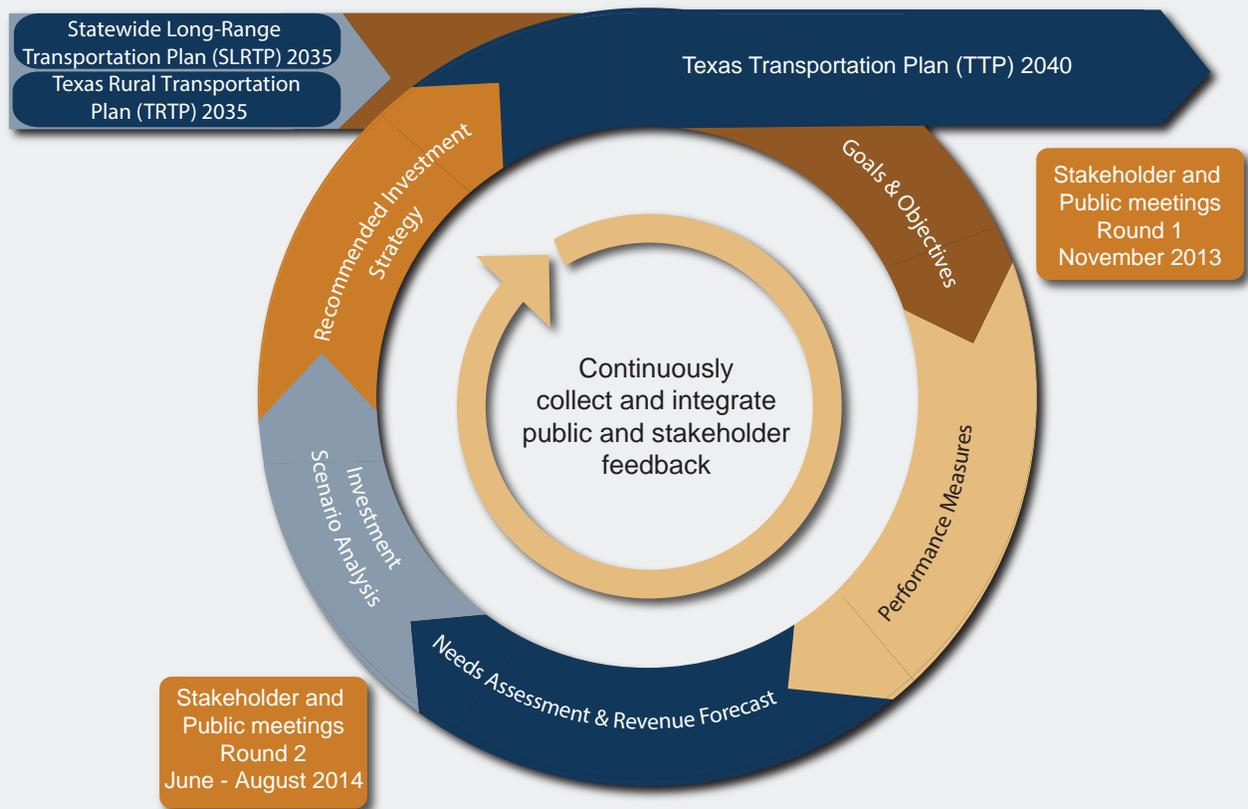


TEXAS TRANSPORTATION PLAN DEVELOPMENT

The Texas Transportation Plan (TTP) advances performance-based planning concepts and integrates existing and ongoing state transportation plans and initiatives. While TxDOT's role as owner-operator, partner, or advocate varies widely across transportation modes, the TTP provides goals and objectives in addition to needs and anticipated revenues for all passenger and freight modes, including those falling within and outside of TxDOT's direct responsibilities.

