



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION
819 TAYLOR STREET, ROOM 14A02 300 E. 8TH STREET, ROOM 826
FORT WORTH, TEXAS 76102-9003 AUSTIN, TEXAS 78701

Refer to: HPP-TX

March 7, 2024

Killeen-Temple Metropolitan Planning Organization (KTMPO)
2022 Federal Certification Review—Congestion Management Plan (CMP) Update

Judge Roy Miller
KTMPO Chair
Killeen-Temple Metropolitan Planning Organization
2180 North Main Street
Belton, TX 76513

Dear Judge Miller:

We at Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have reviewed the updated KTMPO CMP, transmitted via email from KTMPO on October 30, 2023. Based on this review, the KTMPO CMP has been found acceptable by FTA and FHWA.

As the original CMP was the justification for the 2022 Federal Certification Review corrective action, this CMP update will affect KTMPO's certification status. With the new CMP implemented, the certification status of the Killeen-Temple Metropolitan Planning Organization is now acceptable. KTMPO is now in compliance with 23 CFR 450.

Should you have any questions or comments concerning this action, you may contact Justin Morgan at Justin.Morgan@dot.gov and (512) 536-5943 or Tony Ogboli at Tony.Ogboli@dot.gov and (817) 978-0566.

Sincerely,

David Bartels
Director, Planning and Program Development
FTA Region 6

Michael T. Leary
Director, Planning and Program Development
FHWA Texas Division

electronic copies:

Tony Ogboli, FTA-Region 6
Uryan Nelson, KTMPO
Victor Goebel, P.E., TxDOT-WAC
Casey Wells, TxDOT-TPP
Karen Burkhard, TxDOT-PTN



U.S. Department
of Transportation

Federal Highway
Administration

Federal Transit
Administration

Transportation Management Area Planning Certification Review

Killeen-Temple MPO Transportation Management Area



May 25, 2022

Certification Review Report



Cover Photo: Dall-E Mini (<https://huggingface.co/spaces/dalle-mini/dalle-mini>)





Table of Contents

1.0	EXECUTIVE SUMMARY	3
1.1	Previous Findings and Disposition.....	3
1.2	Summary of Current Findings	4
2.0	INTRODUCTION	11
2.1	Background.....	11
2.2	Purpose and Objective	12
3.0	SCOPE AND METHODOLOGY	12
3.1	Review Process.....	12
3.2	Documents Reviewed.....	14
4.0	PROGRAM REVIEW	15
4.1	Metropolitan Planning Area Boundaries	15
4.2	MPO Structure and Agreements.....	17
4.3	Unified Planning Work Program	19
4.4	Metropolitan Transportation Plan	21
4.5	Transit Planning.....	23
4.6	Transportation Improvement Program.....	27
4.7	Public Participation	29
4.8	Civil Rights (Title VI, EJ, LEP, ADA).....	32
4.9	Consultation and Coordination	35



4.10	List of Obligated Projects.....	37
4.11	Freight Planning.....	38
4.12	Environmental Mitigation/Planning Environmental Linkage	40
4.13	Resiliency	42
4.14	Transportation Safety	45
4.15	Transportation Security Planning	47
4.16	Nonmotorized Planning/Livability.....	48
4.17	Integration of Land Use and Transportation	50
4.18	Travel Demand Forecasting.....	52
4.19	Air Quality	55
4.20	Congestion Management Process / Management and Operations.....	57
5.0	CONCLUSION AND RECOMMENDATIONS.....	60
5.1	Corrective Actions	60
5.2	Recommendations	60
5.3	Commendations	62
5.4	Training/Technical Assistance	63
APPENDIX A - PARTICIPANTS		64
APPENDIX B - STATUS OF FINDINGS FROM LAST REVIEW		65
APPENDIX C – PUBLIC COMMENTS.....		66
APPENDIX D –Summary of Elected Official Comments		67
APPENDIX E - LIST OF ACRONYMS		68



1.0 EXECUTIVE SUMMARY

On May 24th through May 26th, 2022, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) conducted the certification review of the transportation planning process for the Killeen-Temple, Texas urbanized area. FHWA and FTA are required to jointly review and evaluate the transportation planning process for each urbanized area over 200,000 in population at least every four years to determine if the process meets the Federal planning requirements.

1.1 Previous Findings and Disposition

The first certification review for the Killeen-Temple urbanized area was conducted in 2015. The second certification review was conducted in 2018. The previous Certification Review recommendations and commendations are provided in Appendix B and summarized as follows.

Discovery	Action	Corrective Actions/ Recommendations	Disposition
The MPO considers the unique needs of veterans, a non-federally recognized population group that is rapidly growing in the KTMPO region.	Commendation	We commend the MPO on recognizing a demographic mix and planning ahead for the needs of those groups, especially veterans.	None.
There needs to be a summary in the plan that describes how much funding is available for Maintenance & Operations (M&O).	Recommendation	Recommendation that M&O be included in the plan. This should be accomplished with the new Metropolitan Transportation Plan as it is developed.	The Metropolitan Transportation Plan for 2045 has a table showing maintenance funding under a medium-funding scenario in a short-range and long-range term.
It was not clear how much revenue in total could be generated, or how much was to be expended overall.	Recommendation	Recommendation of a chart or table showing revenue and expenditures totals should be included in the new Metropolitan Transportation Plan.	Tables in the 2045 Metropolitan Transportation Plan shows revenue outputs and revenue inputs, based on four scenarios. The funding type and term (short-range and long-range) are provided.



Discovery	Action	Corrective Actions/ Recommendations	Disposition
There was extensive coordination between Hill Country Transit District and KTMPO. Also, HCTD took the initiative to prepare for new FAST Act requirements, including a new MOU between them and KTMPO. Further, the transit provider prioritized Transit Asset Management (TAM) plan and similar, unrequired metrics.	Commendation	We commend the MPO for its coordination of transit. We also commend TxDOT and the transit agency for preparing for the new requirements. It is also commendable that the transit agency took notable efforts on performance measures outside of the TAM and regarding the TAM.	None.
HCTD, in coordination with the MPO, offers the general public guidance on how to best use the bus network.	Commendation	We commend the transit agency for having "travel training" and related activities that that helps riders and riders using service dogs.	None.
The MPO staff create videos and other visuals to inform and promote safety on social media.	Commendation	We commend the MPO for utilizing social media to promote safety.	None.
The MPO has a protocol where if a board member disagrees on data used in the model, that member must provide alternate credible data.	Commendation	The MPO has a policy of requesting credible data alternatives should policy board members disagree on data used in model.	None.

1.2 Summary of Current Findings

The current review found that the metropolitan transportation planning process conducted in the Killeen-Temple urbanized area meets with a corrective action Federal planning requirements, based upon a desk review and an on-site review of the MPO.

As a result of this review, FHWA and FTA are certifying the transportation planning process conducted by the Texas Department of Transportation (TxDOT), Killeen-Temple Metropolitan Planning Organization (MPO) and Hill Country Transportation District subject to addressing corrective action. There are also recommendations in this report that warrant close attention and follow-up, as well as areas that MPO is performing very well in that are to be commended.



Review Area	Discovery	Action	Corrective Actions/ Recommendations/ Commendations	Resolution Due Date
Metropolitan Planning Area Boundaries 23 U.S.C. 134(e) 23 CFR 450.312(a)	MPO is compliant, based upon desk review	--	--	--
MPO Structure and Agreements 23 U.S.C. 134(d) 23 CFR 450.314(a)	MPO is compliant, based upon desk review	--	--	--
Unified Planning Work Program 23 CFR 450.308	Task 5 descriptions in Unified Planning Work Program (UPWP)	Recommendation	It is recommended that KTMPO fully describe the nature of Task 5 "Special Studies", versus stating a generic description that serves as a placeholder.	None.
		Recommendation	Recommended that the MPO reduce their reliance on private consultants and do more studies with KTMPO staff to better utilize limited funds.	None.
Metropolitan Transportation Plan 23 U.S.C. 134(c),(h)&(i) 23 CFR 450.324	MPO is compliant, based upon desk review	--	--	--
Transit Planning 49 U.S.C. 5303 23 U.S.C. 134 23 CFR 450.314	Transit and the MTP	Commendation	Transit is well integrated into the KTMPO MTP.	N/A
	HCTD Budget	Commendation	The HCTD operated efficiently on a limited budget and does an excellent job in outreach and identifying the needs of the community.	N/A



Review Area	Discovery	Action	Corrective Actions/ Recommendations/ Commendations	Resolution Due Date
Transit Planning 49 U.S.C. 5303 23 U.S.C. 134 23 CFR 450.314	Elderly and disabled transit use	Commendation	HCTD is striving to maintain services reaching many elderly and disabled passengers dependent on transit so such passengers can maintain their independence and have access to medical and other quality of life services.	N/A
	HCTD Funding Sources	Recommendation	HCTD through its Transit Development Plan (TDP) should endeavor to explore and with focus on identifying other alternative ways of generating dedicated stable funding sources given the limited transportation funding challenges faced by the region.	
	Funding for JARC	Recommendation	HCTD may want to reconsider further opportunities for leveraging its Section 5307 funding to develop a Program Management Plan that would enable establishing a more robust Job Access Reverse Commute (JARC) project that it currently not fully maximized.	



Review Area	Discovery	Action	Corrective Actions/ Recommendations/ Commendations	Resolution Due Date
Transit Planning 49 U.S.C. 5303 23 U.S.C. 134 23 CFR 450.314	RCTP updates	Recommendation	The Regionally Coordinated Transportation Plan (RCTP) provided on the KTMPO website was last updated in 2017 as mandated by the Texas Transportation Code, Title 6, Subtitle K, Chapter 461. However, the current regional coordinated plan document was due for an update 2021 and should be brought in compliance to requirements with an updated document.	
	Fort Hood and Transit	Recommendation	Fort Hood is a major identified destination and activity center in the region and currently with no connecting transit service availability, even though a need assessment has determined that a need may exist. The review team recommends that KTMPO and the HCTD continue the efforts in engaging Fort Hood to encourage meaningful transportation coordination efforts to working towards planning for an expanded transit service to link this important regionally significant activity center.	
		Recommendation	KTMPO should continue to advance the public participation plan elements and update the interested parties/consulting agencies list.	



Review Area	Discovery	Action	Corrective Actions/ Recommendations/ Commendations	Resolution Due Date
Transportation Improvement Program 23 U.S.C. 134(c),(h)& (j) 23 CFR 450.326	MPO is compliant, based upon desk review	--	--	--
Public Participation 23 U.S.C. 134(i)(6) 23 CFR 450.316 & 450.326(b)	MPO is compliant, based upon desk review	--	--	--
Civil Rights Title VI Civil Rights Act, 23 U.S.C. 324, Age Discrimination Act, Sec. 504 Rehabilitation Act, Americans with Disabilities Act	Keeping Title VI plans updated	Recommendation	The MPO should update their Title VI Implementation Plan to reflect current Title VI Procedures followed by the MPO.	None.
	Title VI cross-reference	Commendation	KTMPO's inclusion of a Title VI footnote on each page of their public website that takes the public to their Title VI Implementation Plan.	N/A
	Title VI cross- reference	Recommendation	The Title VI footnote should be updated to link to the latest version of the Title VI Plan.	None.
	Access to Title VI complaint forms	Recommendation	It is recommended that the MPO post a copy of their Spanish Title VI Complaint form on their website.	None.
Consultation and Coordination 23 U.S.C. 134(g) & (i) 23 CFR 450.316, 23 CFR 450.324(g)	MPO is compliant, based upon desk review	--	--	--
List of Obligated Projects 23 U.S.C. 134(j)(7) 23 CFR 450.334	Correcting financial information in the Annual Project Listing (APL)	Recommendation	It is recommended that the MPO work with TxDOT to determine what can be changed in the APL in order for it to display the correct financial information.	None.



