cycling is a viable option for short trips to nearby locations. Safe walk and bikeways, especially within and in the vicinity of city centers, are desirable features for individuals and families living in or moving into urban and suburban areas. Having the option to substitute a short car ride with a safe bicycle ride or walk nearby increases resident health, quality of life, and property value.

There are additional opportunities for a bicycle network in Grayson County to increase tourism. The Denison Parks and Trails Plan highlights opportunities for bicycle networks that connect historical landmarks in the area, creating a tourist-friendly route between sites tourists may travel distances to see. Connecting routes between notable sites serves both adventurous tourists and local residents who can utilize the network for sightseeing and exercise. The Demand Analysis highlights the clumping of important locations within Sherman and Denison's city centers. The bicycle network outlined in Denison's Comprehensive Plan, based on that proposed in the 2040 MTP, aligns with these high-density destination clumps in Denison's city center and surrounding parks. The Sherman plan similarly prioritizes access between parks and adjacent to the city's main arterials.

Figure 8.10. Two Uniformed Individuals Walking Along US 75

Connections to Employment

Encouraging cycling as a form of transportation to and from employment centers can reduce rush-hour traffic and contribute to employee health and well-being. With employers moving into Grayson County and established employers hiring County residents, there may be opportunities to explore collaboration opportunities to build bicycle routes that provide employees with alternative transportation options to and from work each day. The employer benefits of encouraging alternative transportation options for employees are discussed further in the Benefits section of this report.

Connections Across Highways & Parkways

One of the greatest barriers to access for cyclists and pedestrians in Grayson County is highways. US 75 runs through the center of the county, bisecting Sherman and separating the West and East sides of the County. The 503 Spur and US 69 inhibit East-West travel across Denison, and US 82 bisects the County between the North and the South. Drivers are less likely to expect bicycle or pedestrian crossings after quickly decelerating off a non-shared highway. As shown in Map 3 many vehicle, pedestrian, and cyclist crashes occur at intersections along highways and high-speed roadways.

Currently, Denison has addressed this issue of roadway crossings through the construction of a pedestrian bridge along the newly constructed Phase One of the Katy trail, which travels over Loy Lake Road (a 30 mph roadway). Future plans for the Katy trail include a crossing above Spur 503, connecting to the Hospital District at Gateway Village. Maintaining a physical separation between bikeways and high-speed traffic while ensuring connectivity across and along major roadways is an integral balance to protect cyclist safety and maintain a desirable, navigable network.

Trail Access Within & Between Parks Across the County

Since the creation of the 2045 Bicycle and Pedestrian Plan in 2019, there has been significant progress in the implementation of bicycle trails in Grayson County parks. Sherman and Denison have both adopted updated Parks and Trails Plans, committing to maintaining and expanding their pedestrian and bicycle trails within and outside of local parks. The implementation of these trails introduces a new need, to connect parks and trails through collaboration between cities, towns, and private developments.

One example of a successful collaboration is the multi-use Katy Trail, built on the abandoned Katy railroad. When phase two of the Denison trail is completed, it will connect Waterloo Lake Regional Park to the Gateway Village Development, which has 10 miles of planned private development trails, including a connective trail to the Texoma Health Foundation Park.

Sherman is also planning on building out their own segment of the Katy Trail, which will run from East Brockett Street up to FM 691 Grayson Drive. Connections between these two trails will be a regional effort, transforming an abandoned railway line into a pedestrian and bicycle connector between the County's two largest cities. The Katy trail could then further align with the TxDOT Tourism Trails map, serving as a regional connection southweard to the McKinney Northeast Texas Trail and northward to the Carpenter's Bluff Bridge.

Aside from those along the Katy Trail, there are several parks outside of city limits that would be desirable locations for regional trail access. By increasing connectivity across the county, there would be increased opportunities for those living in the high-density cities to travel out to nearby parks and for those living in the more rural parts of the county to bicycle into the County's cities for shopping or social gatherings.

Bicycle and Pedestrian Best Practices

Sidewalk Best Practices

Sidewalks are a necessary element of any transportation system. Those who drive as their primary mode of transportation between locations benefit from high-quality and connective sidewalks, as they walk between personal automobiles and building frontages. Walking between nearby locations has health benefits. According to the CDC, continued physical activity can reduce health risks, strengthen bones and muscles, and increase chances of living longer.

For some, high-quality sidewalks are an absolute necessity, and poor quality or absent sidewalks can be a barrier to access. In 2023, the U.S. Access Board proposed new public right-of-way accessibility guidelines (PROWAG) under the Americans with Disabilities Act and the Architectural Barriers Act. These updated guidelines focus on the accessibility of pedestrian facilities located in the public right-of-way, including sidewalks, shared use paths, pedestrian signals, crosswalks, transit stops, and on-street parking. Guidelines will enforce accessibility measures along sidewalks such as curb cuts, sidewalk width, path surface material, and signals that are audible and vibrotactile. Although, as of May 2024, PROWAG has not yet been formally adopted by the US Department of Justice and Department of Transportation, the guidelines are now considered the standard for right-of-way planning.

Figure 8.11. Example of a Split Crossing
Source: Salt Lake City Transportation

The state requirements for sidewalks fall under the TxDOT's right-of-way considerations. TxDOT requires that sidewalks be included on any project where:

- Facility is part of a locally adopted sidewalk planning document;
- There is evidence of pedestrian traffic (either pedestrians are observed, there is a beaten down path, or significant potential exists for pedestrians to walk in the roadway)
- Facility is located on a route to a school or a transit route;
- Where pedestrian generators/ attractors exist, new sidewalk construction should be included

Sidewalks themselves should be wide enough to meet pedestrian access routes that are a minimum of four (4) feet wide and ideally five (5) feet in width. Wider sidewalks, from six (6) to ten (10) feet in width facilitate comfortable side by side walking and are ideal for pedestrian paths. Sidewalk width might also be expanded for installation of street trees, benches, and encroachment of building frontage zones.

Sidewalks are both more accessible and more useful when interconnected in a walkway network. That network might include connections between downtown areas, residential neighborhoods, and schools. Downtowns, like those in Denison and Sherman, already have sidewalks lining popular streets. These main streets serve as a hub within a potential hub and spoke network of sidewalk infrastructure. Targeting high-traffic areas as offshoots of existing sidewalk networks creates potential walking routes between houses, schools, and tourist areas.

Intersections pose a threat to pedestrian safety, especially in areas where the crossing is not signaled and is unexpected to oncoming traffic. Intersections without pedestrian crosswalks or long sections of road without pedestrian crossing amenities should be considered for additional amenities and signage. Pedestrians are more likely to make risky street crossings if they see no safer alternative nearby.

Crosswalks in wider roads might include split crossings, with an island phasing road crossing across two traffic light cycles.

By providing adequate stop and yield signage at intersections with foot traffic, pedestrian crashes can be avoided. Commercial driveways should be consolidated and reduced where possible to reduce interaction in the pedestrian right-of-way. Visibility is also a key element of safe intersections. Any roadside or sidewalk structures must not block pedestrian visibility from the street. Adequate lighting must also be provided at street crossings and driveways, especially in areas that experience foot traffic before and after daylight.

Bikeway Best Practices

Grayson County is a mixed urban, suburban, and rural region with a number of scenic parks and trails as well as bustling main streets. Bikeways across the county will vary depending on the surrounding context, as well as their intended user.

Currently, streets in Grayson County that facilitate cyclist use are shared roadways, where cyclists share the road with cars, behaving in the lane as if they are also motor vehicles. This bikeway type requires cyclists and drivers to maintain an extra level of awareness as cyclists do not travel at the same speed or take up the same amount of roadway space as a motor vehicle. On less-busy side streets, this bikeway may be feasible for riders of all skill types, however sharing the road with motor vehicles on high-speed or busy roadways may be seen as too dangerous for younger or less experienced cyclists.

Bicycle facility design should serve riders of all ages and abilities, with opportunities for less confident riders to gain cycling skill without a high barrier to entry. This can be done by reducing the speed and volume of traffic on shared roadways, building protected bicycle lanes on high-traffic roads, and increasing the shared-use and bicycle path network. Tools to decrease cyclist stress on bikeways should be utilized when designing bicycle facilties in Grayson County.

Figure 8.12. Cyclist in Denison

Wayfinding is a key component of best practices for cyclist amenities. Visible and comprehensive signage plays a major role in cyclists' safety and route planning. Lane markings and signs that note shared roadways or bicycle lanes communicate to drivers that they should expect cyclists on the road.

Wayfinding signage types might include signs confirming location, upcoming turns or intersections, and nearby destinations. Marking popular bicycle intersections allows cyclists to confidently make expected turns without any last-minute decisions that could place them and motorists in dangerous conditions. Wayfinding also encourages new cyclists on the road, as they do not need to worry about which route is ideal for travel. Wayfinding signage also displays connective bicycle network features, advertising a comprehensive network to those who might not know about it otherwise.

Urban and Rural Bikeway Practices

With the expansion of the Grayson County MPO boundary, consideration of bicycle amenity types across the county must be based on regional context. The previous MPO Bicycle and Pedestrian Plan, adopted in 2014, focused on bicycle routes within the previous MPO boundaries, namely the Sherman and Denison city boundaries. While Sherman and Denison can handle a higher density bicycle network as proposed in the previous plan, the urban lane and trail system might not be as applicable in smaller cities and towns in the county, but these locations might also benefit from regional rural connective trails.

Rural bicycle amenities might include fewer on-street bicycle lanes and instead incorporate standalone bicycle and pedestrian trails that connect cities and towns to urban centers both in Grayson County and elsewhere. Currently, those traveling within and between Grayson's suburban and rural areas are cycling along the shoulder of higher-speed roadways. Providing alternatives or improvements for these roadways should be a priority alongside existing statewide trail plans.

The following section outlines three bikeway facility alternatives, each of which serves its own purpose within a larger alternative transportation system. Future planning efforts should consider potential bikeway connections that can be seamlessly integrated into the existing transportation conditions.

Shared Use Paths (Class I Trail)

This bikeway is often implemented along corridors that do not have existing or feasible bicycle lanes in roadways. The Katy Trail is an example of a Class I shared use trail system, where cyclists and pedestrians can travel along a former railway. As indicated in its name, a shared use trail is shared between pedestrians and cyclists, with signage that effectively communicates right-of-way. This bicycle amenity type is the most beginner and family-friendly, as there are no high-speed motor vehicles on the trail to maneuver around.

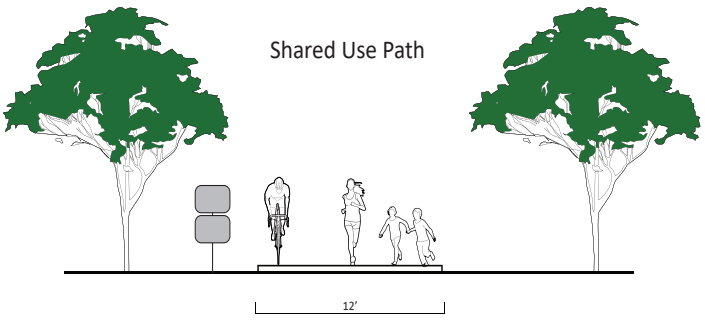


Figure 8.13. Shared Use Path

Figure 8.14. Denison's Katy Trail, a Shared Use Path

Shared Use Paths (Class I Trail) cont.