Exhibit 2-1. Texas Transportation Plan 2040 Development Process



2.1 Plan Framework: Integration with Other Transportation Plans and Programs

2.1.1 TxDOT 2015-2019 Strategic Plan

In accordance with TxDOT's commitment to operational excellence and innovation, the TTP applies state-of-the-art methodologies that link investment decisions with the achievement of the long-term goals defined in TxDOT's Strategic Plan (Exhibit 2-2).

Exhibit 2-2. TxDOT Mission, Values, and Goals as Defined in the 2015–2019 Strategic Plan

Mission	Work with others to provide safe and reliable transportation solutions for Texas
Values	Trust: We strive to earn and maintain the confidence of our partners and the people of Texas.
	Integrity: We honor our commitments and keep our word.
	Responsibility: We are accountable to the people of Texas for carrying out our mission and roles.
	Excellence: We do our work at a high level of quality.
Goals	Service: We do what we do for the people of Texas.
	Maintain a Safe System
	Address Congestion
	Connect Texas Communities
	Become a Best-in-Class State Agency

2.1.2 Texas Freight Mobility Plan

The early freight specific findings of the Texas Freight Mobility Plan (TFMP) have been included in the TTP. As the TFMP is still in development, this document maybe updated to included information from the final TFMP as appropriate. TFMP draft goal areas included:

- Enhancing freight mobility and improving economic competitiveness through efficient, reliable, and safe transport of goods throughout the state;
- Defining policies and investments that will enhance Texas’ freight transportation system into the future; and
- Establishing a framework for Texas’ first comprehensive freight planning program to inform freight stakeholders and decisionmakers.

2.1.3 Other Plans and Programs

TTP development included analyses of existing TxDOT and metropolitan planning organization (MPO) transportation plans and programs to ensure consistency with other ongoing planning efforts and initiatives. Exhibit 2-3 provides a summary of the documents reviewed, considered, or incorporated into the TTP by reference.

Exhibit 2-3. TxDOT Plans for Coordination with Texas Transportation Plan

Plan/Program	Developed By	Approved By	Content
State Implementation Plan	Texas Commission on Environmental Quality & Non-Attainment MPOs	Environmental Protection Agency	A description of control strategies, or measures to deal with pollution, for areas that fail to achieve national ambient air quality standards
TxDOT Strategic Plan	TxDOT	Texas Transportation Commission	TxDOT’s operational goals and strategies
Statewide Long-Range Transportation Plan (SLRTP) 2035 and Texas Rural Transportation Plan (TRTP)	TxDOT	Texas Transportation Commission	Future goals, strategies, and performance measures for the multimodal transportation system
Texas Freight Mobility Plan	TxDOT (in development)	Texas Transportation Commission	Establish a framework for Texas’ first comprehensive freight planning program and decision making
Texas Rail Plan	TxDOT	Texas Transportation Commission	Long-range rail investment program for freight and passenger infrastructure
Texas Airport System Plan	TxDOT	Texas Transportation Commission	Guidelines to help planners determine how to maximize the return on investment of public funds and identifies what capital improvements would best serve the state’s aviation needs

Exhibit 2-3. TxDOT Plans for Coordination with Texas Transportation Plan

Plan/Program	Developed By	Approved By	Content
Texas Ports Capital Program	Port Authority Advisory Committee	Texas Transportation Commission	Identifies funding requests for port transportation and economic development projects submitted by ports
Statewide Transportation Improvement Program	TxDOT	USDOT (FHWA/ FTA)	Multimodal transportation projects/investments
Unified Transportation Program	TxDOT	Texas Transportation Commission	Multimodal projects to be funded/implemented in a 10-year period
Transportation Improvement Programs – TxDOT Rural	TxDOT Districts	Governor (delegated to TxDOT)	Multimodal transportation projects/investments
Transportation Improvement Programs – MPOs	MPOs	MPO Policy Boards	Multimodal transportation projects/investments
Metropolitan Transportation Plan	MPOs	MPO Policy Boards	Policies, programs, and projects for development that respond to adopted goals and expenditures for state and federal funds over the next 20+ years
Corridor Studies (e.g., IH 35, IH 69)	TxDOT	Texas Transportation Commission	Benefit cost analysis and feasibility
Highway Safety Plan	TxDOT	Governor (delegated to TxDOT)	Identifies goals, strategies, performance measures and objectives
Strategic Highway Safety Plan	TxDOT	Texas Transportation Commission	Crash data analysis, survey data, crash reduction goals and objectives including actions

2.1.4 Meeting Legislative Requirements

The TTP complies with state and federal legislation for long-range transportation planning.

