

MPO 101 Workshop



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What is Transportation Planning?



Continuing

Cooperative





Comprehensive

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What is the 3C Planning Process?

- Continuing The process is ongoing and cyclical.
- Cooperative Transportation stakeholders work together to develop the best strategies for a metropolitan area.
- Comprehensive Programs and strategies address all modes of transportation, all options, and the benefits and drawbacks of all alternatives.









Evolution of Transportation Planning

1962	Federal Aid Highway Act – Continuing, Cooperative, Comprehensive.
1964	Urban Mass Transportation Act - Funding channeled through local agencies.
1965	Housing and Urban Development Act – Authorized grant funding.
1969	National Environmental Policy Act (NEPA) – Definition of Environmental Studies for Projects.
1970	Amendments to the Clear Air Act – EPA and air quality standards, State Implementation Plans, non-attainment area deadlines.
1975	UMTA Joint Regulations for Urban Planning – MPO designation.
1977	Clear Air Act Amendments – Transportation Plan conformity with approved SIPs.
1978	Surface Transportation Assistance Act – Energy conservation and TSM Alternatives.
1983	Final Planning Rules – Simplified Process for small areas, TSM requirements reduced.
1984	UMTA Major Capital Investment – Alternatives Analyses.
1990	Clear Air Act Amendments – Expanded Conformity Requirements.

Evolution of Transportation Planning

1991	 Intermodal Surface Transportation Efficiency Act (ISTEA) Fiscal Constraints Increased Public Involvement Congestion Management Systems and CMAQ Intelligent Transportation Systems (ITS)
1994	Executive Order 12898 – Environmental Justice
1998	 Transportation Efficiency Act for the 21st Century (TEA-21) Consolidated to Seven Planning Factors Streamlined Project Planning Regional Intelligent Transportation Systems (ITS) Architecture Increase role of management and operations
2005	 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Added Management and Operations to planning factor
2012	 Moving Ahead for Progress in the 21st Century (MAP-21) Performance-Based Planning Recommended
2015	 Fixing America's Surface Transportation (FAST Act) Performance measures and targets Required System report with respect to these performance targets.

Evolution of Transportation Planning

Infrastructure Investment and Jobs Act (IIJA)/Bipartisan Infrastructure Law (BIL)

- Consistency of planning data if more than one MPO is designated in an urban area. ٠
- Public participation encouragement for using social media and web-based tools. ٠
- Travel demand data and modeling USDOT to support State/MPO efforts (§11205). ٠
- Safe and accessible transportation options use $\geq 2.5\%$ of PL funds to increase options (§11206). •

New Planning Emphasis Areas:

- 1. Tackling the Climate Crisis Transition to a Clean Energy, Resilient Future.
- 2. Equity and Justice40 in Transportation Planning.

2021 3. Complete Streets.

- 4. Virtual Public Involvement.
- 5. Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination.
- 6. Federal Land Management Agency (FLMA) Coordination.
- 7. Planning and Environment Linkages (PEL).
- 8. Data in Transportation Planning.
- Prioritization Process Pilot Program (discretionary, §11204)
- Transportation Access Pilot Program (§13010)
- Accelerating Project Delivery

MPO representation – equitable and proportional.

Infrastructure Investment and Jobs Act (IIJA) Programs

- Repair and rebuild roads and bridges.
- Climate change mitigation Carbon Reduction Program.
- Resilience (PROTECT Program).
- NEVI (Electric Vehicle Infrastructure).
- Safe Streets for all users (SS4A):

Funding	\$1 billion annually, FY 22-26.	Additional funding subject to appropriations (up to \$200 million /year).
Eligible Recipients	 Metropolitan Planning Organizations. Political subdivisions of a State. Federally recognized Tribal government. Multijurisdictional group of entities. 	 Not more than 15% of funds can be awarded to projects in a single state in a given fiscal year. 80%/20% Federal/match cost share.
Eligible Activities	 A. Develop a Comprehensive Safety Action Plan. B. Conduct planning, design, and development activities for projects and strategies identified in an Action Plan. C. Carry out projects and strategies identified in an Action Plan. 	At least 40% in a given fiscal year must go towards planning grants.