- A Class I trail shall be constructed on abandoned railroad corridor, easements, and city/state property having sufficient right of way to have a separate shared use path.
- The proposed trail improvements would typically have a minimum 30’ wide cleared right of way.
- The proposed trail design would include a 14’ wide subgrade preparation, this can include cement or lime stabilization as necessary, with 8’ wide ditches that have a side slope of 4:1 for ease of access and maintenance.
- Depending on project needs and the County’s requirements, the existing damaged bridges would be repaired or replaced, and new handrails would be installed.
- Installation of a 12’ wide crushed aggregate base (4” thick) on the prepared 14’ wide subgrade as per TxDOT Specification “Item 247- Flexible Base”.
- Installation of a 10’ wide wearing surface (asphalt, concrete, or crushed aggregate fines, etc.) at a minimum thickness of 2” on top of the new 12’ wide base.
- The trails installed on top of the bank within existing state/city right of way shall have a minimum of 12’ wide cement or lime treated stabilized subbase (typically a 3% mixture) which is 6” thick for ease of maintenance and 12’ wide crushed aggregate base which is also 6” thick. A 10’ wide wearing surface (asphalt) which is 2” thick shall be installed above the base.

Bike Side Path

Shared Use Trails can also be implemented along existing roadways, in which case they become a Bike Side Path. A bike side path runs adjacent to a thoroughfare but maintains separation between cyclists, pedestrians, and motor vehicles. The bike path can range from eight (8) to ten (10) feet in width, providing ample space for two-way bicycle traffic. In cases where there is not clearance for both bicycle and pedestrian amenities adjacent to the road, a shared roadside path may be implemented, but is not ideal. This bikeway also serves cyclists who might not be comfortable sharing the road with cars but does involve roadway intersection navigation and signage for drivers, cyclists, and pedestrians is necessary.

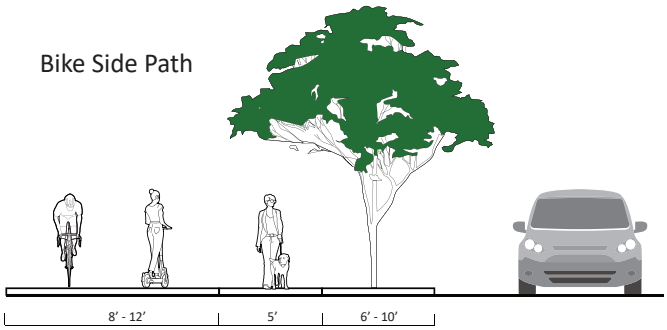


Figure 8.15. Bike Side Path

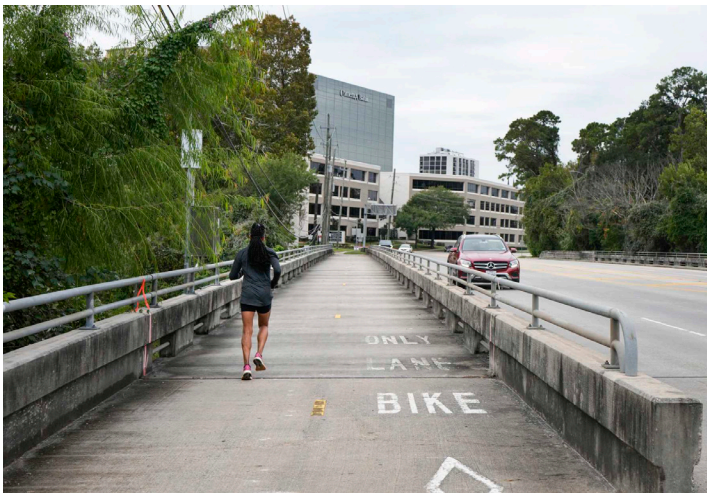


Figure 8.16. Bike Side Path in Houston, Tx
Source: Houston Chronicle

Class II Trails

Class II trails are recommended in locations where there is not enough City/State right of way for a shared trail or side path, but there is roadway space for two bike lanes, one in each direction.

On City streets and high-speed, high-volume roads the proposed trail would include a 10’ wide bike lane/cycle track separated from roadway by a 2’ wide buffer lane or 6” tall concrete curb on low volume city streets, county roads, and low volume state highway a 10’ wide shoulder could be used as a bike lane.

Below, the potential types of bike lanes that may be implemented as Class II trails are discussed at further length.

Bike Lane

The bike lane is the solution to integrating on-street cyclist amenities that separate bicycles from automobile traffic. These bikeways require a bit more experience and awareness from cyclists and drivers, especially in intersections. These bikeways might not be beginner-friendly but serve as strong connective accessways for more experienced commuting cyclists.

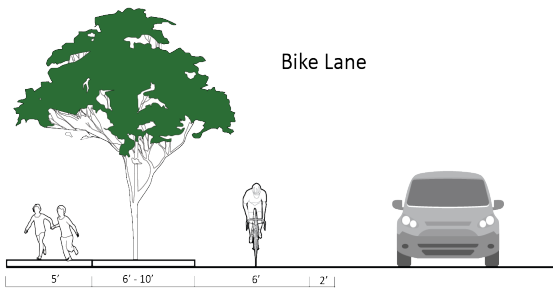


Figure 8.17. Bike Lane

There are a range of bicycle lane infrastructure facilities, ranging from conventional bike lanes to protected bikeways.

Conventional Bike Lane

One step up from the shared roadway, a conventional bike lane denotes a separate space for cyclists to ride along an expanded street shoulder. There is no physical barrier between bicycles and cars, only a painted line delineating a separate bike lane. This bikeway is typically deemed uncomfortable for inexperienced cyclists, especially as cars may park or stand in bicycle lanes, forcing cyclists into the motor vehicle lane.

Figure 8.18. Conventional Bike Lane in Austin, Tx
Source: NACTO

Buffered Bike Lane

Buffered bikeways are a type of painted bikeways that, like conventional bike lanes, do not offer any physical protection. Unlike the conventional bike lane, buffer lanes do feature a wider painted “buffer” between motor vehicle lanes and the bicycle lane. This extra space between lanes ensures that cyclists can maintain a safe distance from motor vehicles, increasing perceived safety for cyclists who may be less experienced and more nervous.

Figure 8.19. Buffered Bike Lane in Dallas, Tx
Source: FOX4 News KDFW

Protected Bike Lane

The highest standard for on-street bikeways is the protected bike lane, where cyclists are physically sectioned off from the motorway and protected by bollards, planters, or motor vehicle parking. Protected bike lanes increase rider safety, especially on high-speed roadways. The ideal protected bicycle lanes are two-way lanes that run along one side of the street. However, one-way protected bike lanes along an expanded road shoulder might also be implemented where there is not clearance for two-way lanes on one side of the street.

Unprotected bike lanes should not be implemented on streets where traffic is traveling faster than 40 miles per hour. Protected bike lanes may be placed on higher-speed streets, but in these cases shared trails or bike paths should be considered as a safer alternative.

Figure 8.20. Protected Bike Lane in Dallas, Tx
Source: Dallas Morning News

Class III Trail (Shared Roadway)

City streets and county roads where sufficient right of way may not be available, the proposed trail would typically be a Class III bikeway, or the local government can investigate the acquisition of right-of-way or easements to establish a separated Class I trail.

Class III bikeways mirror existing conditions, where cyclists share the road with motor vehicles. Class III bikeways are best utilized on low-traffic, low-speed streets. Improvements to these bikeways are generally additions of wayfinding such as increased signage or roadway markings, also known as "sharrows". Class III bikeways should be considered for future safety and connectivity improvements.

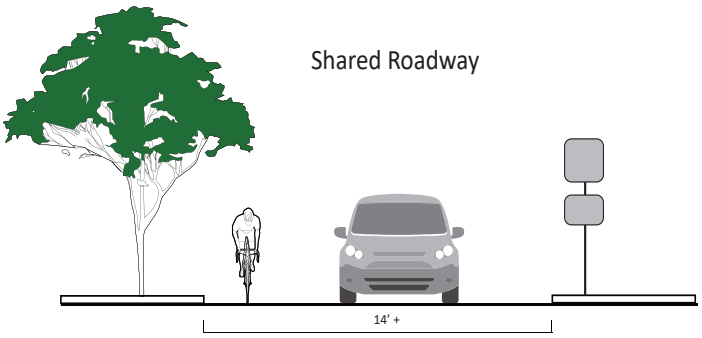


Figure 8.21. Shared Roadway

Figure 8.22. Shared Roadway Marking or "Sharrow"
Source: BikeTexas

Bicycle and Pedestrian Recommended Improvements

Bicycle: Urban

The 2040 MTP Bicycle and Pedestrian Plan laid a comprehensive groundwork for planning studies taken on over the past ten years. Elements of the proposed MTP corridors have been incorporated into studies and plans for both Sherman and Denison. As shown in Figure 8.1, Sherman has created a series of proposed park connectivity corridors. Additionally, Denison's comprehensive plan features bike routes proposed in the 2040 and 2045 MTP. These planned bicycle routes do align with demand and safety schema as analyzed in Maps 2 and 3. Opportunities for further route analysis that meet demand and safety needs are also included in Map 1 alongside existing, planned, and proposed bicycle corridors.

Bicycle network recommendations include further investment in building bicycle lanes as proposed in each city's trail and comprehensive plans. Additionally, there may be additional non-identified bicycle opportunities running east-west through Sherman that might be incorporated as either bicycle lanes or shared paths. The recommendations provided in the 2019 Bicycle and Pedestrian Plan within the 2045 MTP are included in the below map for comparison purposes. It is recommended that proposed bicycle amenities reflect the amount of coverage proposed.

The current proposed plans in Sherman are a vast improvement from the commitments noted in the 2040 plan. However, there are few proposed network connections through the eastern side of Sherman, and no city-proposed bicycle routes connecting Fielder Park, Cherry Street Park, and Hawn Park. A bike path or bike lane running east-west on East King Street or East Thomas Street, or a connected north-south route running along South Grand Avenue from East Brockett Street down to Cherry Street Park would greatly improve park-to-park or park-to-downtown connectivity if a local analysis of park use justifies these considerations.

