SUNSET ADVISORY COMMISSION STAFF REPORT WITH COMMISSION DECISIONS

Texas Department of Transportation



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Texas Department of Transportation

Sunset Staff Report with Commission Decisions 2016-2017

85th Legislature

HOW TO READ SUNSET REPORTS

Each Sunset report is issued *three times*, at each of the three key phases of the Sunset process, to compile all recommendations and action into one, up-to-date document. Only the most recent version is posted to the website. (**The version in bold is the version you are reading.**)

1. SUNSET STAFF EVALUATION PHASE

Sunset staff performs extensive research and analysis to evaluate the need for, performance of, and improvements to the agency under review.

FIRST VERSION: The *Sunset Staff Report* identifies problem areas and makes specific recommendations for positive change, either to the laws governing an agency or in the form of management directives to agency leadership.

2. SUNSET COMMISSION DELIBERATION PHASE

The Sunset Commission conducts a public hearing to take testimony on the staff report and the agency overall. Later, the commission meets again to vote on which changes to recommend to the full Legislature.

SECOND VERSION: The Sunset Staff Report with Commission Decisions, issued after the decision meeting, documents the Sunset Commission's decisions on the original staff recommendations and any new issues raised during the hearing, forming the basis of the Sunset bills.

3. Legislative Action Phase

The full Legislature considers bills containing the Sunset Commission's recommendations on each agency and makes final determinations.

THIRD VERSION: The Sunset Staff Report with Final Results, published after the end of the legislative session, documents the ultimate outcome of the Sunset process for each agency, including the actions taken by the Legislature on each Sunset recommendation and any new provisions added to the Sunset bill.

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Sunset Commission Decisions

Summary

The following material summarizes the Sunset Commission's decisions on the staff recommendations for the Texas Department of Transportation (TxDOT), as well as modifications raised during the public hearing.

After a decade of intense legislative scrutiny including multiple Sunset reviews, frequent leadership changes, and continuing organizational flux, TxDOT is now embarking on another high-stakes transition as it prepares to spend billions of dollars in new funding provided by voters and the Legislature. While this new funding represents a historic opportunity for the state, it also poses a significant challenge for the department to plan, select, and deliver projects effectively and transparently.

Generally, the Sunset Commission found the department has made good-faith efforts to address previous concerns, but improvements most critical to its ability to meet high expectations are far from complete. Chief among these improvements is a continued push toward a more transparent and performance-based planning and project selection process — a longstanding legislative goal, but still a work in progress. TxDOT also needs to quickly rectify well-documented inefficiencies in its project development pipeline, which have led to persistent over-time and over-budget highway projects. The commission also recommends giving TxDOT additional contract management tools to improve timeliness of the department's frequently delayed construction projects. Lastly, because the department is tentatively on the right track, the Sunset Commission recommends continuing TxDOT for the standard 12-year period to allow time to stabilize the department and complete tasks critical to meeting the challenges at hand.

Issue 1

TxDOT's Progress Toward a More Transparent, Performance-Based Transportation Planning Process Is Far From Complete.

Recommendation 1.1, Adopted — Require TxDOT to adopt one clear set of overall transportation system goals and associated measures to consistently carry through all planning documents.

Recommendation 1.2, Adopted — Require TxDOT to publish an analysis illustrating the link between funding decisions in the Unified Transportation Program and progress toward overall transportation goals.

Recommendation 1.3, Not Adopted — Require TxDOT to revise its approach to distributing transportation funding to better align with established priorities and performance goals.

Recommendation 1.4, Adopted — Require TxDOT to create a prominently displayed online dashboard report clearly communicating the adopted goals for Texas' transportation system and regularly updating progress toward meeting them.

Recommendation 1.5, Adopted — Require TxDOT to evaluate a project's strategic need and potential impact on transportation goals before and separately from other factors when selecting and prioritizing projects.

Recommendation 1.6, Adopted — Require TxDOT to clarify roles and responsibilities of the department and planning organizations through a rulemaking process.

Recommendation 1.7, Adopted — Require TxDOT to adopt rules streamlining and clarifying public information requirements relating to changes to the Unified Transportation Program.

Recommendation 1.8, Modified — Require TxDOT to regularly evaluate and make improvements to the online project tracker system and adopt related rules.

Also direct TxDOT to develop materials to increase awareness and use of the online project tracker tool for local elected officials. (Management action – nonstatutory)

Recommendation 1.9, Modified — In lieu of staff Recommendation 1.9, request the House Committee on Transportation and the Senate Committee on Transportation to provide necessary oversight of the state's significant transportation investment and TxDOT's progress toward performance-based planning. As a related management action, direct TxDOT to provide detailed status reports and any other information requested by the committees. (Recommendation to Legislative Committees – nonstatutory; see Adopted Language, page A9)

Issue 2

TxDOT Must Quickly Finalize Ongoing Project Development Fixes to Eliminate Backlogs and Prepare for the Future.

Recommendation 2.1, Adopted — Require TxDOT to finalize implementation of its new project portfolio review process and publicly share resulting performance information.

Recommendation 2.2, Adopted — TxDOT should provide regular analysis and monitoring reports to the Transportation Commission about the department's efforts to correct issues with underperformance in key budget measures, letting controls, and right-of-way backlogs. (Management action – nonstatutory)

Recommendation 2.3, Adopted — TxDOT should develop a more risk-based, cross-functional focus to its internal project development activities. (Management action – nonstatutory)

Recommendation 2.4, Adopted — Direct TxDOT to regularly report on its progress implementing the Modernize Portfolio and Project Management system to ensure visibility and oversight of this important but high-risk project. (Management action – nonstatutory)

Recommendation 2.5, Adopted — TxDOT should make efforts to improve proactive external stakeholder outreach to avoid conflicts with future planned transportation projects. (Management action – nonstatutory)

TxDOT Lacks Critical Contract Oversight Tools to Efficiently Spend Billions in Taxpayer Dollars and Better Deliver Construction Projects on Time.

Traditional Low-Bid Highway Contracts

Recommendation 3.1, Adopted — Require TxDOT to include a range of contract remedies in its traditional low-bid highway contracts.

Recommendation 3.2, Adopted — Require TxDOT to adopt rules implementing the existing statutory requirement to reflect accurate costs of project delays in liquidated damages.

Recommendation 3.3, Adopted — Require TxDOT to conduct contractor evaluations and consider past performance in determining bid capacity through a process defined in rule.

Recommendation 3.4, Adopted — Direct TxDOT to develop clear criteria for applying sanctions. (Management action – nonstatutory)

Recommendation 3.5, Adopted — Direct TxDOT to develop and implement a process for regular, centralized monitoring of construction contract delays. (Management action – nonstatutory)

Recommendation 3.6, Adopted — Direct TxDOT to develop criteria for applying project incentives such as milestone incentives and A+B bidding. (Management action – nonstatutory)

Recommendation 3.7, Adopted — Direct TxDOT to update production rate information for estimating project timelines and establish a schedule for regular revisions. (Management action – nonstatutory)

Professional Engineering Contracts

Recommendation 3.8, Adopted — Direct TxDOT to provide guidance for district management of construction engineering inspectors, including how to perform staffing analyses and manage these expanding contracts. (Management action – nonstatutory)

Recommendation 3.9, Adopted — Direct TxDOT to better monitor and enforce the existing requirement that professional service project managers complete engineering contractor evaluations. (Management action – nonstatutory)

Recommendation 3.10, Adopted — Direct TxDOT to improve the availability of comparative information needed for districts to effectively negotiate the scope of work for professional engineering contracts. (Management action – nonstatutory)

Oversight and Support of Newly Decentralized Functions

Recommendation 3.11, Adopted — Direct TxDOT to develop additional training and monitoring processes to oversee districts' management of large, complex contracts, such as design-build. (Management action – nonstatutory)

Recommendation 3.12, Adopted — Direct TxDOT to provide comprehensive guidance and monitoring for decentralized procurement of professional engineering services contracts. (Management action – nonstatutory)

Contract Review and Monitoring

Recommendation 3.13, Adopted — Direct TxDOT to develop a risk-based approach to centrally reviewing contracts. (Management action – nonstatutory)

Recommendation 3.14, Adopted — Direct TxDOT to update its signature authority based on risk, eliminating unnecessary delays while preserving the appropriate level of review. (Management action – nonstatutory)

Recommendation 3.15, Adopted — Direct TxDOT to develop and monitor performance measures for contract procurement. (Management action – nonstatutory)

Issue 4

TxDOT Has Not Taken Proactive Steps to Improve Contracting Opportunities for Disadvantaged Businesses.

Recommendation 4.1, Adopted — Direct TxDOT to align its business opportunity goal setting with state and federal guidelines to more actively promote higher participation. (Management action – nonstatutory)

Recommendation 4.2, Adopted — Direct TxDOT to develop a standard process for addressing failure to meet business opportunity program goals. (Management action – nonstatutory)

Recommendation 4.3, Adopted — Direct TxDOT to actively recruit new businesses for certification and provide training on contracting with TxDOT. (Management action – nonstatutory)

Recommendation 4.4, Adopted — Direct TxDOT to improve central monitoring and support for its business opportunity programs. (Management action – nonstatutory)

Recommendation 4.5, Adopted — Direct TxDOT to evaluate the small business enterprise program and develop policies and rules to provide meaningful opportunities for small businesses. (Management action – nonstatutory)

Recommendation 4.6, Adopted — TxDOT should streamline certification to actively certify SBE-eligible businesses and increase participation of businesses eligible for multiple programs. (Management action – nonstatutory)

Issue 5

TxDOT's Process Improvement Efforts Lack Clear, Measurable Results.

Recommendation 5.1, Adopted — Direct TxDOT to centrally coordinate and track results of business process improvement efforts, including the use of private management consultant contracts. (Management action – nonstatutory)

Recommendation 5.2, Adopted — Direct TxDOT to consider implementing a rapid process improvement program similar to the Texas Workforce Commission model. (Management action – nonstatutory)

TxDOT Does Not Effectively Oversee or Support Its 25 Districts.

Recommendation 6.1, Adopted — Direct TxDOT to actively and consistently monitor, evaluate, and report district performance. (Management action – nonstatutory)

Recommendation 6.2, Adopted — Direct TxDOT to improve communication with and support of the districts. (Management action – nonstatutory)

Issue 7

The State's Aging Aircraft Fleet Raises Questions About Its Future and Requires More Accountability for Its Use.

Recommendation 7.1, Modified — Require TxDOT to provide the Legislature a thorough range of analyses and options for deciding the future of the state aircraft fleet within its long-range fleet plan.

As part of the plan, require TxDOT to analyze how it could include capital costs in flight rates charged to customers, including, at a minimum, information about the potential impact on the fleet replacement schedule and customer utilization. Also clarify TxDOT's authority to include capital costs in flight services rates charged to customers if practicable, and create a subaccount within the State Highway Fund to collect funds for this purpose.

Recommendation 7.2, Adopted — Tighten statutory criteria for use of state aircraft to prioritize cost effectiveness and need over convenience.

Recommendation 7.3, Adopted — Clarify statute to specify state agency heads are responsible for ensuring their employees' use of state aircraft meets statutory criteria.

Recommendation 7.4, Adopted — Direct TxDOT to track specific statutory justifications for state aircraft use. (Management action – nonstatutory)

Recommendation 7.5, Adopted — Direct TxDOT to adopt a clear internal policy governing the appropriate use of the state aircraft fleet by department staff and regularly monitor usage. (Management action – nonstatutory)

Issue 8

Paper Crash Reports Increase Administrative Costs and Limit the Reliability and Timeliness of Vital Safety Data.

Recommendation 8.1, Adopted — Require law enforcement agencies to submit crash reports electronically to TxDOT by September 1, 2019.

Recommendation 8.2, Adopted — Eliminate the wasteful administrative requirement to submit drivers' crash report forms to TxDOT.

Texas Has a Continuing Need for the Texas Department of Transportation.

Recommendation 9.1, Adopted — Continue the Texas Department of Transportation for 12 years.

Issue 10

The Department's Statute Does Not Reflect Standard Elements of Sunset Reviews.

Recommendation 10.1, Adopted — Update the standard across-the-board requirement related to commission member training.

Recommendation 10.2, Modified — Discontinue two of TxDOT's reporting requirements and modify four others.

Also modify the required content of the existing Long-Term Plan for Statewide Passenger Rail to include analysis of

- short- and long-term impacts of a proposed passenger rail line on state and local road connectivity, including impacts to oversize/overweight vehicles and other commercial traffic; and
- impacts of a proposed line on statewide transportation planning, including impacts on future state and local road construction and maintenance needs.

Recommendation 10.3, Adopted — Direct TxDOT to more proactively implement and monitor its efforts to increase workforce diversity. (Management action – nonstatutory)

Fiscal Implication Summary

Overall, the Sunset Commission's recommendations to improve the efficiency of crash reporting would result in a net positive fiscal impact to the state of approximately \$3.3 million over the next five fiscal years, as described in the chart below. Many other recommendations are designed to improve internal operations and efficiency at the department, but their impact would ultimately depend on implementation, two of which are also highlighted below.

The recommendation to adjust liquidated damages to reflect road user costs could have a positive fiscal impact to the state, but the amount cannot be estimated without knowing the increased amount of liquidated damages, number of projects for which these liquidated damages would be applied, and length of time delayed.

The recommendation for TxDOT to provide additional options to the Legislature regarding the state aircraft fleet could have a fiscal impact if the analysis results in changes in use or composition of the fleet, such as considering the use of contracted flight services. In addition, clarifying TxDOT's authority to include capital costs in its rates could result in price increases to state agencies using the planes if TxDOT ultimately decides to use this authority. However, this approach, if feasible, could allow TxDOT to save for aircraft replacement needs over time, instead of requiring lump sum legislative appropriations. Finally, requiring agencies to prioritize cost effectiveness over convenience could result in more efficient use of the state aircraft and ultimately, savings to the state.

The recommendations to require electronic submission of law enforcement crash reports and eliminate an unnecessary driver crash report would have a net positive fiscal impact of \$40,470 in fiscal years 2018 and 2019, and about \$1.06 million positive impact beginning in fiscal year 2020 due to a reduction of two full-time equivalent positions and the elimination of the data entry costs associated with paper crash reports.

Texas Department of Transportation

Fiscal Year	Cost to the General Revenue Fund	Savings* to the State Highway Fund	Change in the Number of FTEs From 2017
2018	\$5,130	\$45,600	-1
2019	\$5,130	\$45,600	-1
2020	\$5,130	\$1,069,300	-2
2021	\$5,130	\$1,069,300	-2
2022	\$5,130	\$1,069,300	-2

^{*} TxDOT initially funds data entry costs from the State Highway Fund and then recoups the cost by billing the Federal Highway Administration.

ADOPTED LANGUAGE

Recommendation 1.9

Replace Recommendation 1.9 with a request to the House Committee on Transportation and the Senate Committee on Transportation to provide necessary oversight of the state's significant transportation investment and TxDOT's progress toward performance-based planning. The Sunset Commission would request the committees monitor TxDOT's

- overall planning, programming, and funding of the state's transportation system, particularly its response to increased funding availability;
- integration and reporting of long-range goals in the statewide transportation plan as related to annual funding allocation and project selection decisions;
- use of performance-based measures to allocate funds and select projects, including review of rules relating to funding categories and allocation formulas;
- internal department processes for planning, delivering, and evaluating projects according to performance criteria;
- collaboration with planning organizations and other transportation stakeholders;
- transparency and public information regarding the planning and project delivery process overall, including information regarding long-term transportation plans and goals, programming documents, and the online project tracker system;
- quality and availability of data and analysis tools to evaluate transportation system and TxDOT performance toward achieving established performance goals; and
- any other transportation planning matter the committees considers appropriate.

Each committee should adopt a meeting schedule in consultation with TxDOT at least twice per year at similar or approximate times (fall/spring) for at least four years, to monitor the annual adoption and subsequent update process for the Unified Transportation Program.

As a related management action, TxDOT should support the committees as requested, including, at a minimum, providing all needed data and information relating the committee's oversight activities. TxDOT should also provide a detailed report with a status update and information on each of the items listed above, and any other information requested by the committee prior to each meeting.

SUMMARY OF SUNSET STAFF RECOMMENDATIONS

SUMMARY

The Texas Department of Transportation (TxDOT) has reached another pivotal moment in its long and often turbulent history. After a decade of intense legislative scrutiny including multiple Sunset reviews, frequent leadership changes, and continuing organizational flux, TxDOT is now embarking on another high-stakes transition as it prepares to spend billions of dollars in new funding. Over the next 10 years, this amount could top \$80 billion, more than double previous funding estimates, primarily due to voter approval of Propositions 1 and 7 and the Legislature's ending of diversions from the State Highway Fund.

Given this significant new investment, one central question permeated the Sunset review: "Is TxDOT ready?" Though the department has a broader

transportation mission, the vast majority of TxDOT's overall funding, including its new state sources of revenue, is overwhelmingly restricted to highway projects. As a result, the review primarily evaluated TxDOT's core responsibilities. While this new funding represents a historic opportunity for the state, it also poses a significant challenge for the department to plan, select, and deliver projects effectively and transparently, a perennial area of concern.

TxDOT needs to stabilize and complete many half-finished tasks so it can meet the tremendous challenges at hand.

Generally, the review found the department has made good-faith efforts to address previous concerns, but improvements most critical to its ability to meet high expectations are far from complete. TxDOT needs to get out of its crisis mode mentality developed in previous times of change and funding uncertainty, and implement a more proactive and streamlined approach to delivering highway projects from beginning to end. Chief among these improvements is a continued push toward a more transparent and performance-based planning and project selection process—a longstanding legislative goal, but still a work in progress. TxDOT also needs to quickly rectify well-documented inefficiencies in its project development pipeline, which have led to persistent over-time and over-budget highway projects. Other recommendations aim to improve TxDOT's immense \$32 billion contracting operation, primarily with tools to improve timeliness of the department's frequently delayed construction projects.

Because the department is tentatively on the right track, continuing TxDOT without another wholesale reinvention would allow the department much needed time to stabilize and complete many half-finished tasks critical to meeting the tremendous challenges at hand. While continued legislative scrutiny is certainly warranted especially with the new funding, the Legislature can still keep a close watch on TxDOT in other ways until the next Sunset review, such as through the joint oversight committee recommended in this report. Also, since TxDOT's highway building work occurs over a long time horizon, recommended changes will take several years to fully implement and determine ultimate impact.

The following material summarizes the Sunset staff recommendations as previously discussed, as well as improvements for several other functions of the Texas Department of Transportation.

Issues and Recommendations

Issue 1

TxDOT's Progress Toward a More Transparent, Performance-Based Transportation Planning Process Is Far From Complete.

Beginning with the 2009 and 2011 Sunset reviews and more recently through House Bill 20 in 2015, the Legislature has required TxDOT to develop a more transparent and performance-based project planning process. The Sunset review identified persistent challenges requiring attention to ensure the department fully implements past and ongoing improvements, given that many decisions about how to use significant new funding are yet unmade and untested. The review found TxDOT still does not clearly communicate how funding decisions impact the state's overall transportation goals. Long-range plans remain disjointed; funding allocation decisions lack clear, objective analysis to understand and explain tradeoffs; and overall performance reporting lags behind best practices. When selecting and prioritizing projects, TxDOT's approach tends to validate the status quo instead of ensuring the highest-priority projects receive the most focus and attention. TxDOT also continues to struggle with providing useful information and opportunities for meaningful public input.

Key Recommendations

- Require TxDOT to adopt one consistent set of statewide transportation goals, revise its approach
 to distributing funding to better align with these goals, and better analyze and report on the impact
 of funding decisions.
- Require TxDOT to update its approach to project prioritization, evaluating a project's strategic need and impact on transportation goals before other factors.
- Require TxDOT to streamline and clarify public information requirements relating to its key 10-year planning document and improve the online project tracker system.
- Maintain oversight of TxDOT's delivery of significant new funds and progress toward performancebased planning through a joint oversight committee.

Issue 2

TxDOT Must Quickly Finalize Ongoing Project Development Fixes to Eliminate Backlogs and Prepare for the Future.

As currently structured, TxDOT's project development process is not meeting expectations and is not prepared to effectively handle the influx of new transportation funding projected to double over the next decade. TxDOT has not met key on-time or on-budget measures for several years, indicating underlying problems with the department's management of its project portfolio through complex steps including environmental review, design, and right-of-way acquisition. Additionally, TxDOT administration does not regularly monitor and analyze performance problems at key points in the project development

pipeline to address issues as they arise. TxDOT's ad hoc approach to project development and backlogs in right-of-way and utility relocation processes have prevented a more forward-thinking, collaborative, and risk-based approach to delivering projects. Though TxDOT is aware of these problems and has taken recent steps in the right direction to address them, the efforts were too new to fully evaluate during the Sunset review. Also, TxDOT's long-term fixes heavily depend on a high-risk and currently troubled information technology project.

Key Recommendations

- Require TxDOT to finalize implementation of its new project portfolio review process and publicly share resulting performance information.
- Direct TxDOT to regularly analyze performance and report on its progress addressing several problem areas, including on-time, on-budget construction; right-of-way backlogs; and the Modernize Portfolio and Project Management information technology project.
- TxDOT should develop a more risk-based, cross-functional focus to its internal project development
 activities and improve proactive external stakeholder outreach to avoid conflicts with future planned
 transportation projects.

Issue 3

TxDOT Lacks Critical Contract Oversight Tools to Efficiently Spend Billions in Taxpayer Dollars and Better Deliver Construction Projects on Time.

In evaluating TxDOT's \$32 billion contracting operation, the Sunset review focused on the types of contracts that will be most impacted by the significant transportation funding increase on the horizon: traditional low-bid highway contracts, professional engineering services contracts, and large strategic contracts such as design-build. TxDOT lacks standard, effective remedies and oversight tools to quickly address construction delays caused by poorly performing contractors, which have resulted in significant negative impacts on businesses and the traveling public in recent years. The department also has not fully developed the use of contractor incentives such as milestone payments to effectively shorten construction time for targeted projects. TxDOT also has not provided basic tools to assist its districts in managing a dramatic increase in the use of outsourced construction engineering inspectors, risking inefficient use and poor oversight of the critical quality assurance role these inspectors provide. Additionally, TxDOT recently decentralized responsibility for managing large, complex strategic contracts such as design-build without a clear plan for ensuring effective accountability and oversight. Finally, TxDOT's administrative approach to centralized contract approvals does not match level of risk with level of review, potentially causing unnecessary delays in negotiating and executing contracts as its volume of contracts continues to rise.

Key Recommendations

- Require TxDOT to include a range of contract remedies in its traditional low-bid highway contracts
 and adopt rules to ensure its liquidated damages accurately reflect the cost of project delays.
- Require TxDOT to conduct contractor evaluations and consider past performance in determining bid capacity through a process defined in rule.

- Direct TxDOT to develop criteria for applying project incentives such as milestone payments.
- Direct TxDOT to provide guidance for district management of construction engineering inspectors, including how to perform staffing analyses and manage these expanding contracts.
- Direct TxDOT to provide additional guidance and training for newly decentralized responsibilities such as managing design-build contracts and certain professional engineering services procurements.
- Direct TxDOT to develop a risk-based approach to reviewing and approving contracts.

TxDOT Has Not Taken Proactive Steps to Improve Contracting Opportunities for Disadvantaged Businesses.

The department administers three separate business opportunity programs intended to help level the playing field for small, minority-, and women-owned businesses to contract with the state. However, TxDOT has not done enough to effectively manage these programs to provide meaningful opportunities. For example, TxDOT does not strategically set or monitor participation goals and lacks a standard process for addressing missed goals. Overlapping certifications among the three programs combined with gaps in outreach efforts limit full participation of eligible businesses. TxDOT also does not ensure proper quality assurance and support for day-to-day program implementation decentralized throughout the department. Finally, TxDOT's largely dormant small business enterprise program does not currently provide meaningful opportunities for small businesses and needs further evaluation as to its future role.

Key Recommendations

- Direct TxDOT to set more meaningful goals for its business opportunity programs and streamline certification to increase participation of businesses eligible for multiple programs.
- Direct TxDOT to improve central monitoring and support for its business opportunity programs.
- Direct TxDOT to evaluate the small business enterprise program and develop policies and rules to provide meaningful opportunities for small businesses.

Issue 5

TxDOT's Process Improvement Efforts Lack Clear, Measurable Results.

Despite spending more than \$100 million on private management consulting contracts to improve performance since 2010, TxDOT has little information to clearly evaluate the results of these multiple, expensive efforts. TxDOT does not centrally track or evaluate these contracts and lacks criteria needed to ensure efficient use of existing internal resources already dedicated to performance improvement. The Texas Workforce Commission offers a better model for a successful and less expensive approach to improving performance.

Key Recommendation

 Direct TxDOT to centrally coordinate and track results of business process improvement efforts, including the use of private management consultant contracts, and consider implementing a rapid process improvement program similar to the Texas Workforce Commission.

TxDOT Does Not Effectively Oversee or Support Its 25 Districts.

TxDOT has not sufficiently mitigated the disadvantages inherent in its decentralized organizational structure. With the state's vast size and the widely varied challenges faced by TxDOT's 25 districts, a decentralized approach to project delivery is understandable from a practical standpoint, but the Sunset review found several examples in which central office divisions in Austin, such as construction and design, do not clearly communicate expectations or sufficiently monitor district performance. A generally hands-off approach to monitoring districts jeopardizes the department's ability to effectively detect and address performance problems. As a result, TxDOT administration does not have enough overall management information, and districts do not receive the support and feedback they need.

Key Recommendations

- Direct TxDOT to actively and consistently monitor, evaluate, and report district performance.
- Direct TxDOT to improve communication with and support of the districts.

Issue 7

The State's Aging Aircraft Fleet Raises Questions About Its Future and Requires More Accountability for Its Use.

The Legislature currently lacks adequate information to address the future of the state's aging aircraft fleet, which should include the possibility of replacing current aircraft as well as other ways of providing flight services, such as contracted charter services. In addition, unclear lines of accountability provide little oversight and direction for use of the fleet. Although general state law for agency travel prioritizes cost effectiveness as a primary consideration in travel decisions, statute does not clearly assign responsibility for verifying appropriate use of the fleet. Even TxDOT, the largest user of the fleet, does not ensure its use is cost effective. Overall, state law governing fleet usage is too broad and enables convenience, rather than cost effectiveness, to be a key reason for using the fleet.

Key Recommendations

- Require TxDOT to provide the Legislature a thorough range of analyses and options for deciding the future of the state aircraft fleet within its long-range fleet plan.
- Tighten statutory criteria for use of state aircraft, prioritizing cost effectiveness and need over convenience, and specify state agency heads are responsible for ensuring their employees' use of state aircraft meets statutory criteria.
- Direct TxDOT to adopt a clear internal policy governing the appropriate use of the state aircraft fleet by department staff and regularly monitor usage.

Paper Crash Reports Increase Administrative Costs and Limit the Reliability and Timeliness of Vital Safety Data.

Statute allows paper-based submission of required crash reports to TxDOT by law enforcement agencies, adding administrative costs, delaying access to critical safety data, and increasing risk of data errors. Despite changes to TxDOT's crash records system making electronic crash report submission easier, many law enforcement agencies still submit reports by mail, costing TxDOT about \$1 million per year for data entry expenses. Statute also requires TxDOT to receive and retain crash reports from individual drivers without a clear government purpose, needlessly wasting additional state resources.

Key Recommendation

 Require law enforcement agencies to submit crash reports electronically to TxDOT by September 1, 2019 and eliminate the unnecessary driver crash report requirement.

Issue 9

Texas Has a Continuing Need for the Texas Department of Transportation.

The need for TxDOT's mission to plan, design, build, and maintain Texas' transportation infrastructure is here to stay and will increase as the state's population continues to grow. Though various controversies have surrounded the department over the years, TxDOT has generally made good-faith efforts to address previous concerns. Overall, the Sunset review concluded that the department needs time to stabilize, especially considering its numerous organizational changes over the last decade. Sufficient legislative and internal agency monitoring tools exist to provide ongoing oversight of TxDOT until the next Sunset review, including through the numerous recommendations in this report.

Key Recommendation

• Continue the Texas Department of Transportation for 12 years.

Issue 10

The Department's Statute Does Not Reflect Standard Elements of Sunset Reviews.

Based on standard elements evaluated as part of every review, Sunset staff identified several needed changes to TxDOT's statute and management practices. First, TxDOT's statute does not reflect updated requirements for commission member training. In addition, two of the department's reporting requirements are no longer necessary and four others need to be modified. Finally, TxDOT has continually struggled to improve its workforce diversity, repeatedly falling below statewide civilian workforce percentages for employment of African Americans, Hispanics, and women, yet has not fully implemented its own plans for improvement.

Key Recommendations

- Update the standard across-the-board requirement related to commission member training.
- Discontinue two of TxDOT's reporting requirements and modify four others.

• Direct TxDOT to more proactively implement and monitor its efforts to increase workforce diversity.

Fiscal Implication Summary

Overall, the recommendations in Issue 8 would result in a net positive fiscal impact to the state of approximately \$3.3 million over the next five fiscal years, as described in the chart below. Many other recommendations in the report are designed to improve internal operations and efficiency at the department, but their impact would ultimately depend on implementation, two of which are also highlighted below.

Issue 3 — Adjusted liquidated damages to reflect road user costs could have a positive fiscal impact to the state, but the amount cannot be estimated without knowing the increased amount of liquidated damages, number of projects for which these liquidated damages would be applied, and length of time delayed.

Issue 7 — Changes in use or composition of the state fleet could result in a fiscal impact. For example, TxDOT could sell or purchase aircraft, or develop an entirely new model for delivering flight services using contracted services. In addition, as a direct result of the recommendation requiring agencies to prioritize overall cost effectiveness over convenience, state agencies may use the state aircraft less frequently, resulting in savings to the state.

Issue 8 — The recommendations to require electronic submission of law enforcement crash reports and eliminate an unnecessary driver crash report would have a net positive fiscal impact of \$40,470 in fiscal years 2018 and 2019, and about \$1.06 million positive impact beginning in fiscal year 2020 due to a reduction of two full-time equivalent positions and the elimination of the data entry costs associated with paper crash reports.

Texas Department of	Transportation
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Fiscal Year	Cost to the General Revenue Fund	Savings* to the State Highway Fund	Change in the Number of FTEs From 2017
2018	\$5,130	\$45,600	-1
2019	\$5,130	\$45,600	-1
2020	\$5,130	\$1,069,300	-2
2021	\$5,130	\$1,069,300	-2
2022	\$5,130	\$1,069,300	-2

^{*} TxDOT initially funds data entry costs from the State Highway Fund and then recoups the cost by billing the Federal Highway Administration.

TXDOT AT A GLANCE
NOVEMBER 2016

TXDOT AT A GLANCE

The Legislature established the Texas Department of Transportation (TxDOT) as the Texas Highway Department in 1917. In the nearly 100 years since its creation, the department has taken on additional responsibilities, expanding its mission from providing funding and direction for county road construction programs to delivering a safe, reliable, and integrated transportation system that enables the movement of people and goods. To fulfill its mission, TxDOT performs the following key functions:

- Plans, constructs, maintains, and supports Texas' transportation system, including roads, bridges, public transportation, railroads, airports, the Gulf Intracoastal Waterway, and ferry systems
- Develops and operates a system of toll roads using public and private sector partners and financing options
- Manages operations on the state highway system, including improving traffic safety, providing rest areas and travel information, and regulating outdoor advertising

Key Facts

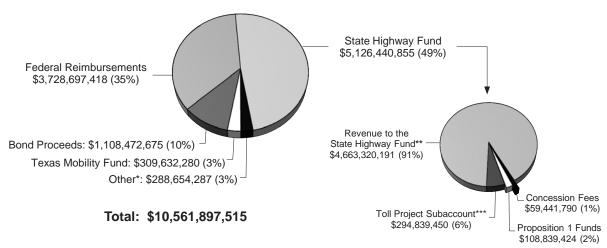
• Texas Transportation Commission. The Texas Transportation Commission provides policy direction and oversight for TxDOT through monthly meetings. The commission consists of five members appointed by the governor, with the advice and consent of the Senate. Statute requires the commission's membership to reflect Texas' diverse geography and population, and one representative must reside in a rural area.¹ The governor designates the commission's chair, and all commissioners serve staggered six-year terms. The chart, Texas Transportation Commission, shows the commission's current membership. Ten advisory committees provide recommendations to the commission on topics such as ports, public transportation, and freight, as detailed in Appendix A, Texas Department of Transportation Advisory Committees.

Texas Transportation Commission				
Nama	City	Qualification		

Name	City	Qualification	Term Expiration
Tryon D. Lewis, Chair	Odessa	Public Member (represents rural areas)	2021
Jeff Austin III	Tyler	Public Member	2019
J. Bruce Bugg, Jr.	San Antonio	Public Member	2021
Laura Ryan	Houston	Public Member	2017
Victor Vandergriff	Fort Worth	Public Member	2019

• **Funding**. In fiscal year 2015, TxDOT's method of finance totaled more than \$10.5 billion, mostly from state taxes and fees directed to the State Highway Fund, bond proceeds, and federal reimbursements. The pie chart on the following page, *Texas Department of Transportation Method of Finance*, shows the breakdown.

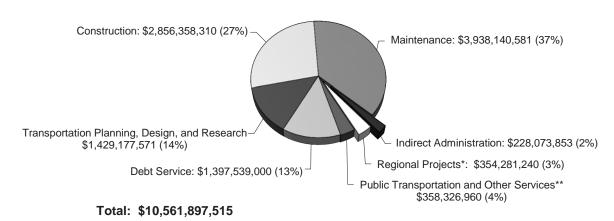
Texas Department of Transportation Method of Finance FY 2015



- * Includes general revenue, Transportation Infrastructure Fund, and interagency contracts.
- ** Primary sources of revenue include state motor fuels tax and motor vehicle registration fees.
- *** This account primarily consists of funds previously received for the right to develop and operate State Highway 121.

In fiscal year 2015, TxDOT's expenditures totaled more than \$10.5 billion. The department spent more than \$6.6 billion, or 64 percent of total expenditures, on highway construction and maintenance contracts. The pie chart, *Texas Department of Transportation Expenditures*, provides more detail.

Texas Department of Transportation Expenditures FY 2015



^{*} Tolled or non-tolled projects funded from the toll project subaccount or concession fees, which may only be spent in the region in which funds are derived.

TxDOT spends about 80 percent of its funding on contracts, primarily for professional engineering services and construction and maintenance projects. As described in Issue 4, TxDOT uses three different business opportunity programs to promote contracting opportunities for small, minority-, and women-owned businesses.² Appendix B, *Historically Underutilized Businesses Statistics*, describes TxDOT's use of state-certified historically underutilized businesses in purchasing goods and services for fiscal years 2013–2015.

^{**} Includes rail, aviation services, Gulf Intracoastal Waterway, ferries, traffic safety, and travel information.