2.1.4.1 Texas Administrative Code Requirements

The specific requirements for the development of a statewide, long-range transportation plan for Texas (Title 43, Part 1, Chapter 16, Subchapter B of the Texas Administrative Code [Rule 16.54]) are as follows:

- A minimum 24-year planning horizon with an update cycle of every 4 years;
- The inclusion of all modes of the transportation system;
- The integration with the Statewide Transportation Improvement Program (STIP) and Unified Transportation Program (UTP);
- The inclusion of specific, long-term goals for the state that advance Strategic Plan goals;
- The inclusion of specific, measurable targets for each goal;
- The consideration of MPO and Regional Council of Government metropolitan transportation plans and strategies;
- The identification of priority corridors, projects, or areas of concern with respect to meeting TTP goals; and
- The inclusion of a participation plan for obtaining input on goals, targets, and project selection and prioritization.

2.1.4.2 Moving Ahead for Progress in the 21st Century Act Requirements

Moving Ahead for Progress in the 21st Century (MAP-21) Act calls for a performance-based approach to transportation decision-making and provides a clear sense of purpose for transportation investments through the establishment of seven national goal areas: safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. States and MPOs are required to measure and report on performance in these areas.

2.1.5 Texas Transportation Plan Structure

The TTP is performance-based, with a focus on achieving the TTP goals and objectives through statewide multimodal

transportation investments. The performance-based structure includes:

- **TTP goals and objectives** that identify components that can be measured and tracked given the high-level priorities developed by TxDOT in cooperation with stakeholders. In addition to state-specific goals, the TTP incorporates MAP-21 national goals.
- **TTP performance measures** provide a means to better understand the impacts of investments in TTP goals. Measures in the TTP include both those that are predictive (used in TTP analyses) as well as those recommended for tracking and monitoring system performance and TTP implementation over time.
- **Performance-based multimodal needs assessments** were conducted to identify the minimum investment amount required to achieve a state of good repair or similar performance targets through 2040.
- **TTP scenario analyses** for several investment approaches were conducted to better evaluate the costs and outcomes of investing various amounts of funding across modes and infrastructure on the Texas transportation system. The expected revenues available to meet statewide multimodal transportation needs were also presented.

2.2 Plan Technical Components

The TTP content was developed as a series of Technical Memoranda over an 18-month period (Exhibit 2-4). These Tech Memos detail all data, methodologies, and findings in the TTP.

Exhibit 2-4. Technical Memoranda Developed for the Texas Transportation Plan

Tech Memo #	Title	Contents
1	Plan Assessment and Framework	Provides an overview of the TTP development process and recommends a performance-based framework
2	TTP Goals & Objectives “Building Blocks”	Documents key components of TTP goals and objectives consistent with on-going activities of the state
3	Passenger Methodology <ul style="list-style-type: none"> • Pavement • Bridge/Culvert • Transit • Passenger Rail • Bicycle and Pedestrian • Aviation • Intelligent Transportation Systems • Statewide Analysis Model (SAM) v3 	Lists the current transportation plans, programs, and studies collected for Plan and provides the methodology for the development of system needs as detailed in Tech Memo #6 Passenger Modal Profiles
4	Freight Methodology	Includes an assessment of the data provided from the TFMP and summarizes how TFMP findings will be incorporated into the TTP
5	Transportation Today “Snapshot”	Provides the existing conditions and future trends affecting the statewide transportation system
6	Passenger Modal Profiles <ul style="list-style-type: none"> • Pavement • Bridge/Culvert • Transit • Passenger Rail • Bicycle and Pedestrian • Aviation • ITS • Highway Expansion 	Present demand and backlog as well as forecasted demand and unconstrained future needs for all passenger modes
7	Freight Modal Profile	Summarizes demand and backlog as well as forecasted demand based on TFMP findings
8 and 9	Project Development and Selection Processes	Summarizes the various phases in the project planning and development process and provides recommendations for furthering performance-based planning and programming

