



House Bill 20 Implementation

House Select Committee on Transportation Planning

Tuesday, August 30, 2016, 1:00 P.M.

Capitol Extension E2.020

INTRODUCTION

In response to House Bill 20 (HB 20), 84th Legislature, Regular Session, 2015, and as part of the implementation effort, the Texas Department of Transportation (TxDOT) created the Planning Organization Stakeholder Committee (POSC) in July 2015. The POSC is comprised of representatives from seven metropolitan planning organizations (MPOs) as well as representatives from seven TxDOT districts.

In addition to the POSC, TxDOT formed a Core Strategy Team (CST) charged with reviewing and updating the TxDOT's values, vision, mission, and goals in order to set the foundation for the performance measures and metrics to be used in a performance-based planning process. The new values, vision, mission, and goals developed by the CST were adopted by the Commission on February 25, 2016. The new goals are as follows:

- Deliver the Right Projects – Implement effective planning and forecasting processes that deliver the right projects on-time and on-budget;
- Focus on the Customer – People are at the center of everything we do;
- Foster Stewardship – Ensure efficient use of state resources;
- Optimize System Performance – Develop and operate an integrated transportation system that provides reliable and accessible mobility, and enables economic growth;
- Preserve our Assets – Deliver preventative maintenance for TxDOT's system and capital assets to protect our investments;
- Promote Safety – Champion a culture of safety; and
- Value our Employees – Respect and care for the well-being and development of our employees.

With the assistance of the POSC, TxDOT has taken a number of steps to fulfill the requirements of HB 20. These actions include consideration of performance-based criteria as part of recent efforts by the Texas Transportation Commission (Commission) to distribute category funding in the 2017 update to TxDOT's Unified Transportation Program (UTP), along with the development of proposed amendments to Chapter 16 of the Texas Administrative Code (TAC). These efforts have been undertaken recognizing that implementation of HB 20 remains an on-going process, with final reports from the House and Senate select committees on HB 20 anticipated by November 1, 2016. The following testimony provides detail on these efforts, as well as other actions taken by TxDOT to address the requirements of HB 20.

DEVELOPMENT OF PERFORMANCE-BASED PLANNING AND PROGRAMMING PROCESS

The over-arching requirement called for in HB 20 is the development of a performance-based planning a programming process.

“Develop and implement a performance-based planning and programming process dedicated to providing the executive and legislative branches of government with indicators that quantify and qualify progress toward attaining all department goals and objectives established by the legislature and the commission.”

For a number of years, TxDOT has implemented performance-based processes in many aspects of it’s work activities, particularly in the areas of bridge, preservation, maintenance, and safety programs. In response to HB 20, and recommendations from the POSC, TxDOT has further integrated performance-based planning and programming processes in the development of the 2017 UTP. The performance process used in this UTP builds on and enhances existing performance efforts of the department. Distribution of funding to categories within the UTP is aligned with TxDOT’s top strategic priorities. These priorities include addressing safety, preserving assets, targeting congestion and urban mobility needs, and enhancing rural connectivity corridors. The specific strategic priorities and performance outcomes provided in **Figure 1** were considered as the Commission updated category funding levels in the adoption of the 2017 UTP.

FIGURE 1 - Strategic Priorities and Anticipated Performance Outcomes

Top Strategic Priorities	Anticipated Performance Outcomes
Address safety	Reduce crashes and fatalities
Preserve assets	Maintain and preserve system/asset conditions
Target congestion/urban mobility needs	Mitigate congestion and improve reliability of system
Enhance rural connectivity corridors	Enhance connectivity and mobility
Focus on strategic initiatives (<i>energy sector, trade, and economic development</i>)	Enhance economic development opportunities; facilitate movement of freight and international trade

Under the guidelines of HB 20, and consistent with the TxDOT’s adopted goals and objectives, the development and implementation of a performance based program will become institutionalized. Future UTPs will be developed based on the proposed planning rules which provide that the Commission will use a performance-based process, subject to the mandates of state and federal law, to determine the amount to be allocated to each program funding category for the appropriate period of time in order to achieve established performance outcomes.

The CST has also developed a set of objectives to support TxDOT's implementation of a performance-based planning process. Based on this work, and input from the HB 20 POSC, TxDOT staff has proposed a set of key performance indicators and targeted outcomes to guide the allocation of category funding in the UTP and track progress toward accomplishment of the departmental goals and objectives. These efforts support the following requirements of HB 20:

“Develop and implement performance metrics and performance measures as part of:

- *Review of strategic planning in the statewide transportation plan, rural transportation plans, and unified transportation program;*
- *Evaluation of decision-making on projects selected for funding in the unified transportation program and statewide transportation improvement program; and*
- *Evaluation of project delivery for projects in the department's letting schedule.”*

The adopted values, vision, mission, and goals outlined in the introduction speak to these objectives, as do the on-going measures that are part of TxDOT's HB 20 implementation. These measures are further outline in the remaining section of this testimony.