Increased funding projections. Newly approved state funding sources as well as the 2015 federal transportation reauthorization bill — the Fixing America's Surface Transportation (FAST) Act — more than doubles TxDOT's projection for available highway funding over the next 10 years, to a total of more than \$80 billion. According to TxDOT's estimates, the \$48.6 billion in additionally projected funds over the next decade will come from the sources described in the table, *Newly Forecasted Highway Funding Sources*. Appendix C, 2017 Unified Transportation Program, provides a more detailed breakdown of how TxDOT plans to use \$38 billion of these additional funds for new highway projects over the next 10 years. The department plans to use the remaining \$10.6 billion to fund project development activities, such as right-of-way acquisition and engineering, which must occur prior to construction.

Newly Forecasted Highway Funding Sources FYs 2017–2026

Funding Measure	Source of Funds	Year Approved	Estimated Amount of Additional Funding FYs 2017–2026
Proposition 1 ³	A portion of oil and gas severance taxes	2014	\$8.5 Billion
Proposition 7 ⁴	A portion of sales tax and motor vehicle sales and rental tax	2015	\$27.2 Billion
House Bill 20 ⁵	Ending diversions from the State Highway Fund to the Department of Public Safety for law enforcement on state highways	2015	\$5.1 Billion
	Newly approved state sources of funding		
FAST Act ⁶	Federal funds newly forecasted in the Unified Transportation Program	2015	\$7.8 Billion
		Total	\$48.6 Billion

- Staffing. At the end of fiscal year 2015, TxDOT had 11,773 employees, with 2,869 employees located in TxDOT's Austin headquarters and 8,904 in 25 district offices throughout the state. The Brownwood district had the fewest employees with 187, while the Houston district had the most, with 985. See Appendix D, *Texas Department of Transportation Districts*, for a map of TxDOT's districts. Appendix E, *Equal Employment Opportunity Statistics*, compares TxDOT's workforce composition to the percentage of minorities in the statewide civilian labor force for the past three fiscal years. Issue 10 also discusses TxDOT's workforce composition in more detail.
- Transportation planning and programming. TxDOT works with a variety of local entities, including the state's 25 federally required metropolitan planning organizations, seven state-authorized rural planning organizations, nine regional mobility authorities approved by the Transportation Commission, and different types of local toll authorities. TxDOT and its partners work together to identify project needs, develop funding strategies, solicit public input, and plan projects through a series of planning documents and processes, as described in more detail in Issue 1. Appendix F, Key Transportation Entities, describes the responsibilities of these entities in more detail.

- Highway construction and maintenance. TxDOT constructs, operates, and maintains more than 80,000 centerline miles of federal and state roads in Texas, called on-system roads. On-system roads include federal interstates, U.S. and state highways, and farm- and ranch-to-market roads. The department implements projects through a series of planning and project development steps, which include planning and feasibility studies, public involvement, design, right-of-way acquisition, and, finally, construction. Issue 2 describes the project development process in greater detail. In addition to its traditional project development processes, TxDOT has limited authority to use design-build contracts and comprehensive development agreements typically for large, complex projects that may include a private funding component. In fiscal year 2015, TxDOT awarded 2,069 traditional, low-bid construction and maintenance contracts totaling nearly \$5 billion. TxDOT used its design-build and comprehensive development authority for two construction contracts executed, which totaled about \$1.1 billion.
- Toll operations. TxDOT operates 768 lane miles of toll roads and managed lanes throughout Texas. As shown in the accompanying textbox, *Local Entities Operating Toll Roads and Bridges in Texas*, several other entities throughout the state also build and operate toll roads. Toll revenue on TxDOT roads provides an alternative source of financing for the department, and TxDOT uses a variety of funding and planning mechanisms to construct and maintain toll roads. TxDOT's toll operations division processes toll collections and provides customer support, largely through a contract with a private vendor, for users of TxDOT-operated toll roads as well as those operated by four regional mobility authorities. In fiscal year 2015, TxDOT collected more than \$208 million on toll roads operated by the department.

Local Entities Operating Toll Roads and Bridges in Texas

- **Regional Mobility Authorities**. Four active regional agencies operate toll roads, such as 183A in central Texas and Toll 49 in northeast Texas.
- **Regional Toll Authority**. The sole regional toll authority in Texas, the North Texas Tollway Authority operates several toll roads in the Dallas-Fort Worth area, including the Dallas North Tollway and State Highway 121.
- **County Toll Authorities**. Three active county toll authorities operate toll roads in the greater Houston area, including the Sam Houston Tollway and the Katy Managed Lanes.
- Metropolitan Rapid Transit Authority. The Metropolitan Rapid Transit Authority of Harris County operates several high-occupancy toll lanes in the Houston area, which are open to carpools or drivers paying tolls.
- Toll bridges. Counties, cities, and private companies operate 25 toll bridges, most of which border or cross the Rio Grande into Mexico.
- Statewide transportation support. Though TxDOT's primary funding and focus is on constructing and maintaining roads, TxDOT also supports the state's overall transportation system, which includes bridges, rail, airports, waterways, public transportation, and traffic safety measures.
 - <u>Traffic safety and operations</u>. TxDOT oversees safety measures including signs, signals, and lighting. TxDOT also provides grants for safety improvements, manages a statewide crash records system, maintains dynamic traffic information signs, and coordinates several safety campaigns,

listed in the textbox, *TxDOT Traffic Safety Campaigns*. TxDOT provided \$123 million in traffic safety grants to law enforcement and other local agencies in fiscal year 2015, with \$48 million for safety campaigns.

Bridges. TxDOT administers the Bridge Inspection Program, inspecting all 53,875 Texas bridges, on and off the state highway system, at least biennially to determine their condition. TxDOT also maintains standards for bridge construction and prioritizes funding for bridge projects through the Highway Bridge Program based on current bridge conditions. TxDOT awarded \$230 million for bridge projects in fiscal year 2015, including \$170 million for on-system and \$60 million for off-system bridges. In fiscal year 2015, 82 percent of Texas bridges were rated in good or better condition. Bridges that are not rated good or better are still safe, as explained in the textbox, *Bridge Condition Ratings*. TxDOT closes bridges that do not meet safety standards.¹⁰

Freight mobility. The 2015 federal transportation reauthorization bill, known as the FAST Act, reallocated some federal funds to freight transportation. The Federal Highway Administration now requires all state departments of transportation to develop state freight plans detailing freight planning activities and priority projects for federal funds. The Transportation Commission created a Freight Advisory Committee to advise the state on freight mobility issues and assist in developing the first Texas Freight Mobility Plan, which the commission adopted in January 2016. The plan recommended more than 1,200 freight

mobility projects totaling about \$49 billion. Current funded projects include widening highways, improving entrance and exit ramps, and increasing bridge clearances.

Rail. TxDOT inspects rails and rail-highway grade crossings and installs signs at rail-highway crossings for safety. In fiscal year 2015, TxDOT completed 122,089 rail safety inspections and executed 183 agreements to support rail-highway crossing safety. TxDOT also assists public- and private-sector partners with freight and passenger rail projects by supporting planning efforts and performing environmental reviews. TxDOT is currently providing support for rail project studies including the Dallas-Fort Worth Core Express Service and the Neches River Rail Bridge. Additionally, TxDOT owns the 391-mile South Orient Rail Line, maintained and operated by a contractor, and provides limited assistance for public- and private-sector partners on planned high-speed passenger rail projects.

Waterways and ports. TxDOT's maritime division, created in 2012, provides support for Texas ports and waterways. As the non-federal sponsor of the Texas portion of the Gulf Intracoastal Waterway, TxDOT acquires upland dredged material placement areas to maintain the channel. In 2016, the Federal Highway Administration named the Texas portion of the Gulf Intracoastal Waterway a marine

TxDOT Traffic Safety Campaigns

- Click It or Ticket
- Teen Click It or Ticket
- Child Passenger Safety
- Be Safe. Drive Smart.
- Impaired Driving Campaigns
- Distracted Driving
- Motorist Awareness of Motorcycles

Bridge Condition Ratings

- Structurally deficient bridges have routine maintenance concerns or frequently flood, but do not pose a safety risk.
- Functionally obsolete bridges met design standards when built, but no longer meet current standards and may lack adequate lane or shoulder widths or vertical clearance to meet traffic needs.
- Substandard for load bridges are not classified as structurally deficient or functionally obsolete, but have a load capacity below the legal state limit.

highway, making it eligible for additional grant funding. TxDOT's Corpus Christi and Houston districts operate ferries on two routes, from Aransas Pass to Port Aransas and from Galveston to Port Bolivar. TxDOT also provides support for the Port Authority Advisory Committee, which studies and recommends port projects to the Transportation Commission.

In 2015, the Legislature approved up to \$20 million in funding from the Texas Mobility Fund for port capital improvement projects identified by the Port Authority Advisory Committee. The committee developed a list of 10 projects to improve on-system roads serving adjacent ports, totaling about \$20.3 million. In 2016, the Transportation Commission approved each of these projects for inclusion in the state's transportation plan, including, for example, road rehabilitation and widening to accommodate truck traffic around the Port of Victoria.

<u>Aviation grants</u>. TxDOT provides planning, capital improvement, and maintenance grant assistance to about 278 small general aviation airports. In fiscal year 2015, TxDOT awarded grants totaling nearly \$63 million in state and federal funds.

<u>Flight services</u>. TxDOT provides air charter and flight maintenance services for official state business, as described in Issue 7. In fiscal year 2015, TxDOT provided nearly 670 flights for about 2,400 passengers, with state agencies paying about \$1.15 million for these flights. TxDOT provided more than \$5.4 million in maintenance services for other state agencies' aircraft, primarily for the Department of Public Safety.

<u>Public transportation</u>. TxDOT provides planning and grant assistance to local public transportation providers and planning organizations, mostly in areas with a population below 200,000. Areas with a population over 200,000 are generally eligible for direct funding from the Federal Transit Administration. In fiscal year 2015, TxDOT awarded more than \$87 million in grants to public transportation providers to establish, maintain, or expand their systems.

- Travel information. TxDOT supports and promotes travel within Texas by providing information and services to highway users and the traveling public, including directional signs listing traveler services and a monthly magazine, *Texas Highways*. TxDOT operates 92 travel information centers and safety rest areas. TxDOT also manages the Don't Mess with Texas and Adopt-a-Highway programs to reduce litter on state highways and encourage citizen involvement in litter prevention programs. In fiscal year 2015, TxDOT spent about \$18.6 million to operate travel information programs.
- Outdoor advertising regulation. The federal Highway Beautification Act requires states to regulate billboards to remain eligible for federal transportation funding. State law also requires similar regulation of billboards along rural roads. In fiscal year 2015, TxDOT licensed 1,318 outdoor advertising operators and permitted 14,521 individual signs along federal-aid and rural roads. The department has also certified 29 cities to regulate outdoor signs within their jurisdictions on behalf of TxDOT. In fiscal year 2015, certified cities approved 4,290 outdoor signs.

All citations to Texas statutes are as they appear on http://www.statutes.legis.state.tx.us/. Section 201.051, Texas Transportation Code.

The federal Disadvantaged Business Enterprise (DBE) program applies to federally funded transportation projects and requires TxDOT to set a goal for purchasing from DBE-certified small minority and women-owned businesses. TxDOT's Small Business Enterprise (SBE) program, which applies to highway projects either funded entirely with state money or federally funded transportation projects without a DBE goal, requires TxDOT to set goals for purchasing from SBE-certified small businesses. The state's Historically Underutilized Businesses program applies to all other TxDOT purchasing and requires goals for purchasing from small, minority-, women-, and service-disabled veteranowned businesses.

- Sections 49-g(c-1)-(c-2), Article III, Texas Constitution.
- ⁴ Sections 7-c(a)-c(b), Article VIII, Texas Constitution.
- ⁵ Section 5, Chapter 314 (H.B. 20), Acts of the 84th Texas Legislature, Regular Session, 2015.
- ⁶ Fixing America's Surface Transportation Act, Pub. L. 114–94 (2015).
- ⁷ Section 370.031, Texas Transportation Code.
- ⁸ Centerline miles measure the total length of a road, rather than the total length of each individual lane. Lane miles measure the length of the road multiplied by the number of lanes.
 - 9 Sections 223.201 and 223.242, Texas Transportation Code.
- Texas Department of Transportation, *Bridge Inspection Manual* (2013), chap. 7, accessed November 3, 2016, http://onlinemanuals.txdot.gov/txdotmanuals/ins/bridge_programming.htm.
- ¹¹ In August 2016, the Texas Court of Appeals ruled that certain provisions of the Texas Highway Beautification Act violate the First Amendment of the U.S. Constitution, and the Texas attorney general filed a request for rehearing. As of November 2016, TxDOT continues to regulate billboards under current law pending final judgment in the case.

_____Issues

Issue 1

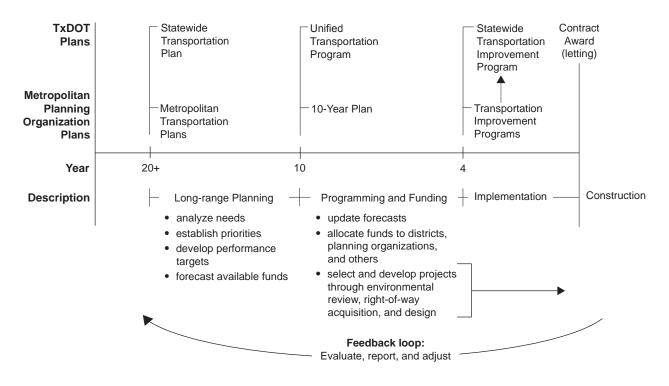
TxDOT's Progress Toward a More Transparent, Performance-Based Transportation Planning Process Is Far From Complete.

Background

The Texas Department of Transportation (TxDOT) is embarking on a high-stakes transition as it prepares for the significant funding increases entrusted to it by voter approval of Propositions 1 and 7, the Legislature's ending of diversions from the State Highway Fund, and newly projected federal funds. TxDOT currently estimates its highway project portfolio will double over the next decade — from about \$32 billion to more than \$70 billion. This funding increase represents a historic opportunity for the state, but also a significant challenge for the department to select, plan, and deliver projects effectively and transparently.

• Overview of transportation planning. TxDOT must navigate a complicated web of requirements and local partnerships to plan highway projects, mostly guided by federal law and the Federal Highway Administration. Federal requirements create a partnership between TxDOT and Texas' 25 metropolitan planning organizations, which play a key role in planning and selecting projects in urban areas with a population above 50,000. In the large rural areas of the state, TxDOT staff in the department's districts work with local officials to define needs and select projects, or in some cases, through the state's seven rural planning organizations. The *Transportation Planning Timeline* depicts the overall process.

Transportation Planning Timeline



Planning transportation infrastructure investments is not a quick process, at times taking 20 years or more. Federal and state laws require both statewide and locally developed plans on various timelines. Through these plans, TxDOT and its partners identify needs, develop long-range goals, estimate available funding, and select specific projects. In Texas, the state-required Unified Transportation Program (UTP) is TxDOT's key project implementation plan covering a 10-year planning horizon.² Through the UTP's annual update process, the Transportation Commission determines how much anticipated funding will be allocated to metropolitan planning organizations, TxDOT districts, the commission, and other partners to select and develop projects. Projects selected by TxDOT through the UTP in urban areas must also be approved by metropolitan planning organizations. Appendix C, 2017 Unified Transportation Program, shows the current projected UTP funding allocations for the next 10 years.

• Legislative focus on transportation planning. Beginning with the 2009 and 2011 Sunset reviews and more recently through House Bill 20 in 2015, the Legislature has pushed TxDOT toward a more transparent and performance-based planning process, summarized in the chart, Recent Legislative Themes — Transportation Planning Process. The state's performance focus aligns with a complementary federal focus, as federal law now also requires states to set and meet performance targets toward national highway performance goals.³ According to the Federal Highway Administration, performance-based planning and programming helps ensure that transportation investment decisions are made, both in long-term planning and short-term project selection, based on their ability to meet established priorities such as safety, asset management, congestion management, freight mobility, or economic development.⁴

Step in Planning Process	Senate Bill 1420, 82R, 2011 (Result of 2009 and 2011 Sunset Reviews) ⁵	House Bill 20 84R, 2015 ⁶
Long-range Planning	TxDOT's long-range planning is outdated and disjointed, resulting in disconnected goals, inconsistent forecasting, and unclear needs analysis.	The Texas Transportation Commission should examine transportation needs for the state as a whole, rather than on a region-by-region basis.
Project Selection Process	Project selection and prioritization is not understandable or transparent within the Unified Transportation Program.	Performance-based planning and programming would provide a framework to ensure transportation funds are distributed in an objective, transparent fashion.
Reporting and Transparency	TxDOT's reporting on the status of transportation planning and development to the public and the Legislature is not consistent or meaningful.	TxDOT should provide public accountability for each dollar spent by requiring that information be published in a format that is easy to understand.
Continuing Oversight	Short Sunset date (four years initially adopted, later extended to six years in House Bill 1675, 83R, 2013)	Creation of House and Senate Select Committees on Transportation Planning (set to expire in January 2017)

The current Sunset review evaluated TxDOT's ongoing efforts to implement these requirements in the context of the department's long-term planning horizon and the immense pressure to prepare for significant new funding. Though TxDOT has made good-faith efforts and some progress, the review identified several statutory barriers and other challenges requiring attention to ensure the department does not lose steam on these important efforts. Establishing processes that accomplish the Legislature's goals in a meaningful way will take several years and require TxDOT's continued and diligent focus.

Findings

TxDOT does not clearly communicate how funding decisions impact the state's overall transportation goals, frustrating understanding of how the department makes important decisions and measures progress.

Strategic goals in flux. Without consistently articulated long-range goals and a plan to measure them, TxDOT cannot effectively communicate its vision to internal and external stakeholders or be held accountable for progress. The table, *Inconsistent Communication of TxDOT's Strategic* Goals, shows at least five different public descriptions of TxDOT's overall strategies identified during the Sunset review. Though TxDOT updated Texas' long-range statewide transportation plan as required by the 2011 Sunset bill, the goals in this key plan are now out of sync with current decision making.⁷ While the basic themes among these various sets of goals do not vary dramatically, the inconsistent approach among TxDOT's planning efforts results in disjointed long-range planning with no clear connection to day-to-day decision making. Texas' transportation system requires a huge breadth of planning efforts to comply with many state and federal requirements that should all follow from TxDOT's overall strategic goals, from analysis of specific corridors needing improvement to an overall look at the movement of freight. TxDOT needs to harmonize its longrange statewide transportation goals among all of its planning efforts as a basic starting point for transparency and performance-based reporting.

The Sunset review identified at least five different descriptions of TxDOT's overall goals.

• Lack of objective information fixates funding decisions on who selects projects, instead of how best to achieve statewide goals. The Transportation Commission's current process for determining how much money to allocate to different statewide transportation goals tends to favor horse trading among various interests more than consideration

Inconsistent Communication of TxDOT's Strategic Goals

	Statewide	H.B. 20 –	TxDOT	Unified	Presentation to House
	Transportation	Preliminary	Strategic	Transportation	Select Committee on
	Plan ⁹	Report ¹⁰	Plan ¹¹	Program ¹²	Transportation Planning ¹³
	February 2015	March 2016	June 2016	August 2016	August 2016
Described Goals	Safety Asset management Mobility and reliability (people and freight) Multimodal connectivity (people and freight) Stewardship Customer service Financial sustainability	Safety Congestion Connectivity Best-in-class state agency District strategic priority	Deliver the right projects Focus on the customer Foster stewardship Optimize system performance Preserve our assets Promote safety Value our employees	Safety Congestion Connectivity Strategic priorities	Address safety Preserve assets (pavements) Preserve assets (bridges) Target congestion Enhance connectivity (urban) Enhance connectivity (rural)

The commission's process for allocating funds tends to favor horse trading more than performance information.

of performance information, when it should and can be the other way around. The commission's key decision each year is determining how much of the estimated funds available over its 10-year planning horizon to invest in each of the UTP's 12 funding categories. In August 2016, the commission allocated more than \$70 billion in estimated project funding to TxDOT's districts, divisions, metropolitan planning organizations, and its own discretionary program for project selection through these 12 categories over the next 10 years. Appendix C, 2017 Unified Transportation Program, provides a detailed listing of the categories and a breakdown of the commission's recent funding decisions.

Overall, the commission's decision-making process for allocating money to categories tends to get bogged down in discussions about how much money is flowing to urban versus rural areas, or to districts versus planning organizations. Though the names of the categories sound like statewide priorities for allocating funds to achieve overall goals, they do not actually function as such. Instead, the categories primarily serve to organize which entity selects projects according to various federal programs, state initiatives, and other funding streams, as shown in the chart, UTP Funding Categories by Project Selection Responsibility. While TxDOT evaluates and sets long-range targets for some factors such as the overall state of road and bridge repair, the amount of money the commission puts in each category does not actually provide a complete picture of the state's total investment in goals such as overall maintenance of the system. For example, though an urban corridor project funded through category two, such as widening a highway, would likely improve pavement conditions since these projects usually involve resurfacing the entire roadway, these

UTP Funding Categories by Project Selection Responsibility

Primary Project Selection Responsibility	Category Number — Description
TxDOT Districts	 1 - Preventative Maintenance and Rehabilitation 4 - Statewide Connectivity Corridor* 11 - District Discretionary (includes energy sector initiative)
TxDOT Divisions 6 – Structures Replacement and Rehabilitation (bridge division) 8 – Safety (traffic operations division)	
Metropolitan Planning Organizations	2 – Metropolitan and Urban Area Corridor 5 – Congestion Mitigation and Air Quality 7 – Metropolitan Mobility and Rehabilitation
Transportation Commission	12 – Strategic Priority (commission discretionary and congestion relief initiative)
Varies	3 – Non-Traditionally Funded (ex: Texas Mobility Fund) 9 – Transportation Alternatives Program (ex: bike, pedestrian, and rest areas) 10 – Supplemental Transportation Projects (ex: Green Ribbon landscape, state parks)

^{*} Currently proposed rule changes would allow category 4 projects to be selected by districts in partnership with metropolitan planning organizations. By current rule, the commission selects category 4 projects.

Note: Metropolitan planning organizations must concur with all projects developed within their regions.

types of cross-impacts are not well tracked or given enough consideration during the decision-making process. Also, statute unnecessarily prescribes some of the funding categories even though TxDOT is also required to adopt them in rule, making potentially needed revisions in light of new performance requirements unnecessarily difficult.¹⁴

TxDOT does not currently have well-developed, ingrained tools or processes in place to objectively analyze the potential impact of its category funding decisions across its overall strategic goals. Both House

Bill 20 and the 2011 Sunset bill previously targeted this gap between funding decisions and evaluative information needed to assess the impact of these decisions on overall performance, as shown in the textbox, Legislative Direction to Tie Funding Decisions to Outcomes. Emerging federal regulations are also clearly moving all departments of transportation toward more performance-based planning with detailed requirements.¹⁵ As a result of these pressures, planning organization stakeholders and TxDOT staff are now discussing the creation of a new analysis to better link category funding decisions to strategic goals and potential project outcomes, which is a step in the right direction. TxDOT has recently purchased technology tools to aid this analysis, but this effort is very much in its infancy. The department needs continued direction to ensure full implementation.

Legislative Direction to Tie Funding Decisions to Outcomes

House Bill 20 (2015)

"The commission by rule shall establish a performance-based process for setting funding levels for the categories of projects in the department's unified transportation program."

Section 201.9991(b), Texas Transportation Code

Senate Bill 1420 (2011) - previous Sunset bill

The department shall provide reports "that evaluate the effectiveness of the department's expenditures on transportation projects to achieve the transportation goal."

Section 201.808(c)(1), Texas Transportation Code

Given the varied interests in a state as large and diverse as Texas, transportation funding decisions will always be difficult, and no objective process could ever completely replace the policy decisions that the commission and other state leaders have a clear responsibility to address. However, Texans deserve to have at least some basic, publicly available performance information to better understand the tradeoffs involved in these funding decisions and to have as a basis for providing input and tracking progress.

• Lacking performance dashboards. TxDOT has not effectively implemented best practices directed by past Sunset reviews to develop performance reporting tools and online dashboards to clearly communicate information about the performance of Texas' transportation system to TxDOT administration, the commission, and the general public. ¹⁶ Though TxDOT now has a "performance results summary" page on its website, this information only lists legislative budget goals, not the state's adopted transportation goals, and does not provide any information about trends over time. ¹⁷ TxDOT has undergone an extensive internal review process over the last year to develop updated measures and key performance metrics, but these efforts were not finalized during the Sunset review. Appendix G, *Draft TxDOT Alignment of Performance-Based Planning Requirements*, depicts information from an internal TxDOT working paper showing

Texans deserve to have basic performance information to understand tradeoffs in transportation funding decisions.

existing measures TxDOT already has available to comply with federal and state performance reporting requirements, including H.B. 20. However, TxDOT has not yet finalized targets for all of these measures or publicized any preliminary results, an important step needed to begin tracking progress toward agreed-upon goals.

Many other state departments of transportation have better approaches to displaying performance information in an easy-to-understand format. For example, Virginia, Wisconsin, North Carolina, and Washington state all provide summary dashboard reports depicting the performance of the system overall and trends over time. TxDOT still has a long way to go to catch up to these efforts.

a long way to go to catch up to other states in displaying performance information.

TxDOT still has

An unclear approach to project selection and prioritization risks creating confusion between TxDOT and planning organizations as significant new money is put to use.

After the commission decides how much money to allocate to the 12 broad funding categories in the UTP, TxDOT, planning organizations, and other entities must do the hard work of identifying and selecting individual projects to develop. As TxDOT converts the more than \$38 billion in estimated new UTP funding into actual projects over the next decade, several elements of its project selection process and relationship with metropolitan planning organizations need clarification and revision to ensure most effective use of the new funding. In addition, most of the department's new funding comes from various tax revenue, and is subject to volatility. Given the high likelihood of funding fluctuations over the UTP's 10-year planning horizon, a meaningful and well-understood project prioritization process is critical so that TxDOT and its partners have clearly communicated contingency plans to address various funding scenarios.

TxDOT's project scoring formula gives equal weights to strategic need, funding availability, and readiness.

Existing project prioritization process validates status quo instead of advancing projects based on need or impact. TxDOT's current approach to prioritizing projects does not actually serve as a tool to evaluate which projects are strategically best, but rather works backwards to validate projects that are already in development. To comply with the 2011 Sunset bill and more recent requirements in H.B. 20, TxDOT developed a project scoring and prioritization process to rank each project in the UTP into three priority tiers, shown in the graphic on the following page, Project Ranking Scoring in the Unified Transportation Program. 19 However, TxDOT's formula gives equal weighting to whether a project is needed, how far along it is in development, and how much of its estimated cost is secured. Funding availability and project readiness are important factors for organizing work, and TxDOT must consider these elements as it stages project development activities and construction schedules. However, the evaluation of strategic need should be considered before, and separately from, the more practical scheduling considerations when selecting projects. The Sunset review identified several examples of planning organizations that better separate the

Project Ranking Scoring in the Unified Transportation Program

TxDOT Strategic Initiatives

34 Points

- Safety
- Congestion
- Connectivity
- Strategic Priorities

Project Development

33 Points

- Project phasing
- Project readiness (environmental; right of way; plans, specifications, and estimates)

Funding Availability

33 Points

- Secured/committed funding
- Current district cost estimates

Total Score out of 100

Threshold	Rank
>75	Tier 1
50–75	Tier 2
<50	Tier 3

Source: Texas Department of Transportation

evaluation and ranking of a project's need and potential impact from other considerations, such as the North Central Texas Council of Governments in the Dallas-Fort Worth region.²⁰ TxDOT should follow suit.

• Unclear communication of project priorities. As TxDOT and its partners begin developing more complex, high-impact projects with the new money, TxDOT should revisit its approach to describing and communicating project prioritization within the UTP. The Sunset review revealed that UTP priority tier rankings or what they mean have little impact for TxDOT frontline staff and most metropolitan planning organizations. The goal of prioritization is to help TxDOT staff, planning stakeholders, and the public understand and track how the department is focusing effort to achieve the state's transportation goals. Under the current system, TxDOT is missing an opportunity to use prioritization to help guide the significant effort required to shepherd projects through the complex development process with both internal staff and external partners, as intended by the 2011 Sunset recommendations. Issue 2 of this report further discusses TxDOT's project development inefficiencies stemming in part from a lack of risk-based project prioritization.

TxDOT also has not consistently implemented a requirement to identify major projects within the UTP and to provide additional reporting and public information about their progress.²¹ TxDOT initially developed a list of major projects to comply with requirements in the 2011 Sunset bill,

TxDOT's project priority rankings have little impact for frontline staff or metropolitan planning organizations.

but has not updated the list in recent years. Meanwhile, the commission has recently embarked upon several separate priority initiatives, including a congestion relief initiative called Texas Clear Lanes, which has its own website and listing of significant projects separate from the UTP.²²

TxDOT will not actually begin selecting projects with much of the new money until

February 2017.

Future project selection process for new money is currently unresolved. Though the commission decided how much money to allocate to each of the 12 funding categories when it adopted the 2017 UTP in August 2016, the department and its planning partners have not yet actually selected projects for much of the new funding, most of which will ultimately fund larger, more complex projects. These high-impact congestion relief projects and initiatives to increase connectivity within the state will require an increased level of coordination between planning organizations, TxDOT districts, and the Transportation Commission to prioritize, select, and successfully deliver. However, as of October 2016, TxDOT has not yet finalized guidance for how project selection should work for much of the new funding being estimated and made available for planning. In fact, TxDOT has identified four funding categories needing further consideration to ensure project selection processes have complied with the performance-based process required by H.B. 20, shown in the chart, 2017 UTP — Funding Categories Needing Additional Focus and Project Selection Review.²³ These categories make up 87 percent of the department's projected new funding in the UTP over the next decade. TxDOT currently plans to make a major update to the 2017 UTP in February 2017 to actually begin selecting projects with the new money, with a goal to select the first four years of new projects within the 10-year program. With so many critical decisions about how to use the new money yet unmade, the Legislature should continue to closely monitor TxDOT's progress.

2017 UTP — Funding Categories Needing Additional Focus and Project Selection Review

UTP Category	New Funding Added to 2017 UTP (\$Billion)	Percent of Total New \$38.3 Billion Added to 2017 UTP
2 – Metropolitan and Urban Area Corridor	\$11.2	29%
4 – Statewide Connectivity Corridor	\$11.2	29%
11 – District Discretionary (includes energy sector initiative)	\$2.4	6%
12 – Strategic Priority (commission discretionary and congestion relief initiative)	\$9.0	23%
Total	\$33.8	87%

Source: Texas Department of Transportation

• Vague requirements for new 10-year plans required of metropolitan planning organizations. TxDOT and its partners need to be on the same page now more than ever. While several of the state's 25 metropolitan planning organizations have sophisticated planning tools and many employees, most are very small organizations with few resources. House Bill 20 newly required planning organizations to develop 10-year plans to align with TxDOT's planning horizon in the UTP.²⁴ However, the law is silent on when these plans should be due, or how TxDOT should organize the process, provide funding forecasts and access to needed data, support planning organizations, or review results. Also, planning organizations have other federal planning requirements that could impact their ability to list projects in the 10-year plan, or develop the plan by certain deadlines. Though TxDOT is working to provide support as needed, requirements and expectations regarding the 10-year plans should be worked out comprehensively through a formal, open rulemaking process.

Despite good faith efforts, TxDOT continues to struggle with providing useful information and opportunities for meaningful input.

Improving the transparency of TxDOT's planning process was a central theme of the last Sunset review. While the current review concluded most stakeholders feel TxDOT's tone and overall openness has improved since 2008, the department has not yet effectively balanced its approach to public involvement and transparency for the UTP.

• Ineffective public input and revision process for the UTP. The 2011 Sunset bill required TxDOT to annually update the UTP in collaboration with local transportation entities, and to develop a more comprehensive public involvement policy for TxDOT generally, which the commission adopted in January 2011. 25,26 However, the UTP's public hearing requirements have not resulted in robust public engagement, as concluded in a 2014 internal audit which found no general public attended the hearings sampled, and very few individuals participated online. 27

In developing public hearing rules for the UTP, the commission went further than required by law, requiring a full public hearing process prior to final adoption of the UTP, any updates, and approval of any adjustments to the program due to changes to funding allocations.²⁸ As a result, the department is now bogged down in administrative revision requirements for the UTP, which may increase transparency but provide little benefit to actual public engagement. TxDOT conducted four separate, complete revision cycles in one year for the 2016 UTP, each requiring significant staff time.

Given the critical decisions that occur in the UTP, complete transparency of all administrative changes must always be reported to the commission at a public meeting and provided online. However, every change may not rise to the level of needing a lengthy hearing and public input process.

TxDOT conducted four separate revision cycles in one year for the 2016 UTP.

As it continues to develop the 2017 UTP, TxDOT needs to rethink its approach and develop a more comprehensive and targeted approach to seeking public input relating to the UTP. This approach should focus on communicating information about and seeking input at more limited, but critical decisions points, such as the commission's annual allocation decisions relating to TxDOT's strategic priorities.

• Poor usability of online project tracker. House Bill 20 allowed TxDOT to streamline the listing of individual projects in the UTP, focusing on certain types of projects that have the greatest impact and interest, such as new capacity projects, and exempting other more routine programs, such as safety and preservation, from many of the bill's requirements.²⁹ This change could help make the currently 1,200-page UTP a more digestible document, but also adds pressure to TxDOT's online project tracker system to continue to provide complete and transparent information for all projects.

TxDOT developed the project tracker online database of projects to comply with the 2011 Sunset bill, and has upgraded the technical aspects of the system several times since launching it.^{30,31} However, testing of the system during the Sunset review, as well as feedback from both internal department staff and external stakeholders, consistently indicated that the system is not as useful as it could be for understanding individual transportation projects. In particular, projects in the system have widely inconsistent descriptions and target milestone listings, making comparisons difficult. Also, the system does not provide certain information most members of the public would find most useful, especially estimated construction or project completion dates to indicate whether, when, and why construction may be occurring in their area.

Texas' significant investment in transportation infrastructure warrants continued oversight through a special joint committee.

- House Bill 20 committees expiring. The Legislature's current mechanism for providing focused oversight of TxDOT's planning process is set to expire in January 2017.³² House Bill 20 created two separate interim committees, the House and Senate Select Committees on Transportation Planning, which conducted multiple hearings, received reports from TxDOT on progress, and are due to release final reports in November 2016. As detailed above, TxDOT's work to select projects with the new money and link funding decisions to performance is far from complete, and ongoing legislative attention is needed to ensure continued progress.
- **Joint committees a common oversight tool**. The Legislature regularly creates joint committees to oversee issues of critical statewide importance, especially when investing significant funds in a new program or restructuring state government. For example, when the Legislature created the State Water Implementation Fund for Texas in 2013, it also created a joint committee to evaluate and provide recommendations on the Texas Water Development Board's implementation of the fund.³³ The Texas Water

H.B. 20 allows for a more streamlined UTP, so project tracker must continue to provide full transparency.

The Legislature created a joint committee to oversee \$8 billion in water projects, far less than TxDOT's new funds.

