

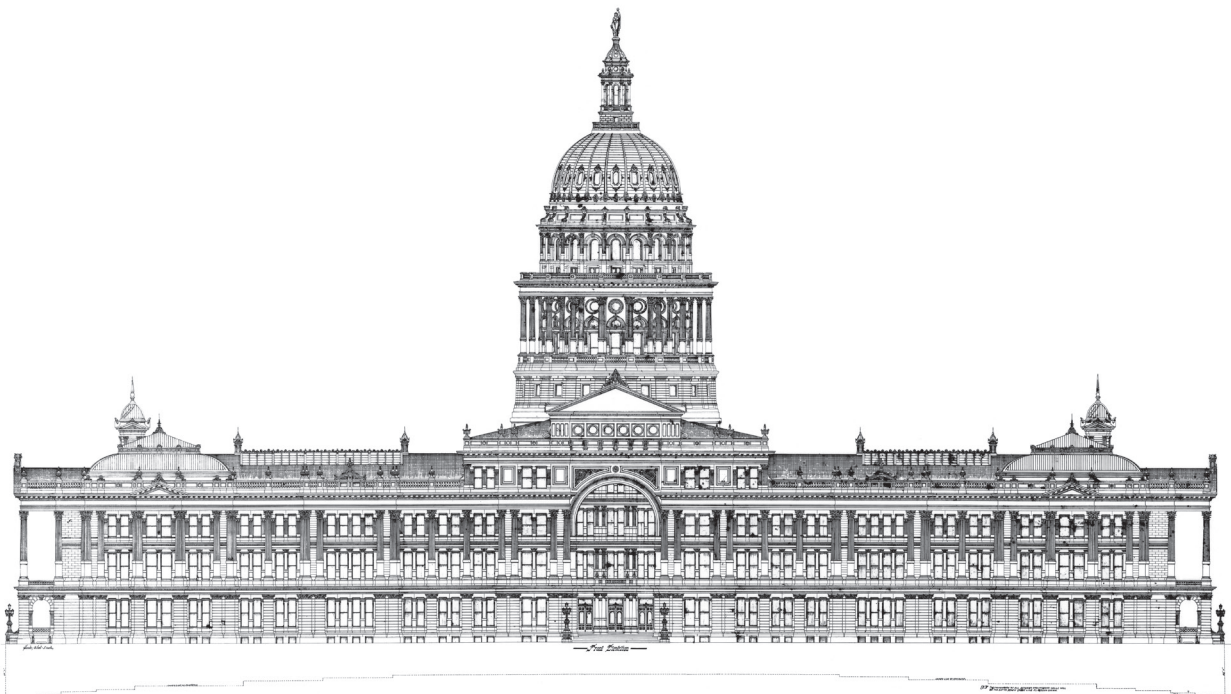


INTERIM REPORT

TO THE

82ND TEXAS LEGISLATURE

House Committee on
TRANSPORTATION
January 2011



HOUSE COMMITTEE ON TRANSPORTATION
TEXAS HOUSE OF REPRESENTATIVES
INTERIM REPORT 2010

A REPORT TO THE
HOUSE OF REPRESENTATIVES
82ND TEXAS LEGISLATURE

JOE C. PICKETT
CHAIRMAN

LEIGH ANNE LAUDERDALE
COMMITTEE CLERK

W. BRADY FRANKS
ASSISTANT COMMITTEE CLERK



Committee On Transportation

January 10, 2011

Joe C. Pickett
Chairman

P.O. Box 2910
Austin, Texas 78768-2910


The Honorable Joe Straus
Speaker, Texas House of Representatives
Members of the Texas House of Representatives
Texas State Capitol, Rm. 2W.13
Austin, Texas 78701

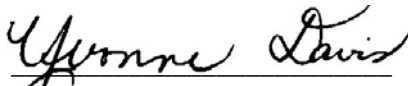
Dear Mr. Speaker and Fellow Members:

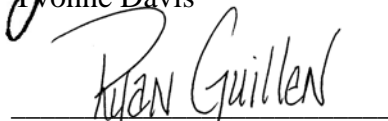
The Committee on Transportation of the Eighty-first Legislature hereby submits its interim report including recommendations for consideration by the Eighty-second Legislature.

Respectfully submitted,

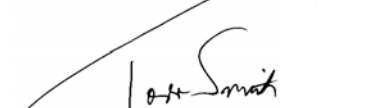

Joe C. Pickett, Chairman


Larry Phillips, Vice Chairman

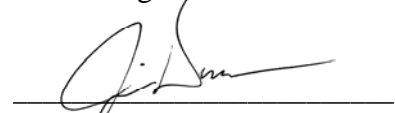

Yvonne Davis



Ryan Guillen

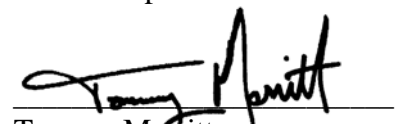

Ruth Jones McClendon

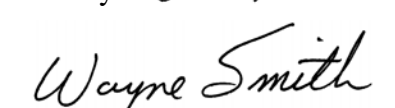

Todd Smith


Bill Callegari


Jim Dunnam


Linda Harper-Brown


Tommy Merritt


Wayne Smith

Larry Phillips
Vice-Chairman

Members: Bill Callegari, Yvonne Davis, Jim Dunnam, Ryan Guillen, Linda Harper-Brown,
Ruth Jones McClendon, Tommy Merritt, Todd Smith, Wayne Smith

TABLE OF CONTENTS

Introduction.....	3
Charge 1	6
Charge 2.....	16
Charge 3.....	28
Charge 4.....	54
Charge 5.....	63
Charge 6.....	68
Appendix A.....	77
Appendix B.....	82
Appendix C.....	102
Endnotes.....	104

Introduction

In February of 2009, during the 81st Legislative Session, Speaker Joe Straus appointed eleven Members to the House Committee on Transportation. Pursuant to House Rule 3, Section 32, the Committee had jurisdiction over all matters pertaining to:

1. commercial motor vehicles, both bus and truck, and their control, regulation, licensing, and operation;
2. the Texas highway system, including all roads, bridges, and ferries constituting a part of the system;
3. the licensing of private passenger vehicles to operate on the roads and highways of the state;
4. the regulation and control of traffic on the public highways of the State of Texas;
5. railroads, street railway lines, interurban railway lines, steamship companies, and express companies;
6. airports, air traffic, airlines, and other organizations engaged in transportation by means of aerial flight;
7. water transportation in the State of Texas, and the rivers, harbors, and related facilities used in water transportation and the agencies of government exercising supervision and control thereover;
8. the regulation of metropolitan transit; and
9. the following state agencies: the Texas Department of Transportation and the Texas Transportation Commission.

Interim Study Charges and Subcommittee Assignments

After the Legislative Session ended, Speaker Strauss charged the House Committee on Transportation with studying seven issues prior to the 82nd Legislative Session. During the interim, the Committee held nine public hearings to take testimony on the following issues.

1. Monitor the Texas Department of Transportation (TxDOT) to ensure the agency is implementing recommended legislative, sunset, and Grant Thornton management audit changes.

2. Review the organization and operation of Metropolitan Planning Organizations (MPOs). Consider the relationship between MPOs and TxDOT regarding transportation planning and programming.

Subcommittee

- | | |
|--------------------------|-----------------------|
| 1. Larry Phillips, Chair | 5. Todd Smith |
| 2. Jim Dunnam | 6. Linda Harper-Brown |
| 3. Ruth Jones McClendon | 7. Wayne Smith |
| 4. Yvonne Davis | |

3. Study the practices and procedures used in the development of toll roads and make recommendations as necessary.

Subcommittee

- | | |
|-------------------------|-------------------|
| 1. Jim Dunnam, Chair | 4. Todd Smith |
| 2. Ruth Jones McClendon | 5. Bill Callegari |
| 3. Yvonne Davis | |

4. Review federal, state, and local programs to promote traffic light signalization, improve traffic flow, and reduce congestion.

Subcommittee

- | | |
|--------------------------|-----------------|
| 1. Bill Callegari, Chair | 4. Yvonne Davis |
| 2. Wayne Smith | 5. Todd Smith |
| 3. Ryan Guillen | |

5. Study methods for improving safety on Texas roadways. Study the funding levels of crash prevention programs directed toward pedestrians, bicyclists, motorcyclists, and other vulnerable road users. Explore ways to improve safety for roadside workers.

Subcommittee

- | | |
|------------------------------|-------------------|
| 1. Linda Harper-Brown, Chair | 4. Larry Phillips |
| 2. Bill Callegari | 5. Tommy Merritt |
| 3. Ryan Guillen | |

6. Study the safety and efficiency of the existing agriculture-related transportation infrastructure. Consider the air, ground, and rail transportation needs of rural Texas and analyze the effect on economic development.

Joint Interim Charge with House Committee on Agriculture and Livestock.

7. Monitor the agencies and programs under the committee's jurisdiction.

Charge 1

Monitor the Texas Department of Transportation (TxDOT) to ensure the agency is implementing recommended legislative, sunset, and Grant Thornton management audit changes.

On November 19, 2009, Texas House Speaker Joe Straus instructed the House Committee on Transportation to:

Monitor the Texas Department of Transportation (TxDOT) to ensure the agency is implementing recommended legislative, sunset, and Grant Thornton management audit changes.

Sunset Advisory Commission Recommendations

Background

"The Sunset Advisory Commission staff issued its recommendations for the Texas Department of Transportation over in the summer of 2008...Sunset legislation continuing the Texas Department of Transportation did not pass during the 81st Legislative Session; however, many of the recommendations of the Sunset Advisory Commission did not require legislation and TxDOT has been working to implement the recommendations that do not require statutory change"¹.

The Texas Department of Transportation (TxDOT) was scheduled for Sunset Review during the 81st Legislative Session. The Sunset Review Process typically occurs once every twelve for Texas' Agencies and involves a comprehensive process including a review by the Sunset Agency staff, a self-evaluation report submitted by the agency and public hearings and testimony.

The Sunset Advisory Commission Staff Report was published in June 2008 and contained six major issues and recommendations along with Across-the-Board Recommendations found in all Sunset Staff Reports. According to the report, "(t)he Sunset review of the Texas Department of Transportation (TxDOT) occurred against a backdrop of distrust and frustration with the Department and the demand for more transparency, accountability, and responsiveness"². In order to achieve the purposed goals, the Sunset Staff recommended, "what is in effect a four-year 'legislative conservatorship' to return control over transportation policy to the Legislature, where it belongs... The recommendations in [the Sunset Report] would strengthen the Legislature's position in overseeing the Department and help to restore trust and confidence in TxDOT"³. To achieve this end, they addressed the following issues and recommended the following changes in statute:

Issue 1: "Until trust in the Texas Department of Transportation is restored, the State cannot move forward to effectively meet its growing transportation needs." The Sunset Staff recommended that this issue be addressed by changing the "culture" of TxDOT in a variety of ways. First, they recommended that the Texas Transportation Commission (TTC) be abolished and replaced by one appointed Commissioner. In order to provide the proper surveillance of the Department they suggested establishing a Transportation Legislative Oversight Committee that would review and comment on TxDOT's research program, including individual research projects and activities.

Issue 2: "The State's complicated transportation planning and project development process frustrates understanding of how important decision are made." Recommendations to mitigate the effects of the issue were to redevelop, and update at more regular intervals, the Statewide Long Range Transportation Plan. Also, TxDOT should establish a transparent and understandable system for project programming within TxDOT that integrates project milestones, forecasts, and priorities, as well as developing a system, devised with input from key transportation

stakeholders, to measure and report progress in meeting transportation goals and milestones⁴.

Issue 3: "TxDOT does not meet the high expectations placed on it to ensure consistent, meaningful public involvement." The Sunset Staff recommended requiring TxDOT to develop and implement policies that guide and encourage more meaningful public involvement efforts, to develop standard procedures for documenting complaints, and a formal process for staff with responsibilities to share best practices information. They also were interested in seeing more central coordination for TxDOT's major marketing campaigns and a more user-friendly Agency website.

Issue 4: "Elements of TxDOT's contracting functions lack efficiency and could expose the state to unacceptable levels of risk." The Sunset Staff recommended relaxing the restrictions on TxDOT's contracting practices, allowing them to use design build contracts, which can be used for toll projects under current law, on traditionally funded highway projects and remove the requirements to advertise contract notifications and solicitations in newspapers. They also should improve consistency and efficiency in professional services contracting by setting timeframes for key stages in its contracting process. Finally, the Agency should reduce its risk and improve its contract management by increasing staff oversight on professional services contracts, strengthen oversight and training for professional services contracts and establish an external process for reviewing comprehensive development agreements (CDAs)⁵.

Issue 5: "Key elements of TxDOT's regulation of motor vehicle dealers, salvage vehicle dealers, and household good carriers do not conform to commonly applied licensing practices." The Sunset Staff recommended that TxDOT provide necessary resources to enforce its statutory provision regarding salvage vehicle dealers. Also, TxDOT should standardize licensing provisions by requiring a surety bond for certain franchise dealers and update enforcement practices to enable regulations of motor vehicle advertisements and provide new tools for taking action against motor vehicle dealers.

Issue 6: "Key elements of TxDOT's regulation of outdoor advertising do not conform to commonly applied licensing practices." Recommendations for this issue include standardizing administration of outdoor advertising licenses for rural roads and depositing those fees to General Revenue-Dedicated Texas Highways Beautification Account, updating enforcement practices and authorizing the use of standard administrative penalties, and depositing all program fines into the General Revenue-Dedicated Texas Highways Beautification Account. The Department should also have the authority to deny license renewals if a licensee's permits are in poor standings. Finally TxDOT should centralize the program, better track total program costs and raise fees to recover costs⁶.

These issues and other legislative priorities were assessed by the Sunset Advisory Commission and used to create the language for the TxDOT Sunset Bill. House Bill (HB) 300, also known as the TxDOT Sunset Bill, during the 81st Regular Session, was authored by then Chairman of the Sunset Advisory Commission, Representative Isett, and coauthored by Chairman Pickett and Representative Harper-Brown. HB 300 contained the Sunset Commission's recommendations of TxDOT, as well as other changes in statute that were added throughout the legislative process. HB 300 passed through both Chambers of the Legislature and a Conference Committee of Members of the House and Senate. The Legislature, however, failed to finish their debate of HB

300 before the deadline passed. This put the existence of the Department into question as no bill was passed to continue its operations, usually known as a "safety net" bill. The Legislature met on July 1, 2009 in a Special Session to debate, among other bills, Senate Bill 2, which continued TxDOT until 2011, and required the Sunset Commission to focus its second review of TxDOT solely on recommendations made in the previous Sunset Report.

Committee Action

The House Committee on Transportation met in a scheduled public hearing on September 17, 2009 in Austin, Texas. Amadeo Saenz, the Executive Director of TxDOT provided testimony on the department's adoption of Sunset recommendations that did not require changes in statute. He discussed the department's new website, which according to the department is more user-friendly. Other actions included the project tracker available on the website which allows stakeholders to view transit projects, their status, costs and budget, and the status of the State Long Range Transportation Plan (SLRTP) update. John Barton, Assistant Executive Director for Engineering Operations, and Ed Serna, former Assistant Executive Director Support Operations, of TxDOT also provided updates on the department's improvement of their contracting procedures. These improvements, they noted, were meant to improve the process by decreasing the time it took to deliver the project and decreasing the risk involved in contracting.

Discussion

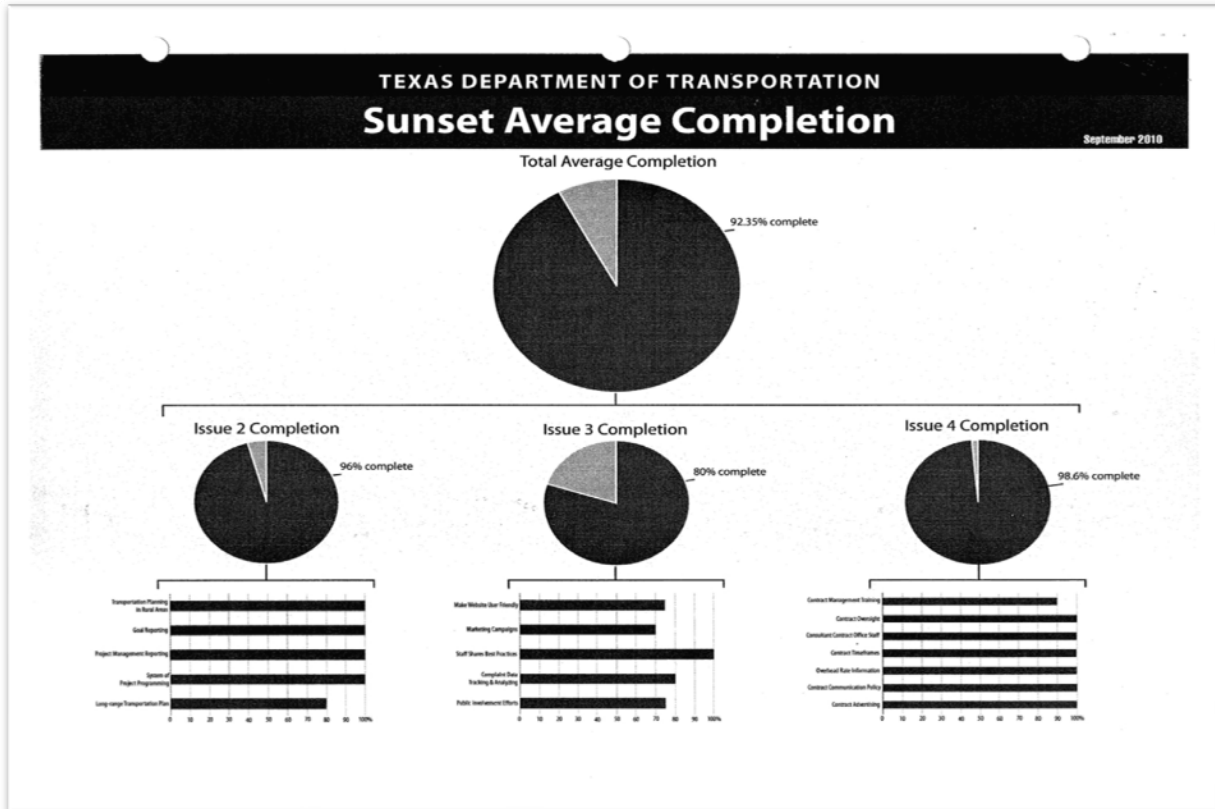
Of the original six issues recommended for revision by the Sunset Advisory staff, three could be implemented by TxDOT without change in statute (Issues 2, 3 and 4). To date, these three items have a total average completion of 92.35% and will be completed in March of 2011. Issue 2, relating to the transportation planning and project development, is currently 96% complete and is scheduled for completion in November, 2010. Issue 3, relating to public involvement and outreach, is 80% complete and is scheduled for completion in March, 2011. Issue, 4 relating to professional service contracts, is 98.6 complete and is scheduled for completion in December, 2010.

Issue 2: "The TxDOT Strategic Plan (Sunset Advisory Commission issue 2.4), was adopted by the Texas Transportation Commission in June 2010, is ultimately in service of the Statewide Long Range Transportation Plan (SLRTP) which is still in the fieldwork stage (Sunset Advisory Commission issue 2.1). If necessary, the TxDOT Strategic Plan will be adjusted accordingly once the SLRTP is in place before the end of 2010"⁷.

The first priority of Issue 2 is to "require TxDOT to redevelop and regularly update the long-range Statewide Transportation Plan describing total system needs, establishing overarching statewide transportation goals and measuring progress towards those goals"⁸. To date, this priority is 80% complete and is scheduled to end in November of 2010. In May and August of 2010, TxDOT hosted open-house meetings to obtain input from citizens regarding the 24-year statewide plan. The final step occurred when the TTC adopted the 2035 SLRTP at their November 2010 meeting after the draft report was made available for public review and comment in September 2010.

Priority two of Issue 2 is to "require TxDOT, with input from transportation partners and

policymakers, to develop a system to measure and report on progress in meeting transportation goals and milestones"⁹. This priority is complete and the main action was in June of 2010 when public comments from the draft plan were integrated into the SLRTP. The final plan was submitted to the Legislative Budget Board and the Governor's Office and was approved in July of 2010.



Priority three is to "establish a transparent, well-defined and understandable system of project programming within TxDOT that integrates project milestones, forecasts and priorities"¹⁰. This priority is complete and the main action was in October of 2009 when the Unified Transportation Program Working Group issued its final report to TxDOT. The TTC considered new proposed programming and project development rules in May 2010 that were drafted by the Transportation Planning and Project development Rulemaking Advisory Committee. The rules were adopted in August of 2010.

Priority four is to "require TxDOT districts to develop detailed work programs driven by milestones for major projects and other statewide goals for smaller projects"¹¹. This project is

complete, but requires continuing enhancements and improvements. In September of 2009, TxDOT released Primavera Version 6 (P6), which gives TxDOT managers real-time project schedules to ensure accountability for project design resources. This is an updated version of project development tracking system (Project Development Management System) originally launched in September 2008. In December 2009, the department transferred project data from PDMS to the new P6 system. They also began to train project managers on the new software and began supporting the web-based Project Tracker with the P6 software in March 2010.

The final priority of Issue 2, priority 5, is to "require TxDOT to establish, and provide funding and support for transportation planning in rural areas around the state"¹². This priority is complete and was implemented when TxDOT adopted rules in August 2010 that incorporated rural planning organizations into its planning and programming processes.

Issue 3: This issue focuses primarily on the importance of public outreach and involvement in transportation planning. The first priority of this issue was to "require TxDOT to develop and implement a public involvement policy that guides and encourages more meaningful public involvement efforts agency wide"¹³. To date, this priority is 75% complete. Texas Southern University (TSU) was contracted to evaluate TxDOT's public involvement strategies. TSU will provide a draft policy for the TTC's consideration as well as recommendations on how to improve the agency's function in this regard at the TTC workshop on December 15.

Priority two is to "require TxDOT to develop standard procedures for documenting complaints and for tracking and analyzing complaint data"¹⁴. A new tracking system named CRAFT (Customer Relationship and Feedback tracking) is currently being field tested by TxDOT. The agency's employees are being trained on the new system, which is being used to electronically track complaint reports. This priority was completed, with continual updates as necessary, when CRAFT went operational statewide in October 2010.

Priority three of Issue 3 is for TxDOT to "provide a formal process for staff with similar responsibilities to share best practices information"¹⁵. This priority is complete, but requires continuing updates. Currently, TxDOT employees can share best practices information using a program called SharePoint and through the department's internal online learning center. Also, TxDOT is planning to launch an internal training and informational sharing video archive. This service will be available to all employees and will be a centralized source for best practices information.

Priority four is that "TxDOT should provide central coordination of the department's major marketing campaigns"¹⁶. To date, priority four is 70% complete and included the formation of an internal committee to study "all campaigns and awareness efforts, standardizing contracting, working on an umbrella strategic advertising and marketing plan, and developing measurement methods." Once the strategic plan is developed, it will be put into place by March of 2011. After the strategic plan is formally adopted, a request for proposals will be used to secure qualified vendors to handle the department's advertising and marketing needs.

The final priority of issue 3 is to "make [the TxDOT] website easier to use." This priority is 75% complete and included a new streamlined department website. This website was launched in December of 2008 and includes Project Tracker, a program that provides information on

infrastructure projects currently being developed. In March of 2010, a program named Tracker was added to provide information regarding performance measures used by the department such as construction, pavement conditions, traffic fatalities, and various congestion measures. While this project will run through the end of the year, the department anticipates regular updates based on public comments and feedback to be implemented in the website.

Issue 4: This issue focuses on the contracting process used by TxDOT and recommendations to make the process more efficient and reduce the risk involved. Priority one was to "remove provisions in statute and rule requiring TxDOT to advertise its contract solicitations in local and statewide newspapers"¹⁷. This recommendation cannot be implemented by TxDOT until changes in statute are made by the Legislature.

Priority two of issue 4 is for TxDOT to "develop clear communication policies regarding contract solicitations for its professional service contracts"¹⁸. This recommendation was implemented in October of 2008 when TxDOT amended The Contract Management Manual, Chapter 1, Section 4 to provide a more detailed communication plan. The Contract Services Section (CSS) of the General Services Division (GSD) developed generic forms for the communication plans and non-disclosure statements, and worked to create a customized form for most common types of professional services contracts. "To promote overall compliance with department contracting policy and procedures, the [GSD] will submit this area to the Audit Office as a candidate for review as they develop their annual Audit Plan for the department."

Priority three is to ensure that TxDOT "provides additional information on overhead rates to districts and ensure that they use them." In October 2008, TxDOT updated its required contract training and added a Contract Management and Administration course. This class covers negotiation and establishment of overhead rates and any department staff who are involved in contract negotiation are required to take this course. There is also improved oversight in that the Design Division's Consultant Contract Office Section (CCO) reviews negotiated overhead rates and compare them to the audited overhead rates.

The fourth priority is for TxDOT to "set timeframes for each major step in the development of professional services contracts"¹⁹. A September 2008 memorandum from TxDOT administration detailed deadlines for each major step in the development of professional service contracts that were established by the CCO. These timelines have been integrated in TxDOT policy manuals which were distributed to all districts, regions, divisions, and offices. In addition to the new manuals, department regional staff set more specific standard operating procedures in order to complete contract execution within 100 days of their receipt of Letters of Interest.

Priority five is that "TxDOT should consider providing additional staff to support its Consultant Contract Office"²⁰. In September of 2008, TxDOT added four additional staff positions to the Consultant Contract Office. The new staff members were tasked with "developing and implementing the Professional Services Contract Administration and Management System, standardizing the invoice for engineering, surveying and architecture contracts, maintaining contracting rules, updating all precertification categories, and developing additional guidance and resources to support the selection, negotiation and management phases."

Priority six is for TxDOT to "strengthen oversight and accountability of professional service

contracts in its district offices." TxDOT significantly condensed the number of offices that oversee professional service contracts from twenty-five districts to four regions. This has improved consistency, with final operating procedures approved in January 2010 and more timely reviews of these contracts.

The final priority of issue 4 is for TxDOT to "require contract management training for its professional services project managers and other employees involved in professional services contract administration"²¹. This priority is 90% complete and the main action came when TxDOT developed a two-part training curriculum for professional service contract administrators. These courses ensure that employees receive in-depth instruction on the correct handling of department contracting. A more comprehensive course will be offered at the end of this year and will be continued to meet demand, which is estimated to be twice a year.

Grant Thornton Management Audit

Background

In 2009, The Texas Transportation Commission retained the services of an independent audit firm, Grant Thornton, LLP, to conduct a top-down management and organizational review of TxDOT. The Commission directed Grant Thornton to perform this review per a recommendation from the Texas State Legislature in 2009.

The final report was delivered to the Commission during its workshop meeting on May 26, 2010. The report can be found at:
<http://www.txdot.gov/about_us/commission/2010_meetings/documents/gt.pdf>

In July 2010, the Texas Transportation Commission (TTC) established the TxDOT Restructure Council (TRC) to provide a "fresh set of eyes" to assist with modernizing and improving TxDOT. The Commission selected three experts, Howard Wolf, Jay Kimbrough, and David Laney, to serve on the TRC. The TRC will review and evaluate recommendations from the Grant Thornton Report, as well as other audits and reviews, to determine areas of emphasis and implementation priorities to present to the Commission.

Once the TRC was formed, they began to meet with TxDOT administration and staff to gain perspective on the recommendations made in the Grant Thornton Report. It was at this point that they began work to develop the Recommendations Tracking Database. They also updated the Commission at their monthly meeting on August 25, 2010 at their monthly workshop.

In September of 2010, the TRC continued to meet with TxDOT administration, staff, and transportation stakeholders as well as with Grant Thornton staff. Mr. Kimbrough was invited to provide an update to the House Committee on Transportation and also a demonstration of the Recommendations Tracking Database to Capitol staff. An update was provided to the Commission at their monthly meeting on September 29, 2010.