Exhibit 2-4. Technical Memoranda Developed for the Texas Transportation Plan

Tech Memo #	Title	Contents
10	Revenue Forecast and Investment Scenarios/Performance Outcomes	Provides four example investment approaches to better evaluate the costs and outcomes of investing in the Texas transportation system
11	Safety and Security	Identifies safety issues to be addressed and identifies potential mitigation strategies to meet state safety goals
12	SLRTP 2035 and TRTP Implementation Progress	Summarizes the progress towards implementing the goals in the SLRTP 2035 and TRTP as well as the progress of the TTP
13	Performance Measures and Targets	Addresses the state's progress toward the establishment of MAP-21 performance measures and targets as well as the specific measures applied in the TTP

2.3 Public Outreach and Opportunities for Input

Effective communication and engagement is critical to the successful development and implementation of a statewide multimodal transportation plan. TTP outreach efforts were designed to:

- Gather input on goals and objectives used to develop the TTP;
- Educate the public and stakeholders about the TTP as a performance-based plan and about tradeoffs between types of investments and levels of funding; and
- Collect data on public and stakeholder values related to transportation priorities and types of investments as well as revenues available for transportation improvements.

For nearly a year, a variety of TTP outreach opportunities were provided in order to inform, engage, and collect feedback from TxDOT representatives, external partners and stakeholders, and the general public on a continuing basis throughout Plan development (Exhibit 2-1), including:

- The formation and convening of an internal TxDOT Technical Advisory Committee (Section 2.3.1);
- Two rounds of stakeholder and public meetings with supporting materials (meeting notices, website publications, exhibits, and questionnaires) available in English and Spanish and accessible to those in attendance or online. Bilingual staff was also present at all meetings (Section 2.3.2);
- Outreach to several individual transportation advisory committees, MPO boards, Councils of Government, and public advocacy groups;
- A presence at the TxDOT Planning Conference 2014 held in Corpus Christi, Texas;
- Project webpages on www.TxDOT.gov that were accessible October 2013 through October 2014;
- Public and stakeholder comments received via email on www.TxDOT.gov or at TxTransPlan2040@txdot.gov;
- A transportation questionnaire (available online and at meetings) and comment forms distributed at meetings; and
- An interactive planning scenario tool built on a MetroQuest platform that was featured during Outreach Round 2 meetings and available online June 2, 2014 through September 30, 2014 (Section 2.3.2).

The TTP outreach effort will culminate with a public hearing and associated comment period during which all TTP comments will be addressed before it is finalized. Notification of the public hearing and the final TTP publication will be provided to those who attended a meeting, visited the website and provided their contact information, and stakeholders.



The public hearing notification and final TTP will also be posted on TxDOT.gov. Additional information regarding the Technical Advisory Committee meetings, stakeholder and public outreach, and the MetroQuest interactive planning scenario tool and questionnaire are provided in the following sections.

2.3.1 Technical Advisory Committee

The Technical Advisory Committee composed of representatives from various TxDOT divisions met five times during the development of the TTP and was continuously engaged and involved in reviewing Plan content (e.g., modal methodologies and assumptions) and outreach materials. A summary of what was discussed and decided upon at each Technical Advisory Committee meeting is provided below.