Review Area	Discovery	Action	Corrective Actions/ Recommendations/ Commendations	Resolution Due Date
Freight 23 U.S.C. 134(h) 23 CFR 450.306	MPO is compliant, based upon desk review	--	--	--
Environmental Mitigation/Planning Environmental Linkage 23 U.S.C. 134(i)(2)(D) 23 CFR 450.324(f)(10) 23 U.S.C. 168 Appx. A 23 CFR Part 450	Using the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST)	Recommendation	It is recommended that KTMPO undertake a scoring session using INVEST to determine how sustainable their planning practices are.	None.
Resiliency 23 CFR 450.306(b)(9)	Resiliency planning	Recommendation	Recommend that the Killeen-Temple MPO develop a voluntary resiliency improvement plan (RIP) per the BIL Act in order to compete for PROTECT discretionary funds in the near future.	None.
Transportation Safety 23 U.S.C. 134(h)(1)(B) 23 CFR 450.306(a)(2) 23 CFR 450.306(d) 23 CFR 450.324(h)	The latest updates for the SHSP	Recommendation	It is recommended the KTMPO be aware of the latest SHSP update and its strategies to address fatalities and serious injuries.	None.
	Local HSIP projects	Recommendation	It is recommended KTMPO work with their corresponding TxDOT District on local HSIP projects.	None.
Transportation Security Planning 23 U.S.C. 134(h)(1)(C) 23 CFR 450.306(a)(3) 23 CFR 450.306(d) 23 CFR 450.324(h)	MPO is compliant, based upon desk review	--	--	--



Review Area	Discovery	Action	Corrective Actions/ Recommendations/ Commendations	Resolution Due Date
Nonmotorized Planning/Livability 23 U.S.C. 134(h) 23 U.S.C. 217(g) 23 CFR 450.306 23 CFR 450.3224(f)(2)	Safe roads for all	Commendation	Through the MPO's emphasis on Complete Streets, the Regional Mobility Plan (RMP, formerly the Regional Thoroughfare Plan) which emphasizes a nonmotorized plan, as well as the concept that bicyclists and pedestrians are equally important users of the roads, which helps educate in the citizenry of the region that roads are multimodal and encourages their safe use.	None.
Integration of Land Use and Transportation 23 U.S.C. 134(g)(3) 23 U.S.C. 134 (h)(1)(E) 23 CFR 450.306(a)(5)	MPO is compliant, based upon desk review	--	--	--
Travel Demand Forecasting 23 CFR 450.324(f)(1)	MPO is compliant, based upon desk review	--	--	--
Air Quality Clean Air Act 42 U.S.C. 7401 40 CFR Part 93 23 CFR 450.324(m)	Planning in advance for air quality issues (air quality reports, air quality monitoring)	Commendation	The KTMPO MPO is proactively monitoring nonattainment status with information to their stakeholders.	None.
Congestion Management Process / Management and Operations 23 U.S.C. 134(k)(3) 23 CFR 450.322	The CMP does not adequately address the requirements of 23 CFR 450.322 concerning the effect of completed added capacity projects	Corrective Action	The CMP needs to be revised to address the effects of added capacity projects.	Within six months of issuance of this report.

Details of the certification findings for each of the above items are contained in this report.

2.0 INTRODUCTION

2.1 Background

Pursuant to 23 U.S.C. 134(k) and 49 U.S.C. 5303(k), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) must jointly certify the metropolitan transportation planning process in Transportation Management Areas (TMAs) at least every four years. A TMA is an urbanized area, as defined by the U.S. Census Bureau, with a population of over 200,000. After the 2010 Census, the Secretary of Transportation designated 183 TMAs – 179 urbanized areas over 200,000 in population plus four urbanized areas that received special designation. In general, the reviews consist of three primary activities: a site visit, a review of planning products (in advance of and during the site visit), and preparation of a Certification Review Report that summarizes the review and offers findings. The reviews focus on compliance with Federal regulations, challenges, successes, and experiences of the cooperative relationship between the MPO(s), the State DOT(s), and public transportation operator(s) in the conduct of the metropolitan transportation planning process. Joint FTA/FHWA Certification Review guidelines provide agency field reviewers with latitude and flexibility to tailor the review to reflect regional issues and needs. As a consequence, the scope and depth of the Certification Review reports will vary significantly.

The Certification Review process is only one of several methods used to assess the quality of a regional metropolitan transportation planning process, compliance with applicable statutes and regulations, and the level and type of technical assistance needed to enhance the effectiveness of the planning process. Other activities provide opportunities for this type of review and comment, including Unified Planning Work Program (UPWP) approval, the MTP, metropolitan and statewide Transportation Improvement Program (TIP) findings, air-quality (AQ) conformity determinations (in nonattainment and maintenance areas), as well as a range of other formal and less formal contact provide both FHWA/FTA an opportunity to comment on the planning process. The results of these other processes are considered in the Certification Review process.

While the Certification Review report itself may not fully document those many intermediate and ongoing checkpoints, the “findings” of Certification Review are, in fact, based upon the cumulative findings of the entire review effort.

The review process is individually tailored to focus on topics of significance in each metropolitan planning area. Federal reviewers prepare Certification Reports to document the results of the review process. The reports and final actions are the joint responsibility of the appropriate FHWA and FTA field offices, and their content will vary to reflect the planning

process reviewed, whether or not they relate explicitly to formal “findings” of the review.

To encourage public understanding and input, FHWA/FTA will continue to improve the clarity of the Certification Review reports.

2.2 Purpose and Objective

Since the enactment of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the FHWA and FTA, are required to jointly review and evaluate the transportation planning process in all urbanized areas over 200,000 population to determine if the process meets the Federal planning requirements in 23 U.S.C. 134, 40 U.S.C. 5303, and 23 CFR 450. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), extended the minimum allowable frequency of certification reviews to at least every four years.

The Killeen-Temple Metropolitan Planning Organization (KTMPO) is the designated MPO for the Killeen-Temple urbanized area. TxDOT is the responsible State agency and Hill Country Transit District (HCTD) is the responsible public transportation operator. Current membership of the Killeen-Temple MPO consists of elected officials and citizens from the political jurisdictions in the Killeen-Temple-Fort Hood Metropolitan Statistical Area (MSA). The study area includes all of Killeen-Temple-Fort Hood MSA with the City of Killeen as the largest population center.

Certification of the planning process is a prerequisite to the approval of Federal funding for transportation projects in such areas. The certification review is also an opportunity to provide assistance on new programs and to enhance the ability of the metropolitan transportation planning process to provide decision makers with the knowledge they need to make well-informed capital and operating investment decisions.

3.0 SCOPE AND METHODOLOGY

3.1 Review Process

The initial certification review was conducted in 2015. A subsequent certification reviews was conducted in 2018. A summary of the status of findings from the last review is provided in 1.1 Previous Findings and Disposition and in APPENDIX B - STATUS OF FINDINGS FROM LAST REVIEW. This report details the third review, which consisted of a desk review (a review of documents from the MPO), formal site visit, and a public involvement opportunity, conducted in May of 2022.



Participants in the review included representatives of FHWA, FTA, TxDOT (staff from the Austin HQ Transportation Planning and Programming division), Hill Country Transit District, and Killeen-Temple MPO staff. Locally elected officials who are members of KTMPO's policy board were interviewed as well. A full list of participants is included in Appendix A.

A desk audit of current documents and correspondence was completed prior to the site visit. In addition to the formal review, routine oversight mechanisms provide a major source of information upon which to base the certification findings.

The certification review covers the transportation planning process conducted cooperatively by the MPO, State, and public transportation operators. Background information, current status, key findings, and recommendations are summarized in the body of the report for the following subject areas selected by FHWA and FTA staff for on-site review:

- Metropolitan Planning Area Boundaries
- MPO Structure and Agreements
- Unified Planning Work Program
- Metropolitan Transportation Plan (MTP)
- Transit Planning
- Transportation Improvement Program (TIP)
- Public Participation
- Civil Rights (Title VI, EJ, LEP, ADA)
- Consultation and Coordination
- List of Obligated Projects
- Freight Planning
- Environmental Mitigation/Planning Environmental Linkage
- Transportation Safety
- Transportation Security Planning
- Nonmotorized Planning/Livability
- Integration of Land Use and Transportation
- Travel Demand Forecasting
- Air Quality
- Congestion Management Process / Management and Operations



3.2 Documents Reviewed

The following MPO documents were evaluated as part of this planning process review:

- MPO-TxDOT-Fiscal Agent Agreement, 2018—the fiscal agent is the Central Texas Council of Governments (CTCOG)
- FY 2022-2023 Unified Planning Work Program (UPWP) for the Killeen-Temple MPO
- MPO Metropolitan Transportation Plan (MTP), 2045
- MPO FY-2021-2024 Transportation Improvement Plan (TIP) and Self-Certification
- <https://ktmpo.org>
 - Public Participation Plan
 - Congestion Management Plan
- Annual Project Listing (APL), FY 2021
- Regional Multimodal Plan (RMP)
- *Air Quality: Next Steps* Guide, 2012
- [KTMPo Title VI Plan \(March 14, 2018\)](#)
- [Hill Country Transit District Limited English Proficiency \(LEP\) Plan](#)



4.0 PROGRAM REVIEW

4.1 Metropolitan Planning Area Boundaries

4.1.1 Regulatory Basis

23 U.S.C. 134(e) and 23 CFR 450.312(a) state the boundaries of a Metropolitan Planning Area (MPA) shall be determined by agreement between the MPO and the Governor. At a minimum, the MPA boundaries shall encompass the entire existing urbanized area (as defined by the Bureau of the Census) plus the contiguous area expected to become urbanized within a 20-year forecast period for the MTP.

4.1.2 Current Status

MPO Official Name—The Killeen-Temple Metropolitan Planning Organization (KTMPO since 2009; previously Killeen-Temple Urban Transportation Study (K-TUTS))

MPO Area Boundaries—Bell County, parts of Coryell and Lampasas Counties

Population Served—475,367 (US Census Bureau P1 data for 2020)

The MPO consists of two census urbanized areas, Killeen, and Temple, Texas. The MPA currently encompasses both urbanized areas, as well as any contiguous area that could be urbanized within the next two-and-a-half decades. This includes smaller communities such as Belton, Copperas Cove, Harker Heights, Nolanville, and Troy, among other communities. The Metropolitan Area Boundary (MAB) was last altered in June of 2009. This was so the MAB could cover all of Bell County, more of Lampasas and Coryell Counties, and parts of Fort Hood.

The Killeen Urbanized Area (UZA) ends on the outer edge of Belton. This segment, known as a “hop”, or “jump”, may merge together soon (based on the latest Census data), creating a population of 300,000-350,000 for the two UZAs. Since Belton and Killeen are currently in the same MPO, the implications of the 2020 Census on KTMPO could include increased funding, policy board changes, and MPA boundary changes.

UZA changes will have an effect on transit, however: currently, there is one large urban zone, and one small urban zone being served by HCTD. One contiguous UZA would remove



a gulf between Killeen and Temple, eliminating the need for the current connector transit route between the two communities.

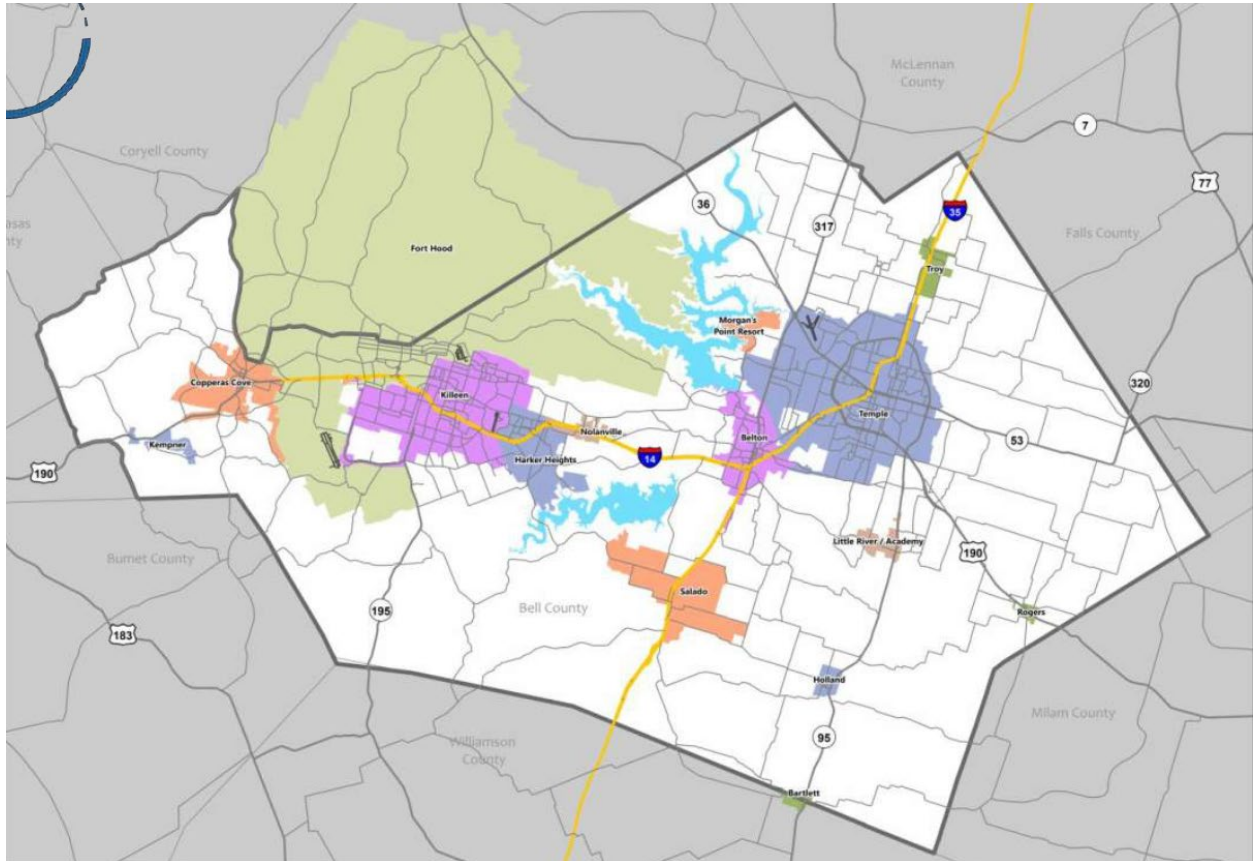


Figure 1: The KTMPO Metropolitan Planning Area (MPA) and its member cities

As of this writing, KTMPO is waiting on the results of the Census before making any major changes to the MPA boundaries. Once the results are obtained, designation of the urban area and a smoothing of the boundaries will be performed.