In October of 2010, TxDOT, with TRC approval, posted two new high-level executive positions for Chief Information Officer and Chief Administration Officer. With the help of the TRC, TxDOT posted Phase I of the Recommendations Tracking Database on their website. Mr. Kimbrough

was invited to testify at a hearing of the Senate Committee on Transportation & Homeland Security and Mr. Wolf was invited to provide information at a hearing of the House Select Committee on Transportation Funding.

In November 2010, the TRC continued to meet with TxDOT administration, staff, Grant Thornton staff, and transportation stakeholders. Phase II of the Recommendations Tracking Database was scheduled to be completed and posted by mid-November. TRC also began drafting a report to the Commission, and an update on TRC activities occurred at the November 18, 2010 TTC meeting, with another update planned for the December 15, 2010 workshop. The presentation of final recommendations was originally scheduled for the December 16 meeting, but was postponed due to a "scheduling conflict". The Commission also felt a need to release their recommendations in conjunction with the Sunset Advisory Commission recommendations.

Committee Action

The House Committee on Transportation met in a scheduled public hearing on September 17, 2009 in Austin, Texas. Susan Pentecost of Grant Thornton was invited to provide an update of the organization's review of TxDOT. At the time, Grant Thornton was half-way through their interview of stakeholders and preparing to release their final recommendations by the end of the year. The full report, as noted earlier, was available on May 26, 2010. The Committee members clarified the extent of the review and ensured the stakeholders interviewed by Grant Thornton were of a diverse background and represented Texas as a whole.

The House Committee on Transportation met in another scheduled public hearing on June 9, 2010 in Austin, Texas. This hearing was held after the Grant Thornton report was released. Two employees, Anna Dannegger, Director, and Susan Pentecost, Partner, of Grant Thornton were invited to give the Members information regarding the methodology and process used by the firm to review TxDOT. Two Chairmen of the TTC, Ned Holmes and Fred Underwood, were also invited to testify about the decision to Commission made to have a second audit completed.

Both hearings were intended to provide an update to the progress the Commission made to comply with the recommendations made in the Grant Thornton management audit.

Discussion

Over the past several years there have been numerous recommendations made to the department that have come from back-to-back management audits and reviews. Before the council could begin to assess and analyze what the department should do to modernize and improve they needed a way to "put their arms around" what has been asked of the department.

The solution was a comprehensive database that included all the recommendations made to the department from the Grant Thornton review, as well as from other management audits and reviews from the past few years (pre-sunset audits, sunset commission report, and 2030 committee report). This database was made available to the public on Friday, October 1 and can be accessed on the TxDOT web site.

In order to better organize the 191 Grant Thornton Recommendations, which make up 29% of the database, the TRC worked closely with Grant Thornton staff to capture the recommendations accurately and to organize them into nine distinct categories. These categories are: Leadership and Culture, Implementing Change, Organizational Structure, Plan/Design/Build, Human Resources, Information Technology, Financial Management, Procurement, and Communication. The TRC also worked with the department and commission staff to ensure the database was easy to use and allowed the public to search, sort, filter, and download the information²².

The database is an agency accountability tool that will allow the council, the public and transportation stakeholders to review, search, and comment on recommendations and agency activity in an organized and efficient manner. This is also a tool that will assist the council in developing their report to the Texas Transportation Commission outlining their recommendations and priorities for the Department.

The two newly created positions at TxDOT are intended to help improve the agency's organizational structure. The Chief Administration Officer will direct and manage support functions of the agency including human resources, procurement, HUB/DBE compliance, occupational safety and travel information. The Chief Information Officer will provide leadership and strategic directions for the department's information systems and manage the technology services aspects of the agency's operations. Both positions will report directly to TxDOT's Executive Director.

Once the TRC presents their final report to the TTC, it will be the responsibility of the Commission to implement, plan, and execute further action.

Conclusion

While TxDOT and the TTC have improved their accountability since the publication of the 2008 Sunset Advisory Commission Staff Report and the Grant Thornton Management Audit, the Legislature should remain vigilant and continue a thorough investigation of the Agency and Commission's activities.

Recommendations

The House Committee on Transportation recommends the 82nd Legislature to:

1. Continue to monitor the Department and Commission to ensure statutory and rule changes currently being made are continued after project completion.
2. Develop and implement certain management review recommendations into statute. Establish timelines and set goals to track and measure implementation progress.
3. Consider ensuring Legislative and Sunset recommendations that were unable to be adopted by the department are included in the Department Sunset bill during the 82nd Legislative Session.
4. Consider working with the Commission to obtain the services of an independent management group to monitor the progress toward the goals of the recommendations and make adjustments to achieve those goals.

Charge 2

Review the organization and operation of Metropolitan Planning Organizations (MPOs). Consider the relationship between MPOs and TxDOT regarding transportation planning and programming.

On November 19, 2009, Texas House Speaker Joe Straus instructed the House Committee on Transportation to:

Review the organization and operation of Metropolitan Planning Organizations (MPOs). Consider the relationship between MPOs and TxDOT regarding transportation planning and programming.

Background

Metropolitan Planning Organizations (MPOs) are an integral part of the transportation planning process in Texas. MPOs also allow citizens to have significant input into the transportation projects in their area. However, these organizations are not well known or understood by the public, and therefore this report seeks to better clarify the role of MPOs in meeting our state's transportation needs.

MPOs are federally mandated entities that encompass urban areas throughout the nation and are charged with developing a transportation plan for that urbanized area. Federal law requires an MPO to be designated for each urbanized area with a population greater than 50,000.

All MPOs are required to prepare and update a long-range metropolitan transportation plan (MTP) that takes into consideration all aspects of the area's transportation needs such as new and existing infrastructure, public transit, and congestion. The MTP is a plan that forecasts transportation needs for the next twenty years and is updated every four years. Additionally, the MPO is required to develop another plan, referred to as the Transportation Improvement Program, which includes a priority list of proposed federally supported projects and strategies to be carried out within a four year period. The Texas Department of Transportation (TxDOT) collects these plans and programs from each of the twenty-five MPOs, and the plans from the individual TxDOT districts where there is no MPO, to form the State Transportation Plan which is used to prioritize projects across the state.

Additionally, the duties of an MPO can be greatly expanded given a variety of different factors including: encompassing a Transportation Management Area (TMA), which is an urbanized area with a population of 200,000 or more; a designation as a nonattainment or maintenance area under the Clean Air Act; or serving a multi-state area.

Funding for MPOs is provided by grants from the Federal Highway Administration (FHWA) and from the Federal Transit Administration (FTA) on a reimbursement basis. In order to receive funding, an MPO must submit a project request to the local TxDOT district for processing. If the expenditures are allowed, the state must reimburse the MPO within thirty business days. The state, in turn, seeks reimbursement from the appropriate federal agency.

Because of the nature of the funding stream, cooperation must exist on many levels between the federal and state governments and the MPOs. At the state level, the relationship between TxDOT and the MPOs should be further explored to ensure transparency, cooperation and efficiency throughout all steps of the planning process.

Committee Action

On March 22, 2010, Chairman Pickett formed a Subcommittee to fully develop and thoroughly analyze the complex nature of this charge. He appointed the Vice-Chairman of the Committee, Representative Larry Phillips, to serve as the Chair, and Representatives Jim Dunnam, Yvonne Davis, Linda Harper-Brown, Ruth Jones McClendon, Todd Smith and Wayne Smith to form the rest of the Subcommittee.

Hearing Summary

The House Committee on Transportation, Subcommittee on Metropolitan Planning Committees met in a scheduled public hearing on August 25, 2010. The Committee heard public and invited testimony from: John Barton, Assistant Executive Director for Engineering Operations at TxDOT, Alan Clark of the Houston-Galveston Area Council, Christopher Evilia of the Waco MPO, Dan Kessler of the Association of Texas MPOs (TEMPO), Bill Magers of the Sherman-Denison MPO, Robert Wood of the Sherman-Denison MPO, Brad McCaleb of the Texarkana MPO, Michael Morris of the North Central Council of Governments., and Terri Hall of Texas TURF.

Mr. Barton testified that TxDOT is aware that the planning process is not as transparent as is desired. While the complexity of the transportation planning process is innate and it involves so many components, TxDOT has taken steps to simplify it. After the 81st Legislative Session, TxDOT formed an advisory committee to make recommendations about revising existing TxDOT rules regarding planning and programming. Mr. Barton stated the rules require that TxDOT's planning and project development program include: project selection criteria for the Department and each MPO to use in their transportation plans that are based on the Texas Transportation Commission's (TTC) transportation goals and measurable targets; statewide connectivity project benchmarks and implementation guidelines; an extended cash forecast; funding formulas for various categories of transportation projects; allocation formulas for mobility projects located within MPOs and related performance measures; flexibility provisions that allow TxDOT and MPOs to accelerate or delay projects based on cash forecasting; and consistent, clear and understandable reporting requirements. TxDOT also enacted, via the rulemaking process, many of the components found in House Bill 300 in the 81st Legislative Session, the TxDOT Sunset Bill.

The Committee also heard testimony from the Sherman-Denison MPO, one of the smallest MPOs in the state, the Waco MPO, a mid-sized MPO, and the Houston-Galveston and the North Central MPOs, the two largest MPOs in the state. Overall, all of the MPOs could cite positive working relationships with TxDOT personnel. There was an acknowledgement that TxDOT does seem to be working to correct some of the problems in communication and transparency. However, there is still concern that TxDOT seems to want to approve or control which projects are developed, rather than listening to the MPOs' priorities as established by regional elected officials and transportation providers. Furthermore, there seemed to be universal frustration that there is a lack of an information system that is capable of providing accurate, reliable and timely information on letting cycles and long-term financial projections within TxDOT that can be accessed and used by the MPOs in their forecasting.

Survey Summary

In April 2010, the Committee sent a questionnaire to each of the twenty-five MPOs. The committee received responses from nineteen of the MPOs. The following is some of the basic information from the responses to the survey.

Abilene MPO

no response

Amarillo MPO

The Amarillo MPO serves a population of approximately 222,000, has three full-time employees and two part-time employees. The City of Amarillo is the fiscal agent for the MPO. The governing board consists of eleven voting members: two county judges, two county commissioners, mayor, city manager, TxDOT district engineer, Council of Governments member, a member from the chamber of commerce, and a TxDOT director of Transportation Planning and Development. The board does not allow for proxy voting. The Amarillo MPO recommended that the communication from TxDOT to the MPOs regarding the content and format of documents such as the MTP and TIP should be clearer and come earlier in the process. The response seems to indicate that the Amarillo MPO feels there are many last minute changes requested by TxDOT, which wastes time and money.

Brownsville MPO

The Brownsville MPO serves a population of approximately 200,000 and has four full-time employees. The City of Brownsville is the fiscal agent for the MPO. The governing board consists of nine voting members: one member from the City of Brownsville, one member from Los Fresnos, one member from Rancho Viejo, one member from TxDOT, one member from Cameron County, one member from Brownsville Independent School District, one member from the Brownsville Navigation District, one member from the Brownsville/S. Padre International Airport Advisory Committee, one member from the Brownsville Chamber of Commerce, and one member from the Brownsville Economic Development Corporation. The board does allow for proxy voting. The Brownsville MPO recommended that TxDOT continue to work cooperatively with the various MPOs throughout the state through TEMPO. The MPO also cited the environmental clearance process to be problematic, specifically with the United State Fish and Wildlife Service staff.

Bryan-College Station MPO

No response

Capitol Area MPO (CAMPO)

CAMPO serves a population of approximately 1.6 million people and serves the Round Rock-Austin-San Marcos MSA. The MSA also covers Bastrop, Caldwell, Hays, Travis and Williamson Counties. CAMPO has fifteen full-time employees and two part-time employees. The City of Austin is the fiscal agent for the MPO. The governing board consists of eighteen voting members: County Commissioners from Bastrop, Caldwell, two from Travis and Williamson Counties; the Mayors of Pflugerville, Austin, Cedar Park, San Marcos, and the Mayor Pro-Tem of Round Rock, three Austin City Council Members, Travis and Hays County Judges, one member from Travis County, one member from Capitol Metro, and one member

from the TxDOT Austin District. The board does not technically allow for proxy voting, however, members may designate an alternate who is affiliated with that member's organization or other body, and that alternate is allowed to vote in the member's stead. CAMPO recommended that TxDOT work on consistency in dealing with all MPOs, treat MPOs as a partner and not as a department, and manage the MPOs less.

Corpus Christi MPO

The Corpus Christi MPO serves a population of approximately 790,000 and has six full-time employees. Nueces County is the fiscal agent for the MPO. The governing board consists of seven voting members: Nueces County Judge, San Patricio County Judge, Mayor of Corpus Christi, Mayor of Portland, an official from the Port of Corpus Christi, an official from the Regional Transportation Authority Board, and a member of the Corpus Christi TxDOT District. The board does not allow for proxy voting. The Corpus Christi MPO did not have any specific recommendations on improvements TxDOT could make to their planning processes.

Dallas-Fort Worth MPO

The Dallas-Fort Worth MPO serves a population of approximately 6,600,000 and has one hundred and thirty two full-time and two part-time employees. The North Central Texas Council of Government (COG) is the fiscal agent for the MPO. The governing board consists of twenty six elected officials from the cities, ten elected officials from the counties, and seven members that are transportation providers. The board does not allow for proxy voting. The Dallas-Fort Worth MPO recommended greater decentralization of project selection and implementation by TxDOT.

El Paso MPO

The El Paso MPO serves a population of approximately 700,000 and has fourteen full-time employees. The City of El Paso is the fiscal agent for the MPO. The board does not allow for proxy voting. El Paso MPO recommended that TxDOT work to provide a more transparent travel demand model practices and demographic forecast training.

Harlingen-San Benito MPO

No response

Hidalgo MPO

The Hidalgo MPO serves a population of approximately 800,000 and has eight full-time employees. The Lower Rio Grande Valley Development Council is the fiscal agent for the MPO. The governing board consists of local elected officials, transit provider directors, the chairman of the commuter rail district, and the chairman of the local Regional Mobility Authority. There are also several ex-officio members of the policy board from Mexico. The board does allow for proxy voting. The Hidalgo MPO recommended less oversight from and greater cooperation and partnership with TxDOT.

Houston-Galveston MPO

The Houston-Galveston MPO serves a population of approximately 6,000,000 and has about seventy full-time employees. The MPO also receives direct support from Houston-Galveston Area Council (H-GAC) employees in administrative functions. The Council of Governments is the fiscal agent for the MPO. The governing board consists of twenty eight voting members:

City of Baytown, City of Galveston, three members from the City of Houston, City of Missouri, City of Pasadena, City of Sugar Land, City of Texas City, Brazoria County, Chambers County, Fort Bend County, Galveston County, two members from Harris County, Liberty County, Montgomery County, Waller County, Metropolitan Transit Authority, two members from TxDOT, Houston-Galveston Area Council, one at-large city appointee from Brazoria County, one at-large city appointee from Montgomery County, one at-large city appointee from Harris County, Gulf Coast Rail District, other cities with a population of 50,000 or more, and one appointee by the TPC. The board does not allow for proxy voting, however it does allow for a designated alternate to serve on the governing board in place of the primary member, with voting privileges. The Houston-Galveston MPO recommended that TxDOT provide more accurate, reliable financial information which includes the current letting cycle and short-term and long-term financial projections.

Killeen-Temple MPO

No response

Laredo MPO

No response

Longview MPO

The Longview MPO serves a population of approximately 80,000 and has three full-time employees. The City of Longview is the fiscal agent for the MPO. The governing board consists of nine voting members: the Mayor of White Oak, the Gregg County Judge, a Harrison County Commissioner, the City Manager of Longview, the TxDOT District Engineers for Tyler and Atlanta Districts, and the Directors of Development and Public Works for the City of Longview. The board does allow for proxy voting. The Longview MPO indicated that while the relationship with TxDOT has improved over the last few years, clearer and more timely communication on upcoming meetings, policy changes, and other planning issues would benefit their planning process.

Lubbock MPO

The Lubbock MPO serves a population of approximately 225,000 and has three full-time employees. The City of Lubbock is the fiscal agent for the MPO. The governing board consists of nine voting members: one elected Lubbock County official, Lubbock County judge, three representatives from the City of Lubbock, two of whom must be elected officials, TxDOT district engineer, the City Manager of Lubbock, the Mayor of Wolfforth, and the General Manager of Citibus. The board does not allow for proxy voting, with the exception of those who serve on the transportation advisory committee. The Lubbock MPO recommended that TxDOT provide additional transparency and more effective communications in their interactions with MPOs.

Midland-Odessa MPO

The Midland-Odessa MPO serves a population of approximately 211,000 and has four full-time employees. The City of Odessa is the fiscal agent for the MPO. The governing board consists of: City Council Members from Odessa and Midland, a commissioner from the County of Midland, the Ector County Judge, and the TxDOT District Engineer. The board does not allow for proxy voting. The Midland-Odessa MPO expressed concern with TxDOT's cash forecasting

model saying that the current model makes long-range forecasting difficult.

San Angelo MPO

The San Angelo MPO serves a population of approximately 95,000 and has three full-time and one part-time employee. The City of San Angelo is the fiscal agent for the MPO. The governing board consists of eleven voting members: the President of the Chamber of Commerce, the Concho Valley COG Executive Director, the City Manager of San Angelo, the Director of Community Planning and Development, the City Engineer, the Director of the airport, the Director of Transportation Planning and Development, and the TxDOT District Engineer. The board does not allow for proxy voting. The San Angelo MPO did not have any specific recommendations on improvements TxDOT could make to their planning processes.

San Antonio MPO

The San Antonio MPO serves a population of approximately 1,600,000 and has fifteen full-time employees. Bexar County is the fiscal agent for the MPO. The governing board consists of nineteen voting members: one member from the Alamo Area COG, three elected officials and one appointed member of Bexar County, four elected officials and two appointed members from the City of San Antonio, one elected official from the Greater Bexar County Council of Cities, one member from the Northeast Partnership, two members of the state Legislature, two representatives from TxDOT, and two members from VIA Metropolitan Transit. The board does not allow for proxy voting. The San Antonio MPO did not have any specific recommendations on improvements TxDOT could make to their planning processes.

Sherman-Denison MPO

The Sherman-Denison MPO serves a population of approximately 80,000 and has two full-time employees. The MPO also utilizes employees of the COG for administrative assistance. The Texoma COG is the fiscal agent for the MPO. The governing board consists of five voting members: the Mayor of Sherman, the Mayor of Denison, a rotating representative from one of the smaller cities (currently Pottsboro), a county commissioner, and the TxDOT District Engineer. The board does not allow for proxy voting. The Sherman-Denison MPO indicated a positive relationship with TxDOT, but that the agency could still improve communication and assist in training MPO staff.

Southeast Texas MPO

No response.

Texarkana MPO

The Texarkana MPO serves a population of approximately 94,000 in two states and has three full-time employees. The City of Texarkana is the fiscal agent for the MPO. The governing board consists of fourteen voting members: one member from Miller County, three members from Texarkana, two members from Arkansas State Highway and Transportation Department (AHTD), one member from Bowie County, three members from Texarkana, one member from Wake Village, one member from Nash, two members from TxDOT. The board does not allow for proxy voting. The Texarkana MPO did not have any specific recommendations on improvements TxDOT could make to their planning processes.

Tyler MPO

The Tyler MPO serves a population of approximately 180,000 and has one full-time and five part-time employees. The City of Tyler is the fiscal agent for the MPO. The governing board consists of eleven voting members: two mayors, one county commissioner, one county judge, three city managers, TxDOT district engineer, a city engineer, the county road administrator, and a Regional Mobility Authority board member. The board does not allow for proxy voting. The Tyler MPO did not have any specific recommendations on improvements TxDOT could make to their planning processes.

Victoria MPO

The Victoria MPO serves a population of approximately 84,000 and has the equivalent of two full-time employees. The staff of the MPO are also employees of the City of Victoria. The City of Victoria is the fiscal agent for the MPO. The governing board consists of ten voting members: two representatives from TxDOT, the Victoria County Judge, a Victoria County commissioner, two Victoria City Council Members, the City Manager, the city Public Works Director, one member from the Port of Victoria, and the manager of the Victoria Regional Airport. The board does not allow for proxy voting. The Victoria MPO recommended that TxDOT be more flexible and open to local input.

Waco MPO

The El Paso MPO serves a population of approximately 220,000 and has two and a half full-time employees. Two of these employees are also employed by the City of Waco. The City of Waco is the fiscal agent for the MPO. The governing board consists of nineteen voting members: nine local elected officials, eight city managers and municipal staff, and the TxDOT district engineer. The board does allow for proxy voting. The Waco MPO indicated that there are some inefficiencies with the travel demand model, and last minute updates to the transportation plans, which results in delays.

Wichita Falls MPO

The El Paso MPO serves a population of approximately 141,000 and has two full-time employees. The City of Wichita Falls is the fiscal agent for the MPO. The governing board consists of nine voting members: the Mayor of Wichita Falls, the Wichita County Judge, two Wichita Falls City Councilmembers, the TxDOT District Engineer, the City of Wichita Falls Public Works Director, the City Administrator of Pleasant Valley, the Mayor of Lakeside City, and the Executive Director of the North Texas Regional Planning Commission. The board does not allow for proxy voting. The Wichita MPO recommended that TxDOT provide more training on the development and maintenance of TransCAD Travel Demand Model.

Recommendations for the Texas Department of Transportation

The House Committee on Transportation recommends the Texas Department of Transportation to implement the following items by use of the Department's Rulemaking Authority.

Transparency

Based on the Committee work, MPO survey results and the public hearing, there is a consensus that the relationship between TxDOT and MPOs can be improved. Specifically, a workgroup

with the purpose of identifying methods and activities that will produce more financial transparency should be formed between TxDOT and the MPOs. The workgroup's emphasis should be working with the Department on developing financial tracking and reporting tools that would allow MPOs to follow TxDOT's programming of funds, including the assignment of obligation authority to specific projects, that reflect the project selection priorities as established by MPO Policy Boards, and provide feedback to the MPOs when those project selection priorities are not achieved including the circumstances that preempted the MPOs project prioritization. This workgroup could also give MPOs more information on the uses of federally appropriated funds, Advance Construction, and general cash flow of TxDOT particularly for those programs that impact MPO responsibility such as Category 2, TxDOT Mobility Funds, Congestion Mitigation and Air Quality (CMAQ), and Surface Transportation Program – Metropolitan Mobility (STP-MM). This workgroup could also work with the TTC to pursue a more open process to apply for transportation development credits.

Financial Partnering

The Department could also assist MPOs in funding administrative functions for regional projects that benefit the state's on-system network. An example is the STP-MM- and CMAQ-funded regional projects that benefit all on-system projects. The Department should also reimburse STP-MM and CMAQ funded projects after costs are incurred by the MPOs; many times MPOs must cash flow these projects pending reimbursement from TxDOT. The MPOs should also continue to streamline the funding agreement process with TxDOT Districts, regional office, and the Agency headquarters. Finally, TxDOT should consider utilizing the Federal Transit Administration model for grant agreements and reimbursement processes, which would permit a periodic audit and close-out rather than a labor-intensive detailed monthly review and audit.

Project Selection

The process of selecting certain projects could be improved if TxDOT allowed for certain processes to operate in a less top-down fashion. For example, the selection of safety projects could be improved if TxDOT allowed more flexibility to the MPOs, and if MPOs were included in the beginning of the process. Additionally, the funding formula for safety projects could be altered to more equitably spend money across the state. Currently, a crash rate is used in the funding formula rather than absolute totals, which has the effect of favoring rural areas even though more accidents are occurring in urban areas of the state. The use of Proposition 12 monies can also be distributed more equitably geographically, as was recommended by a broad range of MPOs and Districts.

Maintenance project selections could also be improved to allow more flexibility for MPOs. Currently, MPOs need a statement from each TxDOT district stating how maintenance projects were selected and the why investment in this particular project is beneficial to the community. To improve the current procedure, the process for selecting maintenance projects should be approved by the MPO policy boards. Additionally, expected performance improvements from the project should be defined and the performance of the facility should be monitored after the improvements. The performance of the improved facility should later be reported to the MPO and district constituents in annual reports. This will help MPOs determine where the best value is for scarce transportation resources and provide accountability to the public.

Currently, statewide planning documents must show a connection and consistency with MPO long-range plans and Transportation Improvement Programs (TIPs). To improve this process, the statewide plan should include, first, a summary of MPO priorities prepared by each MPO. Second, it should have projects or programs that demonstrate a linkage to MPO plans and TIPs and take into account the activities of MPOs as it relates to the statewide system. There should be more emphasis on the system rather than individual projects. Finally, the statewide plan should demonstrate financial constraint as it is currently laid out in federal rules and regulations for MPOs. The financial constraint demonstration of the statewide plan should include a baseline financial forecast plus additional financial scenarios. In addition, the statewide plan should identify the overall transportation need and resources necessary to satisfactorily address that need. Examples of issues that should be in the Statewide Plan would be toll and managed lanes, system interoperability, project priorities for the state, congestion pricing policies, statewide freight flow and infrastructure needs, and ITS deployment along high volume, interregional corridors. TxDOT should also have performance measures to evaluate these potential projects, developed in cooperation with MPOs and other key stakeholders that are consistently measured and reported across all districts and are clearly defined and replicable by others.

Communications

The communications between TxDOT, the MPOs, and the public needs improvement, with a greater focus on proactive versus reactive communications. For example, on December 22, 2009 the MPOs along with the District Engineers were called to Austin by TxDOT Administration. The purpose of the meeting was to give the MPOs Category 2 & Category 3 numbers and to discuss the 2011 Unified Transportation Program (UTP). The result was that the MPOs were asked to give an approval on a set of numbers they had not seen before, nor had MPO policy boards been able to review. In short, the MPOs would like to meet when there isn't an immediate crisis to resolve so there is the time and ability to discuss mutual concerns in depth and to consult with local elected leaders.

Also, TxDOT often proceeds with activities that have an impact on MPOs, but does not always involve the MPO in preliminary discussions with local, state, and federal agencies. Examples include public outreach and environmental documents. TxDOT should coordinate all public outreach activities that are in the non-rural portions of their districts with the twenty-five MPOs across the state. Currently, TxDOT district staff meets monthly with the FHWA and the Environmental Affairs Division to discuss the status of ongoing environmental documents. The MPOs are not invited to those meetings at the request of TxDOT, even though the status of the documents has an impact on MPO long-range plans, TIP documents and transportation conformity. With financial commitments eroding, there needs to be an increased emphasis on communications and accountability.

Organizational Structure

To improve the relationship between the department and the MPOs, there should be a greater consensus on the level of oversight performed by Regional Office representatives. For example,

some regional staff believes that oversight requires them to be involved and sometimes have the final decision on scopes of work for contracts between the MPOs and their contractors, as well as work tasks identified within the Unified Planning Work Program, which come from the budgets of the MPOs. The appropriate role for the TxDOT regional staff is to determine whether or not a proposed activity meets federal eligibility requirements, not to determine project scope.

In order to help improve the structure between the Department and MPOs, the Department should make appropriations available to fully fund and staff the Transportation Planning and Programming (TP&P) Division. In the past, the TP&P Division has served as a planning liaison between the MPOs and the TxDOT Administration. With their current staffing levels, the TP&P Division's ability to perform that function has been greatly diminished. The TP&P Division also used to provide consistent interpretations of federal law and guidance to the MPOs. Their current lack of staffing has resulted in fragmented interpretations of federal law and statute from the TxDOT Regional Offices.

The decision-making structure could be improved to allow more decisions to be made at the local level as opposed to ones made in a centralized fashion. In many cases, local elected officials, who make up a large majority of an MPO, are closest to the issues and are directly accountable to the public in those regions. Also, centralized decision-making for projects or policies which are regional in scope is inappropriate. Examples include Intelligent Transportation Systems management, bypassing long-range plans, and conformity staging when advancing projects. There could also be other models for better integration between the MPOs and TxDOT. These alternatives could include a dedicated MPO staff representative housed at TxDOT with the purpose of elevating the profile of MPOs within TxDOT Administration, or an increase in the meetings between TxDOT management and the MPOs for briefings on topics such as funding and legislative agendas.