PERFORMANCE-BASED PROCESS FOR SETTING FUNDING LEVELS

HB 20 calls for TxDOT to implement a performance-based process to determine appropriate levels of funding for the various categories within the UTP.

“Establish a performance-based process for setting funding levels for the categories of projects in the department's unified transportation program.”

In the development of the 2017 UTP, TxDOT used existing system performance data to evaluate the effect of different funding allocations on desired strategic outcomes. The data included information on system safety, preservation, and congestion in urban areas of the state.

In consideration of the strategic priorities, targeted performance outcomes, and available funding, the Commission allocated \$38.3 billion of additional funding to the strategic program areas and objectives shown in **Figure 2** as part of the adoption of the 2017 UTP.

FIGURE 2 – Funding Allocations to Program Areas and Objectives

Program Areas and Objectives	10 Year Additional Funding (\$ Billion)
Preserve Existing Assets	\$ 6.9
Safety	1.3
Maintenance	2.6
Bridges	0.5
Energy Sector	2.1
District Discretionary	0.4
Urban Congestion/Mobility	\$ 21.2
MPO Partnerships	11.2
Connectivity Corridor Congestion	5.0
Strategic Congestion Initiative	5.0
Rural Connectivity Corridors	\$ 6.2
<i>Interstates (Existing & Future), Trunk System, Border, Super-2 Lane</i>	
Additional Strategic Priorities	\$ 4.0
TOTAL	\$ 38.3

The following figure provides context to the anticipated results from the overall funding decisions applied to the 2017 UTP. For the strategic initiatives listed, TxDOT staff analysed the effect of various funding levels would have on performance in 10 years (2015).

FIGURE 3 - Strategic Priorities and System Performance Outputs

Strategic Priority	Performance Measure	Current Performance Output	Projected Performance Output (in 10 yrs.)
Address Safety	Fatality Rate	1.43*	0–2% Reduction
Preserve Assets (Pavements)	Condition Scores (% Good or Better)	87%	87%
Preserve Assets (Bridges)	Condition Scores (% Good or Better)	82%	83%
Target Congestion	Urban Congestion Index	1.19	0–5% Increase
Enhance Connectivity (Urban)	Urban Reliability Index**	1.57	TBD
Enhance Connectivity (Rural)	Rural Reliability Index***	1.18	TBD

* Per 100 million vehicle miles travelled.

** Index represents how much total time should be allowed to ensure on-time arrival. Score of 2.5 means 75 minutes should be planned for a 30 min. trip during free flow travel.

*** Index represents how much total time should be allowed to ensure on-time arrival Score of 1.5 means 4.5 hours should be planned for a 3-hour trip during free flow travel.

Highway safety and infrastructure preservation are among the top transportation priorities for the state and the Commission. There are over 313,000 centerline miles of public roadways in Texas, of which more than 80,000 are operated and maintained by TxDOT. The pavements are aging while passenger and freight movement in Texas continue to grow. There are 52,536 highway bridges in the state, constituting 9 percent of the nation’s total inventory of bridges. Texas is projected to experience robust growth through 2040 in terms of both population and employment. This growth will be concentrated in urban areas of the state. The projected 61 percent increase in population and 80 percent increase in employment are expected to result in a 57 percent increase in total trip volumes from 2010 levels. While rural roadways may carry less than half the traffic volume of urban highways, the rural highway system is essential to the economic vitality of the state.

As shown in **Figure 3**, the performance objectives in the areas of safety and asset preservation, for both maintenance/pavements and bridges, are being achieved. At this point, it is unclear the degree to which improvements in performance outcomes in the areas of congestion and connectivity will be achieved. There are still a number of variables that will affect TxDOT’s ability to accurately project outcomes in these areas. These variables include project selection, population growth, and leveraging of other fund sources that could increase capacity for project improvements.

For the initial distribution of funding, a reliable estimate of urban and rural impacts on reliability performance metrics could not be generated. It is anticipated that forecasted impacts in these areas will be developed as TxDOT and planning organizations proceed with performance-based project selection efforts. As an initial consideration in distributing funds for rural connectivity and urban mobility/congestion/connectivity, the Commission considered vehicle miles of travel (VMT) as a metric for the distribution of funds in these areas. As is shown in **Figure 4**, Rural VMT represents 23 percent of the system-wide VMT while Urban VMT represents 77 percent. Additional funding allocated by the Commission in 2017 UTP categories supporting these areas match the 23/77 percent VMT distribution

FIGURE 4 – Rural and Urban VMT and Funding Distribution

Vehicle Miles of Travel (Million – 2015 Annual Estimate)*		
Rural VMT	61,056	23%
Urban VMT	202,431	77%
Total	263,487	100%
Additional Funding (\$ Million – 10-Year UTP)		
Rural Connectivity	\$ 6,206	23%
Urban Congestion	21,197	77%
Total	\$27,403	100%

*Est. VMT based on TxDOT 2015 Road-Highway Inventory Network (RHiNo) data on Major Collector roads & higher.