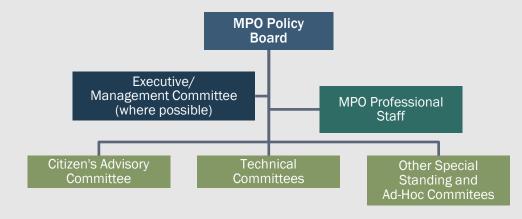
Federal and State Authority

United States Code	Code of Federal Regulations (CFR)	Texas Administrative Code
 Title 23 - Highways Section 134, Metropolitan Planning Section 135, Statewide and Non-Metropolitan Planning Title 49 - Transit Section 5303, Metropolitan Planning Section 5304, Statewide and Non-Metropolitan Planning 	 23 CFR, Section 450 - Highways Subpart A, Definitions (§§ 450.100 - 450.104) Subpart B, Statewide and non- metropolitan transportation planning (§§ 450.200 - 450.226) Subpart C, Metropolitan transportation planning (§§ 450.300 - 450.340) 49 CFR, Section 613 - Transit Subpart A, Metropolitan transportation planning and programming (§ 613.100) Subpart B, Statewide and non- metropolitan transportation planning and programming (§ 613.200) 	 Title 1 - Administration Part 1, Office of the Governor Chapter 5, Subchapter A, Division 2, Metropolitan Planning Organizations Title 30 - Environmental Quality Part 1, Texas Commission on Environmental Quality Title 43 - Transportation Part 1, Texas Department of Transportation Chapter 16, Planning and Development of Transportation Projects Chapter 26, Regional Mobility Authorities
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What is a Metropolitan Planning Organization (MPO)?

- The **policy board** of an agency created and designated to carry out the metropolitan transportation planning process for urbanized areas with populations greater than 50,000 and designated by local officials and the Governor of the State.
- Membership defines an MPO.



Organization chart provided for illustration purposes, only. This varies among MPOs.

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What is the MPO Policy Board?

- The decision-making body for the MPO.
- Primary forum for stakeholder input.
- Debates issues, proposals, and projects regarding key actions in the federal transportation planning process.



Picture Source: Lubbock MPO via Facebook, 2016.

Who is a member of the MPO Policy Board?

- Board composition is cooperatively determined by states and their local governments.
- Wide variation across all MPOs nationwide:
 - Size (i.e., number of members).
 - Representation (e.g., entities, elected or appointed officials, etc.).
 - Socioeconomic mix.
- Board must represent 75% of the affected population within the urbanized area (including the largest incorporated city, based on population, as named by the Census Bureau).







What are the Policy Board's responsibilities?

- The MPO policy board formulates and evaluates transportation improvement alternatives, sensitive to the context of regional interest and scaled to the size and complexity of the region.
- All MPOs have the same basic planning requirements.
- The policy board develops the core MPO documents.

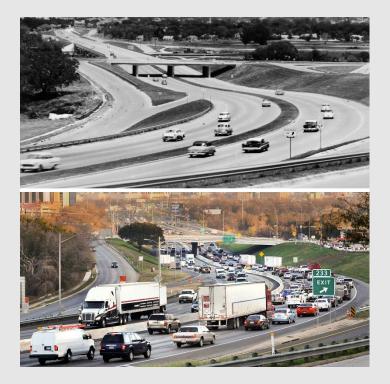


Picture Source: Houston Public Media, 2017.

Engaging an MPO Policy Board

Multi-tier approach:

- Providing an "Introduction to an MPO" upon board membership to discuss how our agency approaches planning.
- Continuing one-on-one discussions to:
 - Identify common topics.
 - Discuss needs and priorities.
- Attending their public events to understand priorities.
- Working with their professional staff:
 - City and County Executives.
 - Intergovernmental Relations.
- "What have you done for me, lately?"