Leadership and Culture

There should be a greater level of recognition by TxDOT regarding the importance and roles of the metropolitan planning process. Local elected officials are the first line responders to transportation issues in their communities and as such should be given more deference in the transportation decision-making process as it is carried out by TxDOT.

For example, TxDOT often brings together the MPO directors to develop consensus regarding a number of policy related issues, usually under tight deadlines. TxDOT then uses the discussions from these meetings to advertise a consensus among the MPOs. The problem with this system is that it is the MPO Policy Boards, comprised of mostly of local elected officials, and not the MPO staff, that have the final authority to speak on behalf of their regions.

Legislative Recommendations

The House Committee on Transportation recommends the 82nd Legislature to:

1. Consider altering the project selection method used by TxDOT to allow for greater inclusion of MPOs and other key stakeholders.
2. Consider requiring that a high percentage of the voting membership of an MPO policy board be made up of local elected officials.
3. Consider prohibiting the use of proxy votes by policy board members and limiting the ability of alternates to vote on policy matters
4. Consider developing a training program to ensure that MPO staff, policy board members, and members that have not served on an MPO previously are adequately trained in new planning programs.
5. Continue to work to improve communication between TxDOT, the MPOs and staff, especially relating to any changes in revenue forecasting or planning models.
6. Continue to monitor the effectiveness of the rules recently adopted by TxDOT.

Charge 3

Study the practices and procedures used in the development of toll roads and make recommendations as necessary.

On November 19, 2009, Texas House Speaker Joe Straus instructed the House Committee on Transportation to:

Study the practices and procedures used in the development of toll roads and make recommendations as necessary.

Introduction

The Subcommittee conducted two public meetings on June 9, 2010 and September 2, 2010. The Subcommittee additionally solicited and obtained other information from relevant sources.

In summary, due to the complexity of the interim charge and the broad impact of potential recommendations, the Committee deems it proper to submit a general history of the use of toll roads in Texas, specific observations made by the Subcommittee, and areas of recommended further inquiry.

Background

The 20-cent-a-gallon state gasoline tax has not been raised since 1991 and Governor Perry has stated that it will not be raised in the coming session²³. The Department projects that the gas tax will generate roughly \$4.1 billion dollars during the 2012-13 biennium²⁴, an estimated \$2.8 billion of which must be used for highway maintenance and preservation²⁵. The official amount will be reported in the Comptroller's Biennial Revenue Estimate, released in January. The Texas Department of Transportation (TxDOT) estimates that without an additional revenue source, the State Highway Fund (SHF) will be insufficient to finance any new construction projects in 2012, and the total expenditures for maintenance will exceed the revenues from the state motor fuels tax. Furthermore, much of the new road construction that occurred during the current biennium was funded by one-time sources of revenue such as the American Recovery and Reinvestment Act of 2009 or by General Revenue bonds, many of which are quickly running out.

For these reasons, tolling roads become the only readily apparent option for new road construction in Texas in the foreseeable future. In describing the current highway funding situation, former Texas Transportation Commission Chairman Ric Williamson stated that Texans must choose between "no roads, slow roads or toll roads". However, decisions regarding tolling will have to be made soon, and Texas cannot afford that these decisions be made in the dark. It is the state's duty to toll in a manner that most efficiently maximizes state resources and protects the long term interests of the state.

Prior to the 77th Regular Session of the Texas Legislature, all Texas highway construction was funded by cash-in-hand from the State Highway Fund (Fund 6). In 2001, legislators concluded that the tradition "pay-as-you-go" approach was no longer sufficient and moved to adopt new "innovative" methods of highway finance. The Texas Department of Transportation was given statutory authority to issue debt and enter into public-private partnerships, and the two primary mechanisms of highway finance became revenue bonds and tolling authorities.

As a result, toll roads, once rarely encountered outside the state's largest metropolitan areas, expanded and could become common in cities large and small. The Texas Department of

Transportation (TxDOT) now incorporates tolling elements into virtually all of its planning for new road construction and the expansion or extension of existing highways.

Advocates argue that widespread tolling must be adopted in order to adequately finance unmet demands for highway construction and maintenance generated by the state's rapidly growing population of motorists. Some opponents argue that tolling existing highways amounts to a double tax on a virtual necessity merely to generate revenue without necessarily producing significant traffic congestion relief or added roadway capacity. Other opponents concede that tolling should play a role in highway financing but dispute that it is the only viable option. This report examines how toll roads have become integral to TxDOT's long-term highway plans and the practices and procedures involved in the development of toll roads.

The Texas Department of Transportation was initially established as the State Highway Department in 1917 by the Thirty-fifth Legislature. It was created to distribute monetary aid to counties for the purpose of highway construction and maintenance, but also undertook road construction projects. In 1921 the Federal Aid to Roads Act was amended to require that states take over responsibility for road design, construction, and maintenance after 1925. In 1924, the State Highway Department also took over responsibility for all state highway maintenance, which had previously been left to counties. During the late 1920s, the Legislature adopted the pay-as-you-go system of highway financing. The Forty-second Legislature, in 1932, provided that highway financing was a state responsibility and limited counties' contributions to providing right-of-way. The Texas Department of Transportation was established in 1991, taking over responsibilities of the Department of Aviation, the Motor Vehicle Commission, and the State Department of Highways and Public Transportation.

"Pay-As-You-Go"

Traditionally, road financing was generated through motor vehicle registration fees, taxes on motor fuels and lubricants, and federal funds. Almost all of the revenue in the State Highway Fund, Fund 006, is administered by TxDOT and dedicated to transportation purposes. Historically, Texas has financed the construction of highways with cash on hand from Fund 006. Available funding for highway projects has been appropriated by the Legislature and disbursed by the Texas Transportation Commission (TTC). In addition, Article 3, section 49 of the Texas Constitution, which generally prohibits state debt, historically has prevented the state from issuing bonds to finance non-toll-road construction with borrowed money. In recent years transportation funding has not kept pace with the state's road maintenance and construction needs. As the state's population, economy, and vehicle miles traveled have increased, the cost of materials for road construction has also increased. From 2002 to 2007, the highway construction cost index increased at an abnormally fast rate, rising by 62 percent. The value of the gasoline tax, which went into effect in 1993, was set at \$0.20 per gallon and, due to inflation, the value has eroded and is worth \$0.14 today when adjusted for inflation using the Consumer Price Index. Furthermore, significant improvements in vehicle fuel economy have not helped the state's cause to finance roads in the traditional pay-as-you-go sense. Texas now has over 80,000 centerline miles and 191,000 lane miles of highway roads. From 1995 to 2006, the number of national highway system lane miles in Texas grew by approximately 9 percent. From 1995 to 2006, however, the state's population increased by more than 20 percent, and the number of vehicle

miles traveled increased more than 50 percent. With the pay-as-you-go system no longer able to sustain the needs of the state's highway system, new financing tools have been made available to TxDOT²⁶.

Enabling Legislation

The Texas Turnpike Authority (TTA) was created in 1953 by the Texas Legislature for the purpose of constructing, maintaining, repairing, and operating future turnpike projects in the State of Texas, including specific direction to construct the Dallas-Fort Worth Turnpike, now known as Interstate 30. The TTA was governed by a twelve-member board serving staggered six year terms. Due to the lack of available revenue to build the roadway under the traditional revenue streams, pay-as-you-go approach, this project was financed by revenue bonds issued by the TTA and backed only by the prospect of future ridership, and then levying of toll collections. The turnpike was operated as a toll road from 1957 until the bond debt was paid off in 1977. The TTA's efforts were primarily in the Dallas-Fort Worth area, developing three major toll road projects, including the Dallas-Fort Worth Turnpike, the Dallas North Tollway, and the President George Bush Turnpike²⁷. In 1983, due to strong traffic demand, voter support, and strong local finances the 68th Legislature authorized Harris County to create the Harris County Toll Road Authority to meet the transportation needs the TTA could not address. The Harris County Toll Authority was the first County Tolling Authority created and proceeded with a 50-mile, \$900 million toll road project that, by all accounts, has been very successful²⁸.

Public attitudes toward state support for toll roads have shifted over the years. In 1987, voters rejected a proposed constitutional amendment that would have permitted joint projects by the TTA and TxDOT, which would have allowed the state to contribute money from any source for such projects and allowed certain counties and cities to use revenue from a special property tax to subsidize toll roads; in 1991, however, voters approved an amendment to Article 3, section 52-b, allowing TxDOT to contribute state money for toll projects as long as any Fund 006 money used for this purpose was repaid with toll revenue²⁹.

Also in 1991, the Texas Legislature instructed the Texas Sunset Advisory Commission to look into the consolidation of the TTA with TxDOT. In 1996, the Sunset Commission recommended consolidating the two agencies, since the operations of TxDOT and TTA were very similar; both agencies build and maintain highways, with the only significant difference being the method of financing construction³⁰.

In 1997, during the 75th Legislative Session, Senate Bill 370 abolished the old TTA and created a new turnpike division within TxDOT to develop toll roads. Under SB 370, the turnpike division within TxDOT was governed by an independent seven-member board, although the turnpike board needed concurrence from the TTC on many things, including the condemnation of property³¹. The bill also established the regional North Texas Tolling Authority (NTTA) under Chapter 366 of the Texas Transportation Code. All of the Texas Turnpike Authority's assets, rights, and other property located in Collin, Dallas, Denton, or Tarrant counties were transferred to the NTTA. The attendant creation of the NTTA gave the state three independent agencies responsible for planning and constructing toll roads—the Texas Department of Transportation, the North Texas Tollway Authority, and the Harris County Toll Road Authority.

TxDOT's Texas Turnpike Authority (TTA) Division has statewide jurisdiction for development of turnpikes and is no longer associated with regional or county toll authorities. The objective of TTA is to consider the development of turnpike projects in any part of the state where there is a demonstrated need and where a project has been shown to be financially feasible. The enabling act also authorizes TTA to enter into an agreement with the government of Mexico to cooperate on NAFTA and border-related issues³².

TTA's enabling legislation did not change the Texas law that prohibits TxDOT from expending funds for the construction, operation, and maintenance of a toll facility of a public or private entity without a requirement for repayment. Furthermore, despite the fact that TTA is a division of TxDOT, Section 52-b, Article III of the Texas Constitution precludes advancing funds for turnpike project development without an obligation for repayment. Therefore, as described below under Project Funding, these funds must be repaid at closing which adds to the challenge of financing start-up toll roads³³.

Alternative Project Development & Financing Methods

Legislation enacted in the past few years has made new highway financing options, including bonds and tolling, available to TxDOT officials and other transportation planners. To address the constitutional prohibition on state debt, in 2001 the 77th Legislature enacted Senate Bill 4 by Senator Florence Shapiro authorizing the creation of the Texas Mobility Fund (TMF). This revolving bond fund, administered by the TTC, may be used to support bond debt for any state transportation project, including public toll roads. The TMF will receive surplus revenue from the new \$30 state traffic fine and habitual "bad driver" surcharges established in 2003 and applicable to most moving traffic violations. Eventually, the fund will be capitalized with a combination of revenue from various driver's license and vehicle inspection fees and penalties³⁴.

Senate Bill 342 by Senator Shapiro, also enacted in 2001, established in law the concept of "toll equity." TxDOT now may spend money from any source on public toll road projects without reimbursement. Surplus revenue would be deposited into Fund 6 to be spent on other toll projects or facilities. In addition, the bill authorized the TTC to approve the creation of regional mobility authorities (RMAs). The TTC may transfer highways to RMAs for maintenance and operation as toll roads. RMAs may spend the toll revenue from such conversions on any roadway within their jurisdictions³⁵.

Voters in 2001 approved a constitutional amendment, Senate Joint Resolution 16 by Senator Shapiro, to allow the creation of the TMF, and repeal the requirement for repayment of TxDOT funds lent or granted for toll projects³⁶.

In 2003, the 78th Legislature enacted an omnibus transportation bill, House Bill 3588 by Representative Mike Krusee, and a subsequent "clean-up" bill, House Bill 2 by Representative Krusee, enacted during the third called session. These laws expand the powers of RMAs, which, along with counties and the toll authorities in the Houston and Dallas areas, now may condemn private property through the power of eminent domain. RMAs also may issue revenue bonds to build toll roads that they would operate and maintain. In addition, TxDOT may participate with both public and private entities in utilizing a borrowing mechanism known as "pass-through" or "shadow" tolls. These negotiated payments are made incrementally to local governmental

entities or private companies based on traffic volumes to help defray their costs of financing road construction and/or operation. The payments are made as if tolls were being collected from motorists by the operators upon project completion. Such financing can accelerate lower-priority projects, allow more local discretion, and help assure investors that project costs will be repaid over time³⁷.

In addition to toll revenue bonds, such as those helping finance State Highway 130 near Austin, TxDOT may issue up to an estimated \$3 billion in bonds against the TMF. This debt authorization is in addition to the \$3 billion in bonds TxDOT may issue against Fund 6 – not to exceed \$1 billion per fiscal year – constitutionally authorized in 2003 through House Joint Resolution 28 by Representative Joe Pickett. House Bill 3588 also changed the annual toll equity spending limit from 30 percent of federal funding to \$800 million³⁸.

To accelerate spending on needed projects, TxDOT also is using the “tapered match” method to front-load federal funds for several eligible projects (90 percent on interstates, 80 percent on others), thereby delaying payments of the state’s share. To avoid a recurrence of cash flow problems that arose in late 2001, TxDOT now may borrow short-term against anticipated revenue to pay for its operations, as authorized by House Bill 471 by Pickett, enacted in 2003³⁹.

The legislation enacted in 2001 and 2003 rejected higher gasoline taxes in favor of authorizing TxDOT to finance highway construction by issuing bonds and expanding the number and kind of transportation projects that can be paid for with toll revenue. This has led to an unprecedented and controversial new tolling policy that TxDOT is implementing statewide⁴⁰.

Since the statutory framework was established, TxDOT has begun planning and implementing a number of toll road projects using some of the newly authorized financing mechanisms. In 2002, TxDOT sold \$2.2 billion in toll revenue bonds and anticipation notes to help pay for construction of the Central Texas Turnpike Project. It includes State Highway 45 North, the Loop 1 (MoPac) extension, and the first four phases of State Highway 130, a planned 49-mile bypass designed to relieve congestion on Interstate Highway 35 in and around Austin. TxDOT estimates that toll rates on SH 130 will average 12.5 cents per mile for passenger cars and 48 cents per mile for trucks⁴¹.

The Central Texas Regional Mobility Authority (CTRMA), the state’s first, is developing plans for a 12-mile toll road from northwest Austin to a point north of Leander in Williamson County, bypassing Cedar Park. The \$200 million US 183-A project will be financed partially with toll revenue bonds issued by the CTRMA. Toll rates are projected to be between 10 and 15 cents per mile⁴².

Such tolling projects, which function as a means to finance construction of new urban highways, do not signify a dramatic departure from how toll roads historically have been utilized in metropolitan areas such as Dallas and Houston. Other aspects of the state’s new tolling policy, however, represent a conceptual change in state transportation financing. In December 2003, the TTC instructed TxDOT staff to begin evaluating all controlled access highway projects as possible candidates for tolling. This includes all projects involving new lane construction, both those under way and those being planned. Toward that end, TxDOT is paying Texas A&M University’s Texas Transportation Institute \$96,000 to develop a toll viability computer program

or district office use in determining the revenue potential of various projects⁴³.

As the 2003 policy directive illustrates, tolling has emerged as an integral part of TxDOT's overall approach to highway financing and project planning, encompassing new construction, added capacity, planned improvements, and ongoing maintenance. No longer will tolls be limited to separate, self-sustaining, intercity turnpikes or intra-city expressways. Under certain conditions, tolls now may be charged on virtually any portion of the tax-supported state highway system, from a new section already planned or under construction to extend or complete an existing roadway, to new express lanes, or new roads connecting existing or planned roads. Under its new authority, the TTC may charge tolls on any state highway and transfer segments of state highways to local governments for tolling. A provision in federal appropriations bills since 2006, added by Senator Hutchison, prohibit tolling interstates except for some managed lanes.

Because toll revenue is expected to contribute significantly to project maintenance and operations, not just construction costs, tolls are less likely to be discontinued, as they were for the Dallas-Fort Worth Turnpike. Moreover, TxDOT eventually plans to spend toll revenue either for ongoing toll road improvements or for other projects in the same area. The TTC now views tolling less as a discretionary surcharge applicable solely to debt retirement on distinct, premium urban routes, and more as a general user fee suitable for many types of state roadway projects that can generate additional revenue to leverage other funds. Rep. Joe Pickett of El Paso would go a step further and dedicate toll revenue to highway maintenance statewide instead of recirculating it locally. He suggests that TxDOT identify and accelerate the most viable toll projects throughout the state and use the revenue generated to perpetually supplement highway system maintenance expenditures, which currently exceed \$2 billion per year, and reallocate existing maintenance funds to unmet construction needs⁴⁴.

Senate Bill 792 by Senator Tommy Williams, enacted by the 80th Legislature in 2007, placed a limited, two-year moratorium on the state's entering into contracts that would authorize private entities to operate or collect revenue on toll roads. The bill provided exceptions for specifically designated highways and for tolled lanes added to existing highways if the projects met other conditions. With some exceptions, SB 792 also accelerated the expiration date for TxDOT's authority to enter into comprehensive development agreements, which are contracts with private entities to finance, construct, maintain, operate, or expand a tolled highway project, from August of 2011 to August of 2009, and it limited the spending of revenue from these agreements to the geographic area in which the revenue was collected⁴⁵.

SB 792 also gave local toll authorities the right of first refusal, or primacy, over private entities for developing toll projects in their areas. If a local entity opts to develop a project but does not adhere to a specified timeline, the option to develop the project reverts to TxDOT and the TTC, which must develop it within the same timeline. The bill charges TxDOT and the TTC with helping local entities develop, finance, build, and operate a toll project undertaken by a local entity.

Local entities must negotiate toll development agreements with TxDOT. A tolling agreement must be preceded by a market valuation study carried out jointly by the negotiating parties that includes traffic, cost, and revenue projections. If a local toll entity and TxDOT cannot reach an agreement on terms and conditions, the project becomes ineligible for development as a toll road.

SB 792 also raised the cap on the dollar amount of Fund 6 revenue bonds that TxDOT may issue from \$3 billion to \$6 billion, and increased the agency's annual cap on issuing bonds from \$1 billion to \$1.5 billion. The bill also established a legislative study committee to examine the implications of private toll road developments. In December 2008, the Legislative Study Committee on Private Participation in Toll Projects released its report stating that conventional finance methods no longer are sufficient to provide necessary highway improvements and must be supplemented with carefully crafted public-private partnerships.

In November 2007, voters approved Proposition 12 (Senate Joint Resolution 64 by Senator John Carona) authorizing the Legislature to issue up to \$5 billion in general obligation bonds for highway improvement projects. While voters approved the constitutional amendment authorizing the bonds, the Legislature did not enact contingent legislation to authorize issuance of the bonds or appropriate the bond revenue during the 80th Legislative Session. However, in 2009, House Bill 1 by Representative Jim Pitts, First Called Special Session of the 81st Legislature, allowed for the issuance of those general-obligation bonds. The bill allows the TTC to issue bonds to pay for costs of a highway improvement project, defined as the acquisition, construction, reconstruction, and major maintenance of a highway or right-of-way, and cover administrative costs for authorized projects, pay costs of issuing the bonds, or make a payment due under a credit agreement.

Proceeds from the sale of general obligation bonds must be appropriated by the Legislature. The TTC may enter into credit agreements relating to the bonds. Bond issuances may not exceed the total authorized in the Texas Constitution and must mature no later than 30 years after issuance. Bonds and related records must be submitted to the attorney general for approval. House Bill 1 also amended provisions in TxDOT Rider 60 in Senate Bill 1, the general appropriations act for fiscal 2010-11, to appropriate \$2 billion in Proposition 12 general-obligation bond proceeds for highway projects and \$100 million for debt service on the bonds. It also amended provisions in Senate Bill 1 directing \$1 billion in general obligation bond proceeds to be used to capitalize the State Infrastructure Bank by specifying that money in the bank for loans to public entities may not be used for the purpose of converting a non-tolled road or highway to a tolled road or highway. The bill also revised current law allowing a local toll project entity and TxDOT to issue bonds and enter into credit agreements to pay any costs associated with certain toll road projects. The bill extends the maximum duration of bonds issued for these purposes from 30 years to 40 years⁴⁶.

Comprehensive Development Agreements: Special Purpose Authority

The following information in this section was written testimony of Mr. Amadeo Saenz Jr., P.E., Executive Director, TxDOT, and submitted before the Texas Senate Committee on Transportation and Homeland Security on October 13, 2010.

Traditional transportation funding methods in Texas have left a large gap between what is available and what is necessary to address the transportation challenges our citizens face. Previous legislatures have enacted laws that provide opportunities for the Texas Department of Transportation (TxDOT) to fill that gap, and department staff have been diligent in pursuing these options since their availability to address our goals of reducing congestion, enhancing safety, expanding economic opportunity, improving air quality, and increasing the value of our transportation assets. These alternative project development and financing methods run the gamut from bonds, pass through financing and federal stimulus funds, to publicly and privately

financed toll facilities through the use of Comprehensive Development Agreements (CDAs).

Partnering with the private sector using CDAs has greatly expedited project delivery for critical elements of our transportation system. It has also allowed for the investment of approximately \$3.5 billion in state/federal funds to leverage more than \$10 billion worth of long-term transportation improvements over the past eight years. General CDA authority for TxDOT and Regional Mobility Authorities (RMAs) expired August 31, 2009. Limited special purpose CDA authority for specifically exempted projects and toll projects that are not financed by a private entity, such as design-build projects, for those same entities will expire on August 31, 2011. As such, the committee is being charged with examining the public policy implications of CDAs, including whether they should be reauthorized to construct specific roadways. The following testimony reviews the history of CDAs, the potential role they can play in addressing the future needs of the State, and which projects could utilize this option.

The History

The earliest version of the CDA was referred to as an Exclusive Development Agreement, as outlined in HB 749 from the 72nd Regular Legislative Session in 1991. Statutory language allowed the then-Texas Turnpike Authority to develop projects through public/private partnerships, including other toll road corporations. The Authority was given “broad latitude” in negotiating the terms and conditions for these agreements. In 1997 the Texas Turnpike Authority was transferred to TxDOT, along with its enabling statutes. The authority to enter into Exclusive Development Agreements had not been used at the time of the transfer. Legislation passed during the 77th Legislative Session in 2001 (SB 342) created Regional Mobility Authorities and allowed for increased ability to utilize such agreements.

Governor Perry realized several years ago that the demand for transportation infrastructure is so great the private sector would see it makes good business sense to participate in the process of responding to this ever-increasing demand, possibly through financing a project, building a project, operating a project, maintaining a project, or any combination of these. In January 2002 he proposed the Trans-Texas Corridor concept that could include facilities for cars, trucks, passenger rail, freight rail, utility transmission, and connections for intermodal freight. Later that year, TxDOT received an *unsolicited proposal* to develop the IH-35 component of the Trans Texas Corridor, confirming the private sector’s interest in addressing our State’s transportation needs. In 2003, the Texas Legislature authorized several new tools the Transportation Commission and the department needed to fully realize the benefits of private sector participation and that provided the authority needed to fully develop the multimodal facilities that are to make up the Trans-Texas Corridor. After passage of that legislation, scores of businesses organized themselves into three teams and made competing proposals to partner with the State of Texas on TTC-35. By injecting market forces into the process of planning infrastructure, TxDOT provided a means of ensuring that private financing is made available for the development of facilities needed to respond to transportation demand when needed, allowing traditional highway funding to remain intact and providing drivers with more choices that ensure safer, more reliable travel.

CDAs are entered into using a procurement process that allows TxDOT to select the proposal that provides the best value to the State. CDAs are agreements that provide for the design and construction, rehabilitation, expansion, or improvement of a transportation project as outlined in

Transportation Code §223.201-209, and may also provide for the financing, acquisition, maintenance, or operation of such a project. During the 80th Legislative Session (SB 792), Transportation Code § 223.210 was added providing a moratorium on the use of CDAs with some exemptions. This law also changed the expiration date of the general authority for TxDOT and RMAs to enter into a CDA to August 31, 2009, except for the exemptions discussed previously. The bill also authorized the use of the CDA project delivery method by County Toll Road Authorities and Regional Tollway Authorities.

The Process

CDA proposals are selected based on a measure of who offers the best long-term value for the state, not necessarily on the lowest initial bid as required for traditional construction contracts under Transportation Code Chapter 223, Subchapter A. Chapter 223, Subchapter E allows us to consider more than just price when awarding a contract. We can look at design innovation, timelines, quality, and experience in addition to price. CDAs may be used for projects that include both tolled and non-tolled elements, projects in which the private entity has an interest, and projects that are financed wholly or partly with federal sources such as private activity bonds or loans under the Transportation Infrastructure Finance and Innovation Act (TIFIA).

Negotiations are allowed with the private entity whose proposal offers the apparent best value. Greater negotiating authority ensures that the public entity receives the best value. In contracts in which the private entity will design and build, but not finance the project, TxDOT is allowed to pre-qualify a private entity to submit a detailed proposal to provide services. This shortens the process and makes it easier to narrow down candidates to those most highly qualified for that project.

The law requires a private entity entering into a CDA to provide performance and payment bonds or alternative forms of security in an amount sufficient to protect the department and the payment bond beneficiaries. TxDOT can only enter into a CDA with a private equity investor if the project is identified in the Unified Transportation Program or is located on a transportation corridor identified in the statewide transportation plan. A limited waiver of sovereign immunity is provided to give greater financial protection to developers under a CDA. Certain obligations of the commission or the department may be enforced by mandamus. This allows the state to obtain greater value from the private participant for the rights granted under the CDA, e.g., a greater amount of concession fees and revenue sharing. The length of a concession term may not be longer than 52 years. Prior to SB 792, projects not on the Trans-Texas Corridor could have term lengths of up to 70 years, but all agreements allowing the private participant to collect tolls for the use of a toll project are now limited to 52 years. If the department enters into an agreement with a private entity that includes the collection of tolls by that entity, the department must approve the methodology for setting tolls, increases to tolls, plans to collect tolls including any amounts to be charged as a penalty for late payment of a toll, and any change to the approved methodology.

The Implications

Looking to public private partnerships does come along with its own set of controversies, and several concerns have been brought up in recent years by both elected officials and the public. Following are some issues that have been raised:

Non-Compete Clauses

Essentially these clauses recognize the fact that projects developed now and in the future could have an effect on the revenue brought in by a nearby toll road, but development and improvements to other roadways will continue to occur regardless. The state and the developer can agree to an exempt list of projects that will be allowed to be built without required compensation. The non-compete clause does not prevent any nearby projects from being built regardless if they are listed within the contract or not. The clause merely sets forth a requirement that if a non-exempt project is built that negatively affects a project then compensation will be made. For instance, if a non-exempt project within the zone has a positive impact on toll revenue, the positive value will be "banked" or credited to the state. If a project has an adverse impact on toll revenue, the impact will be offset by any positive value banked by the state. Over time, if the adverse value exceeds any banked amount, the developer may make a claim for compensation. However, the developer bears the burden of proving its claim. Transportation Code Chapter 371, Subchapter C provides several protections when entering into a CDA. The law provides the agreement shall not prohibit the construction, reconstruction, expansion, rehabilitation, operation or maintenance of a highway or transportation project. For example, any needed safety improvements or projects within the state transportation plans are allowed under CDAs without the need for the state to provide compensation for lost toll revenue. There are those that would like to prevent the use of non-compete clauses because they feel it will prevent improvements from being made to nearby facilities, thereby increasing the attractiveness of using the toll road. The fact of the matter is that TxDOT is in the business of providing transportation services to this state and is committed to the continued maintenance and rehabilitation of existing infrastructure. The non-compete clause is a standard business agreement used around the world and does not prevent maintenance or new capacity from being built near a toll road.