- **Meeting 1, October 10, 2013**
 - Technical Advisory Committee priorities for long-range planning in Texas
 - Proposed TTP schedule, Outreach Round 1 stakeholder and public meetings schedule, opportunities for coordination among state planning activities
- **Webinar, November 1, 2013**
 - Follow-up web-based meeting to confirm draft goals and objectives prior to presenting them to the stakeholders and public
- **Meeting 2, January 29, 2014**
 - Goal and objective recommendations (finalize language)
 - Modal needs methodologies
- **Meeting 3, May 14, 2014**
 - Unconstrained multimodal needs
 - TTP scenario analysis and MetroQuest tool
 - Proposed Outreach Round 2 stakeholder and public meetings schedule
- **Meeting 4, August 25, 2014**
 - Outreach Round 2 stakeholder and public meetings findings
 - TTP development and review (including modal profiles)

2.3.2 Stakeholder and Public Participation

Disseminating information and collecting comments from stakeholders and the general public was a critical component of developing the TTP. The following objectives outlined in the *Stakeholder and Public Participation Plan* guided stakeholder and public outreach:

- Establish **early and continuous public participation** opportunities that provide timely information about transportation issues and decision-making processes to all interested parties;
- Provide **reasonable public access** to educational, technical, and policy information to enhance the public's knowledge and ability to participate in the development of the TTP;
- Provide **adequate public notice** of participation opportunities during the development of the TTP; and time for public review and comment at key decision points in the planning process;
- Ensure that public participation opportunities are held at **convenient and accessible** (Americans with Disabilities Act) **locations and times**;
- **Make information comprehensible** using visualization techniques, and available in appropriate electronically-accessible formats and means via the TxDOT website, technology-enabled media, and video-teleconferencing;
- Include measures for seeking input from and **considering the needs of those traditionally underserved by existing transportation systems** as defined in Title VI of the Civil





Rights Act of 1964, such as low-income, minority, and non-English speaking households who may face challenges accessing employment and other services; and

- Provide for the **periodic review of the public participation process** to ensure the effectiveness of TxDOT’s public involvement efforts and revise the process as appropriate.

While stakeholder and public input was collected and responded to throughout TTP development, there were two rounds of targeted public outreach meetings. The first round occurred in November of 2013 and the second round occurred from June 2014 through August 2014. Notices and meeting information for both rounds of outreach was distributed through the TxDOT website, media press releases, electronic notices, MPO correspondence, telephone calls, electronic mail, Twitter, and Facebook.

2.3.2.1 Outreach Round 1 Stakeholder and Public Meetings

The first round of stakeholder and public meetings was held in November 2013 in eight of the 25 TxDOT Districts (Exhibit 2-5). Stakeholder meetings were held from 9:30 a.m. to 11:30 a.m. and public open-house meetings were held from 4:00 p.m. to 7:00 p.m. Video television conference was made available for the stakeholder and public meetings held in Dallas and San Antonio District offices. In total, 166 stakeholders and members of the general public attended a meeting during Outreach Round 1.

Exhibit 2-5. Outreach Round 1 Meeting Schedule

District	Video Television Conference	Date
San Antonio	✓	November 6, 2013
Pharr		November 7, 2013
Houston		November 13, 2013
Bryan		November 14, 2013
Lubbock		November 18, 2013
Wichita Falls		November 19, 2013
Dallas	✓	November 20, 2013
Abilene		November 21, 2013

Outreach Round 1 was intended to inform and educate meeting attendees about the TTP effort, answer questions and collect comments, and engage attendees to discuss statewide transportation topics and concerns; additionally, the TTP draft goals and objectives were presented and discussed. Meeting materials included display boards and handouts. A PowerPoint presentation was provided during the stakeholder meeting to communicate draft goals and objectives and facilitate discussion regarding transportation priorities from the perspectives of each participant.

The stakeholders generally supported the initial TTP draft goals and objectives and suggested an additional goal of sustainable funding which was subsequently added. Additional stakeholder and public feedback was collected through comment forms, a transportation questionnaire, and a demographic survey.