Development Board plans to finance \$8 billion in state water plan projects over the next decade with the fund, significantly less than the \$38 billion in new UTP funding TxDOT expects over the next decade.³⁴

Similarly, when the Legislature enacted Senate Bill 200 reorganizing the state's health and human services agencies in 2015 as a result of the Sunset review, it created the Health and Human Services Transition Legislative Oversight Committee to oversee the complex task of consolidating multiple agencies and minimizing disruption in service. This committee, including Senate, House, and public members, has provided a public forum for discussion, deliberation, and continued pressure to ensure the transfer of functions does not stall and the agencies address identified problems.

Recommendations

Change in Statute

1.1 Require TxDOT to adopt one clear set of overall transportation system goals and associated measures to consistently carry through all planning documents.

This recommendation would require TxDOT to clearly define a single set of transportation system strategies, target goals, and related performance measures in the statewide transportation plan, and ensure that TxDOT aligns all planning documents with these goals. Clear and consistent communication about the state's goals throughout all TxDOT planning documents and decision-making processes is essential to ensuring the department can clearly articulate its vision for the future, measure progress, and be held accountable as it delivers a significantly increased workload. In implementing this recommendation, TxDOT must ensure state goals also align with new federal requirements. TxDOT should complete the initial review and update by March 1, 2018.

1.2 Require TxDOT to publish an analysis illustrating the link between funding decisions in the Unified Transportation Program and progress toward overall transportation goals.

The intent of this recommendation is to solidify and build on TxDOT's recent internal effort to begin quantifying the link between progress toward performance goals and funding decisions for different types of projects in the UTP. This recommendation would help the Transportation Commission and stakeholders evaluate how different funding and project selection scenarios impact transportation goals, and fill an important gap of information needed to understand the effect of the commission's strategic funding investments within the UTP. As a related management action, TxDOT should make efforts to provide a preliminary analysis with available data to inform the 2018 UTP update process by March 1, 2017.

TxDOT would be required to

- comprehensively analyze how funding allocation and project selection decisions impact performance
 of transportation goals described in the statewide transportation plan, and provide this analysis as
 a decision tool to Transportation Commission members, planning organizations, and the public to
 inform UTP funding deliberations before final decisions are made;
- update the analysis as part of every formal update to the UTP, and as part of the annual statewide transportation report already required in law;

- make all of the analysis and reports timely available online in summary form; and
- provide documentation of the data and methodology used to generate the analysis.

1.3 Require TxDOT to revise its approach to distributing transportation funding to better align with established priorities and performance goals.

This recommendation would ensure TxDOT has the flexibility to build a more performance-based approach to its critical funding decisions according to the goals of H.B. 20, while also allowing for continued transparency and stakeholder involvement through an open rulemaking process. The recommendation would

- remove requirements for and references to specific funding categories from state law, and instead require TxDOT to adopt rules describing all funding categories and allocation formulas and specifying how each contributes to statewide transportation goals;
- require TxDOT to convene a stakeholder committee to evaluate the current funding categories and
 formulas in light of newly adopted strategic goals and ongoing development of performance metrics,
 and adopt related rules no later than September 1, 2018; and
- require TxDOT to conduct reviews of funding categories and allocation formulas at the same time
 the department evaluates performance goals as part of its required update to the long-range statewide
 transportation plan, usually every four years.

1.4 Require TxDOT to create a prominently displayed online dashboard report clearly communicating the adopted goals for Texas' transportation system and regularly updating progress toward meeting them.

TxDOT would be required to develop an online dashboard reporting system to display information about progress toward statewide transportation goals, as clearly defined through Recommendation 1.1, in an easy-to-navigate format. TxDOT should also regularly update this report and make the underlying methodology and data available. TxDOT must complete its associated internal key performance measures and targets and publish the first dashboard report online no later than March 1, 2018.

1.5 Require TxDOT to evaluate a project's strategic need and potential impact on transportation goals before and separately from other factors when selecting and prioritizing projects.

TxDOT would be required to first evaluate projects on potential contribution toward transportation goals, before considering issues relating to funding availability, project readiness, and other factors within the UTP. This recommendation would ensure TxDOT focuses on identifying projects with the greatest potential impact on achieving transportation goals, and better communicates its prioritized projects to stakeholders and the public.

As a related management action, TxDOT should make the department's implementation of current law regarding project priority tiers and major projects more useful and meaningful as a communication tool. TxDOT should relate these lists to new initiatives such as Texas Clear Lanes, ensuring updated information about the status of these major projects is readily available and understandable to stakeholders in a central location. These efforts would promote understanding about how TxDOT is focusing efforts and expenditures with significant new funding.

1.6 Require TxDOT to clarify roles and responsibilities of the department and planning organizations through a rulemaking process.

This recommendation would address gaps in the state's transportation planning statute and current rules by requiring TxDOT, through an open rulemaking process, to clarify the relationship between TxDOT and planning organizations. This clarification is essential as TxDOT and its partners embark upon a significantly expanded responsibility to collaborate on planning and project selection activities to deliver more complex projects in coming years. TxDOT would be required to convene a stakeholder group and adopt rules no later than September 1, 2018 addressing the following topics:

- Alignment of TxDOT's state and federal funding forecasts with those of planning organizations, including long-term planning assumptions, the 10-year planning forecast, and annual forecast updates
- Alignment of statewide project recommendation criteria developed by TxDOT with those of
 planning organizations relating to statewide transportation goals, particularly for major mobility
 projects requiring a mix of several funding sources selected by different entities
- TxDOT's timelines and review process for the new 10-year planning organization plans established by H.B. 20, considering the planning organizations' other deadlines and requirements in federal regulations
- TxDOT's process for allowing planning organizations direct access to TxDOT information systems, software, and technical assistance to assist in accomplishing statewide goals
- TxDOT's process for collaborating with planning organizations to regularly evaluate the availability, consistency, and quality of data and other information needed to fully develop a more performancebased transportation planning and project selection system

1.7 Require TxDOT to adopt rules streamlining and clarifying public information requirements relating to changes to the Unified Transportation Program.

This recommendation would add a requirement for TxDOT to adopt a policy comprehensively explaining its approach to public engagement and transparency related to the UTP. Without such a comprehensive policy, TxDOT has tended to conduct many low-engagement administrative processes at the expense of more meaningful public engagement on this important planning and project funding plan. However, the recommendation would clearly require TxDOT to always, at a minimum, post and provide reports to the Transportation Commission in a public meeting on any change to the program regardless of the ultimate rules for public hearings and approval. TxDOT would be required to convene a stakeholder group to develop the policy and adopt any needed rule changes by September 1, 2018.

1.8 Require TxDOT to regularly evaluate and make improvements to the online project tracker system and adopt related rules.

The recommendation would require TxDOT to conduct a comprehensive review of the project tracker system, using feedback from internal and external users of the system and advice from TxDOT's public involvement office. Improving the quality of this system is essential given the number of new projects that will be funded in coming years and because H.B. 20 relaxed project listing requirements within the UTP. TxDOT would be required to develop a plan for implementing needed improvements by March 1, 2018, and adopt any needed rule changes by September 1, 2018. Going forward, TxDOT should continue to conduct such reviews on a regular basis through a process specified in rule. As a related

management action, TxDOT should consider adding elements to the system to indicate estimated construction completion dates for each project and the benchmark tracking report already required in law, to the extent practical within system funding constraints.

1.9 Maintain oversight of TxDOT's delivery of significant new funds and progress toward performance-based planning through a joint oversight committee on transportation planning and performance.

This recommendation would streamline and extend the current oversight provided by the separate House and Senate Select Committees on Transportation Planning into a single joint committee. The committee would provide increased visibility into TxDOT's use of significant new transportation funds, and ensure implementation of improvements to the transportation planning process, which will take several years to complete given the long horizon of infrastructure development. The committee would be advisory in nature, similar in purpose and structure to other joint committees recently created by the Legislature, and composed of the following eight members:

- Three members of the Senate, appointed by the lieutenant governor
- Three members of the House of Representatives, appointed by the speaker
- Two members of the public, appointed by the governor

The lieutenant governor and the speaker would each designate a presiding co-chair from among their respective appointments. All appointments would be required by October 1, 2017. The committee would be subject to the Open Meetings Act and would expire in six years, on December 1, 2023.

The committee would be charged with monitoring TxDOT's

- overall planning, programming, and funding of the state's transportation system, particularly its response to increased funding availability;
- integration and reporting of long-range goals in the statewide transportation plan as related to annual funding allocation and project selection decisions;
- use of performance-based measures to allocate funds and select projects, including review of rules relating to funding categories and allocation formulas;
- internal department processes for planning, delivering, and evaluating projects according to performance criteria;
- collaboration with planning organizations and other transportation stakeholders;
- transparency and public information regarding the planning and project delivery process overall, including information regarding long-term transportation plans and goals, programming documents, and the online project tracker system;
- quality and availability of data and analysis tools to evaluate transportation system and TxDOT performance toward achieving established performance goals; and
- any other transportation planning matter the committee considers appropriate.

The committee would be required to meet at least semi-annually according to a meeting schedule adopted by the committee in consultation with TxDOT. The meetings should be timed to allow the committee

to monitor the annual adoption and subsequent update process for the UTP. TxDOT staff would be required to provide support to the committee as requested, including, at a minimum, all needed data and information relating to the committee's charges. TxDOT would be required to provide a detailed report with a status update and information on each committee charge, and any other information requested by the committee prior to each committee meeting. The committee would be required to provide a report to the Legislature by November 1 of even-numbered years regarding each charge, with the assistance of TxDOT as requested.

Fiscal Implication

Overall, the recommendations are designed to ensure TxDOT and its partners make the most efficient and effective use of significant new funding entrusted to the department by the Legislature and Texas voters, but would not have a specific fiscal impact on the state, since any gained efficiencies would be reinvested into project development. The recommendations also would not have a negative fiscal impact on TxDOT, as they primarily clarify and improve core functions that TxDOT is already performing relating to transportation planning, prioritization, and reporting. The recommendation to create a joint oversight committee would not have a fiscal impact as these committees are regularly created and supported by the Legislature and already accounted for in the state budget process.

 $^{{\}footnotesize 1} \qquad \text{Texas Department of Transportation, 2017 Unified Transportation Program (August 25, 2016), accessed October 11, 2016, http://ftp. dot.state.tx.us/pub/txdot-info/tpp/utp/2017/utp-2017.pdf.}$

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Issue 2

TxDOT Must Quickly Finalize Ongoing Project Development Fixes to Eliminate Backlogs and Prepare for the Future.

Background

After the need for a transportation project is identified by TxDOT or a metropolitan planning organization and included in a transportation plan as described in Issue 1, TxDOT begins a series of project development steps, which for most projects proceed in the logical sequence shown in the textbox, *Typical Project Development Steps*. For large or complex projects such as major interchanges or new highways that require detailed evaluations of environmental impacts or significant new land purchases, these steps can take 10 years or more to complete.

District engineers in charge of TxDOT's 25 districts are primarily responsible for overseeing project development and deciding when a project is ready for letting, or awarding of a construction contract. TxDOT's divisions in Austin such as environmental affairs, design, professional engineering procurement services, and right of way provide policies, program oversight, and support to the districts. In fiscal year 2016, TxDOT awarded 786 construction contracts worth \$4.87 billion. The scope of project development activities needed to support TxDOT's letting volume is enormous. In a typical year, TxDOT makes about 1,600 environmental review determinations, executes about 400 contracts for professional engineering services, and acquires more than 1,200 parcels of land needed for construction.

The Sunset review naturally focused on evaluating whether TxDOT's project development approach is equipped to effectively manage significant new highway funding sources. Due primarily to additional state funds provided by the Legislature and Texas voters in recent years, TxDOT estimates its highway funds

Typical Project Development Steps

- **Planning and preliminary feasibility studies**. TxDOT and local planning organizations identify project priorities by analyzing safety, congestion, and other needs, and develop a preliminary project concept.
- Environmental review. TxDOT evaluates the potential environmental and cultural impacts of each transportation project receiving state or federal funds. In 2014, the department received delegated federal authority from the Federal Highway Administration to make final environmental review decisions.
- **Public involvement.** TxDOT seeks public input on projects through public meetings, open houses, and public comment periods.
- **Detailed design**. Department staff or contracted design firms create detailed plans for the project and its construction needs.
- Right-of-way acquisition. TxDOT acquires any parcels of land necessary to construct the project.
- **Utility relocation**. TxDOT works with private and public entities to move utilities such as telecommunications, electricity, water, and natural gas impacted by project construction.
- Letting. The department receives bids for construction and maintenance projects on a monthly basis and awards contracts to the lowest bidder.
- **Construction**. TxDOT works with contractors to build projects, which includes providing public information and addressing traffic needs during construction and monitoring on-time and on-budget progress.

could more than double over the next decade, to a total of more than \$80 billion. The Transportation Commission recently allocated most of this funding through its 10-year project plan described in Appendix C, 2017 Unified Transportation Program. The state has high expectations for TxDOT's use of this funding and the department needs to be prepared to meet them. The review also considered the status of past Sunset Commission recommendations and TxDOT's ongoing internal efforts to evaluate and improve its project development processes.

Findings

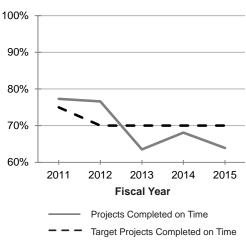
As currently structured, TxDOT's project development process is not meeting expectations and is not yet prepared to effectively handle the enormous influx of new transportation funding.

• Not meeting key on-time, on-budget measures. TxDOT has not met key performance measures set by the Legislative Budget Board in recent years that show whether a transportation project is delivered on time and within its original budget. The graphs, TxDOT On-Time and On-Budget Performance Measures, show how TxDOT has not met its on-time targets for the last three fiscal years, and has not met its on-budget targets for the last five years.

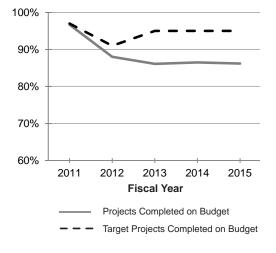
Though these measures only evaluate the final construction phase of project development, they are a yardstick for how well the department is planning, developing, and managing its portfolio of transportation projects, as problems that arise at the latest stages often start far earlier in the process. These recent measures indicate TxDOT has been experiencing cost overruns and delays that reduce the department's ability to build other projects and

TxDOT On-Time and On-Budget Performance Measures FYs 2011–15





TxDOT On-Budget Performance Measures



Source: Legislative Budget Board

subject the public to increased congestion and dangerous construction work zones for longer than expected. TxDOT's ability to accurately plan for its workload has been impacted in recent years by a perfect storm of stagnant traditional funding from gas taxes combined with several shorter-term infusions demanding immediate expenditures on "shovel-ready" projects, such as the 2009 American Recovery and Reinvestment Act. While these factors may explain some of TxDOT's challenges, the ongoing trend indicates systemic problems with how TxDOT has approached planning for its changing funding landscape, as described below.

• Poor letting oversight leading to right-of-way backlog. Ideally, TxDOT should not allow a project to go to letting, or bidding for construction contract award, until the project is ready to begin construction. Failure to do so risks creating a cascading series of problems including project delays and cost overruns in the construction phase. The decision of when to bid a project is a difficult balancing act to ensure TxDOT appropriately manages its available cash flow, does not leave any federal dollars on the table, and can show progress towards delivering the level of new construction the Legislature and Texans expect. However, over the last several years, as TxDOT's pipeline of ready projects often fell behind expected letting targets, TxDOT increasingly solved its challenges by allowing contracts to be bid when they were not actually ready for construction, a practice known as "dirty letting." Dirty letting went from a band-aid solution to a larger systemic problem, which has now caught up with the department.

Bidding contracts before projects were actually ready to construct became a bandaid solution to a larger problem.

Negative trends in right-of-way land acquisition and utility relocations show the impact of dirty letting on project delivery. Analysis by a private management consultant illustrates how right-of-way work has now become more focused on catching up on past contract awards instead of proactively planning for the future, as shown in the textbox, TxDOT's Right-of-Way Backlog. The issues also affect TxDOT's utility relocation efforts, the final step in clearing a project for construction. In recent testimony before the House Transportation Committee, TxDOT reported delays with utility relocations after contract award resulted in \$21.9 million in additional costs and delay claims by

contractors and added more than 10,000 total days to all projects from fiscal years 2013–2015. Ultimately, these problems are rooted in bigger issues within TxDOT's overall project development pipeline and TxDOT administration's failure to instill discipline in the letting process.

No comprehensive process to understand and correct inefficiencies.
 TxDOT does not currently have comprehensive processes in place to evaluate, identify, and correct issues leading to its poor on-time, on-

TxDOT's Right-of-Way Backlog FY 2015

Cleared right of way at time of award

- About 30 percent of contract awards did not have cleared right of way for the entire project
- About *20 percent* of contract awards had no cleared right of way at all

Budget expenditures

• About *80 percent* of right-of-way spending focused on catching up on already-awarded projects (up from about 35 percent in 2008)

budget performance. The textbox, *Success Factors for On-Time, On-Budget Construction*, lists best practices from a survey conducted by the American Association of State Highway and Transportation Officials.² TxDOT has not taken some of these basic steps to understand why it is falling short and how to improve performance across the state. On a basic level,

Success Factors for On-Time, On-Budget Construction

- Fostering accountability for cost and schedule
- Monitoring causes of problems to identify common culprits
- Creating incentives for staff and contractors to do better
- Strengthening connections between preconstruction and construction work phases

Source: American Association of State Highway and Transportation Officials TxDOT administration is not regularly monitoring causes of delays and cost overruns to identify common issues. For example, to respond to a Sunset data request for information about the root causes behind the performance data, TxDOT's construction division could only produce a list of projects with delays or cost overruns of more than 10 percent. TxDOT did not have any analysis regarding root causes of these delays, and had to gather written narratives from each of the 25 district offices to provide information about each individual project. Monitoring statewide performance on these two key measures, and delving into the reasons behind problems, is a basic management responsibility of any department of transportation.

Recent outside analysis and the Sunset review both indicate TxDOT has many opportunities for improving its on-budget performance by fixing issues within its control during the project development process. A private management consultant concluded TxDOT's project delivery inefficiencies contribute to significant letting delays, change orders, and cost overruns that TxDOT could address through internal process improvements. Sunset staff also reviewed TxDOT's fiscal year 2015 project-by-project explanations for cost overruns and separately identified several common causes stemming from problems in project development, such as poor initial estimates, design flaws, or poor initial scoping of the project. Root issues with delays caused by construction contractors are addressed separately in Issue 3, which describes TxDOT's similarly lacking tools and initiative to take effective action when problems arise with construction contractors.

Many of TxDOT's challenges stem from an overall ad hoc management approach.

• No collaborative focus on high-risk projects. A recent outside analysis concluded many of TxDOT's challenges during the letting and construction phases stem from the department's overall ad hoc approach to managing its project portfolio. Through the project development lens, TxDOT's organizational challenge boils down to a failure to communicate early or often enough across multiple division and district lines of authority. As a result, TxDOT administration's role tends to be reactionary — putting out fires once they reach a crisis — instead of monitoring and providing support to hot spots as they arise. As a project progresses through environmental review, design, and right of way, each overseen by different divisions, communication can easily become disjointed with no focus on the health of the project overall.

TxDOT also lacks a clear risk-based approach needed to more effectively oversee its overwhelming number of projects. A private management consultant looked at the breaking point for high-risk, complex projects with characteristics such as having a new location, needing right of way, being part of a larger strategic initiative, or having total estimated costs over various thresholds. Ultimately, the analysis identified only 124 out of 2,711 projects as high risk. TxDOT could improve outcomes by investing in more collaborative advanced planning upfront for this subset of projects, for example, by conducting more in-depth, early reviews of designs with staff from multiple project development subject areas such as environmental review or right of way. As noted in Issue 1, TxDOT has not effectively prioritized projects in the Unified Transportation Program or regularly updated a list of major projects as required in current law.³ By taking a more targeted instead of one-size-fits-all approach, TxDOT could focus on the types of higher-risk projects that would be more likely to cause cost overruns or delays.

A recent analysis only identified 124 out of 2,711 TxDOT projects as high risk.

TxDOT has taken first steps to improve its project development process, but the state lacks assurances these efforts will be successful, requiring additional and continuing attention and oversight.

- Long history of problems with no quick fixes. TxDOT has recently been working to evaluate and make improvements to its project development process, with an encouraging awareness and buy-in among staff at all levels about the need to better prepare for future project delivery. However, Sunset staff was unable to evaluate and determine the full impact of the changes since they have not yet been fully implemented. Ongoing direction and support will be needed to ensure TxDOT's current efforts do not fall by the wayside or become diluted in case of leadership changes or other pushback, as has occurred in the past. For example, the 2009 Sunset review and 2011 Sunset bill identified a need for more consistent district work programs to provide increased transparency and tracking of project development efforts, but TxDOT never implemented the changes in a meaningful way.⁴
- Unknown impact of new project portfolio oversight plan. TxDOT underwent an extensive internal business process review over the last year, resulting in plans for a more comprehensive approach to overseeing project development. TxDOT is in the early stages of transitioning to the improved approach, with fiscal year 2017 being the first year these changes will be comprehensively rolled out across all phases of the project development process and annual planning timeline. This approach focuses on viewing the department's project portfolio as a funnel, with stage gates at various steps of the process, as shown in the graphic on the following page, TxDOT's New Portfolio Management Approach. The new approach also depends on a more liberal method of estimating TxDOT's long-range planning forecasts so TxDOT and its partners can increase the number of

Sunset staff
was unable to
determine the
full impact of
TxDOT's ongoing
improvements.

projects being developed in the out-years and better respond to shorter-term funding fluctuations in the future. According to this plan, TxDOT administration's oversight role will now be focused on monitoring whether TxDOT districts are developing the right mix of projects to meet identified goals within planned timeframes.

4-Year Plans Portfolio Health: Right portfolio 10-20+ Year size by phase **Plans** 10-Year Plans Right portfolio mix by phase Plan Develop Strategic Construct In-Construction Initiatives: Congestion Mobility Safety Maintain Feedback system Optimize Connectivity **Prioritize** Need Performance Project Health: Resource Health: Feedback On-time Right estimation On-budget Right mix On-phase Right allocation

TxDOT's New Portfolio Management Approach

Source: Texas Department of Transportation

- New letting controls only tracked since April 2016. Though TxDOT recently took steps to better oversee letting, it will take several years to fully recover from the current right-of-way backlog and establish better overall project development practices to support its upcoming, ambitious letting schedule. In March 2016, TxDOT issued a new letting policy emphasizing the "need to be engaged in addressing these items earlier in the project development process for TxDOT's full responsiveness to large funding injections, improving our engineering quality control, streamlining the construction phase, and executing with integrity." The new policy states contracts should not be awarded unless projects are ready to begin construction within three months. TxDOT administration started tracking and controlling for these factors for the first time in April 2016 and therefore the impacts could not be fully evaluated.
- Information sharing currently undefined. An element currently lacking in TxDOT's improved portfolio management approach is transparency

and information sharing with interested stakeholders such as metropolitan planning organizations and ultimately, the public. During the course of the review, numerous stakeholders expressed frustration with a lack of understanding about changes to TxDOT's project letting dates for local projects. One planning organization estimated that more than half of its projects have been rolling over from TxDOT's letting schedules year after year, without a clear explanation as to why they have not been let. TxDOT's internal processes impact many other external players who have an interest in the status of the new district portfolio reviews. As TxDOT moves forward with its new approach, it should develop a plan for how it will share this useful information outside the department.

Improvements dependent on a high-risk and currently troubled information technology project. The current Sunset review revealed many instances of lacking data to answer basic management questions, particularly in the right-of-way and utility relocation areas. Transitioning to modern systems that enable easier extraction and analysis of information for management purposes is a key component of TxDOT's ability to better oversee its complex, decentralized project development process. To that end, TxDOT has been planning the Modernize Portfolio and Project Management (MPPM) project for several years, with initial goals of providing better department-wide information sharing and decision-making tools.6 While the goals are laudable, MPPM is essentially the textbook definition of a high-risk information technology project. Approved by the Legislature in the state's fiscal year 2016–2017 budget, TxDOT initially estimated \$46.9 million for the project and with completion by August 2017.8 The project scope is enormous, touching almost all of TxDOT employees' daily tasks relating to project management. The project also necessarily involves replacing and integrating dozens of old legacy systems, each one of which is a complicated task in its own right, even to fully understand the current environment.

TxDOT entered into a contract with a vendor in December 2015, but ended this contract in September 2016 due to concerns about the vendor's ability to deliver on TxDOT's decision to significantly expand the project's scope. Many internal and external stakeholders expressed concern during the Sunset review about the status of this complex project and uncertainty about the plan going forward. TxDOT will likely issue a request for proposals soon for another vendor to complete the project, but details about the structure of the proposal or publicly available budget information were not finalized during the Sunset review.

Though the state provides some monitoring of major information technology projects through the Quality Assurance Team, it is ultimately the Transportation Commission's responsibility to ensure MPPM proceeds effectively and according to best practices for managing a project of this scope before additional problems arise. The state has many examples of high-profile and costly failures of projects of this magnitude. As the department navigates the many potential hiccups a project of this size and

The Modernize
Portfolio
and Project
Management
system is a
textbook highrisk IT project.

TxDOT cancelled the original contract in less than one year, causing concern and uncertainty about the project's future.

scope entails, heightened information and accountability is essential so the Transportation Commission and Quality Assurance Team can effectively perform their oversight roles, and so stakeholders can provide input and understand the impact to their work.

TxDOT is missing opportunities for more proactive planning with external stakeholders.

The Sunset review revealed an agency struggling to catch up and better position itself for a more measured and well-coordinated approach to long-term project development. This theme came through loud and clear in Sunset's survey of TxDOT employees, who repeatedly reported a sense of being in "hero mode" to deliver projects in recent years. This focus has pushed opportunities for a more proactive approach to early planning and communication with external stakeholders to the back burner, as described below.

TxDOT's recent "hero mode" has prevented a more proactive approach.

- Utility and rail master planning. As TxDOT embarks upon its significantly expanded project portfolio in coming years, it will likely be developing more complex projects with a higher risk for conflicts, including with utilities and railroad companies that frequently operate in or adjacent to TxDOT's right of way. TxDOT has experienced increased problems, including cost overruns and delays, when dealing with utilities and rail companies on major projects in recent years. However, the department has no statewide policy in place to comprehensively include rail or utility companies in advanced planning, and no master agreements to better govern how the relationships should work. Recently, TxDOT has taken steps to better engage utilities in planning by holding stakeholder meetings and piloting a statewide escalation process to address delay issues with one company, but these efforts are very new.
- **Corridor preservation collaboration.** TxDOT also does not have a systematic approach to working with local governments and metropolitan planning organizations to protect areas with planned transportation projects from ongoing development, especially in more dense metropolitan areas where conflicts can cause the most delay and expense. Overall, corridor preservation is an important activity to avoid future problems and minimize land acquisition time and costs when possible. Such preservation activities depend on proactive engagement and information sharing between all levels of government and planning organizations. However, Texas has one of the most limited state programs for transportation corridor preservation in the country because local governments, not the state, have primary authority for protecting future transportation corridors, with some oversight provided by metropolitan planning organizations in urban areas. 10,11 Local governments have the authority to limit development within their jurisdictions along planned transportation corridors, while TxDOT has minimal authority or available funding to protect or acquire land until very late in the project development process. Although TxDOT's direct authority is limited, its role as the state's leader in transportation planning is not. As TxDOT's

While TxDOT's direct authority is limited, its role as the state's transportation leader is not.

project delivery efforts ramp up, the department could use its existing partnerships, such as with metropolitan planning organizations, to better protect future planned projects by coordinating with local governments to encourage such preservation whenever possible.

Recommendations

Change in Statute

2.1 Require TxDOT to finalize implementation of its new project portfolio review process and publicly share resulting performance information.

This recommendation would ensure TxDOT fully ingrains its new efforts to implement a regular, department-wide review process to monitor how districts are developing projects as planned in the Unified Transportation Program. Though TxDOT has begun implementing these changes within current resources and information systems, the recommendation would provide accountability that these improvements continue. A clearly required tracking and review process would ensure TxDOT and its partners better monitor project development progress, identify and correct backlogs, promote better communication among diverse stakeholders, and ultimately be better positioned to deliver an increasingly complex project workload in coming years.

Statute would require TxDOT to take the following actions, and adopt related rules no later than September 1, 2018:

- Develop consistently formatted district project portfolios, reconfiguring current law referring to district work programs that TxDOT never fully implemented¹²
- Develop comprehensive performance measures for key steps in the project development process to track and report whether districts are developing the right mix of projects and are on track to meet letting targets given new guidance controlling when a project should be bid for contract award
- Conduct regular reviews of project development activities in each district's portfolio, and use the reviews to monitor and evaluate district performance
- Include key stakeholders in these reviews as appropriate, such as local government project sponsors or metropolitan planning organizations
- Convene a stakeholder group to develop and regularly update rules describing the process overall, how planning and project stakeholders can be involved, and how the department will regularly report results to the commission and the public

Management Action

2.2 TxDOT should provide regular analysis and monitoring reports to the Transportation Commission about the department's efforts to correct issues with underperformance in key budget measures, letting controls, and right-of-way backlogs.

This recommendation would ensure the department's administration and the Transportation Commission are closely tracking TxDOT's current efforts to address past issues and prepare for the future. Regularly reporting this information at public commission meetings would also ensure transparency regarding TxDOT's progress. TxDOT should begin reporting the following information, no later than March 1, 2017, and continue the reports at least quarterly until issues are resolved, as determined by the commission:

- Information regarding projects not meeting on-time, on-budget goals, including analysis of root
 causes and any recommendations for how to address identified problems, especially as they relate
 to internal project development issues
- Information regarding the department's new policy controlling when projects should be allowed to
 go to bidding for construction (letting), indicating whether the department is improving performance
 according to its criteria and if not, why not
- Information regarding backlogs in the right-of-way and utility relocation process, including
 information about any resulting time delays or cost overruns, and the department's efforts to correct
 underlying issues

2.3 TxDOT should develop a more risk-based, cross-functional focus to its internal project development activities.

Improved, early communication across TxDOT's internal project development silos is key to ensuring TxDOT can develop its increasing project portfolio with fewer problems and cost overruns in the future. No later than March 1, 2018, TxDOT should take the following actions:

- Develop a risk-based scheme for identifying projects needing enhanced cross-functional communication, such as projects needing significant right of way or with budgets over a certain threshold, potentially using the improved project priority rankings in the Unified Transportation Program suggested in Issue 1 for this purpose
- Formalize a more comprehensive, cross-functional approach to collaboration across project development
 responsibilities focused on environmental review, design, and right of way to enhance communication
 and awareness to earlier identify and mitigate problems on high-risk projects

2.4 Direct TxDOT to regularly report on its progress implementing the Modernize Portfolio and Project Management system to ensure visibility and oversight of this important but high-risk project.

This recommendation directs TxDOT to enhance its reporting about the status of this complicated and recently troubled information technology project. The Transportation Commission, and later, all internal and external department stakeholders need to be kept well informed of progress to ensure any implementation issues are caught early and potential cost escalations and further time delays are kept to a minimum.

- Ongoing procurement phase. As the department works to re-procure the project, department staff should initially provide regular, confidential status updates to the Transportation Commission regarding their ongoing procurement efforts, as currently allowed in law to protect the state's interests. The information provided to the commission should include a summary of any feedback and suggestions received from the Quality Assurance Team, Contract Advisory Team, or other stakeholders, and how that feedback is being addressed. TxDOT should begin providing these updates immediately, but no later than March 1, 2017, and then at least monthly until the new vendor is on board.
- Implementation phase. Once the new contract is procured and work on the system restarts, the following information should be provided to the commission in a public meeting and shared with internal and external stakeholders impacted by the project:
 - Target dates and costs for completion of all project steps and TxDOT's status in meeting them

- A summary of contract management activities and contract performance, including monitoring dashboards and any analysis provided by external quality assurance vendors
- A summary of any information requested by or feedback received from the Quality Assurance
 Team as part of its ongoing monitoring of the project, and TxDOT's response

These reports should be provided at least quarterly, with the first report made available no later than 30 days after the new contract is executed. Also, TxDOT should provide a copy of these reports to the Quality Assurance Team, to assist with monitoring of this major information technology project.

2.5 TxDOT should make efforts to improve proactive external stakeholder outreach to avoid conflicts with future planned transportation projects.

TxDOT should explore opportunities to better collaborate with and engage external stakeholders in early planning to better avoid conflicts in the future. Specifically, TxDOT should develop a master agreement and planning approach with utility and rail companies that often operate in or adjacent to TxDOT's right of way and have experienced increasing conflicts in recent years. Also, TxDOT should work more proactively with metropolitan planning organizations and local governments to better identify and protect planned transportation corridors to the extent possible within existing authority.

Fiscal Implication

These recommendations, taken together, would allow TxDOT to maximize use of state and federal funds by cutting the cost impacts of inefficient project development. TxDOT could then use "saved" dollars on the next projects in development. The recommendations also provide additional assurances that TxDOT will continue to make critical improvements to its project development process and is held accountable. The department has already started to make many of these changes within its existing staff and information technology resources, and the Legislature previously appropriated funds needed for related information technology upgrades.

¹ American Recovery and Reinvestment Act, Pub. L. 111-5 (2009).

² Joe Crossett and Lauren Hines, Comparing State DOTs' Construction Project Cost and Schedule Performance: 28 Best Practices from Nine States (Washington, DC: American Association of State Highway and Transportation Officials, May 2007), 1, accessed October 21, 2016, http://www.mydotperformance.org/docs/final_report_aashto_version.pdf.

- 3 All citations to Texas statutes are as they appear on http://www/statutes.legis.state.tx.us/. Sections 201.994 and 201.995, Texas Transportation Code.
- ⁴ Section 201.998, Texas Transportation Code; Sunset Advisory Commission, *Texas Department of Transportation Final Report* (July 2009), 26 and 31, accessed November 4, 2016, https://www.sunset.texas.gov/public/uploads/files/reports/Department%20of%20 Transportation%20Final%20Report%202009%2081%20Leg.pdf.
- ⁵ Memorandum from Texas Department of Transportation chief engineer to district engineers, "Ready to Let (RTL) Definition for Construction Projects," March 7, 2016.
- ⁶ Texas Department of Transportation, 2015–2019 Strategic Plan (July 7, 2014), 48–49, accessed November 4, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/sla/strategic-plan-2015–2019.pdf.
 - ⁷ Section 2054.003(10), Texas Government Code.
- ⁸ Legislative Budget Board, State Auditor's Office, and Department of Information Resources, *Annual Report: Overview of Major Information Resources Projects Reported to the Quality Assurance Team December 2014 to November 2015* (December 7, 2015), 17, accessed October 23, 2016, http://qat.state.tx.us/2015%20QAT%20Annual%20Report.pdf.
- See, for example, past Sunset reviews of the Department of Information Resources and Health and Human Services Commission which cite several examples of major information technology project failures. Sunset Advisory Commission, *Department of Information Resources Final Report* (July 2011), 17–28, accessed November 4, 2016, https://www.sunset.texas.gov/public/uploads/files/reports/Department%20of%20 Information%20Resources%20Staff%20Report%202011%2082nd%20Leg.pdf; Sunset Advisory Commission, *Health and Human Services Commission and System Issues Staff Report with Final Results* (July 2015), 45–46, accessed November 4, 2016, https://www.sunset.texas.gov/public/uploads/files/reports/HHSC%20and%20System%20Issues%20Final%20Results.pdf.
- Transportation Corridor Preservation: A Survey of State Government Current Practices," U.S. Department of Transportation, Federal Highway Administration (May 2000), accessed October 23, 2016, https://www.fhwa.dot.gov/real_estate/right-of-way/corridor_management/case_studies/cp_state.cfm.
 - Section 232.102, Texas Local Government Code and Section 201.619, Texas Transportation Code.
 - 12 Section 201.998, Texas Transportation Code.