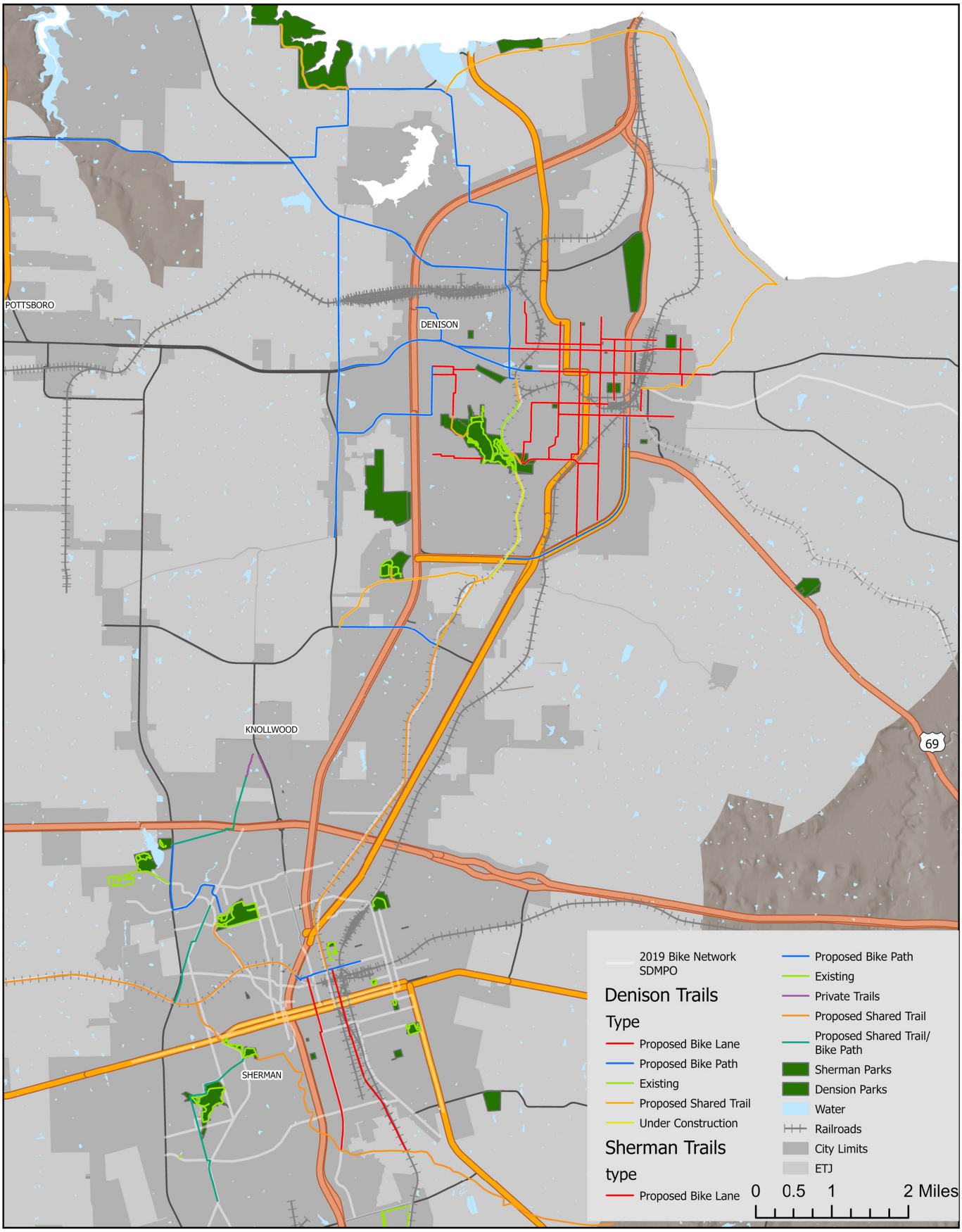


Figure 8.23. Existing and Proposed Trails

Bicycle: Rural

The 2045 MTP update document presented a series of corridors that are recommended as preferred routes aligning with the TxDOT State Bicycle Tourism Trail Study. These corridors depart slightly from those proposed in the study to account for railroad corridor availability, utility easements, and right-of-ways. An updated demand and safety study of these presented corridors (Safety and Demand Maps) affirms that the rural recommendations from this plan should be pursued as proposed, with minor adjustments for planned urban trail connectivity in Sherman and Denison.

Current bicycle plans in Sherman and Denison connect to this proposed regional plan at multiple points, making the bicycle trips in these cities scalable and available for those traveling farther distances in and out of the cities. While there are no planned bike networks within Grayson County's smaller cities and towns, the current proposed regional network connects cyclists to Sadler, Whitesboro, Collinsville, Southmayd, Collinsville, Tioga, and Bells. Future local bicycle networks may also be considered in Van Alstyne, where bike routes could connect a future parks network, as discussed in the Van Alstyne Comprehensive Plan, to the regional route that links to the greater network as proposed.

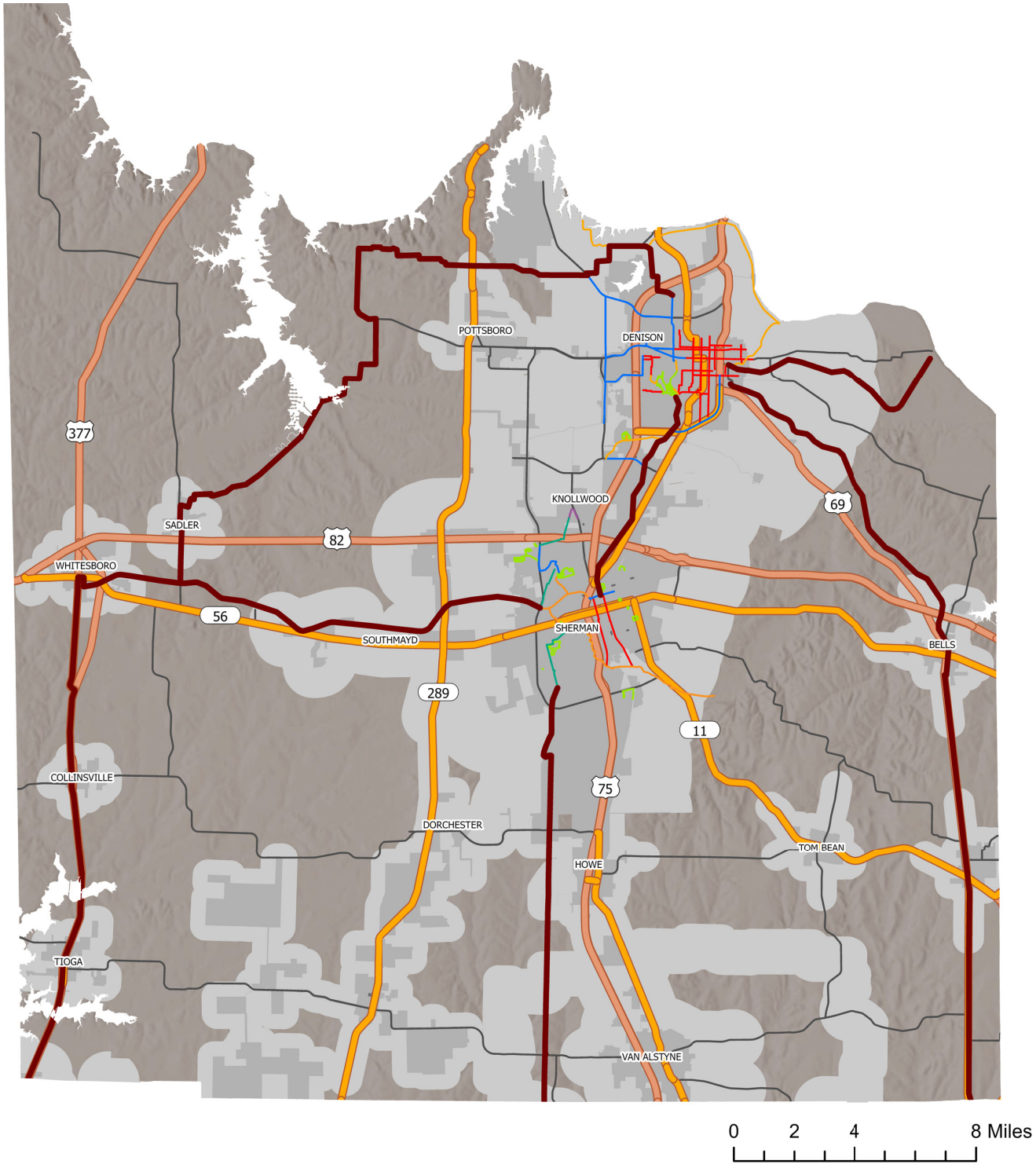


Figure 8.24. Regional Trails and Connections

Pedestrian

Since the sidewalk analysis conducted in 2014, there have been notable improvements made to increase sidewalk connectivity, especially along key roads, urban centers, and in new developments. A TxDOT road widening project in 2022 included the construction of sidewalks along FM 1417 between US 82 and SH 56 in Sherman. The reconstruction of Denison's Main Street, phase one of the city's "Designing Downtown" project, was completed in 2023 and included 12ft wide curb-less sidewalks.

There has also been a Main Street redesign effort along State Highway 56 in Whitesboro, which has included sidewalk refurbishment and pedestrian improvements, such as tactile paving at intersections and improved curb and ramp accessibility.

Denison is currently planning on conducting a Sidewalk and Street Assessment to further study sidewalk opportunities in the city.

Van Alstyne was recently awarded grant funding to construct 3,800 feet of shared use path along SH 5. This connective pedestrian and bicycle path will link a school, two parks, and the downtown sidewalk system in combination with an existing shared use path at Newport Drive.

Grayson County is also seeing the creation of new development communities, many of which are constructed with consideration of internal sidewalk connectivity between homes and schools in the area. Connectivity issues arise, however, when traveling outside of and between these new developments. Future consideration may be given toward the further study of sidewalk connectivity adjacent to major throughways, especially as there are a number of schools in the county that are located along high-speed roadways.

Findings from studies of current planning studies and the updated analysis of walkways and sidewalks within the .5-mile radius of schools in the region found that:

- As found in the 2040 Bicycle and Pedestrian Plan, several schools located in areas with a high proportion of low-income residents continue to have insufficient safe walking infrastructure.
- Sidewalk infrastructure is not planned as a singular priority of comprehensive plans within Grayson County and is instead considered supplementary to existing planned projects.
- While new developments have more extensive sidewalk networks, there is little connective walking infrastructure outside the properties' external boundary.
- Major employers in Grayson County are located within large campuses along highways and are quite difficult to access via foot or bicycle.
- The majority of shops and grocery stores in Grayson County are located within shopping centers that are only accessible via medium to high-speed roadways without pedestrian infrastructure.

Bicycle and Pedestrian Policy Recommendations

Demand for bicycle and pedestrian amenities has increased over the past 10 years, as have the alternative transportation policies and plans of cities within Grayson County.