As are results of the funding consideration to performance areas and strategic objectives, the funding as shown in **Figure 5**, is provided in the 2017 UTP. These funding levels provide for a 10-year program of projects in excess of \$70 billion for TxDOT and local communities.

FIGURE 5 – Funding Distribution by Category Over 10 Years of the UTP

UTP Funding Categories	Funding Distributed Over 10 Years of UTP by Category (\$ Million)		
	2016 UTP Base	Increase in Funds & Project Adjustments	2017 UTP Funding
Category 1 – Maintenance & Rehabilitation	\$ 11,157	\$ 2,625	\$ 13,782
Category 2 – Metropolitan & Urban Corridor Projects	1,334	11,202	12,536
Category 3 – Non-Traditional Funding	4,572		4,572
Category 4 – Connectivity (Rural)	429	6,206	6,635
Category 4 – Connectivity (Congestion)		4,996	4,996
Category 5 – Congestion Mitigation/Air Quality (3 MPOs)	2,169		2,169
Category 6 – Bridge Programs	2,709	514	3,223
Category 7 – Metropolitan Mobility & Rehabilitation (Large MPOs)	4,241		4,241
Category 8 – Safety Programs	1,887	1,291	3,178
Category 9 – Transportation Alternatives Program	500		500
Category 10 – Special Federal Programs	557		557
Category 11 – District Discretionary	1,540	360	1,900
Category 11 – District Discretionary (Energy Sector Initiative)		2,079	2,079
Category 12 – Strategic Priority Projects	763	4,064	4,827
Category 12 – Strategic Priority (Congestion Initiative)		5,000	5,000
Total Allocated Funds	\$ 31,858	\$ 38,337	\$ 70,195

DEVELOPMENT, USE, AND PERIODIC REVIEW OF PERFORMANCE METRICS AND MEASURES

The proposed planning rule changes, which are anticipated to have preliminary Commission action in September of 2016 with final adoption by December of 2016, Build on existing procedures and provide a foundation for how TxDOT will address the transportation needs of the state through performance-based planning. The proposed rules address the following requirements of HB 20 through the incorporation of performance metrics and measures in its efforts to evaluate and rank the priority of projects listed in the UTP.

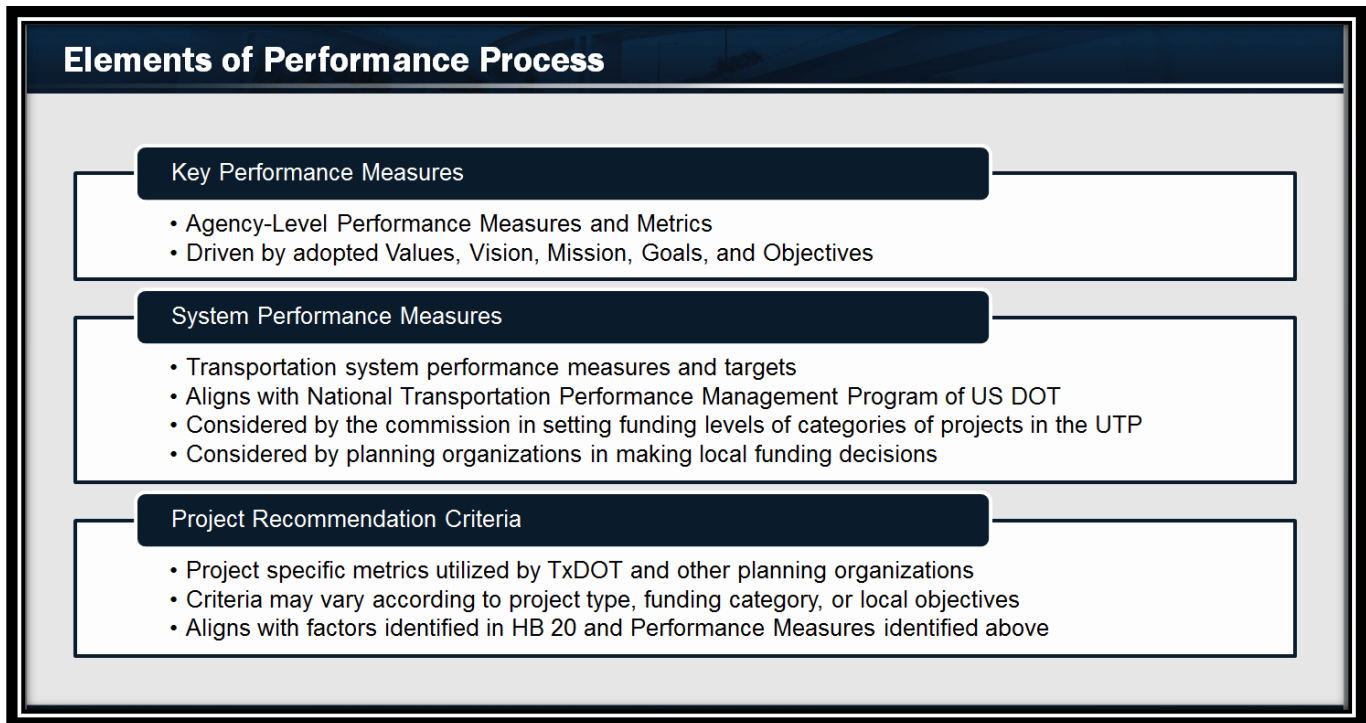
“Adopt and periodically review metrics and measures to:

- *Assess how well the transportation system is performing and operating in accordance with the requirements of 23 USC Section 134 or 135, as applicable;*

- Provide the department, legislature, stakeholders, and public with information to support decisions in a manner that is accessible and understandable to the public;
- Assess the effectiveness and efficiency of transportation projects and service;
- Demonstrate transparency and accountability; and
- Address other issues the commission considers necessary.”

“Develop and implement periodic reporting schedules for all performance metrics and measures required under this section (Texas Transportation Code, Section 201.809).”

FIGURE 6 - Key, System, and Project Performance Measures



TxDOT staff have identified and defined a preliminary series of commission and TxDOT administration level key performance measures (KPMs) and system performance measures. These measures and metrics are designed to inform the Commission and stakeholders on how well Texas’ transportation system is performing on a statewide level, and will assist decision makers on how best to allocate funding for projects and programs.

The implementation of a periodic reporting schedule will be codified as part of the previously referenced rule changes that TxDOT will consider this fall in response to HB 20. TxDOT has developed a preliminary set of metrics and measures in response to the new values, vision, mission, and goals adopted by the Commission. These preliminary system performance metrics and measures are provided in **Appendix A** along with initial performance outcomes. TxDOT is currently using these measures to evaluate funding and planning decisions at the system level. TxDOT staff plans to present key agency-level performance measures and metrics, and updated project recommendation criteria, to the Commission in the coming months.

The metrics and measures used in this process will be continuously reviewed to ensure TxDOT is using both effective and meaningful measures. To better inform the legislature, stakeholders, and the public, TxDOT has procured a reporting tool that will be used to help visualize the KPMs using charts, graphs, and maps. TxDOT is currently working to improve its data management to ensure performance information is easily accessible and consistent. Processes are also being developed to ensure TxDOT can successfully incorporate performance reporting into day-to-day operations. Finally, TxDOT is working to ensure the timing of our reporting is integrated with existing planning and programming processes.

PROJECT PRIORITIZATION AND SCORING

State law calls for the statewide long-range transportation plan to be updated every four years. Although the next update of the plan is not scheduled until 2019, TxDOT staff has begun working on this effort. A performance-based planning process is being applied to this update, including to the selection and prioritization of projects throughout the state.

HB 20 also calls for TxDOT to:

“Prioritize and approve projects included in the statewide transportation plan under Section 201.601 in order to provide financial assistance in this chapter.”

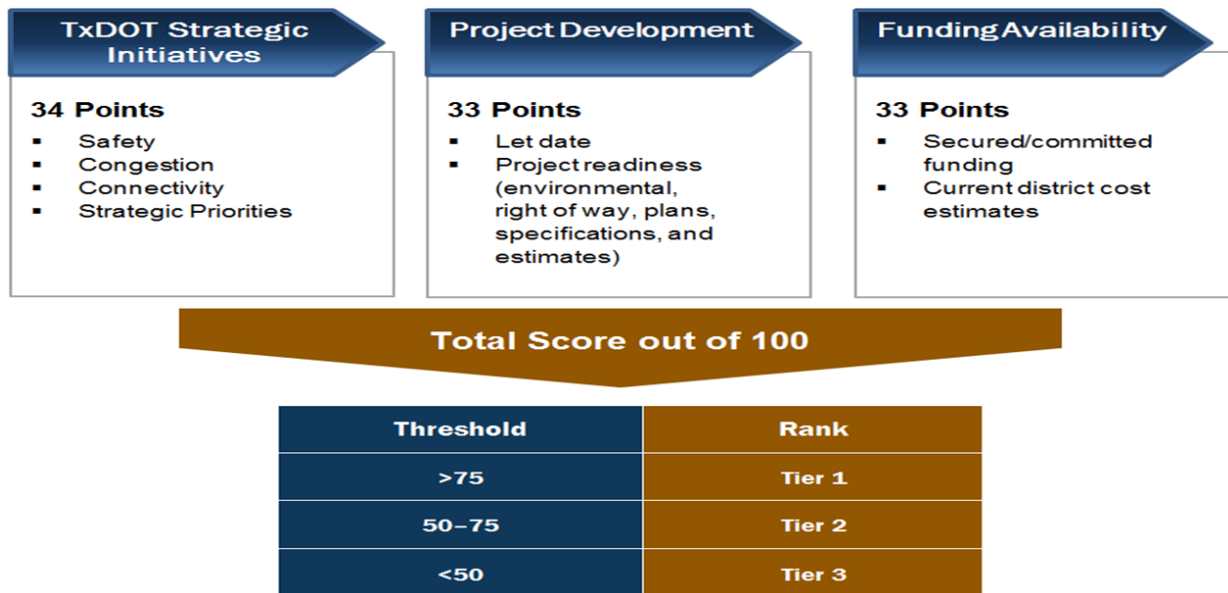
“Establish a scoring system for prioritizing projects for which financial assistance is sought from the commission by planning organizations.”