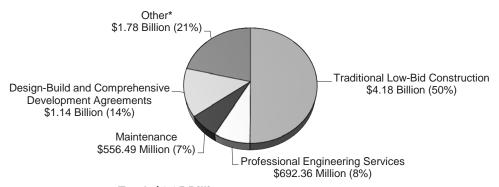
Issue 3

TxDOT Lacks Critical Contract Oversight Tools to Efficiently Spend Billions in Taxpayer Dollars and Better Deliver Construction Projects on Time.

Background

With more than \$32 billion in active contracts, the magnitude of contracting at the Texas Department of Transportation (TxDOT) is immense, rivaled only by the health and human services system for the most contracting activity in state government. Significant new funding approved by Texas voters and the Legislature is estimated to more than double TxDOT's planned project portfolio over the next 10 years, to more than \$80 billion. This dramatic increase in funding coupled with a significant decrease in staff in recent years — from about 14,000 positions authorized by the Legislature in fiscal year 2008 to about 12,000 in fiscal year 2015 — greatly magnifies the already intense focus on contracting as the primary way TxDOT carries out its key duty to deliver transportation projects. TxDOT spent about 78 percent of its budget on contracted expenditures in fiscal year 2015. The pie chart, *Value of Executed TxDOT Contracts*, shows the dollar value of TxDOT contracts by type executed that same year.

Value of Executed TxDOT Contracts FY 2015



Total: \$8.35 Billion

Due to the sheer scale of contracting at TxDOT, contract management is a highly decentralized activity mostly carried out by frontline staff in TxDOT's 25 districts, while many procurement activities are performed by divisions in Austin. For example, the construction division conducts the low-bid contract bidding and award process, known as letting, but has almost no involvement in managing these contracts. The chart on the following page, Contract Procurement and Management — Construction, Maintenance, and Professional Engineering Services, shows the parties responsible for procuring and managing the major types of contracts making up the vast majority of the department's contract spending.

Other includes purchase orders, advance funding agreements, interagency and interlocal contracts, facilities contracts, and federal and interstate agreements.

Contract Procurement and Management Construction, Maintenance, and Professional Engineering Services

Contract Type	Division Procuring Contract	Day-to-Day Management
Traditional low-bid construction and maintenance	Construction division (districts may procure maintenance contracts of less than \$300,000)	Districts
Professional engineering services	Professional engineering procurement services division	Districts and Some Divisions*
Alternative, or "strategic" construction contracts for major projects, such as comprehensive development agreements and design-build	Project finance, debt, and strategic contract division	Districts

^{*} Some divisions, such as bridge and rail, manage professional engineering services contracts as part of their program responsibilities.

The department's central contract services division reviews a wide range of TxDOT's negotiated contracts, including advance funding agreements governing projects delivered jointly by TxDOT and local governments, private consultant contracts, and interagency contracts. The contract services division does not review construction or maintenance contracts, since these are standard low-bid contracts, or alternative contracts, such as design-build, which have a separate review process handled by TxDOT's general counsel division. Appendix H, *Contract Services Division Review Role*, shows a complete list of contract types reviewed by the division, including dollar amount thresholds triggering division review.

In evaluating TxDOT's contracting functions, the Sunset review focused primarily on the procurement and management of the types of contracts that will be most impacted by the significant transportation funding increase on the horizon — traditional low-bid highway contracts, large strategic contracts such as design-build, and professional engineering contracts. Staff also evaluated the department's overall approach to monitoring such a high volume of contracts through various centralized and decentralized processes, relying on best practices from various sources to identify gaps, such as the *State of Texas Contract Management Guide*, and those identified by Sunset through numerous reviews of agencies with contracting functions.² Finally, staff compared TxDOT's contracting practices with those of other state departments of transportation, given the unique features of low-bid highway contracting.

Findings

Traditional Low-Bid Highway Contracts

The Sunset review revealed weaknesses with TxDOT's ability to address construction contractor delays.

TxDOT struggles with significant construction project delays, causing negative impacts on business and the travelling public.

TxDOT's bread-and-butter highway contracting method is the traditional low-bid process, described in the graphic on the following page, *Overview of Traditional Low-Bid Highway Contracting Process*. In fiscal year 2016, TxDOT awarded 786 construction contracts with a total value of \$4.87 billion, and this number is expected to grow to 929 contracts valued at \$5.84 billion in fiscal year 2017. Though this tried-and-true method has long produced successful highway projects for Texas over the last century, the Sunset review revealed significant weaknesses with TxDOT's current ability to address construction

contractor delays and manage these contracts most effectively when problems arise. While TxDOT uses the same low-bid process for maintenance contracts, the Sunset review did not identify similar problems with delays on these projects. Generally, the improved contracting tools needed for construction contracts as described below could also help with management of maintenance contracts should the need arise in the future.

Overview of Traditional Low-Bid Highway Contracting Process

Project plans posted, including days to complete project

Bids submitted, with cost to complete within specified time Project conditionally awarded to lowest bidder at monthly letting

Transportation Commission approves contract

Contractor fault delays a quarter of all projects. TxDOT's highway construction projects are often delayed, sometimes significantly. Construction delays can cause increased traffic congestion, lost revenue for local businesses, safety risks to the traveling public, and general public frustration that state government is not delivering critical highway projects on time. Several factors can cause project delays — some are TxDOT's fault, such as difficulties with securing right of way and timely relocating utilities, as described in Issue 2, and some delays, like weather, are inevitable. However, project delays are often caused by contractors not meeting the timelines in the contract. The chart, Statewide Contractor-Fault Delays, provides an overall picture of the number of projects completed and length of delays due to contractor fault during fiscal years 2013–2015. This data does not include projects delayed for other reasons, such as issues with right of way or bad weather. In fiscal year 2015, 17 completed projects were delayed significantly, by 100 days or more, as described in Appendix I, Completed Projects Delayed Over 100 Days.

> Statewide Contractor-Fault Delays FYs 2013–15

Fiscal Year	Projects Completed	Projects With Contractor Delays (Percent)	Average Days Delayed	Total Days Delayed on All Projects Due to Contractor Fault
2013	773	218 (28%)	36	7,875
2014	724	171 (24%)	28	4,771
2015	751	177 (24%)	37	6,478

 Negative impacts of contractor-fault delays. Because TxDOT must award projects to the lowest bidder, the department sometimes awards additional contracts to contractors who are behind schedule on projects already in progress. As a result, these contractors may get further behind Construction delays can cause increased congestion, lost revenue, safety risks, and public frustration.

Construction delays on I-35 near Waco have significantly impacted local businesses.

on their overall portfolio as they struggle to balance resources among the projects. The graph on the following page, *I-35 Waco District Projects*, gives one particularly stark, ongoing example of a contractor with significant delays on multiple projects. The chart reflects only delays due to contractor fault, not excusable delays, such as weather, which TxDOT does not track. From fiscal years 2010 to 2014, TxDOT awarded the same contractor six projects to widen 20 miles of Interstate 35 between Salado and Waco. The contractor has significantly exceeded the time allowed on four of the projects, and has not yet completed any of them. The resulting traffic congestion and lane closures have had significant impacts on local businesses, with many in Salado closing or experiencing decreased revenue. According to a local official, 82 of Salado's 127 businesses have closed over the last three years.³ Meanwhile, TxDOT has taken no contract action to address this situation aside from assessing liquidated damages, which have not spurred faster construction.

TxDOT lacks standard, effective remedies to address poor performance by construction contractors.

Agencies should have a range of contract remedies to ensure they can effectively enforce contracts and most efficiently use limited taxpayer dollars. Remedies should include a toolbox of progressive measures to allow the agency to address minor issues before they become more serious. However, TxDOT's traditional low-bid process does not include the most effective mix of contract remedies typical of other states' departments of transportation to best ensure projects are built on time.

• Limited remedies built into contracts. Despite issues with delayed projects, TxDOT does not have effective contract enforcement measures for its highway contracts short of using the extreme measure of defaulting a contractor and replacing the company with another to finish a project. The

Current Highway Contract Remedies

Liquidated damages: Contractors causing construction delays beyond the days allowed in the contract pay liquidated damages for each additional day required to complete the project.

➤ In fiscal year 2015, TxDOT assessed a total of \$6.2 million in liquidated damages for project delays.

Default: The department can declare contractors that fail to perform as specified in the contract to be in default. When a contractor is defaulted, the bonding company — which insures the contractor as part of the prequalification process — completes the remaining work.

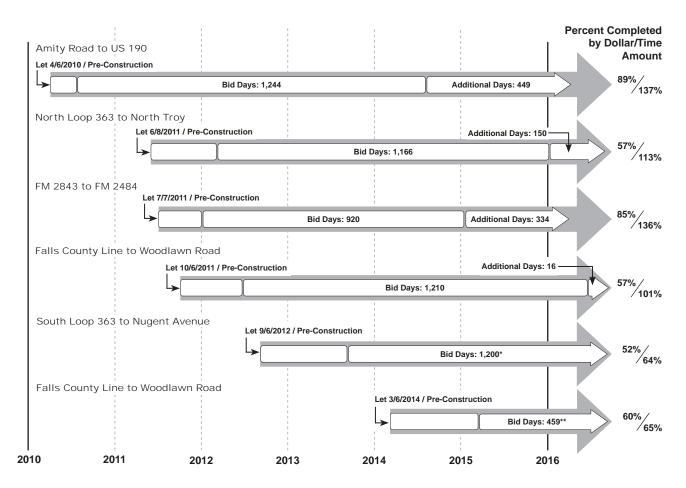
➤ In fiscal year 2015, the department defaulted four contractors on 13 projects.

textbox, *Current Highway Contract Remedies*, details the only two remedies available for low-bid contracts — liquidated damages, which are often too low to have a tangible effect on performance, and default.⁴

Intermediate remedial measures could include developing formal corrective action plans with updated, enforceable work schedules or prohibiting a contractor from bidding on additional projects until the contractor catches up on existing projects.

Other state departments of transportation often include intermediate remedies in lowbid construction contracts. For example, Florida and Iowa suspend the qualifications

I-35 Waco District Projects



- * As of September 16, 2016, 763 bid days have been used.
- ** As of September 16, 2016, 300 bids days have been used.

Term definitions

- Let and pre-construction. The time between the project being let, or awarded, and construction beginning. TxDOT generally requires that work begin within 30 days of contract execution. For these six projects, TxDOT was responsible for pre-construction delays due to issues securing right of way and relocating utilities, which are not factored into the bid days.
- Bid days. The number of days the contract allows for work to be completed.
- Additional days. Additional days worked by the contractor beyond the number of days allowed by contract, for which TxDOT
 assesses liquidated damages.
- Percent complete by dollar amount. Contractors are bound to the project cost in their bid, unless TxDOT approves a change order for additional work requested by the department. Percent complete by dollar amount shows the percentage of the original bid amount already paid to the contractor.
- Percent complete by time. Contracts allow a fixed number of days to complete the project. The percent time complete shows
 the percentage of time allowed already used by the contractor.

Even TxDOT's large contracts, like design-build, contain a wider range of contract remedies.

of contractors that delay projects beyond the days allowed, prohibiting them from bidding on additional projects.⁵ California requires contractors to submit time impact analyses for delays that alter the original work schedule.⁶ Even TxDOT's own comprehensive development agreements and design-build contracts, procured through a separate process, contain a wider range of contract remedies, such as warning notices and enforceable remedial plans. Including additional intermediate tools in its low-bid highway contracts would allow TxDOT to more quickly address problems without allowing delays to escalate to the point where extreme remedies, such as default, become necessary.

Liquidated damages do not reflect true cost of delays. Liquidated damages are standard contract provisions intended to compensate the state for failure to perform as promised, which in the case of highway contracts, mean the cost of delays. However, TxDOT does not calculate liquidated damages to accurately reflect the full impact of delays to ensure the state, and its taxpayers, are appropriately compensated. Statute already requires TxDOT's liquidated damages to reflect both contract administration and traffic impact costs, but the current schedule of liquidated damages used for most projects reflects only the average contract administration costs, such as costs to oversee and inspect the project. Projects on major highways or in metropolitan areas involving extensive lane closures or detours may have significant impacts on traffic, but TxDOT's standard schedule of liquidated

Missouri Department of Transportation Liquidated Damages

Liquidated damages for all projects calculated through a two-step process:

- Damages for contract administration costs are based on the total contract value.
- 2) Damages for traffic impacts are based on the average vehicle traffic in the project area.

damages does not usually reflect these important impacts. From fiscal years 2013–2015, the department sporadically applied liquidated damages that also included the cost of traffic impacts on just 33 projects. Assessing additional liquidated damages for projects that may have significant impacts on traffic is a common practice at other states' departments of transportation such as Missouri, New York, Oregon, and Alabama.⁸ The textbox, *Missouri Department of Transportation* — *Liquidated Damages*, details one example of how another state calculates liquidated damages.⁹

TxDOT's prequalification process does not protect against less extreme but still significant performance issues.

• No evaluation of contractor performance. Evaluating past performance allows agencies to award projects to contractors who have proven their ability to complete quality, timely work. General state law and the state's contract management guide establish contractor evaluation as a standard practice. TxDOT does not evaluate low-bid highway contractor performance and determines only a contractor's financial capacity to complete projects through its prequalification process. Also, while statute requires TxDOT to review contractors' bidding capacity — the dollar value of projects a contractor is allowed to bid on — to ensure contractors meet quality, safety, and timeliness standards, TxDOT has not developed a process to do so, relying only on financial criteria determined by the market through independent bonding companies. Bonding protects the state in the case of default, but does not prevent against less extreme, but still significant contract performance issues.

Sunset staff identified at least 28 states' transportation agencies that use contractor performance evaluations as a factor in the contracting process, whether in the prequalification process or as a separate process for corrective

actions.¹² For example, some states, such as Florida, Kentucky, Pennsylvania, and Virginia, use contractor evaluations to determine contractors' bidding capacity or trigger various corrective actions to address performance deficiencies.¹³ The textbox, Florida Contractor Evaluation Process, gives one example of a construction contractor performance evaluation process.¹⁴ Florida's process rewards contractors who complete quality, timely work with increased bidding capacity, while allowing contractors with poor evaluations the opportunity to improve with a reduced bid capacity. Other states, including Connecticut, Indiana, and South Carolina, use evaluations as a basis for actions to address performance problems, which may range from a notice of need for improvement to a temporary prohibition from bidding on future projects.¹⁵ Many states average multiple evaluations to develop an overall contractor rating, preventing outlier evaluations from disproportionately affecting contractors.

Florida Contractor Evaluation Process

- Evaluations: Project managers complete evaluations scoring contractors.
- Scoring: Once a contractor has at least three scores, the department averages these scores with the existing score.
- Appeals: Contractors can appeal individual evaluations and overall scores.
- Determining bid capacity: The resulting score determines a factor by which the contractor's bid capacity is multiplied.
- Average contractor performance: While contractors receive a wide range of scores, most contractors have fairly high ratings. Poor performing contractors often improve through the evaluation process.
- Nonstandard and ineffective sanctions process. While TxDOT rules provide for a separate contractor sanctions process, this process is ineffective as a contract management tool since it typically drags on for a year or more while project delays persist without resolution. The textbox, *TxDOT Contractor Sanctions*, lists the types of sanctions currently allowed in TxDOT rule. This process is much more akin to a regulatory process than a
 - contracting process, and is unusual among state agencies, which typically rely on contract remedies built into each contract's terms to quickly address poor contractor performance. The department did not even use sanctions at all for almost 10 years, but resumed in fiscal year 2015 when it assessed three sanctions. A more effective process would use standard remedies built into contracts to address all levels of performance problems, and reserve the sanctions process for more serious cases of repeated, egregious performance issues or ethical violations.

TxDOT Contractor Sanctions

- Letter of reprimand
- Prohibition from participating on a specified project
- Limit on the contract amount or payment amount to be awarded to the contractor, for up to 36 months
- Debarment for up to 36 months

TxDOT also lacks guidance for applying these sanctions, risking subjective, varying application of sanctions for similar cases.¹⁷ The process involves multiple levels of review, but no clear standards for deciding whether to use a sanction and, if so, which sanction is appropriate. Established guidance for this process would allow TxDOT to most effectively use sanctions to address the most serious cases of poor performance.

The construction division does little monitoring of projects, relying on districts to report concerns about contractor performance.

• Hands-off approach to central monitoring of contractor delays. Prior to September 2016, when the executive director requested a monthly report, TxDOT administration did not regularly receive information about construction contracting problems around the state except via anecdote, despite the issues with delays described above. This information gap allowed major projects to get significantly behind schedule with little to no awareness on the part of TxDOT administration. The department's central construction division also does little monitoring of construction projects around the state, relying on districts to report concerns about contractor performance. Many contractors work in multiple districts throughout the state, and the construction division could provide the broader monitoring and analysis necessary to ensure projects are on schedule and any delays are mitigated as soon as they begin.

TxDOT has not fully developed the use of contractor incentives to effectively shorten construction time for targeted projects.

Incentives designed to encourage contractors to finish work more quickly through a "carrot" rather than "stick" approach could help address construction project delays. TxDOT has two available tools to incentivize faster project delivery, A+B bidding and milestone incentives. A+B bidding requires contractors to bid both the cost of construction and the time needed to complete a project, unlike the traditional low-bid process in which contractors bid only the cost to complete the work with TxDOT specifying the time. TxDOT calculates the cost per days bid, adds the cost of time and construction to develop an overall cost, and awards the project to the lowest bidder. Milestone incentives are specified payments for reaching a deadline set in the contract, and contractors receive a bonus if they meet the deadline or are assessed a penalty if they do not. These incentive tools involve a tradeoff between cost and time, typically costing more to deliver projects more quickly, and TxDOT needs to carefully target and manage their use, as described below.

TxDOT has not distributed guidelines for using incentives to quicken project completion.

• No criteria for when to apply incentives to complete work faster. TxDOT has not provided sufficient guidance to districts to help them determine which projects are good candidates for incentives. The department developed guidelines for using incentives and other methods to accelerate project timelines in 2003, but has never formally distributed this information to the districts or kept guidelines up to date. Using an incentive generally results in increased cost to save time, as contractors must use more staff and work longer hours to meet deadlines. The department has only used A+B bidding on 10 projects since fiscal year 2013, and has not evaluated the time savings or costs from using this method to derive lessons learned. TxDOT regularly uses milestone incentives, but also lacks guidance for using this tool. Providing standard criteria on selecting projects for incentives would help ensure districts apply incentives to the high-impact projects that would most benefit from time savings, while avoiding unnecessary cost increases on projects that are less time sensitive.

• Outdated guidance for calculating project time. The department uses "production rates" to calculate time allowed to complete a project, but last updated this information in 1993. As a result, current production rates may not accurately reflect the time needed to complete projects today. To use incentives successfully, TxDOT must accurately estimate the time needed to complete the project to ensure deadlines set to receive incentive payments represent a true acceleration of the project timeline. Otherwise, TxDOT risks paying more for work that a contractor could complete on time without an incentive payment.

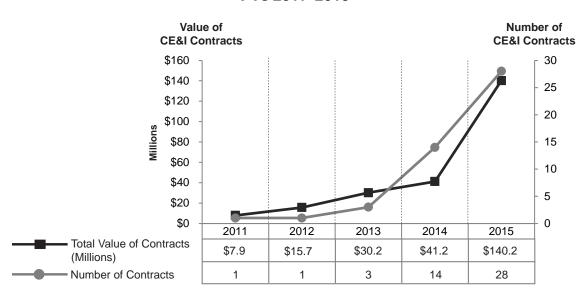
Professional Engineering Contracts

TxDOT has not provided basic tools to assist districts in managing newly outsourced construction engineering inspectors, risking inefficient use and poor oversight.

When outsourcing new functions, agencies should carefully plan, implement, and evaluate performance to ensure the contracting initiative is effectively achieving the agency's goals. In contrast to this standard, TxDOT's dramatically increased use of outsourced inspectors in recent years has not been based on such careful planning. Historically, TxDOT performed all inspection work in house, but recent staffing constraints led to outsourcing this function more and more, as shown in the graph, TxDOT Construction Engineering and Inspection (CE&I) Contracts. These inspectors play a crucial contract monitoring and quality assurance role, ensuring construction contractors complete work according to TxDOT's specifications and address any problems that arise before finalizing the project.

Inspectors play a crucial contract monitoring and quality assurance role.

TxDOT Construction Engineering and Inspection (CE&I) Contracts
FYs 2011–2015



Managing contracted inspectors is a new responsibility for many district staff.

The central office division's approach has been largely hands off, with districts primarily responsible for balancing use of these contractors with existing staff resources and determining how to manage the contractors. A 2015 internal audit recommended that TxDOT develop a consistent approach to procuring and managing inspection consultant contracts. ¹⁸ However, the department has not yet developed such a framework, which could include tools for completing staffing analyses to determine the need to contract out as well as training and guidance for district staff overseeing the contractors. District construction staff are responsible for managing contracted inspectors, a new responsibility for many of these staff. Most of TxDOT's 25 districts — 23 of which have used inspection contractors — have developed their own methods to determine contractor staffing needs and contract management methods. For example, the Dallas district separately paid to develop its own staffing analysis tool to help ensure the district contracts out at the optimum level by balancing contracted resources with in-house staff. However, TxDOT's central office divisions have not made efforts to identify and share this or other tools with other districts. Developing guidance for analyzing staffing needs and managing contracts would help ensure district staff is prepared for the increased use of inspection contractors.

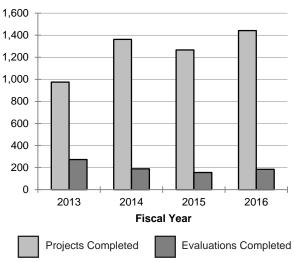
Overall, TxDOT does not effectively use available information to ensure selection of the most qualified professional engineering services contractors and negotiate similar pricing for similar work.

The department lacks tools needed to most effectively select professional engineering services contractors and negotiate advantageous pricing. TxDOT's central professional engineering procurement services division, formed in 2013, procures contracts for engineering, architecture, surveying, and other professional services. TxDOT selects contractors based on qualifications prior to negotiating price and executing the contract, as required by statute. Districts or other divisions using these contracts then must negotiate the scope of work authorized, which largely determines the ultimate cost.

TxDOT has not enforced the requirement to complete engineering contractor evaluations.

assess the overall success of a contractor performance. Agencies should assess the overall success of a contractor's performance to improve future contractor selection. Without contractor evaluations, TxDOT cannot effectively evaluate past performance, an important part of measuring a contractor's qualifications, and risks contracting with firms that have performed poorly in the past. TxDOT's rules require project managers to complete performance evaluations for engineering contractors both annually and after a project is complete, to be used in future procurements. However, TxDOT has not enforced the requirement to complete evaluations, resulting in very few evaluations as compared to the number of projects completed, as shown in the graph on the following page, TxDOT Engineering Contractor Evaluations.





• Little information about past pricing. Agencies should document lessons learned from contract negotiations to prepare for future negotiations. TxDOT's districts do not have easy access to information about past negotiations to inform current efforts. To assist districts in negotiating the scope of work for projects, TxDOT created a database with historical data on the number of hours agreed upon in previous negotiations for the same project scope. This information should help districts negotiate the number of hours needed to complete a project. However, some districts report the database is difficult to use. The data are also out of date — the most recent information is from fiscal year 2013. TxDOT has not made sufficient efforts to work with its districts to determine how best to modify the database to more effectively help them negotiate the scope of work. Taking such an approach would help ensure district staff has available information to help effectively negotiate the right number of hours for the specific type of project required.

TxDOT's districts do not have easy access to information about past negotiations to inform current efforts.

Oversight and Support of Newly Decentralized Functions

TxDOT recently decentralized two major contracting responsibilities without a clear plan for ensuring effective accountability and oversight.

Agencies with decentralized contracting functions should promote clear accountability and consistency in their contracting practices to reduce risk and increase contracting efficiency. However, TxDOT has recently decentralized two contracting responsibilities to the districts without a plan in place to adequately oversee performance or provide needed training. As discussed in Issue 6, the department has begun decentralizing some project delivery functions after nearly a decade of centralization efforts. Given the impending increase in money for transportation projects and the need for districts to work efficiently, TxDOT's

decisions to decentralize are understandable. However, the department must also mitigate the risks involved in decentralizing contracting functions to ensure consistent, efficient processes and effective contract oversight. Without providing effective training, guidance, and monitoring, TxDOT cannot be sure that district staff appropriately carry out these new responsibilities. The department also runs the risk of recreating the same issues with inconsistency that previously led to more centralized procurement of professional engineering services contracts.

• Large, complex "strategic" contracts. In February 2016, TxDOT delegated day-to-day management of \$7.4 billion in "strategic" contracts to the districts in which the projects are located, while maintaining responsibility for procurement of these contracts with the central project finance, debt, and strategic contracts division. The textbox, Types of Alternative or "Strategic"

Contracts, describes these contracts, and Appendix J, Strategic Projects Currently Under Construction, lists the department's 12 active projects using these methods.

Types of Alternative or "Strategic" Contracts

- Comprehensive Development Agreements.
 Public-private partnerships funded using any combination of private investments, toll revenue bonds, regional or local toll revenue, or federal and state funds, and limited to projects listed in statute. Statutory authority is set to expire in 2017.
- **Design-Build**. Projects completed by one contractor who both designs and constructs the project, rather than the project designed prior to being bid for construction. By state law, TxDOT may execute up to three design-build projects each fiscal year, for contracts valued at more than \$150 million each.

TxDOT made this decision without first developing guidance and training for district staff, many of whom are newly responsible for managing these large, highrisk contracts. TxDOT also lacks monitoring processes to ensure districts provide effective contract oversight. Strategic contracts are structured differently than the typical low-bid construction contracts districts are most used to managing. Some of the districts managing these contracts do not have prior experience with strategic contracts. For example, the Corpus Christi district is now managing a \$900 million project to rebuild the Harbor Bridge, the first major designbuild contract managed by that district.

An August 2016 State Auditor's Office report also focused on TxDOT's lack of a fully established framework to most effectively procure strategic contracts.²¹ Department staff plans to draft comprehensive policies and procedures as directed in the audit by spring of 2017.

• Professional engineering services contracts. Since 2013, TxDOT has centrally procured its professional engineering services contracts, with a central office division putting master contracts in place that districts can then use as needed by negotiating separate work authorizations. TxDOT centralized this procurement process due to problems such as unpredictable and often very long procurement timelines and inconsistently negotiated rates across the state.²²

The increase in transportation funding has caused TxDOT to partially rethink its centralized procurement and oversight model. The department has used an increasing number of professional engineering services contracts,

from less than \$500 million in each of fiscal years 2010–2012 to about \$1.5 billion in fiscal year 2016. To free up central office division staff to conduct more procurements, TxDOT has recently devolved the execution of work authorizations of less than \$1 million to seven districts, and is preparing to launch a pilot to decentralize some procurement to select districts. The districts participating in these pilots are smaller districts that may have less contracting expertise, and therefore likely require more extensive training and support. The central division provides a one-time training course for districts participating in pilots and provides targeted support for district staff for three months. However, the division has not provided formal guidance or standards for districts taking on new contracting responsibilities and has not established a regular monitoring process to ensure the districts are approving work authorizations appropriately.

Contract Review and Monitoring

TxDOT's centralized contract approvals do not match level of risk with level of review, potentially causing unnecessary delays in negotiating and executing contracts.

In a decentralized contracting environment, centralized review and approval processes for contracts help ensure accountability and adherence to basic legal requirements as well as agency policy. However, these approval processes should balance the need for oversight with the need to efficiently negotiate and approve contracts and avoid delays. Sunset staff heard numerous complaints from stakeholders internal and external to the department about the length of time needed to review and approve various types of contracts. Two types of contracts most complained about include project-specific work authorizations for professional engineering services negotiated by districts and approved by multiple central office divisions and high-level staff; and advance funding agreements used for projects jointly delivered by local governments and TxDOT. Ultimately, the Sunset review identified the following three areas for TxDOT to review and streamline its approach to contract monitoring while maintaining sufficient oversight.

• Scope of central contract review not risk based. TxDOT's central contract services division reviews a broad range of negotiated contracts prior to execution. Appendix H, *Contract Services Division Review Role*, details the number and dollar amount of prime contracts reviewed by this division in fiscal year 2015. For most contract types, the division reviews all contracts with no minimum dollar amount, while reviewing a few types of contracts only if they exceed a minimum threshold.

TxDOT's current approach to central review of contracts is not based on a formal risk assessment, potentially adding unnecessary delay to lower-risk contracts. Further, while state law and TxDOT policy directs other divisions and districts procuring contracts to assess the risk level of each individual

Sunset staff heard numerous complaints about the time needed to review and approve various contracts.

Common Contract Risk Factors

- High total contract value
- High contract complexity
- Source of funding, with federal funding incurring greater risk
- Contractor experience and past performance

contract, the division itself does not have a similar process for determining priority for which contracts it should review.²³ The textbox, *Common Contract Risk Factors*, shows factors the division could consider in determining a contract type's risk level. Conducting a comprehensive analysis of the current system using such factors could help develop a logical, risk-based approach to central contract review and allow staff to focus more time on higher-risk contracts and ultimately avoid unnecessary delays.

- Signature authority overly complex and not risk based. Signature authority documents list the staff authorized to approve various types of contracts. Generally, more complex, riskier contracts receive more scrutiny and review. The signature authority for TxDOT contracts is complex and not risk based, a result of years of minor amendments without a broader, strategic revision. The executive director's signature authority document was revised recently, in August 2016. However, some districts and divisions have not updated their signature authority documents following significant reorganizations. For example, the Abilene and Bryan districts have not updated their signature authority since 2014, and the design and fleet operation divisions have not revised signature authority documents since 2013. Additionally, some signature authority among districts sometimes differs for the same types of contracts. The complexity of TxDOT's approach to signature authority and the lack of a risk-based approach have resulted in delays for approval of some contracts. For example, some professional services contracts require as many as seven signatures prior to execution, and while TxDOT's goal for professional services contract execution is 15 days, the execution process took as long as 46 days for one engineering contract in fiscal year 2016.
- TxDOT's siloed contract performance measures prevent identification of bottlenecks.

No comprehensive approach to measuring contracting processes. Though tracking performance measures is a best practice standard for contract management, TxDOT's approach is siloed and does not track contract procurement and approval processes overall, preventing the department from identifying potential bottlenecks where attention is needed.²⁴ Due to TxDOT's decentralized contracting functions, no single division is responsible for tracking overall contracting measures from the perspective of the end-user waiting for contract execution to do their job. For example, the contract services division tracks the time from submission of a contract for review and approval until execution, with other divisions tracking time for procurement and negotiation. However, TxDOT does not measure this entire process. As a result, the department may continue to add layers of approval and review without knowing the impact these processes have on overall efficiency.

Recommendations

Traditional Low-Bid Highway Contracts

Change in Statute

3.1 Require TxDOT to include a range of contract remedies in its traditional low-bid highway contracts.

This recommendation would require the Transportation Commission to adopt rules defining a range of contract remedies to be included in all traditional, low-bid contracts. The department should use a stakeholder process to develop these rules. At a minimum, the rules should define a process for including enforceable corrective action plans and criteria for prohibiting contractors with significant delays from bidding on new projects. As part of this process, TxDOT should consider contract remedies used by other Texas state agencies as well as other states' departments of transportation. This recommendation would also require TxDOT to develop a process and clear criteria for applying the various contract remedies. The commission would be required to adopt rules implementing intermediate contract remedies by September 1, 2018.

3.2 Require TxDOT to adopt rules implementing the existing statutory requirement to reflect accurate costs of project delays in liquidated damages.

This recommendation would require the Transportation Commission to adopt rules implementing the existing statutory requirement that liquidated damages reflect the costs of project delays, including administrative costs and impacts on traffic. The rules would list criteria for identifying projects with a significant impact on the traveling public, for which TxDOT should calculate project-specific liquidated damages to accurately reflect the cost of traffic delays. The department should also consider differences between construction and maintenance contracts in developing these rules. By assessing project-specific liquidated damages for appropriate projects, TxDOT would ensure contractors properly compensate the state for the cost of project delays with significant traffic impacts. The commission must adopt rules implementing this process by September 1, 2018.

3.3 Require TxDOT to conduct contractor evaluations and consider past performance in determining bid capacity through a process defined in rule.

Under this recommendation, TxDOT would develop a process to evaluate contractor performance and criteria for modifying contractors' bidding capacity for low-bid contracts where appropriate, as already required in statute. The department should include an appeals process in its rules. As a management action, TxDOT should review other states' models as part of developing a method for using performance evaluations, either in the prequalification process or by creating a system of corrective actions for poor performers. The department should also use industry input in designing an appropriate evaluation tool. TxDOT would define in rule criteria for using the evaluations to address contractor performance problems. The department should adopt rules implementing the performance evaluation and qualification process by September 1, 2018.

Management Action

3.4 Direct TxDOT to develop clear criteria for applying sanctions.

The commission should revise its rules on construction contract sanctions to clearly connect each sanction listed in rule with the types of performance problems it would address. The department should also

develop internal policies to guide use of sanctions for contractors with the most egregious performance problems. These policies would define performance issues that should trigger the imposition of specific sanctions and a process to escalate sanctions if a contractor has repeated problems. The department would revise its rules and develop internal criteria and guidance for use of sanctions by September 1, 2018.

3.5 Direct TxDOT to develop and implement a process for regular, centralized monitoring of construction contract delays.

This recommendation would direct TxDOT to expand its approach to central monitoring of construction contractor performance. Monitoring would help the department identify repeated performance issues and trends, ensuring TxDOT can effectively develop intermediate steps to address problems and assist districts in determining how to use the contract remedies to be defined under Recommendation 3.1. In addition, centralized monitoring would help identify cases meriting use of the separate contract sanctions process for more serious, chronic performance issues. The construction division could prepare and review a monthly report of projects that are over schedule or over budget by a set percentage, and work with districts to identify reasons for the delays and understand trends. The report could also highlight contractors with delays on multiple projects as well as delays on large, high-profile projects with significant traffic impacts. The division should also analyze trends and work with districts to identify drivers of poor contractor performance. The division should continue to provide monthly updates to TxDOT administration to ensure awareness of significant issues that may require high-level intervention. The department should implement the expanded monitoring and reporting process by March 1, 2018.