- Establish a Bicycle and Pedestrian Advisory Committee consisting of local stakeholders to work with city and MPO technical and planning staff.
- Continue to adopt policies, programs, and projects identified in this Bicycle and Pedestrian Plan.
- Continue weighing bicycle and pedestrian plan inclusion as an element of criteria when selecting projects within the Grayson County MPO Metropolitan Transportation Plan.
- Consider livability and sustainability as elements of criteria when selecting projects within the Grayson County MPO Metropolitan Transportation Plan.
- Collaborate with landowners and employers to consider long and short-term bicycle parking facilities at destinations like schools, workplaces, and shopping centers.
- Further investigate partnership opportunities with private developers to incorporate alternative transportation options within and adjacent to new development parcels.
- Ensure that policies require roadways to safely accommodate all users including bicyclists, pedestrians, transit riders, older individuals, children, disabled persons, and motorists.
- Include pedestrian and bicycle infrastructure planning in comprehensive planning efforts.
- Promote enforcement of traffic laws to reduce bicycle and pedestrian-related conflicts.
- Work with TAPS to develop and promote a standard bicycle policy for all TAPS vehicles.
- Enhance and promote education and safety training opportunities for both cyclists and drivers to increase awareness of roadway-sharing policies and increase safety.
- Increase and promote bicycle and pedestrian travel options throughout the Grayson County MPO as an alternative to motor vehicle trips.

Benefits of Bicycle and Pedestrian Implementation

General Roadway Improvements

Bicycle and pedestrian infrastructure amenities benefit not only those utilizing alternative modes of transportation but also those commuting via motor vehicle. Implementing bicycle and pedestrian infrastructure can transform a community by reducing overall traffic congestion, air pollution, and energy use. Implementing bicycle and pedestrian network improvements within a city creates a safer environment for all commuters, particularly around schools and high-speed, high-traffic areas.

Notable Potential Economic Impacts

Expansive corporate offices and large-scale residential developments are common where affordable and desirable land is available. Typically, land in these sought-after locations is acquired with the primary goal of expanding and accommodating future corporate and residential growth. While many communities across the US have traditionally relied on cars to commute, the preferences of the modern workforce are shifting towards more diverse transportation options including biking and walking. According to a report drafted by the League of American Bicyclists in partnership with the CDC in 2021, access to quality bicycle and pedestrian infrastructure can completely transform a community into an economically thriving environment for residents and visitors.

Employer Benefits

Grayson County hosts numerous expansive corporate facilities that are primarily only accessible by motor vehicles. In recent years, Grayson County has seen increasing investment from major US-based corporations. As the population of the County grows, cities have experienced an increasing demand for transportation alternatives that have shaped the framework for future development plans. Expanding the bicycle and pedestrian network to reach these corporate campuses can provide employers with a variety of benefits including creating safer, healthier, and more cost-efficient transportation alternatives for their employees. By providing employees with alternative transportation options, employers can expect an increase in productivity and reduced healthcare costs due to the health benefits associated with maintaining a healthy, active lifestyle.

Bicycle Tourism

In recent years, bicycle tourism has substantially grown in popularity connecting parts of towns, cities, and regions across the United States. Bicycle tourism promotes recreational and cultural experiences, supports a healthy natural environment, and boosts local and municipal economies. This form of tourism encourages people to consider alternative methods of transportation, reducing the overall reliance on motor vehicles to navigate through cities and towns. Bicycle-related events and initiatives have the potential to attract residents and visitors with active lifestyles promoting local tourism in the area. Counties like Grayson, which has an array of natural landmarks and beautiful scenery, are especially desirable options for tourists looking to briefly escape city or suburban living. Quality infrastructure for bicycling can be a lucrative investment for communities, demonstrated by successful ventures and partnerships that promote and enhance local and regional tourism through cycling.

Health Benefits

Investments in bicycle and pedestrian-related infrastructure are investments in the health and overall well-being of the city's residents. The United States Centers for Disease Control and Prevention (CDC) supports this with evidence claiming that regular physical activity can improve community health and reduce healthcare costs. Strategic urban planning and design, as recommended by the National Prevention Council, are essential in integrating these health benefits into daily life. Access to alternative modes of transportation encourages people to maintain an active lifestyle linked to physical and mental health benefits. Among the list of various health benefits, communities with access to bicycle and pedestrian-related infrastructure experience reduced obesity rates, an overall decreased risk of cardiovascular disease, and improved mental health and air quality.

Environmental Benefits

The impact of car-centric infrastructure has been detrimental to our natural environment. According to the EPA, the transportation sector accounted for 28% of total greenhouse gas emissions in 2022. These emissions are linked to climate change, getting trapped in the Earth's atmosphere and reflecting light back to the Earth's surface, changing weather patterns and long-range temperature trends. By implementing "green" infrastructure like bicycle and pedestrian pathways and other related amenities, communities will experience an overall reduction in air pollution and less traffic congestion which directly correlates with lower greenhouse gas emissions. Communities that implement transportation alternatives can also benefit from reduced noise pollution, improved water quality, greater accessibility to green spaces, and more effective resource conservation.

Residential Property Values

With the recent employer investments in Grayson County, it is expected that property in the county will become more desirable as job availability increases. Additionally, residential property values will appreciate as the population continues to grow. As alternative modes of transportation have grown in popularity, direct investments in expanding bicycle and pedestrian infrastructure often lead to increased property values. Residential areas in active communities are typically more attractive, and developments along trail and abandoned rail corridors revitalize parts of the community into a more desirable living environment.

Individual Savings

With the rising costs of living and fuel, people are looking for alternative commuting options to save money. Accessibility to bicycle and pedestrian infrastructure creates options for individuals trying to cut their commuting costs. Evidence shows that replacing vehicle trips with bicycle or walking trips can save individuals a significant amount per mile, illustrating the personal financial benefits of adopting more active transportation options. Choosing to bike or walk, particularly to nearby destinations, significantly cuts individual costs associated with having a motor vehicle like gas prices, car repairs, and insurance fees.

Potential Bicycle and Pedestrian Funding Sources

Funding for bicycle and pedestrian infrastructure is acquired from a variety of sources ranging from grassroots funding approaches like community fundraisers to larger-scale efforts like seeking grant funding. This section identifies several major financing opportunities that can aid in funding bicycle and pedestrian projects in Texas beginning with federal financing opportunities. Federal programs are critical in supporting the development and providing funding for infrastructure projects throughout the United States.

Federal Funding Sources

Signed into law in November of 2021, the Bipartisan Infrastructure Law (BIL) addresses the poor state of infrastructure across the United States and provides funding for infrastructure projects across the nation. Central to this historic investment is its focus on mitigating the effects of climate change, improving American quality of life, creating well-paying and stable jobs, and positioning the United States as a global leader in nationwide infrastructure connectivity. This investment has allocated $1.2 trillion to fund a wide variety of infrastructure projects throughout the United States via a diverse set of grant programs as outlined in the 2022 “Building A Better America” guidebook. To date, Texas has received $345 million for alternative transportation infrastructure projects across the state to increase access and provide residents and visitors with a variety of transportation options. Within the BIL, is a series of competitive grants that project managers can apply for to receive federal funding support for their initiatives.

Federal Grants

Outlined in the “Building a Better America” guidebook is a general framework for future US infrastructure projects and project funding, which includes announcing the funding opportunities, screening grant applications for eligibility, and evaluating applications based on a specific set of criteria identified in the guidebook. Among the extensive list of grant programs, the following will play a prominent role in providing funding for bicycle and pedestrian infrastructure projects in the coming decades.

The BIL identifies several new and existing grant programs that contribute directly to developing new and improving existing bicycle and pedestrian-related infrastructure and other related facilities. These include infrastructure grants such as, but are not limited to, the “Active Transportation Infrastructure Investment Program” (ATIIP), the “Safe Streets for All” (SS4A) Program, the “Transportation Alternatives Set-Aside” (TA) Program, and the “Recreational Trails Program” (RTP) which is an important component of the TA program.

Active Transportation Infrastructure Investment Program (ATIIP)

The ATIIP is a new competitive grant program outlined in the BIL aimed at supporting infrastructure projects that enable people to safely and conveniently commute to school, work, and other destinations by walking, biking, driving, etc. Projects seeking financial support must have planning and design costs of at least $100,000 to be eligible for funding.

Safe Streets for All (SS4A)

The SS4A federal grant program is another essential component of the BIL as it provides states with funding to support infrastructure projects that promote road safety for all users of roadway networks including pedestrians, cyclists, and drivers. This program aims to implement roadway improvements, apply low-cost safety treatments to roads, and install safety enhancements, among other major safety improvements with the eventual goal of meeting the Texas "Vision Zero" plan which aims to eliminate all traffic-related fatalities by 2050. To date, the state of Texas has received $6 billion that is to be awarded to local and tribal governments that aim to advance Texas' Vision Zero plan.

In 2024, an SS4A Planning & Development Grant of $280,000 was awarded to the City of Denison to develop a Safety Action Plan with a Safe Routes to School plan.

Transportation Alternatives Set-Aside (TA)

The Transportation Alternatives Set-Aside Program (TA) distributes funding to local, regional, and municipal bicycle and pedestrian infrastructure projects across the state to improve mobility and safety for non-motorized commuters. In semi-rural areas like Grayson County, TA funding is distributed directly from the state government. The $345 million investment in bicycle and pedestrian-related infrastructure and amenities represents a significant increase in allocated funding compared to the $55 million awarded in the last Transportation Alternatives call for projects in 2021. Central to the TA program is the previously mentioned RTP which receives funding directly from off-road vehicle gas taxes to support its trail development and nourishment programs.

Reconnecting Communities and Neighborhoods Grant Program

The goal of this federal grant program is to distribute funding to a variety of infrastructure projects aimed at repairing the negative effects of the infrastructure development decisions of the past with a focus on improving connectivity between communities and neighborhoods promoting equity and environmental justice across the country. This grant program has around $3 billion in available funding to be distributed to various infrastructure projects meeting the program's project criteria requirements.

State Grants and Funding Opportunities

Texas Department of Transportation

The Texas Department of Transportation (TxDOT) plays an active role in project oversight and the distribution of federal and state-awarded grant funding. They are primarily responsible for the management, and the distribution of funding for all transportation-related projects within the state. Since the passage of the BIL, Texas has received massive investments in state infrastructure projects on statewide, regional, and municipal levels. To date, Texas has been the recipient of $30.6 bn of funding from the BIL with around $20 bn of that total amount directly funding transportation projects across the state. According to the USDOT, Grayson County will receive $280,000 of federal funding aimed at developing a comprehensive road safety strategy to improve road safety for cars and pedestrians in the City of Denison.

New sidewalks, bikeways, and other forms of non-motorized infrastructure will aid in improving safety and enhancing the quality of life in Texas communities with approval by the Texas Transportation Commission with over $345 million going towards projects across the state. The funding will go towards 83 projects that will provide safety enhancements and alternative mobility options for commuters.

Texas Parks and Wildlife Grants

The Texas Parks & Wildlife Department receives funding through the Recreational Trails Program (RTP) and the Federal Highway Administration (FHWA). It is managed by state-level government agencies and distributes funding to pedestrian and bicycle-related infrastructure projects that are awarded funding. Since the adoption of the 2014 Bicycle and Pedestrian Plan, changes in Texas Parks & Wildlife funding have been implemented, notably the increase in funding cap for non-motorized trail grants which grew from $200,000 in 2014 to $300,000, today.