Toll Rates

It's not an alien concept to Americans that market forces determine the prices of most goods and services. But people are not used to the idea of market forces determining the cost of goods and services that are traditionally provided by government. State law provides protections as well with language included in HB 2702 from the 79th Legislative Session stating that all tolling entities must address toll rate methodology when entering into a CDA. If an agreement is entered into with a private entity that includes the collection of tolls by that entity, TxDOT or the other public tolling entity must approve a methodology for the setting of tolls, increases to tolls, plans to collect tolls including penalties, and any change to the approved methodology. For example, when the CDA process was ongoing for SH 121 in Denton and Collin Counties (prior to awarding the contract to NTTA), local officials were allowed to recommend the initial toll rates and the maximum allowable increases, which recommendations were approved by the Transportation Commission. While the market may be able to bear higher rates, the developer was limited to charging reasonable toll rates as determined by the region and local leaders.

Length of Agreements and Buyback Provisions

One of the most significant aspects of a CDA is the length of the agreement. There will be some who are concerned that the state will "give away the farm" when we structure the agreements and that nothing can be done about it for 50 years or more. Simply put, private developers will be investing vast sums of money and it will take time to recoup such an investment. It is also important that the state be allowed to buy out a developer. Authorizing buyouts in statute will

allay the fears that the state will negotiate a poor deal for drivers and be held to it for several decades. Under Transportation Code 371, Subchapter C, the state has the ability to issue bonds for the purpose of buying back a CDA.

SB 792 – Various CDA-Related Provisions

Staff of the Legislative Study Committee on Private Participation in Toll Projects requested updates on any provisions related to SB 792 which may not have been discussed otherwise. Following are some articles and provisions which include various components of the CDA process. Prior to the 80th Legislative Session, the department was required to provide stipends to unsuccessful proposers for CDA projects. This stipend provides an incentive to private firms to participate in the process, thereby increasing competition as well as leading to better proposals. Article 2 of SB 792 provides that the payment of a stipend is now be permissive as opposed to mandatory. The Transportation Commission has approved stipend payments under the revised law and is currently in the process of implementing rules on the matter.

In relation to CDA payments, Article 6 provides that all payments, refinancing dividends, and any other revenue received under such an agreement must be allocated to the TxDOT district within the MPO boundaries in which the project that is the subject of the CDA is located. These funds will be distributed based on the percentage of toll revenue from users from each district of the project and can only be spent on transportation and air quality projects in the region.

Under Article 11, TxDOT, Regional Tollway Authorities, Regional Mobility Authorities and County Toll Road Authorities must have all CDAs reviewed by the Attorney General for legal sufficiency, and the Legislative Budget Board must be supplied with the short list of proposers within ten days after selection. It also requires a financial forecast and a traffic and revenue report for the project be provided to the LBB and the Comptroller respectively before the CDA is entered into. In terms of competing facilities, an 8-mile wide compensation zone from the centerline of the project was established to be included in CDA terms, meaning improvements within this zone affecting the revenues of the toll road will result in compensation to the contractor unless the improvements are in a transportation plan, or related to safety projects, air quality projects, or preservation projects. This also applies to facility agreements.

Market Valuation

A process established in SB 792 requires all proposed toll projects eligible within the boundaries of a local tolling entity to go through what is called the Market Valuation process. The department has identified eight such toll viable projects around the state and we are currently working with local entities to implement this process⁴⁷. Once a project is identified, the local tolling entity and TxDOT must agree on terms and conditions for the development, construction, and operation of the toll project. This includes the initial toll rate and the toll rate escalation methodology. Once these terms are settled, the tolling entity and TxDOT must agree on an entity to perform the actual market valuation. The market valuator will use the agreed upon terms and conditions and other information agreed on by TxDOT and the local tolling entity, such as the traffic and revenue study, project scope, market research, and estimate project costs, to determine the project's value. During the process, there is one main point of contact with both the department and the tolling entity during negotiations and all negotiations are open to the public and recorded.

Upon completion of the market valuation, the tolling entity and TxDOT will have 90 days to

review and agree to the market valuation. The local tolling entity is then given six months to exercise the first option to develop the project. After that option is exercised, the local tolling entity has two years after the date on which all environmental requirements necessary for the development of the toll project are secured and all legal challenges to development are concluded to enter into a construction contract. The local tolling entity must also commit to providing the value of the project as determined in the market valuation. This can be done by making a payment into a toll project sub-account in the State Highway Fund in an amount equal to the value of the project, or making a commitment to construct, within the period agreed to by the local toll project entity and the department, additional transportation projects in the region in which the toll project is located with estimated construction costs equal to the market valuation of the toll project. Funds paid into a sub-account may only be used by the department to finance the construction of additional transportation and air quality projects in the region. Or, in the case of a payment by a county, for transportation projects located in the county and the counties contiguous to that county.

If the local tolling entity is a Regional Mobility Authority, or RMA, they have the option to commit to use all surplus revenue from the toll project for the purposes for which surplus revenue may be used by an RMA under Section 370.174(b) of the Transportation Code, including constructing other transportation projects (to include RMA, TxDOT or other governmental entity projects) in an amount equal to the valuation of the project during a time period to be agreed upon by the department and the authority. If any of the above deadlines are not met by the local tolling entity, then TxDOT will have two months to make a choice on whether to develop the project. If the department chooses to develop the project, we will have two years to enter into a construction contract and commit to providing the financial value of the project by payment or by construction commitment. If TxDOT elects not to develop the project or does not meet the deadlines, then the market valuation process may begin again, starting with the local tolling entity and the department developing revised terms and conditions for the project. The Transportation Commission identified 87 toll-viable projects which could go through this process by adopting a Minute Order in June 2007.

SB 792 exempted the following projects from the market valuation process: DFW Connector, North Tarrant Express, SH 121 (in Denton and Collin Counties), IH 635, LP 1604, President George Bush Turnpike, Phase 3 and 4 extensions of the Dallas North Tollway, The Lewisville Lake Bridge, I-69/TTC and TTC-35. In addition, all of the Houston Area projects exempted from the moratorium discussed earlier under exempted projects are not required to undergo the market valuation process.

Conclusion

It is a known fact that projected transportation funding levels will not cover the transportation needs of Texas. Without legislative action, the authority to utilize design-build and all other types of CDAs will end as of August 31, 2011 for TxDOT and regional mobility authorities. Without proper funding and the ability to enter into CDAs, fewer projects will have the opportunity for development with fewer options to procure and deliver them.

Governing Entities

The following information in this section was written testimony of Mr. John Barton, P.E.,

Assistant Executive Director of Engineering Operations, TxDOT, and submitted before the Texas Senate Committee on Transportation and Homeland Security on October 13, 2010.

In addition to TxDOT, there are three types of tolling authorities allowable by current statute: regional toll authorities, such as NTTA (Transportation Code, Chapter 366); county toll authorities, such as Harris County Toll Road Authority, (Transportation Code, Chapter 284); and regional mobility authorities (RMAs), such as the Central Texas RMA, (Transportation Code, Chapter 370). A full listing of tolling authorities in Texas is listed below, and also includes the projects that the various authorities have undertaken.

As more tolling authorities have been created over the years, TxDOT has worked to create a more symbiotic relationship with them to tackle much-needed projects in certain regions. Both TxDOT and tolling authorities benefit from a strong relationship as each have a mutual goal of improving infrastructure and increasing mobility options. Although both TxDOT and tolling authorities have a shared goal, in some respects their goals are obviously different. As the State's department of transportation, TxDOT is tasked with improving statewide mobility. This requires a system that provides statewide connectivity to transport people and goods in the most efficient and safe manner as possible. Additionally, TxDOT is tasked with the maintenance of roadways (interstate highways, state highways and farm-to-market roads), the rehabilitation of the State's aging infrastructure, and the preservation of its world-class transportation system.

By design, tolling authorities are focused on a more regional solution to address transportation needs. Each statutorily created authority has its own unique boundaries and powers that are clearly defined by law. A brief description of each type of tolling authority is provided below:

Statewide Toll Authorities

Transportation Code, §362.051 provides that certain governmental entities may not begin construction of a toll road, toll bridge, or turnpike without the approval of the commission if the project is to become part of the state highway system⁴⁸. In order to move forward with the development of a project, the Texas Turnpike Authority Board must approve the project, submit it for further approvals to the Transportation Commission, which in turn prepares and issues a minute order authorizing the project. A minute order sets policy and authorizes an action by the Texas Transportation Commission and is used any time the Commission is required to make a decision. The current existing statewide toll authority is Texas Turnpike Authority Division of TxDOT, which is overseen by the TTC.

Regional Toll Authorities

The Texas Transportation Commission has the authority to authorize the creation of a Regional Toll Authority (RTA) unless a proposed county in the authority has a population of greater than 1.5 million. An RTA is a political subdivision formed by two or more counties, acting through their respective commissioner's courts. An RTA may be formed if one of the counties has a population of not less than 300,000, and the counties form a contiguous territory. This requirement currently limits the creation of RTAs to Bexar, Cameron, Collin, Dallas, Denton, El Paso, Fort Bend, Harris, Hidalgo, Nueces, Tarrant, Travis and their adjoining counties. Unless one of the counties has a population of 1.5 million, the Commission must approve the creation of an RTA. The governing body of an RTA consists of a Board of Directors, appointed by the commissioners' courts of each member county. The governor also appoints one director.

Numerous powers and duties associated with the study, evaluation, design, acquisition, construction, maintenance, repair and operation of turnpike projects. Within a county that is a part of the authority or in a county in which the authority operates or is constructing a turnpike project if the project in the affected county is a continuation of the project from an adjacent county. Traditional methods plus comprehensive development agreements (CDAs). A regional toll authority may also procure a combination of engineering, design and construction services in the course of a single procurement provided that any contract awarded results in the best value to the authority. RTAs are required to use surplus revenues to pay the costs of another turnpike project or for the study, design, construction, maintenance, repair and operation of a highway or similar facility that is not a turnpike project, under certain conditions. The North Texas Tollway Authority is the only current regional toll authority.

County Toll Road Authorities

A county with a population of 50,000 or more that borders the Gulf of Mexico or an inlet opening into the Gulf (Cameron, Nueces, Brazoria, Galveston, Jefferson and Orange counties), a county that has a population of 1.5 million or more or is adjacent to a county that has a population of 1.5 million or more (Harris, Dallas and adjoining counties) or a county that borders Mexico (El Paso, Hudspeth, Presidio, Brewster, Terrell, Val Verde, Kinney, Maverick, Webb, Zapata, Starr, Hidalgo and Cameron counties). These entities are governed by a County commissioners' court or an operating board appointed by the commissioners' court. CTAs have numerous powers and duties associated with constructing, acquiring, improving, operating, maintaining or pooling projects, including causeways, bridges, tunnels, turnpikes, highways and ferries. These entities are exclusively located in the county, and outside the county in one or more counties adjacent to the county. A county may not construct or acquire a project located outside the county without the consent of the commissioners' court of the other county. CTAs are able to use traditional methods of project delivery and CDAs. They are also required to use surplus funds to pay for the study, design, construction, maintenance, repair or operation of roads, streets, highways or other related facilities that are not part of a project. Current existing County Tolling Authorities are: Harris County Toll Authority; Brazoria County Toll Authority; Chambers County Toll Authority; Collin County Toll Authority; Ft Bend County Toll Authority; Montgomery County Toll Authority; Waller County Toll Authority.

Regional Mobility Authorities

Chapter 370 of the Texas Transportation Code authorizes the creation of a Regional Mobility Authority (RMA). An RMA is a political subdivision formed by one or more counties. The Commission authorizes the creation of an RMA. RMAs are governed by a Board of Directors, appointed by the commissioners' courts of each county in which a transportation project of the RMA is located. The presiding officer of the board is appointed by the governor. Numerous powers and duties associated with the study, evaluation, design, acquisition, construction, maintenance, repair and operation of all modes of transportation projects. RMAs are located within the county or counties in which it operates and into adjacent counties and potentially into another state or Mexico, under certain conditions. Member counties do not have to be adjacent to one another and the service area of an RMA may overlap with that of another RMA. RMAs use traditional project delivery methods plus limited CDA authority, expires August 31, 2011. An RMA may also procure a combination of engineering, design and construction services in the course of a single procurement provided that any contract awarded results is the best value to the RMA. RMAs are required to use surplus funds to reduce tolls, deposit the surplus revenue in the

Texas Mobility Fund or spend the surplus revenue on other transportation projects. Current RMAs include: Alamo RMA Cameron County RMA; Camino Real RMA; Central Texas RMA; Grayson County RMA; Hidalgo County RMA; Northeast Texas RMA; Sulphur River RMA.

Committee Action

On March 22, 2010, Chairman Pickett formed a subcommittee to study this charge, in order to fully develop and thoroughly analyze the complex nature of this charge. As follows, he appointed the Honorable Representative Jim Dunnam to serve as Chairman. Under his leadership, he said, "Our goal will be to provide transparency in how toll roads are being funded, and what the real options are for assuring a top transportation network for our state in the future"⁴⁹. The following House Committee on Transportation Members served on the Subcommittee on Toll Roads: Representatives Yvonne Davis, Ruth McClendon, Todd Smith, and Wayne Smith.

Chairman Dunnam sent a letter to the Texas Department of Transportation on April 19, 2010 a copy of which can be found in Appendix B. In the letter he states that, "[The] goal for the subcommittee is to provide a transparent overview of the various funding mechanisms used to build and lease toll roads and to examine, among other things, the legal authority that the Department of Transportation and project participants believe authorizes each type of toll road development and operation and additional options for funding future transportation projects in Texas"⁵⁰. To begin the subcommittee's work, Chairman Dunnam stated he "would like to examine several toll projects that are representative of the different approaches to both tolling roads and the construction and operation of those roads."

As each project is unique and different to some degree, whether it is the details of the individual contracts, the different revenue streams used to fund the project, or how the project changed from its initial conception to final completion or current reality. For example, "it is my understanding that the Camino Columbia Toll Road began as a private toll road that entered foreclosure and was ultimately repurchased by the State. I am certain there are other examples the Department and its public and private project participants are aware of that would aid the subcommittee's study of tolling practices"⁵¹.

In his letter, Chairman Dunnam requested the Department to provide the Subcommittee with a suggested list of examples of every single toll project (anything that is a toll road or has toll-related parts including managed lanes, interchange connectors, etc.) to be studied by the subcommittee that will allow the Members to develop an in-depth understanding of all historical, current, and future options for toll roads in Texas. This would include examples of all the different variables that influenced the initial, interim, and final configuration of all identified projects. If there is another governmental or private entity who you believe has information related to this study, he also asked that they please identify them. (*See the "Governing Entities" section of this report, also see the Appendix B for the list referenced above*)

In addition, he requested for the Department to suggest toll project that addresses each of the relevant variables involved in tolling and toll finance in Texas and state what those relevant variables are clearly in a separate column next to the project's name. The types of information the sub-committee would like to know are: whether there is private financing involved; whether

there is a TIFIA loan involved; whether the state's gas tax or state bonds have been used and in what manner, etc. Based on the Department's project suggestions and my list above, I would like you to prepare a comprehensive chart of all the various mechanisms that have been used to create toll roads. (See Appendix B)

Furthermore, he requested that for each toll project the department lists, please identify the specific legal authority that enables the Department and all other project participants to enter into a specific kind of toll road project. He asked that they describe this clearly in a separate column next to the project's name with a specific cite to each relevant section of the Texas Constitution, Federal or state law or regulation, or other source of law. Similarly, in a separate column, please describe any conflicting or ambiguous authorities, whether constitutional, statutory, regulatory, or otherwise, that may cause the public to feel that some toll road projects are, in fact, either unconstitutional or entered into extra-legally. Lastly, in a third column that addresses legal implications of toll roads in Texas, please describe in detail any related legislative changes that occurred in reaction to or soon after each project was initiated or completed.

Finally, for each toll project the department lists, he asked that they outline the important details of the contract stipulations. For example, please list whether or not the contract contains compensation clauses, non-compete clauses, the specific duration of the contract, etc. Please do so clearly in a separate column. In a separate column, please also clearly state the status of each project.

Committee Hearings

The House Committee on Transportation, Subcommittee on Toll Roads met in a public hearing on June 9, 2010. Those invited to testify were John Barton, Assistant Executive Director for Engineering Operations, TxDOT; Mark Tomlinson, Director, Turnpike Division, TTA; Ed Pensock, Director of Corridor System, TTA; and John Wight, Office of General Council, TxDOT. This hearing was convened to determine how toll roads were organized and financed in a manner that was easily understandable. The Chairman was also interested in discussing specific projects such as Interstate 130, the North Dallas Tollway and Highway 130.

First, the members of the panel gave a brief summary of the financing and development of State Highway 550, its purchase for \$20 million by TxDOT and the private revenue bonds that financed the project. Next, the Central Texas Turnpike System, including Interstate 45 and Highway 130, was discussed including the change of the project from an "exclusive development agreement" to a "comprehensive development agreement". This led to a discussion by the panel and Subcommittee regarding statutory authority. Next, the Subcommittee discerned the difference between "design build" and "design bid build", and how the former is quicker, but requires more upfront costs. Finally, toll road collections and profits were discussed by the Subcommittee and panel.

The House Committee on Transportation, Subcommittee on Tolls Roads, met in a second public hearing for a round table discussion on September 2, 2010 to hear invited testimony from the following people: John Barton, Assistant Executive Director for Engineering Operations, TxDOT; Mark Tomlinson, Director, Turnpike Division, Texas Turnpike Authority, TxDOT; Victor Vandergriff, Chairman, North Texas Toll Authority (NTTA); James Hernandez, Bond Counsel, Harris County Toll Authority.

John Barton, Assistant Executive Director for Engineering Operations for TxDOT, and Mark Tomlinson, Director of Turnpike Division for TxDOT, discussed the different aspects of SH130 and other various toll roads with the Members. Responding to Chairman Dunnam, Mr. Tomlinson said SH130 is "consistently above" gross revenue projections. However, Mr. Tomlinson said SH130's capacity is "underutilized," and Mr. Barton said toll roads were originally designed to alleviate capacity in the metro areas. Whether or not that goal has actually been achieved was discussed.

A participant in the roundtable told of Williamson County's history with toll roads, stating they mitigate congestion. Rep. Pickett inquired into the pricing structure of the various segments of SH130 and was told it "should be similar."

Mr. Barton said SH130 had \$77 million in toll revenue and \$51 million in operating costs in 2009. The roundtable engaged in wide ranging discussion of how economically feasible it was if the operating and maintenance costs exceed or comparable to the revenue generated.

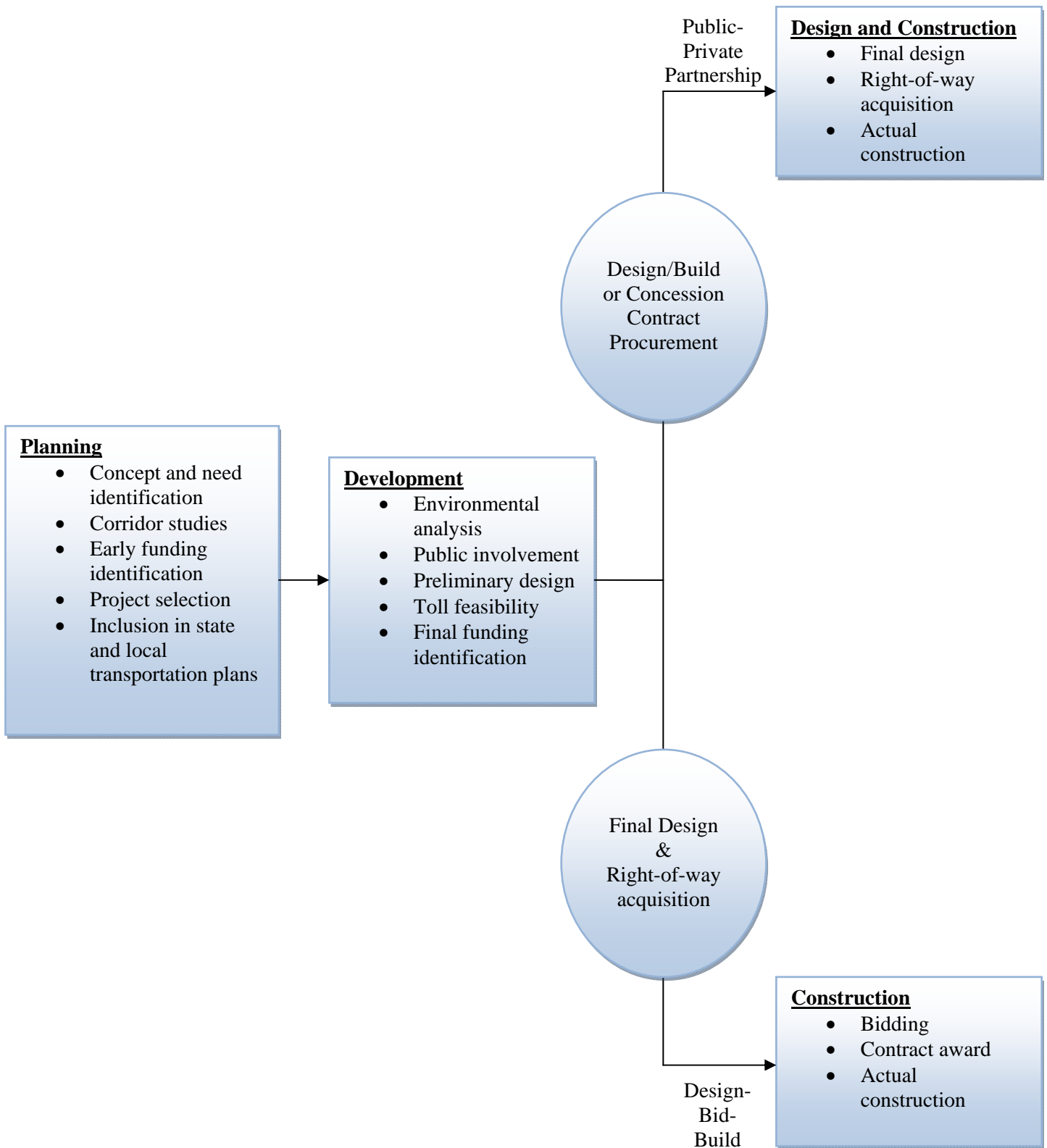
Victor Vandergriff, Chairman of the North Texas Toll Authority (NTTA), said toll roads are the "only option" for the highway needs of the Metroplex. He said a 2 lane toll road in Johnson County will cost over \$1 billion, which led Rep. Pickett into a discussion of TxDOT's revenue and gas taxes. In response to Rep. Todd Smith, Mr. Vandergriff said NTTA had \$310 million in revenue with operating costs of \$91 million and \$15 million in maintenance costs. Mr. Vandergriff said its debt service for 2009 was \$150 million. The roundtable further discussed costs and revenue.

James Hernandez, Bond Counsel for the Harris County Toll Authority, and the roundtable continued to discuss revenue, costs, taxes, political decisions and HOV lanes.

Discussion

Project Planning and Development

There are a variety of ways that transportation projects can be identified. Many projects involving improvements to existing state-owned highways are generally identified by TxDOT's districts and divisions. The projects may be identified through corridor studies, needs assessments, or other analysis techniques. Projects can also be identified by government officials, the public, Metropolitan Planning Organizations (MPO) or regional transportation planning committees. Obtaining funds for projects is an ongoing process. Each project goes through three funding authorization stages: planning, development and construction. Since projects are authorized in multiple stages, a project will first receive approval for its planning phase. Next is approval for the development stage. Once development is complete, the project must go through the final and most difficult approval process to receive funding for construction.



Various funding options that are available include: Motor fuel tax revenues (state and federal), Debt financing; Pass through financing; Toll equity (toll revenue bonds); Vehicle registration fees; Local and regional governmental participation; Public-private partnerships.

How a Need is Identified

Every project starts with an idea or need. The impetus for a project can come from any number of sources at the community, state or federal level. Once a need has been identified, project supporters usually approach TxDOT's local district office or their local Metropolitan Planning Organization (MPO). Local authorities are especially familiar with the unique demands of their area and with the needs of the people who live there.

Building a Successful Financial Plan

Building a financial plan is an iterative process that continues throughout the planning and development phases. Early in the planning process, a preliminary cost estimate of likely solutions to the transportation need is developed. From these estimates, a funding strategy for the suggested project is devised. The availability of funding is a major factor in determining whether a project is authorized to proceed. Many projects are funded through a combination of resources. The determination of funding sources is investigated and included as part of the environmental review process.

Planning Begins

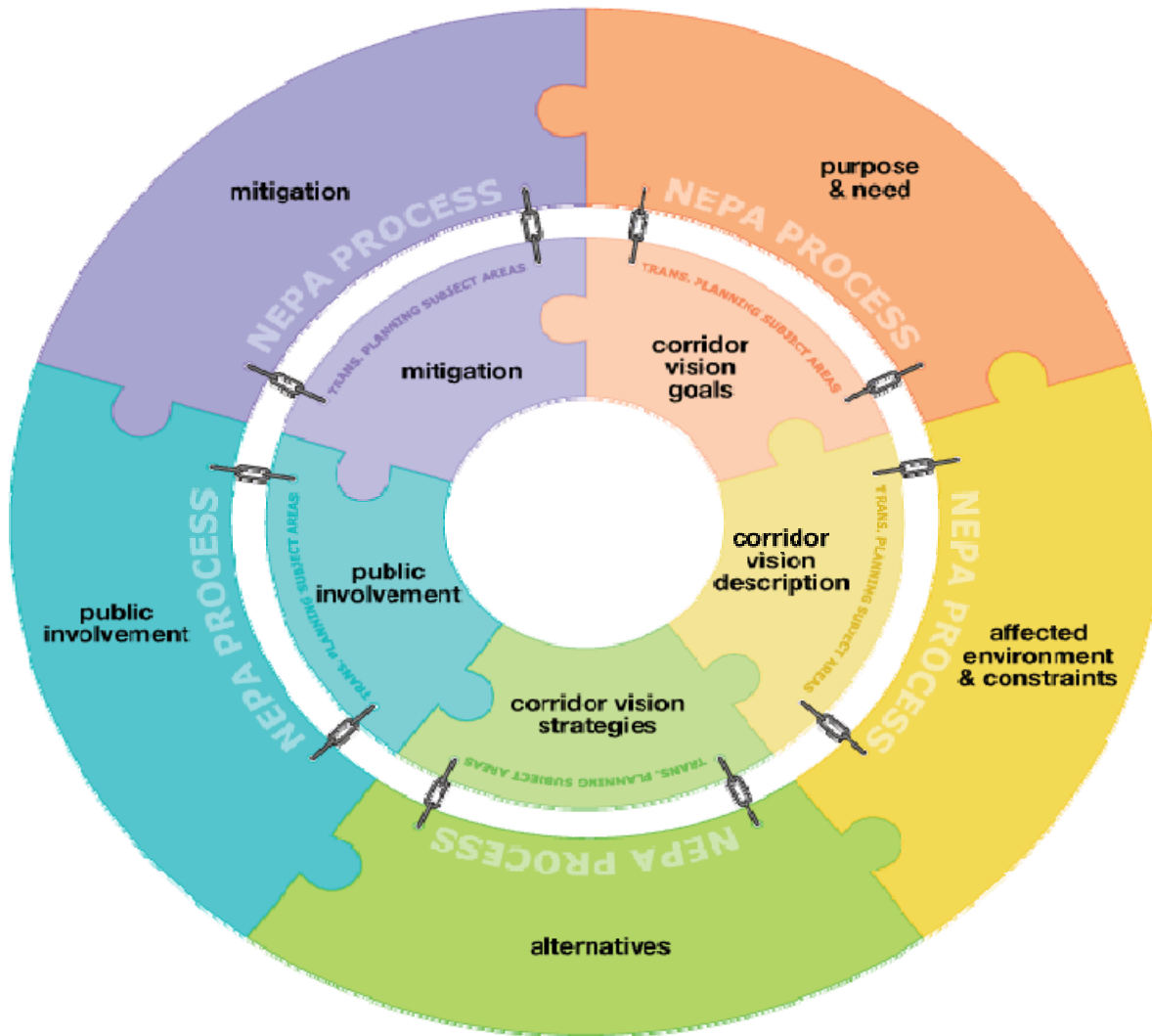
Once a proposal is supported at the TxDOT district level or by an MPO, it competes with similar projects for funding. Project selection authority rests with TxDOT and local officials. Because projects are often funded through a combination of funding categories at a variety of authority levels, funding can be a complex task. Each year, TxDOT funds projects through a comprehensive plan called the Unified Transportation Program (UTP). With the UTP, the Texas Transportation Commission establishes the criteria and standards for different kinds of projects.