3.6 Direct TxDOT to develop criteria for applying project incentives such as milestone incentives and A+B bidding.

The department should develop criteria for existing project acceleration tools, including milestone incentives and A+B bidding, to provide information to districts on when these tools should be used. Criteria should include, at a minimum, overall project cost, impact on traffic, location and time-specific needs, business impacts, and site readiness. TxDOT should designate a central office division to support districts in determining whether to use a project incentive, and should regularly review a sample of district decisions to determine whether criteria should be adjusted. Additionally, TxDOT should evaluate the use of project incentives and determine the time savings and associated costs, revising criteria as needed. The department should develop criteria for using acceleration tools by March 1, 2018.

3.7 Direct TxDOT to update production rate information for estimating project timelines and establish a schedule for regular revisions.

The department should update production rate information to allow for accurate estimations of project timelines, which would help districts more accurately determine whether project incentives should be used. Updating production rate information will also allow TxDOT to properly assess liquidated damages by more accurately estimating the time needed to complete a project, the basis for time allowed in all contracts. The department should also develop a schedule to regularly revise its production rate guidance to ensure the long delay in updating the current guidance is not repeated. The department should update its production rates and plan a revision schedule by March 1, 2018.

Professional Engineering Contracts

Management Action

3.8 Direct TxDOT to provide guidance for district management of construction engineering inspectors, including how to perform staffing analyses and manage these expanding contracts.

The department should develop tools and guidance for districts to help determine the need for contracted inspectors and how to perform effective contract oversight. For example, TxDOT should provide guidance to districts on completing staffing analyses, allowing districts to determine projects requiring contracted inspectors and communicate the need for a contract to the professional engineering procurement services division. Effective analysis of staffing needs would also help districts fully use existing staff resources before engaging contractors. The department should also modify existing contract manager training to include specific standards and policies for managing inspection contractors, a new responsibility for many district staff. In developing these standards, tools, and training, the construction and professional engineering procurement services divisions should work together to identify best practices already developed by districts and share with all districts. The department should develop these standards and training for managing construction engineering and inspection contracts by March 1, 2018.

3.9 Direct TxDOT to better monitor and enforce the existing requirement that professional service project managers complete engineering contractor evaluations.

This recommendation would direct TxDOT to enforce an existing requirement that project managers evaluate engineering contractors annually and at the end of projects to ensure past performance can be used in future qualifications-based procurements. To accomplish this goal, the department should develop a process to regularly remind project managers to complete evaluations and monitor completion of evaluations. To implement this recommendation, the department could consider communicating evaluation completion rates back to districts to ensure ongoing accountability and staff awareness of the need to complete evaluations. Division staff could also work with districts to determine whether additional training is needed on completing evaluations. TxDOT should implement these changes by March 1, 2018.

3.10 Direct TxDOT to improve the availability of comparative information needed for districts to effectively negotiate the scope of work for professional engineering contracts.

The department should review its existing level-of-effort database to create a more user friendly, upto-date tool. The department should work with districts to identify how to make the information more useful, and should develop a process to regularly update available information about negotiated scopes of work. This change would help districts more effectively negotiate contracts with professional engineering services contractors. TxDOT should complete this review and update by March 1, 2018.

Oversight and Support of Newly Decentralized Functions Management Action

3.11 Direct TxDOT to develop additional training and monitoring processes to oversee districts' management of large, complex contracts, such as design-build.

TxDOT should develop a comprehensive approach to providing training and conducting monitoring to ensure district staff effectively oversees the department's largest, most complex contracts. TxDOT

should use district input in developing these processes. The elements of this approach should include, at a minimum:

- Training for district staff specific to managing large, strategic contracts
- Performance measures to help with ongoing monitoring of district contract management, such as measures related to change orders, contractor performance issues, and others
- Quality assurance processes, such as audits or reviewing samples of district work, to conduct riskbased checks to ensure effective contract oversight
- A feedback process to ensure the project finance, debt, and strategic contracts division regularly solicits input from districts to identify gaps in training, guidance, and policies

Developing and implementing a structured oversight process would help ensure TxDOT can maintain a sufficient level of oversight in light of recent decisions to decentralize management of the department's largest, most complex contracts. TxDOT should implement these processes by March 1, 2018.

3.12 Direct TxDOT to provide comprehensive guidance and monitoring for decentralized procurement of professional engineering services contracts.

The department should create a comprehensive approach to help guide and oversee districts newly procuring professional services contracts and executing work authorizations to ensure that procurement is carried out properly at the district level. The professional engineering procurement services division's approach should include, at a minimum:

- Clear policies and procedures defining the process districts must follow in procuring professional engineering services contracts and developing work authorizations
- Performance measures to monitor districts' timely completion of procurements and work authorizations
- Risk-based quality assurance processes to regularly review a sample of districts' procurements and work authorizations for basic compliance with agency policies and standards
- A feedback process to ensure the division regularly solicits input from districts to identify gaps in training, guidance, and policies

These changes would help ensure a clear oversight structure exists given the recent moves to decentralize certain professional services contracting functions. TxDOT should complete these steps by March 1, 2018.

Contract Review and Monitoring

Management Action

3.13 Direct TxDOT to develop a risk-based approach to centrally reviewing contracts.

This recommendation would direct TxDOT to revise the contract services division's review role to ensure central review of contracts is based on risk, freeing up staff time to focus on the most high-risk contracts and address any process bottlenecks. The department should define key areas of risk requiring central contract review, and limit review of contract types that pose little risk to the state. Additionally, TxDOT should consider revising minimum dollar amounts that trigger central review, rather than reviewing multiple contract types with no minimum contract value. The department should revise and adopt a new contract services division review scope by March 1, 2018.

3.14 Direct TxDOT to update its signature authority based on risk, eliminating unnecessary delays while preserving the appropriate level of review.

The department should conduct a comprehensive review and update of its highly complex signature authority to reflect the risk level of various contract types and to clarify signatures needed prior to execution. This change would help balance needed oversight with the competing need to minimize delays. As part of this recommendation, the department should also ensure that all divisions and districts update signature authorities to reflect reorganizations and other significant changes, and work with staff throughout the agency to ensure the signature authority is clear to staff who must identify the appropriate approval points. The department should review and update its signature authority by March 1, 2018.

3.15 Direct TxDOT to develop and monitor performance measures for contract procurement.

The department should develop comprehensive performance measures for the procurement of negotiated contracts and monitor these measures to identify problem areas and assess the need to revise processes to minimize delays. Performance measures should include both overall end-to-end contracting time from the end-user's perspective as well as the amount of time taken by each step of the process. TxDOT should develop measures for all types of negotiated contracts that require negotiation, review, and approval, such as advance funding agreements and work authorizations. This change would allow TxDOT to have more visibility into total procurement time and make adjustments to the process as necessary. The department should develop and implement contract performance monitoring by March 1, 2018.

Fiscal Implication

Overall, the recommendations are designed to improve internal operations and efficiency, but their exact impact would depend on implementation. Requiring TxDOT to better oversee and monitor contracting functions would require substantial effort to implement, but are basic oversight responsibilities that should be accomplished within TxDOT's available resources. For example, the department could incorporate the additional contract management training within its current training programs, and already has staff qualified to write the new curriculum.

The recommendation to adjust liquidated damages to reflect road user costs in the schedule of liquidated damages and for specific high-impact projects could have a positive fiscal impact. However, the fiscal impact cannot be estimated without knowing the updated amount of liquidated damages, number of contracts and amount of project-specific liquidated damages, and total number of days delayed.

These numbers exclude the full-time equivalent positions transferred from TxDOT to the Department of Motor Vehicles (DMV) when the Legislature created the DMV in 2009.

² Texas Comptroller of Public Accounts, *State of Texas Contract Management Guide* (September 1, 2016), accessed October 14, 2016, https://www.comptroller.texas.gov/purchasing/docs/contract-management-guide.pdf.

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- ⁶ California Department of Transportation, *Standard Specifications* (2015), Section 8–1.02D(8)(a), accessed October 14, 2016, http://www.dot.ca.gov/hq/esc/oe/construction_contract_standards/std_specs/2015_StdSpecs/2015_StdSpecs.pdf.
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Issue 4

TxDOT Has Not Taken Proactive Steps to Improve Contracting Opportunities for Disadvantaged Businesses.

Background

Federal, state, and local governments created business opportunity programs to help level the playing field for small, minority-, and women-owned businesses to participate in government contracting. The programs are not quota or set-aside programs, since they do not guarantee contracts. Instead, their primary purpose is to provide a fair opportunity to win government contracts by identifying and certifying eligible businesses, setting participation goals, and conducting outreach. Generally, goals relate to the number of eligible businesses ready and able to contract within different contract categories, such as construction and commodities.

The Texas Department of Transportation (TxDOT) is in the unique position of administering three separate business opportunity programs required by federal law, state law, and TxDOT rules, described in more detail in the table, *Comparison of TxDOT Business Opportunity Programs*. The department's central civil rights division in Austin oversees the three programs, with TxDOT's 25 district offices conducting much of the day-to-day work.

Comparison of TxDOT Business Opportunity Programs

Program	Disadvantaged Business Enterprise (DBE)	Historically Underutilized Business (HUB)	Small Business Enterprise (SBE)
Oversight agency	U.S. Department of Transportation	Texas comptroller's office	TxDOT
Controlling law	Federal regulations ¹	State law ²	TxDOT rules ³
Agency responsible for certifying program-eligible businesses	TxDOT ⁴	Texas comptroller's office	TxDOT
Eligible businesses	Small businesses owned by minorities or women ⁵	Small businesses owned by minorities, women, or service-disabled veterans	Small businesses
Eligible types of contracts	Highway, airport, and transit contracts receiving federal funds	Professional services and commodities contracts, excluding state-funded construction and maintenance contracts, for which the SBE program applies	State-funded construction and maintenance contracts; and federally funded DBE-eligible contracts if no DBE goal has been set by TxDOT ⁶
Number of certified businesses in FY 2015	4,031	15,924	406
Total eligible contract expenditures in FY 2015	\$3.38 billion	\$6.3 billion	\$5.28 billion

Program	Disadvantaged Business Enterprise (DBE)	Historically Underutilized Business (HUB)	Small Business Enterprise (SBE)
Expenditures in FY 2015 with certified businesses	\$516.5 million	\$534.23 million	\$156.28 million
Overall percent of eligible contract expenditures with certified businesses	15.3%	8.48%	2.97%
FY 2015 program goals	Highway projects: 11.7% Airport projects: 11.8% Transit projects: 3.3%	Heavy construction: 7.14% Building: 20.16% Special trade: 36.14% Professional services: 18.75% Other services: 25.08% Commodities: 15.84% ⁷	13% overall goal

Comparison of TxDOT Business Opportunity Programs (continued)

The Sunset review paid special attention to these programs for several reasons. First, TxDOT is one of the top contracting operations in state government, spending \$8.3 billion on contracts in fiscal year 2015, or 78 percent of its overall expenditures. TxDOT's success in contracting with small, minority-, and women-owned businesses is therefore particularly important to the state's overall goals to open up opportunities to these businesses. Also, TxDOT has undergone multiple internal and external audits in recent years indicating persistent management challenges with the department's administration of these programs that remained quite apparent throughout the Sunset review.8 TxDOT often had difficulty providing reliable and complete data and information in response to Sunset data requests, even about basic elements and requirements of the programs. While TxDOT is in the midst of resolving many of the specific past audit findings to ensure compliance with basic federal and state requirements, the Sunset review focused on bigger-picture issues to improve overall effectiveness of and participation in these programs. In addition, the Sunset Act requires the Sunset Commission to consider agencies' compliance with applicable state requirements regarding the state's HUB program. Staff routinely evaluates agency performance regarding these requirements in the course of a Sunset review, but only reports deficiencies significant enough to merit attention. Last, as long as these programs exist in federal and state law, TxDOT is expected to successfully accomplish the goals of the programs and should be evaluated on that basis.

Findings

TxDOT does not strategically set or monitor participation goals, reducing the effectiveness of its business opportunity programs.

TxDOT's

goal-setting

methods rely too

heavily on past

performance.

Goals not set to encourage improvement. TxDOT does not set stretch goals for any of its business opportunity programs to encourage increased participation within reasonable limits. Overall, the department's goalsetting methods rely too heavily on using past performance as a basis to determine future goals, promoting the status quo without an eye toward improvement. On a basic level, when TxDOT far exceeds its goals, the department has generally increased the goal for the following year by only a small amount. For example, in fiscal years 2014 and 2015, TxDOT exceeded its federal DBE goals for highway projects by more than three percentage points but only raised its fiscal years 2017–2019 goals by less than one percentage point.¹⁰

TxDOT has not taken steps to ensure its goals accurately reflect the availability of businesses certified in each program, as suggested in both state and federal guidance for these programs.¹¹ For example, the U.S. Department of Transportation provides various options for state departments of transportation to set DBE goals based on DBE availability, as listed in the textbox, *Federal Guidance for Setting DBE Goals*.¹² Instead, the department uses the state's 2009 HUB Disparity Study and past participation as the primary basis for goal setting, not necessarily an updated or accurate reflection of DBE availability. While the U.S. Department of Transportation has approved TxDOT's goal-setting methodology in years past, the department could use alternative data sources to set more accurate goals. Additionally, TxDOT's internally set HUB goals for fiscal years 2015

The department's goals do not accurately reflect availability of certified businesses.

and 2016 were based on an average of past participation, did not reflect overall HUB availability, and were therefore much lower than the statewide aspirational goals set by the comptroller's office. In fiscal year 2015, the difference between the comptroller's statewide goal for heavy construction projects and TxDOT's agency-specific goal was significant — 11.2 percent set by the comptroller, while TxDOT's was far less at 7.1 percent. Finally, TxDOT has not ensured its SBE goals accurately reflect the number of available certified businesses.

Federal Guidance for Setting DBE Goals

- Compare DBE directories of certified businesses with Census Bureau data
- Compare the list of previous DBE bidders with the list of all previous bidders
- Obtain a valid, applicable disparity study analyzing utilization of DBE businesses in the area
- Use another federal funding recipient's goal, such as a local government, if in the same geographic area

Source: U.S. Department of Transportation

• No standard process for addressing missed goals. While TxDOT has generally met its federal DBE goals in recent history, the department falls short in several of the broader state HUB spending categories, such as commodities and other services, as shown in Appendix B, *Historically Underutilized Businesses Statistics*. TxDOT also fell far short of its SBE goal in fiscal year 2015, only achieving less than 3 percent of its overall 13 percent goal. The civil rights division is responsible for setting goals and general oversight, but lacks a process to understand why the department is failing to meet the HUB or SBE goals or how to improve performance, such as increasing efforts to hold pre-bid vendor conferences or other forums to inform TxDOT staff about available certified firms. Improving such oversight is particularly important considering TxDOT's highly decentralized contracting environment where the 25 districts and many central office divisions have significant independent authority to make program decisions.

TxDOT fell far short of its small business enterprise goal in fiscal year 2015.

Overlapping certifications and lacking outreach limit full participation of eligible businesses.

• Failure to actively certify SBE-eligible businesses. TxDOT does not actively certify contractors for the SBE program even though department rules make HUB- and DBE-eligible businesses also eligible for SBE certification. The table, *Multiple Business Opportunity Program Certifications*, shows the low percentage of firms currently holding multiple certifications, especially SBE certification. TxDOT could automatically dual certify these businesses as SBEs, but requires a separate application process instead, reducing the effectiveness and reach of the SBE program.

Requiring
a separate
application
process reduces
the reach of the
small business
enterprise
program.

Multiple Business Opportunity Program Certifications FY 2015

Certification	Dual Certification as HUB	Dual Certification as DBE	Dual Certification as SBE
HUB		18%	<1%
DBE	54%		<1%
SBE	24%	10%	

In a 2013 survey, 29 percent of respondents rated TxDOT's outreach as poor or bad. **Inadequate outreach and training efforts.** The department does not do enough to identify and support eligible contractors using outreach and training. Contracting with a large agency like TxDOT can pose unique challenges for small businesses without prior experience, particularly due to complex requirements for construction projects using federal funding. The department completed a 2013 survey of stakeholders, including minority and women business owners; business development organizations; public officials; and minority, women, and general contractor groups. Twenty-nine percent of respondents rated TxDOT's outreach efforts as poor or bad. 14 While TxDOT subsequently increased its training and outreach events, the department typically focuses content on running a small business, rather than the nuts and bolts of working with a large agency like TxDOT. In addition, these efforts are largely targeted at contractors already certified in one of TxDOT's three programs, instead of identifying new, eligible businesses for participation. The department has recently recognized these issues and started improving its training and outreach efforts. A continued move in this direction would ensure TxDOT recruits more eligible businesses and provides more useful support, ultimately increasing the overall effectiveness of these programs.

TxDOT does not ensure sufficient overall quality assurance and support for day-to-day program implementation across the department.

The civil rights division does little to monitor program implementation overall or ensure districts and other central office divisions carrying out the day-to-day responsibility of contract monitoring have needed guidance and support. The table, *TxDOT Business Opportunity Programs Division of Responsibilities*, describes this decentralized contracting environment. Districts have the most intensive monitoring responsibilities since they oversee the bulk of TxDOT's expenditures for traditional low-bid highway construction projects. Because only small businesses can participate in TxDOT's three programs, certified firms are usually subcontractors on larger prime contracts, requiring closer oversight. Overall, the Sunset review found districts receive little support, guidance, or monitoring from the civil rights division despite their extensive responsibilities for ensuring the success of TxDOT's business opportunity programs.

Certified firms
are usually
subcontractors on
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oversight.

TxDOT Business Opportunity Programs Division of Responsibilities

Civil Rights Division Role	Contract Manager Role (Districts and Some Divisions)	
Establish program-wide and project-specific goals	• Collect prime contractors' commitment lists of certified firms for subcontracting	
Certify federal DBEs and TxDOT SBEs	• Collect and review monthly progress reports and final reports	
Set policyPrepare reports	• Address problems when prime contractors are not meeting participation goals	
	• Perform on-site reviews	
	Monitor local governments managing projects with business opportunity program goals	
	Enter data on participation	

The division launched a quality assurance audit process in response to recent State Auditor's Office audit findings, but this process is very new, with the

division only completing five audits so far.¹⁵ The audits completed so far have identified contract management shortcomings, as shown in the accompanying textbox, *Example Issues Found Through New Civil Rights Division Audits*. Completing audits of all districts and divisions on a regular schedule would allow the civil rights division to identify and systematically address contract management shortcomings related to these programs.

Example Issues Found Through New Civil Rights Division Audits

- No monitoring of prime contractors' good-faith efforts when they fail to meet subcontracting goals
- No completion of required on-site reviews
- No tracking of prompt payment of subcontractors within the required timeframe

TxDOT's largely dormant small business enterprise program does not meaningfully promote opportunities for small businesses.

The department has allowed the small business enterprise program to languish without proactively using it to provide enhanced opportunities for small businesses. Currently, this program is in limbo, largely dormant and providing little benefit to the few certified businesses currently participating in it. Even so, the department uses the program to meet a 2011 federal regulation requiring state departments of transportation to foster small business participation. Overall, the department needs to evaluate whether a separate SBE program is actually needed to meet these regulations, and if so, how to make it more meaningful.

TxDOT has not set small business goals on any federally funded contracts in the last four years.

• Unclear need for separate program. While the SBE program technically remains on the books in TxDOT's rules, the department is not required by state law or federal regulations to have a separate program to promote small businesses. In 2000, a lawsuit settled by consent decree required TxDOT to create a certification program for economically disadvantaged small businesses, regardless of the owner's gender or minority status, but did not require TxDOT to set specific participation goals. The court only retained jurisdiction over TxDOT's SBE certification program for one year, ending in July 2001, but TxDOT voluntarily kept the program in place without actively managing it.

Ten years later in 2011, the U.S. Department of Transportation required all states' departments of transportation to foster small business participation on federally funded projects as part of their DBE programs, through

Federal Guidance For Promoting Small Business Participation

- Small business set-asides for small contracts
- Creating opportunities for small businesses on projects without a DBE goal
- Ensuring discrete elements of large projects are of an appropriate size for small businesses.

Source: U.S. Department of Transportation

measures such as those listed in the textbox, Federal Guidance for Promoting Small Business Participation.¹⁷ The federal regulations did not require states to create separate small business programs, but TxDOT complied by adopting rules to ostensibly apply the state SBE program to all federally funded projects without DBE goals.¹⁸ However, TxDOT did not actually set SBE goals on any federally funded contracts from fiscal years 2013–2016, calling into question the program's more recently stated purpose to help promote small businesses for federally funded contracts.

Only 400 businesses are currently certified as small business enterprises. Passive management. TxDOT's passive management of the SBE program results in low participation rates — in fiscal year 2015, the department fell far short of its overall SBE goal of 13 percent, with less than 3 percent actual SBE participation. When TxDOT created the SBE program in 2000, the department voluntarily developed requirements for the SBE program mirroring the federal DBE program, with overall participation goals, contract-specific goals, and contract monitoring through monthly progress reports and on-site reviews. However, the department no longer seeks to actively certify new SBE businesses, and only 400 businesses

currently have SBE certification. TxDOT does not set goals on all programeligible state-funded projects and, as discussed above, has not set goals on federally funded projects in several years. While districts monitor the department's limited SBE contracts in a similar manner to projects with federal DBE goals, the civil rights division provides little to no guidance or oversight. Because the program is not required by law, TxDOT does not report program participation to an external oversight agency, and has not regularly reported on the program internally.²⁰

Recommendations

Management Action

4.1 Direct TxDOT to align its business opportunity goal setting with state and federal guidelines to more actively promote higher participation.

The department should follow established guidance to set more meaningful goals for its business opportunity programs, as follows.

- Federal DBE program. TxDOT should base its goals on the number of available DBEs, in line with recommendations by the U.S. Department of Transportation. In accordance with federal regulations, TxDOT has various options. The department could identify the number of available DBE contractors using the department's DBE directory, a list of past bidders, or a valid DBE disparity study. The department should also ensure its adjustments for past participation and other factors adequately reflect aspirational goals given the department's past success in meeting most of its goals in this program. TxDOT should make these changes before the next required goal submission to the U.S. Department of Transportation in 2017.
- State HUB program. The department's agency-specific goals should not merely reflect past participation, but also HUB availability and the overall state aspirational goals. TxDOT should develop rationale for setting HUB goals based on guidance from the comptroller of public accounts and clearly document its goal setting decisions based on this rationale. TxDOT should make this change before the next required goal submission to the comptroller in 2017.
- TxDOT SBE program. TxDOT should review its overall goal-setting methodology to ensure the goals adequately reflect the number of certified businesses eligible to participate in the program. The department should continue to annually document its goal-setting methodology for the SBE program, as it did in fiscal years 2013 and 2015. Additionally, the department should set participation goals for all program-eligible projects. TxDOT should make this change by March 1, 2018.

Bringing goal-setting practices in line with basic state and federal guidance should result in goals that reflect actual availability of eligible businesses, more accurately track the impact of these programs, and help increase overall opportunities and participation of eligible businesses as intended.

4.2 Direct TxDOT to develop a standard process for addressing failure to meet business opportunity program goals.

TxDOT's civil rights division should develop standard protocols for addressing failure to meet its business opportunity program goals. This change would most impact the state HUB and SBE programs at first, since the department has been recently meeting or exceeding its federal DBE goals. However, having a standard process for addressing nonattainment of program goals should apply to any business opportunity

program in the future. These changes would help TxDOT more actively promote opportunities for certified businesses and improve future performance. TxDOT should implement this process by March 1, 2018, including, at a minimum, the following elements:

- Analysis of district and division contracting patterns to determine areas with low participation
- Proactive communication with districts and divisions to develop strategies to increase utilization
- Increased opportunities for TxDOT staff to learn more about available certified businesses, such as through increased use of pre-bid conferences or other forums

4.3 Direct TxDOT to actively recruit new businesses for certification and provide training on contracting with TxDOT.

The department should improve its outreach and recruitment of new businesses, particularly in underrepresented specialties, by proactively identifying workshops and events likely to have a large number of eligible, but not certified firms. The department should also expand its outreach to groups and associations of eligible firms. The department should set targets for certification numbers and monitor the number of certified firms and percentage change each fiscal year to evaluate the success of these efforts and determine the need to make adjustments. In addition, TxDOT should continue to refocus the content of its outreach and training for eligible businesses on the nuts and bolts of contracting with TxDOT, rather than focusing solely on general training about running a small business. TxDOT should modify its approach and develop an initial plan to more actively recruit new businesses by March 1, 2018.

4.4 Direct TxDOT to improve central monitoring and support for its business opportunity programs.

TxDOT's civil rights division should develop a structured approach to monitoring and supporting the day-to-day duties of districts and other central office divisions in implementing the department's three business opportunity programs. The civil rights division should seek district and division input in developing these processes. A more standard oversight process would help ensure the department can maintain a sufficient level of quality assurance, particularly given past audit findings indicating lacking oversight. TxDOT should implement improved processes including the following elements by March 1, 2018:

- Enhanced training for district staff on monitoring program contracts, conducting on-site reviews, and addressing common problems
- Basic quality assurance processes, such as reviewing samples of district and division work and conducting more routine audits of all districts and central office divisions managing program contracts to identify systemic issues
- A feedback process to ensure the civil rights division regularly solicits input from districts and divisions to identify gaps in training, guidance, and policies

4.5 Direct TxDOT to evaluate the small business enterprise program and develop policies and rules to provide meaningful opportunities for small businesses.

The department should make a decision on how best to administer its voluntary small business enterprise program to provide opportunities for small businesses and adopt rule revisions by September 1, 2018. These new rules should address the department's plans to certify small businesses, set goals for SBE

participation, and monitor SBE projects, among other basic elements. The department should determine whether to comply with federal requirements to foster small business participation through the SBE program or other means suggested in federal regulations. If the department chooses not to use the SBE program to provide opportunities for small businesses on federally funded projects, TxDOT should develop an alternative plan to do so and consider whether there is a continuing need for the separate SBE program. Proactive decision making to resolve these issues would ensure the department manages its programs to provide meaningful opportunities for small businesses, as intended.

4.6 TxDOT should streamline certification to actively certify SBE-eligible businesses and increase participation of businesses eligible for multiple programs.

The department should automatically certify DBE and HUB businesses as SBEs according to eligibility requirements defined in department rule. A streamlined certification process would help increase the number of SBE-certified businesses and provide more meaningful opportunities to small businesses if TxDOT decides to continue using a separate SBE program as its method of meeting federal requirements as discussed in Recommendation 4.6. TxDOT should implement this process by March 1, 2018.

Fiscal Implication

These recommendations will not have a direct fiscal impact to the state. Implementing the recommendations would require effort, but relate to the civil rights division's most basic management responsibilities and should be achievable within existing resources. The recommendation for TxDOT to improve its outreach efforts to eligible businesses simply refocuses the department's existing training efforts and could be accomplished within existing resources.

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- ¹ 49 C.F.R. Parts 23 and 26.
- All citations to Texas statutes are as they appear on http://www.statutes.legis.state.tx.us/. Chapter 2161, Texas Government Code; 34 T.A.C. Chapter 20, Subchapter B.
 - ³ 43 T.A.C. Chapter 9, Subchapter K.
- ⁴ Five other local and regional entities certify disadvantaged business enterprises through the federally required Texas Unified Certification Program. Each agency certifies applicants in its area, and TxDOT certifies applicants outside of these cities and regions. All agencies accept certification by other program partners.
- ⁵ Under federal regulations, minorities and women are presumed disadvantaged. Business owners who are not women or minorities may submit proof of social and economic disadvantage to TxDOT to be considered for certification.
- ⁶ TxDOT determines whether to set a DBE goal on each project based on a range of factors, including total contract value, demographics, DBE availability in the project area, subcontracting opportunities, and the extent to which project opportunities are suited for DBEs.
- The comptroller of public accounts sets statewide HUB goals, and also requires agencies to develop agency-specific goals, which should use the comptroller's goals as a starting point. The goals listed in the table are TxDOT's goals, five of which are lower than the comptroller's statewide goals.
- Texas Department of Transportation, Office of Civil Rights Program Management Audit Report, May 31, 2013, accessed October 13, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/aud/reports/OffCivRigPM.pdf; Texas Department of Transportation, Internal Audit Follow-Up Report, Office of Civil Rights Program Management, August 22, 2014, accessed October 13, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/aud/reports/ocr_map_follow_up_engagement_finalreport.pdf; State Auditor's Office, An Audit Report on Selected Business Opportunity Programs at the Department of Transportation, September 2015, accessed October 13, 2016, https://www.sao.texas.gov/Reports/Main/16-002.pdf.
 - 9 Section 325.011(9), Texas Government Code.
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- ¹¹ 34 T.A.C. Section 20.13(c); 49 C.F.R. Section 26.45; U.S. Department of Transportation, *Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program,* December 22, 2014, accessed October 13, 2016, https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise.
 - ¹² 49 C.F.R. Section 26.45(c).
 - ¹³ 43 T.A.C. Section 9.305(b).
- Texas Department of Transportation, Overall Annual DBE Goal for Highway Design and Construction, Fiscal Years 2014–2016, August 2013, 37, 48–49, accessed October 14, 2016, https://ftp.dot.state.tx.us/pub/txdot-info/bop/dbe/dbe-goal-hwy-des-cst.pdf.
 - State Auditor's Office, An Audit Report on Selected Business Opportunity Programs at the Department of Transportation.
 - 16 Consent Decree, Kossman v. Texas Department of Transportation, No. H-99-0637 (2000).
 - ¹⁷ 49 C.F.R. Section 26.39(b).
 - ¹⁸ 43 T.A.C. Section 9.301.
 - 19 State Auditor's Office, An Audit Report on Selected Business Opportunity Programs at the Department of Transportation, 11.
 - ²⁰ Ibid.

Issue 5

TxDOT's Process Improvement Efforts Lack Clear, Measurable Results.

Background

In the midst of significant organizational flux since the 2009 Sunset review, the Texas Department of Transportation (TxDOT) has made extensive use of private management consultants to identify needed changes and recommend improvements to its operations. The first of these major efforts was a comprehensive management review in fiscal year 2010, which resulted in nearly 200 recommendations. Since that time, the department has continued to pursue various improvement efforts, largely focused on fixing longstanding issues and criticisms like balancing its relationship with the districts, improving

efficiency, developing a more performance-based focus to its operations, and increasing visibility into project development, among others. The textbox, *Selected Expenditures on Private Management Consultants*, provides more detail on TxDOT's major expenditures on these types of efforts.

In fiscal year 2012, TxDOT formed the operational excellence group, an internal group of consultants currently within TxDOT's strategic planning division, dedicated to working on business process improvement and other projects at the request of central office divisions or the 25 districts. Past projects include assisting TxDOT management in implementing changes made through the previous Sunset review, such as improving the department's transportation planning processes.

Selected Expenditures on Private Management Consultants FYs 2010–2016

- 10 contracts for professional services procurement process improvement (2014–2016): \$29.3 million
- Seven contracts for planning and portfolio management improvement efforts (2015–present): \$22.6 million
- Six contracts for fleet management initiative (2014–2015): \$18.7 million
- One contract for implementation of Restructure Council recommendations (2011–2012): \$4.1 million
- Grant Thornton management and organizational review (2010): \$2.1 million
- Two contracts for evaluation of project management functions (2013–2014): \$1 million

Findings

Despite spending more than \$100 million on management consulting contracts to improve performance since 2010, TxDOT has little information to clearly determine the results of these efforts.

TxDOT does not centrally track all of its improvement efforts, including those using private management consultants, or systematically evaluate performance improvements resulting from these expensive efforts. TxDOT has largely overlooked its internal operational excellence group that could perform this tracking and evaluation, as well as some of the performance improvement projects, likely at a lower cost.

TxDOT largely overlooks internal resources that could assist with performance improvement efforts.

The department is at risk of contracting multiple times to solve the same performance issues.

The Texas
Workforce
Commission's
rapid process
improvement
model has yielded
impressive
results.

- No central tracking and minimal evaluation of results. Despite the multiple, expensive efforts at business process improvement using private management consultants, TxDOT has not taken basic steps to ensure consistent tracking or to assess whether the money is well spent and results in the intended improvements. For example, Sunset staff requested a comprehensive accounting of all management consultant engagements from the last five fiscal years, but TxDOT had to manually compile a list of contracts by asking several divisions to submit information to help fulfill the request. Sunset staff analysis identified at least \$114 million in expenditures on these types of contracts over the last five fiscal years. TxDOT also lacks an effective process for ensuring evaluation of these efforts — both to verify implementation of changes as well as assess how successful these changes are in improving performance. In fiscal year 2015, TxDOT paid \$500,000 for a management consultant to gather all recommendations resulting from the previous Sunset reviews, the fiscal year 2010 Grant Thornton management review, and other evaluations, and assess their implementation status. The evaluation consisted only of selfreported information from divisions and contained no analysis of actual performance or results achieved. While TxDOT clearly sees the need to make improvements, it does not centrally track or evaluate these efforts internally, putting the department at risk of not achieving its goals and potentially contracting multiple times to solve the same performance issues.
- No criteria to evaluate need and underused internal resources. While TxDOT can benefit from hiring management consultants in some cases, the department should also use its internal resources more efficiently. Decisions on need for and use of private management consultants largely fall on individual divisions with budget the primary limiting factor. However, TxDOT has no criteria in place to determine when to contract with a private management consultant versus when work can be done in house. In particular, this review found TxDOT's internal operational excellence group is generally underused and typically overlooked in favor of contracting with private management consultants.

Another state agency has implemented a successful and less expensive model for performance improvement.

The Texas Workforce Commission (TWC) has instituted an effective internal business process improvement program that has yielded impressive results — largely without incurring the significant costs associated with private management consultants. A sample of some of these efforts and the results achieved are described in the textbox on the following page, TWC Rapid Process Improvement Results. The Legislature first required TWC to pilot a business process improvement program in 2011.¹ Since that time, TWC's rapid process improvement has become embedded in the culture of the agency. With only two internal staff directing the program, TWC carries out rapid process improvement projects to remedy known issues, such as lengthy procurement

times or backlogged application or appeals processes. Five years since the initial pilot, TWC has trained about 80 staff — both managers and frontline staff — to identify and solve performance issues in their own programs. As of October 2016, TWC had eliminated nearly all of its backlogged work and now uses rapid process improvement primarily to focus on improving customer service and quality.

TWC Rapid Process Improvement Results FYs 2011–2016

- Work Opportunity Tax Credit Program: Eliminated 91,696 backlogged applications and reduced application determination time from 194 days to 40 days.
- IT procurement: Reduced IT procurement process from 439 days to 240 days.
- Career service schools: Reduced application decision times from 137 days to 84 days.
- Housing discrimination investigations: Reduced average time to close a case from 207 days to 56 days.
- Skills Development Fund: Reduced time to award contracts from 170 days to 96 days.

Source: Texas Workforce Commission

Recommendations

Management Action

5.1 Direct TxDOT to centrally coordinate and track results of business process improvement efforts, including the use of private management consultant contracts.