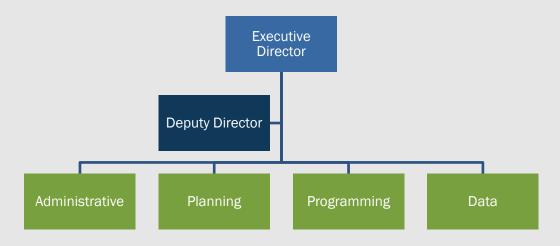
What are an MPO's Advisory Committees?

- MPO Policy Board discretion regarding their implementation and conduct.
- May be mode-oriented, issue-oriented, or focused on a special need.
- Could include executive leadership from member agencies.



Who is the MPO Staff?

- Generally, manage day-to-day functions.
- Consists of an MPO director and staff.
- Prepare technical assessments and evaluations provided to the board and committees as appropriate.



Organization chart provided for illustration purposes, only. This varies among MPOs.

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MPO Statistics



50,000.

25.6 million. (2020 Census)

What is a Transportation Management Area (TMA)?

- For large urban areas (over 200,000 in population), Congress provided a greater role by having the Secretary of Transportation certify these areas as Transportation Management Areas (TMAs).
- One or more Metropolitan Planning Organizations (MPOs) represent a TMA.
- These MPOs in turn have greater requirements for congestion management, project selection and certification.



TMA Statistics









U.S. Census Bureaudesignated urban area population must **exceed** 200,000. There are now **13 TMAs in Texas** (one by request--Permian Basin).

Beaumont-Port Arthur has a metro population over 300,000, but the two urban areas are each below 200,000 → NOT a TMA. Two new Texas TMAs: Amarillo and Bryan-College Station.

Peer Exchanges and Resources



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Transportation: To what end?

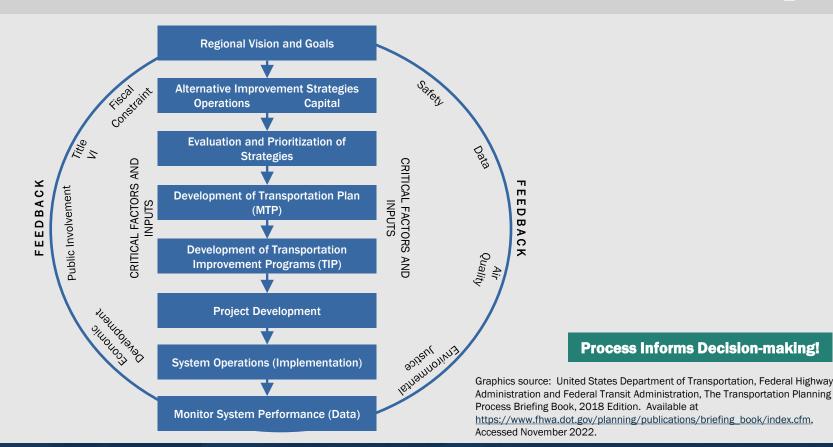




Defining an MPO's Planning Process

Mission Statement Motto Vision Statement Can the MPO be What do What and why does an MPO exist? summed up in a few stakeholders want words? their transportation system to look like in the future?

How is Transportation Planning done?



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Planning Issues MPOs Consider

Safety	Asset Management	Regional Economic Development	Sustainability and Livability
Security	Environmental Mitigation	Freight and Goods Movement	Mobility
Public Participation	Transportation Systems Management and Operations	Environmental Justice	Regional Coordination

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Planning Issues MPOs Consider



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Performance-Based Planning

Strategic Direction:Where do we want to go?

vision, goals, and objectives.

Establishing Performance Targets

Targets should be:

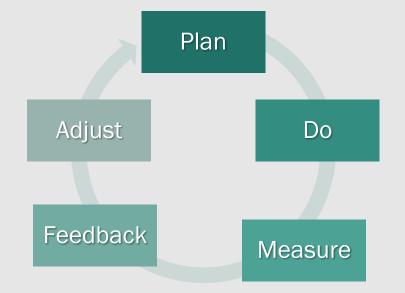
- Reasonable.
- Appropriate for the region.
- Measurable.
- Aligned with national, state, and regional



Why Do Performance-Based Planning?