Project Development

Building a highway, bridge or other major transportation improvement is a complex, long-term process that involves the participation of both transportation professionals and the public. Local priorities, determined by the communities, are given high weight and consideration as projects move through the TxDOT selection process. Public involvement is a critical part of the development process. Transportation planning, design and right of way acquisition are all primarily accomplished locally by TxDOT districts working with city and local officials. During this process, numerous public hearings and meetings give citizens many opportunities to offer input and be involved in the decision-making process.

Depending on a project's size and scope, project development can take as little as a few months to as long as several years. Once authorized by the commission, a project goes through an in-depth development phase that may include advanced planning, environmental planning and documentation, and preliminary engineering.

In line with federal statutes and regulations, TxDOT has linked the planning and environmental processes in order to streamline the delivery of projects in a more timely fashion. This figure depicts how the planning and environmental review and clearance processes are linked.



The inner portion of the circle depicts all of the efforts that must be addressed in the planning area, while the outer portion of the circle depicts all of the elements that are required to be addressed in the environmental process in order to clear a project for design and construction.

When planning and development processes are completed, the project then proceeds to contract bidding so it can be built. The commission makes the final decision authorizing construction funding, based on the availability of funds and local priorities.

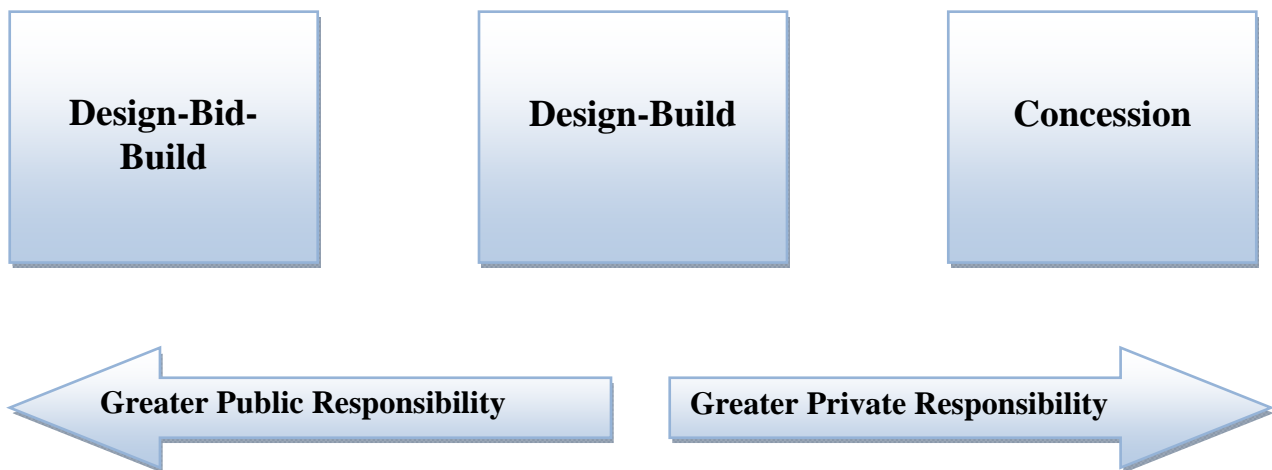
During the early planning stage, if it appears that the funding available from other sources (i.e., Fund 6, local funds, etc.) will not be adequate for the desired project, then the project can be considered as a candidate for tolling. During the development and environmental analysis stage, if it is confirmed that funding is inadequate, then toll feasibility studies will be performed.

There are several engineering and financial related factors that must be considered when deciding to develop a project as a toll road. First, engineers must determine whether there will be enough traffic using the facility over time to support the costs of developing the toll road.

Next, they must determine if there are existing or planned non-toll routes that drivers may choose to use instead of the planned toll facility. Finally, the economic strength of the local economy must be evaluated, and how susceptible it may be to changes such as: an economic downturn, changes in the ability of users to pay tolls, how many industries make up the employers in the local region and the current and future projected mix of passenger vehicles and trucks, and what toll rates users might be willing to pay. In addition, an MPO must include any potential toll project as a tolled facility in its long range plan. Finally, the Texas Transportation Commission makes the final determination if a project will be tolled or not. This typically takes place during the project development phase.

Phase in which Procurement Takes Place

The project delivery method is chosen during the development stage based on the needs and scope of the project. Project procurement takes place in the development stage. Project delivery methods include the following:



Design – Bid – Build Projects

With design-bid-build contracts, owners fund, design and request bids for a project. A private contractor then constructs the project according to the owner’s design. Procurement for design-bid-build projects occurs after the design work is completed.

Design – Build Projects

With design-build procurements, owners execute a single, fixed price contract for both the design and construction of the project. The owner funds all costs for the design and construction.

Concession Projects

With a concession approach, the responsibilities for designing, building, financing and operating the project are bundled together in one contract and transferred to the private sector partners.

Procurement for design-build and concession projects occurs after the preliminary design and environmental analysis of the project is completed by the state.

Partners for toll projects are selected in either the traditional design-bid-build process, or in a four-step process using the design-build or concession delivery process.

In the traditional design – bid – build procurement process, TxDOT may select a project design engineer through qualifications-based open procurements or design the work ourselves. Once the entire project design is completed, TxDOT will advertise the design and bid documents and select a contractor through an open procurement low-bid process.

For design-build and concession contracts, TxDOT uses an alternative procurement process that includes the following four phases. First, TxDOT publishes a Request for Qualifications to allow private bidders to express interest in the project and provide information to allow TxDOT to evaluate the potential bidders and develop a short-list of the most qualified firms. Next, TxDOT issues a Request for Proposals (RFP) to the short-listed firms. The RFP includes specific instructions for the preparation of the proposal, and the comprehensive development agreement for the project. Then, proposals are prepared by the short-listed firms and submitted to TxDOT. Proposals contain both technical and financial plans, as well as a proposed project schedule. TxDOT evaluates each proposal independently based on the submitted price, schedule, and quality against predetermined criteria. Finally, TxDOT chooses the proposal that offers the overall best value to the state. Approval of the selection by the Transportation Commission is required before contract negotiations begin. The Federal Highway Administration oversees the entire procurement, evaluation and selection process. Additional oversight includes the Legislative Budget Board approval of the final contract, the Office of the Attorney General review for legal sufficiency, and the State Comptroller approval of any traffic and revenue forecasts.

Traffic and revenue studies are performed throughout the planning and development stages. In the planning stage of a candidate toll project, a preliminary, or Level 1 traffic and revenue study is used to evaluate the project's revenue potential and toll feasibility. If a project's revenue potential identified in the planning phase warrants further investigation, a more detailed Level 2 study is conducted during the project development phase. A Level 2 traffic and revenue study will further determine a project's revenue potential by evaluating detailed data and advanced modeling on the proposed corridors. Level 2 data collection can include detailed demographic forecasts; origin and destination studies to identify specific travel patterns; surveys to determine if travelers in the region would use the toll road; economic analysis including employment and salary analysis; and an estimate of the drivers perception of the value of their time. With this additional level of analysis, a candidate toll project's revenue forecast is further refined by the supporting data and modeling efforts. A Level 3 traffic and revenue study, also known as an investment grade study, is used for evaluating a project as a potential investment using public sector bonds. Further modeling and refinement of the previously conducted Level 2 study is performed. Level 2 or 3 traffic and revenue studies are used to make the final decision on whether or not to proceed with the toll project at the midpoint of the project development phase. If the decision to proceed is made, final project development continues until the project is ready to proceed to procurement.

The bond rating process for toll road revenue bonds is a critical milestone in the financing of toll road projects. The ability to achieve an investment grade rating for the majority of the project debt is crucial for the financial feasibility of the project.

The purpose of a bond rating is twofold: first, to provide investors with an independent assessment of the credit risk of the bond, and also to provide a comparable measure of an issuer's ability and willingness to repay debt in a full and timely manner. The rating process begins when the issuer makes a formal request to the rating agencies for a bond rating (typically ratings are requested from at least two of the three nationally recognized rating agencies). The application is followed by providing the agencies with all the project and financing documents, often times including a site visit and a formal presentation about the project by key project staff, governing officials, and consultants. The balance of the process is internal to the rating agencies and typically involves a review by a team of analysts who make a presentation and rating recommendation to an internal rating committee. The rating committee approves the rating, which is then published via a formalized bond rating report.

For revenue bonds in general, rating agencies focus on four broad categories of analytical focus: governance and management, operational profile, debt profile, and financial profile. Within these categories special attention is paid to the following : Traffic Demand, Project Competition, Project Management, Project Operations, Project Feasibility Study, Legal Provisions, Financial Projections, Debt Structure, Sensitivity Analysis, and for Public Private Partnerships – evaluation of debt and equity considerations.

Governance and Management

Assessments involve developing an understanding of the governing body's mission, strategy, structure, composition, knowledge of industry issues, performance standards, and interaction with management. Management's track record in implementing the governing body's policies and providing capable day-to-day management is also examined.

Operating Profile

Operating profiles are measured in a variety of ways depending on the sector, but generally include investigating business strategy, operational effectiveness, environmental factors, and capital and management processes. For toll roads this involves traffic demand, project competition, traffic and revenue forecasts, and feasibility studies.

Debt Profile

Key areas of focus are on the purpose of a planned financing, the total amount of debt outstanding, and the structure of the debt. Additionally, legal provisions such as security provisions, rate covenants, events of default, reserve requirements, and additional bond tests are important factors.

Financial Profile

Analysis includes a quantitative assessment of operating performance, liquidity, debt load, and historical trends in performance metrics. Peer comparisons are also a component of the analysis

Contact Term Negotiations and Risk Management

As each project is different, contract terms are modified to address the project specific requirements. Initially, the project agreement is based upon TxDOT's standard business terms for the type of project being developed. Included in these terms is the base case for the

assignment of risks, such as responsibilities for handling hazardous materials, utility relocations, and right-of-way acquisition. During the development of the RFP, industry review is accomplished through one-on-one meetings between TxDOT and the proposer teams involved in procurement. During this review, comments from the proposers are received and project specific business terms and technical requirements are further refined and finalized. Risk is assigned to the party (the State or private sector) best equipped to manage that risk. Following industry review, the assignment of responsibility for specific risks is finalized in the final version of the RFP. The final contract will contain an assignment of risks between TxDOT and the selected developer

Conclusion

While the Subcommittee studied extensively the practices and procedures used in development of toll roads, there are still areas in which further review could greatly improve the process in which these projects operate. First, determine the criteria used by TxDOT and other entities in deciding which revenue method should be used. The Legislature should consider legislation to standardize this process and hold decision-makers accountable to the public for project failures and cost inefficiencies incurred during the development, construction, and maintenance of toll roads. Second, the Legislature should continue to study the different methods of financing toll road projects. It should determine if and when private capital is necessary and efficient over state dollars and how the state benefits from the use of public-private partnerships. Next, the Legislature should continue to study the cost of collection on unpaid tolls by the Texas Department of Transportation and other agencies and determine whether the costs incurred by the collections process outweigh revenue generation. Finally, the Legislature should consider legislation to standardize the practices of these authorities and clarify which authority has first option when there are multiple local toll project entities with the same geographic region.

Recommendations

The House Committee on Transportation recommends the 82nd Legislature to:

1. Consider reauthorizing the authority of TxDOT and local toll authorities to enter into Comprehensive Development Agreements on specific road projects that: can begin within two years from the effective date of the legislation, are supported by the State and the local transportation planning organization, and where the provider is determined by the MPO with input from TxDOT and local toll authorities.
2. Consider requiring potential Comprehensive Development Agreement proposals to include limited non-compete clauses, mutually acceptable tolling policies and rate structures, concession terms not to exceed 40 years, and a mutually acceptable defined buyback price for the facility.
3. Consider further studying the role of private sector funding as a backstop or revolving fund for system-level public-private partnerships.
4. Consider allowing the MPO or RMA, where applicable, clarify which governmental entity has the first right of refusal to construct a project when multiple entities within the same geographic region have the authority to construct, operate, and maintain tolled projects.
5. Continue to study the cost of unpaid tolls by all toll authorities in Texas to ensure that all toll authorities have fair, accurate, and timely collection practices in accordance with state law.

Charge 4

Review federal, state, and local programs to promote traffic light signalization, improve traffic flow, and reduce congestion.

On November 19, 2009, Texas House Speaker Joe Straus instructed the House Committee on Transportation to:

Review of federal, state, and local programs to promote traffic light signalization, improve traffic flow, and reduce congestion.

Background

In 2007 the National Transportation Operations Coalition graded the nation's traffic signal operations with a D (poor) letter grade⁵². This letter grade was marginal improvement from the 2005 report card, which graded the nation's traffic signal operations with a D minus. The 2007 letter grade was based on a self-assessment received from 417 state and local transportation agencies, representing approximately 45 percent of all traffic signals in the United States.⁵³ NTOC's findings in its 2007 report card corroborate with a broader estimate by the US Department of Transportation: 75 percent of the 330,000-plus traffic signals in the United States could be made to operate more efficiently⁵⁴. These improvements could be made through adjusting signals' timing plans, coordinating adjacent signals, or updating equipment. In the absence of properly maintained and coordinated traffic signal systems, communities suffer from a host of congestion-related ailments. Properly maintained signal systems yield significant benefits to communities that invest in them.

Problems of Poor Signal Timing

Improperly timed traffic signals contribute to several problems on Texas roadways. Lack of proper signal timing or coordination limits mobility, and increases traffic congestion. The US Department of Transportation estimates that poor traffic signal timing accounts for ten percent of the traffic delay on major roadways in the United States⁵⁵. These delays, in turn, create more problems. Motorists' waste productive time waiting in traffic and idling vehicles generate emissions, harming air quality. Further, waiting vehicles consume gasoline, costing motorists more at the gas pump while depleting the nation's fuel supplies. Public works departments pay as well, as increased congestion causes greater wear and tear on roadway pavement, contributing to higher maintenance and repair expenses⁵⁶.

In some instances, poorly timed signals may create a safety hazard. Stop and go traffic commonly associated with ill-timed signals increases the incidence of rear-end motor vehicle collisions. Motorists wishing to avoid clogged arterials may cut through residential neighborhoods, increasing residential congestion while presenting a risk to pedestrians in those areas. Some drivers may deliberately ignore signal instructions and run the red light, creating a safety hazard for on-coming traffic⁵⁷. Moreover, and perhaps more commonly experienced, bad signal timing contributes to motorist frustration, prompting some to exhibit unfortunate "road rage."

Benefits of Signal Timing

Synchronized traffic signal timing presents advantages for traffic planning jurisdictions. First, traffic signal retiming serves as a cost-effective method for improving traffic movement and making streets safer⁵⁸. Studies indicate that optimizing signal timing to lessen congestion and improve traffic flow costs between \$2,500 and \$3,100 per signal, per update.⁵⁹ Research findings from the Texas Traffic Light

Signalization (TLS) Programs underscore that signal re-timing presents clear benefits to those jurisdictions that invest in re-timing their signals. The text box, *Texas Traffic Light Synchronization (TLS) Grant Programs*, explains the history of these programs in greater detail⁶⁰. The first TLS Grant Program found that for every dollar spent on improving traffic light synchronization, resulted in a \$62 savings to motorists in reduced stops, delay, and fuel consumption⁶¹. The second TLS grant program identified a 1 to 32 cost to benefit ratio⁶².

Other studies corroborate the TLS grant programs' findings that investing in improved traffic light synchronization yields positive public cost to benefit ratios⁶³. In 1994, the Federal Highway Administration estimated that cost of benefit ratio of signal improvements equals 1 to 40, where every dollar invested in optimizing traffic signal timing results in \$40 returned to the public in time and fuel savings⁶⁴. More contemporary studies indicate similar cost to benefit ratios. A new signal timing program implemented in 2004 by the City of Nashville, Tennessee found a one-year cost to benefit ratio of 1 to 27, and a three year ratio of 1 to 81⁶⁵. Also, in 2004, Oakland County, Michigan, which includes the Detroit metropolitan area, reported a cost to benefit ratio of over 1 to 50 through the retiming of its traffic light signals.

Improved traffic light synchronization enhances mobility by increasing speeds and travel times, and reducing delays. These types of changes allow for vehicle traffic to move more freely and quicker. In general, basic traffic signal improvements may yield a 12 percent improvement in vehicle speed or travel time. More advanced traffic signal improvements can increase speeds by 25 percent⁶⁶. In addition to allowing traffic to move quicker, improved traffic signal coordination decreases delays and stops. As an example, the Texas Traffic Light Synchronization Grant programs found that, on average, improving traffic light synchronization reduced delay by 27.1 percent and reduced the number of vehicle stops by 12.85 percent⁶⁷. A traffic light synchronization program recently implemented by the City of Austin in 2007 resulted in a 9.8 percent overall reduction in travel time for all arterials, and a 28 percent reduction in the number of stops per intersection⁶⁸. Changes to the City of Plano's management of its traffic light system reduced the total number of vehicle stops by over 36 million, and cut

Texas Traffic Light Synchronization (TLS) Grant Programs

The Texas Department of Transportation administered two Traffic Light Synchronization (TLS) Programs during the early 1990's. These programs allocated grants to municipalities through the state for the optimization of traffic signal timing plans and the replacement of outdated signal controller equipment. The funding for these programs came from the Oil Overcharge funds made available by the Governor's Energy office. The first grant program, administered between June 1989 and October 1992, used \$7.7 million in state and local funds, resulting in 166 completed projects, with 2,243 signals in 44 cities being retimed. The second program, operated between April 1991 and August 1994. TLS II, resulted in the expenditure of \$7.7 million of program funds and local matches, improving 1,348 intersections in 43 cities.

delays by 745,490 hours⁶⁹.

Better synchronization also leads to less fuel consumption, saving motorists money while eliminating harmful emissions. Findings from the Texas Traffic Light Synchronization Grant programs indicate that the signal improvements, financed through the state's grant program, reduced fuel consumption by 11.3 percent (a total of 50.8 million gallons of petrol). Using October 2010 average gas prices in Texas (\$2.67 per gallon of regular gasoline), these changes saved Texas motorists \$135.6 million⁷⁰. Reduced gasoline consumption translates into less vehicle emissions as vehicles spend less time operating on Texas roads. The implementation of signal retiming programs in the Detroit metropolitan area and in the City of Alpharetta, Georgia, identified a measurable decrease in carbon monoxide, nitrous oxide, and hydrocarbons⁷¹. A similar program in Syracuse, New York, reduced vehicle emissions and noise pollution by 13 percent⁷². In light of these emissions reduction benefits, improved traffic signal synchronization allows cities a cost-effective way to comply with the Clean Air Act's requirements in metropolitan areas that must improve their air quality. In particular, traffic light synchronization programs may assist some Texas cities in non-attainment air quality areas to achieve compliance with federal regulations.

Causes of Poor Signal Timing

While the benefits of traffic signal synchronization are readily observed and measured, several impediments exist to the implementation of effective, efficient signal systems. In most cases, the lack of funding and resources serves as the most immediate barrier to efficient system implementation. Throughout the Traffic Efficiency Subcommittee's hearing on May 26, 2010, several witnesses identified lack of funding, or a need for better funding, as a principal barrier to implementing efficient systems. Some jurisdictions, particularly smaller cities, may lack the revenues necessary to purchase state-of-the-art signal systems. As a corollary to this finding, the cost of installing a new traffic light, particularly ones with the features required for signal synchronization, is extremely high. As an example, according to a brief prepared by the Texas Department of Transportation for the Traffic Efficiency Subcommittee, installing a standard, four-way intersection traffic signal costs between \$90,000 and \$160,000⁷³. The cost of installing several new traffic signals within a synchronized system may be prohibitive to those jurisdictions that lack the necessary funds. Improved timing and better management of signal systems can be accomplished at a fraction of the cost for a new signal.

In some cases, transportation planning jurisdictions have not allocated the personnel or materials necessary to ensure the continued efficient functioning of their traffic light systems. According to the National Transportation Operations Coalition's 2007 *National Traffic Signal Report Card*, nearly one-third of the systems surveyed had minimal or no management of traffic signal operations, while nearly one-half did not have the staff, or other resources, necessary to monitor or manage traffic on a regular basis⁷⁴. Ideally, signal timing should be evaluated on an annual basis to determine effectiveness and efficiency. At a minimum, signals should be retimed every three years, particularly in growing areas⁷⁵. Despite this rule of practice, many jurisdictions lack the resources to achieve compliance. During the Traffic Efficiency Subcommittee hearing, several witnesses observed that many jurisdictions lack the personnel, or the expertise necessary, to perform this function. In the absence of qualified, dedicated personnel, some transportation planning jurisdictions lack the capacity to attain optimal traffic signal operations.

Another impediment to effective signal planning involves the lack of coordination between traffic planning jurisdictions along major arterials. Take, for example, a major roadway that transects three separate jurisdictions located within one county. Although the signals within each jurisdiction may be appropriately synchronized, lack of signal coordination between jurisdictions may lead to inefficient traffic flows. Several witnesses during the Traffic Efficiency Subcommittee hearing testified that a lack of coordination and planning between jurisdictions leads to signal synchronization inefficiencies along arterials.

Alternatives to Traffic Light Synchronization

While the benefits of synchronized traffic signal systems are readily understood, other traffic management strategies may be employed to improve mobility. One strategy involves using different types of signals, or signal phasing, in order to move traffic. Some jurisdictions use flashing yellow lights along major arterials during non-peak travel periods to allow for continuous, yet cautioned, traffic flow. Other jurisdictions have implemented flashing yellow or red arrows, or green lights, with permissive signage at major intersections to allow for unprotected left turns. According to some traffic experts, vehicles waiting to execute a left turn at an intersection contribute significantly to congestion at certain intersections⁷⁶. Flashing yellow arrows, or other permissive signals, allow vehicles a greater time window to make an unprotected left turn, at times mitigating the associated congestion. Some Texas cities, including the cities of San Antonio, Tyler, Irving, Richardson, Sugarland, and Carrollton, have installed flashing yellow arrow signals to allow for unprotected left turns⁷⁷. Several witnesses at the Traffic Efficiency Subcommittee hearing commented on the use of flashing yellow arrows, and other permissive signals, for unprotected left turns as a method for mitigating congestion.

Adjusting traffic signals and phases is not the only innovative method for moving traffic through congested intersections. In some cases, the design of the intersection itself may allow for a better flow of traffic. Towards that end, the development and use of traffic roundabouts, continuous flow intersections, and median U-turns, to name a few design profiles, may be used to reduce delays for through vehicles as well as re-routing left turns⁷⁸. Traffic roundabouts, which are heavily used in Europe as well as some American cities, divert traffic entering an intersection towards the right, allowing a vehicle to make a right turn onto a street of their choice. The clear advantage of traffic roundabouts is that they eliminate the need for using traffic signals as well as the need for allowing left turns. A continuous flow intersection features a ramp to the left of an arterial before an intersection to allow a better protected left turn from that arterial⁷⁹. These types of intersections allow for a reduced delay for through arterial traffic, as well as reduced stops. To date, several continuous flow intersections have been designed in Mexico and the United States. Another type of innovative intersection is the median U-turn, also known as the "Michigan Left" intersection. These types of intersections require that vehicle needing to make a left turn proceed beyond the intersection, make a left U-turn at the crossover, and make a right turn onto the desired street at the main intersection⁸⁰. The Michigan Department of Transportation, the most prominent user of the median U-turn design, has employed this type of intersection design for over thirty years. Like the continuous flow intersection, the median U-turn allows for a more seamless flow through an intersection and a left turn.

Another alternative to the synchronization of traffic signals involves the minimization of signal use altogether. Most traffic lights are installed to stop or slow traffic flow. A reduction in the

number of signals used, logically, may improve traffic flows within some jurisdictions. In some jurisdictions, particularly smaller cities, the amount of traffic flow may not justify the implementation of traffic signals. In other jurisdictions, signals may not adequately meet warrant criteria for installation. A significant number of traffic signals in use could be eliminated if traffic planning jurisdictions critically evaluated their continued need or use. Such a reduction could help contribute to improved traffic flows and mobility.

Committee Action

On March 22, 2010, Chairman Pickett formed a Subcommittee to fully develop and thoroughly analyze the complex nature of this charge. He appointed Representative Bill Callegari to serve as the Chair, and Representatives Yvonne Davis, Ryan Guillen, Todd Smith and Wayne Smith to form the rest of the Subcommittee.

The House Committee on Transportation, Subcommittee on Traffic Improvement and Efficiency, met in scheduled public hearing on May 26, 2010. The Subcommittee received testimony from experts relating to traffic light efficiency.

Christopher Poe of the Texas Transportation Institute (TTI) provided testimony regarding the research TTI has conducted on traffic signal operations for fifty years. Mr. Poe observed that a survey of research found that signal improvements result in a 10 to 15 percent improvement in mobility. Advanced improvement can increase speed and decrease travel time by 25 percent. Mr. Poe noted that these types of improvements reduce fuel consumption by 10 percent. The net effect of signal improvements is a 40:1 benefit to cost ratio. Mr. Poe's discussed the need for better vehicle detection technologies along roadways, including the use of video detection. He noted that better communication between signalized intersections, as well as innovative signal phasing, improves traffic flow and that improved signal efficiency reduces the number of severe crashes. Mr. Poe concluded by noting that the emphasis on traffic engineering has decreased in Texas as state and local transportation agencies are being asked to do more with less staff. State and local transportation planning departments need to have the staff and financial resources to implement efficient signal systems.

Gilmer Gaston, President of the Institute of Traffic Engineers, Texas District, opened by noting that there are over 300,000 traffic signals in the United States, of which 75 percent could be improved through adjustments to the timing or new equipment. Signal improvements are one of the most cost-effective ways to move traffic and make safe. Mr. Gaston discussed the findings from TLS Program, which realized a benefit to cost ratio of 62 to 1 and benefits of reduced delay, reduced fuel consumption, reduced vehicle maintenance. He noted that a similar program in California found a benefit to cost ratio of 58 to 1. Mr. Gaston discussed the merits of using radar-based systems for vehicle detection and that video detection technologies may be problematic during certain lighting phases of the day and that radar allows for reliable, stable detection. Another underutilized option includes modern roundabouts, which is applicable to some areas in the state and could work on rural, low-volume intersections. The National Institute for Highway Safety studied 24 roundabout intersections and found that roundabouts contribute to a 39 percent decrease in crashes, 76 percent decrease in injury crashes, 89 percent decrease in fatal or serious injury, and 75 percent reduction in traffic delays. The National Cooperative Highway Research Program looked at 55 roundabout intersections and witnessed a

35 percent decrease in crashes, 76 percent reduction in injury crashes, and an 81 percent decrease in fatal or incapacitating crashes. Mr. Gaston observed that the New York Department of Transportation requires that every new intersection be a roundabout. If an intersection is not planned to have a roundabout, traffic planners must complete an engineering study demonstrating why the alternative is preferable. Other states, including Florida, Utah, and Arizona, are also using roundabout designs. He also discussed the draft document authored by the Federal Highway Administration on different options for innovative intersection configurations. Mr. Gaston noted that the largest problem with congested, conventional intersections is left turns and some intersection design concepts to remove or re-locate the left turn can reduce delays from 60 to 85 percent.