4.1.3 Findings

The boundaries of the MPO are meeting the requirements of 23 U.S.C. 134(e) and 450.312(a) in that they are encompassing the entirety of the urbanized area, based upon the most recently available (2010) Census data.

4.2 MPO Structure and Agreements

4.2.1 Regulatory Basis

23 U.S.C. 134(d) and 23 CFR 450.314(a) state the MPO, the State, and the public transportation operator shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO, the State, and the public transportation operator serving the MPA.

4.2.2 Current Status

- MPO Official Name—Killeen-Temple Metropolitan Planning Organization
- Year Founded—1975, as Killeen-Temple Urban Transportation Study (K-TUTS)
- Organizational Type/Status (i.e., Council of governments, non-profit, independent)—part of the Central Texas Council of Governments (CTCOG). CTCOG serves as the fiscal agent for the MPO
- Member Jurisdictions and Number Represented--Member Jurisdictions and Number Represented—14 cities (Bartlett, Belton, Copperas Cove, Harker Heights, Holland, Kempner, Killeen, Little River-Academy, Morgan's Point Resort, Nolanville, Rogers, Salado, Temple, and Troy) and a portion of Fort Hood. 14 voting members are on the Transportation Planning Policy Board (this includes 11 elected officials from within the MPA); 23 members (voting and nonvoting) on the Technical Advisory Committee
- Major Transit Operators—Hill Country Transit District



KTMPO has a policy board, a technical advisory committee, and other adjunct committees, including a bicycle/pedestrian advisory committee. Policy board membership is defined in a set of bylaws that were officially adopted.

The voting membership of the KTMPO Policy Board is based on population. It is anticipated the city of Temple will soon have three voting representatives, pending the latest census results. No other cities are anticipated to add representation at this time.

Fort Hood has a non-voting membership on the Technical Advisory Committee and the Policy Board.

The MPO has an agreement (“Agreement with Metropolitan Planning Organization”) with TxDOT, and their fiscal agent, Central Texas Council of Governments (CTCOG) that was signed in 2018 and expires at the end of September 2024. The agreement designates the responsibilities of TxDOT, such as assisting in the development of the UPWP, or distributing federal transportation funds to KTMPO. It also details the responsibilities of KTMPO, like creating an Annual Performance and Expenditure Report (APER). There are also responsibilities for the KTMPO fiscal agent and the MPO’s Policy Board noted in the agreement. These responsibilities include that the requirements of 23 USC 134 and 135 are met, and that an MTP for the MPA is developed and adopted by the board.

The MPO has a performance measure agreement. Since 2018, KTMPO has been annually adopting TxDOT’s Safety Performance Rule (PM1) measures as the MPO’s safety performance targets. For the Infrastructure or Pavement/Bridge Condition Measures (PM2), the MPO has also approved TxDOT’s targets, which were most recently updated in December of 2020. Also, KTMPO has adopted the System Performance/Freight Measures (PM3) of TxDOT’s as well to measure those metrics. All of the measures are reported by the MPO in its TIP and are also available through an online dashboard (see 4.7 Public Participation).

4.2.3 Findings

The MPO is meeting the requirements of 23 USC 134 in regard to the structure of KTMPO. Its agreements with TxDOT clearly state the responsibilities of each entity. KTMPO is also meeting the requirements of 23 CFR 490.207, 23 CFR 490.307, and 23 CFR 490.507, which establish performance measures for safety, infrastructure, and system performance.

4.3 Unified Planning Work Program

4.3.1 Regulatory Basis

23 CFR 450.308 sets the requirement that planning activities performed under Titles 23 and 49 U.S.C. be documented in a Unified Planning Work Program (UPWP). The MPO, in cooperation with the State and public transportation operator, shall develop a UPWP that includes a discussion of the planning priorities facing the MPA and the work proposed for the next one- or two-year period by major activity and task in sufficient detail to indicate the agency that will perform the work, the schedule for completing the work, the resulting products, the proposed funding, and sources of funds.

4.3.2 Current Status

Biannual Budget—\$2,779,633 (FY 2022 and 2023)

Major Projects/Plans-- (Transit service changes, Highway expansions, etc.) --\$350,000 planned for Special Study 5.10 (This is likely the MPO Dashboard). \$244,514 planned for MTP 2045 Implementation across both fiscal years.

Major MPO Issues-- Special studies in Task 5

The MPO utilizes a two-fiscal-year Unified Planning Work Program (UPWP). The most recent UPWP was adopted by the KTMPO policy board on July 21, 2021. It was subsequently approved by FHWA and FTA on September 9, 2021. According to the MPO director, UPWPs are the document amended the most, in order to keep up with the latest tasks. The FY 22-23 UPWP has been amended once (in August of 2021) to support new tasks.

The KTMPO UPWP follows the same five-task structure as the other Texas MPOs. They have consulted with TxDOT to get assistance on how to fulfill FAST Act and related Federal initiatives, such as Ladders of Opportunity and a sense of regional cooperation, through the UPWP.

The UPWP has a table at the end of each of the five-task sections that states the subtask, the fiscal year, and the funding source (Transportation Planning Funds, FTA Section 5307, or local funds).



The UPWP currently doesn't discuss transit performance measures, but does discuss things like planning issues and emphasis, and private sector involvement. Regarding private sector involvement, the UPWP states that private consultants may be used to conduct special studies such as thoroughfare plans, traffic counts, demographic and traffic studies, and "additional necessary transportation data".

That being said, the UPWP has five tasks in the FY 2022-2023 UPWP that are designated as "Special Studies" in the Task 5 section of the UPWP. These tasks are designated to be completed by private consultants. It was found during the on-site review that 48% of the Task 5 budget would be going to consultants.

Also, these Task 5 studies, including Task 5.10, do not have sufficient detail in their descriptions in order to base federal-aid highway program funding eligibility (as the tasks merely state that they will "support national transportation planning goals"). The UPWP will have to be amended to include sufficient detail for FHWA and TxDOT to determine eligibility.

4.3.3 Findings

The UPWP has sufficient information regarding planning issues and funding information for subtasks but needs a more through description when it comes to special studies to be conducted by private consultants.

Recommendations: It is recommended that KTMPO fully describe the nature of Task 5 "Special Studies", versus stating a generic description that serves as a placeholder. This can be done by amending the UPWP.

It is also recommended that the MPO reduce their reliance on private consultants and do more studies with KTMPO staff to better make use of limited funds.

4.4 Metropolitan Transportation Plan

4.4.1 Regulatory Basis

23 U.S.C. 134(c), (h) & (i) and 23 CFR 450.324 set forth requirements for the development and content of the Metropolitan Transportation Plan (MTP). Among the requirements are that the MTP address at least a 20-year planning horizon and that it includes both long- and short-range strategies that lead to the development of an integrated and multi-modal system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

The MTP is required to provide a continuing, cooperative, and comprehensive multimodal transportation planning process. The plan needs to consider all applicable issues related to the transportation systems development, land use, employment, economic development, natural environment, and housing and community development.

23 CFR 450.324(c) requires the MPO to review and update the MTP at least every four years in air quality nonattainment and maintenance areas and at least every 5 years in attainment areas to reflect current and forecasted transportation, population, land use, employment, congestion, and economic conditions and trends.

Under 23 CFR 450.324(f), the MTP is required, at a minimum, to consider the following:

- Projected transportation demand
- Existing and proposed transportation facilities
- Operational and management strategies
- Congestion management process
- Capital investment and strategies to preserve transportation infrastructure and provide for multimodal capacity
- Design concept and design scope descriptions of proposed transportation facilities
- Potential environmental mitigation activities
- Pedestrian walkway and bicycle transportation facilities
- Transportation and transit enhancements
- A financial plan



4.4.2 Current Status

The MPO's most current plan is their *Mobility 2045* MTP. The general public provided input regarding the plan in April of 2018. This was done through public workshops. Additional comments from the public, put into a draft MTP, was done over a 30-day period from March to April 2019.

The MTP, which predicts and plans growth out to the year 2045, estimates an additional 206,000 new residents and over 100,000 more jobs in the MPA within this 25-year period. Also, during that time, there are 65 roadway projects and 24 active transportation projects planned.

The MTP also contains potential environmental mitigation activities. The plan discusses how alternative designs or alignments can be developed to reduce a project's impacts on environmentally sensitive areas. Please see section 4.12 Environmental Mitigation/Planning Environmental Linkage for more information on KTMPO's environmental mitigation efforts.

KTMPO's MTP has a bicycle and pedestrian chapter, where a regional plan for such facilities (the Regional Multimodal Plan, or RMP) is described. One of the conclusions of this section is that a continuous hike/bike system through communities is needed. An important distinction to note is that this regional plan for mobility is multimodal. It is also a collaborative work by the numerous jurisdictions in the MPA.

Total project costs are shown in the MTP under "estimated costs" in the project listing. This appears to contain all cost associated with a project, including construction.

The MTP has been amended to keep it current. While the plan itself hasn't been altered, the project list has been changed (12 times to be precise). Most of these amendments have been administrative, so language in the Transportation Improvement Plan (TIP) is consistent with the MTP.

By 2024, KTMPO plans to update the MTP to 2050, exceeding the 20-year planning horizon at the time of approval required in the federal regulations.

4.4.3 Findings

KTMPO is meeting the regulations of 23 CFR 450.324 by transportation planning multimodally and cooperatively (with the public) in a manner that covers a long-term (25-year) viewpoint.

4.5 Transit Planning

4.5.1 Regulatory Basis

49 U.S.C. 5303 and 23 U.S.C. 134 require the transportation planning process in metropolitan areas to consider all modes of travel in the development of their plans and programs. Federal regulations cited in 23 CFR 450.314 state that the MPO in cooperation with the State and operators of publicly owned transit services shall be responsible for carrying out the transportation planning process.

4.5.2 Current Status

Hill Country Transit District (HCTD) is a regional public transit system whose mission is to build, refine, and operate a safe, dependable, and effective transportation network that provides mobility, improves the quality of life, and stimulates economic development through the provision of rural, urban fixed route, and ADA complementary paratransit service for citizens and visitors of the Central Texas area. HCTD has been around since the 1960s, and currently operates a fleet of nearly 140 buses, 24 of which are fixed route, and 41 are paratransit vehicles. HCTD operates “The HOP” which is the only regional public transit system in the KTMPO region. The HOP provides urban, paratransit and rural service. Special Transit Service (also referred to as Complementary Paratransit Service or Paratransit Service) is provided to those individuals with disabilities that are unable to use the regular HOP services for their trip needs. Rural Transit Hill Country Transit District provides transit services to a broad range of individuals within rural portions of the KTMPO region on a demand-responsive basis. They provide service to a nine-county area as follows: Bell, Coryell, Hamilton, Lampasas, Llano, Mason, Milam, Mills, and San Saba.

Rural service is provided to all nine counties and includes door to door demand response public transportation. In addition to the rural division, HCTD operates two Urban Divisions—the Temple Urban Division which includes Belton, and the Killeen Urban Division which includes Copperas Cove and Harker Heights. Urban service includes fixed route and complementary paratransit services. Five fixed routes are provided within the Killeen urbanized area. Three fixed routes are provided within the Temple urbanized area. Additionally, an express connector route runs between the two areas. HCTD operates a fleet of 139 buses including 24 fixed route buses, 41 urban paratransit vehicles, and 74 service vehicles in the rural division.

In 2017, the transit provider worked with Central Texas Council of Governments (CTCOG) to create a Regionally Coordinated Transportation Plan (RCTP), which itself was an update to the



2013 Regional Transit Coordination Plan. In the RCTP, various transportation resources and planning processes occurring in the region are documented and promoted in a way to integrate them and maximize efficiency.