2.3.2.2 Outreach Round 2 Stakeholder and Public Meetings

Outreach Round 2 was held in summer 2014 with public and stakeholder meetings conducted in all 25 districts across the state (Exhibit 2-6). Stakeholder meetings were held from 2:00 p.m. to 4:00 p.m. and public open-house meetings were held from 5:30 p.m. to 7:30 p.m. with some variation depending on location. In total, 668 stakeholders and members of the general public attended a meeting during Outreach Round 2.

Outreach Round 2 educated the general public and stakeholders about future multimodal transportation system needs and funding gaps, created a dialogue about necessary tradeoffs between types of investments and levels of funding, and garnered comments and attitudes related to transportation investments and funding.

Meeting materials included display boards and handouts about the TTP development process and integration with other TxDOT plans and programs as well as information regarding current and future forecasted revenue streams and expenditures. A PowerPoint presentation was used during the stakeholder meetings to communicate and facilitate discussion around the multimodal unconstrained needs, methodologies, and assumptions as well as the anticipated funding gap through 2040 given reasonably expected revenues. Additional stakeholder and public feedback was solicited through comment forms, a transportation questionnaire, a demographic survey, and a MetroQuest tool that was developed for the TTP as described in Section 2.3.3.3.

Exhibit 2-6. Outreach Round 2 Meeting Schedule

District	Date
Bryan	June 9, 2014
Beaumont	June 10, 2014
Houston	June 11, 2014
Lufkin	June 12, 2014
San Angelo	June 16, 2014
Odessa	June 17, 2014
El Paso	June 18, 2014
Atlanta	June 24, 2014
Paris	June 25, 2014
Tyler	June 26, 2014
Dallas	July 7, 2014
Wichita Falls	July 8, 2014
Fort Worth	July 9, 2014
Brownwood	July 10, 2014
Laredo	July 14, 2014
Pharr	July 15, 2014
Corpus Christi	July 16, 2014
Yoakum/Victoria	July 17, 2014
Waco	July 21, 2014
Abilene	July 28, 2014
Childress	July 29, 2014
Amarillo	July 30, 2014
Lubbock	July 31, 2014
San Antonio	August 4, 2014
Austin	August 5, 2014

2.3.3 Input Collected from Outreach Methods and Tools

As discussed in Section 2.3, gathering input from the public and stakeholders was of paramount importance to TxDOT in the development of the TPP. As such, several methods and tools were developed and applied to engage and gather input from multimodal owners, operators, and users of the Texas transportation system.



More than 2,500 comments and responses were received (Exhibit 2-7) as a result of the extensive outreach effort. In general, the comments reflected the following:

- TTP goals and objectives were generally supported. As noted in Section 2.3.2.1, a goal of “Sustainable Funding” was added, along with supporting objectives, based on stakeholder feedback received during Outreach Round 1;
- Additional transportation funding is needed. Current diversions of funds should be reduced or eliminated;
- Preservation of the existing transportation system is a top priority;
- Addressing congestion is a top priority though the high cost of expanding facilities and the difficulty in managing current and future demand was generally acknowledged and understood;
- Performance-based planning makes logical sense and should be used to allocate resources; and
- All modes of transportation should be considered in the transportation planning process.

The following sections provide a summary of the feedback received via each outreach method and tool. In addition to these specific means used to collect feedback, TxDOT welcomed direct input via email, phone and postal mail. For more details regarding the feedback that was received, including a complete list of comments, please refer to Appendix A.