Tom Urbanik of Kittleson and Associates, an international consulting firm, discussed the challenges of implementing traffic light synchronization. He noted that there are several ways for signal programs to work poorly. For example, many signals have features that are not being used by many jurisdictions. A jurisdiction requires qualified personnel and funding in order to make their signal systems work effectively. Mr. Urbanik noted that some detection systems, including cameras and detector loops, do not work and that failure to appropriately maintain detection systems leads to their improper functioning. He noted that the Manual on Uniform Traffic Control Devices needs to be amended to allow for new, different processes. He observed that a flashing yellow arrow for left turns may not be a good solution because drivers may not understand what it means and there are too many mixed messages with traffic signals, which need to stay closer to fundamental meanings. For example, Mr. Urbanik suggested installing flashing red arrows for permissive left turns, as opposed to a new indicator for a left turn. Mr. Urbanik discussed how smaller communities lack funding or other mechanisms to implement innovative systems and concluded by noting that roundabouts may work best on rural roads, as opposed to urban arterials.

Michael Morris, the Director of Transportation for the North Central Texas Council of Governments, observed that there are far too many traffic signals in operation. In many cases, local governments are pressured to install unwarranted lights from neighborhood associations and policy officials. Mr. Morris explained the signal planning programs used by the Dallas-Fort Worth area where there are a total 5,635 traffic signals. One program is the City Signal Program where cities are given federal funds, or use their own funds, to use arterial signals. The area also has a Regional Signal Program, beginning in 2002, used to improve air quality due to region's non-attainment status. Since its inception, the Regional Signal Program has upgraded 2,329 signals. Mr. Morris mentioned that local governments should be able to participate in a technology transfer or exchange program where older controllers in one jurisdiction may be replaced with surplus controllers from another. Second, Mr. Morris recommended that cities of 50,000 or more should be audited to ensure their compliance with state made agreements regarding operations and maintenance of signals. Third, the state should encourage technology pilot programs, such as adaptive signal controls. Lastly, Mr. Morris recommended requiring coordination among jurisdictions along a corridor to encourage better signalization.

Carol Rawson, Director of the Traffic Operations Division at TxDOT, testified that TxDOT designs, installs, and maintains signals on state highway systems in unincorporated areas and within cities of 50,000 or less, or along frontage roads in urban areas which can be governed by local agreements. TxDOT is responsible for 6,150 traffic signals, of which 1,950 signals are

operated within a coordinated or interconnected system. Ms. Rawson noted that smaller jurisdictions may not have the funding or expertise to maintain signals. She noted that signal timing improvement, or upgrading signal components, helps improve traffic flow. Ms. Rawson also observed that better coordination among traffic authorities, including cities and metropolitan planning organizations, improves mobility. She noted that TxDOT provides technical training to smaller cities, however, the agency lacks the time, money, and personnel to administer a more comprehensive program. Mr. Rawson also observed that both TxDOT and local traffic jurisdictions have fewer traffic engineers as they had in the past. With regard to solutions, Ms. Rawson observed that more funding could help improve traffic light coordination throughout the state. She also noted that TxDOT does not have a dedicated source of revenue for traffic light signalization.

Andy Mao of the Harris County Public Infrastructure Department discussed signalization efforts in Harris County and how the county's limited authority for land use planning affects its traffic planning effort. Mr. Mao's presentation focused on four central areas to traffic light planning: design, construction, operation management, and traffic management. With regard to signal design, Mr. Mao noted that the county tries to promote a consistent design while realizing that certain situations recognize adaptive designs. In general, the county tries to design things that will be easier and more cost-effective to maintain in the long run. With regard to construction, Mr. Mao noted that focus on a good construction and inspection program ensures the enactment of quality design. Operation management, the most important factor, includes routine maintenance, emergency maintenance, and annual maintenance. The last phase to traffic signal planning involves traffic management which involves coordinating with other facilities and corridors, as well as signal timing. Mr. Mao observed a need to have functional boundaries to more effectively manage lights in a regional basis. He also noted that the liability involved with certain signal management and operation practices precludes effective management. Mr. Mao recommended the need for greater funding to sustain operations and management of signals.

Cesar Molina, Director of Engineering for the City of Carrollton, explained how the City of Carrollton manages construction of traffic signals through a priority process. First, a citizen requests a study for a signal at a given intersection. A traffic study is conducted and then, if warrants are met, makes a recommendation on the placement of a signal. The City of Carrollton then uses an advisory committee to select priority locations for construction. Mr. Molina mentioned that the City has 106 signals, all "smart" signals, some using video detection technology. Mr. Molina also discussed the efficacy of traffic roundabouts and their merits relative to the conventional use of traffic signals. He noted that the City of Carrollton has implemented roundabouts in smaller subdivisions to try to break up traffic and deter drivers from cutting through neighborhoods between arterials. Mr. Molina discussed how the City of Carrollton has installed flashing yellow arrows for left turns and, as a possible result of this project, accidents were significantly reduced. In light of these findings, Carrollton is moving forward to install flashing yellow left-turn arrows at other locations. Mr. Molina concluded by noting that the suburbs around Carrollton present a challenge, where neighboring cities may have different signal timing for lights along shared corridors.

Jeff Weatherford, the Deputy Director of Public Works and Engineering for the City of Houston, presented information regarding a program that the City of Houston implemented in 2004 to re-time signals every four years. He observed that while improved signal timing may alleviate

some stresses, it cannot cure all transportation capacity problems. Mr. Weatherford noted that Texas may need to look at alternative intersections, such as the continuous flow intersection or grade separation, in order to move high volumes of traffic more effectively. He also noted that traffic signal retiming can help improve smaller intersections. Mr. Weatherford observed that traffic signals have a 20 year lifespan, and that jurisdictions need more financial resources in order to replace older signals. He concluded by observing that jurisdictions need to better prioritize traffic planning in order to effectively move traffic.

Conclusion

Improving traffic signalization is a cost effective way to improve safety and reduce the amount of time Texans spend traveling. The Legislature should encourage state and local transportation planning agencies to develop or improve traffic signal signalization programs in order to improve traffic mobility.

Recommendations

The House Committee on Transportation recommends the 82nd Legislature to:

1. Consider allowing transportation funding programs to be used for local agencies to improve their signal programs, including the use of smart signal systems, and acquire the personnel necessary to maintain and improve those systems.
2. When funding becomes available, consider recreating a program similar to the Texas Traffic Light Synchronization Programs where agencies are allocated grant funds, and encouraged to use matching local dollars, to improve specific corridors.
3. Encourage the use of alternative traffic management strategies such as flashing yellow or red arrows or green balls for unprotected left turns. Encourage the use of traffic management infrastructure such as traffic roundabouts, superstreets, or continuous flow intersections to improve mobility and potentially mitigate the need for traffic signals within certain intersections.
4. Encourage local and regional transportation authorities to develop and coordinate signal synchronization programs along arterials and major roadways that transect multiple jurisdictions.
5. Consider allowing the Department to adopt a standard for unprotected left turns in order to allow traffic to move more freely through intersections. Further, left turns should be encouraged through the use of green lights, flashing red lights, or flashing yellow lights or arrows.
6. Consider encouraging local traffic jurisdictions to minimize the use of regular signal phases during off-peak times (e.g. flashing yellow lights along an arterial, with flashing red lights on perpendicular streets). These types of signals, particularly flashing yellow lights, may be used during off-peak hours in urban and suburban areas to improve traffic flow.
7. Consider encouraging local traffic jurisdictions to minimize the number of traffic signals used. Jurisdictions should also employ strict threshold requirements to traffic light warrants. The Texas Department of Transportation should evaluate the warrants for traffic signals and establish more effective warrant guidelines with a goal of reducing the number of traffic lights in actual use.

Charge 5

Study methods for improving safety on Texas roadways. Study the funding levels of crash prevention programs directed toward pedestrians, bicyclists, motorcyclists, and other vulnerable road users. Explore ways to improve safety for roadside workers

On November 19, 2009, Texas House Speaker Joe Straus instructed the House Committee on Transportation to:

Study methods for improving safety on Texas roadways. Study the funding levels of crash prevention programs directed toward pedestrians, bicyclists, motorcyclists, and other vulnerable road users. Explore ways to improve safety for roadside workers.

Background

In 2008, more than 3,400 residents died on Texas roadways and another 84,000 were seriously injured⁸¹. There were 388 fewer fatalities on Texas highways in 2009, an 11 percent decrease from the previous year. Safer roads contributed to the significant decline, with numbers representing the lowest fatality rate in 75 years of measuring crashes on Texas roads⁸². Although fatality and injury rates have been declining, the rates in Texas are consistently higher than U.S. rates⁸³.

In order to continue enhancing roadway safety in Texas, on March 22, 2010 Chairman Pickett formed the Subcommittee on Vulnerable Road User Safety. The Subcommittee was charged with studying methods for improving safety on our roadways, studying the funding for crash prevention programs, examining roadway safety for vulnerable road users, such as pedestrians, bicyclists, and motorcyclists, and exploring ways to improve safety for roadside workers. Chairman Pickett appointed the Honorable Representative Linda Harper-Brown to serve as Chairman and Representatives Bill Callegari, Ryan Guillen, Tommy Merritt and Larry Phillips to form the rest of the Subcommittee.

The Texas Department of Transportation (TxDOT), through the administration of the Texas Traffic Safety Program, has a number of programs in place to protect vulnerable road users. The purpose of the Texas Traffic Safety Program is to reduce the number and severity of traffic crashes, injuries, and fatalities through enforcement, education, and training efforts. This competitive grant program, funded by the National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation, emphasizes motorcycle, pedestrian, bicycle, and school bus safety⁸⁴.

The Texas Traffic Safety Program utilized \$570,034 in Fiscal Year (FY) 2009 for pedestrian and bicycle safety funding, and \$515,740 is allotted for FY 2010. This program funds projects to increase enforcement of traffic laws regarding bicycle right of way, increase motorist awareness of sharing the road with bicyclists, improve bicycle and pedestrian crash data, improve pedestrian “walkability” of roads and streets, and improve public education and information on pedestrians and “safe walking”⁸⁵.

Texas has received more than \$80 million through the Safe Routes to School Program which encourages walking and biking to school and the development of safety construction improvements in and around schools. This program was first funded with more than \$5 million in 2003. In 2007, \$24.7 million in state and federal funds was awarded and an additional \$54.1 million was awarded in May 2010⁸⁶.

Despite these safety programs, there were 346 pedestrian fatalities and 4,599 injuries in Texas in 2009⁸⁷. The most common causes for these accidents include driver inattention, driver distractions, high vehicle speeds, and the inattention or unsafe behavior of the pedestrians themselves⁸⁸. There are nearly 50 bicyclist deaths and more than 1,300 serious injuries in Texas each year caused by inattention, distractions, and unsafe behavior⁸⁹.

Motorcycle safety is another issue of concern. In 2009, there were 434 motorcycle occupant fatalities and 8,219 injuries in Texas, a decline from 2008 numbers⁹⁰. New laws requiring new motorcycle licensees to receive training may be a reason for the recent decline in motorcycle fatalities⁹¹. Another factor may be the new “Look – Learn – Live” campaign and website, www.looklearnlive.org, to promote motorist and rider awareness launched by TxDOT and the Texas Transportation Institute (TTI)⁹².

The motorcycle safety program has also allowed for the development of projects designed to increase motorcycle helmet usage by riders under the age of 21, improve public information and education on motorcycle safety including the dangers associated with the operation of a motorcycle while under the influence of alcohol or other drugs, and increase the overall level of rider education and training. One project that was developed under this program is the “Share the Road” education and public information campaign. This campaign seeks to bring motorcyclists to the attention of motorists and promotes safe motorcycle riding habits. The campaign entails TxDOT placing “Share the Road” emblems on the back of “Watch for Ice on Bridge” signs. In FY 2009, the state awarded \$391,840 for motorcycle safety, and \$246,022 is planned for FY 2010. The total planned funding for motorcycle safety in FY 2011 is approximately \$1.75 million⁹³.

With as many as 1,000 active work zones placed by TxDOT and its contractors, work zone safety needs to be addressed. In 2009, there were 108 fatalities and 8,667 injuries in Texas work zones⁹⁴. This is especially concerning when you consider that Texas has led the United States in roadway work zone deaths for the past 10 years⁹⁵. Although there are a number of work zone deaths and injuries, TxDOT uses a variety of approaches to improve safety in work zones for both workers and the traveling public. The Texas Traffic Safety Program provided \$718,000 in grants in 2009 for work zone safety training programs. One approach to safety is requiring each TxDOT District to develop and maintain an overall work zone management plan that addresses worker, pedestrian, and motorist safety. Further, TxDOT, in conjunction with TTI, is evaluating new work zone safety technologies, such as an automated flagger assistance device, mobile barrier safety zones, and portable traffic signals to help ensure greater safety for roadside workers⁹⁶.

The Texas “Move Over” law protects authorized emergency vehicles on the side of the road by imposing penalties for individuals who violate the law. Enacted in 2003, the “Move Over” law requires operators of a vehicle to vacate the adjacent lane or reduce speed when there is an emergency medical services, fire, or law enforcement vehicle stopped on the side of the road.

In 2009, legislation related to the safe passage of vulnerable road users was vetoed. This bill defined which individuals may be designated as vulnerable road users and included highway construction and maintenance workers, tow truck operators, utility workers, stranded motorists, individuals on horseback, individuals operating unprotected farm equipment, pedestrians, and

bicyclists. It also required that a safe passing distance of a vulnerable road user is three feet for a car or light truck and six feet for a non-light truck. The bill also would have established penalties for property damage and bodily injury.

Discussion

One in five adult Texans cannot drive, and across Texas, more than 280,000 workers do not have access to a car. These factors, as well as the likely rise of fuel costs, construction costs and limited transportation funding, should compel the state to take into account other modes of transportation as it designs the transportation system⁹⁷. The Subcommittee recommends the advancement of transportation policies that will protect the safety of all travelers on our roadways. Implementing a “complete streets” approach would enable safe access for all users including pedestrians, bicyclists, motorcyclists, and other vulnerable road users. “Complete streets” policies would ensure that transportation agencies take into account all travelers when building roadways including investing in transit systems, wider roadways, bike lanes, sidewalks, raised medians, crosswalks, and improved bus stop placement.

Approximately 40 percent of bicycle traffic crash fatalities in Texas occur due to unsafe passing by a motor vehicle⁹⁸. It is also estimated that there are more than 200 “struck by” of tow truck operators annually, with 50 to 60 of those resulting in death. According to Mike Scott with the Towing and Recovery Association of America, the number of tow operators killed nationally each year is equal to the number of police and paramedics killed along our roadsides. Texas is one of only seven states that do not include tow trucks in its “Move Over” law.⁹⁹

About two-thirds of all fatal crashes involve some type of adverse driver behavior such as excessive speed, consumption of alcohol, inattention, or aggressive driving¹⁰⁰. The implementation of “Highway Safety Corridors” along select routes where crashes are more frequent, as successfully utilized by other states, could reduce fatal and serious injury crashes. “Highway Safety Corridors” include speed limit evaluations, increased enforcement, increased fines, and enhanced public awareness regarding these efforts to enhance safety.

In carrying out this charge, the Subcommittee focused on pedestrians, bicyclists, motorcyclists, roadside workers, emergency vehicles, and tow truck operators. There are a number of other constituencies, however, that could be considered vulnerable road users including motorists affected by texting, consumption of alcohol, or distracted driving, as well as older drivers and teen drivers. It is important that the state advances legislation that protects vulnerable road users by improving the overall safety of our Texas roadways.

Recommendations

The House Committee on Transportation recommends the 82nd Legislature to:

1. Consider other modes of transportation and the safety of all travelers in the design our state's transportation system.
2. Consider more clearly defining the "safe passage" of bicycles, pedestrians, and other non-vehicle users on our roadways.
3. Consider expanding the current "Move Over" law to include tow trucks.
4. Consider the implementation of "Highway Safety Corridors" along select routes, where crashes are more frequent, to reduce fatal and serious injury crashes

Charge 6

Study the safety and efficiency of the existing agriculture-related transportation infrastructure. Consider the air, ground, and rail transportation needs of rural Texas and analyze the effect on economic development.

Joint Interim Charge with House Committee on Agriculture and Livestock

On November 19, 2009, Texas House Speaker Joe Straus instructed the House Committee on Transportation to:

Study the safety and efficiency of the existing agriculture-related transportation infrastructure. Consider the air, ground, and rail transportation needs of rural Texas and analyze the effect on economic development. *Joint Interim Charge with House Committee on Agriculture and Livestock*

Background

Over the past two decades, changes in demand for the transportation of agriculture and rural industry have coincided with the deregulation of the transportation sector. This has resulted in the abandonment of both the regulation of truck rates and competition, and many rural rail links that were deemed inefficient. Agricultural industrialization and the move towards applying market principles to guide production decisions have had a profound impact on rural transportation infrastructure. Combined with strategic rail decisions to terminate inefficient routes, these changes have resulted in larger and heavier truck hauling agricultural products over longer distances on pavements and bridges that were not constructed to withstand these loads. Overall, there is a need to better understand the strategic challenges and issues, as well as the critical role that transportation plays in promoting competitive agriculture and a strong rural economy. A letter written by the Honorable Representative Ruth Jones McClendon stresses the importance of freight rail's inclusion in the state's transportation plan and that "our foresight in meeting freight rail needs will be essential to the continued growth of the agricultural industry in Texas and to our role in interstate commerce"¹⁰¹. A copy of Representative McClendon's letter can be found in Appendix C.

Committee Action

The House Committee on Transportation and the House Committee on Agriculture and Livestock met in a joint public hearing on April 28, 2010. The Committees heard testimony from the following: Todd Staples, Commissioner, Texas Department of Agriculture; Fred Underwood, Commissioner, Texas Transportation Commission; Amadeo Saenz, Executive Director, TxDOT; Major David Palmer, Assistant Director, Highway Patrol Division at Department of Public Safety (DPS); Dr. Stephen Roop, Assistant Director for Multimodal Freight Transportation, Texas Transportation Institute (TTI); Charles Ray Huddleston, State Director, Texas Farm Bureau; Bob Turner, Government Affairs Consultant, Texas Poultry Federation; Josh Winegardner, Government Affairs Consultant, Texas Cattle Feeders Association; Steve Bearden, CEO, Rio Grande Valley Sugar Growers Inc.; Charlie Gee, Coordinator, Texas Logging Council; Major David Palmer, DPS; Jim Allison, General Counsel, County Judges and Commissioners' Association of Texas; Dr. Michael Walton, Chairman, 2030 Committee; Bob Turner, Government Affairs Consultant for Rural Issues; Dennis Kearns, Legislative Counsel, Texas Railroad Association; Francis Gandy, Commissioner, Port of Corpus Christi.

Panel One, Commissioners:

Commissioner Todd Staples of the Texas Department of Agriculture, informed the committee

that agriculture accounts for one in seven Texas jobs and over \$100 billion in the state's economy. He said 31% of freight train tonnage and 70% of trucking tonnage is agriculture-related. He stated property rights must be addressed as infrastructure expands and landowners need to be treated fairly. Commissioner Staples and the members discussed the lack of access and capacity issues.

Commissioner Fred Underwood, of the Texas Transportation Commission, testified about the "extensive" secondary road network for rural Texas and agriculture, which is the "backbone of a healthy economy". He said aging highways are "consuming limited financial resources." Due to declining gas tax revenue, increasing fuel efficiency, and the cost of road construction inflating 65% from 2002-08, there is not enough money to maintain the existing system. Truck traffic is increasing in rural Texas because the railroad industry is abandoning rural Texas and removing the rails.

Chairman Pickett stated that some farm-to-market roads are becoming "congested arterials" and current maintenance of farm-to-market roads is inadequate. Commissioner Underwood stated that farm-to-market roads were not designed to endure today's heavy truck traffic. (The impact of one heavy truck is equal to 9,600 cars.)

Panel Two, Agencies:

Amadeo Saenz, Executive Director of TxDOT, testified that there are not resources for maintenance of rural roads, but the agency is investigating best practices to stretch its dollars. He told the Committee that 86% of rural roads are rated "good" and that rural traffic fatalities have been dropping in recent years due to safety improvements. He said that TxDOT is also developing a comprehensive rail plan. Mr. Saenz said more truck traffic on rural roads increases the cost of maintaining those roads and decreases those roads' life spans. Finally, he discussed the twenty-seven different types of permits for overweight and oversized vehicles.

Major David Palmer, Assistant Director for the Highway Patrol Division at the Department of Public Safety (DPS), Director Saenz, and the Committee discussed, at length, many aspects of heavy truck traffic and enforcement and their constituents' concerns.

Dr. Stephen Roop, Assistant Director for Multimodal Freight Transportation at the Texas Transportation Institute (TTI), said the price of energy impacts freight transportation, and the needs and natures of agricultural transportation and freight transportation are very different. Dr. Roop discussed the proposed "freight shuttle system," which would utilize automated guide ways and private financing. He said TTI is exploring the feasibility of a pilot program on the El Paso-Juarez border for such a program.

Panel Three, Agriculture Producers:

Charles Ray Huddleston, State Director of the Texas Farm Bureau, testified for increased truck weight limits, which would allow for transportation of more agricultural products. He requested increased rural road construction and maintenance.

Bob Turner, a government affairs consultant to the Texas Poultry Federation, spoke of the fuel

savings of train freight, but the lack of availability of trains require the use of trucks.

Josh Winegardner, a government affairs consultant to the Texas Cattle Feeders Association, Steve Bearden, CEO of the Rio Grande Valley Sugar Growers Inc., and Charlie Gee, a coordinator for the Texas Logging Council, recommended increasing the gross vehicle weight to 97,000 pounds and adding a 6th axle to, theoretically, mitigate the increased weight and not increase the wear on roadways by reducing truck trips.

Major David Palmer of DPS was recalled to discuss super-single tires and the proposed federal adoption of a gross vehicle weight of 97, 000 pounds. He said there appears to be an increase in the number of safety violations on overweight trucks.

Panel Four, State and Local Impacts and Economic Development:

During the fourth panel, Jim Allison, general counsel for the County Judges and Commissioners' Association of Texas, stated, "Agriculture is the life blood of our Texas rural economy, the county road system is a vital part of the arteries that transport that lifeblood. With over 160,000 road miles and 17,000 bridges in the county road system, agriculture relies upon the county road system for transport of its products and supplies. Unfortunately, even as demand and usage of the county road system has increased, financial support has dwindled"¹⁰². The county road system receives \$7.3 million annually from the state gas tax and this amount has remained unchanged since 1951. County property taxes primarily fund county roads and are an insufficient source of funding. The bridge rehabilitation program is funded 80% by federal grants, 10% by state grants, and 10% by county funds. Mr. Allison said additional state funding is necessary for county roads. He recommended ending Fund 6 diversions, indexing of fuel taxes, raising fuel taxes by 10 cents, and allowing local option elections for county transportation needs.

Dr. Michael Walton, Chairman of the Texas 2030 Committee, discussed the committee's "Texas Transportation Needs Report." The committee's goals were to preserve and enhance the state's transportation systems, preserve and enhance urban and rural mobility, enhance safety, and examine all modes of transportation. He said the report did not address changes in the sizes and weights of truck, and the report focused only on needs, not funding.

Dr. Walton, Mr. Allison and the members went on to discuss funding and taxes, political will, toll roads, public-private partnerships, local option elections, disparities, road utility districts, strengthening bridges, productivity gains, and costs.

Bob Turner, a government affairs consultant for rural issues, testified about the importance of rural airports with regards to economic development. He discussed the missed opportunities of rural rail and the permanent loss of rail right-of-ways. He said the state-owned South Orient Railroad has economic potential with a connection to the deepwater Mexican ports.

Dennis Kearns, legislative counsel for the Texas Railroad Association, said the industry is investing in new locomotives, which average \$2 million each. Longer train lengths and other measures are increasing efficiencies and productivity. In 2008, 60,000 agricultural product units were moved in Texas by rail. Mr. Kearns also discussed how the Pacific Northwest ports are becoming integral to shipping goods to Asia. Representative Hardcastle and Mr. Kearns

discussed the impacts of closing the "short lines" and its impact on trucking in rural Texas.

Francis Gandy, a commissioner for the Port of Corpus Christi, discussed how the Port was deepening their channel due to the Panama Canal, tenants, and rail projects and shipments.

Discussion

Farm-to-Market Road System

There are more than 62,000 center-lane miles of rural highway in Texas, with the 10,175 mile Texas Trunk System forming the core of the rural network. Also, in the trunk system are 40,969 miles of Farm or Ranch-to-Market roads and spurs. This constitutes the most extensive network of secondary roadways in the world.

The Texas Highway Trunk System is a program to improve the mobility and safety of highway users on the state's rural highway system. The program objectives are to provide a rural four-lane divided or better network to connect major activity centers within Texas and to provide access to major points of entry. To successfully maintain high mobility and safety, it was recognized that access to the highways had to be controlled while still allowing sufficient access.

The network was initially established between 1930 and 1950 with the improvement of existing unpaved roads linking rural communities. As early as 1945, the then Texas Highway Commission authorized construction of 7,500 miles of rural roads funded by the state and federal governments on a equal cost-share basis. The first construction contracts were let in January 1946 in Randall County. The Colson-Briscoe Act of 1949 included \$15 million annually in funding to construct local roads that did not have sufficient traffic volume to pay for their construction and maintenance. In 1962, the Texas legislature increased the appropriation to ensure that at least \$23 million annually would be available to construct new farm roads. That same year, the commission increased the size of the state's farm-road system from 35,000 to 50,000 miles.

County Roads

The county road system in Texas is comprised of 160,000 center-lane miles and 17,000 bridges. The county road system receives \$7.3 million annually from the state gasoline tax, an amount that has not changed since 1951. Additionally, the Texas Department of Transportation (TxDOT) allocates approximately \$6 million in surplus materials annually to counties. The ongoing county bridge rehabilitation program is funded 80 percent by federal grants, 10 percent by state grants and 10 percent by county funds. Counties also receive a portion of the local motor vehicle registration fees, including the optional local registration fee which may be assessed by the commissioners court. Currently, 242 of 254 counties collect this fee. Counties also receive a portion of the state truck permit fee. All other local funds must be raised though the property tax assessment.

All of the state's 254 counties are authorized by law to retain a portion of motor vehicle registration fees they collect. Section 502.102 of the Transportation Code governs the allocation of tag-fee revenue between TxDOT and individual county road and bridge funds based on the

number of miles maintained by the county up to 500 miles, the amount of certain taxes and penalties collected by the county's tax assessor-collectors, and net collections. Other funding sources for county roads include TxDOT's Local Government Assistance Program, optional road and bridge fees, 2060 permit fees, lateral road and bridge funds and the Off-System Bridge Program. Over the last 20 years, state assistance for county roads totaled more than \$8.8 billion.

Rural Rail

According to TxDOT, Texas railroads handle more than 10 million carloads over a 15,000 mile rail system, which leads the nation in total rail miles and rail tons carried. Forty-five railroads operate in Texas, including three Class 1 railroads: the Union Pacific, the Burlington northern Santa Fe, and the Kansas City Southern. In December 2009, TxDOT created a Rail Division to perform a variety of functions related to rail safety and preserving and expanding rail access in rural Texas.