Since 2020, HCTD has seen significant decreases in ridership over the last few years, a symptom synonymous with other transit agencies nationwide. Total ridership in the Killeen area decreased approximately about 24%. Conversely, during the same period of time, total ridership in the Temple area remarkably increased approximately 14%. Accordingly, ridership may not increase at the same rate when comparing future calendar years. Various factors have contributed to these changes in ridership and the agencies struggle to find appropriate solutions enhancing public transportation service for the KTMPO region. The HCTD acknowledged transit regional service is faced with some obvious challenges but says it is taking proactive steps to make the HOP continues to be a successful transit provider.

In past years, HCTD has coordinated with the transit advisory committees of the cities of Temple and Killeen. The Temple Transit Advisory Committee (TTAC) held meetings four to six times annually. The TTAC received performance information and in turn made suggestions regarding service enhancement possibilities. The Killeen Transportation Committee consisted of elected city officials, city staff, and economic development people. Route changes and other factors that affected the transit system were often brought to this committee. Neither advisory committee exists today; however, HCTD continues to coordinate with each city through the cities' planning staff. KTMPO staff is available to assist HCTD in their planning efforts and were instrumental in the development of their current GIS system. Currently, HCTD is working to improve the service by adjusting and increasing service locations and times; purchase new fixed route buses; and install more passenger shelters.

The Federal review team was pleased to learn HCTD has contracted a consulting firm presently conducting an evaluation study to reassess the agencies' current functional structure, operations, and services with recommendations for how best to move HCTD forward and effectively enhance their region's transit service for their various communities in the region.

FTA/FHWA Observation - Transit

- HCTD (The-HOP) is the only regional public transit service provider for the nine-county planning areas that includes Bell, Coryell, Hamilton, Lampasas, Llano, Mason, Milam, Mills, and San Saba. Fort Hood is a major identified destination and activity center in the region and currently with no connecting transit service available, even though a need assessment has determined that a need does exist.



- Current resources and funding to evaluate transportation inefficiencies and service gaps in the planning region are limited.
- When considering transportation needs, there are two basic population segments to consider— the general population (fixed routes) and those with disabilities (Special Transit). The general population functions well with fixed route service. Many of the health and human service organizations in the region have clients that need Para-transit service more so than fixed route.
- Based upon the comprehensive regional need assessment within the nine-county planning region, Bell County has the largest population and the highest number of health and human service agencies, medical facilities, employment centers and other desirable destinations. Bell County has the most developed transportation network but also appears to have the most need for improved transportation. Students, low-income residents, and the elderly seem to have the highest need for public transportation.
- HCTD provides good service with current schedules and routes; however, expanded hours in the early morning and late evening may be desired to provide coverage from 6 am to 10 pm, Monday through Sunday.
- Additional bus routes outside the major cities may also be needed. The Agency Survey targeted agencies associated with health and human services. Participation was very limited. While all responses provide valuable input for consideration, it is difficult to draw meaningful conclusions with the limited study base and low participation rate.

4.5.3 Findings

FTA and FHWA find that HCTD and KTMPO are meeting the federal regulations, but USDOT has a few recommendations for the transit provider and KTMPO, as well as commendations.

Commendations:

- Transit is well integrated into the KTMPO MTP.
- The HCTD operated efficiently on a limited budget and does an excellent job in outreach and identifying the needs of the community.
- Despite prevailing challenges, through its FTA Section 5310 program, the HCTD is striving to maintain services reaching many elderly and disabled passengers dependent on these transportation services to maintain their independence and provide access to medical and other quality of life services.



The HCTD Section 5310 services integrate public transportation with Rural and Urban services in order to efficiently use resources. Through these services, HCTD is addressing gaps/barriers identified in their Plan through the purchase of accessible buses to provide transportation to persons with disabilities and elderly persons, identified as those being most in need. The HCTD project targets persons with disabilities and senior citizens.

Recommendations: FTA/FHWA Recommendation - Transit

- HCTD through its Transit Development Plan (TDP) should endeavor to explore and with focus on identifying other alternative ways of generating dedicated stable funding sources given the limited transportation funding challenges faced by the region.
- HCTD may want to reconsider further opportunities for leveraging its Section 5307 funding to develop a Program Management Plan that would enable establishing a more robust Job Access Reverse Commute (JARC) project that it currently not fully maximized.
- The Regionally Coordinated Transportation Plan (RCTP) provided on the KTMPO website was last updated in 2017 as mandated by the Texas Transportation Code, Title 6, Subtitle K, Chapter 461. However, the current regional coordinated plan document was due for an update 2021 and should be brought in compliance to requirements with an updated document.
- Fort Hood is a major identified destination and activity center in the region and currently with no connecting transit service availability, even though a need assessment has determined that a need may exist. The review team recommends that KTMPO and the HCTD continue the efforts in engaging Fort Hood to encourage meaningful transportation coordination efforts to working towards planning for an expanded transit service to link this important regionally significant activity center.
- KTMPO should continue to advance the public participation plan elements and update the interested parties/consulting agencies list.

4.6 Transportation Improvement Program

4.6.1 Regulatory Basis

23 U.S.C. 134(c),(h) & (j) set forth requirements for the MPO to cooperatively develop a Transportation Improvement Program (TIP). Under 23 CFR 450.326, the TIP must meet the following requirements:

- Must cover at least a four-year horizon and be updated at least every four years.
- Surface transportation projects funded under Title 23 U.S.C. or Title 49 U.S.C., except as noted in the regulations, are required to be included in the TIP.
- List project description, cost, funding source, and identification of the agency responsible for carrying out each project.
- Projects need to be consistent with the adopted MTP.
- Must be fiscally constrained.
- The MPO must provide all interested parties with a reasonable opportunity to comment on the proposed TIP.

4.6.2 Current Status

The current TIP, for fiscal years (FY) 2021-2024, was approved by the policy board on May 20th, 2020. It is a fiscally constrained document, with a basic description for the surface transportation project, total project costs broken down by project phase, and the project sponsor (usually a municipality within the MPO) is always listed.

Concerning project selection criteria, the MPO uses a “four-step project selection process”, as mentioned in the most recent TIP. The process begins with a call for projects from entities that make up the MPO. Once projects are submitted, there is then a period of review and evaluation in which the project submissions are vetted for consistency with MTP goals and a local funding source that can meet any match requirements. During the project scoring and selection process, projects that are on the MPO’s Congestion Management Process (CMP) network received extra points. Also, projects that emphasize connections to facilities with regional or national transportation significance (I-14 and I-35) are given extra weight in the process.

The next step has the project proposals go before the MPO’s Technical Advisory Committee (TAC). The TAC scores and prioritizes the projects. The criteria used include if the project has



consistency with KTMPO goals, if there is a local funding match identified, and project readiness. Projects listed in a previously approved TIP which were not let are KTMPO's main priority and are therefore rolled over into the new TIP. This policy helps projects move forward within the four years of the TIP. Finally, the MPO's Policy Board has an opportunity to review and formally approve the project submissions. Once adopted, the projects will be included in the next TIP.

The scoring system was upgraded in 2019-2020 to reflect FAST Act considerations more accurately. The revamp also addressed an issue with project score weighting, as bigger projects were getting extra points or double-counted at the expense of smaller projects.

The MTP and the TIP selection process are conducted somewhat simultaneously. However, the primary source of TIP projects are projects that were once a part of the MTP.

The MPO's self-certification is included on p.60 of the most recent TIP.

4.6.3 Findings

The KTMPO Transportation Improvement Program is meeting the requirements of 23 CFR 450.326 and 23 U.S.C. 134 (c), (h), and (j).

4.7 Public Participation

4.7.1 Regulatory Basis

Sections 134(i)(5), 134(j)(1)(B) of Title 23 and Section 5303(i)(5) and 5303(j)(1)(B) of Title 49, require a Metropolitan Planning Organization (MPO) to provide adequate opportunity for the public to participate in and comment on the products and planning processes of the MPO. The requirements for public involvement are detailed in 23 CFR 450.316(a) and (b), which require the MPO to develop and use a documented participation plan that includes explicit procedures and strategies to include the public and other interested parties in the transportation planning process.

Specific requirements include giving adequate and timely notice of opportunities to participate in or comment on transportation issues and processes, employing visualization techniques to describe metropolitan transportation plans and TIPs, making public information readily available in electronically accessible formats and means such as the world wide web, holding public meetings at convenient and accessible locations and times, demonstrating explicit consideration and response to public input, and a periodically reviewing of the effectiveness of the participation plan.

4.7.2 Current Status

Public participation is an issue that is a priority for KTMPO. With the COVID-19 Pandemic, interacting with the public has been more of a challenge. This section will discuss the history of the public participation plan, how and when comments from the public are handled, and how meetings and forums are conducted.

According to documents provided for the review, and documents available online, their original Public Participation Plan (PPP) by K-TUTS was drafted in 2001, and under KTMPO, a new PPP was developed and adopted in the summer of 2007. The latest PPP was approved in November of 2020 by the MPO's Policy Board.

The PPP has procedures for how to collect and respond to public comment. Comments are collected from both print and electronic media and presented to the policy board.

The TIP, MTP and Congestion Management Process (CMP) get 30 days of public comment before new versions of those documents are approved by the KTMPO policy board. For major amendments to those documents, the public comment period is 15 days. Major amendments



are defined in the PPP as changes in the list of projects, the project scope or phase of work, or significant changes in funding.

As for the PPP itself, the adoption of a new plan requires 45 days of public comment before the policy board approves it. This amount of time is the same for major amendments to the PPP.

All of the planning documents require at least two public forums before the policy board approves them, except for amendments to the TIP, MTP and CMP. In that case, only one forum is needed.

Most public meetings are held at the MPO's offices in Belton, but if an agenda item has the potential to affect a specific area, the PPP stipulates that the meeting can be held in that community. Virtual meetings are held when physical meetings are not recommended.

Public forums, which are different from public meetings, are also held with location in mind. The adoption of a new plan requires a minimum of two public forums (one to be held on the eastern side of the KTMPO MPA, and one on the western side), while a major amendment requires only one forum, held close to the affected community when possible.

KTMPO advertises public events through "specialized media", which includes physical postings, the local newspaper, and electronic means as well. Electronic formats include the MPO website and Facebook. The MPO believes more interest could be generated from specialized media if they paid Facebook to promote their posts.

The MPO employs visualization to illustrate their plans. The plans, like the MTP and TIP, have graphs, maps, and listings for projects. The website for the MPO also has visualizations. The MPO has made an interactive map, which the MPO intends to make public, so citizens can post comments on projects and locations of interest. Also, the Bicycle Pedestrian Advisory Committee (BPAC) of KTMPO has a showcase of trails on their website. Lastly, the MPO has created a dashboard of vital statistics, noted below (Figure 2), regarding transportation planning in the MPA. As of the review, it isn't available to the public just yet, but links will be added in the future.

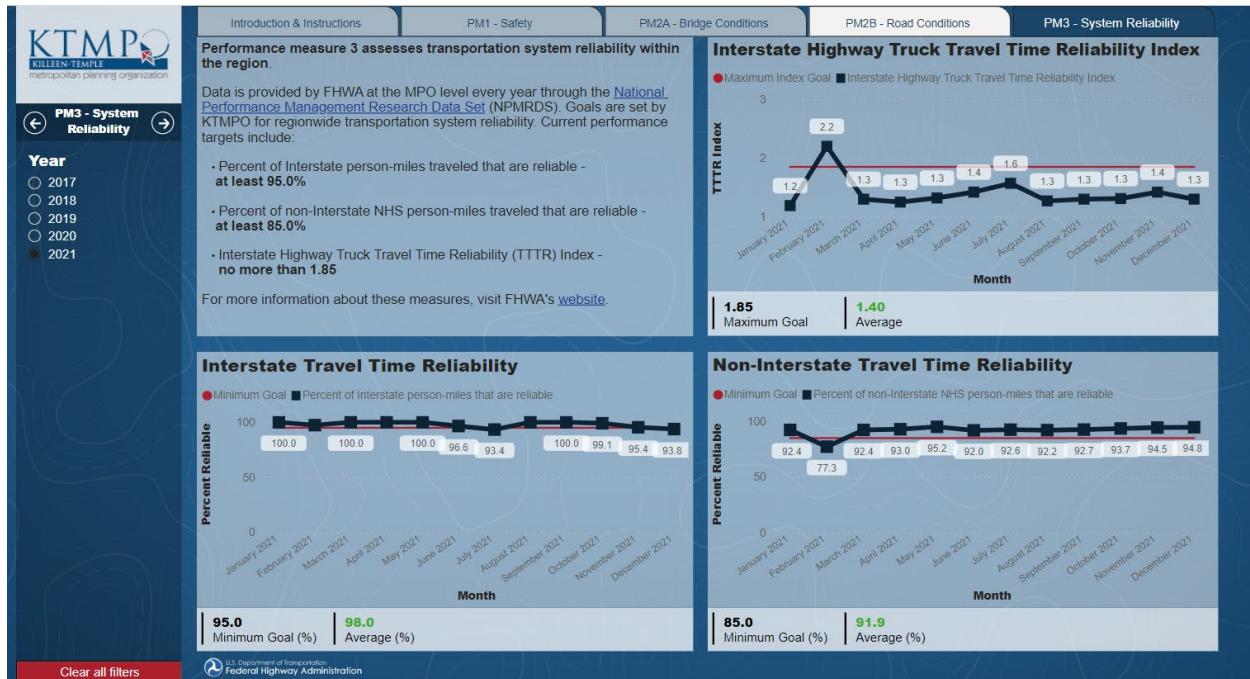


Figure 2: The KTMO Performance Measure 3 (PM3) System Reliability Dashboard

Regarding transit-related public participation, it was recommended by FTA in 4.5 Transit Planning that KTMO update their list of stakeholders to keep it current.