- *“Criteria used to score projects must take into consideration the department’s strategic goals as approved by the commission in accordance with the requirements of 23 U.S.C. Section 134 or 135, as applicable.”*
- *“System must account for the diverse needs of the state so as to fairly allocate funding to all regions of the state.”*

In 2012, TxDOT adopted rules in response to sunset legislation that call for the ranking, or prioritization, of all projects in the state’s UTP. TAC Section 16.105(d)(2) requires TxDOT to “establish criteria to rank the priority of each project listed in the UTP based on the transportation needs of the state and the goals identified [...] project will be ranked within its applicable program funding category and classified as tier one, tier two, or tier three for ranking purposes.” In the 2017 UTP, each project listed in the Roadway and Bridge Program section is

ranked as Tier 1, 2, or 3. Projects designated as a major transportation project have an automatic Tier 1 ranking. The current process for ranking and guiding the prioritization of projects is illustrated in **Figure 7**. To facilitate this process, a project ranking process was developed to collect data and receive input from TxDOT districts and planning organizations throughout the state. The criteria used in this process aligned with the requirements of HB 20 and were implemented by TxDOT districts and divisions directly involved with programming-specific projects.

FIGURE 7 – 2017 UTP Project Scoring and Prioritization



PROJECT RECOMMENDATION CRITERIA

TxDOT staff is in the process of further refining the current scoring system to ensure future scoring takes into account the project recommendation criteria laid out in HB 20.

“Develop its own project recommendation criteria, which must include consideration of:

- *Projected improvements to congestion and safety;*
- *Projected effects on economic development opportunities for residents of the region;*
- *Available funding;*
- *Effects on the environment, including air quality;*
- *Socioeconomic effects, including disproportionately high and adverse health or environmental effects on minority or low-income neighborhoods; and*
- *Any other factors deemed appropriate by the planning organization.”*

The criteria shown in **Figure 7** include factors that align with the project recommendation criteria required by HB 20. Specific alignment of the current factors with HB 20 requirements is shown in **Figure 8**. Going forward, TxDOT anticipates that additional criteria will be adopted to replace or supplement those currently considered as part of the project ranking process to provide further alignment with HB 20 criteria.

FIGURE 8 - Project Scoring and Recommendation Criteria

Current UTP Project Scoring Criteria	HB 20 Project Recommendation Criteria					Other Factors		
	Congestion & Safety Improvement	Effect on Economic Opportunity for Residents of Region	Available Funding	Effects on Environment (Including Air Quality)	Socioeconomic Effects (Including Minority & Low-Income)	Local Priorities	Freight/ International Trade	Project Delivery
Safety								
Crash Data	X	X		X	X			
Congestion								
Level of Service	X	X		X	X			
“Top 100” Segment	X	X			X			
Connectivity								
Functional Classification		X				X	X	
Freight Network or Texas Trunk System Designation		X					X	
Truck Volume	X	X					X	
Corridor Gap	X	X					X	
Alternative Mode		X				X		
Strategic Priorities								
Long-Range & Strategic Corridor Plan Alignment						X	X	
Cost/Vehicle Miles Travelled	X	X			X			
District/Local Priority Rating						X		
Funding Availability								
% of Funding Available vs Total Construction Cost			X					X
Project Readiness/Development Status								
Scheduled Letting Date						X		X
Environmental Status					X			X
Right of Way Status						X		X
PS&E Status						X		X

Furthermore, the proposed planning rules revise the project selection criteria to incorporate language contained in the department's new strategic goals and objectives. They also provide for projects to be ranked using a performance-based scoring system. This scoring system will be used for prioritizing projects for which financial assistance is sought from the Commission. The amendments also provide that the scoring system must account for the diverse needs of the state so as to fairly allocate funding to all regions of the state.