According to Texas Parks & Wildlife: “This federally funded program receives its funding from a portion of federal gas taxes paid on fuel used in non-highway recreational vehicles. The reimbursable grants can be up to 80% of the project cost with a maximum of $300,000 for non-motorized trail grants… Funds can be spent on…non-motorized recreational trail projects such as the construction of new recreational trails, to improve existing trails, to develop trailheads or trailside facilities, and to acquire trail corridors.”

Texas Safe Routes to School (SRTS) Program

As mentioned previously in the “Big Ideas” section of the plan, the SRTS program was adopted in 2009 and is entirely funded by a federal cost reimbursement program managed by the TxDOT. It advocates for creating safer commuting environments for all K-8 students. This program aims to encourage students and parents to consider walking and biking as an option in their commute to school. SRTS directly funds projects that include infrastructure improvements, safety education, and other related initiatives.

Local and Regional Funding

With the expected future growth of cities in Grayson County, the need for sustainable, safe, and accessible transportation options becomes increasingly more essential to the success of modern living environments that promote connectivity and the preservation of the beauty of towns and cities. A significant portion of the funding for these projects comes directly from various local funding opportunities. Municipal funding is drawn from various often smaller funding sources included within municipal budgets, public-private partnerships, and community donations and volunteer programs. These sources include municipal budget allocations, public-private partnerships, non-profit partnerships, and private donations.

Grayson County Funding

The Grayson County MPO distributes funding to various infrastructure projects across the county and is actively involved in all stages of project development from the planning phase to completion.

City Budget Allocations

While it varies from county to county and city to city, funding for infrastructure development and maintenance is typically a large portion of the annual budgets of municipal governments in Texas. Investments in infrastructure projects remain a top priority for local governments across the country due to their vital importance in maintaining and enhancing both urban and rural living environments.

Potential Private Partnership Opportunities

The private sector has also made several major funding contributions to public infrastructure projects across Texas. The H-E-B Grocery Store has committed to environmental sustainability through its, "Our Texas, Our Future" initiative which focuses on transforming Texas into a more eco-friendly and sustainable state. As of March 2023, H-E-B has donated $1 million to help fund efforts to develop and enhance trails and recreational spaces throughout Texas as a part of its corporate responsibility programs.

Other Potential Funding Strategies

Opportunities to acquire funding for pedestrian and bicycle-related projects also include non-profit group funding, charitable trust funding, and private donations. Some of these donor groups include, but are not limited to:

The Friends of the Trail Group

The Friends of the Trail group is a community-based organization that advocates for the development and enhancement of trail systems across the United States. Through their efforts, the Friends of the Katy Trail is the primary beneficiary funding the development and maintenance of the trail system that connects cities in Grayson County via trail.

The American Hiking Society

The American Hiking Society collects funding for trial projects around the nation through awards disbursed from its National Trails Fund, which supports grassroots organizations doing trail maintenance, pathway improvement, and environmental advocacy work. This organization also mobilizes volunteers and collaborates with corporate partners to provide financial and logistical support for trail conservation efforts.

The Rails-to-Trails Conservancy

The Rails to Trails Conservancy contributes funding to a wide variety of trial-related projects around the country. The program promotes active collaboration with federal, state, and local governments to acquire funding for their projects. They also provide direct funding with their Trail Grants Program, which supports communities to thrive and make alternative modes of transportation more accessible. The Conservancy also works to acquire inactive rail corridors to develop trails along obsolete railway lines through a process known as railbanking.

Charitable Trust Funding Opportunities

Potential charitable trust funding opportunities offer another potential funding opportunity for infrastructure-related projects. The Meadows Foundation and the Moody Foundation are both privately funded programs that support community improvement projects.

The Meadows Foundation

The Meadows Foundation is a privately funded program that helps support nonprofit organizations fund a wide variety of projects including environmental conservation and community development. In the past, they have contributed to several trail and park development projects by providing grant funding to organizations that work on enhancing green spaces, promoting outdoor recreation, and conserving the natural environment across Texas.

The Moody Foundation

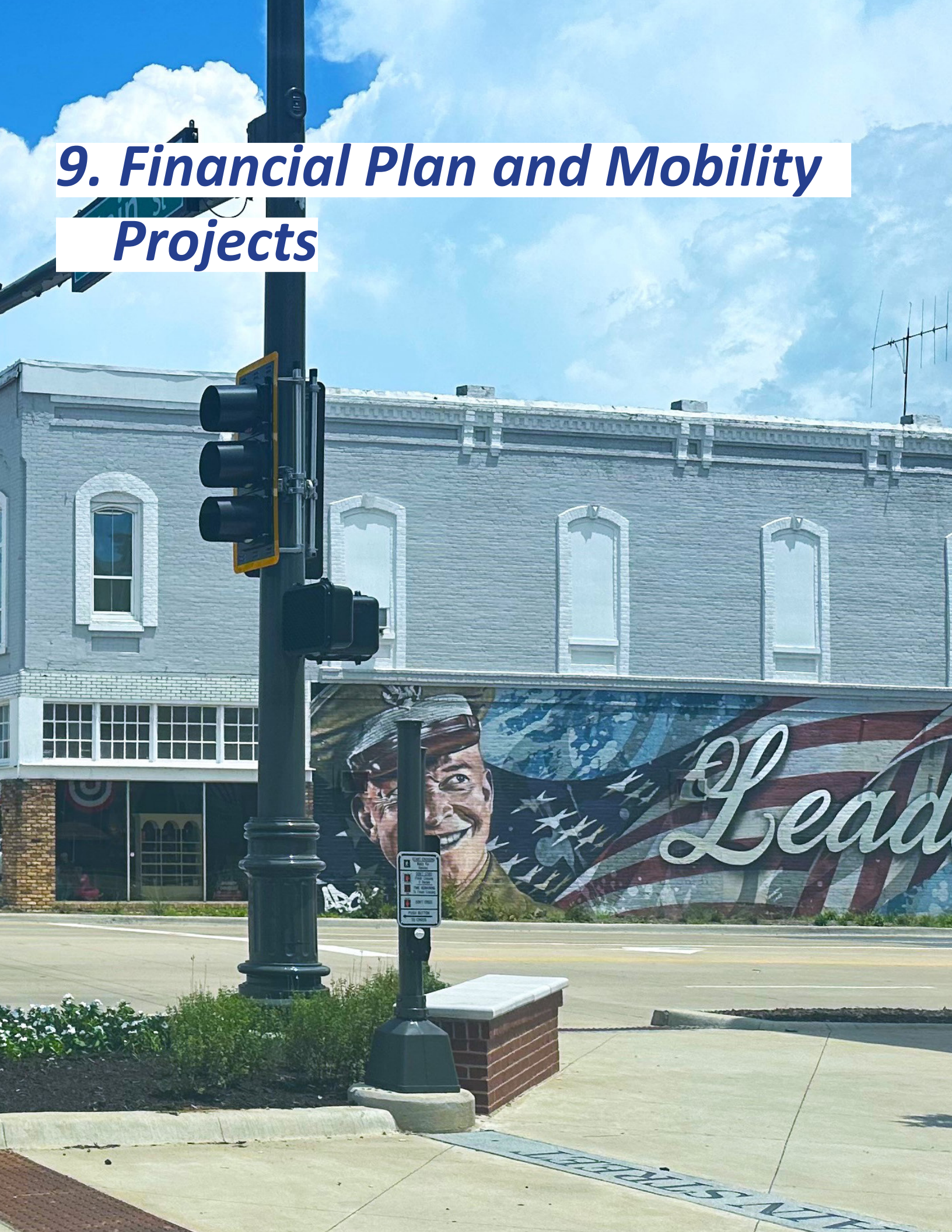
The Moody Foundation has also contributed to a wide range of community development projects including various park and trail-related projects. To date, the foundation has made large donations to a variety of eco-friendly projects like their $15 million donation to the Waller Creek Conservancy and $9.7 million donation to the Pease Park Conservancy. This funding helped finance the construction of an outdoor amphitheater and complete transformations of both the Waterloo Greenway and Pease Park outdoor spaces.

Private Donations and Volunteer Groups

Private donations are another source of funding infrastructure projects. This type of financing often occurs on a smaller level with private citizens, organizations, and/or businesses that have an interest in the area providing funding for infrastructure development projects. These donations can manifest in a variety of forms including direct funding, construction of facilities, donations of recreational equipment, public art installations, etc. Volunteer groups also play a prominent role in helping advance non-motorized infrastructure projects. These groups not only raise money for relevant projects but also work to mobilize volunteers to assist with smaller phases of projects like trail clean-ups and art installations.


s Austin Ave

9. Financial Plan and Mobility Projects



Financial Plan and Mobility Projects

The MTP is required to be fiscally restrained; in other words, the proposed projects must fit within the expected budget. However, funds can come from a variety of sources and be given for specific projects. Therefore, non-funded projects will be listed separately from projects expected to receive funding; these projects could still receive funding through alternative means.

Revenue Projections

The MPO is currently funded through various federal, state, and local sources. Federal funding is administered by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). On the state level, TxDOT distributes funding to local MPOs statewide.

MPO funding alone is insufficient to fund many of the projects needed by the county; alternative sources of revenue need to be found in order to complete them. These alternative sources can include local partnerships, project-specific grants, bonds, public-private partnerships, and local taxes.

Local partnerships with municipalities and with TxDOT allow greater funding opportunities. By working with partner organizations to fund projects that are mutually beneficial, projects that would otherwise lack funding can be completed.

Infrastructure Investment And Jobs Act (IIJA)

Effective since October 2021, the Infrastructure Investment and Jobs Act (IIJA) provides funding for transportation projects throughout the nation. It expanded on the FAST Act, using many of the same funding programs and creating new ones. The IIJA overall increased Federal funding for transportation infrastructure.

The IIJA, along with the acts prior to it, generally distributes funds using two methods. The first is formula distribution, where a formula is used to split funding to States and sometimes smaller entities such as urbanized areas to use for the purpose of that program. The other is competitive grants, where government entities can submit applications to fund specific projects; a division of the US DOT, depending on the grant, decides which of the applied projects to fund.

Fast Act And State Transportation Improvement Program (STIP)

The FAST Act is a federally funded program aimed at improving and maintaining US transportation infrastructure. Central to the FAST Act is the requirement for states to establish a State Transportation Improvement Program (STIP) where FAST Act funding can be effectively distributed funding to. The state-run STIP coordinates on a statewide, countywide, and local level to acquire federal funding for a variety of transportation-related projects.