4.7.3 Findings

The MPO is meeting the requirements of Title 23 and Title 49 by allowing timely participation in the planning process by the public, and making information available through various means, including the World Wide Web.



4.8 Civil Rights (Title VI, EJ, LEP, ADA)

4.8.1 Regulatory Basis

Title VI of the Civil Rights Act of 1964, prohibits discrimination based upon race, color, and national origin. Specifically, 42 U.S.C. 2000d states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” In addition to Title VI, there are other Nondiscrimination statutes that afford legal protection. These statutes include the following: Section 162 (a) of the Federal-Aid Highway Act of 1973 (23 U.S.C. 324), Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973/Americans with Disabilities Act (ADA) of 1990. ADA specifies that programs and activities funded with Federal dollars are prohibited from discrimination based on disability.

Executive Order #12898 (Environmental Justice) directs federal agencies to develop strategies to address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. In compliance with this Executive Order, USDOT and FHWA issued orders to establish policies and procedures for addressing environmental justice in minority and low-income populations. The planning regulations, at 23 CFR 450.316(a)(1)(vii), require that the needs of those “traditionally underserved” by existing transportation systems, such as low-income and/or minority households, be sought out and considered.

Executive Order # 13166 (Limited-English-Proficiency) requires agencies to ensure that limited English proficiency persons are able to meaningfully access the services provided consistent with and without unduly burdening the fundamental mission of each federal agency.

4.8.2 Current Status

The MPO currently utilizes HCTD’s Limited-English-Proficiency plan. KTMPO is aware of urban-rural contrasts between the Metropolitan Planning Area and HCTD’s region, but the MPO doesn’t believe this affects Civil Rights. HCTD uses a “four-factor analysis” to analyze LEP services and polices, which includes number of LEP persons in the eligible service population, and the importance of the service provided by the program. HCTD’s LEP Plan appears to have last been updated around 2012. To ensure language services are being provided to the correct populations, KTMPO should work with HCTD to update their LEP Plan or create their own LEP Plan for the MPO. This should include using the most recent Census Data available.



Regarding other aspects of Civil Rights, KTMPO uses the most recent data available for their Environmental Justice (EJ) activities, such as determining “communities of concern”, which are areas with high minority and/or low-income populations (see 4.7 Public Participation).

Concerning Title VI, KTMPO strives to be sensitive to all regulations and makes sure they are embedded within the planning process. As of the latest update of their Title VI Plan (which was approved March 14, 2018), KTMPO is using the most recent Title VI assurance language. The MPO’s self-certification, found in their 2021-2024 TIP and dated May of 2020, addresses the Title VI requirement.

If any person thinks that they received unequal benefits or discrimination on federally protected grounds, they may follow KTMPO’s Title VI complaint process which is readily available on their [website](#) in English as a standalone document. The Spanish version of the form is only available within the Title VI Plan on the website. It is a process which covers all complaints filed under Title VI of the Civil Rights Act of 1964; Section 504 of the Rehabilitation Act of 1973; the Civil Rights Restoration Act of 1987; and the Americans with Disabilities Act of 1990. The discrimination can relate to any program or activity administered by the MPO.

The MPO continues to advertise and post information in ADA-accessible locations as well. Self-certification for ADA can also be found in the 2021-2024 TIP.

Based upon the items reviewed during the desk audit, it was found that KTMPO Civil Rights-related transportation planning processes comply with 23 CFR 450.316(a)(1)(vii). However, based on discussions during the site-visit, it appears some documents may need updating to reflect current MPO practices and procedures. These documents include the KTMPO Title VI Plan and the Limited English Proficiency Plan. FHWA encourages detailing how the MPO collects and analyzes demographic data and how this data is used to conduct reviews in their Title VI Plan.

4.8.3 Findings

Commendation: The MPO is commended for inclusion of a Title VI footnote on each page of KTMPO’s public website that takes the public to their Title VI Plan.



Recommendations:

- The MPO should update their Title VI Plan to reflect current Title VI Procedures followed by the MPO and update the webpage to link to the most current version of the Title VI Plan.
- The Title VI footnote should be updated to link to the latest version of their Title VI Plan.
- The MPO should post a copy of their Spanish Title VI Complaint form on their website.

Proposed FHWA/FTA Technical Assistance: FHWA will provide updated USDOT guidance when it becomes available to the MPO regarding Title VI and EJ Implementation.

4.9 Consultation and Coordination

4.9.1 Regulatory Basis

23 U.S.C. 134(g) & (i)(5)-(6) and 23 CFR 450.316(b-e) set forth requirements for consultation in developing the MTP and TIP. Consultation is also addressed specifically in connection with the MTP in 23 CFR 450.324(g)(1-2) and in 23 CFR 450.324(f)(10) related to environmental mitigation.

In developing the MTP and TIP, the MPO shall, to the extent practicable, develop a documented process that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies as described below:

- Agencies and officials responsible for other planning activities (State, local, economic development, environmental protection, airport operations, or freight)
- Other providers of transportation services
- Indian Tribal Government(s)
- Federal land management agencies

4.9.2 Current Status

The MPO consults and coordinates with several outside entities. These include the transit provider, local, state, and Federal agencies, and other organizations.

One example of state consultation is with Transportation Alternatives Projects (TAP). TAP projects are selected by KTMPO in consultation with TxDOT.

For environmental projects, mitigation measures are developed jointly “with appropriate entities”. For example, Texas Parks and Wildlife, the Texas Commission on Environmental Quality, and the U.S. Fish and Wildlife Service. For other projects, land use management and historic preservation agencies, like local planning & zoning commissions, local historical agencies, and the Texas Historical Commission are consulted.

KTMPO has also coordinated with other MPOs in Texas with resiliency matters by attending the Texas Metropolitan Planning Organization Association (TEMPO) resiliency working group.

The MPO has worked with local counties and towns in multi-jurisdictional planning for freight transportation. They have also met with outside agencies, like airport authorities, military installations (Fort Hood), and private freight stakeholders to discuss plans and projects, according to the 2021 MPO Freight Program Assessment that KTMPO participated in.



Since 2013, KTMPO has hosted planner roundtable meetings to promote regional cooperation. Topics discussed with fellow planners within the KTMPO region include environmental studies (such as the Nolan Creek Flood Protection Study), the correlation between land use and transportation, air quality, coordination for the Regionally Coordinated Transportation Plan, and MTP project reprioritization.

4.9.3 Findings

The MPO is meeting the requirements of 23 CFR 450.316 by consulting and coordinating with outside groups in the transportation planning process.

4.10 List of Obligated Projects

4.10.1 Regulatory Basis

23 U.S.C. 134(j)(7) and 23 CFR 450.334 requires that the State, the MPO, and public transportation operators cooperatively develop a listing of projects for which Federal funds under 23 U.S.C. or 49 U.S. C. Chapter 53 have been obligated in the previous year. The listing must include all federally funded projects authorized or revised to increase obligations in the preceding program year and, at a minimum, the following for each project:

- The amount of funds requested in the TIP
- Federal funding obligated during the preceding year
- Federal funding remaining and available for subsequent years
- Sufficient description to identify the project
- Identification of the agencies responsible for carrying out the project

4.10.2 Current Status

The most recent Annual Project Listing (APL), drafted by the MPO in March of 2022, contained all of the information recommended by FHWA to display: MPO Project ID number; Project Sponsor; Amount of Federal Funding Programmed in the MPO TIP; Amount of Federal Funding Obligated in Fiscal Year; Limits; and Funding Category, among other descriptors.

When the APL was submitted to TxDOT and FHWA for review, not all of the projects had sponsors listed. There were also financial issues: the amount of funding obligated for projects wasn't equating with the FHWA financial net increase/decrease (BUGS) report. When asked about this during the on-site certification review, the lack of sponsors was an oversight on the planning staff, but the MPO believes the financial issues were due to TxDOT. KTMPO stated that the verification of federal dollars wasn't in the purview of the MPO. The MPO should work with TxDOT Planning & Programming division to clarify the issue.

4.10.3 Findings

Recommendations: It is recommended that the MPO work with TxDOT to determine what can be changed in the APL in order for it to display the correct financial information.

4.11 Freight Planning

4.11.1 Regulatory Basis

The MAP-21 established in 23 U.S.C. 167 a policy to improve the condition and performance of the national freight network and achieve goals related to economic competitiveness and efficiency; congestion; productivity; safety, security, and resilience of freight movement; infrastructure condition; use of advanced technology; performance, innovation, competition, and accountability, while reducing environmental impacts.

In addition, 23 U.S.C. 134 and 23 CFR 450.306 specifically identify the need to address freight movement as part of the metropolitan transportation planning process.

4.11.2 Current Status

KTMPO has done quite a bit regarding freight planning. A truck parking study was done between 2019-2020. The MPO intends to coordinate with the State freight plan which will be approved in August.

In 2021, FHWA conducted a freight survey with KTMPO. This Freight Program Assessment discussed various topics, like freight data and performance measures, collaboration with other freight stakeholders, and freight plans and related plans.

Freight data and performance measures were discussed in the Program Assessment. While in the survey KTMPO states that they use “state or local truck volume data” in freight planning efforts, the MPO’s Travel Demand Model, which can forecast truck volumes, isn’t being currently used to analyze any freight-specific scenarios. They also say that they are not yet using freight-specific performance measures and targets.

On the topic of collaboration, which was partially mentioned in 4.9 Consultation and Coordination, the MPO has worked with both public and private freight stakeholders to discuss projects. These include Draughton Miller Airport, Fort Hood Regional Airport, BNSF Railroad, and numerous private distributors and haulers.

KTMPO has a freight committee. Although it was inactive for 48 months, there was a recent meeting on April 21st of 2022. The committee intends to meet quarterly after that point.



The MPO does not have a freight plan. However, KTMPO has incorporated freight into planning through the aforementioned freight advisory committee, as well as their multimodal plan, which addresses freight corridors and areas of connectivity. Regarding related plans, KTMPO does not provide freight-related comments on the State's comprehensive land use plans, according to the Freight Assessment survey.

4.11.3 Findings

KTMPO is meeting the requirements of 23 U.S.C. 134, 23 U.S.C. 167, and 23 CFR 450.306 by considering freight movement in the transportation planning process through their freight committee and travel demand model volume forecasting, among other efforts.



4.12 Environmental Mitigation/Planning Environmental Linkage

4.12.1 Regulatory Basis

23 U.S.C. 134(i)(2)(D) and 23 CFR 450.324(f)(10) requires environmental mitigation be set forth in connection with the MTP. The MTP is required to include a discussion of types of potential environmental mitigation activities for the transportation improvements and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.

23 U.S.C. 168 and Appendix A to 23 CFR Part 450 provide for linking the transportation planning and the National Environmental Policy Act (NEPA) processes. A Planning and Environmental Linkages (PEL) study can incorporate the initial phases of NEPA through the consideration of natural, physical, and social effects, coordination with environmental resource agencies, and public involvement. This will allow the analysis in the PEL study to be referenced in the subsequent NEPA document once the project is initiated, saving time and money with project implementation.

4.12.2 Current Status

The MPO describes its efforts towards environmental mitigation and improving the quality of life of residents in the MTP. Environmental mitigation starts at the initiation of the environmental process with developing strategies to preserve environmental resources and minimize disturbances. Mitigation strategies include avoidance, minimization, design exceptions, variances, and other methods.

KTMPO has also made efforts towards livability and sustainability. KTMPO seeks to incorporate principles of sustainable transportation such as access, movement, choice (of transportation mode), environmental justice, economic impact, and environmental impact. FHWA's Infrastructure Voluntary Evaluation Sustainability Tool (INVEST) is a way to measure MPO sustainability. The MPO said during the on-site review that it has not used INVEST. They would like to use INVEST in the future to further their efforts regarding sustainability.