TEN-YEAR PLANS

The UTP, as currently structured, includes 10-year plans for each District. These plans, which guide the state's transportation project development, include information on projects being developed by metropolitan planning organizations, as well. TxDOT District staff coordinate with the local planning organizations in their area to ensure these projects are included in the UTP.

“Develop a 10-year transportation plan for the use of the funding allocated to the region.”

- *“The first four years of the plan shall be developed to meet the transportation improvement plan requirements of 23 U.S.C. Section 134 or 135, as applicable.”*
- *“For an area that is not within the boundaries of a metropolitan planning organization, the department district shall develop the 10-year transportation plan with input from municipal and county elected officials and transportation officials in the region.”*

“Assist planning organizations in development of their 10-year plans by providing in a timely manner such information as is reasonably requested by the planning organization.”

While 10-year programs of projects are currently reflected in the UTP for all areas of the state; moving forward, TxDOT will work with the local planning organizations in the development of their statutorily required 10-year plans. These plans may further supplement the program of projects outlined in the 10 years of the UTP and align with the long-range plans for these areas. In some instances, MPOs may simply elect to utilize the plan of projects documented in the UTP as their 10-year plan.

DISCRETIONARY FUNDING DECISIONS

“Make discretionary funding decisions for no more than 10 percent of the current biennial budget of the department.”

In compliance with HB 20, the proposed planning rule changes amend TAC §16.153 to provide that discretionary funding decisions to do not exceed 10 percent of TxDOT's biennial budget. It is estimated that under current funding forecasts approximately eight percent of the department's biennial budget is dedicated to Commission Strategic Priority funding (Category 12) with the 2017 UTP.

The proposed rule changes also provide for funding allocation adjustments to be subject to consideration of performance results as well as significant changes in funding. If a significant change in funding is identified, the letting schedule may be revised and projects advanced or delayed relative to priority, applicable fund source eligibility, and completion of project benchmarks.

“INITIAL” AND “PRELIMINARY” REPORTS

TxDOT, with the assistance of the POSC, submitted “Initial” (September 1, 2015) and “Preliminary” (March 31, 2016) reports that addressed matters called for in HB 20. These included the review of:

- Revenue projections and needs (*Initial Report*);
- Current funding categories (*Initial Report. Determined to be sufficient by HB 20 POSC Subcommittee*);
- Existing performance-based scoring and decision making processes (*Initial Report. Current UTP includes project selection scoring process*);
- Alternative methods of financing (*Preliminary Report*);
- Performance metrics and measurement tools used by TxDOT (*Preliminary Report*);
- Collaboration with elected officials and stakeholders (*Preliminary Report*);
- Statewide rules, policies, and programs (*Preliminary Report*); and
- Benefits of zero-based budgeting principles (*Preliminary Report*).

2017 UNIFIED TRANSPORTATION PROGRAM (UTP)

As previously noted, the 2017 UTP (as adopted by Commission August 25, 2016) has incorporated several new processes that will affect the development and implementation of transportation projects both now and in the future. These processes provide for the alignment of the UTP with TxDOT’s updated mission, values, and goals statement; and HB 20 provisions related to planning and programming. The following language is included throughout the 2017 UTP document to further emphasize the department’s commitment to carrying out the provisions of HB 20 throughout this effort which is on-going and subject to revision based on legislative and stakeholder input, and recommendations included the forthcoming House and Senate select committees’ final report.

“Note: As passed by the 84th funding allocations and project listings identified in the UTP that generally involve allocations in Categories 2, 4, 11, and 12 may be subject to further consideration by the Texas Transportation Commission to ensure that the Texas Department of Transportation and HB 20 designated Planning Organizations (TxDOT Districts and Metropolitan Planning Organizations) have complied with the requirements of HB 20. Any proposed revisions to funding allocations or project listings will be addressed in future updates to the UTP.”

ADMINISTRATIVE PLANNING RULE CHANGES

As previously referenced, on September 29, 2016 the Commission will be asked to approve proposed amendments to Chapter 16 of the TAC. The amendments, as noted throughout this testimony, are in large-part in response to the planning and programming directives provided by HB 20. Following Commission approval, the proposed changes will go through a period of public involvement. This schedule will allow for consideration of any relevant recommendations included in the House and Senate select committees report on HB 20 that are anticipated by November 1, 2016. The proposed rules will be presented to the Commission for final adoption in mid-December.