YEAR	Grant 5339		Grant 5307		Other Sources	TOTAL
	FEDERAL	STATE	FEDERAL	STATE		
2023	$150,000.00	$-	$2,077,584	$214,310	$181,123	$2,623,017
2024	$175,000.00	$-	$585,348	$214,524	$186,615	$1,161,487
2025	$200,000.00	$-	$597,050	$216,885	$192,276	$1,206,211
2026	$225,000.00	$-	$652,785	$219,270	$242,809	$1,339,864
Total						$6,330,579

Figure 9.1. 2023 STIP Funding Table

Bipartisan Infrastructure Law (BIL)

As mentioned in the Bicycle and Pedestrian Plan, the BIL is an unprecedented investment in American infrastructure nationwide. Funding for this $1.2 trillion investment package will be allocated to states over the next decade to support a variety of infrastructure projects including, but not limited to the development and maintenance of road networks, bridges, public transportation systems, airports, and clean water facilities.

As of March 2024, $15 B of federal support is already funding 589 projects state with the largest portion of funding directly financing transportation maintenance and development projects. It is expected that over the next 10 years, funding will exponentially increase.

Over the next five years, Texas is expected to receive $27.5 billion for roads and bridges, $3.4 billion funding public transit projects, $408 million to fund projects expanding electric vehicle charging stations, and other funding directed towards other transportation-related projects. Local Texas MPOs, along with other MPOs nationwide, will also be able to apply for federal grants to acquire further funding.

TxDOT Unified Transportation Program (UTP)

TxDOT's UTP is a 10-year comprehensive plan that outlines the development process of transportation projects statewide. The UTP helps determine and identify how funding is distributed to projects and it is split into 12 related categories to include a wide array of different types of transportation projects. The chart below reveals how funding is distributed to different types of projects in 2024.

Currently, the UTP is directly responsible for funding a variety of transportation projects in Grayson County. The UTP also plays a role on the local level providing further funding for local transportation projects. Among that list of projects is the development of new frontage roads in Whitesboro, freeway widening projects in Howe and Sherman, and the development of two new location roads in Howe and Tom Bean.

TxDOT UTP Funding Category	2024 UTP Funding Authorizations
1. Preventative Maintenance and Rehabilitation	$18,667,880,000
2. Metro and Urban Area Corridor Projects	$11,487,980,409
3. Non-Traditionally Funded Transportation Projects	$4,986,593,894
4. Statewide Connectivity Corridor Projects	$17,780,433,610
5. Congestion Mitigation and Air Quality Improvement	$2,322,790,000
6. Structures Replacement and Rehabilitation (Bridge)	$4,681,612,746
7. Metropolitan Mobility and Rehabilitation	$5,751,838,385
8. Safety Projects	$3,747,421,009
9. Transportation Alternatives	$1,730,508,188
10. Supplemental Transportation Projects	$2,433,528,107
11. Distinct Discretionary	$6,943,047,030
12.Strategic Priority	$20,025,958,943
Total	**$100,565,592,319**

Figure 9.2. TxDOT UTP Funding Table

Funding Category	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	TOTAL
1. Preventative Maintenance and Rehabilitation	$-	$-	$-	$-	$-	$-	$-	$-
2. Urban Corridor	$16,489,610	$19,816,454	$10,633,300	$11,023,510	$11,267,944	$7,406,743	$8,793,510	$85,431,071
3. Local	$-	$-	$-	$-	$-	$-	$-	$-
4. Urban Connectivity	$-	$-	$-	$-	$-	$-	$-	$-
5. CMAQ	$-	$-	$-	$-	$-	$-	$-	$-
6. Bridge Program	$-	$-	$-	$-	$-	$-	$-	$-
7. Metropolitan Mobility and Rehabilitation	$-	$-	$-	$-	$-	$-	$-	$-
8. Safety	$-	$-	$-	$-	$-	$-	$-	$-
9. Transportation Alternatives-Carbon Reduction	$754,288	$261,553	$266,785	$256,525	$256,525	$256,525	$256,525	$2,308,726
10. Supplemental Transportation Projects	$-	$-	$-	$-	$-	$-	$-	$-
11. District Discretionary	$-	$-	$-	$-	$-	$-	$-	$-
12. Strategic Priority	$-	$-	$-	$-	$-	$-	$-	$-

Figure 9.3. Draft 2024 UTP Projects

Public Transit, Bicycle, And Pedestrian Funding

According to the Statewide Transportation Improvement Program (STIP), funding has been set aside to finance a variety of transportation projects.

The US DOT distributes funds for Transportation Alternatives (TA) projects to each state DOT, which then fund individual projects. TA funds ultimately are from IIJA funding, which nearly doubled the TA set-aside funding from the FAST Act. Transportation Alternative projects are exclusively pedestrian and bicyclist infrastructure.

The FTA Urbanized Area Formula Grants (Section 5307) provides federal funding to projects in urban areas with 50,000 or more residents. Funding is distributed to local planning organizations.

According to data published by Texas A&M University, in 2023 the Texoma Area Paratransit System (TAPS) brought in a total of $1,964,030 with expenditures matching their revenue.

Every other year, TxDOT puts out a call for TA projects. Local governments, school districts, nonprofits, small MPOs (including the GCMPO), and similar entities can submit proposals for TA projects. Projects selected will receive up to 80% of the funding from TxDOT; the sponsoring agency must match the remaining required funding.

While the GCMPO does not apply for TA projects, local municipalities do. Since the last MTP update, 3 projects in Grayson County have been approved for TA funding; Van Alstyne was approved for funding two separate sections of shared-use paths and Whitesboro was approved for funding sidewalks on Main Street. The Katy Trail plan has also moved into Phase 2 in Denison with plans to start at Loy Lake Road and continue south for about a mile connecting to Spur Route 503. This project aims to create connections for the cities within Grayson County via alternative transportation options. Included within this project is the installation of new lighting, new signage, and other trail-related amenities.

Non-Traditional Funding

Another potential method of funding transportation is through toll roads. Toll roads are built using public-private partnerships, where a private company cooperates with a government entity to create a toll road. The private company provides funds for toll roads that cannot be covered through other sources in exchange for toll revenue over time; a successfully built roadway with expected use allows for the private company to profit and for the public to benefit from the transportation infrastructure. This method of funding has found success in Texas.

There is currently a plan to extend the Dallas North Tollway through Grayson County. The tollway would provide greater access to Grayson County from the Metroplex and would allow through traffic to bypass the development and traffic along most of the length of US 75 in Grayson County.

Public-private partnerships can also be used outside of toll roads. TAPS currently utilizes a public-private partnership with Transdev to provide curb-to-curb bus service. This partnership aims to restore and offer public transit services for disabled citizens. It has led to safe and efficient transportation solutions for elderly and disabled residents of Grayson and surrounding counties.

Local Taxes and Revenues

The potential funding from local revenues is currently limited. Because there is a statewide limit of a 2% local sales tax and most municipalities in Grayson County have a 2% sales tax, the County cannot institute one. The only significant local revenue for transportation is through vehicle registration fees; Grayson County charges a $10 vehicle registration fee, which is typical for counties in Texas.

There are a few potential alternative sources of local revenue that would need to be approved by a voter referendum. Projects, usually ones with especially large scales, can be funded by a transportation improvement bond. By raising capital upfront and spreading project costs over time bonds significantly contribute to funding large-scale transportation projects. Some of the important bond programs include Highway Improvement General Obligation (HIGO) Bonds which are backed by state credit, State Highway Fund Revenue Bonds which are backed by the revenue produced from the funded project, Texas Mobility Fund Bonds, and TxDOT Toll Revenue Bonds.

Transportation user fees (TUF) are another potential funding source. These fees are charges imposed on property owners based on their overall usage of transportation infrastructure. These fees provide funding for the maintenance and improvement of local roads and the transportation systems of a particular area. TUF has proven to be successful across the country and specifically in the cities of Austin, TX and Taylor, TX.

Project Prioritization

As mentioned in Chapter 4, TxDOT uses Decision Lens which is a software that generates methodical rankings for proposed transportation improvement projects using a multi-criteria decision analysis framework. This framework incorporates various important factors like project safety and environmental impact, mobility conditions, and economic benefits to rank projects. Every proposed project is scored and weighted based upon based upon the specific criteria set. The projects with a higher weighting percentage align closer to TxDOT's overall transportation goals and are prioritized. This approach helps streamline the project selection process.

Decision Lens uses various Performance Metrics including Data Integration System to incorporate data directly from TxDOT sources like DCIS, CRIS, RHINO, PMIS, and PONTEX. These sources include important information like crash data, traffic congestion reports, bridge and pavement conditions, and highway and freight routes. Public engagement and community surveys are also considered I the prioritization of projects.

The current Decision Lens report was generated in the Summer of 2024 and the project weighting is indicated in the following Figure 9.5.

Decision Lens follows a formula to generate the project's final weighting score. The formula is as follows:

$$Final\ Score = \frac{\text{Result from Decision Lens}}{1 - \text{Local Contribution (Percent)}}$$