Railroad Congestion

Congestion is a problem on our state's rail network as well as on our highways. Rural agricultural producers who utilize rail to transport their products are adversely affected by a major railroad congestion problem in Fort Worth. Tower 55 is an at-grade intersection of the Burlington Northern Santa Fe and Union Pacific railroads located adjacent to downtown Fort Worth, and has been identified as the busiest railroad intersection in the United States. Between 100 and 120 trains pass through this location daily and an additional 70 trains per day use the adjacent Trinity Railway Express line. Due to the high traffic volume, and the time it takes for trains to complete a crossing, trains must wait an average of 90 minutes to pass through Tower 55. TxDOT is working with the Burlington Northern Santa Fe Railroad, the owner of the crossing, and the north Central Texas Council of Governments to reduce or eliminate congestion at Tower 55. A study is planned to identify the best option for a grade-separated crossing at Tower 55, which is likely the most efficient long-term solution. In the meantime, a third north-south track will be added and adjacent to Tower 55. This will enable more trains to pass through Tower 55 at the same time and allow tower operators to stage trains closer to the intersection and move them through more efficiently. The improvements are expected to cost \$93.7 million and in a few years might relieve some of the Tower 55 congestion.

South Orient Railroad and North East Texas Rural Rail Transportation District

In West Texas, TxDOT owns the South Orient Railroad (SORR), approximately 391 miles of rail that extend from San Angelo Junction to Presidio at the Texas-Mexico border. SORR has one of only five rail border crossings between Texas and Mexico, and one of only eight between the U.S. and Mexico. TxDOT estimates that between 2001 and 2008, transporting freight along the SORR has saved \$43,257,369 in pavement maintenance costs for parallel roads. Commodities moved on the SORR are primarily agricultural: wheat, cotton, feed, fertilizer, molasses, mash, milk; industrial: steel, scrap metal, paper; and energy related: pipe, sand, wind tower components. Several agricultural cooperatives are located along the rail and depend on the rail traffic. There are currently several projects underway to rehabilitate the line from San Angelo East toward Coleman. Once complete, these projects will enable 25 mile per hour speeds on this segment of the line. Train speeds are currently limited to 10 miles per hour across the entire

SORR route, except for a segment of approximately 131 miles between San Angelo and Sulphur Junction.

In East Texas, the North East Texas Rural Rail Transportation District (NETEX), a political subdivision of the state, owns and manages a 66-mile rail line from West of Mount Pleasant to West of Greenville. NETEX has been relatively successful in preserving its railroad corridor and continuing to provide freight rail services. It has also developed potential projects in cooperation with local economic development entities which would expand rail services to new and existing businesses in the area, increase NETEX operations, and provide economic stimulus. Commodities transported across this rail line include plastics, wax, agricultural products, scrap iron, lime, fly-ash and chemicals.

Rural Truck Traffic

Over the past two decades, the transportation demands of agricultural producers and rural industries have changed and railroads, for economic reasons, have abandoned many rural rail links. In many regions of the state, the volume of truck traffic on rural infrastructure has significantly increased due to a variety of factors including: agricultural industrialization resulting in fewer but larger farms, increases in the physical size of agricultural equipment transported by truck between specialized operations, economic revival of the oil industry resulting in short but high-volume heavy truck movements, increases in allowable truck gross weights on state roads and highways, increases in truck traffic resulting from the North American Free Trade Agreement, and the abandonment of approximately 2,400 miles of railroad track in Texas.

Overweight and Oversized Vehicles

For approximately 40 years, the state continued to absorb county roads into the state system to relieve county responsibility for heavy traffic. In recent years, TxDOT has been unable to continue expansion of the state system. Meanwhile, a state permit system, adopted in 1989, has resulted in unrestricted traffic by heavy trucks on county roads and numerous permitted and exempted loads. Permitted loads are those that exceed legal limits and require a TxDOT-issued permit. Exempt loads are those that do not require a permit, but are allowed to exceed legal limits by a specific statute or law. Any vehicle exceeding the legal gross vehicle weight or axle weight is considered an overweight vehicle. The current legal load limits are 20,000 pounds for a single axle, 34,000 pounds for a tandem axle, 42,000 pounds for a tridem axle and 80,000 pounds total gross weight. Although state law generally requires operators of oversize and overweight vehicles to obtain a permit, it specifically exempts vehicles transporting particular commodities including milk, chili peppers, timber, cotton, and several other products. With few exceptions, permits are required to transport non-divisible loads or loads that cannot reasonably be divided to meet legal size and weight requirements. By law, permitted loads are engineered to minimize damage to roads and bridges. For overweight loads, TxDOT specifies axle weights and spacing to properly disburse the weight of the load. Permitted loads are also required to travel a route specified by TxDOT and must meet other safety requirements governing signage and lighting and the use of escort vehicles. Fees vary from \$60 for a single trip permit with no weight to \$4000 for an annual permit for unlimited trips for loads up to 12 feet wide, 14 feet high and 120,000 pounds.

Using widely-accepted formulas, TxDOT calculated that increasing gross vehicle weights from 80,000 pounds to 89,000 pounds would increase pavement damage by more than 57 percent. This increased damage reduces expected 20-year pavement life to 12.71 years. At current annual replacement costs, a road that lasts 20 years costs \$10,000 per lane-mile each year to maintain. If the same road lasts only 12.71 years, however, the cost increases to \$15,736 per lane-mile each year. Damage caused by 89,000 pound gross-weight vehicles will increase TxDOT's costs by \$5,736 per lane-mile each year¹⁰³. It has also been determined that each overweight truck inflicts as much road damage as 10,000 automobiles, and counties do not have funds available to absorb the cost of additional damage.

Recently, organizations in the industry have been advocating that federal and state governments consider new legislation that would allow states to increase the Interstate truck weight allowance from 80,000 to 97,000 pounds, provided that trucks operating above 80,000 pounds add a sixth axle. They claim that adding a sixth axle will allow them to carry heavier loads and provides no additional damage since the additional weight is evenly distributed. Current law limits the weight of five-axle trucks traveling on the interstate system to 80,000 pounds.

However, not everyone sees the proposed legislation as beneficial. An article at eTrucker.com reports that the Owner-Operator Independent Drivers Association opposes the federal bill because they believe that increasing the truck weight allowance would endanger road users and hasten infrastructure deterioration. In addition, other transportation safety groups say past size and weight increases have not yielded fewer trucks, trips or miles traveled. In fact, there is research that suggests fewer, heavier trucks on the road can be detrimental to safety. Heavier trucks lead to increased level of damage per individual accident and there was a direct correlation found between accident damage and higher gross vehicle weight in five axle trucks in a study completed by the National Transportation Research Board¹⁰⁴. This report also broadly covers the impact of overweight trucks on infrastructure and concludes that the overall damage is significant, but may be resolved by the macro-economically positive benefit of cheaper transportation on cost of goods distribution.

Conclusion

As urban and rural areas of the state compete for transportation funding, it is increasingly becoming obvious that there a growing need for both urban and rural needs. In the coming years, a significant portion of the state's rural highway system will require rehabilitation. Due to the widening gap between rural highway needs, and available funding and the loss of rural railway capacity, prioritizing which rural highway projects are funded has become more important than ever before. A lack of funding from traditional state and federal gas revenues for new highway construction and rehabilitation and maintenance of existing roads and highways continues to be the primary obstacle.

Recommendations

The House Committee on Transportation recommends the 82nd Legislature to:

1. Keep the current weight limit at 80,000 pounds and using no more than five axles.
2. Continue studying ways to improve the effectiveness of freight rail for agriculture producers and shippers to increase the lifespan of county roads

Appendix A
Charge 2



Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

December 15, 2010

The Honorable Larry Phillips
Chairman, House Select Committee on Transportation Funding
P.O. Box 2910
Austin, Texas 78768-2910

Dear Chairman Phillips:

Thank you for the opportunity to testify before the House Select Committee on Transportation Funding on October 26, 2010. I appreciate your commitment to an ongoing dialogue with the Texas Department of Transportation (TxDOT).

Enclosed is the additional information requested by the Committee during the hearing: 1) A summary of TxDOT planning rules; 2) an updated primer on public transportation funds and distributions; and 3) a public document outlining TxDOT's project selection process. This brochure is available on our website at <ftp://ftp.dot.state.tx.us/pub/txdot-info/fin/2011projectselection.pdf>. Additionally included for your information is a white paper on Transportation Development Credits which was also a topic of conversation during the hearing.

I hope you and the members of the Committee find this information helpful. I look forward to continuing to work with you in identifying potential transportation funding solutions. If I can be of any further assistance, please do not hesitate to contact me at (512) 305-9501. Staff inquiries may be directed to Wendy Reilly, Legislative Liaison, at (512) 463-8665.

Sincerely,

Amadeo Saenz, Jr., P.E.
Executive Director

Enclosure

cc: The Honorable Larry Phillips, District Office
Members of the House Select Committee on Transportation Funding
Courtney Reid, Clerk, House Select Committee on Transportation Funding
Texas Transportation Commission
James M. Bass, Chief Financial Officer, TxDOT
Eric L. Gleason, Director, Public Transportation, TxDOT
James L. Randall, P.E., Director, Transportation Planning & Programming, TxDOT
Wendy Reilly, Government and Public Affairs Division, TxDOT

THE TEXAS PLAN
REDUCE CONGESTION • ENHANCE SAFETY • EXPAND ECONOMIC OPPORTUNITY • IMPROVE AIR QUALITY
INCREASE THE VALUE OF OUR TRANSPORTATION ASSETS

TxDOT Planning Rules

Background

Federal law requires the State of Texas to develop a comprehensive and intermodal statewide transportation plan and transportation improvement program. It's been difficult for both the public and the state's transportation entities to determine their precise roles in the process of developing these plans because of its complex nature and many moving parts.

During the 81st legislative session, improvements in this process were envisioned as part of the Texas Department of Transportation's (TxDOT) Sunset bill. Even though the transportation Sunset bill did not pass, the Texas Transportation Commission had its professional staff work with its regional transportation partners across the State to draft new planning rules to make the process more streamlined, transparent and efficient. A full list of participants is included at the end.

On August 26, 2010, the Texas Transportation Commission adopted new planning rules recommended by an 11-member public advisory committee. These new rules:

- Institute more extensive and effective public involvement processes during the development of TxDOT plans;
- Require TxDOT to prepare and report annual long range funding forecasts for use in developing programs and funding allocations;
- Establish funding allocation formulas to distribute funds to MPOs and TxDOT districts;
- Prohibit transfers of funds between Metropolitan Planning Organizations (MPOs) or TxDOT districts unless these transfers are documented and agreed upon by all effected MPOs or districts; and
- Create performance measures to evaluate the effectiveness of projects selected by MPOs and TxDOT districts for funding.

Overall, the proposed rules empower both MPOs and the general public by providing increased transparency and efficiency of the state's transportation planning process and practices.

Synopsis of Rules

The core of the new planning rules requires TxDOT to codify its planning and program rules in such a way that will enable the agency MPOs, to develop long-range, mid range and short range plans each with specific criteria. Here are the specific actions:

- The development of rules for a comprehensive approach to **new transportation planning, programming, funding, and performance reporting** required a significant expansion of the existing rules found in Chapter 15, Subchapters A and D. Consolidating and expanding those provisions required repealing the previous planning and programming provisions while simultaneously proposing new Chapter 16, Planning and Development of Transportation Projects.

November 8, 2010

- New Subchapter A, General Provisions, incorporates the purpose provision and definitions from the existing requirements of Chapter 15, Subchapter A. It also includes an introduction that summarizes the planning and programming process, identifies its component parts, describes the relationship among the Department and metropolitan and rural planning organizations, and includes a flow chart illustrating the planning and programming process and stages. This process involves the various transportation entities cooperatively developing **separate but interrelated long-range planning documents** that identify projects, strategies, and transportation needs and both mid-range and short-range programming documents that list and prioritize projects for implementation.
- New Subchapter B, Transportation Planning, incorporates most of the existing planning requirements of Chapter 15, Subchapters A and D, plus additional requirements that are necessary to provide a **detailed, coordinated, and comprehensive planning process**. For example, there are new formalized procedures and requirements for the 24-year Statewide Long-Range Transportation Plan.
- New Subchapter C, Transportation Programs, incorporates most of the existing programming requirements of Chapter 15, Subchapter A, plus additional requirements that are necessary to provide a **detailed, coordinated, and comprehensive programming process**. For example, there are new formalized procedures and requirements for TxDOT's 10-year Unified Transportation Program.
- New Subchapter D, Transportation Funding, includes provisions necessary to develop **reliable financial assumptions and forecasts** for common use by all participants in the planning and programming process, and equitably allocates available state and federal resources to department districts, metropolitan planning organizations, and other authorized entities to fund individual projects.
- New Subchapter E, Project and Performance Reporting, contains provisions needed to establish **strategic performance measures** and a reporting system to monitor and evaluate the effectiveness of the planning and programming process and to identify areas that need improvement.

Rulemaking Advisory Committee

Working over a year on this project were:

HCTRA

Planning Committee Chair
The Honorable Edward M. Emmett
County Judge, Harris County

NCTCOG MPO

Planning Committee Vice Chair
Michael Morris, P.E., Director of Transportation
North Central Texas Council of Governments

Commission appointed member

Starr County Judge Eloy Vera

November 8, 2010

El Paso MPO
Honorable Joe Pickett
Chair, House Committee on Transportation

H-GAC MPO
Alan Clark
MPO Director

Deep East Texas Council of Governments
Walter G. Diggles, Sr., Executive Director

CAMPO
Honorable Senator Kirk Watson

Texas Association of Regional Councils
Dr. Jerry Marshall

Federal Highway Administration
Barbara C. Maley

San Antonio VIA Metropolitan Transit Board
Jesse Balleza
Vice President

Abilene MPO & West Texas Representative
Ross L. Jones, Attorney

For further information

Contact: Wendy Reilly, TxDOT Government and Public Affairs Division, 512/463-8665 or
Wendy.Reilly@TxDOT.gov

Appendix B

Charge 3



TEXAS HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION
P.O. Box 2910 • AUSTIN, TEXAS 78768-2910 • (512) 463-0818

April 19, 2010

Mr. Amadeo Saenz, Jr.
Executive Director
Mr. John Barton
Assistant Executive Director for Engineering Operations
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483

Dear Mr. Saenz and Mr. Barton

As you know, House Transportation Chairman Joe Pickett recently asked me to serve as chairman of the subcommittee on the policies and procedures related to toll roads in Texas. My goal for the subcommittee is to provide a transparent overview of the various funding mechanisms used to build and lease toll roads and to examine, among other things, the legal authority that the Department of Transportation and project participants believe authorizes each type of toll road development and operation and additional options for funding future transportation projects in Texas.

To begin the subcommittee's work, I would like to examine several toll projects that are representative of the different approaches to both tolling roads and the construction and operation of those roads. Those projects are:

1. The Dallas-Fort Worth Turnpike/Interstate 30
2. The Sam Houston Tollway
3. Westpark Tollway
4. The Camino Columbia Toll Road
5. The 121 Tollway
6. SH 130 Segments 5 and 6
7. SH 161/Chisholm Parkway
8. North Tarrant Express Managed Lanes
9. US 183-A Turnpike
10. Central Texas Turnpike (State Highway 130, State Highway 45, Loop 1)
11. DFW Connector
12. Highway 281
13. State Highway 99/The Grand Parkway

JOE C. PICKETT, Chair • LARRY PHILLIPS, Vice-Chair
Yvonne Davis, Ruth Jones McClendon, Tommy Merritt, Todd Smith,
Jim Dunnam, Bill Callegari, Ryan Guillen, Wayne Smith, Linda Harper-Brown

Each of the projects above are different to some degree, whether it is the details of the individual contracts, the different revenue streams used to fund the project, or how the project changed from its initial conception to final completion or current reality. For example, it is my understanding that the Camino Columbia Toll Road began as a private toll road that entered foreclosure and was ultimately repurchased by the State. I am certain there are other examples the Department and its public and private project participants are aware of that would aid the subcommittee's study of tolling practices.

I request that the Department provide me with a suggested list of examples of every single toll project (i.e., anything that is a toll road or has toll-related parts including managed lanes, interchange connectors, etc.) to be studied by the subcommittee that will allow the Members to develop an in-depth understanding of all historical, current, and future options for toll roads in Texas. This would include examples of all the different variables that influenced the initial, interim, and final configuration of all identified projects. If there is another governmental or private entity who you believe has information related to this study, please identify them.

Also, please suggest a toll project that addresses each of the relevant variables involved in tolling and toll finance in Texas and state what those relevant variables are clearly in a separate column next to the project's name. The types of information that I, and the members of the subcommittee, would like to know are: whether there is private financing involved; whether there is a TIFIA loan involved; whether the state's gas tax or state bonds have been used and in what manner, etc. Based on the Department's project suggestions and my list above, I would like you to prepare a comprehensive chart of all the various mechanisms that have been used to create toll roads.

Further, for each toll project the department lists, please identify the specific legal authority that enables the Department and all other project participants to enter into a specific kind of toll road project. Please describe this clearly in a separate column next to the project's name with a specific cite to each relevant section of the Texas Constitution, Federal or state law or regulation, or other source of law. Similarly, in a separate column, please describe any conflicting or ambiguous authorities, whether constitutional, statutory, regulatory, or otherwise, that may cause the public to feel that some toll road projects are, in fact, either unconstitutional or entered into extra-legally. Lastly, in a third column that addresses legal implications of toll roads in Texas, please describe in detail any related legislative changes that occurred in reaction to or soon after each project was initiated or completed.

Finally, for each toll project the department lists, please outline the important details of the contract stipulations. For example, please list whether or not the contract contains compensation clauses, non-compete clauses, the specific duration of the contract, etc. Please do so clearly in a separate column. In a separate column, please also clearly state the status of each project.

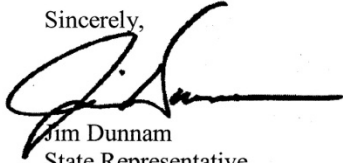
After I receive all the necessary information I am asking in this letter to provide, the subcommittee will hold a hearing and engage in a roundtable discussion of the projects. Again, our first meeting will be to educate the subcommittee on all of the variations in projects.

For our anticipated second hearing, I would like to go through all projects, grouped by type from the examples used in the first meeting. Toward that end, for the second meeting, I would ask the Department for an inventory of all toll roads/lanes in Texas, when they were built, under what legal/constitutional authority, by whom, and with what source(s) of revenue, including toll roads/lanes that are under development (in the design/construction stages) and those currently in the conceptual or planning stages. We have not been in the toll road business all that long, so I do not believe that it would be extraordinarily time-consuming for the Department assemble this information. If this would impose an undue burden on the Department, please let me know as soon as possible. Please also include the original toll revenue projections and the actual collections, and information that would allow the subcommittee to determine whether there are sufficient revenues to cover the debt payments, road maintenance, etc.

In the end, I would like to develop an exhaustive list of all the options that have been tried and all the options that are being considered or possible within the existing legal frameworks. I would like to be able to describe to the full committee and the full House the legal authority for each option, including the financing options. Most importantly, I would like to start putting this into terms and concepts that the taxpaying public understands.

I ask that the Department employees assigned to this task work closely with my legislative director, Jenny Casey, to ensure that the information is comprehensive yet digestible. Please do not hesitate to contact my office with other questions or suggestions, including suggestions of other entities from whom we should request the information sought in this letter.

Sincerely,



Jim Dunnam
State Representative

CC: The Honorable Joe Pickett
Chairman, House Committee on Transportation
The Honorable Bill Callegari
The Honorable Yvonne Davis
The Honorable Ruth Jones McClendon
The Honorable Todd Smith



Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

June 9, 2010

The Honorable Jim Dunnam
Texas House of Representatives
P.O. Box 2910
Austin, Texas 78768-2910

Dear Representative Dunnam:

Thank you for your letter requesting information on toll projects and associated funding mechanisms to help prepare for hearings of your subcommittee as appointed by House Transportation Committee Chairman Joe Pickett and provide information related to your interim charge from Speaker Joe Straus: Study the practices and procedures used in the development of toll roads and make recommendations as necessary. I apologize for the delay in responding as it required obtaining data from various resources to attain the most accurate information. Nonetheless, we certainly appreciate your interest in this area of transportation and your dedication to acquiring the information necessary to help the committee members, and the public, make informed decisions.

Your letter requested detailed information on several toll projects representing different approaches to developing and operating such roadways. For your reference, the table labeled "Enclosure A" lists the various toll projects under the purview of the Texas Department of Transportation (TxDOT). It includes project status, responsible entity, types of financing, project delivery method, key contract stipulations, related applicable laws, and any other relevant factors that may have changed or influenced the projects. Please note that for those toll projects included in your request that do not fall under our purview, we listed the appropriate local toll project entity and recommend contacting those entities for additional information. In addition, your letter requested a separate column describing any conflicting or ambiguous authorities, whether constitutional, statutory, regulatory, or otherwise, that may cause the public to feel some toll road projects are unconstitutional or entered into extra-legally. This column is not included in Enclosure A as we are not aware of any such provisions for TxDOT projects.

In your letter, you specifically reference the Camino Columbia Toll Road as a private toll project that entered foreclosure and was ultimately "repurchased" by the State. The project did in fact originate as a fully private endeavor without direct involvement from TxDOT; however the traffic did not meet the original projections leading to a default on the bonds. Given the unique history of this project, we will be prepared to discuss this project at your hearing(s) to provide additional details and data on the Camino Columbia Toll Road in a format that you and the members of your committee will find most helpful.

The table shows that each project is unique with respect to financing, contract stipulations, and project scope, which reflects the variety of tolling options available under current law. Please

THE TEXAS PLAN
REDUCE CONGESTION • ENHANCE SAFETY • EXPAND ECONOMIC OPPORTUNITY • IMPROVE AIR QUALITY
INCREASE THE VALUE OF OUR TRANSPORTATION ASSETS

An Equal Opportunity Employer

June 9, 2010

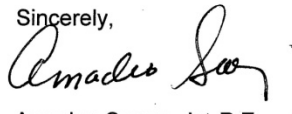
refer to "Enclosure B" which cites each statute that authorizes these various development and financing options for toll projects in Texas. "Enclosure C" provides a summary of the various project delivery options authorized under current law and details the advantages and disadvantages of each option. These options range from traditional approaches, such as design/bid/build, to more recent approaches, such as concessions and pre-development agreements.

Finally, "Enclosure D" lists every toll road and bridge in Texas and the entity responsible for the facility. This information had been provided previously by email; however, I thought it would be helpful to include it with this correspondence to have all of the information together.

We are prepared to provide this and other related information when you and the members of your committee are ready to hear from us. My staff and I would be happy to research any additional topics you feel may be helpful or provide more detailed information on the topics contained in the correspondence.

Your leadership and commitment to the people of Texas as chair of this subcommittee will help improve mobility in this state. I appreciate all the work you do and look forward to working together to address our state's transportation challenges. If you have additional questions or need more information, please contact me at (512) 305-9501, or should your staff have any questions, they may contact Caroline Love, Government and Public Affairs Division, at (512) 463-1965.

Sincerely,



Amadeo Saenz, Jr., P.E.
Executive Director

Enclosures

cc: The Honorable Jim Dunnam, Texas House of Representatives, District Office
The Honorable Joe Pickett, Texas House of Representatives
The Honorable Bill Callegari, Texas House of Representatives
The Honorable Yvonne Davis, Texas House of Representatives
The Honorable Ruth Jones McClendon, Texas House of Representatives
The Honorable Todd Smith, Texas House of Representatives
Leigh Anne Lauderdale, Texas House of Representatives Transportation Committee,
Capitol Office
Texas Transportation Commission
John A. Barton, P.E., Assistant Executive Director for Engineering Operations, TxDOT
Caroline Love, Government and Public Affairs Division, TxDOT

House Transportation Committee
Subcommittee on Toll Road Policies and Procedures
Texas Toll Road Information

Toll Projects	Current Status	Responsible Agency ¹	Project Financing & Funding Mechanisms		Project Delivery Method ²	Contract Stipulations	Federal and State Legal Authority		Factors and Variables That Changed or Influenced the Project
			Type(s) of Public Funding	Type(s) of Private Funding			Relevant Law(s) that Enabled the Contract	Legislative Change(s) Related to or Caused by the Project	
<p>SH 130 Segments 5 and 6</p> <p>County: Travis, Caldwell, Guadalupe</p> <p>Summary: Toll facility; minimum of two tolled lanes in each direction; ultimate will be 3 tolled mainlanes in each direction; 17 miles of continuous frontage on northern segment; all-electronic tolling</p>	<p>Under Construction</p> <p>Expected completion 2012</p>	<p>TxDOT</p> <p>TxDOT (toll collection)</p>	<p>n/a</p>	<p>Private equity: \$210 M</p> <p>Private debt: \$720.75 M</p> <p>TIFA: \$430 M</p>	<p>Concession (D-B-F-O-M)</p>	<p>- 50 year concession term from service commencement date.</p> <p>- TxDOT can build or improve any facilities at any time. If TxDOT chooses to build or improve any facilities, projects would be built or improved on a non-exclusive basis. SH 130 toll revenue would be positive, neutral, or negative. Any negative impacts would be offset by positive ones. All improvements to IH-35 are excluded from competing facilities analysis.</p> <p>- TxDOT receives 50% of refinancing gain, prior to Service Commencement</p> <p>- \$25 M concession payment to TxDOT</p> <p>- TxDOT has the right to buyback or terminate for convenience anytime.</p> <p>- All toll revenues collected are shared between Developer and TxDOT</p> <p>- Initial toll rate, and future rate changes, are limited to defined maximum rates defined in the contract. The Developer must notify TxDOT and the public in advance of any toll rate changes.</p> <p>- O&M costs to be borne by Developer during concession period.</p>	<p>Transportation Code Chapter 223, Bids and Contracts for Highway Projects</p> <p>Transportation Code Chapter 227, Trans-Texas Corridor</p> <p>43 Texas Administrative Code 6.27.1.9 Toll Projects - Comprehensive Development Agreements</p>	<p>Transportation Code Chapter 223 amended to clarify and define the process for TxDOT to acquire a portion of a private participant in a comprehensive development agreement and related property, and to provide a limited waiver of the State's sovereign immunity for the purpose of enforcing an obligation of TxDOT to make or secure a termination payment.</p> <p>Revisions to Tax Code to generally provide that any facility that is generally provided by TxDOT that is part of the Trans-Texas Corridor, is a rail facility or system, or is a highway in the state highway system, and that is licensed or leased to a private entity by that department under Chapter 91, 223, or 227, Transportation Code, is public property used for a public purpose if the rail facility, highway, or system is owned, operated by the private entity, to provide transportation or utility services. Any part of a facility, rail facility or system, or state highway that is licensed or leased to a private entity for a commercial purpose is not exempt from taxation.</p>	<p>- Environmental re-evaluation in 2006</p> <p>- Consideration of future rail development in median</p>
<p>North Tarrant Express Managed Lanes</p> <p>County: Tarrant</p> <p>Summary: Rebuild the existing four to six main lanes, add four toll-managed lanes, plus frontage roads and auxiliary lanes to approximately double the existing capacity. Construction is expected to begin late 2010. Estimated completion 2015. Estimated cost: no later than 2030 at no additional cost.</p>	<p>Developer to assume all construction and maintenance of the corridor on 4/30/2010</p> <p>Construction expected to begin late 2010</p> <p>Expected completion 2015</p>	<p>TxDOT</p> <p>NTTA (toll collection back office and payment processing)</p>	<p>TxDOT: \$573 M</p>	<p>Private equity: \$426 M</p> <p>PAB: \$398 M</p> <p>TIFA: \$650 M</p> <p>(value from 2/12/10 financial plan)</p>	<p>Concession (D-B-F-O-M)</p>	<p>- 50 year concession term from CDA execution</p> <p>- TxDOT can build any facilities in long range transportation plans and programs. Construction to Developer (if any) is limited to net loss in toll revenues, offset by any positive impacts of other competing facilities. Developer has no right to prohibit construction or operation of any competing facilities.¹⁴</p> <p>- Revenue sharing potential from Developer to TxDOT.</p> <p>- TxDOT receives 75% of HREF financing gains from TIFA or PAB; 50% of other refinancing gain</p> <p>- TxDOT has the right to buyback or terminate for convenience</p> <p>- Toll rates set according to NCTCOG regional toll policy</p> <p>- Estimated \$444 M in O&M costs (in 2009 dollars) to be borne by Developer during concession period</p>	<p>Transportation Code Chapter 223, Bids and Contracts for Highway Projects</p> <p>43 Texas Administrative Code 6.27.1.10 Toll Projects - Comprehensive Development Agreements</p>	<p>Transportation Code Chapter 223, Bids and Contracts for Highway Projects</p>	<p>- Environmental re-evaluation in 2006</p> <p>- Consideration of future rail development in median</p>