The proposed rule changes:

- Provide for the adoption of a performance-based planning and programming process with performance metrics and measures;
- Specify that the department will consider performance metrics and measures to evaluate and rank the priority of each project listed in the UTP;
- Integrate the department's new strategic goals and initiatives;
- Revise the project selection criteria to incorporate language contained in the new strategic goals and objectives;
- Provide that the Commission will use a performance-based process, subject to the mandates of state and federal law, to determine the amount to be allocated to each program funding category in order to achieve established performance outcomes;
- Specifies that changes in UTP funding levels may result from consideration of performance results;
- Updates definition of "project" pursuant to HB 20; and
- Respond to considerations of the POSC regarding improvements to planning and forecasting processes.

As TxDOT continues to collaborate with planning partners, legislative committees, and the POSC, additional rule changes may be needed to further refine the processes that will guide project selection criteria and funding distributions.

NEXT STEPS

During the course of the next six months, TxDOT and its partners will continue to refine the planning and programming measures currently in use. These efforts will include:

- **Administrative Planning Rule Changes** - The proposed changes to administrative planning rules will be presented to Commission in September 2016 for approval. Following approval, the proposed changes will go through a period of public involvement and be presented to the Commission for final adoption in mid-December. Additional rule changes may be needed in follow-up to recommendations included in the House and Senate select committees report on HB 20, and the Sunset Advisory Commission's Final Report.
- **Additional "Stress" Testing of Performance Measures and Metrics** - TxDOT is working with the Texas A&M Transportation Institute and others to develop additional tools and methodologies for "stress testing" the application of performance measures and metrics for category and project funding decisions.
- **Federal Performance Management Efforts** - TxDOT has, and will continue to work with MPOs through the Texas Association of Metropolitan Planning Organizations (TEMPO) to review and respond to federal performance management requirements. In this effort, TxDOT is working to establish a balance between federal and HB 20 performance requirements to minimize confusion that may result from the application of varying measures and metrics, and burden on TxDOT staff and planning organizations.
- **Future UTP Development** - Consistent with administrative planning rule changes noted above; the coming months staff will present recommendations to Commission on candidate projects for Connectivity, Congestion, and Strategic Priority funding and release draft planning and funding targets to guide the development of the 2018 UTP, and the Commission will take action on these proposals.
- **10-Year Plans** - TxDOT staff will continue to work, through the POSC and TEMPO, to assist planning organizations with development of their individual 10-year plans, including the application of project selection criteria on the local level.

CONCLUSION

The process of developing and applying a performance-based planning program is one of continuous improvement that guides day-to-day operations, both within TxDOT and with our planning organizations. It is an iterative process that will require constant review and refinement. As new tools are developed, more robust data will become available for analysis and application to project selection and funding.

APPENDIX A

Proposed System Performance Measures

Proposed System Performance Measures							
TxDOT Goal	TxDOT Objective	Key Performance Measure (KPM)	KPM Definition	Results			
				2012	2013	2014	2015
Optimize System Performance	Mitigate Congestion	Total Average Delay Per Person	Total Average Delay per person calculated as total annual hours of delay for all vehicles on Texas roadways divided by estimated population of state. Measure provides average annual delay per person for state inclusive of passenger vehicles and commercial trucks.	Data incomplete	28.31	28.31	Released in Oct.
			Congestion Index (Travel Time Index) indicates relative increase in travel time due to congestion in urban areas. Is ratio of peak-period travel time as compared to free-flow travel time. Measure of average congestion in designated urban areas (Pop. over 50,000).	Data incomplete	1.2	1.19	Released in Oct.
	Reliability Index	Truck Reliability Index	Free-flow travel time is capped at speed limit. Averages taken by segment in 15 minute intervals across urban areas, road sections. Time periods are weighted by vehicle miles travelled (VMT). Optimal index of 1.0 means traffic is free to travel at posted speed limit.	Data incomplete	1.65	1.57	Released in Oct.
			Urban - Reliability Index (Planning Time Index) is ratio of 95th percent peak-period travel time to free-flow travel time. Is measure of heaviest traffic. (Pop. Over 50,000).	Data incomplete	1.17	1.18	Released in Oct.
Facilitate movement of freight and international trade	Border Crossing Travel Time	Border Crossing Travel Time is calculated as aggregated average time it takes for total truck traffic volume to exit border crossing process after joining queue before Custom and Border Protection (CBP) primary inspection booth.	Rural - Reliability index represents how much total time should be allowed to ensure on-time arrival. Value of 2.5 means 75 min. should be planned for 30 min. trip during free flow travel.	Data incomplete	1.41	1.39	Released in Oct.
			Reliability Index (Planning Time Index) is ratio of 95th percent peak-period travel time to free-flow travel time along rural interstate and trunk system highways. Indicator of frequency of disruption and delay on rural highway system during peak travel periods.	Data incomplete	1.41	1.39	Released in Oct.
			Index represents how much total time should be allowed to ensure on-time arrival. Value of 1.5 means 4.5 hrs should be planned that for trip that would take 3 hrs during free-flow travel.	Data incomplete	1.41	1.39	Released in Oct.
			Border Crossing Travel Time is calculated as aggregated average time it takes for total truck traffic volume to exit border crossing process after joining queue before Custom and Border Protection (CBP) primary inspection booth.				
			At international port of entry (POE), truck tagged with RFID reader will go through four reader locations: R1 - MX street before MX Aguanga; R2 - Toll booths in Mexico; R3 - CBP Primary Inspection; R4 - Exit DPS Facility.				
			Border Crossing Travel Time is the segment defined as R2 - R4: This trip segment can be used to estimate crossing time from end of inspection and toll payment processes in Mexico to exit into U.S. roadway system.				Awaiting data and analysis from TTI - Currently report 7 ports of entry separately on an average daily/monthly basis. Have requested aggregated index and quarterly view.