TxDOT should ensure its overall business process improvement efforts — both internal and contracted — result in intended performance improvements, including those using private management consultants. The changes described below would help ensure TxDOT uses a more judicious, strategic approach to determine when to use management consultants instead of internal resources and measure the results of these efforts. The changes would also provide more visibility of the department's use of management consulting contracts, and help ensure TxDOT fully evaluates and tracks implementation and performance results to get the best use of funds spent. TxDOT should implement the following changes by March 1, 2018.

- Central tracking, reporting, and evaluation. TxDOT should use its operational excellence group to track and verify implementation status of both its internal improvement efforts as well as those using private management consultants, both past and present. To enable this tracking and evaluation process, TxDOT should develop criteria to define what constitutes a major process improvement effort, whether conducted with internal or contracted resources, and require these efforts to be tracked and reported consistently. Centralized tracking would help TxDOT management better evaluate the overall results of these efforts and ultimately determine if money for management consultants is well spent.
- Criteria to determine need to use outside management consultants. TxDOT should develop criteria to ensure staff fully evaluate need before deciding to contract with a private management consultant. These criteria should include consideration of available internal resources that could perform a needed assessment or review, such as the operational excellence group.

5.2 Direct TxDOT to consider implementing a rapid process improvement program similar to the Texas Workforce Commission model.

TxDOT should consult with TWC to evaluate implementation options, including potential staffing requirements and candidates for initial rapid process improvement projects. Implementing an internal process improvement program similar to the TWC model would improve TxDOT's ability to make meaningful, lasting improvements to its operations and should ultimately cost less than the current reliance on private management consultants.

Fiscal Implication

These recommendations would help TxDOT determine ways to manage its resources more efficiently. Better tracking and reporting of the use of private management consultants could result in savings if TxDOT reduces its use of these types of contracts, as could opting to implement a less expensive, internal process improvement program. Without knowing the outcome of these recommendations, the potential savings could not be estimated.

Chapter 1225 (S.B. 563), Acts of the 82nd Legislature, Regular Session, 2011.

Issue 6

TxDOT Does Not Effectively Oversee or Support Its 25 Districts.

Background

The Texas Department of Transportation (TxDOT)'s 25 districts deliver billions of dollars in transportation projects every year all over Texas. Appendix D, *Texas Department of Transportation Districts*, shows a map of the districts. While TxDOT administration is ultimately responsible for overseeing the districts, several central office divisions in Austin, including design, construction, maintenance, bridge, right of way, and transportation planning and programming, provide support and set policies and standards for districts to follow in delivering transportation projects.

Historically, districts have had considerable autonomy in transportation project development and delivery, with district engineers overseeing the vast majority of TxDOT staff and directing the day-to-day work of building and maintaining the state highway system. However, TxDOT has made several changes to

its organizational arrangement since the 2009 Sunset review, as described in the textbox, *TxDOT Organizational* Shifts. These changes largely focused on the central office divisions' relationships with the 25 districts and included gradually centralizing support services like information technology and human resources, and decision-making authority such as contract approvals. Then, in 2013, TxDOT began devolving some of these responsibilities back to the districts, such as review and approval of project designs, largely because centralization had caused difficulties for districts in efficiently delivering transportation projects and prioritizing resources.

TxDOT Organizational Shifts, 2008-2016

- Regionalization (2008–2012): TxDOT centralized some services into four regional offices across the state, including accounting, sign shops, right-of-way acquisition, purchasing, and fleet management.
- Centralization (2012–2013): TxDOT disbanded the regional
 offices and centralized some of these and other support services into
 central office divisions in Austin, including accounting, right of way,
 public information, human resources, and information technology.
- Decentralization of project design reviews (2013): TxDOT discontinued mandatory central office division review of district project plans and project development status prior to letting.
- Decentralization of project delivery functions (2016): TxDOT began delegating certain key project delivery functions back to districts, such as management of large design-build construction contracts, right-of-way acquisition, and execution of certain professional services contracts.

Findings

TxDOT has not sufficiently mitigated the disadvantages inherent in its decentralized structure.

With TxDOT's vast size and the widely varied challenges faced by the 25 districts, decentralizing project delivery is understandable from a practical standpoint, and billions of dollars in newly dedicated state and federal funds coming in will absolutely require nimble decision making. However, the Sunset review found several examples in which central office divisions do not clearly communicate expectations or sufficiently monitor and measure district

Decentralized project delivery is understandable from a practical standpoint.

performance to ensure they carry out their responsibilities in a timely and effective way, as described in the textbox, *Insufficient Monitoring and Support of TxDOT Districts*.

Insufficient Monitoring and Support of TxDOT Districts

- Project delays and cost overruns. The central office divisions are not analyzing known problem areas in the districts, such as their continued inability to meet on-time and on-budget measures for construction projects, to identify and address the root causes. (Issue 2)
- Construction contract problems. The central construction division and TxDOT administration are largely unaware of poor contractor performance in the districts and provide little guidance on handling these issues. (Issue 3)
- Lack of guidance for billion dollar alternative contracts. TxDOT's central project finance, debt, and strategic contract division has not provided guidance and support districts need to effectively oversee these large contracts. (Issue 3)
- Languishing business opportunity programs. Districts receive little support, guidance, or monitoring from the central civil rights division despite districts' extensive responsibilities for ensuring the success of TxDOT's business opportunity programs. (Issue 4)
- Hands-off approach to monitoring districts jeopardizes TxDOT's ability to effectively detect and address performance problems.

Disparate, often insufficient approaches to evaluating district performance. TxDOT has no cohesive approach to evaluating the quality of districts' work and compliance with division policies. While a few divisions conduct some level of performance review and quality assurance of district operations, the amount of monitoring is largely determined on a division-by-division basis, with some divisions performing more thorough review than others. For example, the design division reviews district project designs upon request, but not all districts request assistance. In fact, one large district accounts for the vast majority of the design division's review workload. To encourage better design quality throughout the state and avoid problems in the construction phase, the division could instead use risk-based criteria to target its approach, even reviewing designs from past projects to evaluate quality and provide feedback to districts for future improvement.

<u>Limited district performance measures</u>. Despite multiple efforts to develop performance dashboards since the last Sunset review, TxDOT still does not have a clear, complete set of key operational performance measures to allow TxDOT administration and the divisions to monitor overall district performance. TxDOT has a high-level district scorecard with eight measures, including on-time and on-budget measures, and is currently developing a more complete dashboard for use by department management. Current drafts of the dashboard include areas not covered by the scorecard, such as ready-to-let project status, environmental review, bridge condition, and performance related to the business opportunity programs, further

Despite multiple efforts, TxDOT still lacks a clear, complete set of operational performance measures.

described in Issue 4. The draft dashboard measures also include district-by-district breakouts of key measures, critical for monitoring and evaluating overall district performance. TxDOT anticipates completing this current effort in early 2017.

While having a performance dashboard for districts is a step in the right direction, without more detailed performance measurement and analysis by central office divisions, TxDOT administration is ill-equipped to identify and address the root causes of performance trends — good or bad. For example, the construction division performs no analysis to identify key reasons driving TxDOT's failure to meet on-time and on-budget

goals. On the other hand, the right-of-way division's new leadership recently implemented new performance measures to help identify causes of slowdowns in the parcel acquisition process, as listed in the textbox, Examples of Performance Measures—Right-of-Way Division. Better measures would help the divisions identify the drivers behind district performance—both good and bad—and replicate or address them accordingly.

Examples of Performance Measures Right-of-Way Division

- Timeliness of parcels acquired prior to construction
- Timeliness of initial offers to property owners
- Timeliness in responding to customers
- Timeliness of invoice payment processing
- Timeliness of evaluating acquisition services contractors

Lack of updated, complete, and easy-to-find policies and guidance. An agency must have policies in place to ensure agencywide adherence to federal and state requirements, as well as agency rules and standards. Having standard procedures promotes accountability for agency staff, predictability for those doing business with the agency, such as contractors, and ability to meet expectations of the agency's customers, in this case, the public. However, standards are of little use if not kept up-to-date and easily accessible.

TxDOT does not have a systematic, agencywide approach to ensure updated and complete policies and procedures to guide district operations, despite a 2013 internal audit that recommended these needed improvements.¹ The lack of clear and up-to-date policies leads to confusion among district staff about how to properly perform critical functions. District staff must track a myriad of policy and standards manuals as well as multiple policy memos to determine how to do their jobs appropriately. For example, the environmental affairs division does not regularly update their manuals and instead relies on numerous policy memos to communicate changes. The construction division has memos dating back to 2002 on its intranet site that have not been clearly incorporated into the overall policy manuals. This approach can result in district staff not performing their job duties correctly and in the best way. A 2014 audit of the department's process for construction bid estimations found district staff were not documenting changes to project scope as directed by a 2004 memo. The memo had never been incorporated into the division's policies and procedures, and many employees were unaware of it due to turnover.²

Lack of clear and up-to-date policies leads to confusion among district staff. Districts often do not fully understand what divisions do or what services they provide.

Divisions do not take the lead in identifying and sharing best practices

statewide.

During Sunset staff's visits to several TxDOT districts, staff indicated difficulty in keeping up with the frequent changes made by the central office divisions. District staff need clear, up-to-date, and complete policies and procedures to keep up with the changes and ensure they are following the standards set by the divisions.

Inconsistent support and communication by central office divisions inhibits district performance.

General lack of communication with districts. While divisions typically articulate their role as one of policy setting and support for districts, the districts often do not fully understand what divisions do or what services they provide. A recent review by a private management consultant found districts are often unaware of all of the services offered by divisions, such as the bridge division and the design division, though these divisions can support districts with valuable expertise to ensure their project designs meet quality standards and do not contain serious errors. Such issues can delay projects and increase costs if not detected before construction begins.

TxDOT intranet not always helpful or up-to-date. A standard minimum level of up-to-date information on each division's intranet page would help facilitate communication with districts and ensure access to the most up-to-date version of policies, standards, and other information needed from the divisions. However, divisions have authority to determine the level of information they put on Crossroads — TxDOT's intranet site — and are not required to keep it updated. This approach has resulted in inconsistency in the level and timeliness of information provided by each division. For example, the environmental affairs division's intranet page is largely outdated — the latest "news" posted is from 2013. The division instead uses a SharePoint site and the external TxDOT website to share information and post documents.

<u>Lack of emphasis on customer service</u>. Generally, TxDOT divisions do not have clearly defined responsibilities to provide quality customer service and ensure they are adequately supporting district project delivery needs. The right-of-way division recently began surveying districts on their customer service, but this is a new process and has only been implemented by this division.

No process for identifying and sharing best practices. Divisions do not proactively identify best practices developed by a district to share with other districts. Currently, only the internal audit division, which evaluates agency operations, identifies best practices used by districts as a systematic part of its work. The Sunset review identified a number of innovative management practices used by various districts, but divisions do not take the lead in identifying and sharing these statewide. Better communication and monitoring processes would help divisions know how districts are implementing their programs and identify which approaches produce the best results. For example, one district contracted with a university to develop

a staffing analysis tool for the newly outsourced construction engineering inspection function, as described in Issue 3, but this tool is only used by one district. Other districts have developed their own methods for conducting this type of analysis, with no division involvement or guidance to evaluate effectiveness of these approaches and assist districts that need such tools.

The need for improved monitoring and support of the districts is not new.

Several audits have also identified the need for better monitoring, oversight, and support of districts, as described in the textbox, *Select Audit Findings on Lack of District Oversight and Support*.³

Select Audit Findings on Lack of District Oversight and Support

- 2015 State Auditor Audit on Business Opportunity Programs: TxDOT's civil rights division does not perform consistent monitoring to ensure districts comply with program requirements.
- 2015 Internal Audit on Construction Inspection and Engineering Contracts: TxDOT lacks a statewide framework for use and management of newly outsourced construction engineering inspectors to ensure efficient use and proper oversight.
- 2014 Internal Audit on Bid Estimation: Divisions do not provide guidance or standards for districts to estimate bid amounts before contract letting.
- 2013 Internal Audit on Construction Operations: Review of interim and final construction is not standardized; the process for resolving review findings is inconsistent; and standards for districts to ensure adequate staffing to oversee construction projects do not exist.
- 2013 Internal Audit on Local Government Project Oversight: Oversight of local government projects is sometimes inconsistent and not always compliant with statewide standards.

Recommendations

Management Action

6.1 Direct TxDOT to actively and consistently monitor, evaluate, and report district performance.

TxDOT should implement basic monitoring processes to ensure its central office divisions and administration have visibility into district operations and can effectively evaluate district performance. Identifying emerging performance issues early will be critical to ensuring the districts are successful in choosing and constructing transportation projects funded by the billions of dollars in new funding soon to be entrusted to them. Divisions could also more effectively monitor the districts' implementation of the policies and standards they set to quickly identify any issues and needed changes. TxDOT should develop and implement these processes by March 1, 2018. TxDOT's monitoring of district performance should include, at a minimum, the following elements.

 Performance measures and more in-depth analysis. TxDOT should follow through on its current plans to implement a performance dashboard for administration, including district-by-district measures. In addition, each division should develop more specific performance measures targeted to their responsibilities, including timeliness and quality measures, such as those developed by the right-of-way division. Divisions should monitor dashboard measures to identify district performance issues in need of attention, and perform more in-depth analysis to help identify root causes driving these trends. For example, the construction division should use on-time and on-budget performance data to target districts with lower performance and identify root causes of the trends, such as contractor delays, weather, excessive change orders, materials availability, or other reasons. Divisions should work together to analyze performance issues spanning multiple disciplines. For example, if a district is not meeting ready-to-let targets, the right of way, environmental affairs, and design divisions should work together to identify root problems and help the district address them.

• Risk-based quality assurance processes. Divisions should develop risk-based quality assurance processes to evaluate samples of district work and communicate feedback. For example, the design division could use performance dashboard data or project status information from the quarterly review process to target a risk-based approach to reviewing district project designs. This process could result in both more proactive targeting of districts to offer support as well as review of recent district designs to evaluate overall quality and communicate areas for improvement. Risk-based review of district work products can generally happen electronically without the need to visit districts. These processes should include a clear method for communicating results to districts, and a process to follow up to ensure districts address identified issues and implement recommended changes. In developing these processes, TxDOT divisions should consult with the internal audit and compliance divisions to develop meaningful monitoring processes.

6.2 Direct TxDOT to improve communication with and support of the districts.

TxDOT should ensure its central office divisions have clearly defined responsibilities to best serve the needs of districts and are evaluated on their customer service performance. TxDOT should implement the following changes by March 1, 2018.

- Consistent updates to policies and procedures. TxDOT should develop a consistent, agencywide process to ensure all divisions regularly update their policy and procedure manuals to ensure changes are routinely incorporated and staff can easily access needed information. This change would help promote better understanding of expectations and adherence to policy and best practices, and would ensure updates to standard operating procedures and policy memos would not exist indefinitely without a process to incorporate them into formal policy or standards manuals.
- Customer service feedback loop. TxDOT should develop processes to regularly solicit feedback and measure districts' satisfaction with division services and assistance to ensure a high-quality level of service that best supports district project delivery. To implement this process, TxDOT could use a survey-based process similar to that already developed by the right-of-way division, or incorporate visits to districts, or other types of communication to get needed feedback. Feedback from districts would help TxDOT and the divisions understand the districts' needs and perspectives better, and how division services could improve. This process would also help divisions communicate better with districts as to what services and support they can offer to help districts solve problems and best deliver their projects. Developing and tracking districts' satisfaction with the divisions' efforts would also allow TxDOT administration to evaluate division performance. Customer service satisfaction should be reported regularly to administration and could be included in the performance dashboard in Recommendation 6.1.

- Improved use of intranet. TxDOT should define minimum types of information divisions must include on the department's intranet site, and define circumstances in which use of another method, such as SharePoint, is advisable and allowable. Minimum levels of information would help ensure the intranet site is as useful as possible to both division staff and districts to access basic information. In addition, TxDOT should set basic requirements for ensuring intranet sites are kept reasonably up-to-date.
- Identification and sharing of best practices. Divisions should be more proactive in identifying and sharing effective best practices so all districts can benefit from them. Methods of identifying best practices should include regular monitoring processes developed as directed under Recommendation 6.1, as well as regular communication and feedback processes developed by divisions under this recommendation. Best practices could be shared through the improved intranet site.

Fiscal Implication

These recommendations would better ensure TxDOT spends the billions of dollars in new transportation funding effectively. The recommendation directing TxDOT to develop monitoring processes to oversee district performance may require the department to prioritize resources, but basic monitoring processes are a fundamental responsibility of any state agency with extensive field operations, particularly ones with so much autonomy. Communication with and support of the districts is also a basic responsibility of the department. The recommendations above provide direction and approaches for TxDOT to strengthen these responsibilities and can be accomplished with existing resources.

Texas Department of Transportation, TxDOT Internal Audit Report, Communication of Policies and Guidance (May 31, 2013), accessed October 10, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/aud/reports/CommPolGuid.pdf.

² Texas Department of Transportation, *Internal Audit Report*, *Bid Estimation* (July 15, 2014), accessed October 10, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/aud/reports/q3_15_cei_contracts_and_work_authorization_audit_report.pdf.

Texas Department of Transportation, Internal Audit Report, Construction Engineering Inspection Contracts and Work Authorizations (May 2015), accessed October 10, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/aud/reports/q3_15_cei_contracts_and_work_authorization_audit_report. pdf; Texas Department of Transportation, Internal Audit Report, Bid Estimation; Texas Department of Transportation, Internal Audit Report, Construction Operations (August 28, 2013), accessed October 10, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/aud/reports/CONOPAUDIT.pdf; Texas Department of Transportation, Internal Austin Report, Local Government Project Oversight (August 21, 2013), accessed October 10, 2016, http://ftp.dot.state.tx.us/pub/txdot-info/aud/reports/Local_Government_Project_Oversight_(LGPO)_Audit.docx; State Auditor's Office, An Audit Report on Selected Business Opportunity Programs at the Department of Transportation (September 2015), accessed October 10, 2016, https://www.sao.texas.gov/Reports/Main/16-002.pdf.

Issue 7

The State's Aging Aircraft Fleet Raises Questions About Its Future and Requires More Accountability for Its Use.

Background

The Texas Department of Transportation (TxDOT) operates and maintains the state's aircraft fleet with six planes based in Austin to provide air transportation to state agency staff, elected officials, and other eligible passengers. TxDOT operates the fleet much like a private charter service, charging by flight hour rather than by seat. The fleet is what remains of the State Aircraft Pooling Board, which the Legislature abolished and transferred to TxDOT in 2005. Since then, TxDOT has downsized the fleet from 13 aircraft to six — four that seat eight passengers and two that seat three. TxDOT provides these services on a cost recovery basis, with rates covering operating and maintenance expenses, but not capital costs.

In fiscal year 2015, TxDOT transported approximately 2,400 passengers — representing 19 agencies and approximately 670 takeoffs. These flights transported passengers to destinations both in and outside the state. TxDOT also provides hangar space, fuel, and maintenance by contract for other agencies' aircraft, such as the Department of Public Safety (DPS), University of Texas, and Texas A&M systems.² In fiscal year 2015, TxDOT's flight services billed agencies \$1.15 million for passenger transport and \$5.5 million for maintenance services.

Findings

The state does not have an adequate plan to address the age and growing safety risks of its aircraft fleet.

• Aging state aircraft fleet. Five of the six state aircraft are over 30 years old, well beyond the national average age of 11 years for state-owned and operated aircraft. The textbox, Aging Aircraft Issues, describes some of the challenges TxDOT faces with aging aircraft. Despite the age of the planes, TxDOT has maintained a solid safety record of over 70,000 flight hours without incident, due to its diligent maintenance and operation of the fleet.

However, rigorous maintenance can prolong the life of the planes only so long. While engines can be replaced, the number of times a plane's cabin is pressurized — the

number of times the plane takes off — determines its service life. At a certain point, the fuselage simply wears out, and no amount of maintenance can keep the plane in service. As a result, continued use will eventually depreciate the aircraft to the point where it is too expensive to maintain or too dangerous to fly safely. Recognizing the age of the aircraft, TxDOT brought this issue to the Sunset Commission's attention and requested an evaluation to guide the Legislature's decision making on the future of this service.³

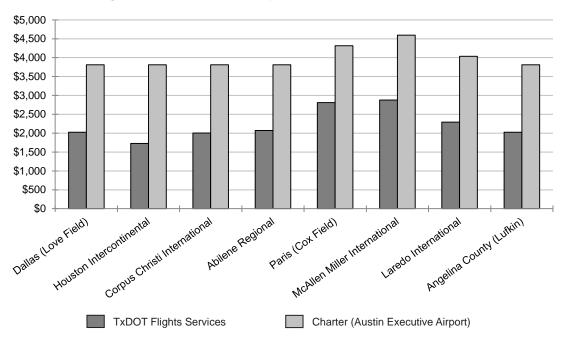
Aging Aircraft Issues

- High maintenance costs
- Structural issues such as corrosion
- Loss of mechanical reliability
- Safety concerns from technologically inferior instruments and high failure rates of critical systems
- Electrical issues

Rigorous maintenance can only prolong the life of the planes for so long. TxDOT must rely on the Legislature to fund new aircraft.

While capital replacement costs are an obvious consideration for private airlines and are included in their pricing, the rates TxDOT charges do not cover these costs because statute only requires TxDOT to charge rates sufficient to cover direct costs, such as operating and maintenance expenses.⁴ Instead, TxDOT must rely on the Legislature to appropriate funds to replace state aircraft. As a result, TxDOT flights appear cheaper to customers than charter aircraft as shown in the graph, *Flight Services Cost Comparison with Private Charter*. However, the true cost of providing state-operated flight services is higher than the quoted costs of the flights because the latter do not include aircraft replacement costs.

Flight Services Cost Comparison with Private Charter



Source: Texas Department of Transportation

TxDOT has not produced or reported the analysis the Legislature needs for decision making.

Insufficient information on replacement needs. Contrary to statutory directives, TxDOT has not produced or reported the analysis the Legislature needs to make decisions about the aging fleet. Statute requires TxDOT to develop a long-range plan regarding the replacement needs of the fleet, but TxDOT has only created internal drafts of this plan. The Texas Transportation Commission has not adopted a final plan, and the department has not formally provided the information to the Legislature. Further, despite statutory direction, TxDOT has not included the plan in its overall strategic plan or made any related funding requests since it assumed responsibility for the program more than a decade ago.

Compounding this lack of information, the scope of TxDOT's draft plan is limited and does not explore other potential models of fulfilling state air travel needs. Instead, the current draft plan offers only one solution: to

replace the fleet with an equal number of newer, more advanced aircraft. However, alternative models do exist. Georgia, for example, reduced flights on state aircraft by 68 percent using a private-public hybrid whereby the state charters aircraft to provide official air travel but also has state helicopters available.⁷ While TxDOT indicates it uses charter services and helicopters in some cases, TxDOT has not evaluated this model or any other alternatives for broader implementation, as it is not required by statute.

TxDOT has not evaluated potential use of a private-public hybrid model.

Unclear lines of accountability provide little oversight and direction for use of the state aircraft fleet.

State entities authorized to fly on state planes must meet certain criteria as shown in the textbox, *Criteria to Use State Aircraft*.⁸ However, statute does

not assign anyone clear responsibility for ensuring these statutory requirements are met. Statute does not hold the state entities or TxDOT responsible for guaranteeing statutory compliance. Passengers must sign an affidavit certifying general, overall compliance with the statutory criteria, but the affidavit does not require them to specify which statutory criterion they are using to justify the trip. In addition, while TxDOT documents each trip's purpose through mission codes on each flight itinerary (known as a "manifest"), these codes do not tie directly to the statutory justifications that would enable any tracking or evaluation of the reasons for use of state aircraft. Without clearly assigned responsibility or a tracking mechanism for ensuring proper use of the state fleet, state agencies may not have incentive to conduct the analysis needed to ensure their use of state planes conforms to the law.

Criteria to Use State Aircraft

Passengers

- must either be state employees or officers, those in their care or custody, or those whose transportation "furthers official state business"
- political and/or paid appearances are expressly forbidden as grounds for transport

Trip Itinerary

- must be destinations not served by commercial carriers, OR
- the time required to use a commercial carrier interferes with passenger obligations, OR
- the number of passengers makes use of state aircraft cost effective

Texas' lax accountability scheme puts the state out of step with other states that have developed more defined requirements on acceptable uses of their state aircraft fleets and clearer responsibility for ensuring compliance with these requirements. The textbox, *Other States' Policies on Use of State Aircraft*, provides some examples of these statewide directives regarding aircraft usage.¹⁰

Other States' Policies on Use of State Aircraft

- Tennessee specifies the need for cost-benefit analysis, specifies officials for whom time is a permitted consideration, assigns agency heads responsibility to justify use, and demarcates clear responsibilities for the providers and customers of flight services on state aircraft.
- Pennsylvania assigns priorities of passengers, prioritizes cost effectiveness amid other possible criteria, and requires written documentation of why agencies choose to use state aircraft.
- Illinois assigns the types of permitted travel, specifies priorities of passengers, and requires heads of agencies to assure that flights are justified.
- North Carolina prioritizes flight purposes and passengers, assigns approval authority to specific offices, and requires different justification criteria depending on type of passenger.

An overly broad statute appears to allow convenience, rather than cost effectiveness, to be a key reason for using state planes.

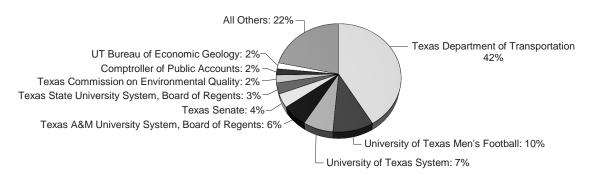
General state law requires agencies to choose the most cost-effective travel arrangements, but allows agencies to consider "all relevant circumstances" in making that decision. ¹¹ Such circumstances could include costs not reflected in the cost of travel itself, such as overtime expenses. However, statute permits using a state plane if the time to use commercial flights interferes with "passenger obligations," which is left to the users' interpretations. ¹² Because no tracking mechanism or detailed documentation of which statutory criterion state agencies use to justify each flight on a state plane exists, Sunset staff had to rely on data analysis of usage patterns to draw conclusions about how agencies justify their use of the state aircraft fleet. This analysis of TxDOT flight data for fiscal years 2011–2015 shows patterns of use that suggest convenience is a key reason agencies choose to use the state planes. While convenience is a permissible use of the state fleet, it is not always a cost-effective use of taxpayer dollars.

The fleet serves only around 20 agencies annually.

• Concentrated use among agencies and relatively few passengers. The fleet serves only around 20 agencies annually. Furthermore, nine agencies accounted for nearly 80 percent of flights between fiscal years 2011 and 2015, with TxDOT being the biggest user by far. Overall, this concentrated use of the state fleet among few agencies suggests most other agencies, even those with extensive field operations, are able to find more cost-effective ways to meet their business needs — possibly other modes of travel or use of technology enabling virtual meetings. The pie chart, *Frequent Fliers*, shows a breakdown of the fleet's most frequent users.

Frequent Fliers FYs 2011–2015

(as percentage of overall flight legs)



As the table on the following page Frequent Fliers' Average Number of Passengers shows, the frequent flier agencies often traveled on flights at less than half capacity, an indication that, absent documentation of other factors, convenience is likely a key reason for their use of the state planes.

Frequent Fliers	' Average Numbe	r of Passengers
	FYs 2011-2015	

Requesting Agency	Average Number of Passengers
Department of Transportation	3.29
University of Texas Men's Football	1.58
University of Texas System	4.5
Texas A&M University System, Board of Regents	1.89
Texas Senate	1.34
Texas State University System, Board of Regents	4.52
Texas Commission on Environmental Quality	6.27
Comptroller of Public Accounts	3.17
UT Bureau of Economic Geology ¹³	0.88

• Limited cost effectiveness of flying on state planes. TxDOT flight services charges an hourly rate, much like private plane charter services, and can have multiple destinations per flight — a third of which did between fiscal years 2011 and 2015. Generally, when commercial flights are available, the cost effectiveness of using a state plane depends on spreading the cost over more passengers. The table, Flight Services Estimated Flight Costs Per Passenger to Commercial Destinations, illustrates the impact the number of passengers has on cost effectiveness for destinations where commercial options are available. The table also shows the percentage of flight legs carrying four or fewer passengers to those destinations — a rough rule of thumb for evaluating the point at which the cost of using a state plane breaks even with commercially available flights.

Cost effectiveness of using state planes depends on spreading the cost over more passengers.

Flight Services Estimated Flight Costs Per Passenger to Commercial Destinations

Destination (from Austin)	One Passenger	Four Passengers	Eight Passengers	Refundable Commercial Fare (2 weeks)	Non-refundable Commercial Fare (2 weeks)	Actual Flights With Four or Fewer Passengers 2011–2015
El Paso	\$4,949.30	\$1,237.33	\$618.66	\$640	\$402	41%
Lubbock	\$3,441.49	\$860.37	\$430.19	\$511	\$376	44%
Midland (Int'l)	\$2,992.60	\$748.15	\$374.08	\$495	\$404	25%
McAllen	\$2,877.50	\$719.38	\$359.69	\$510 (Harlingen)	\$322 (Harlingen)	49%
Tyler	\$2,140.86	\$535.22	\$267.61	\$996	\$448	72%
Dallas (Love Field)	\$2,025.76	\$506.44	\$253.22	\$446	\$212	67%
Dallas / Ft. Worth Int'l	\$2,025.76	\$506.44	\$253.22	\$500	\$433	50%
Corpus Christi	\$2,002.74	\$500.69	\$250.34	\$574	\$547	49%
Houston (Hobby)	\$1,795.56	\$448.89	\$224.45	\$448	\$356	69%
Houston (Bush Int'l)	\$1,726.50	\$431.63	\$215.81	\$756	\$652	89%

Between fiscal years 2011-2015, only 7 percent of flights to commercial airports flew at maximum capacity.

In fiscal years 2011 to 2015, 68 percent of all outbound flight legs on TxDOT's eight-seat aircraft landed at a commercial service airport. Of those, 28 percent carried a single passenger or none at all. Only 7 percent of those flights flew at maximum capacity. This analysis does not include flights to smaller airports that are relatively close to commercial airports, such as Arlington and Sugar Land.

The frequency of planes flying with more than four passengers has not changed much over the years. In 2008, the State Auditor's Office reported that the number of flights with four or more passengers had grown from 35 percent in fiscal year 2006 to 53 percent in fiscal year 2008. However, Sunset staff's analysis found the number of takeoffs with four or more passengers decreased to about 40 percent overall from fiscal years 2011 to 2015. The break-even threshold for airfares varies somewhat based on destination; however, TxDOT no longer provides break-even points online as it did during the 2006 audit. 16

TxDOT, the largest user of the fleet, does not ensure its use is cost effective.

TxDOT is by far the leading user of the state fleet, accounting for 42 percent of all takeoffs from fiscal years 2011–2015. In fact, some individual TxDOT divisions and districts used the fleet on a scale rivaling entire large state agencies,

Snapshot of Agency Fleet Usage FYs 2011–2015

(non-TxDOT entities are italicized)

Requesting Division / Agency	Legs
TxDOT Administration	695
Aviation Division ¹⁷	589
Department of Agriculture	72
Health & Human Services Commission	69
Workforce Commission	63
Atlanta District	57
Office of the Governor	44
Maintenance Division	42
Right-of-Way Division	38
Department of Aging and Rehabilitative Services	20
Tyler District	18
Department of Family and Protective Services	13

as shown in the table, *Snapshot of Agency Fleet Usage*. While TxDOT's policy broadly requires travel to be cost effective, the department has traditionally delegated approval of state aircraft usage to its division heads and district engineers without closely monitoring these decisions.

To address this concern, TxDOT's new leadership recently elevated approval of state aircraft use to the administration level, but has not yet provided further criteria or instructions to employees to ensure they evaluate cost effectiveness and need when determining travel plans. TxDOT has begun to develop cost analysis guidance for its staff on using the fleet versus other means of transportation, but has not formally implemented this process yet. Furthermore, the department's travel request form provides additional, allowable justifications for using the state aircraft that do not align with current statutory criteria, including "productivity" and "other" rationales created by TxDOT itself.

Recommendations

Change in Statute

7.1 Require TxDOT to provide the Legislature a thorough range of analyses and options for deciding the future of the state aircraft fleet within its long-range fleet plan.

This recommendation would add specificity to the existing statutory requirement that TxDOT develop a long-range plan for the state aircraft fleet. Instead of a narrow focus on replacing aircraft, the plan would include additional information and analyses, including but not limited to the following:

- Analysis of current fleet usage, including customer base and documented rationale for use
- Status of maintenance time and costs, with projected future trends
- Documented high-risk mechanical issues with the current fleet
- Projections of remaining useful life for each of the current aircraft
- Proposed schedule for replacing aircraft
- Range of alternatives and scenarios for fleet size and composition
- Costs and benefits of different approaches to meeting air travel currently provided by the fleet. Analyses should include:
 - potential use of statewide contracts for private charter services,
 - more reliance on commercial carriers for routine travel,
 - maintaining a smaller fleet in combination with contracted flight services, and
 - any other feasible options.

The Transportation Commission should adopt the first plan with these revised, more specific criteria by September 1, 2018, with annual updates every year thereafter. The plan should be included as part of TxDOT's strategic plan as well as its legislative appropriations request if the need for additional appropriations is identified. TxDOT should also post the plan on its website. This recommendation would provide the Legislature a full range of options to address the state's air transportation needs comprehensively, and provide needed guidance to sustain, reduce, or end the state-operated model altogether.

7.2 Tighten statutory criteria for use of state aircraft to prioritize cost effectiveness and need over convenience.

This recommendation would remove one of the current statutory justifications that permits travel on state planes if the time required to use a commercial carrier interferes with passenger obligations, thus disallowing the use of the fleet for convenience. This recommendation would preserve the other two efficiency-related statutory criteria — for destinations not served by commercial carriers and when the number of passengers makes fleet use cost effective — and further tie the use of state aircraft to general state law requiring state agencies to prioritize overall cost effectiveness in their travel decisions. This recommendation would also allow use of the fleet for emergency circumstances even if it does not fit the other criteria. This recommendation would clarify statute, provide more measurable criteria to evaluate

compliance, and prioritize cost effectiveness over convenience to ensure the most efficient use of the state aircraft fleet and taxpayer funds.

7.3 Clarify statute to specify state agency heads are responsible for ensuring their employees' use of state aircraft meets statutory criteria.

Designating the head of a state agency as having ultimate responsibility for ensuring proper use of state aircraft would provide clear accountability. To implement this recommendation, agencies may need to establish policies and procedures for their employees to provide the information and analysis needed to justify the use of state aircraft, including specific statutory authority and any other relevant circumstances aside from cost. Such procedures could include providing and maintaining appropriate documentation so agency management and oversight entities can evaluate these decisions. This recommendation would not require TxDOT to prescribe or oversee other agencies' policies and procedures.