Federal requirement.

- Provides a feedback loop . . .
 - Were expected results attained?
 - Should something different be done in the future?
 - Builds a system performance report.
- Ties projects to vision, goals, and objectives.
- Benefits decision-makers and the public.
- Provides accountability and transparency.

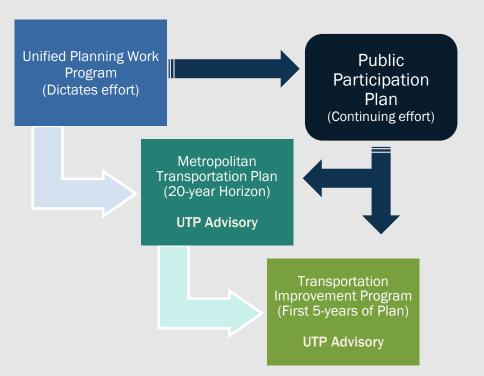


What are the key products of the transportation planning process? Relationship between State, MPO, and Municipal Levels of Government

Planning Work Programs Unified Planning Work Program (dictates effort)

What are the Policy Board's responsibilities with these documents?

- The MPO policy board formulates and evaluates transportation improvement alternatives, sensitive to the context of regional interest and scaled to the size and complexity of the region.
- The policy board develops the core MPO documents.



What is the difference between planning and programming?

Planning – identifying solutions to situations, challenges, and problems

Programming – Assigning specific projects, with specific funding, to specific fiscal years for construction or implementation

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What is the Unified Planning Work Program?

A Unified Planning Work Program (UPWP) is an annual or biennial statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. The document includes:

- Planning data and analysis tasks.
- Public outreach activities.
- MTP and TIP preparation, including supporting new federal emphasis areas, regional studies and products.
- Federally-funded studies.

Code	Description
23 C.F.R. § 420	Planning and Research Program Administration
23 C.F.R. § 450.308	Unified Planning Work Programs
23 U.S.C. § 134	Metropolitan Transportation Planning
23 U.S.C. § 135	Statewide Planning
23 U.S.C. § 139	Efficient Environmental Reviews for Policy Decision Making
31 U.S.C. § 3101-3907	Financial Management
2 C.F.R. 200	Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
49 C.F.R. Part 18	Uniform Administrative Requirements for Grants and Cooperative Agreements to States and Local Governments
49 C.F.R. Part 29	Government-wide Debarment and Suspension (Non- procurement) and Government-wide Requirements for Drug- free Workplace (Grants)
FTA Circular 8100.1C	Program Guidance for Metropolitan Planning and State Planning and Research Program Grants

What is the Metropolitan Transportation Plan (MTP)?

- Describes vision for the region, and policies, operational strategies, and projects for achieving the goals.
- Covers at least the next 20 years.
- Leads to an intermodal system.
- Reflects public involvement.
- Contains a financial plan and is fiscally constrained.
- Is updated every four-years (five-years in non-attainment areas).

Code	Description	
23 U.S.C. § 134(h) (i)	These laws describe the structure and requirements of MPOs as well as the scope of the metropolitan	
49 U.S.C. § 5303	planning process.	
23 C.F.R. § 450.316	These laws discuss planning assistance standards for metropolitan planning agreements, congestion management, and the development and content of the metropolitan transportation plan.	
23 C.F.R. § 450.320		
23 C.F.R. § 450.322		
23 C.F.R. § 500.109	Defines the requirements, strategies, and performance measures that must be integrated into a Congestion Management System (CMS), Public Transportation Management System (PTMS), and	
23 C.F.R. § 500.110		
23 C.F.R. § 500.111	Intermodal Management System (IMS.)	

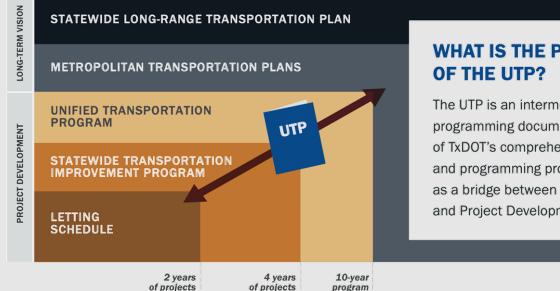
What is fiscally constrained planning?