Linking planning and the environment is done by the MPO by including environmental analysis, defining environmentally sensitive areas, and evaluating impacts. Early in the project planning stage, ways to avoid, minimize and mitigate harm to the environment are considered. A proactive example of this is KTMPO working with Bell County and Coryell County on a Habitat Conservation Plan (HCP). The HCP would impact the funding, engineering, and planning of



roadways in the MPA. The HCP allows KTMPO to plan for future mitigation by protecting habitat for endangered species.

The MPO maintains an inventory of environmentally sensitive sites in the region. These include recreational areas, watersheds, environmental justice communities of concern, and, as previously mentioned, areas containing endangered species. Projects are then checked to see if they might have an impact on these areas. If the projects do, being aware of the impacts helps make the NEPA process easier by saving time and resources when projects need to be altered.

4.12.3 Findings

KTMPO mentions environmental mitigation strategies in their MTP, as 23 U.S.C. 134(i)(2)(D) and 23 CFR 450.324(f)(10) require. Planning and environmental linkage is addressed through considering environmentally sensitive areas, which is what 23 U.S.C. 168 and Appendix A to 23 CFR Part 450 mandate.

Recommendations: It is recommended that KTMPO undertake a scoring session using INVEST to determine how sustainable their planning practices are.

Proposed FHWA/FTA Technical Assistance: There will be an upcoming Planning and Environmental Linkage (PEL) workshop in October 2022, hosted by FHWA and TxDOT.

4.13 Resiliency

4.13.1 Regulatory Basis

The Fixing America's Surface Transportation (FAST) Act and the Infrastructure Investment and Jobs Act (IIJA) both require that the resiliency and reliability of the transportation system, particularly by reducing the impacts of natural disasters on surface transportation, be considered. 23 CFR 450.306(9) has more information.

4.13.2 Current Status

Vulnerability and Resiliency are considerations of the MPO. The KTMPO Resiliency Plan was created by a consultant and adopted in 2020. In the plan, natural disasters such as wildfire, drought and flooding were considered regarding how such events might affect the region. Tornadoes were excluded from resiliency planning due to their random occurrence making it difficult to evaluate how a project could be affected by this disaster. Projects received points in the MTP/TIP project selection process done by the TAC based on a resiliency score derived from how well a project fared against a potential natural disaster.

As an inland area, the Killeen-Temple Metropolitan Planning Organization (KTMPO) region faces a slightly different set of vulnerability challenges in comparison to coastal areas of Texas. This first task is therefore to determine the range of incidents that the region is exposed to, and to exclude incidents that are not relevant (i.e., storm surge), or are so unpredictable that their effects cannot be located (i.e., tornados). After discussion with KTMPO staff, the list of hazard events which are relevant to the region are defined as: 1) Flooding from rainfall; 2) Flooding from dam breach; 3) Wildfire; 4) Drought or high temperature; and 5) Key infrastructure disruption points.

Data for each of the hazard events was gathered from Federal databases and converted to a score in the range of 1 to 5. The scores were then applied to the ¼ mile grid cells of the Regional Vulnerability & Resilience Framework (RVRF). To identify disruption points in the network, KTMPO relied on the list of bridges from the National Bridge Inventory for the road networks. The rail network disruption points are based on bridges identified through a review of aerial imagery. In addition, KTMPO reviewed and scored land use to determine the infrastructure's exposure to hazard events and to define critical land uses which are particularly at risk. A technical memorandum was developed by the KTMPO, and the associated GIS data

layers were presented to illustrate the full range of exposure to hazard incidents for the KTMPO region.¹

A Regional Vulnerability & Resilience Framework (RVRF) was set up with a ¼ mile grid to permit consistent and normalized scoring for each of the defined hazards. The grid cells were all populated with scores for each hazard in the range of 1 to 5. Scoring for dam breaches included a special category of risk for areas upstream of the dams. Scores were based on national-level datasets without editing. In some of the cases this results in “lumpy” allocation of scores. Smoothing the data is an option, but that would be a subjective deviation from the datasets and would have to be repeated each time the data were updated. Since four hazards were defined, the smoothing would have to be repeated for each dataset and would have to be consistent between the datasets. Smoothing was therefore not applied to the RVRF grid, but may be considered in the future, particularly if the lumpiness of the attributes is seen to affect the link-level network project scoring.

Key disruption points have been identified for the auto, bicycle, bus, rail, truck, and walk transportation modal networks. For the auto, bus, and truck networks, an inventory of bridges was used to define disruption points. The rail network uses a separate bridge inventory. For the bicycle and walk networks, their characteristic sparse and disconnected networks are themselves considered as definitions of disruption. Critical network was defined as a subset of roads with higher functional classes or regional importance. This was based on the critical network defined in the Regional Multimodal Plan. Critical land uses were defined as those which would be most significantly impacted by hazards. The defined critical land uses include locations of vulnerable populations (hospitals, nursing homes, schools, and jails), locations of critical infrastructure (police stations, fire stations, electrical transfer stations, water treatment plants), and locations which could have an additional impact on regional infrastructure if they were subject to hazards (ammo dumps, fuel storage tanks, toxic chemicals, or smoke). Critical land uses are identified both on the RVRF grid and as a separate GIS point layer. In summary, the technical memo documents how the RVRF has been set up and populated with defined hazards scored on a consistent 1 to 5 scale, and how the RVRF has additional information on key disruption points, critical networks, and critical land uses. The technical memo includes the development of an inventory of segments of the network for each mode which are impacted by each of the hazards. The second task completed in the technical memo was to develop a spreadsheet and GIS layer combination, so that individual road projects can be laid over the

¹ See KTMPO Technical Memo at: [Vulnerability-Resiliency-Study-Memos-combined.pdf \(ktmpo.org\)](https://ktmpo.org/Vulnerability-Resiliency-Study-Memos-combined.pdf)



RVERF grid, the appropriate grid cells selected, and the individual hazard and composite scores for the project generated. These scores were then be input into the overall project scoring spreadsheet directly, or they may be used to inform a subjective scoring evaluation for input into the overall project scoring spreadsheet.

Upon review of the documentation, the Federal Review Team could not identify a voluntary resiliency improvement plan for the metropolitan region that met the requirements of the BIL Act.

4.13.3 Findings

Recommendations: Recommend that the Killeen-Temple MPO develop a voluntary resiliency improvement plan (RIP) per the BIL Act in order to compete for PROTECT discretionary funds in the near future.

4.14 Transportation Safety

4.14.1 Regulatory Basis

23 U.S.C. 134(h)(1)(B) requires MPOs to consider safety as one of ten planning factors. As stated in 23 CFR 450.306(a)(2), the planning process needs to consider and implement projects, strategies, and services that will increase the safety of the transportation system for motorized and non-motorized users.

In addition, SAFETEA-LU established a core safety program called the Highway Safety Improvement Program (HSIP) (23 U.S.C. 148), which introduced a mandate for states to have Strategic Highway Safety Plans (SHSPs). 23 CFR 450.306 (d) requires the metropolitan transportation planning process should be consistent with the SHSP, and other transit safety and security planning.

4.14.2 Current Status

KTMPO references the TxDOT 2017-2022 Texas Strategic Highway Safety Plan in its safety analysis of roads and other infrastructure in their MPA.

A new version of the SHSP was approved in the month of July. Although this updated SHSP (2022-2027) was not publicly available at the time of the review on the Texas SHSP website (www.texasshsp.com), it is recommended that KTMPO be aware of this latest update, which is now available². KTMPO should also be aware of the SHSP's strategies to address fatalities and serious injuries. It is also recommended the KTMPO to work with the Waco TxDOT District (and possibly Brownwood District as well) on local HSIP projects.

The transit provider also prioritizes safety. HCTD does a safety risk assessment monthly, and an accident review weekly.

² The latest SHSP is now available at <https://www.texasshsp.com/wp-content/uploads/2022/08/2022-2027-Texas-SHSP.pdf>



4.14.3 Findings

Recommendations: It is recommended the KTMPO be aware of the latest SHSP update and its strategies to address fatalities and serious injuries. It is also recommended KTMPO work with their corresponding TxDOT Districts to see if there are any safety projects they would like to submit through the HSIP.

4.15 Transportation Security Planning

4.15.1 Regulatory Basis

23 U.S.C. 134(h)(1)(C) requires MPOs to consider security as one of ten planning factors. As stated in 23 CFR 450.306(a)(3), the Metropolitan Transportation Planning process provides for consideration of security of the transportation system.

The regulations state that the degree and consideration of security should be based on the scale and complexity of many different local issues. Under 23 CFR 450.324(h), the MTP should include emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate.

4.15.2 Current Status

KTMPO supports homeland security through coordination with emergency management organizations at local, state, and federal levels.

The MPO has also done disaster preparedness planning. Separately from the resiliency planning noted above, the Homeland Security Division of CTCOG has done security scenarios on potential disasters. The potential impacts to infrastructure, and possible roadways affected have been reviewed in the scenarios. CTCOG has coordinated with the Texas Department of Emergency Management about emergency preparedness and have formulated disaster preparedness plans.

HCTD also considers security. For example, they have 24-hour monitoring of their facilities and buses.

4.15.3 Findings

The planning factor of security is being considered by KTMPO through its coordination efforts and scenario planning. This meets the requirements of 23 U.S.C. 134(h)(1)(C), 23 CFR 450.306(a)(3), and 23 CFR 450.324(h).

4.16 Nonmotorized Planning/Livability

4.16.1 Regulatory Basis

23 U.S.C. 217(g) states that bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each MPO under 23 U.S.C. 134. Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities.

23 CFR 450.306 sets forth the requirement that the scope of the metropolitan planning process "will increase the safety for motorized and non-motorized users; increase the security of the transportation system for motorized and non-motorized users; and protect and enhance the environment, promote energy conservation, improve the quality of life.

4.16.2 Current Status

The MPO is considering livability and sustainability principles in its transportation planning process.

KTMPO created a Regional Multimodal Plan (RMP) in 2018. In the creation of the plan, it was determined that a continuous hiking and bicycle system through the community was desired by the public. It was also found that street trees were important for encouraging use of the pedestrian network.

The RMP contributes to the 2045 MTP by serving as a primary guide for the development of a regional transportation system. The RMP considers both motorized and non-motorized transportation, so pedestrian and bicycle facilities—and thus transportation alternatives—are considered.

In addition to the RMP, KTMPO has an inventory of the bicycle and pedestrian system. Maps in the MTP display the network.

The MTP has a subsection that discusses active transportation user's safety. Crash records of cyclists and pedestrians are kept, and the way roads are designed (such as with pedestrian crossing indicators, and mid-block crossings) are considered in the MTP as factors that affect



the safety of non-motorized users. The RMP also discusses Complete Streets and sidewalk and intersection treatments that would benefit non-motorized users.

KTMPPO makes use of Category 7 (Surface Transportation Program Metropolitan Mobility) funds for bike/pedestrian projects. Some recent projects of note include the City of Belton's Main Street sidewalk expansion, and Copperas Cove's Avenue D sidewalk.

4.16.3 Findings

Bicyclists and other non-motorized users are being considered in KTMPPO's plans, as 23 U.S.C. 217(g) and 23 CFR 450.306 require.

Commendation: Through the MPO's emphasis on Complete Streets, the Regional Mobility Plan (RMP, formerly the Regional Thoroughfare Plan) emphasizes a nonmotorized plan, as well as the concept that bicyclists and pedestrians are equally important users of the roads, which helps educate in the citizenry of the region that roads are multimodal and encourages their safe use.



4.17 Integration of Land Use and Transportation

4.17.1 Regulatory Basis

23 U.S.C. 134(g)(3) encourages MPOs to consult with officials responsible for other types of planning activities that are affected by transportation in the area (including State and local planned growth, economic development, environmental protection, airport operations, and freight movements) or to coordinate its planning process, to the maximum extent practicable, with such planning activities.

23 U.S.C. 134 (h)(1)(E) and 23 CFR 450.306(a)(5) set forth requirements for the MPO Plan to protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

4.17.2 Current Status

As discussed in 4.9 Consultation and Coordination, KTMPO coordinates with other planning officials through planner roundtables. Some of the planners are from local communities in the MPA, and some work with Fort Hood.

One of the ways the MPO integrates land use into the planning process is through context sensitive solutions. Context sensitive solutions, as mentioned in the MTP, are one of several environmental concepts KTMPO utilizes that has the primary goal of avoiding or minimizing damaging effects to the environment through design features. These features promote environmental and scenic harmony, as well as improve quality of life through better community participation and project buy-in.