Management Action

7.4 Direct TxDOT to track specific statutory justifications for state aircraft use.

TxDOT should amend its passenger manifest — the document detailing a flight's passengers, itinerary, and purpose — to require passengers to indicate their specific statutory justification for using state aircraft, similar to a form change SAO recommended in 2006. This change would capture information specific enough to allow agencies as well as internal and external oversight entities to track reasons for using state aircraft and better monitor overall compliance with statute. TxDOT should adopt this revised passenger manifest by March 1, 2018.

7.5 Direct TxDOT to adopt a clear internal policy governing the appropriate use of the state aircraft fleet by department staff and regularly monitor usage.

Under this recommendation, TxDOT should adopt and implement a formal policy detailing procedures for ensuring the department uses the state aircraft fleet in a cost-effective manner. This policy would include a specific cost analysis procedure as well as guidance regarding how department staff should evaluate their aircraft transportation options and ensure compliance with statutory criteria. In addition to this policy, TxDOT administration should actively monitor the department's use of the fleet to evaluate effects of the new criteria on usage patterns. As the single largest customer of the state aircraft fleet, TxDOT should better scrutinize its travel needs to ensure fleet usage is an operational necessity. TxDOT should adopt this policy by March 1, 2018.

Fiscal Implication

Various fiscal impacts to the state could result from these recommendations, but could not be estimated because they depend on future legislative and state agency decisions about the use of state aircraft.

The recommendation for TxDOT to develop a more detailed plan with a menu of options for the Legislature to consider regarding the future of the state fleet could be accomplished within existing resources. TxDOT already develops a fleet replacement plan and could perform additional analyses needed to develop the more detailed plan within existing resources. However, changes in use or composition of the state fleet could result in a fiscal impact. For example, TxDOT could sell or purchase aircraft, or develop an entirely new model for delivering flight services using contracted services. In addition, as a direct result of the recommendation requiring agencies to prioritize overall cost effectiveness over convenience, state agencies may use the state aircraft less frequently, resulting in savings to the state.

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- Section 8.02, Chapter 281 (H.B. 2702), Acts of the 79th Texas Legislature, Regular Session, 2005.
- All citations to Texas statutes are as they appear on http://www.statutes.legis.state.tx.us/. Section 2205.044, Texas Government Code.
- Texas Department of Transportation, Self-Evaluation Report Submitted to the Sunset Advisory Commission, 336–337, accessed August 9, 2016, https://www.sunset.texas.gov/public/uploads/files/reports/2015%20TxDOT%20Sunset%20Self-Evaluation%20Report%20%20-%209-1-15_1.pdf.
 - ⁴ Section 2205.040(a), Texas Government Code.
 - ⁵ Section 2205.032(c), Texas Government Code.
- Section 2205.032(c), Texas Government Code; State Auditor's Office, An Audit Report on Flight Services Provided by the Department of Transportation's Aviation Division Flight Services Section, Report no 07-001 (September 2006), 12–14, accessed August 4, 2016, http://www.sao.texas.gov/reports/main/07-001.pdf. The 2006 SAO audit found that no long-range plan for the fleet had been sent to the Legislative Budget Board since 2003 and recommended that the department develop and adopt a plan in accordance with statutory requirements, to which the department agreed.
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 - Section 660.007(a), Texas Government Code.
 - 12 Section 2205.036(c)(2), Texas Government Code.
 - 13 These flights for aerial mapping are unable to transport more than one passenger.
- Sunset staff produced this chart by using estimated rates provided on the TxDOT website for an eight-seat aircraft and dividing the rates by one, four, and eight passengers. Sunset staff identified early morning and late afternoon, same-day round trip flights using commercial airline websites and online airfare aggregators.
- Texas State Auditor's Office, A Follow-up Audit Report on Flight Services Provided by the Department of Transportation's Aviation Division Flight Services Section, Report no 09-011 (October 2008), 1, accessed August 5, 2016, http://www.sao.texas.gov/reports/main/09-011.pdf.
- Texas State Auditor's Office, An Audit Report on Flight Services Provided by the Department of Transportation's Aviation Division Flight Services Section, 4.
 - Aviation division flights were primarily flown in the single engine aircraft in support of the Airport Capital Improvement Program.
 - ¹⁸ Section 660.007, Texas Government Code.
- 19 Texas State Auditor's Office, An Audit Report on Flight Services Provided by the Department of Transportation's Aviation Division Flight Services Section, 35.

Issue 8

Paper Crash Reports Increase Administrative Costs and Limit the Reliability and Timeliness of Vital Safety Data.

Background

Federal law requires states to maintain records of traffic crashes to report statistics and other information that support various transportation safety goals. Using data collected from crash reports submitted by law enforcement, the Texas Department of Transportation (TxDOT) maintains the Crash Records Information

System.² This system serves as the state's comprehensive, central repository of crash data for all roadways in Texas. The textbox, *Uses of TxDOT Crash Data*, illustrates the various ways TxDOT, law enforcement, and others use the information made available through this system. Examples include day-to-day concerns, such as local law enforcement patrol routes, to long-term strategic efforts, such as TxDOT's identification and prioritization of projects for the \$3.2 billion in planned safety program spending over the next decade. In calendar year 2015, TxDOT received about 590,000 crash reports from law enforcement. Overall, the crash records system currently holds more than three million crash reports dating back to 2010.

Uses of TxDOT Crash Data

- Support local law enforcement's safety initiatives, such as roadway patrols or special events
- Evaluate need for speed limit changes
- Conduct road safety research and analysis
- Make funding and project selection decisions on highway safety projects based on highest areas of need

The Legislature transferred responsibility for the crash records system from the Department of Public Safety (DPS) to TxDOT in 2007.³ Since then, TxDOT has spent approximately \$43 million in federal dollars to overhaul and operate this system, greatly improving its usability and performance. As a result of these efforts, Texas now has one of the most well regarded crash records systems in the nation, and TxDOT provides Texas law enforcement agencies free online access to the system to submit reports and understand crash trends unique to each local area.

Statute requires another type of report from individual drivers involved in crashes not investigated by law enforcement.⁴ Unlike the reports submitted by law enforcement, the department only stores and maintains these driver reports, and does not include them in the crash records system. TxDOT received about 85,000 of these reports in 2015.

Findings

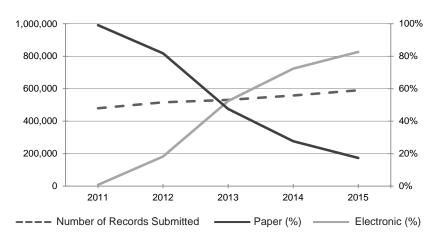
Paper-based submission of required crash reports adds administrative costs, delays access to critical safety data, and increases risk of data errors.

While law enforcement agencies submitted about 488,000, or 83 percent, of required crash reports online in 2015, TxDOT still received about 102,000, or 17 percent, by mail. With a free online system available to law enforcement, TxDOT should now receive all these reports electronically, for the following reasons.

Online submission of officer crash reports has increased to 83 percent since 2011.

• Rapid adoption of voluntary online submission suggests clear benefits with minimal burden. Online submission of crash reports has increased to about 83 percent of all reports submitted since 2011. The chart, Online vs Paper Crash Record Submission Rates, illustrates this positive trend. TxDOT has worked proactively to increase voluntary online reporting by making transition to the system as easy as possible for reporting agencies. For example, TxDOT provides free technical assistance and testing support to help agencies use TxDOT's online system or their own record management service to submit electronically. TxDOT also formed a users' group to provide regular feedback about the system's operation. A recent survey of the users' group found the online system met or exceeded expectations for 97 percent of respondents.

Online vs. Paper Crash Record Submission Rates 2011–2015



TxDOT helps
law enforcement
agencies
transition
to electronic
submission free
of charge.

Though many law enforcement agencies have adopted online report submission, 612, or about 20 percent of submitting agencies, continue to submit paper reports. Surprisingly, nearly 30 percent of the paper reports TxDOT received in 2015 came from larger agencies in urban areas. Continued paper submission in these cases appears to be out of habit or agency preference, not information technology or other resource issues. Since online submission through the crash records system only requires Internet access, not the purchase of new information technology systems or software, and TxDOT is available to help with the transition free of charge, requiring online submission would not be overly burdensome. For the many smaller law enforcement agencies with fewer resources, the burden of transitioning from paper to online reporting would also be minimal because these agencies typically only average about one crash per week or less.

• Needless administrative costs at the expense of safety initiatives. To process paper crash reports, TxDOT must contract with a data entry vendor to enter each paper report into the crash records system. Data entry for

the approximately 100,000 paper reports received per year costs the state about \$1 million and requires one employee to manage. The department could better direct these resources toward traffic safety efforts such as highway projects that address known crash risks.

• Delayed access to critical safety data and increased risk of inaccuracies. Submitting reports on paper decreases the timely availability of accurate information needed to support local and state safety efforts. Local agencies, along with TxDOT, need crash data to carry out their daily work to protect citizens from crash hotspots and implement corrective safety measures. Agencies that submit paper reports to TxDOT must rely on their separate systems, if available, to analyze their own data, or must request information back from TxDOT. In contrast, crash records system users can access crash data directly and retrieve their own reports. In addition, electronic submission has built-in quality control measures that increase data quality by allowing officers to address errors or omissions when they initially file reports.

Local agencies and TxDOT need crash data to protect the public from safety risks.

Statute requires TxDOT to receive and retain crash reports from individual drivers without a clear government purpose, wasting resources.

While crash records submitted by law enforcement are critically important to the state, no similar government use exists for the separate crash report that state law requires drivers to submit to TxDOT. Neither TxDOT nor DPS before it have used these forms for any statewide crash analysis since 1987, because drivers' self-reported information tends to be unreliable and therefore not useful. As a result, TxDOT does not enter any of this data in the crash records system as it does with law enforcement crash reports. The forms simply sit idle in file cabinets until TxDOT discards them after their two-year retention period ends. Maintaining and then destroying these files is an unnecessary, manual, and time-intensive process for TxDOT.

Sunset staff could not identify a continuing need for TxDOT to collect this information. No other state agency requires or uses these reports. Also, while individuals request these reports for various personal reasons, no clear reason exists for TxDOT to act as a custodian for information individuals could keep themselves. TxDOT received requests for less than 1 percent of submitted reports in 2015, or 722 of the total 85,000 submitted that year. Requestors may use these reports to assist in processing insurance claims, legal proceedings related to a motor vehicle incident, or for personal records. However, TxDOT could continue to make the report form available to the public to use and retain without having to spend state resources to receive and store the completed forms.

No agency has used data from driver crash reports since 1987.

Recommendations

Change in Statute

8.1 Require law enforcement agencies to submit crash reports electronically to TxDOT by September 1, 2019.

This recommendation would require approximately 20 percent of the state's local law enforcement agencies to move from paper submission of crash reports to the electronic system. To allow enough time for the agencies to obtain access to the system and gradually make the needed transition, this requirement would take effect on September 1, 2019. As a management action, TxDOT should continue to help law enforcement agencies at no cost to transition to online submission, such as with free crash records system training and testing support for agencies that opt to submit crash reports through their separate record management systems.

Requiring online submission would save resources TxDOT could use for other traffic safety efforts, such as highway projects to address known safety risks. The change would also improve the timeliness and quality of data that increasingly drive day-to-day local traffic safety activities as well as long-term transportation planning decisions. Law enforcement agencies could also access crash data more easily and quickly without having to request data from TxDOT to help them systematically identify traffic safety issues in their local area.

8.2 Eliminate the wasteful administrative requirement to submit drivers' crash report forms to TxDOT.

This recommendation would repeal state law requiring TxDOT to commit resources to receive and store driver-submitted reports, which serve no government purpose. As a management action, TxDOT should continue to make the report form available online for drivers to use, if needed, to document incidents that local law enforcement agencies do not investigate or report.

Fiscal Implication

Overall, these recommendations would have a net positive fiscal impact to the state of approximately \$3.3 million over the next five fiscal years. The recommendations would have a positive net fiscal impact of \$40,470 in fiscal years 2018 and 2019, and about \$1.06 million positive impact beginning in fiscal year 2020 due to a reduction of two full-time equivalent positions and the elimination of the data entry costs associated with paper crash reports.

Recommendation 8.1 requiring electronic submission of all crash reports to TxDOT would reduce the need for one full-time equivalent employee with salary and benefits of approximately \$48,700 per year as well as an estimated \$975,000 per year in contracted data entry costs beginning in fiscal year 2020. TxDOT could instead use these federally reimbursed funds for other purposes, such as projects to improve roadway safety. The state would

Texas Department of Transportation

Fiscal Year	Cost to the General Revenue Fund	Savings⁵ to the State Highway Fund	Change in the Number of FTEs From 2017
2018	\$5,130	\$45,600	-1
2019	\$5,130	\$45,600	-1
2020	\$5,130	\$1,069,300	-2
2021	\$5,130	\$1,069,300	-2
2022	\$5,130	\$1,069,300	-2

continue to collect fees for providing copies of crash reports upon request, which totaled \$1.5 million in fiscal year 2015.

Recommendation 8.2 eliminating TxDOT's requirement to receive and retain drivers' crash reports would eliminate the need for one full-time equivalent employee with salary and benefits of approximately \$45,600 per year beginning in fiscal year 2018. However, the state would lose the fees collected from providing copies of these reports, which totaled \$5,130 to general revenue in fiscal year 2015.

¹ 23 U.S.C. Section 148(c).

² All citations to Texas statutes are as they appear on http://www.statutes.legis.state.tx.us/. Section 550.062, Texas Transportation Code.

³ Section 7, Chapter 1407 (S.B. 766), Acts of the 80th Texas Legislature, Regular Session, 2007.

Section 550.061, Texas Transportation Code.

⁵ TxDOT initially funds data entry costs from the State Highway Fund and then recoups the cost by billing the Federal Highway Administration.

Issue 9

Texas Has a Continuing Need for the Texas Department of Transportation.

Background

In the near century since its creation in 1917, the Texas Department of Transportation (TxDOT) has evolved into a critically important agency that supports Texas' economic engine and social fabric. In conjunction with its many local, state, and federal partners, TxDOT plans, constructs, maintains, and supports Texas' transportation system, including roads, bridges, local public transportation systems, railroads, airports, the Gulf Intracoastal Waterway, and ferry systems.

TxDOT employs about 12,000 staff, including about 9,000 who work in the department's 25 districts, which are responsible for project delivery. The department spent about \$10.5 billion in fiscal year 2015, with about 64 percent going to construction and maintenance contracts. The Texas Transportation Commission, composed of five governor-appointed members, oversees the department.

Due to TxDOT's tremendous everyday impact on all Texans and various controversies surrounding the agency over the last decade, the Legislature has maintained a close watch on TxDOT, including three Sunset reviews since 2009. A deep distrust of TxDOT, both by the Legislature and the public, permeated the 2009 Sunset review. While TxDOT's Sunset bill did not pass that year, the review and other legislation resulted in a cascade of changes and organizational flux, including several leadership and organizational changes that continue to this day. The textbox, *Reviews and Evaluations of TxDOT Programs and Operations*, lists the various internal and external review processes that have occurred since that time.

Reviews and Evaluations of TxDOT Programs and Operations FYs 2009–2017

- 2009 Sunset review: House Bill 300, the TxDOT Sunset bill, failed to pass, but TxDOT implemented a number of management improvements at the direction of the Sunset Commission. The Legislature continued the agency for two years through separate legislation and mandated a limited scope review in 2011 to evaluate appropriateness of the 2009 Sunset Commission recommendations.
- **2010 Grant Thornton management review**: TxDOT contracted for a \$2 million comprehensive, independent management review, resulting in 191 recommendations.
- **2011 Restructure Council report**: Appointed by the Transportation Commission, the three-member Restructure Council issued its report related to the Grant Thornton management review, recommending 62 of the recommendations as priorities for implementation.
- 2011 Limited scope Sunset review and passage of the Sunset bill: Senate Bill 1420 contained a number of provisions focused on improving TxDOT's planning and project selection process, public engagement efforts, and overall accountability and transparency originally proposed in the 2009 Sunset bill.
- 2015 Implementation review: TxDOT contracted with a private firm to review the implementation status of recommendations from various sources, such as Sunset and the Grant Thornton management review.
- **2016–2017 Sunset review and ongoing internal improvement efforts**: In addition to undergoing Sunset review, TxDOT contracted with a private management consultant to improve its project planning, development, and implementation processes.

TxDOT underwent another Sunset review in 2011. The resulting Sunset bill passed and included several changes to improve the department's operations as well as a four-year extension, although the Legislature later extended the date by two years in separate legislation, for a total of six years.¹ As a result, TxDOT is once again under Sunset review and will be abolished on September 1, 2017, unless continued by the Legislature.

Findings

Texas has a continuing need for the Texas Department of Transportation to plan, design, build, and maintain the state's transportation infrastructure.

Texas relies on its transportation infrastructure to move goods and people for both economic and social purposes. The need for TxDOT's functions is here to stay and will only increase as the state's population continues to grow.

Major Efforts to Fund Transportation Infrastructure

- 2001: Texas voters approved Proposition 15, creating the Texas Mobility Fund, authorizing the use of toll equity to fund highway construction, and authorizing the Transportation Commission to approve the creation of regional mobility authorities.
- 2003: The Legislature passed House Bill 3588, the "Trans-Texas Corridor" bill, authorizing the use of bonds to pay for highway construction and the use of comprehensive development agreements, as well as expanding the authority of regional mobility authorities, among other provisions. Voters subsequently approved Proposition 14 to provide the bonding authority in H.B. 3588. The Legislature later repealed the "Trans-Texas Corridor" provisions of H.B. 3588 in 2011.
- 2009: After voters approved Proposition 12 in 2007, the Legislature authorized the issuance of \$5 billion in general obligation bonds to fund highway improvement projects.
- 2014: After legislative approval in 2013, Texas voters approved Proposition 1, which allocates a portion of oil and gas severance tax revenues normally deposited in the Economic Stabilization Fund to the State Highway Fund.
- 2015: Texas voters approved Proposition 7, which dedicates about \$2.5 billion of state sales and motor vehicle sales and rental taxes to the State Highway Fund beginning in fiscal year 2018. In addition, the Legislature ended diversions from the State Highway Fund through House Bill 20, particularly funds previously dedicated to the Department of Public Safety for law enforcement on state highways.

Texas is the second most populous state in the United States, the sixth-fastest growing state in the country, and home to five of the 11 fastest growing cities in the country.^{2,3}

In addition to this tremendous population growth, the state is projected to see a 70 percent increase in the movement of freight on its transportation system — highways, rail, and waterways — as well as an 89 percent increase in heavy truck traffic between 2014 and 2040.⁴ Such growth naturally results in increasing transportation needs both to maintain the existing system and to add new capacity to address growing congestion, connect Texas communities, and facilitate the movement of freight.

Recent efforts to fund the state's increasing transportation needs illustrate the importance of TxDOT's functions to the state's economy and the mobility of Texans. Because the traditional, primary source of transportation funding, the gas tax, no longer generates enough revenue to keep pace with the state's growing needs, the Legislature, with the approval of Texas voters, has created alternative means of funding transportation infrastructure, described in the textbox, *Major Efforts to Fund Transportation Infrastructure*. Subsequently, TxDOT increased its funding projections to reflect the enactments of Propositions 1 and 7, ending of State Highway Fund diversions,

and passage of a five-year federal transportation reauthorization bill.⁵ If actual revenues match TxDOT's current projections, overall funding available for transportation projects will increase by \$48.6 billion over the next 10 years.

TxDOT has made good-faith efforts to address previous concerns, but more time is needed to stabilize the department and determine whether these efforts have been fully successful.

For many years, the Legislature, the public, Sunset and others expressed strong distrust in TxDOT and the way it operates, particularly its transparency, responsiveness, and accountability. This distrust resulted in a great deal of oversight as discussed previously and significant changes in the way the department operates. The current Sunset review found TxDOT has made progress in several of these areas, particularly in improving its relationships with the Legislature and stakeholders. TxDOT has worked to implement hundreds of recommendations from the two previous Sunset reviews as well as a privately

contracted management review in 2010, among other efforts. TxDOT has also experienced several significant organizational changes over the last eight years. Since the 2009 Sunset review, the department has cycled through four executive directors and experienced at least as many organizational changes.

Currently, the department is in the thick of implementing several significant changes and addressing continuing challenges, as described in the textbox, Ongoing TxDOT Challenges, Changes, and Improvement Efforts. Evaluating the ultimate outcomes and benefits of TxDOT's current improvement efforts is a task for the future because TxDOT cannot implement these changes quickly and the results will not be immediately apparent. The current Sunset review also identified some needed course corrections to TxDOT's implementation of previous recommendations, particularly those related to transportation planning as discussed in Issue 1, to ensure ongoing efforts do not stall. However, the ultimate result of these changes will take years to fully implement and evaluate.

TxDOT has cycled through four executive directors since 2009.

Ongoing TxDOT Challenges, Changes, and Improvement Efforts

- Implementation of House Bill 20 (2015) requiring a performance-based funding allocation and project selection process
- Effective use of billions in new funding approved by voters and provided by the Legislature
- Evolving organizational structure and changing responsibilities of districts and various central office divisions
- Ongoing changes to TxDOT's project portfolio management approach, such as improving performance management and key processes, like right-of-way acquisition
- Frequent and significant leadership changes
- Delayed and ongoing replacement of legacy information technology systems critical to agency operations
- Recommendations resulting from the current Sunset review

Sufficient oversight tools exist to provide ongoing oversight of TxDOT until the next Sunset review.

Voters recently approved new transportation funding sources that will provide a significant amount of new funding to TxDOT and present the agency with a tremendous challenge and increase in its workload. Naturally, the Legislature needs to keep a close eye on TxDOT's management and use of the new money

to ensure efficient spending on projects that further the state's strategic interests. Multiple oversight mechanisms, both legislative and internal to TxDOT, exist to provide ongoing oversight of TxDOT.

Legislative oversight. While the state's strong Sunset process is a critical part of the Legislature's oversight toolbox, other mechanisms exist allowing the Legislature to continue monitoring TxDOT's progress and hold its leadership accountable until the next review, as listed in the Ongoing Legislative Oversight of TxDOT textbox. In addition, as described in Issue 1, Sunset staff proposes streamlining and extending the current legislative oversight provided by the separate House and Senate Select Committees on Transportation Planning through a single joint committee.

Ongoing Legislative Oversight of TxDOT

- Legislative standing committees, including the Senate and House Transportation Committees and special oversight committees, such as the Select Committees on Transportation Planning
- Budget oversight through the Legislative Budget Board and appropriations process
- State Auditor
- 102 reports required by statute and budget rider
- 58 TxDOT-related interim charges during the current legislative interim
- 31 interim hearings for which TxDOT provided testimony, as of November 2016

This change would provide increased visibility into TxDOT's use of significant new transportation funds, and ensure implementation of improvements to the transportation planning process, which will take several years to complete.

The Legislature has also been increasingly active in its oversight of TxDOT. Interim hearings for which TxDOT provided testimony have increased from 17 in the 83rd legislative interim to 31 in the 84th legislative interim, with more hearings scheduled before the 85th Legislature convenes in January 2017. Reports required by statute or rider have increased from 60 in 2007 to the current 102. In addition, the 84th Legislature has 58 interim charges affecting the department, the highest number over the last five legislative interims.

• Internal agency oversight. As required by state law, TxDOT has an internal audit function that acts independently of department staff, reporting directly to the Transportation Commission. The internal audit division is very active and well regarded within TxDOT, conducting 31 audits and 43 follow-up reviews in fiscal year 2016. Also, as a result of the previous Sunset review, TxDOT added a compliance division, which focuses on

TxDOT Internal Audit and Compliance Activities FY 2016

- 31 internal audits
- 43 follow-up engagements on previous audits
- 81 investigations
- 7 contractor and grant sub-recipient audits
- 10 consulting engagements

auditing external contractors and grant sub-recipients, investigating allegations of employee misconduct, and conducting consulting activities at the request of management. The internal audit and compliance divisions provide TxDOT leadership with internal tools needed to identify critical issues on an ongoing basis and make needed adjustments. The textbox, *TxDOT Internal Audit and Compliance Activities*, provides basic facts on completed projects in fiscal year 2016.

In addition, this Sunset staff report includes numerous recommendations aimed at improving TxDOT

management's ability to track and manage performance, and at clarifying accountability for results across the department. The recommendations aim to ensure TxDOT tracks and measures impacts of its numerous improvement efforts, clarifies roles and responsibilities of divisions and the 25 districts, and better measures and evaluates its performance across the board.

Recommendation

Change in Statute

9.1 Continue the Texas Department of Transportation for 12 years.

This recommendation would continue the Texas Department of Transportation and its statutorily created advisory committees until September 1, 2029 to ensure the state continues to build and maintain its transportation network to accommodate Texas' ever-growing infrastructure needs. Faced with so many, frequent, and significant changes over the past eight years, the review determined continuing TxDOT for 12 years is necessary and warranted. This time would allow the department to stabilize and focus on successfully implementing its major ongoing improvement efforts, many of which are currently underway. In addition, several other oversight tools exist to provide ongoing oversight of TxDOT until the next Sunset review, which would actually begin in 2027 with the staff evaluation.

Fiscal Implication

This recommendation would not have a fiscal impact to the state. Continuing the agency for 12 years would require continuing legislative appropriations of about \$10.5 billion annually to cover the cost of the agency's operations. However, with the newly dedicated funding sources described above, state funding for transportation will likely increase over time.

Chapter 1279 (H.B. 1675), Acts of the 83rd Texas Legislature, Regular Session, 2013.

² "North Carolina Becomes Ninth State With 10 Million or More People, Census Bureau Reports," United States Census Bureau, December 22, 2015, http://www.census.gov/newsroom/press-releases/2015/cb15–215.html.

³ "Five of the Nation's Eleven Fastest-Growing Cities are in Texas, Census Bureau Reports," United States Census Bureau, May 19, 2016, http://www.census.gov/newsroom/press-releases/2016/cb16–81.html.

⁴ Texas Department of Transportation, *Texas Freight Mobility Plan*, 7–9, accessed September 23, 2016, http://ftp.dot.state.tx.us/pub/txdot/move-texas-freight/studies/freight-mobility/plan.pdf.

⁵ Section 49-g(c-1)-(c-2), Article III, Texas Constitution; Section 7-c(a)-(b), Article VIII, Texas Constitution; Chapter 314, (H.B. 20), Acts of the 84th Texas Legislature, Regular Session, 2015; Fixing America's Surface Transportation Act, Pub. L. 114–94 (2015).

⁶ All citations to Texas statues are as they appear on http://www.statutes.legis.state.tx.us/. Chapter 2102, Texas Government Code.

Issue 10

The Department's Statute Does Not Reflect Standard Elements of Sunset Reviews.

Background

Over the years, Sunset reviews have included a number of standard review elements from direction provided by the Sunset Commission, statutory requirements added by the Legislature to the Criteria for Review in the Texas Sunset Act, or general law provisions imposed on state agencies. This review identified changes needed to conform the Texas Department of Transportation (TxDOT) statute to Sunset across-the-board recommendations (ATBs) and to address the need for the department's required reports. This review also identified a need for TxDOT to make a more diligent effort to improve its workforce diversity numbers.

- Sunset across-the-board provisions. The Sunset Commission has developed standard language that it applies across the board to all state agencies reviewed unless a strong reason exists not to do so. These ATBs reflect an effort by the Legislature to place policy directives on agencies to prevent problems from occurring, instead of reacting to problems after the fact. The ATBs reflect review criteria contained in the Sunset Act designed to ensure open, responsive, and effective government. ATBs are standard administrative policies adopted by the Sunset Commission that contain "good government" standards for state agencies.
- Reporting requirements. The Sunset Act establishes a process for the Sunset Commission to consider if reporting requirements of agencies under review need to be continued or abolished. The Sunset Commission has interpreted these provisions as applying to reports that are specific to the agency and not general reporting requirements that extend well beyond the scope of the agency under review. Reporting requirements with deadlines or expiration dates are not included, nor are routine notifications or notices, or posting requirements.
- Equal employment opportunities. The Sunset Act requires the Sunset Commission to consider agencies' compliance with applicable federal and state equal employment opportunity (EEO) requirements.² Sunset staff routinely evaluates agency performance regarding these requirements in the course of a Sunset review, but only reports deficiencies significant enough to merit attention.

Findings

TxDOT's statute does not reflect updated requirements for commission member training.

The department's statute contains standard language requiring commission members to receive training and information necessary for them to properly discharge their duties.³ However, statute does not contain a newer requirement for the department to create a training manual for all commission members or specify that the training must include a discussion of the scope of and limitations on the commission's rulemaking authority.

Two of TxDOT's reporting requirements are no longer necessary and four others need to be modified.

Statute requires TxDOT to produce 32 reports. State law requires TxDOT to produce 32 reports that are specific to the agency. Two of these reporting requirements are no longer needed and four reports should be modified, as described below. Appendix K, *Texas Department of Transportation Reporting Requirements*, lists all of TxDOT's reporting requirements and Sunset staff's analysis of their need.

- Unsatisfactory Employee Performance Report. This report provides information to the Texas Transportation Commission about employees below the level of district engineer who received an unsatisfactory performance evaluation, but were not terminated. The commission does not use this information and has never taken any action or involved itself in any personnel issues based on the information in this report. Instead, the commission relies on staff to handle personnel matters, making the report unnecessary.
- **EEO Policy of the State Aircraft Pooling Board.** This report is a redundant remnant of the abolished State Aircraft Pooling Board, whose functions transferred to TxDOT in 2005. TxDOT already has a similar reporting requirement that applies to the entire agency, including flight services, making this separate reporting requirement unnecessary.
- Long-Term Plan for Statewide Passenger Rail. TxDOT prepares this plan to comply with both state and federal rail planning requirements.⁶ State statute requires TxDOT to update this plan annually, while the Federal Rail Administration requires updates every five years. At this time, no federal or state funding exists for passenger rail projects. Aligning the required updates to every five years would eliminate unnecessary work by department staff.
- Online posting of reports. While TxDOT posts most of its published reports online, statute does not clearly require this for certain reports that have no other specific recipient except the public. Statute should ensure this practice continues for the Annual Funding and Cash Flow Forecast, Motor Vehicle Crash Statistics, and Red Light Camera Accident reports as well as the Long-Term Plan for Statewide Passenger Rail report.

TxDOT has repeatedly not met EEO statewide civilian workforce percentages in certain categories and has not consistently implemented plans to improve its workforce diversity.

As in years past, the department did not meet civilian workforce percentages in most job categories in the last three years for African Americans, Hispanics, and women. The department indicates it has difficulty improving its percentage of female employees because a large percentage of its employees work in engineering and maintenance, fields comprised predominately of men. Appendix E, *Equal Employment Opportunity Statistics*, shows the department's EEO performance in each job category for fiscal years 2013 to 2015.

TxDOT especially struggles to achieve a more diverse workforce in its management and executive levels. The table, *TxDOT Workforce Statistics*, compares the breakdown of the overall TxDOT workforce with that of management and executive levels. The statistics show a trend of decreasing diversity at higher levels of the department.

TxDOT Workforce Statistics FY 2015

Category	Overall TxDOT Workforce ⁷	Manager/ Supervisor	Executive
White	63 percent	72 percent	86 percent
Male	78 percent	84 percent	90 percent
Female	22 percent	16 percent	10 percent
Hispanic	26 percent	21 percent	13 percent
African-American	8 percent	4 percent	1.5 percent
Asian American or Pacific Islander	2.7 percent	2.7 percent	0 percent
American Indian/ Alaska Native	0.3 percent	0.3 percent	0 percent

TxDOT especially struggles with workforce diversity in its management and executive levels.

Despite difficulties in meeting the workforce percentages, TxDOT could be more proactive in its efforts to increase workforce diversity. The department already creates an annual plan outlining its intended efforts to increase workforce diversity, as required by federal and state law. However, over the last three fiscal years, TxDOT has not fully implemented some of the initiatives described in the plans or proactively tracked implementation and results. The *Planned Workforce Diversity Efforts Not Implemented* textbox provides information on some of these efforts.

Planned Workforce Diversity Efforts Not Implemented, FYs 2014–2016

- Assist human resources officers with outreach and recruitment to achieve 2 percent increase in certain targeted job categories. (FY 2016)
- Ensure recruitment literature is relevant to all employees. (FY 2014)
- Adding diversity goals accountability to manager and supervisor performance criteria. (FY 2014)
- Develop EEO presentation for TxDOT short course, a form of continuing education offered by the department to its employees. (FY 2016)

Recommendations

Change in Statute

10.1 Update the standard across-the-board requirement related to commission member training.

This recommendation would require the department to develop a training manual that each commission member attests to receiving annually, and require existing commission member training to include information about the scope of and limitations on the commission's rulemaking authority. The training should provide clarity that the Legislature sets policy and boards have rulemaking authority necessary to implement legislative policy.

10.2 Discontinue two of TxDOT's reporting requirements and modify four others.

This recommendation would eliminate the report on employees with unsatisfactory performance and the written EEO policy statement for the now-defunct State Aircraft Pooling Board. The recommendation would also require TxDOT to update the Long-Term Plan for Statewide Passenger Rail every five years instead of annually to align it with the federal reporting requirement. Lastly, the recommendation would clarify that TxDOT must post four of its required reports online to ensure the department continues this current practice. All of TxDOT's other reporting requirements would be continued.

Management Action

10.3 Direct TxDOT to more proactively implement and monitor its efforts to increase workforce diversity.

This recommendation would direct TxDOT to implement its existing affirmative action plan and track completion of initiatives and tasks outlined in the plan. TxDOT administration should monitor status of implementation and annually evaluate the department's workforce diversity statistics and direct modifications to the plan as necessary. Further, TxDOT's future plans could include more activities to emphasize retention and promotion practices to help facilitate increased diversity among TxDOT management. This recommendation would help ensure TxDOT's workforce planning activities result in tangible action and could ultimately help the department improve its workforce diversity, including in management and executive levels where TxDOT particularly struggles.

Fiscal Implication

These recommendations would not have a fiscal impact to the state.

All citations to Texas statutes are as they appear on http://www.statutes.legis.state.tx.us/. Sections 325.0075, 325.011(13), and 325.012(a) (4), Texas Government Code.

- ³ Section, 201.059, Texas Transportation Code.
- ⁴ Section 201.404(b-2), Texas Transportation Code.
- ⁵ Section 2205.015(a) and (b), Texas Government Code.
- 6 Section 201.6013, Texas Transportation Code.
- ⁷ Texas Department of Transportation, Fiscal Year 2016 EEO Program Update Part II, Equal Employment Opportunity and Affirmative Action Plan, January 5, 2016.
 - ⁸ 23 C.F.R Part 230, Subpart C, Appendix A, Part II; Section 201.402, Texas Transportation Code.

² Section 325.011(9), Texas Government Code.