- Federal regulations require Metropolitan Transportation Plans (MTPs) and Transportation Improvement Programs (TIPs) to be "fiscally constrained."
- Fiscal constraint is demonstrated by including sufficient financial information to confirm that projects in those documents can be implemented using committed or available revenue sources.
- <u>Reasonable assurance</u> is needed that the federally supported transportation system is being adequately operated and maintained.

Fiscal constraint is defined as a demonstration of sufficient funds, from Federal, State, local, and private sources, which will be used to implement proposed transportation system improvements, as well as to operate and maintain the entire system. This demonstration is carried out by comparing revenues and costs.

Source: United States Department of Transportation, Federal Highway Administration and Federal Transit Administration, The Transportation Planning Process Briefing Book, 2018 Edition, p. 27.

Unified Transportation Program



WHAT IS THE PURPOSE

The UTP is an intermediate, 10-year programming document that is part of TxDOT's comprehensive planning and programming process and serves as a bridge between Long-Term Vision and Project Development.

20-year

plan

24-year

plan

Within the UTP framework, TxDOT works with elected officials, local planning organizations, and the public to select and fund the state's highest priority transportation projects.

Source: https://www.txdot.gov/projects/planning/utp.html, Accessed July 2023.

Funding Categories

1. Preventative Maintenance and Rehabilitation	2. Metro and Urban Area Corridor Projects	3. Non-Traditionally Funded Transportation Projects (includes local and private funds)	4. Statewide Connectivity Corridor Projects
5. Congestion Mitigation and Air Quality Improvement (air quality non- attainment and maintenance areas)	6. Structures Replacement and Rehabilitation (bridges – prioritized statewide)	7. Metropolitan Mobility and Rehabilitation (TMAs only)	8. Safety Projects
9. Transportation Alternatives (TMAs get designated amounts; others compete statewide)	10. Supplemental Transportation Projects	11. District Discretionary	12. Strategic Priority

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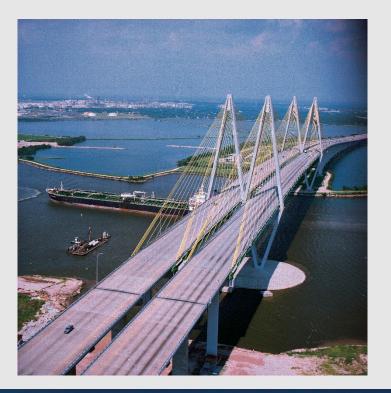
What is the Transportation Improvement Program?

- A staged, multi-year, intermodal program of prioritized transportation initiatives consistent with Plan.
- Shows annual activity for the initial years of the Metropolitan Plan . . . a minimum four-year horizon.
- Contains a financial plan and is fiscally constrained.
- An initiative not listed in the TIP cannot receive FHWA or FTA funds.
- Reflects public involvement.
- Must be updated at least every two-years.

Code	Description
23 U.S.C. § 134 (h) (j) and (k) (3) and (4)	Metropolitan Transportation Planning
23 U.S.C. § 135	Statewide Transportation Planning
23 U.S.C. § 139	Efficient Environmental Reviews for Project Decision making
23 U.S.C. § 204	Federal Lands Highways Program
49 U.S.C. § 5304	Statewide Transportation Planning
23 C.F.R. Part 450 §§ 320, 324, 326, 328, 330, and 332	Congestion Management Process in Transportation Management Areas, Development and Content of the TIP, TIP Revisions and Relationship to the STIP, TIP Action by the FHWA and the FTA, Project Selection From the TIP, and Annual Listing of Obligated Projects, respectively
23 C.F.R. Part 500 §§ 109, 110, and 111	Congestion Management System, Public Transportation Management System, and Intermodal Management System, respectively

Performance-Based Planning for the TIP

- The TIP shall link investment priorities to achievement of performance targets in the plans.
- Identify how projects will help reach targets.
- Describe and ensure the feedback loop process.