KTMPO used the City of Copperas Cove's Future Land Use Plan to develop population projections that factored into the MPO's TDM. Existing zoning data was also collected from across the region to be used in the TDM.

Also, the RMP has a goal of encouraging the development of "sustainable land use patterns" by creating a transportation framework that development can be constructed around. This allows for improved access to jobs, services, and housing for the region's population.

4.17.3 Findings

Based on the items reviewed, KTMPO meets the requirements of 23 U.S.C. 134(g)(3), 23 U.S.C.134 (h)(1)(E) and 23 CFR 450.306(a)(5) by working with planners from other local public agencies and improving environmental outcomes.



4.18 Travel Demand Forecasting

4.18.1 Regulatory Basis

23 CFR 450.324(f)(1) requires that the Metropolitan Transportation Plan include the projected transportation demand of persons and goods in the Metropolitan Planning Area over the period of the transportation plan. Travel demand forecasting models are used in the planning process to identify deficiencies in future year transportation systems and evaluate the impacts of alternative transportation investments. In air quality non-attainment and maintenance areas, they are also used to estimate regional vehicle activity for use in mobile source emission models that support air quality conformity determinations.

4.18.2 Current Status

KTMP uses their Travel Demand Model (TDM) to evaluate the Level-of-Service (LOS) for roads, as well as to assess projected demand. KTMPO worked with Texas A&M Transportation Institute (TTI) and TxDOT in 2017 to refresh the TDM to a 2045 forecast year, and a 2015 base year. Demographic data, namely regional population data, was updated from the previous TDM 2010 base year (which had a 2040 forecast year) in order to achieve this. In addition to population data, existing zoning, future land use plans, and the locations of substantial traffic generators were inputted into the model as well. All of this data was used to develop growth projections and discover new traffic generators for the TDM.

Some traffic generators, known as “special generators” to KTMPO, in the model include the Killeen Mall, Skylark Field airport and Temple Airport, Metroplex Hospital, Central Texas College, and Fort Hood.

To develop a 2045 projection for the model, known population and employment growth between 2014 and 2016 was collected first. Then, projected growth from pending developments and anticipated growth over time were factored in. Elements of the region that could drive future growth include the availability of developable land, proximity to major roads, city-provided infrastructure, future development plans by communities in the MPA, and anticipated growth areas.

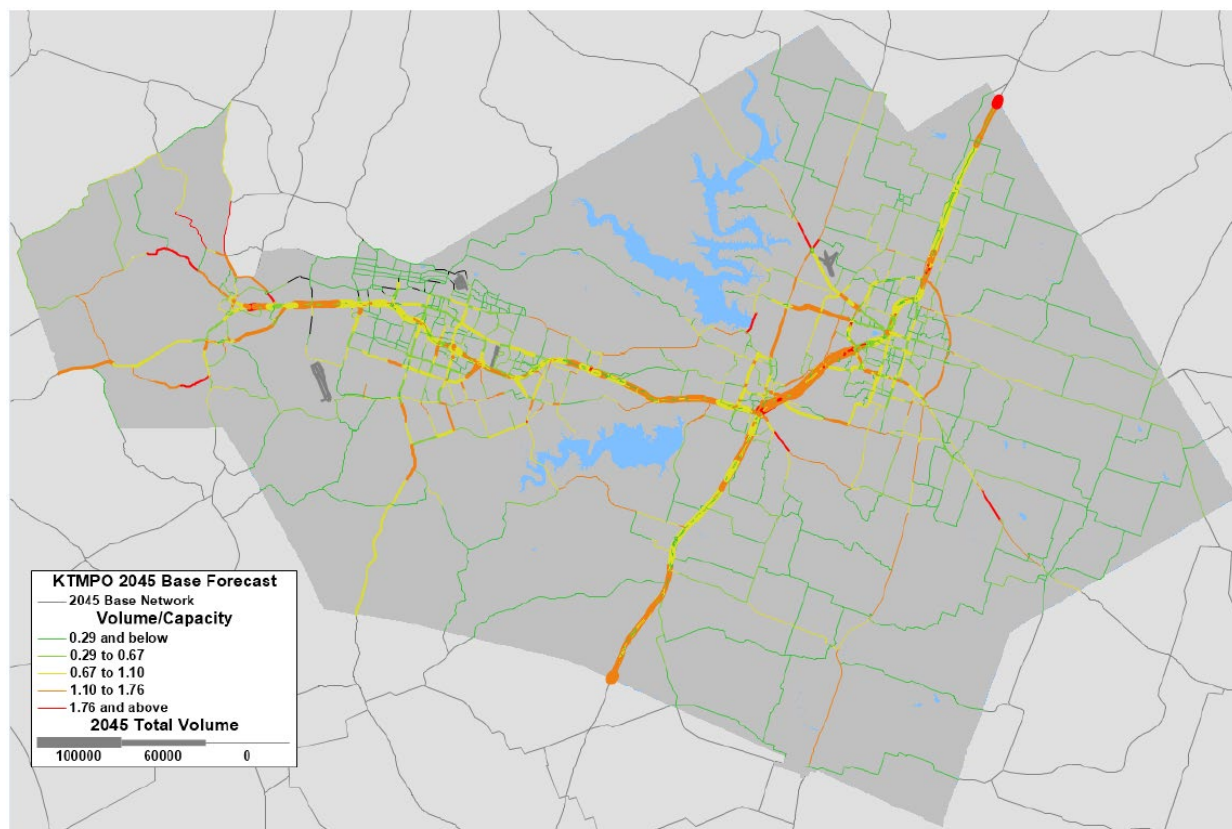


Figure 3: Base Forecast Traffic Volume for 2045, KTMPO

In 2020, KTMPO did an additional update of the TDM network for their 2020 call for projects and reprioritization of the MTP.

The KTMPO TDM uses Traffic Analysis Zones (TAZs) in the model. The TAZs were developed from 2010 Census blocks; there are about 150 TAZs in the model. Each TAZ had its total growth by 2045 computed.

In 2024, the MPO intends to update the TDM to the TexPack standard interface for their 2050 edition MTP. TexPack is a package suite of Travel Demand Modeling software which integrates



TDM platforms and utilizes GIS capabilities.³ The updated TDM will additionally be used to evaluate network segments of the Congestion Management Plan (CMP).

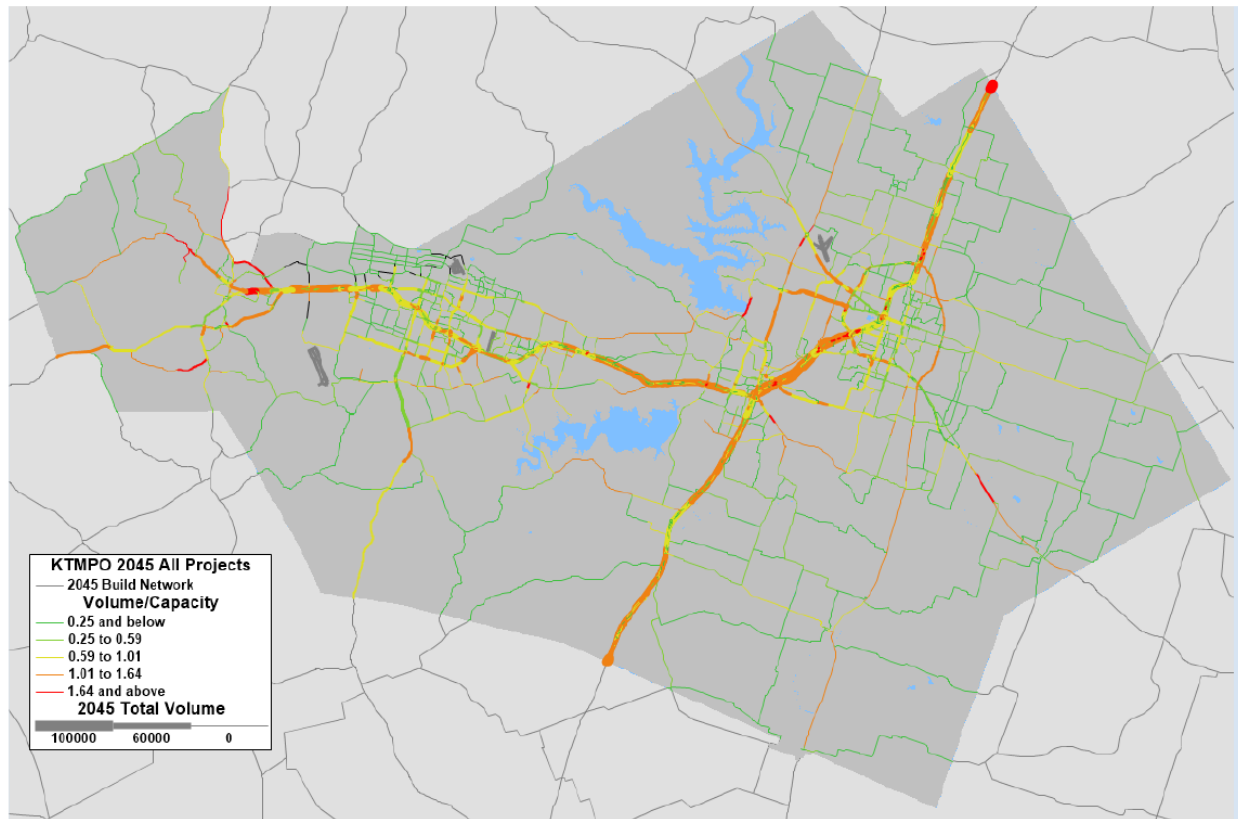


Figure 4: Build Network Forecast Traffic Volumes and Volume-over-Capacity (V/C) Ratios

4.18.3 Findings

Based on the items reviewed, KTMPO's travel demand model activities meet the requirements of 23 CFR 450.324(f)(1).

³ See [TEXPACK: Integrated Travel Demand Modeling Application](https://static.tti.tamu.edu/conferences/tpp16/presentations/breakout-12/hall.pdf) (<https://static.tti.tamu.edu/conferences/tpp16/presentations/breakout-12/hall.pdf>); Texas Department of Transportation, June 2016

4.19 Air Quality

4.19.1 Regulatory Basis

The air quality provisions of the Clean Air Act (42 U.S.C. 7401) and the MPO provisions of Titles 23 and 49 require a planning process that integrates air quality and metropolitan transportation planning, such that transportation investments support clean air goals. Under 23 CFR 450.324(m), a conformity determination must be made on any updated or amended transportation plan in accordance with the Clean Air Act and the Environmental Protection Agency (EPA) transportation conformity regulations of 40 CFR Part 93. A conformity determination must also be made on any updated or amended TIP, per 23 CFR 450.326(a).

4.19.2 Current Status

KTMPO is in air quality attainment, and has always been, yet the MPO considers regional air quality, nonetheless. For example, current air quality data is presented at all Policy Board and Technical Advisory Committee meetings, as well as other functions, such as the Planner Roundtables. The MPO procures this data from two air quality monitoring stations in the MPA, courtesy of the Texas Commission on Environmental Quality (TCEQ). The MPO has been using data from stations to gauge air quality since 2007.



Figure 5: An air quality monitor in the KTMPO MPA

In November of 2017, the EPA designated Bell, Coryell, and Lampasas Counties (the counties that are a part of the MPO) as “Attainment/Unclassifiable”.

In 2012, a consultant was hired to develop future recommendations regarding air quality, particularly if KTMPO were to enter a nonattainment status. The consultant found that this could be possible for ozone if the MPO reached a standard above 0.075 parts per million. The consultant’s report also suggested the MPO doing air quality

modeling with KTMPO staff, or elsewhere (TxDOT, TTI, or a consultant).



On the subject of modeling, KTMPO has worked with TCEQ staff to develop a conceptual air quality model. The model identified airsheds and wind patterns in order to determine pollution sources. This model was completed in September of 2015.

KTMPO plans to use their Congestion Management Process (CMP) to identify corridors that are congested, which, when alleviated, has the benefit of improving air quality by reducing emissions.

4.19.3 Findings

Although 42 U.S.C. 7401 and 23 CFR 450.324(m) do not apply to KTMPO, their efforts to consider air quality concerns while still in attainment are noteworthy.

Commendation: The KTMPO MPO is commended for their efforts to consider potential changes to air quality preemptively through coordinating with TCEQ, modeling, and educating its members about air conditions.

4.20 Congestion Management Process / Management and Operations

4.20.1 Regulatory Basis

23 U.S.C. 134(k)(3) and 23 CFR 450.322 set forth requirements for the congestion management process (CMP) in TMAs. The CMP is a systematic approach for managing congestion through a process that provides for a safe and effective integrated management and operation of the multimodal transportation system. TMAs designated as non-attainment for ozone must also provide an analysis of the need for additional capacity for a proposed improvement over travel demand reduction, and operational management strategies.