APPENDIX A

Texas Department of Transportation Advisory Committees

Committee	Description	Composition	Legal Authority or Rule Reference		
Committees Created in Statute					
Aviation Advisory Committee	Provides advice on aviation program matters to the Transportation Commission, such as the aviation facilities capital improvement program.	Six members with aviation-related qualifications appointed by the commission.	Section 21.003, Transportation Code		
Border Trade Advisory Committee	Makes recommendations to the commission and the governor for addressing border trade transportation challenges.	31 members appointed by the commission currently serve, except for the presiding officer, who is statutorily designated as the secretary of state. Statute does not specify size of the committee. Other members include representatives of border-area metropolitan planning organizations, ports, and others with expertise in border trade issues.	Section 201.114, Transportation Code		
Port Authority Advisory Committee	Prepares a port mission plan and report on Texas maritime ports, recommends projects for funding to the commission, and provides advice on port issues to the commission.	Seven members appointed by the commission, including one member from the Port of Houston Authority, three from ports located on the upper Texas coast, and three from ports located on the lower Texas coast.	Section 55.006, Transportation Code		
Public Transportation Advisory Committee	Advises the commission on the state's public transportation needs, including funding allocation, and comments on proposed rules involving public transportation.	Nine members appointed by the Governor, Lieutenant Governor, and Speaker of the House of Representatives. Three members represent public transportation users, three represent providers, and three represent the general public.	Section 455.004, Transportation Code		

Appendix A

Committee	Description	Composition	Legal Authority or Rule Reference
Bicycle Advisory Committee	Advises the commission on bicycle issues, such as the Safe Routes to School Program and highway design, construction, and maintenance impacts on bicycle users.	Members appointed by the commission using recommendations from the public transportation division.	Section 201.9025, Transportation Code and 43 T.A.C. Section 1.85
Committees Created in	n Rule		
Commission for High- Speed Rail in the Dallas-Fort Worth Region Project Advisory Committee	Provides advice on development of intercity rail corridors, and policies and funding related to implementation of a proposed high-speed rail system in the Dallas-Fort Worth area.	Seven members appointed by the commission currently serve. No restrictions exist in rule or policy specifying size of the committee.	43 T.A.C. Section 1.85
Freight Advisory Committee	Provides advice to the department regarding freight-related priorities, issues, projects, and funding needs.	24 members appointed by the commission representing local government, business, and industry.	43 T.A.C. Section 1.85
I-20 East Texas Corridor Advisory Committee	This committee presented its recommendations to the agency in 2014 and is no longer active. As provided in department rule, it will be abolished December 31, 2017 without commission action.	Not applicable.	43 T.A.C. Section 1.85
I-35 Corridor Advisory Committee	This committee last met in 2013 and is no longer active. As provided in department rule, it will be abolished December 31, 2017 without commission action.	Not applicable.	43 T.A.C. Section 1.86

Appendix A

Committee	Description	Composition	Legal Authority or Rule Reference
I-69 Corridor Advisory Committee	Provides advice and recommendations to the department regarding development of I-69, and builds support and consensus from affected communities, local governments, and other interested parties.	23 members appointed by the Laredo, Paris, Corpus Christi, Yoakum, Houston, Atlanta, and Lufkin district engineers, including TxDOT staff, affected property owners and businesses, technical experts, and the general public, among others.	43 T.A.C. Section 1.86

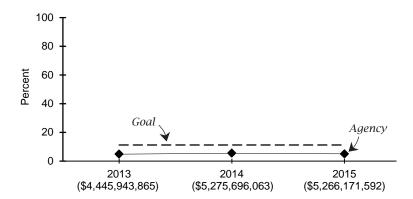
APPENDIX B

Historically Underutilized Businesses Statistics 2013 to 2015

The Legislature has encouraged state agencies to increase their use of historically underutilized businesses (HUBs) to promote full and equal opportunities for all businesses in state procurement. The Legislature also requires the Sunset Commission to consider agencies' compliance with laws and rules regarding HUB use in its reviews.¹

The following material shows trend information for the Texas Department of Transportation (TxDOT)'s use of HUBs in purchasing goods and services. The department maintains and reports this information under guidelines in statute.² In the charts, the dashed lines represent the goal for HUB purchasing in each category, as established by the comptroller's office. The diamond lines represent the percentage of TxDOT spending with HUBs in each purchasing category from 2013 to 2015. Finally, the number in parentheses under each year shows the total amount the department spent in each purchasing category. TxDOT's purchases fell short of statewide goals in some categories but exceeded in others.

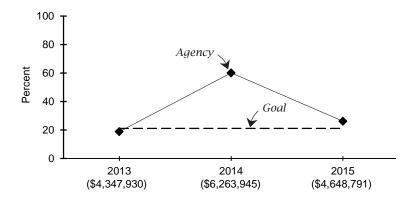
Heavy Construction



The department consistently fell short in this category for all three fiscal years. Federal law requires the department to separately certify disadvantaged business enterprises (DBE) and set participation goals on federally funded construction and maintenance projects, which overlap with the majority of expenditures in this category. For more information on the department's business opportunity programs, see Issue 4.

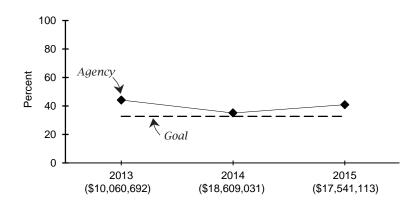
Appendix B





The department's purchases in this category fell short in fiscal year 2013, but exceeded statewide spending goals the following two years.

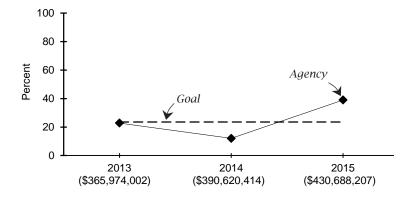
Special Trade



The department's purchases in this category exceeded the statewide purchasing goals for all three years.

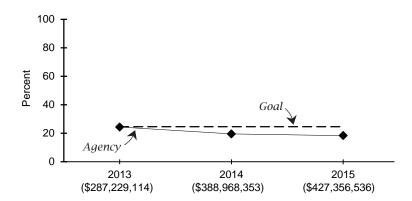
Appendix B





The department fell short of the statewide purchasing goal in this category the first two fiscal years but exceeded the goal in fiscal year 2015.

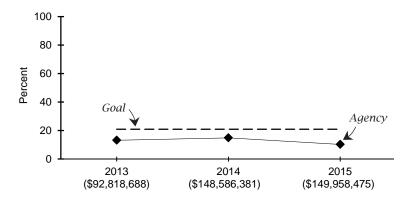
Other Services



The department fell short of the statewide purchasing goal for this category in all three fiscal years. The department has difficulty meeting the goal in this category for various reasons, such as not making enough proactive efforts to increase use of HUBs and lack of available HUBs for information technology and consulting services.

Appendix B

Commodities



The department's purchases in this category fell below the statewide purchasing goals in all three fiscal years. The department has difficulty meeting the goal in this category for various reasons, such as not making enough proactive efforts to increase use of HUBs and use of low-bid contracting for certain commodities.

All citations to Texas statutes are as they appear on http://www.statutes.legis.state.tx.us/. Section 325.011(9)(B), Texas Government Code.

² Chapter 2161, Texas Government Code.

APPENDIX C

2017 Unified Transportation Program (FYs 2017–2026)

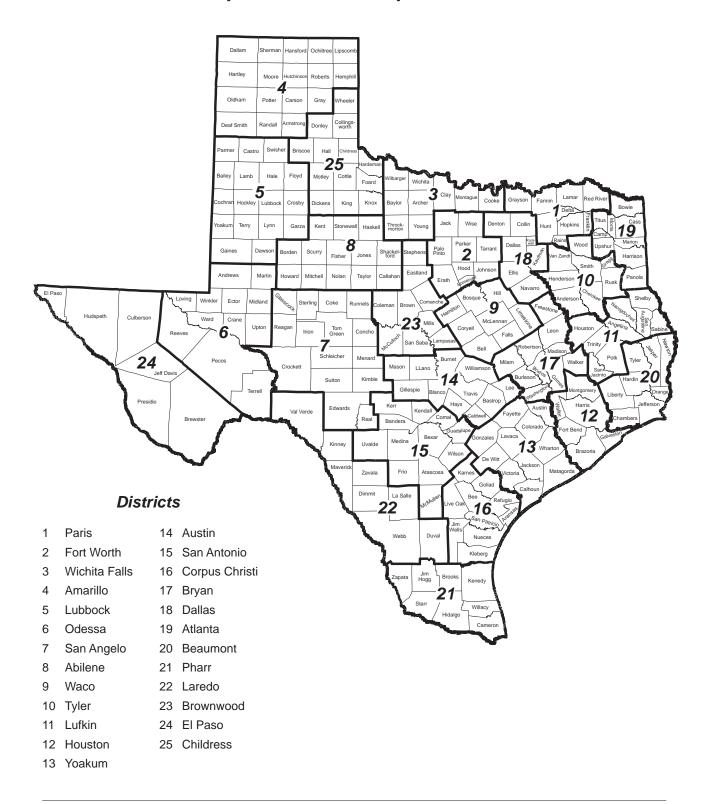
Funding Category	Description and Primary Project Selection Responsibility	UTP Base Amount (Millions)	Funding Increase (Millions)	Total 2017 UTP (Millions)
1 Preventative Maintenance and Rehabilitation	Projects selected by districts to preserve pavement and structural integrity of a road, rehabilitate roads and install or modify signs and markings to improve operation.	\$11,157	\$2,625	\$13,782
2 Metropolitan and Urban Area Corridor	Projects selected by metropolitan planning organizations for adding capacity, decreasing congestion, or maintaining or rehabilitating roadways to improve safe and efficient movement of people and freight.	\$1,334	\$11,202	\$12,536
3 Non-Traditionally Funded	Transportation projects selected by various entities using bond financing, Texas Mobility Fund, regional revenue, and local participation funding.	\$4,572	I	\$4,572
4 Statewide Connectivity Corridor	Mobility and added capacity projects within and connecting urban areas and corridors, proposed to be selected by TxDOT districts and metropolitan planning organizations.*	\$429	\$11,202	\$11,631
5 Congestion Mitigation and Air Quality (CMAQ)	Projects selected by metropolitan planning organizations to improve air quality in areas designated by the Environmental Protection Agency (currently Dallas-Fort Worth, Houston, and El Paso). These projects cannot be used to add capacity for single-occupancy vehicles.	\$2,169	I	\$2,169
6 Structures Replacement and Rehabilitation	Projects selected by TxDOT bridge division to rehabilitate or replace bridges and at-grade highway-railroad crossings, based on sufficiency and cost-benefit indices.	\$2,709	\$514	\$3,223
7 Metropolitan Mobility and Rehabilitation	Projects selected by metropolitan planning organizations with an urban area population in excess of 200,000.	\$4,241	I	\$4,241
8 Safety	Projects selected by TxDOT traffic operations division using three years of crash data and ranked using the safety improvement index.	\$1,887	\$1,291	\$3,178
9 Transportation Alternatives Program	Projects selected by various entities depending on the program. Projects can include safety rest areas, bicycle and pedestrian access.	\$500	I	\$500
10 Supplemental Transportation Projects	Projects selected by various entities depending on the program. Projects can include roads in state parks, railroad crossing replanking, Green Ribbon landscaping projects, and curb ramps.	29\$	I	\$557
11 District Discretionary	Projects on the state highway system selected and ranked by district engineers with the concurrence of metropolitan planning organizations. Includes \$2 billion in new funds for energy sector initiative.	\$1,540	\$2,439	\$3,979
12 Strategic Priority	Projects selected by the Transportation Commission to promote economic development, ability to respond to military deployments or emergencies, and other commission-determined priorities. Includes \$5 billion in new funds for congestion relief initiative.	\$763	\$9,064	\$9,827
	Total	\$31,858	\$38,337	\$70,195

* Rule changes currently pending.

Source: Texas Department of Transportation

APPENDIX D

Texas Department of Transportation Districts



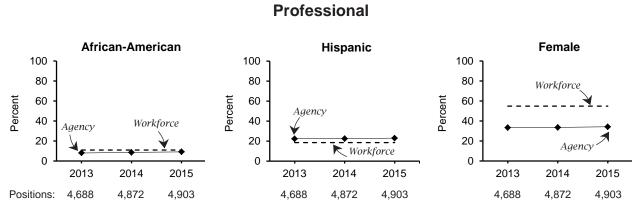
APPENDIX E

Equal Employment Opportunity Statistics 2013 to 2015

In accordance with the requirements of the Sunset Act, the following material shows trend information for the employment of minorities and females in all applicable categories by the Texas Department of Transportation.¹ The agency maintains and reports this information under guidelines established by the Texas Workforce Commission.² In the charts, the dashed lines represent the percentages of the statewide civilian workforce for African-Americans, Hispanics, and females in each job category.³ These percentages provide a yardstick for measuring agencies' performance in employing persons in each of these groups. The diamond lines represent the department's actual employment percentages in each job category from 2013 to 2015. The department fell short in almost all categories over the last three fiscal years, especially in the female category. Issue 10 also discuses TxDOT's workforce diversity challenges.

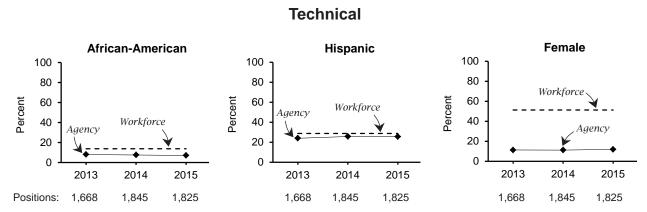
Administration African-American **Female Hispanic** Percent Percent Percent Workforce Workforce Agency Workforce Agency Positions:

The department fell short of civilian workforce percentages for all categories over the last three fiscal years, especially in the female category.

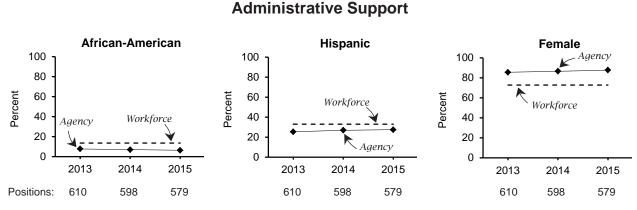


The department exceeded civilian workforce percentages in the Hispanic category, but fell short for the African-American and female categories, especially the female category.

Appendix E



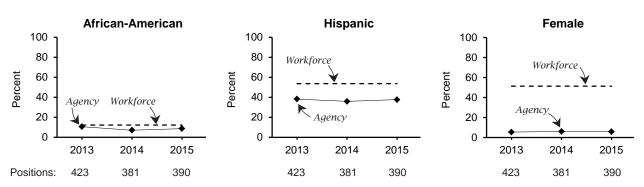
The department fell short of civilian workforce percentages in all categories for the last three years, falling especially short in the female category.



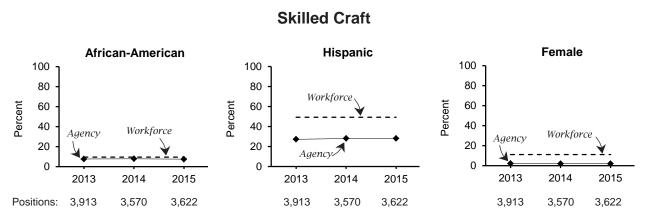
The department exceeded civilian workforce percentages in the female category over the last three fiscal years, but fell short in the African-American and Hispanic categories for all three years.

Appendix E

Service/Maintenance



The department fell short in all categories over the last three fiscal years, falling especially short in the female category.



The department exceeded civilian workforce percentages in all three fiscal years in the African-American category, but fell short in the Hispanic and female categories.

All citations to Texas statutes are as they appear on http://www.statutes.legis.state.tx.us/. Section 325.011(9)(A), Texas Government Code.

² Section 21.501, Texas Labor Code.

Based on the most recent statewide civilian workforce percentages published by the Texas Workforce Commission.

APPENDIX F

Key Transportation Entities

Federal

U.S. Department of Transportation

Umbrella agency overseeing 12 federal transportation agencies, including the following:

Federal Highway Administration

- funding and oversight of federal-aid highways and interstates
- oversight of federal highway planning, environmental, safety, and other regulations

Federal Transit Administration

 grants and safety oversight of public mass transportation

Federal Aviation Administration

grants and safety oversight of public aviation facilities

Federal Railroad Administration

- rail safety programs
- freight and passenger rail planning

State

Texas Department of Transportation

- statewide funding, planning, construction, and maintenance of federal and state roads
- compliance with federal regulations, including bridge safety and environmental reviews
- research and coordination of public transportation, airports, ports, and rail
- · oversight of Texas' only statewide toll authority

Regional

Metropolitan Planning Organizations

- federally required in regions with population more than 50,000
- 25 in Texas, do not cover rural areas of the state
- established by an agreement between local officials and the Governor
- create long- and short-term regional transportation and air quality plans
- select projects for federal transportation funding

Regional Mobility Authorities

- created by one or more counties, with Transportation Commission approval
- nine in Texas (Alamo, Cameron, Camino Real, Central Texas, Grayson County, Hidalgo County, Northeast Texas, Sulphur River, and Webb County— City of Laredo)
- authority to develop toll projects and generate revenue streams for other transportation projects

Regional Toll Authority

- one in Texas the North Texas Tollway Authority, created in 1997
- develops, finances, constructs, and operates toll roads in North Texas

Councils of Governments

- 24 in Texas covering the entire state
- role in transportation varies across state
- MPOs in Houston and Dallas-Fort Worth regions located within a COG
- many provide rural transportation services and participate in rural planning

Local

Local Governments

- · cities and counties build and maintain city and county roads not on the federal or state system
- eight county toll authorities develop and operate toll roads in Brazoria, Chambers, Collin, Fort Bend, Harris, Liberty, Montgomery, and Waller County
- transit agencies provide local public transportation such as buses and light rail
- ports and airports are operated locally

APPENDIX G

Draft TxDOT Alignment of Performance-Based Planning Requirements

	State		F	ederal	
H.B. 20	TxDOT Strategic Plan Goals	Statewide Transportation Plan	Key National Goals	FAST Act Goals (Formerly MAP-21)	TxDOT / National Performance Measures
					Fatality Rate (5-year moving average)
Improvements to Safety	Promote				Number of Fatalities (5-year moving average)
MPO Identified	Safety	Safety	Safety	Safety	Serious Injury Rate (5-year moving average)
Factors					Number of Serious Injuries (5-year moving average)
					Interstate Pavement in Good Condition (IRI<95)
					Interstate Pavement in Fair Condition (IRI 95–170)
MPO Identified	Preserve	Asset		Infrastructure	Interstate Pavement in Poor Condition (IRI>170)
Factors	Our Assets	Management	Pavement	Condition	Non-Interstate NHS Pavement in Good Condition (IRI<95)
					Non-Interstate NHS Pavement in Fair Condition (IRI 95–170)
					Non-Interstate NHS Pavement in Poor Condition (IRI>170)
					% Structurally Deficient Deck Area on NHS Bridges – Percent based on total NHS Deck Area
	Preserve Our Assets			Infrastructure Condition	% Structurally Deficient Deck Area on non- NHS Bridges – Percent based on total non- NHS Deck Area
					Count of Bridges (Entire Inventory) with Cyclic Maintenance Needs
MPO Identified Factors			Bridge		W Bridges (Entire Inventory) by Deck Area with Cyclic Maintenance Needs
					Count of Bridges (Entire Inventory) with Preventative Maintenance Needs
					Bridges (Entire Inventory) by Deck Area with Preventative Maintenance Needs
					Count of Bridges (Entire Inventory) with Rehabilitation or Replacement Needs
					Bridges (Entire Inventory) by Deck Area with Rehabilitation or Replacement Needs
Improvements				Congestion Reduction	
to Congestion		Mobility /		System Reliability	Annual Hours of Truck Delay – Interstates
Effects on Economic	Optimize System	Reliability	Freight	Freight Movement	(millions)
Development	Performance	Multimodal	rioigiit	Economic Vitality	Truck Reliability Index
MPO Identified Factors		Connectivity		Reduced Project Delivery Delays	

Appendix G

	State		F	ederal	
H.B. 20	TxDOT Strategic Plan Goals	Statewide Transportation Plan	Key National Goals	FAST Act Goals (Formerly MAP-21)	TxDOT / National Performance Measures
Improvements to Congestion Effects on Economic Development MPO Identified Factors	Optimize System Performance	Mobility / Reliability Multimodal Connectivity	NHS System Performance	Congestion Reduction System Reliability Freight Movement Economic Vitality Reduced Project Delivery Delays	Annual Hours of Delay – NHS (millions) Annual Hours of Delay – Interstates (millions) Annual Hours of Delay – Non-Interstate NHS Reliability Index – NHS Reliability Index – Interstates Reliability Index – Non-Interstate NHS Border Crossing Travel Time
Effects on the Environment (including air quality) Socioeconomic Effects	NA	Environmental Sustainability	Congestion Mitigation and Air Quality	Environmental Sustainability	Daily kilograms of VOC reduced by the latest annual program of CMAQ projects in areas with one million population or more (5-year average) Daily kilograms of NOx reduced by the latest annual program of CMAQ projects in areas with one million population or more (5-year average) Daily kilograms of CO reduced by the latest annual program of CMAQ projects in areas with one million population or more (5-year average) Annual Hours of Delay (AHD) reduced by CMAQ Projects in areas with one million population or more (1000 of hours)
Available Funding	NA	Financial Sustainability	NA	NA	*See Note

^{*} Though not a performance measure, federal/state rules require resource allocation and project prioritization/selection based on need and available funding — resulting in fiscally-constrained programs of projects.

Source: Texas Department of Transportation

Glossary of acronyms:

CMAQ: Congestion mitigation and air quality

CO: Carbon monoxide

IRI: International roughness index NHS: National highway system

NOx: Nitrogen Oxides

VOC: Volatile organic compounds

APPENDIX H

Contract Services Division Review Role

Contract Type*	Minimum for Review	Number of Prime Contracts FY 15	Contract Expenditures FY 15
Advance funding agreements (TxDOT and local governments jointly develop projects)	No minimum	353	\$851,883,319
Donation	No minimum	131	\$29,964,901
Engineering and architecture services	\$1,000,000	182	\$551,312,409
Interagency	\$50,000	121	\$90,156,957
Interlocal	No minimum	30	\$20,196,975
Interstate and federal	No minimum	6	\$56,617,074
Utility extension agreements	No minimum	1	\$189,910
Medical services	No minimum	1	\$598,000
Multiple use**	No minimum	80	\$O
Other contracts (including research and technology implementation, rentals, hotels, and conferences)	No minimum	289	\$224,275,715
Private consultant	No minimum	1	\$199,899
Scientific services**	\$1,000,000	16	\$13,000,000
State Infrastructure Bank	No minimum	5	\$1,802,500
Survey services	\$1,000,000	16	\$13,750,000
	Total	1,232	\$1,853,947,659

^{*} The contract services division also reviews contracts for accounting services, Border Colonia Access Program, intelligent transportation systems, landscape services, metropolitan planning organizations, outside counsel, pass-through agreements, and right-of-way acquisition provider services. However, the department did not use any of these contract types in fiscal year 2015.

^{**} The contract services division reviews multiple use and scientific services contracts after execution.

APPENDIX I

Completed Projects Delayed Over 100 Days FY 2015

Project and Location	Total Contract Value	Days Allowed	Days Delayed
Tolled managed lane and non-tolled access road construction (Cameron County)	\$34.2 million	457	198
Road widening (Cleburne)	\$17.5 million	516	143
Road rehabilitation (Ochiltree County)	\$11.8 million	462	119
Overpass construction (San Patricio County)	\$9.9 million	353	197
Railroad grade separation (Eagle Pass)	\$9 million	479	125
Interchange construction (Ellis County)	\$8.8 million	546	106
Road rehabilitation and widening (Zapata County)	\$8 million	296	123
Overpass construction (Denison)	\$6.6 million	456	174
Road rehabilitation (Ochiltree County)	\$5.8 million	388	109
Curb ramp construction (Potter County)	\$2 million	207	252
Bridge replacement (Wise County)	\$1.9 million	150	230
Raised median installation and traffic signal work (Waxahachie)	\$1.7 million	98	118
Bridge replacements (Navarro County)	\$1.4 million	251	152
Bridge replacement (Staples)	\$1.3 million	114	200
Bridge replacements (Limestone County)	\$1 million	302	109
Bridge widening (Boerne)	\$943,105	181	137
Repair slope with headwall (Dallas County)	\$256,468	65	145

APPENDIX J

Strategic Projects Currently Under Construction

Fiscal Year Executed	Project	District	Current Contract Cost, as of June 2016	Contract Type
2010	DFW Connector	Dallas	\$1,085,823,884	CDA*
2013	Horseshoe	Dallas	\$722,078,968	Design-Build
2013	North Tarrant Expressway 3A	Fort Worth	\$1,002,800,000	CDA
2013	IH-35E Managed Lanes	Dallas	\$1,064,896,173	CDA
2013	US 77	Corpus Christi	\$78,840,780	Design-Build
2014	Loop 375 Border West Expressway	El Paso	\$447,544,621	CDA
2014	Loop 1604	San Antonio	\$125,635,438	Design-Build
2014	SH 71	Austin	\$101,248,097	Design-Build
2014	SH 183 (Midtown Express)	Dallas	\$856,006,806	CDA
2015	SH 360	Fort Worth	\$279,222,431	Design-Build
2016	US 181 Harbor Bridge	Corpus Christi	\$847,190,139	CDA
2016	SH 288 Toll Lanes in Harris County	Houston	\$815,000,000	CDA
		Total	\$7,426,287,337	

^{*} Comprehensive Development Agreement

APPENDIX K

Texas Department of Transportation Reporting Requirements

	Report Title	Legal Authority	Description	Recipient	Sunset Evaluation
1.	Annual Analysis of Progress in Attaining Long-Term Transportation Goals	Section 201.601(e), Transportation Code	Requires TxDOT to provide analysis of its progress in attaining goals of the 24-year statewide transportation plan.	Lieutenant Governor, Speaker of the House of Representatives, the chairs of each standing committee with primary jurisdiction over transportation issues, and the TxDOT website	Continue
2.	Annual Funding and Cash Flow Forecast	Section 201.993, Transportation Code	Requires TxDOT to develop, publish, and annually update a 20-year forecast of all funds the department expects to receive from both state and federal sources for transportation projects.	Unspecified	Modify
3.	Certain Employees Whose Performances Were Unsatisfactory	Section 201.404(b-2), Transportation Code	Requires TxDOT to annually provide information on employees below the level of district engineer whose performance was unsatisfactory but who were not terminated.	Transportation Commission	Abolish
4.	Complaint Analysis	Section 201.801(g), Transportation Code	Requires TxDOT to compile detailed statistics and analyze trends related to complaints.	Transportation Commission on a quarterly basis; division directors, office directors, and district engineers on a monthly basis	Continue
5.	Compliance Program Reports	Section 201.454, Transportation Code	Requires TxDOT compliance staff to report monthly on their investigation activities.	Transportation Commission	Continue
6.	Contracts with Lobbyists, Public Relations Firms, and Government Consultants	Section 201.805(d), Transportation Code	Requires TxDOT to provide an annual list of its contracts with lobbyists, public relations firms, and government consultants.	Media and TxDOT website	Continue

	Report Title	Legal Authority	Description	Recipient	Sunset Evaluation
7.	Environmental Review Process Reports	Section 201.762(a), Transportation Code	Requires TxDOT to report biannually on projects under the environmental review process and status of each.	Transportation Commission, TxDOT website	Continue
8.	Environmental Review Process Reports	Section 201.762(b), Transportation Code	Requires TxDOT to report annually on implementation of the environmental review process, including a status report containing the information reported to the Transportation Commission under 201.762(a).	Members of the standing legislative committees with primary jurisdiction over matters related to transportation and each legislator with at least one project covered by the report in their districts; TxDOT website	Continue
9.	Equal Employment Opportunity Policy of the State Aircraft Pooling Board	Section 2205.015(a) and (b), Government Code	Requires TxDOT to annually prepare and maintain a written policy statement that implements a program of equal employment opportunity.	Governor	Abolish
10	. Equal Employment Opportunity Status Report	Section 201.402, Transportation Code	Requires TxDOT to annually prepare and maintain a written policy statement that implements a program of equal employment opportunity.	Governor	Continue
11.	. Expenditure Priorities Reporting System	Section 201.808, Transportation Code	Requires TxDOT to provide an online searchable database of transportation project expenditures to achieve transportation priorities, and includes specific information that must be reported, such as pavement and bridge condition.	TxDOT website	Continue
12	. Financial Audit	Section 201.2041, Transportation Code	Requires TxDOT to submit a financial audit by an independent certified public accountant in conjunction with its self-evaluation report to the Sunset Advisory Commission.	Sunset Advisory Commission	Continue
13.	. Fleet Replacement Plan	Section 2205.032 (c), Government Code	Requires TxDOT to develop a long-range plan for state aircraft and adopt the plan as part of its overall strategic plan.	Legislative Budget Board and Governor's Office of Budget, Policy, and Planning	Modify per Recommendation 7.1
14.	. Flight Logs	Section 2205.039, Government Code	Requires TxDOT to gather information on use of state aircraft from agencies using them and report annually.	Legislative Budget Board	Continue

Report Title	Legal Authority	Description	Recipient	Sunset Evaluation
15. Gulf Intracoastal Waterway Report	Section 51.007, Transportation Code	Requires the Transportation Commission to biennially evaluate the impact of the waterway on the state and recommend legislative action if necessary.	Legislature	Continue
16. Highway Maintenance Contracting	Section 223.042(f), Transportation Code	Requires TxDOT to annually provide details of highway maintenance privatization contracts awarded during the previous fiscal year.	Legislative Budget Board	Continue
17. International Trade Corridor Plan Report	Section 201.6011, Transportation Code	Requires TxDOT to report biennially on implementation of its International Trade Corridor Plan.	Lieutenant Governor, Speaker of the House of Representatives	Continue
18. Long-Term Plan for Statewide Passenger Rail	Section 201.6013, Transportation Code	Requires TxDOT to provide an annual update to its long- term plan for a statewide passenger rail system.	Unspecified	Modify
19. Motor Vehicle Crash Statistics	Section 201.806(a) (2), Transportation Code	Requires TxDOT to annually publish statistical information about the number, cause, and location of crashes.	Unspecified	Modify
20. Port Capital Program	Section 55.008, Transportation Code	Requires TxDOT to report biennial goals and objectives of the Port Authority Advisory Committee regarding port facility development and an intermodal transportation system.	Governor, Lieutenant Governor, Speaker of the House of Representatives, and Transportation Commission	Continue
21. Project Information Reporting System	Section 201.807(b), Transportation Code	Requires TxDOT to provide information about individual projects, such as status, sources of funding, benchmarks, timelines for completion, and other data.	TxDOT website	Continue
22. Red Light Cameras Crash Reports	Section 707.004, Transportation Code	Requires TxDOT to annually compile reports from local authorities that operate camera systems, including traffic crash data at intersections monitored by cameras.	Unspecified	Modify
23. Relief from Local Matching Funds Report	Section 222.053(e), Transportation Code	Requires the Transportation Commission to report annually on the use of matching funds and local incentives and the ability of the commission to ensure that political subdivisions located in economically disadvantaged counties have equal ability to compete for highway funding.	Governor, Lieutenant Governor, and Speaker of the House of Representatives	Continue

Report Title	Legal Authority	Description	Recipient	Sunset Evaluation
24. Report on Assistance to Colonias	Section 201.116(b), Transportation Code	Provides quarterly information on any projects funded by TxDOT that serve colonias.	Secretary of State	Continue
25. State Highway Fund Cash Flow Shortfall Forecast	Section 201.962, Transportation Code	Requires the Transportation Commission to provide a forecast to the cash management committee any time TxDOT requests approval to issue tax and revenue anticipation notes to cover a temporary cash flow shortfall.	Governor, Lieutenant Governor, Speaker of the House of Representatives, and Comptroller of Public Accounts	Continue
26. Statewide Transportation Report	Section 201.809, Transportation Code	Requires the department to annually report on the status of each of the state's transportation goals, and requires the information be reported statewide and for each TxDOT district.	Legislature and certain political subdivisions	Continue
27. Statistical Comparison of Districts	Section 201.805(a) and (b), Transportation Code	Requires TxDOT to annually provide specific data elements on its districts and requires the information to be calculated on per capita basis and listed for each county and for the state overall.	Media and the TxDOT website	Continue
28. Status of Texas Mobility Fund	Section 201.805(c), Transportation Code	Requires TxDOT to annually provide the amount of money in the Texas Mobility Fund by source as well as the amount of money received by the department, itemized by source.	Media and the TxDOT website	Continue
29. Status Report on Construction Projects by Legislative District	Section 222.103(d), Transportation Code	Requires TxDOT to provide a status report on all highway construction projects by legislative district that are under contract or awaiting funds.	At the request of a member of the Legislature	Continue
30. Report on Public Transportation Providers	Section 456.008, Transportation Code	Requires TxDOT to report annually on performance of public transportation providers that received any state or federal funding during the previous fiscal year.	Governor's Office of Budget Planning and Policy and Legislative Budget Board	Continue
31. Transportation Program Expenditures Report	Section 201.616, Transportation Code	Requires TxDOT to provide annual expenditure information on the Unified Transportation Program, turnpikes, bonds, regional mobility authorities, and certain rail facilities.	Legislature	Continue

Report Title	Legal Authority	Description	Recipient	Sunset Evaluation
32. Unified Transportation	Sections 201.991 and 201.992,	Requires TxDOT to publish and annually update the	TxDOT website and media	Continue
Program-Related	Transportation Code	entire Unified Transportation	media	
Documents and		Program and summary		
Annual Updates		documents highlighting project benchmarks, priorities, and		
		forecasts.		

APPENDIX L

Staff Review Activities

During the review of the Texas Department of Transportation (TxDOT), Sunset staff engaged in the following activities that are standard to all sunset reviews. Sunset staff worked extensively with department personnel; attended Transportation Commission meetings; met with staff from key legislative offices; conducted interviews and solicited written comments from interest groups and the public; reviewed department documents and reports, state statutes, legislative reports, previous legislation, and literature; researched the organization and functions of similar state agencies in other states; and performed background and comparative research.

In addition, Sunset staff also performed the following activities unique to TxDOT.

- Convened focus groups with local government, freight, aviation, and port stakeholders in several
 areas of the state
- Met with staff and policy board members of metropolitan planning organizations and toll road officials throughout the state
- Observed meetings of the House Bill 20 Planning Organizations Stakeholder Committee
- Observed public meetings on the Unified Transportation Program
- Observed two TxDOT low-bid highway contract bid openings (lettings)
- Visited the Austin, Dallas, Fort Worth, Houston, San Angelo, and Waco TxDOT districts and met with staff in both district and area offices
- Toured highway construction projects located in the Austin and Fort Worth districts
- Toured and met with staff at TxDOT's flight services facility
- Toured Houston's traffic operations center
- Conducted a survey of all 12,000 TxDOT staff members regarding overall performance and internal management and evaluated the 2,795 responses
- Conducted a survey of about 2,000 stakeholders to gather feedback on TxDOT's performance and evaluated the 672 responses
- Attended a right-of-way acquisition services pre-proposal conference
- Attended a meeting of the Grand Parkway Transportation Corporation

Sunset Staff Review of the Texas Department of Transportation

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