What is the Public Participation Plan (PPP)?

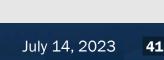
The PPP is an integral part of the transportation process which helps ensure that decisions are made in consideration of and to benefit public needs and preferences. The federal authority behind the PPP is noted in the table.

Code	Description	
23 U.S.C. § 134(i)(5)(B)	These laws state that MPOs are required to develop a public participation plan, in consultation wit	
23 C.F.R. § 450.316 (a)	interested parties, that provides reasonable opportunities for all parties to participate in and comment on transportation plans.	
Title VI of the 1964 Civil Rights Act	This act prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance.	
Title VI and implementing regulations	This ensures meaningful access to the benefits, services, and information of their program and activities for LEP individuals.	

Thoughts about engaging the public

- Go beyond simply "checking the box" . . . address the spirit of the requirements.
- Best practices include:
 - Give the public purpose in planning by taking the participation to them.
 - Find locations with good bicycle, pedestrian, and transit connections.
 - Set milestones and celebrate accomplishments.
 - Develop and explain benefits with participation from policy board.
 - Find methods to acknowledge entities and individuals for participating.

More information available from <u>Public Involvement Best Practices – Susan Howard</u> (<u>TxDOT TPP</u>), December 8, 2022 TEMPO meeting presentation.



Meaningful opportunities to Being fully informed express opinions about and concerns about transportation transportation issues throughout issues in an orderly the process. manner and appropriate forum. Each MPO must Transportation have a Public plans, policies, and Participation Plan decisions have updated public support. periodically.

Source: FHWA, Texas Division.

Tools available for Equity Analysis

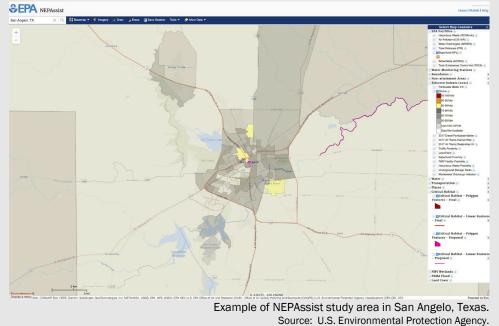


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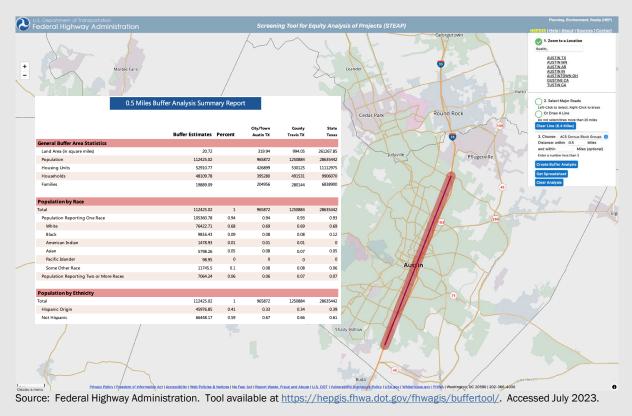
NEPAssist Tool

- Environmental data analysis tool.
- Useful for project impact areas and population characteristics of specific MPO areas, such as:
 - Environmental.
 - Population cohorts.
 - Minority composition.
 - Languages spoken.
 - Income level ranges.



Tool available at https://nepassisttool.epa.gov/nepassist/nepamap.aspx. Accessed July 2023.

Screening Tool for Equity Analysis of Projects (STEAP)



- Enhanced the Buffer Analysis Reports.
- Includes new Decennial 2020 Census Report.
- Updated American Community Survey (ACS) data from 2015-2019 to 2016-2020.
- Improved User Interfaces:
 - Allows users to zoom to project locations by City/Town names.
 - Allows downloading buffer analysis reports in spreadsheets, facilitating project alignment alternative analyses.
 - Displays all streets with referenced City/Town boundaries when zooming in to specific project locations.