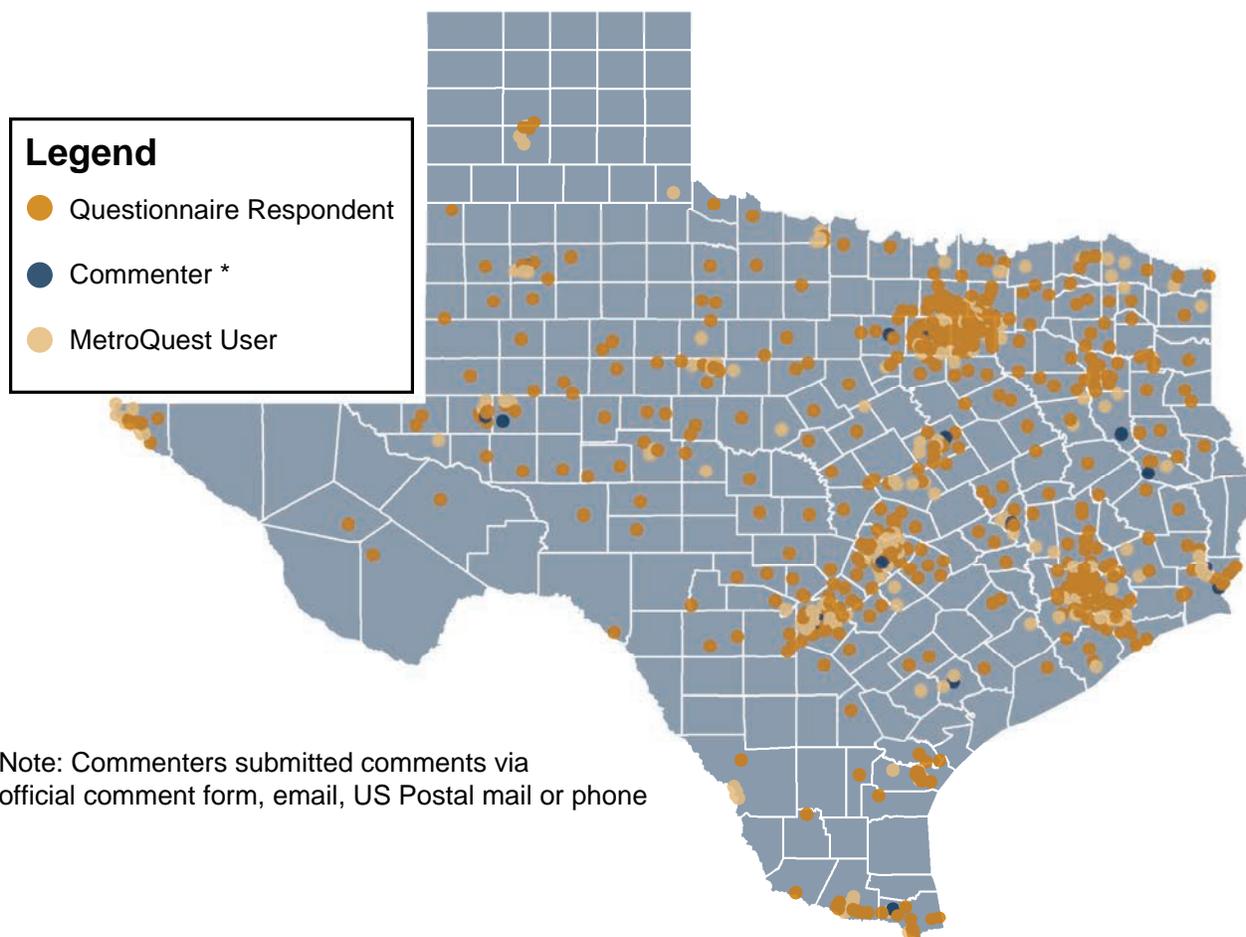
2.3.3.1 Comment Forms

To help inform the development of the TPP, stakeholders and the general public were encouraged to fill out comment forms at meetings during both rounds of meetings; individuals who could not attend meetings or did not have time to fill out comment forms at meetings were encouraged to email, mail or phone comments. Over 200 individual comment forms were received throughout the development of the TPP. Common themes among comments received included:

- Agreement for safety as TxDOT’s top priority with numerous safety concerns cited throughout the state;
- Requests for sustained or increased funding for local maintenance;
- Understanding of and preference for a balanced funding approach between roadway expansion and maintenance;