Proposed System Performance Measures								
TxDOT Goal	TxDOT Objective	Key Performance Measure (KPM)	KPM Definition	Results				
				2011	2012	2013	2014	2015
Preserve Our Assets	Maintain and preserve system infrastructure to achieve a state of good repair and mitigate asset deterioration	Overall Bridge Condition Score	Bridge Condition Score is a quantitative score assigned to each bridge based on lowest/most severe Bridge Inspection Condition Rating (0 thru 9) found during inspection for following components: deck, superstructure, substructure, or culverts. Each component's rating is individually recorded and lowest/most severe rating is assigned to that bridge for basis of its final condition rating. This score is in use today. Statewide Bridge Condition Score is calculated based on individual Bridge Condition Scores weighted by deck area.	89.1%	89.1%	89.1%	89.2%	89.2%
		Overall Pavement Condition Score	Pavement Condition Score is a mathematical combination of ride quality and pavement distress, adjusted for traffic and speed. A score of 70 and above indicates a "Very Good" or "Good" condition rating. This score is in use today. Ride quality is calculated from pavement roughness. Pavement distress is calculated by measuring structural rut data and visual deterioration such as cracking, patching, and punch outs. This data is recorded into the Pavement Management Information System (PMIS). In future, KPM will be split into three highway classifications for detail: NHS Interstate, Non-Interstate NHS, and Non-NHS.	86.5%	88.3%	87.2%	86.9%	87.3%
Promote Safety	Reduce crashes and fatalities by continuously improving guidelines and innovations along with increased targeted awareness and education	Fatality Rate	Fatality Rate is calculated using number of fatalities in reportable motor vehicle traffic crashes, total roadway miles, and average daily traffic volume within a calendar year. Formula is as follows: Fatality Rate = $(D \times 100M) / (S \times Y \times 365)$ *Based on projected VMT. Final #'s released in Oct.	1.29	1.44	1.39	1.46	1.43*
		Total Traffic Fatalities by Calendar Year	Total Fatalities calculated as number of fatalities in reportable motor vehicle traffic crashes. Reportable motor vehicle traffic crash is defined as any crash investigated by officer and processed by report date, involving motor vehicle in transport that occurred or originated on traffic way, resulting in injury to or death of person, or damage to property to apparent extent of \$1,000.	3,067	3,417	3,407	3,536	3,531

Proposed System Performance Measures								
TxDOT Goal	TxDOT Objective	Key Performance Measure (KPM)	KPM Definition	Results				
				2013	2014	2015	2016 YTD	
Promote Safety (Continued)	Reduce crashes and fatalities by continuously improving guidelines and innovations along with increased targeted awareness and education (Continued)	Total Fatalities by Type	Total Fatalities is calculated as number of fatalities in reportable motor vehicle traffic crashes (see Total Fatalities).	Run off Road	1,345	1,378	1,256	530
			Total Fatalities by Type provides detail for Total Fatalities KPM. Break down includes (among others) DUI, Run Off Road, Distracted Driver, and intersection related fatalities.	DUI	1,387	1,407	1,315	440
			Note: Sum of these fatality types will not equate to overall statewide fatality count due to duplication factor. Many crashes are included in several categories.	Distracted Driving	466	482	475	198
				Intersections	777	823	806	328
				2011	2012	2013	2014	2015
		Total Traffic Serious Injuries by Calendar Year	Total Serious Injuries is calculated as number of serious injuries in reportable motor vehicle traffic crashes.	14,775	16,175	16,783	17,132	17,028
		Serious Injury Rate	Serious Injury is defined as incapacitating injury (severe injury that prevents continuation of normal activities; includes broken or distorted limbs, internal injuries, and crushed chest). Reportable motor vehicle traffic crash. See above definition. Serious Injury Rate is calculated using number of serious injuries in reportable motor vehicle traffic crashes, total roadway miles, and daily traffic volume within a calendar year. Formula is as follows: Serious Injury Rate = (D x 100M) / (S x Y x 365) *Based on projected VMT. Final #s released in Oct.	6.22	6.80	6.86	7.05	6.90*