Freight and Intermodal Planning

- Rail
 - Planning for Local origin/destination and pass-through Rail traffic.
 - Studying and recommending improvements for at-grade crossings.
 - Accommodating access to and from Intermodal transfer facilities.
- Trucks
 - Planning for local origin/destination deliveries.
 - Facilitating pass-through truck travel and accommodating safety rest stops.
 - Accommodating truck stop access.



Complete Streets Planning

- Planning for motorized and non-motorized street facilities.
 - Should address accommodations for utilities.
- Goals for Complete Streets:
 - Provides safety for all users.
 - Serves all users.
 - Keeps built- and natural-environments in mind.
- MPO may play role in developing model complete streets ordinances for member agencies.



Resilience and Vulnerability Planning

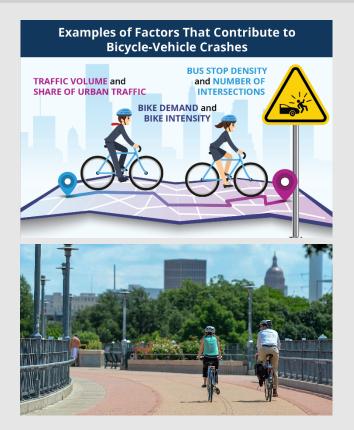
- FAST Act (2015) requires MTP to include an assessment of capital investment and other strategies to reduce vulnerability of infrastructure to natural disasters.
- Resilience Improvement Plan (RIP):
 - Optional.
 - Provides for reduced match requirements on certain projects; but must meet federal requirements.





Active Transportation Planning

- Improve access, mobility, and safety for transportation, health, and recreational uses.
- Enhance the region for tourism, economic development, and as a "healthy" place to live.
- Ensure American with Disabilities Act (ADA) compliance.

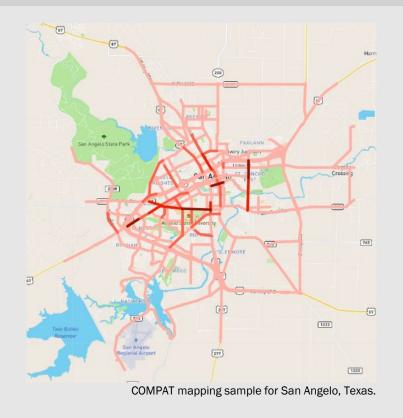


Congestion Analysis Planning

Congestion Management Process Assessment Tool (COMPAT) is available for MPO use in transportation planning applications. The tool provides:

- Identify the range of congestion in your metro area.
- Travel Time Index.

Available at <u>https://compat.tti.tamu.edu</u>, Texas A&M Transportation Institute, accessed July 2023.



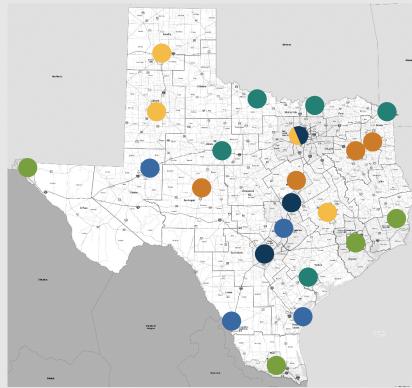
Funding Realities

- Nothing is guaranteed!
- Federal funds seem consistent as these are based on multiyear federal transportation bills (legislation). Key is consistent appropriations.
- State funding is more variable:
 - Proposition 1 Severance (oil and gas production) taxes (dependent on prices and production levels).
 - Proposition 7 State motor fuel tax, vehicle registration fees, and sales taxes (dependent on the overall economy).
- Wherever possible, leverage funds from all possible sources.



MPO continuing challenges ...

Transportation Planning and Programing (TPP) Division Field Representatives



Map source: Texas Department of Transportation, <u>https://ftp.dot.state.tx.us/pub/txdot-info/tpp/maps/mpo-cog.pdf</u>, accessed July 2023.

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