Exhibit 2-7. Statewide Public Involvement Responses



- Recognition that more transportation funding is needed, with proposed solutions including: reducing or eliminating the diversion of funds, indexing/raising the gas tax, increasing vehicle registration fees, using royalty fees for transportation improvements, and transitioning to a user fee system. Comments indicated mixed feelings towards the increased use of toll facilities;
- Encouragement of small design enhancements (e.g., adding turn lanes, “Super 2s”, roadway shoulders, roadway realignment, improved signage, and the provision of railroad crossings) that benefit roadway operations and safety;
- Recognition of congestion as a major problem across the state with suggested solutions including roadway widening to eliminate bottlenecks and travel demand strategies to better manage the existing network;
- Understanding that transit (high speed rail, commuter rail, passenger rail, Bus Rapid Transit, and para-transit) is a viable means to address congestion in the state and provide access to goods and services for disadvantaged, elderly, and disabled populations. Increased transit investments that result in increased ridership and improved access should be encouraged;
- Support for increased investment in and prioritization of bicycle and pedestrian facilities as part of a comprehensive transportation system;
- Encouragement of Intelligent Transportation System infrastructure to manage traffic and adapt to future technological advances that will impact current uses of the transportation system;
- Encouragement of improved coordination between TxDOT and localities to support better land use and transportation interactions;
- Recognition of freight as a top priority for the state that impacts its economic competitiveness, with specific references directed at the importance of the Ports-to-Plains initiative. Mobility improvements are needed along roadways and on rail facilities as well as at intermodal facilities where cargo is transitioned between freight modes. Potential solutions include the provision of inland ports, more efficient freight transfer facilities (including air cargo), enhancements to ports, and maximizing the use of rail facilities for freight transport; and
- Commendation and endorsement for TxDOT’s evaluation of multimodal system performance based on investment levels.

investment priority to another (e.g., from system preservation to roadway expansion) and what a given level of investment can “buy” in terms of various performance measures. The MetroQuest tool was featured at the Outreach Round 2 stakeholder workshops and public open houses (Exhibit 2-9); it was also made available online on TTP’s webpage located on TxDOT’s website from June 6, 2014 through September 2014. The MetroQuest web link was disseminated to meeting participants and advertised through social media. In total, more than 500 people visited the interactive planning tool website.

The MetroQuest tool educated the public and stakeholders about trade-offs between types of investments and levels of funding and gathered input on values related to transportation investments and funding through the following exercises:

- Investment Priorities: The identification and ranking of top transportation priorities;
- Scenarios: The rating of three investment approaches and their associated costs: (1) System Preservation, (2) Metropolitan Mobility, and (3) Connectivity and Freight Mobility;
- Budget: The allocation of funding across investment categories including highway pavement, highway bridge, highway capacity, transit maintenance, transit expansion, as well as bicycle/ pedestrian and safety investments; and
- Next Steps: The submission of answers to questions regarding increased transportation investment in Texas and what additional investment categories should be considered.

The tool was well received by the public and stakeholders with many providing positive feedback regarding its usability. Tool participants indicated that congestion and pavement condition are their top priorities. The ranking of these as top priorities is consistent with the amount of money users allocated in the tool’s “create a budget” exercise. A complete summary of tool responses including the zip codes of respondents is provided in Appendix A.

Exhibit 2-9. Interactive Tradeoff Tool Introduction Page

Texas Transportation Plan 2040 - MetroQuest

Progress: [?](#) [★ Compare Yourself](#)

✓ **Our Challenge** How should money be spent over the next 26 years?

2 INVESTMENT PRIORITIES

3 SCENARIOS

4 BUDGET

5 NEXT STEPS

WELCOME



Texas Transportation Plan 2040






The population in Texas is growing - more than 400,000 people move here each year. These new people and a growing economy create new demands on Texas’ transportation system. With limited resources, TxDOT must invest wisely to keep Texans and the economy moving.

[?](#) help

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