Figure 9.4. TxDOT Performance Based Planning Process

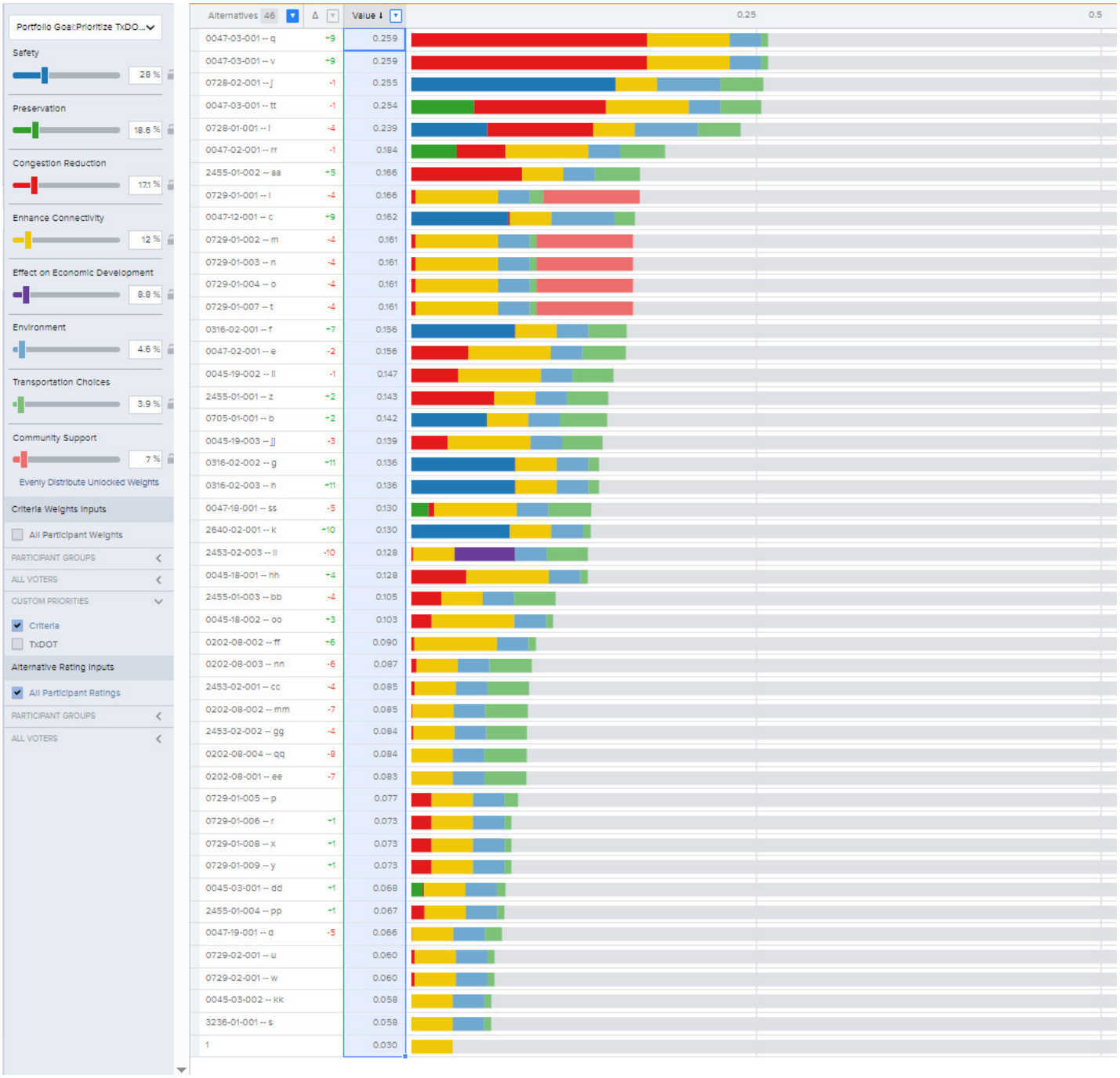


Figure 9.5. Decision Lens Raw Scores

City	Highway	From	To	Description	Estimated Constr. Cost	Final Score
DENISON	FM 120	RR AT KATY DEPOT	8TH STREET	RAILROAD CROSSING IMPROVEMENTS, DRAINAGE IMPROVEMENTS, CURB AND GUTTER, SIDEWALK AND CROSSWALK IMPROVEMENTS	$4,800,000.00	0.318
DENISON	FM 120	YORK	ARMSTRONG	DRAINAGE IMPROVEMENTS AT MAURICE AND MORTON, CURB AND GUTTER, SIDEWALK AND CROSSWALK IMPROVEMENTS, RAILROAD CROSSING IMPROVEMENTS	$10,500,000.00	0.298
VAN ALSTYNE	SH 5	COUNTY LINE ROAD	FM 121	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (3 LANES)	$11,000,000.00	0.287
VAN ALSTYNE	SH 5	FM 121	SPENCE ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$3,000,000.00	0.287
SHERMAN	US 75	SHEPHERD	FM 1417	WIDEN AND RECONSTRUCT SERVICE ROADS	$41,750,000.00	0.254
DENISON	SH 91	SPUR 503	MAIN	DRAINAGE IMPROVEMENTS, MODERNIZE SIGNALS, ADD A BIKE/ PEDESTRIAN PATH, ASPHALT AND STRIPING IMPROVEMENTS, STREETLIGHTING IMPROVEMENTS	$15,000,000.00	0.202
DENISON	FM 84	HIGHWAY 69	FM 84	ADD A 10' PEDESTRIAN AND BIKE PATH TO THE SOUTH SIDE OF THE ROAD TO CONNECT HOUSING CENTERS TO MAJOR EMPLOYER LOCATIONS	$8,000,000.00	0.195
SHERMAN	FM 1417	SH 56	PARK	WIDEN EXISTING FREEWAY	$10,900,000.00	0.184
SHERMAN	US 75	FM 1417	N. TRAVIS ST	WIDEN AND RECONSTRUCT SERVICE ROADS	$54,050,000.00	0.184
VAN ALSTYNE	US 75	FM 121 INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$50,000,000.00	0.182
DENISON	SH 91	MARTIN LUTHER KING	E. OF HIGHWAY 75	ADD A 10' BIKE/PEDESTRIAN PATH TO THE SW SIDE OF THE ROAD, CROSSWALK AND MODERN STOPLIGHT ADDITION AT MLK/91, LIGHTING IMPROVEMENTS	$13,000,000.00	0.177
DENISON	SPUR 503	SH 91	HIGHWAY 69	CREATE 4 LANES WITH A WIDE MEDIAN FOR FUTURE 6 LANE EXPANSION, RECONFIGURING EXITS, DECREASE IN ROADWAY FOOTPRINT, IMPROVE ACCESS FOR DEVELOPMENT	$22,000,000.00	0.173
DENISON	FM 84	HIGHWAY 75	LIL OL' ROAD	WIDEN TO 5 LANES, ADD A BIKE/PEDESTRIAN PATH, STREET LIGHTING, ASPHALT AND STRIPING IMPROVEMENTS, 84/75 INTERSECTION IMPROVEMENTS, SIGNAL MODERNIZATION	$12,000,000.00	0.170
DENISON	FM 84	LIL OL' ROAD	N. OF ELM RIDGE ROAD	WIDEN TO 4 LANES, ADD A BIKE/PEDESTRIAN PATH, STREET LIGHTING, ASPHALT AND STRIPING IMPROVEMENTS, 84/75 INTERSECTION IMPROVEMENTS, SIGNAL MODERNIZATION	$18,000,000.00	0.170
DENISON	FM 406	FM 84	KATY LANE	CREATE 4 LANES, TRAFFIC SIGNAL IMPROVEMENTS, INTERSECTION IMPROVEMENTS, PAVING AND STRIPING	$9,800,000.00	0.162

Figure 9.6. Weighted Decision Lens Results

City	Highway	From	To	Description	Estimated Constr. Cost	Final Score
VAN ALSTYNE	US 75	COUNTY LINE ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$30,000,000.00	0.161
VAN ALSTYNE	US 75	SPENCE ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$45,000,000.00	0.161
VAN ALSTYNE	US 75	FARMINGTON ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$45,000,000.00	0.161
VAN ALSTYNE	US 75	HODGINS ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$45,000,000.00	0.161
SHERMAN	FM 1417	W. TRAVIS	US 75	WIDEN EXISTING FREEWAY	$22,875,000.00	0.159
SHERMAN	US 82	FM 1417	FM 131	WIDEN EXISTING FREEWAY	$5,600,000.00	0.147
SHERMAN	US 82	AT LONESTAR PARKWAY (PLAINVIEW)		NEW INTERCHANGE	$4,550,000.00	0.139
SHERMAN	US 75	N. TRAVIS ST	US 82	WIDEN AND RECONSTRUCT SERVICE ROADS	$22,200,000.00	0.130
SHERMAN	US 82	SH 289	FM 1417	CONSTRUCT FRONTAGE ROADS	$29,300,000.00	0.128
SHERMAN	US 75	FM 1417	W. TRAVIS ST	CONSTRUCT NORTH B EXIT RAMP	$3,000,000.00	0.128
SHERMAN	FM 1417	PARK	W. TRAVIS ST	WIDEN EXISTING FREEWAY	$6,900,000.00	0.117
SHERMAN	US 82	LAMBERTH RD	FM 1417	WIDEN EXISTING FREEWAY	$8,580,000.00	0.103
SHERMAN	FM 1417	US 75	LUELLA	WIDEN EXISTING FREEWAY	$12,050,000.00	0.094
SHERMAN	FM 131	AT US 82		RECONSTRUCT INTERCHANGE	$6,300,000.00	0.090
SHERMAN	FM 131	US 82	TAYLOR ST	WIDEN EXISTING FREEWAY	$5,400,000.00	0.087
VAN ALSTYNE	FM 121	US 75	SH 5	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (6 LANES)	$13,000,000.00	0.085
SHERMAN	FM 131	TAYLOR ST	COLLEGE ST	WIDEN EXISTING FREEWAY	$3,800,000.00	0.085
SHERMAN	FM 1417	LUELLA	SH 11	WIDEN EXISTING FREEWAY	$13,850,000.00	0.084
SHERMAN	FM 131	NORTH CREEK	FM 691	WIDEN EXISTING FREEWAY	$6,000,000.00	0.084
SHERMAN	FM 131	US 82	NORTH CREEK	WIDEN EXISTING FREEWAY	$3,300,000.00	0.083
VAN ALSTYNE	FM 121	US 75	HACKBERRY ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$5,000,000.00	0.081
VAN ALSTYNE	FM 121	HACKBERRY ROAD	FARMINGTON ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$5,000,000.00	0.081

Figure 9.6. Weighted Decision Lens Results (cont.)

City	Highway	From	To	Description	Estimated Constr. Cost	Final Score
VAN ALSTYNE	FM 121	FARMINGTON ROAD	GUNTER CURVE	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$8,000,000.00	0.081
SHERMAN	SH 56	AT SH 56		RECONSTRUCT INTERCHANGE	$6,250,000.00	0.076
DENISON	SPUR 503	HIGHWAY 75	SH 91	CREATE 4 LANES WITH A WIDE MEDIAN FOR FUTURE 6 LANE EXPANSION, RECONFIGURING EXITS, DECREASE IN ROADWAY FOOTPRINT, IMPROVE ACCESS FOR DEVELOPMENT	$16,000,000.00	0.073
SHERMAN	US 82	AT FRIENDSHIP RD		NEW INTERCHANGE	$3,400,000.00	0.067
VAN ALSTYNE	FM 121	SH 5	LINCOLN PARK	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$4,000,000.00	0.067
VAN ALSTYNE	FM 121	LINCOLN PARK	FM 121	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$4,000,000.00	0.067
VAN ALSTYNE	FM 3133	US 75	CHAPMAN ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$14,000,000.00	0.064
SHERMAN	SH 56	FRIENDSHIP RD	CASE RD	WIDEN EXISTING FREEWAY	$2,500,000.00	0.058
TOTAL					$683,655,000.00	

Figure 9.6. Weighted Decision Lens Results (cont.)