23 CFR 450.324(f)(5) requires the MTP include Management and Operations (M&O) of the transportation network as an integrated, multimodal approach to optimize the performance of the existing transportation infrastructure. Effective M&O strategies include measurable regional operations goals and objectives and specific performance measures to optimize system performance.

4.20.2 Current Status

The Congestion Management Process, or CMP, is used by MPOs to measure performance, manage data, and analyze strategies for transportation planning. KTMPO approved its first edition of its CMP in September of 2012. With the help of a consultant, the MPO updated the CMP in 2016.

The 2016 CMP update created a prioritized list of road segments that were congested in the MPA. It also determines if a congestion mitigation strategy for a roadway segment will be either effective, marginally effective, or not applicable. In addition, the CMP also contains strategies to reduce congestion by improving safety at high crash locations, promoting carpooling and ridesharing, and actions to improve air quality, like having fewer vehicles on the road (due to transportation alternatives).

Two years later, in 2018, the CMP network segments were reprioritized. This update included data sources from the National Performance Management Research Data Set (NPMRDS), and the MPO's TDM. The update added roadways and congestion data.

In 2020, reprioritization of the network segments was done again. This was done to make updated data available for the scoring of projects for the 2020 MTP.

It was discovered during the on-site review that completed added capacity projects were not assessed into the CMP process for effectiveness, as required from the regulations. The regulations (23 CFR 450.322) require periodic assessment of how effective the implemented projects are. This information is to be made available to decision makers and the public to provide guidance on selection of effective future projects. Although the 2016 KTMPO CMP reviews the outputs from the TDM model, travel data from the public, and travel speeds from TxDOT, it did not include any information regarding completed added capacity projects. This was also confirmed at the on-site review: the MPO is not following-through on their own CMP plan monitoring, which is to determine performance improvements where transportation investments have been made.

As mentioned in the KTMPO MTP, M&O is considered in the financial plan section. There are sections referring to funding inputs, funding outputs, and maintenance funding.

There are specific dollar amounts for the next four years in this section, based on scenarios. There are high funding, medium funding, and low funding scenarios, plus a baseline.

There is a chart and a paragraph regarding Maintenance funding. In it, there are short-range and long-range forecasts based on a medium funding scenario.

2045 MTP Update-Maintenance		
Short Range:	Medium	\$165,803,999
Long Range:	Medium	\$295,989,993
Total:		\$461,793,992

Figure 6: The MTP Fiscal Constraints for Maintenance Funding

4.20.3 Findings

The MPO is meeting the regulations regarding M&O. However, the CMP has an issue, and therefore a corrective action has been made.

Corrective Action: The CMP does not address the effect of completed added capacity projects. This should be remedied within six months by the MPO. KTMPO needs to revise the CMP to include completed transportation projects in their analysis of congestion management. A



schedule to revise the CMP, through data analysis and plan revisions. Reports should be done monthly and should be reported to FHWA through TxDOT as a part of a work program.

5.0 CONCLUSION AND RECOMMENDATIONS

The FHWA and FTA review found that the metropolitan transportation planning process conducted in the Killeen-Temple area meets with corrective actions Federal planning requirements as follows.

5.1 Corrective Actions

The following is a corrective action that the Killeen-Temple MPO must take to comply with Federal Regulations:

- The KTMPO CMP needs to account for completed added capacity projects. Currently, the CMP does not consider the effect of completed projects on the system, which is in violation of the regulations.
 - To correct this, the MPO needs to revise the CMP to include completed transportation projects in their analysis of congestion management.
 - A schedule to revise the CMP, through data analysis and plan revisions. Progress reports should be submitted monthly to FHWA through TxDOT as a part of a work program.
 - An acceptable CMP should be provided to and approved by FHWA within six months from the release of this report.

5.2 Recommendations

The following are recommendations that would improve the transportation planning process:

- It is recommended that KTMPO fully describe the Task 5 “Special Studies”, versus stating a generic description that serves as a placeholder and provide a revised UPWP before the beginning of FY 23.
- It is recommended that HCTD, through its Transit Development Plan (TDP), focus on identifying other alternative ways of generating dedicated stable funding sources given the limited transportation funding challenges faced by the region.



- It is recommended that HCTD reconsider further opportunities for leveraging its Section 5307 funding to develop a Program Management Plan that would enable establishing a more robust Job Access Reverse Commute (JARC) project that it currently not fully maximized.
- The Regionally Coordinated Transportation Plan (RCTP) provided on the KTMPO website was last updated in 2017 as mandated by the Texas Transportation Code, Title 6, Subtitle K, Chapter 461. However, the current regional coordinated plan document was due for an update 2021 and should be brought in compliance to requirements with an updated document.
- It is recommended that KTMPO and the HCTD continue the efforts in engaging Fort Hood to encourage meaningful transportation coordination efforts to working towards planning for an expanded transit service to link this important regional significant activity center for the region.
- It is recommended that KTMPO continue to advance the participation plan elements and update the interested parties/consulting agencies list.
- It is recommended that the MPO update their Title VI plan to reflect current Title VI procedures followed by the MPO. The webpage featuring the plan should be updated to the most current version of the Title VI plan.
- It is recommended that the Title VI footnote on the webpage link to the most current version of the Title VI plan.
- It is recommended that the MPO post a copy of their Spanish-language Title VI complaint form on their website.
- It is recommended that the MPO work with TxDOT to determine what can be changed in the APL in order for it to display the correct financial information.
- It is recommended that KTMPO undertake a scoring session using INVEST to determine how sustainable their planning practices are.



- It is recommended that the Killeen-Temple MPO develop a voluntary resiliency improvement plan (RIP) per the BIL Act in order to compete for PROTECT discretionary funds in the near future.
- It is recommended the KTMPO be aware of the latest SHSP update and its strategies to address fatalities and serious injuries. It is also recommended KTMPO work with their corresponding TxDOT Districts to see if there are any safety projects they would like to submit through the HSIP.

5.3 Commendations

The following are noteworthy practices that the Killeen-Temple MPO or Hill Country Transit District are doing well in the transportation planning process:

- The inclusion of a Title VI footnote on each page of the KTMPO public website, which takes the public to the MPO's Title VI plan.
- Through the MPO's emphasis on Complete Streets, the Regional Mobility Plan (RMP, formerly the Regional Thoroughfare Plan) which emphasizes a nonmotorized plan, as well as the concept that bicyclists and pedestrians are equally important users of the roads, which helps educate in the citizenry of the region that roads are multimodal and encourages their safe use.
- The KTMPO MPO is considering potential changes to air quality preemptively through coordinating with TCEQ, modeling airsheds, and educating the public and their policy board members
- KTMPO's inclusion of a Title VI footnote on each page of their public website that takes the public to their Title VI Implementation Plan.
- Despite prevailing challenges, through its FTA Section 5310 program, the HCTD is striving to maintain services reaching many elderly and disabled passengers dependent on these transportation services to maintain their independence and provide access to medical and other quality of life services.



5.4 Training/Technical Assistance

The following training and technical assistance are recommended to assist the MPO with improvements to the transportation planning process:

- Training on how to use INVEST
- Updated USDOT guidance regarding Title VI and EJ Implementation, when available
- Planning and Environmental Linkage workshop in October 2022



APPENDIX A - PARTICIPANTS

The following individuals were involved in the Killeen-Temple urbanized area on-site review:

- **United States Department of Transportation (USDOT)**

- Justin Morgan, FHWA Texas Division
- Michael Leary, FHWA Texas Division
- Jose Campos, FHWA Texas Division
- Megan Dere, FHWA Texas Division
- Tony Ogboli, FTA Region VI

- **Killeen-Temple MPO (KTMPO)**

- Uryan Nelson, Metropolitan Planning Director, Killeen-Temple MPO
- James McGill, Planning Manager
- Connie Quintero, Assistant Director
- Dominic E., Planner

- **Hill Country Transit District (HCTD)**

- Darrell Burtner, Director, Hill Country Transit District
- Steven Beck, Interim General Manager, Hill Country Transit District
- Derek Czapnik

- **Texas Department of Transportation (TxDOT)**

- Brigida Gonzalez, Texas Department of Transportation



APPENDIX B - STATUS OF FINDINGS FROM LAST REVIEW

One of the priorities of each certification review is assessing how well the planning partners in the area have addressed corrective actions and recommendations from the previous certification review in 2018. This section identifies the corrective actions and recommendations from the previous certification and summarizes discussions of how they have been addressed.

Recommendation 1: A table of revenues & expenditures should be present in the MTP

Disposition: A table of funding scenarios was a part of the 2045 MTP; however, this table did not display anticipated revenues. A subsequent table on p. 202 of the MTP had this, categorized by short- and long-range timelines and four funding scenarios.

Recommendation 2: A summary in the MTP should describe how much funding is available for Maintenance & Operations

Disposition: On page 204 of the MTP, there is a table stating short- and long-range maintenance forecasts under a medium funding scenario.

There were no corrective actions.



APPENDIX C – PUBLIC COMMENTS

There were no public comments received.

There was no participation by the public in the on-site certification review listening session.

APPENDIX D –Summary of Elected Official Comments

The following is a summary of all the three elected officials interviewed. The officials were - Mayor Tim Davis, Mayor Spencer H. Smith, and County Judge Roger Miller. Their comments are anonymized.

The tenure of these board members varies from three-and-a-half years to over 10. They received training while on the board. There was no training for new members, and there are workshops at various times. It was suggested by one board member that a “refocusing” of training could be done as new members join the policy board.

The elected officials feel that the board is adequately representing every stakeholder. There is a good representation of rural organizations and a diverse variety of projects throughout the MPO.

Hill Country Transit District (HCTD) was the subject of most of the comments from the elected officials. There are funding issues and routes are being cut due to lack of revenue. Although the transit district is in better financial shape than it was three years ago, they have been using reserve funds for a while. Because HCTD operates in a rural-urban model, they have a rural mindset, even though they have city challenges. One elected official believes that the transit district should be regional. Two officials noticed that there was a spatial mismatch between urban core residents and new jobs and shopping on the periphery. On a positive note, it was noted that there was good communication between TxDOT, the MPO and the HCTD director.

Their opinion of the Waco district of TxDOT was positive as well, stating that they do a good job of funding “mutually compatible” projects that meet urban and rural needs. Some projects that are priorities for the region include low-water crossings, new connections in growing urban areas, a loop road for the city of Temple, and Interstate 35 and Interstate 14 (I-14) work.

All of the officials were satisfied with KTMPO’s staff, emphasizing their collaborative and congenial nature. The staff keeps the board informed with reports and other materials, which is appreciated by the elected officials.

The elected officials would appreciate more coordination regarding I-14. Particularly with the other MPOs not including I-14 projects into their MTPs. Also, securing funding for I-14 projects can take decades at the pace things are going.

In conclusion, the elected officials find KTMPO to be a well-run organization with good relations with partners like TxDOT. However, the transit provider and I-14 need some attention.



APPENDIX E - LIST OF ACRONYMS

ADA: Americans with Disabilities Act
AMPO: Association of Metropolitan Planning Organizations
BIL: Bipartisan Infrastructure Law (or IIJA (Infrastructure Investment and Jobs Act))
CAA: Clean Air Act
CFR: Code of Federal Regulations
CMP: Congestion Management Process
DOT: Department of Transportation
EJ: Environmental Justice
FAST: Fixing America's Surface Transportation Act
FHWA: Federal Highway Administration
FTA: Federal Transit Administration
FY: Fiscal Year
HSIP: Highway Safety Improvement Program
ITS: Intelligent Transportation Systems
LEP: Limited-English-Proficiency
M&O: Management and Operations
MAP-21: Moving Ahead for Progress in the 21st Century
MPA: Metropolitan Planning Area
MPO: Metropolitan Planning Organization
MTP: Metropolitan Transportation Plan
NAAQS: National Ambient Air Quality Standards
NO₂: Nitrogen Dioxide
O₃: Ozone
PM₁₀ and PM_{2.5}: Particulate Matter
PPP: Public Participation Plan
RMP: Regional Multimodal Plan
SHSP: Strategic Highway Safety Plan
STIP: State Transportation Improvement Program
TDM: Travel Demand Management
TIP: Transportation Improvement Program
TMA: Transportation Management Area
U.S.C.: United States Code
UPWP: Unified Planning Work Program
USDOT: United States Department of Transportation
V/C: Volume-over-Capacity



U.S. Department
of Transportation
**Federal Highway
Administration**





Report prepared by:

Texas FHWA Division Office

300 E. 8th Street, Suite 826

Austin, TX 78701

512-536-5900

<https://www.fhwa.dot.gov/txdiv/>