Fiscal Year	MPO Project Number	CSJ #	City	Highway	From	To	Description	Category 2 Funding	Total Project Cost
2025	SD2024-01	0047-13-033	VAN ALSTYNE	US 75	COLLIN COUNTY LINE (MPO BOUNDARY)	FM 902	WIDEN MAIN LANES FROM 4-LANE TO 6-LANE AND CONVERSION OF TWO-WAY FRONTAGE ROAD TO ONE-WAY	$0	$107,540,000.00
2025	GC2024-02 U	0047-18-088	SHERMAN	US 75	US 82	SH 91 (Texoma Parkway)	WIDENING FROM 4-LN TO 6-LN	$61,742,701	$147,800,000.00
2025	GC2025-01	5000-00-205	SHERMAN		TBD		INSTALL 4 DIRECT CURRENT FAST CHARGE PORTS WITHIN ONE MILE OF THE ELECTRIC ALTERNATIVE FUEL CORRIDORS	$0	$1,073,050.00
2028	GC2026-01	0047-03-091	SHERMAN	US 75	FM 902	FM 1417	WIDENING FROM 4-LN TO 6-LN	$32,023,941	$
	GC2030-01	0047-18-???	DENISON	US 75	FM 120	LOY LAKE ROAD (DENISON)	WIDENING FROM 4-LN TO 6-LN	$47,000,000	$125,000,000.00
	GC2036-01	0047-13-???	VAN ALSTYNE	US 75	AT FM 720		WIDEN OVERPASS FROM 3-LN TO 6-LN	$25,500,000	$75,000,000.00
	GC2039-01	2455-01-???	SHERMAN	FM 1417	SH 56	US 75	WIDEN FROM 2-LN TO 4-LN WITH MEDIAN	$6,110,000	$50,850,000.00
	GC2040-01	0045-18-???	SHERMAN	US 82	SH 289	FM 1417	ADD 2-LN FRONTAGE ROAD BOTH DIRECTIONS AND ADD OVERPASS AT FRIENDSHIP AND ROCKPORT	$82,000,000	$82,000,000.00
	GCRMA01		DENISON	GCT	PRESTON ROAD	US 75	CONSTRUCT 2 LANE SEGMENT OF GRAYSON COUNTY TOLLROAD	$0	$28,880,000.00
	GCRMA02		DENISON	GCT	SH 289	PRESTON ROAD	CONSTRUCT 2 LANE SEGMENT OF GRAYSON COUNTY TOLLROAD	$0	$22,000,000.00
	GCRMA03		SHERMAN	GCT	SH 289	US 82	CONSTRUCT 2 LANE SEGMENT OF GRAYSON COUNTY TOLLROAD	$0	$115,000,000.00
	GCRMA04		SOUTHMAYD	GCT	US 82	FM 902	CONSTRUCT 2 LANE SEGMENT OF GRAYSON COUNTY TOLLROAD	$0	$83,750,000.00
	GCRMA05		GUNTER	GCT	FM 902	FM 121	CONSTRUCT 2 LANE SEGMENT OF GRAYSON COUNTY TOLLROAD	$0	$35,000,000.00
TOTAL								$254,376,642	$940,767,592.00

Figure 9.7. MTP Selected Projects

City	Highway	From	To	Description	Estimated Constr. Cost
DENISON	FM 120	RR AT KATY DEPOT	8TH STREET	RAILROAD CROSSING IMPROVEMENTS, DRAINAGE IMPROVEMENTS, CURB AND GUTTER, SIDEWALK AND CROSSWALK IMPROVEMENTS	$4,800,000.00
DENISON	FM 120	YORK	ARMSTRONG	DRAINAGE IMPROVEMENTS AT MAURICE AND MORTON, CURB AND GUTTER, SIDEWALK AND CROSSWALK IMPROVEMENTS, RAILROAD CROSSING IMPROVEMENTS	$10,500,000.00
VAN ALSTYNE	SH 5	COUNTY LINE ROAD	FM 121	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (3 LANES)	$11,000,000.00
VAN ALSTYNE	SH 5	FM 121	SPENCE ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$3,000,000.00
SHERMAN	US 75	SHEPHERD	FM 1417	WIDEN AND RECONSTRUCT SERVICE ROADS	$41,750,000.00
DENISON	SH 91	SPUR 503	MAIN	DRAINAGE IMPROVEMENTS, MODERNIZE SIGNALS, ADD A BIKE/ PEDESTRIAN PATH, ASPHALT AND STRIPING IMPROVEMENTS, STREETLIGHTING IMPROVEMENTS	$15,000,000.00
DENISON	FM 84	HIGHWAY 69	FM 84	ADD A 10' PEDESTRIAN AND BIKE PATH TO THE SOUTH SIDE OF THE ROAD TO CONNECT HOUSING CENTERS TO MAJOR EMPLOYER LOCATIONS	$8,000,000.00
SHERMAN	US 75	FM 1417	N. TRAVIS ST	WIDEN AND RECONSTRUCT SERVICE ROADS	$54,050,000.00
DENISON	SH 91	MARTIN LUTHER KING	E. OF HIGHWAY 75	ADD A 10' BIKE/PEDESTRIAN PATH TO THE SW SIDE OF THE ROAD, CROSSWALK AND MODERN STOPLIGHT ADDITION AT MLK/91, LIGHTING IMPROVEMENTS	$13,000,000.00
DENISON	SPUR 503	SH 91	HIGHWAY 69	CREATE 4 LANES WITH A WIDE MEDIAN FOR FUTURE 6 LANE EXPANSION, RECONFIGURING EXITS, DECREASE IN ROADWAY FOOTPRINT, IMPROVE ACCESS FOR DEVELOPMENT	$22,000,000.00
DENISON	FM 84	HIGHWAY 75	LIL OL' ROAD	WIDEN TO 5 LANES, ADD A BIKE/PEDESTRIAN PATH, STREET LIGHTING, ASPHALT AND STRIPING IMPROVEMENTS, 84/75 INTERSECTION IMPROVEMENTS, SIGNAL MODERNIZATION	$12,000,000.00
DENISON	FM 84	LIL OL' ROAD	N. OF ELM RIDGE ROAD	WIDEN TO 4 LANES, ADD A BIKE/PEDESTRIAN PATH, STREET LIGHTING, ASPHALT AND STRIPING IMPROVEMENTS, 84/75 INTERSECTION IMPROVEMENTS, SIGNAL MODERNIZATION	$18,000,000.00
DENISON	FM 406	FM 84	KATY LANE	CREATE 4 LANES, TRAFFIC SIGNAL IMPROVEMENTS, INTERSECTION IMPROVEMENTS, PAVING AND STRIPING	$9,800,000.00
VAN ALSTYNE	US 75	COUNTY LINE ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$30,000,000.00

Figure 9.8. Unmet Project Needs

City	Highway	From	To	Description	Estimated Constr. Cost
VAN ALSTYNE	US 75	SPENCE ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$45,000,000.00
VAN ALSTYNE	US 75	FARMINGTON ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$45,000,000.00
VAN ALSTYNE	US 75	HODGINS ROAD INTERSECTION		UPGRADE INTERSECTION TO FULL INTERCHANGE	$45,000,000.00
SHERMAN	US 82	FM 1417	FM 131	WIDEN EXISTING FREEWAY	$5,600,000.00
SHERMAN	US 82	AT LONESTAR PARKWAY (PLAINVIEW)		NEW INTERCHANGE	$4,550,000.00
SHERMAN	US 75	N. TRAVIS ST	US 82	WIDEN AND RECONSTRUCT SERVICE ROADS	$22,200,000.00
SHERMAN	US 75	FM 1417	W. TRAVIS ST	CONSTRUCT NORTH B EXIT RAMP	$3,000,000.00
SHERMAN	US 82	LAMBERTH RD	FM 1417	WIDEN EXISTING FREEWAY	$8,580,000.00
SHERMAN	FM 1417	US 75	LUELLA	WIDEN EXISTING FREEWAY	$12,050,000.00
SHERMAN	FM 131	AT US 82		RECONSTRUCT INTERCHANGE	$6,300,000.00
SHERMAN	FM 131	US 82	TAYLOR ST	WIDEN EXISTING FREEWAY	$5,400,000.00
VAN ALSTYNE	FM 121	US 75	SH 5	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (6 LANES)	$13,000,000.00
SHERMAN	FM 131	TAYLOR ST	COLLEGE ST	WIDEN EXISTING FREEWAY	$3,800,000.00
SHERMAN	FM 1417	LUELLA	SH 11	WIDEN EXISTING FREEWAY	$13,850,000.00
SHERMAN	FM 131	NORTH CREEK	FM 691	WIDEN EXISTING FREEWAY	$6,000,000.00
SHERMAN	FM 131	US 82	NORTH CREEK	WIDEN EXISTING FREEWAY	$3,300,000.00
VAN ALSTYNE	FM 121	US 75	HACKBERRY ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$5,000,000.00

Figure 9.8. Unmet Project Needs

City	Highway	From	To	Description	Estimated Constr. Cost
VAN ALSTYNE	FM 121	HACKBERRY ROAD	FARMINGTON ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$5,000,000.00
VAN ALSTYNE	FM 121	FARMINGTON ROAD	GUNTER CURVE	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$8,000,000.00
SHERMAN	SH 56	AT SH 56		RECONSTRUCT INTERCHANGE	$6,250,000.00
DENISON	SPUR 503	HIGHWAY 75	SH 91	CREATE 4 LANES WITH A WIDE MEDIAN FOR FUTURE 6 LANE EXPANSION, RECONFIGURING EXITS, DECREASE IN ROADWAY FOOTPRINT, IMPROVE ACCESS FOR DEVELOPMENT	$16,000,000.00
VAN ALSTYNE	FM 121	SH 5	LINCOLN PARK	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$4,000,000.00
VAN ALSTYNE	FM 121	LINCOLN PARK	FM 121	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$4,000,000.00
VAN ALSTYNE	FM 3133	US 75	CHAPMAN ROAD	EXPAND/EXTEND EXISTING ROADWAY TO CREATE BYPASS (2 LANES)	$14,000,000.00
SHERMAN	SH 56	FRIENDSHIP RD	CASE RD	WIDEN EXISTING FREEWAY	$2,500,000.00
TOTAL					$560,280,000.00

Figure 9.8. Unmet Project Needs

Appendix

References

Mobility Conditions

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Acronyms and Definitions

Acronym	Definition
ACS	American Community Survey
ADA	Americans with Disabilities Act
ATIIP	Active Transportation Infrastructure Investment Program
BIL	Bipartisan Infrastructure Law
CDC	Centers for Disease Control and Prevention
CRIS	Crash Records Information System
DFW	Dallas-Fort Worth
DVMT	Daily Vehicle Miles Traveled
EPA	Environmental Protection Agency
FAST	Fixing America's Surface Transportation
FHWA	Federal Highway Administration
FM	Farm to Market
FTA	Federal Transit Administration
GCMPO	Grayson County Metropolitan Planning Organization
HIGO	Highway Improvement General Obligation
HSIP	Highway Safety Improvement Program
IIJA	Infrastructure Investment and Jobs Act
ISTEA	Intermodal Surface Transportation Efficiency Act
MAP-21	Moving Ahead for Progress in the 21st Century Act
MKT	Missouri-Kansas-Texas
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NSC	National Safety Council
NTRA	North Texas Regional Airport
PROWAG	Public Right-of-way Accessibility Guidelines
ROW	Right of Way
RTP	Recreational Trails Program
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users Act
SH	State Highway
SHSP	Strategic Highway Safety Plan
SRTS	Safe Routes to Schools
SS4A	Safe Streets for All
STIP	State Transportation Improvement Program
TA	Transportation Alternatives
TAPS	Texoma Area Paratransit System

Acronym	Definition
TAZ	Traffic Analysis Zone
TCOG	Texoma Council of Governments
TDM	Travel Demand Model
TIP	Transportation Improvement Program
TNR	Texas Northeastern Railroad
TUF	Transportation User Fee
TxDOT	Texas Department of Transportation
UP	Union Pacific
US DOT	United States Department of Transportation
UTP	Unified Transportation Program
VMT	Vehicle Miles Travelled