Toll Projects	Current Status	Responsible Agency ¹	Project Financing & Funding Mechanisms		Project Delivery Method ²	Contract Stipulations	Federal and State Legal Authority		Factors and Variables That Changed or Influenced the Project
			Type(s) of Public Funding	Type(s) of Private Funding			Relevant Law(s) that Enabled the Contract	Legislative Change(s) Related to or Caused by the Project	
<p>Central Texas Turnpike System (SH 130, SH 45, Lp 1)</p> <p>County: Travis, Williamson</p> <p>Summary: Toll facility minimum of two tolled lanes in each direction; ultimate will be 3 tolled mainlanes in each direction</p>	Complete	<p>TxDOT</p> <p>TxDOT (toll collection)</p>	<p>Bonds: \$2.3 B, TIFIA: \$16 M, TxDOT: \$700 M, TIFIA inclusion: \$532 M, Interest: \$163 M</p> <p>(Post financial close refinancing of bond debt using \$600 M in TIFIA funds is not reflected in the funds)</p>	n/a	SH 130 - D-B SH 45N - D-B-B Lp 1 - D-B-B	<p>SH 130- TxDOT had the option to enter into a maximum 10-year capital maintenance agreements with Developer upon completion of Developer maintenance period is in progress and will expire at the end of August 2010.</p>	<p>Transportation Code Chapter 361, State Highway Turnpike Projects</p> <p>Transportation Code Chapter 362, Turnpikes and Toll Projects</p> <p>43 Texas Administrative Code § 54.1</p>	<p>The SH 45 and Loop 1 portions of the project included higher risk property acquisition, utility relocation and local street connections, so TxDOT used the D-B-B delivery method to complete design and construction. TxDOT was able to package the 49 miles of toll road into a single contract, which allowed a faster and coordinated delivery of the relatively less complicated portion of the system.</p>	
<p>DFW Connector</p> <p>County: Tarrant</p> <p>Summary: Combination of new main lanes, frontage road lanes and managed lanes, which will feature dynamic pricing to keep traffic moving at 50 mph. At the widest point the corridor will be 24 lanes wide. Ultimate project will be 14 mi. - currently unfunded.</p>	<p>Under Construction</p> <p>Expected completion 2014</p>	<p>TxDOT</p> <p>NITA (toll collection office and payment processing)</p>	<p>TxDOT: \$627 M Prop. 44: \$107 M</p>	n/a	D-B	<p>TxDOT has the option to enter into a maximum of three, five-year capital maintenance agreements with Developer upon construction completion.</p> <p>- 22 deferred work components worth \$53 million. TxDOT can choose whether any or all of the items can be constructed at any time before substantial completion.</p> <p>- The Developer's price for constructing the ultimate configuration is included in the CMAA. TxDOT has the option of adding this additional \$647 million (including the deferred work items mentioned above) during the term of the agreement.</p>	<p>Transportation Code Chapter 223, Bids and Contracts for Highway Projects</p> <p>43 Texas Administrative Code § 27.1.9 Toll Projects - Comprehensive Development Agreements</p>	<p>- ARRA funding helped close funding gap</p>	

House Transportation Committee
Subcommittee on Toll Road Policies and Procedures
Texas Toll Road Information

Toll Projects	Current Status	Responsible Agency ¹	Project Financing & Funding Mechanisms		Project Delivery Method ²	Contract Stipulations	Federal and State Legal Authority		Factors and Variables That Changed or Influenced the Project
			Type(s) of Public Funding	Type(s) of Private Funding			Relevant Law(s) that Enabled the Contract	Legislative Change(s) Related to or Caused by the Project	
<p>I-635 (LBI)</p> <p>County: Dallas</p> <p>Summary: Reconstruction of four miles, reconstruction and new construction of two miles, and continuous frontage roads in each direction; new construction of three managed toll lanes in each direction that will use dynamic pricing to keep traffic moving at 50 mph.</p>	<p>Financial close anticipated early Summer 2010</p> <p>Construction to begin early 2011</p> <p>Directed completion 2016</p>	<p>TxDOT</p> <p>NITRA (toll collection office and toll collection)</p>	<p>TxDOT: \$445 M</p>	<p>Private equity: \$598 M</p> <p>Private debt: \$800 M</p> <p>TREAS: \$800 M</p> <p>Senior term debt: \$400 M</p> <p>(values will be finalized at financial close, which is anticipated by early Summer 2010)</p>	<p>Concession (D-B-F-C-M)</p>	<p>- 52 year concession term from CDA execution</p> <p>- TxDOT can build any facilities in long range transportation plans and programs. Compensation to Developer (if any) is limited to net loss in toll revenues, offset by any positive impacts of other competing facilities. Developer has no right to prohibit construction or operation of any competing facilities.</p> <p>- Revenue sharing potential from Developer to TxDOT.</p> <p>- TxDOT receives 75% of refinancing gains from TIFIA or PABX; 50% of other refinancing gains</p> <p>- TxDOT has the right to buyback or terminate for convenience</p> <p>- Toll rates set according to NCTCOG regional toll policy</p> <p>- Estimated \$500 M in O&M costs (in 2008 dollars) to be borne by Developer during concession period</p>	<p>Transportation Code Chapter 223. Bids and Contracts for Highway Projects</p> <p>43 Texas Administrative Code § 27.1-10 Toll Projects - Comprehensive Development Agreements</p>		
The Dallas-Fort Worth Expressway 3D		NITRA							
SH 183-C/Grand Parkway		NITRA							
SH 121 Tollway		NITRA							
The Sam Houston Tollway		HCTRA							
Westpark Tollway		HCTRA / FICTRA							
US 281		ARMA							
SH 99/The Grand Parkway		HCTRA/other relevant toll authority							
US 183-A Turnpike		CTRMA							

NOTES

1. For Responsible Agency, the following abbreviations are used: Texas Department of Transportation (TxDOT), North Texas Tollway Authority (NTTA), Harris County Toll Road Authority (HCTRA), Alamo Regional Mobility Authority (ARMA), Camino Real Regional Mobility Authority (CRMA) and Central Texas Regional Mobility Authority (CTRMA)

2. For Project Delivery Method, the following abbreviations are used: Design-Build (D-B), Design-Build-Finance-Operate-Maintain (D-B-F-O-M)

Summary of Tolling Statutes in the Texas Transportation Code

Texas statutes regulating the tolling of public highways and the financing, construction, operation, and maintenance of toll projects are spread throughout the Transportation Code. Please see below for a summary of the statutory provisions impacting toll projects. Where only part of a chapter regulates toll projects, the applicable subchapter or sections are listed.

Title 5 – Railroads

- Chapter 91 – Rail Facilities
 - Section 91.054 – Comprehensive Development Agreements

Title 6 - Roadways

- Chapter 201 – General Provisions and Administration
 - Section 201.001 - Definitions
 - Section 201.113 – Agreements with Regional Tollway Authorities
 - Section 201.616 – Annual Report to Legislature
 - Section 201.707 – Agreements for Service on Regional Tollway Authority Projects
 - Section 201.907 – Contract for Enforcement
 - Section 201.943 – Authority to Issue Obligations; Purposes; Limitations

- Chapter 203 – Modernization of State Highways; Controlled Access Highways
 - Section 203.052 – Commission Determination Required
 - Section 203.0521 – Acquisition of Remainder
 - Section 203.066 – Declaration of Taking for Toll Project
 - Section 203.067 – Possession of Property for Toll Project
 - Section 203.068 – Right of Entry for Toll Project
 - Section 203.092 – Reimbursement for Relocation of Utility Facilities
 - Section 203.0922 – Prepayment Funding Agreement for Relocation of Utility Facilities

- Chapter 222 – Funding and Federal Aid
 - Subchapter A – General Provisions
 - Section 222.032 – Use of Federal Aid for Toll Bridge Construction
 - Section 222.033 – Interstate Toll Bridges
 - Subchapter E – Toll Facilities

- Chapter 223 – Bids and Contracts for Highway Projects
 - Subchapter E – Comprehensive Development Agreements

- Chapter 227 – Trans Texas Corridor

- Chapter 228 – State Highway Toll Projects

- Chapter 282 – Toll Underpass or Tunnel in Certain Counties

- Chapter 283 – Causeways, Bridges, and Tunnels in Certain Counties

Summary of Tolling Statutes in the Texas Transportation Code

Chapter 284 – Causeways, Bridges, Tunnels, Turnpikes, Ferries, and Highways in Certain Counties

Chapter 341 – Private Causeways

Chapter 342 – Ferries and Certain Toll Bridges

Chapter 362 – Turnpikes and Toll Projects

Chapter 363 – County Toll Bridges

Chapter 364 – Toll Bridges in Counties Bordering the Rio Grande

Chapter 365 – Road District Toll Roads

Chapter 366 – Regional Tollway Authorities

Chapter 367 – Municipal Toll Bridges over Rio Grande

Chapter 370 – Regional Mobility Authorities

Chapter 371 – Comprehensive Development Agreements for Highway Toll Projects

Chapter 372 – Provisions Applicable to more than one Type of Toll Project

Chapter 395 – Outdoor Signs and Motorist Information Panels on Toll Roads in Certain Counties

Chapter 431 – Texas Transportation Corporation Act
Section 431.073 – Project in County of 500,000 or more or Adjacent County
Section 431.106 – Public Safety Rules

Chapter 451 – Metropolitan Rapid Transit Authorities
Subchapter O – Advanced Transportation District

Chapter 472 – Miscellaneous Provisions
Section 472.003 – County Payments for Joint Highway Project

Chapter 680 – Miscellaneous Provisions
Subchapter B – Tolls for Motorcycle

Texas Department of Transportation Project Delivery Methods

Delivery Method	Advantages	Disadvantages
<p>Design-Bid-Build</p> <p>Owner designs (or contracts for the design of) the project. Construction bids are solicited from final plans. Construction contract awarded to lowest-priced initial qualified bid</p>	<ul style="list-style-type: none"> • Suitable for all project types • All design is completed and coordinated before any construction begins • More accurate project costs can be determined, as plans are completed prior to the start of any construction • Process is attractive to all contractors (large and small) 	<ul style="list-style-type: none"> • Award is based solely on lowest initial bid price • Owner assumes risk for completeness and accuracy of design • Owner assumes risk for quality control
<p>Design/Build</p> <p>Owner contracts with a single entity for the design and construction of a project. The design-builder may also provide maintenance services on the project for an extended time (up to 15 years)</p>	<ul style="list-style-type: none"> • Single developer entity at risk for design and construction, providing greater efficiency • Contract is usually a fixed-price, so cost control and budget are responsibility of the design-builder • Quality control is responsibility of the design-builder • Opportunity for innovation by design-builder • Quicker delivery time (combining design and construction timeframes) • Extended maintenance agreements possible • Environmental clearance activities can be on-going during procurement 	<ul style="list-style-type: none"> • Not applicable to all projects. Particularly smaller projects do not benefit from combined activities • Not as familiar a delivery method to owner, design firms, or contractors
<p>Concession</p> <p>Owner contracts with a developer who is responsible for the design, construction, finance, operation, and maintenance of a project for up to 52 years.</p>	<ul style="list-style-type: none"> • Reduces (or eliminates) public subsidy on projects • Developer assumes risk for cost, schedule, traffic and revenue, financing, and quality control/assurance • Allows for greater innovation • Environmental clearance activities can be on-going during procurement • Opportunity for revenue sharing with Owner 	<ul style="list-style-type: none"> • Not applicable to all projects • Requires greater effort to develop an agreement that appropriately addresses potential future risks • Not as familiar a delivery method to owner, design firms, or contractors
<p>Pre-Development Agreement</p> <p>Owner contracts with a private developer to plan future facilities jointly with the owner.</p>	<ul style="list-style-type: none"> • Partnership between Owner and Developer allows for private industry perspective in selecting projects for development • Owner retains approval right of projects developed 	<ul style="list-style-type: none"> • Requires effort to develop an agreement that appropriately addresses potential future risks • Not as familiar a delivery method to owner, design firms, or contractors • Initial planning work may not lead to facility development

June 2010

**List of TOLL ROADS &
TOLL BRIDGES in TEXAS**

STATEWIDE TOLL AUTHORITIES:

1. Texas Turnpike Authority Division of TxDOT

Facilities currently operated by TxDOT:

- CTTS (Central Tx Turnpike System – LP 1 N, SH 45 N, SH 130 Seg 1-4)
- SH 45 Southeast - Austin
- Camino Columbia - Laredo
- Lp 49 - Tyler

Facilities currently under construction to be operated by TxDOT or by private contract to TxDOT

- SH 130 Seg 5&6
- DFW Connector (managed lanes)
- North Tarrant Express (I820 / SH 183 managed lanes)
- I-635 / LBJ Freeway (managed lanes)

REGIONAL MOBILITY AUTHORITIES (Transportation Code, Chapter 370):

1. Alamo RMA
2. Cameron County RMA
3. Camino Real RMA
4. Central Texas RMA
5. Grayson County RMA
6. Hidalgo County RMA
7. Northeast Texas RMA
8. Sulphur River RMA

Facilities currently operated by Regional Mobility Authorities:

- 183A (Central Texas RMA)

Facilities currently under construction to be operated by RMAs

- Spur 550 / 511 (Cameron Co RMA); (construction by TxDOT and CCRMA)
- Lp 49 Extension (Northeast Texas RMA)
- US 290 East & US 290/US 183 Interchange (Central Texas RMA)
- 183A Extension (Central Texas RMA)

REGIONAL TOLL AUTHORITIES (Transportation Code, Chapter 366):

1. North Texas Tollway Authority

Facilities currently operated by North Texas Tollway Authority:

- Sam Rayburn Tollway / SH 121
- Dallas North Tollway
- President George Bush Turnpike
- SH 161
- Lewisville Lake Bridge
- Mountain Creek Lake Toll Bridge
- Addison Airport Toll Tunnel

COUNTY TOLL AUTHORITIES (Transportation Code, Chapter 284):

1. Harris County Toll Road Authority (HCTRA)
2. Brazoria County Toll Road Authority (BCTRA)
3. Chambers County Toll Road Authority (ChCTRA)
4. Collin County Toll Road Authority (CoCTRA)
5. Ft Bend County Toll Road Authority (FBCTRA)
6. Liberty County Toll Road Authority (LCTRA)
7. Montgomery County Toll Road Authority (MCTRA)
8. Waller County Transportation Authority (WCTA)

Facilities currently operated by County Toll Authorities:

- Katy (I-10) Managed Lanes (HCTRA)
- Sam Houston Tollway (HCTRA)
- Westpark Tollway (HCTRA)
- Hardy Toll Road (HCTRA)
- Sam Houston Tollway Ship Channel Bridge (HCTRA)
- Fort Bend Parkway Toll Road (FBCTRA)
- Westpark Tollway (FBCTRA)

FERRIES AND CERTAIN TOLL BRIDGES (Transportation Code, Chapter 342):

Los Ebanos Ferry (Privately owned)

COUNTY TOLL BRIDGES (Transportation Code, Chapter 363):

No bridges operating under this chapter.

TOLL BRIDGES IN COUNTIES BORDERING THE RIO GRANDE

(Transportation Code, Chapter 364):

1. Cameron County (3 bridges, one in joint ownership with City of Brownsville: Gateway, Free Trade, and Veteran's International bridges)
2. Starr County (2 Bridges, one in joint ownership with Camargo Bridge Company: Roma – Ciudad Migel Aleman, Rio Grande City – Camargo bridges)

ROAD DISTRICTS (Transportation Code, Chapter 365):

1. Galveston County Road District #1 (1 bridge: San Louis – Vacek Pass Bridge)

MUNICIPAL TOLL BRIDGES OVER THE RIO GRANDE (Transportation Code, Chapter 367):

1. City of Pharr (1 bridge: Pharr – Reynosa Bridge)
2. City of McAllen (1 bridge: McAllen – Hidalgo – Reynosa bridge)
3. City of Laredo (4 bridges: Juarez-Lincoln, Gateway to the Americas International, Colombia-Solidarity, and World Trade bridges)
4. City of Eagle Pass (2 bridges: Camino Real and Piedras Negras bridges)
5. City of Del Rio (1 bridge: Del Rio – Ciudad Acuna bridge)
6. City of El Paso (3 bridges: Ysleta-Zaragosa, Good Neighbor, Paso del Norte bridges)

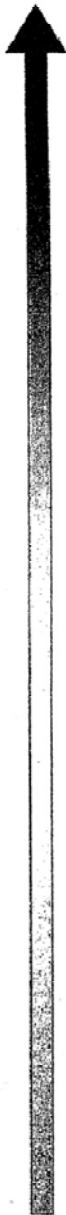
NOTE: there are three private toll bridges in operation that are not addressed by state statutes:

1. B&M Bridge - Brownsville, TX (1908 Federal statute)
2. B&P Bridge - Progreso, TX (1928 Federal statute)
3. Presidio – Ojinaga International Bridge (Tolling of northbound traffic only)

Other International Border bridges:

1. Progreso – Nuevo Progreso International Bridge (Hidalgo County)
2. Anzalduas International Bridge (McAllen)
3. El Porvenir International Bridge (Fort Hancock)
4. Fabens–Caseta International Bridge (Tornillo)
5. Lake Amistad Dam International Crossing

	DESIGN BUILD BUILD	DESIGN BUILD OPERATE MAINTAIN	DESIGN BUILD FINANCE	DESIGN BUILD MAINTAIN FINANCE	SHADOW TOLL	AVAILABILITY PAYMENT	AVAILABILITY PAYMENT	ASSET LEASE	ASSET LEASE	ASSET SALE	DESIGN BUILD OPERATE MAINTAIN FINANCE
SOURCE OF FUNDS: NON-TOLL PROJECT	■ Traditional	■ Traditional	■ Traditional	■ Traditional	■ Traditional	■ Traditional	■ Traditional	■ Traditional	■ Traditional	■ Traditional	■ Traditional
SOURCE OF FUNDS: TOLL PROJECT	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk	N/A	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk	■ Traditional ■ Revenue Backed - Low Risk
PROJECT TYPE	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield
REVENUE RISK	Public	Public	Public	Public	Public	Public	Public	Public	Public	Public	Public



Increasing Risk

Collaborative Projects

TxDOT & The Central Texas Regional Mobility Authority

Since the inception of the Central Texas Regional Mobility Authority (CTRMA) in 2002, TxDOT has assiduously pursued a strong partnership with the authority. Beginning in 2006 with the opening of the extension of Loop 1, the CTRMA and TxDOT have worked together to create a network of inter-connective roadways to relieve congestion resulting from the massive growth in Central Texas. The Loop 1 Extension, SH 45 and SH 130, also known as the Central Texas Turnpike System, all provide enhanced connectivity and congestion relief in the north Austin area. The Loop 1 Extension was built to extend past the former endpoint of Loop 1 to connect to SH 45. This new system of roadways now provides an east/west connection for residents in Travis and Williamson counties and connects to IH 35 and SH 130. Additionally, SH 130 (Segments 1-4) is a 49-mile tollway located east of I 35 through Williamson and Travis counties, extending from IH 35 north of Georgetown to US 183 southeast of Austin. Segments 5 & 6 of SH 130 are a continuation of the northern segments of SH 130; upon completion, SH 130 will be a new 91-mile tollway intended to provide needed relief to the congested I 35 through Central Texas.

In 2005, construction began on the 183A toll road. The project, which extends through Cedar Park and Leander in northwest Williamson County, opened to traffic in March 2007. During its first year of operation, the road generated more than 55,000 toll transactions per day, double the 24,600 originally projected. As a result, the CTRMA is accelerating development of the northern extension of 183A. Overall, the 183A project has significantly improved travel times and reduced traffic on adjacent roadways including US 183.

Traffic on US 290 East between US 183 and SH 130 has increased more than 78 percent since 1990, and the resulting congestion is challenging the area's quality of life and economic prosperity. To address this challenge, the CTRMA is constructing the Manor Expressway. This project will triple the current capacity of US 290 East between US 183 and SH 130. It will be a 6.2-mile limited-access road, which will include three tolled lanes in each direction, and three non-tolled frontage lanes in each direction. The new Manor Expressway will be constructed in an expanded median of the existing US 290 East. The existing US 290 will be widened and improved and will remain non-tolled. Therefore, drivers preferring not to use the Manor Expressway will have the option of using these non-tolled frontage roads. Construction on the first section will begin in early 2010 and portions of the road could begin opening by late 2012. Once completed, the Manor Expressway will link up with other important roadways in the region, including US 183 and the new SH 130 toll road.

TxDOT & The Northeast Texas Regional Mobility Authority

The Northeast Texas RMA (NET RMA) was created in 2004 in order to enhance mobility in the Northeast Texas region. Since its creation, it has grown to include 12 counties. In 2006, the NET RMA agreed to partner with TxDOT to build key segments of Loop 49. Loop 49 is a proposed corridor in Northeast Texas that, when complete, will connect Lindale, Tyler, Longview and

Marshall, Texas, and will provide much needed connectivity with Interstate 20 and the US 59 corridors. The Loop 49 concept is comprised of three key pieces. The first is a 32 mile outer Loop around Tyler that has been in planning phases for over 30 years. Through traditional funding sources and local partnerships, TxDOT completed construction on seven miles of this segment that connects SH 155 and FM 756 on the south side of Tyler. After completion of this two-phase segment, funding constraints and declining gas tax revenues prevented further development of Loop 49 through traditional funding sources. The American Recovery and Reinvestment Act allowed TxDOT to begin construction on an additional 6.2 mile, \$38 million segment connecting SH 31 on the west side of Tyler to SH 155 on the southeast. In addition, the sale of Proposition 14 Bonds allowed TxDOT to start construction on a fourth segment that will connect FM 756, south of Tyler to SH 110 on the southeast. When these two projects are complete, TxDOT will have approximately 16 miles of Loop 49 in operation, connecting SH 31 to the west and SH 110 to the southeast around Tyler. These segments provide much needed congestion relief for US 69, which currently carries 44,000 cars a day north and south through Tyler. A portion of this segment of US 69 is among the Top 100 most congested roadways in the State. Loop 49 provides a much needed east-west corridor and, ultimately, connectivity with IH 20 alleviating congestion along US 69. The NET RMA recently selected a design-build team and is in the process of preparing a financial plan for the sale of bonds that will fund the final western leg of the Outer Loop connecting SH 31 and IH 20.

The second key component of the Loop 49 concept is the Lindale Relief Route. This approximate seven mile segment will connect US 69 on the north side of Lindale, TX west and south to IH 20. This segment will greatly reduce congestion through the city of Lindale by providing an alternate route from US 69 to IH 20. Currently, there are approximately 24,000 cars per day travelling US 69 through Lindale, TX. TxDOT is currently completing the final environmental coordination.

The final component is the Longview Outer Loop, more commonly referred to as the East Texas Hour Glass (ETHG). This project is still in the conceptual planning phase. Ultimately, this project will extend east from SH 110 to IH 20 at the Gregg County Line, then north and east around Longview to US 259, and easterly to US 59 above Marshall, TX. Corridor studies and environmental studies must be completed before the alignment of the proposed roadways can be accurately established.

Thanks to the alternative funding sources provided by the American Recovery and Reinvestment Act and Proposition 14 Bonds, TxDOT has been able to expedite the construction of Loop 49 and provide much needed connectivity and congestion relief through the city of Tyler. TxDOT will continue to work through the NET RMA and local partnerships to complete this project.

TxDOT & The North Texas Tolling Authority

The NTTA was created in 1997 in order to address the transportation demands in the Metroplex. The Authority's mature system of roadways serves to manage congestion and improve mobility for the residents in North Central Texas. With almost 80 centerline miles, the NTTA's system is a major infrastructure component in the North Texas region.

The Dallas North Tollway provides 32 miles of mobility for residents traveling from Dallas to the rapidly growing communities in both Collin and Denton counties. The President George Bush Turnpike is an east/west route that provides a link to the Central Expressway (US 75), the Dallas North Tollway, IH 35E, and LBJ Freeway (IH 635). It also serves as an alternate route to the Dallas-Ft Worth International Airport for residents along that corridor. The 26-mile long Sam Rayburn Tollway, formerly known as SH 121, is a collaborative effort between both NTTA and TxDOT. TxDOT began constructing the project that travels through cities in both Denton and Collin counties including Carrollton, Coppell, Frisco, McKinney and Plano; in 2008, NTTA assumed responsibility for operations, maintenance and construction of the Sam Rayburn Tollway for the next 50 years. Segments 4 and 5 are still under construction, and the total project should be complete by 2012. The Lewisville Lake Toll Bridge is a 1.7 mile tolled bridge that serves as an east/west connection in Denton County across Lewisville Lake. The bridge also connects IH 35 to the Dallas North Tollway.

The most recent collaborative effort between TxDOT and the NTTA is certainly one of which both partners can be proud. In March of 2010, the NTTA agreed to partner with TxDOT on a financing plan to fully develop the SH 161/Southwest Parkway and Chisholm Trail project. Knowing the regional significance of providing this additional capacity, TxDOT worked together with the region to put together a financing package that allows for the projects to be developed in the near term. This collaborative effort involves an approximately \$400 M Transportation Infrastructure Finance and Innovation Act (TIFIA) loan from the Federal Highway Administration; approximately \$330 M in funds advanced by the Regional Transportation Council (RTC); and, the issuance of bonds by the NTTA supported by the projects' toll revenues. TxDOT is supporting the development of the project by providing a toll equity loan to guarantee payment of eligible costs associated with the development, operation and construction of the SH 161 project. As the North Central Texas region continues to grow to the north, east and west of Dallas/Ft Worth, the NTTA continues to grow with it by providing many alternate routes to more effectively and efficiently transport the region's residents.

TxDOT & The Harris County Toll Road Authority

As the most populous county in Texas and one of the most populous in the United States, Harris County requires an extensive transportation infrastructure system to address its mobility needs. The Harris County Toll Road Authority (HCTRA) was created in 1983 to construct toll roads in the rapidly growing Harris County region. Since 1988 with the opening of its first project, the Hardy Toll Road, HCTRA has continued its efforts to keep up with the demands of the traveling public. TxDOT and HCTRA have enjoyed a long-standing, mutually beneficial and productive relationship for many years dating back to the inception of the Beltway 8/Sam Houston Tollway system development.

Following the Hardy Toll Road, HCTRA built an outer loop around the Houston area: the Sam Houston Tollway. TxDOT and HCTRA worked collaboratively in the development, implementation and construction of the Beltway 8/Sam Houston Tollway system infrastructure in use today. In particular, TxDOT and HCTRA made joint investment in constructing the roadway. HCTRA funded the construction of the main lanes, while TxDOT paid for the construction of the major interchanges where the Sam Houston Tollway crossed TxDOT existing facilities in various locations including: IH 45 North and South; I-10 East and West; and US 59

North and South. Additionally, both TxDOT and HCTRA worked together to innovatively enter into an agreement allowing for the exchange of assets (including infrastructure and monies) related to the transfer of ownership of the Beltway 8 Ship Channel Bridge, constructed by the Texas Turnpike Authority. The agreement and exchange ultimately allowed for an accelerated implementation of the Beltway 8 East and South system that significantly improved system connectivity. The Sam Houston Tollway provides connectivity to IH 45, IH 10 and US 59 and serves to move traffic around the city of Houston in a more efficient manner. The Westpark Tollway is a 19 mile route that serves the residents of west Houston and provides access to US 59, the Sam Houston Tollway and SH 6.

The Katy Managed Lanes project opened to traffic in April of 2009. As the first roadway of its kind in Texas, the Katy Managed Lanes project will provide a more flexible option for commuters traveling between SH 6 and IH 610 West by utilizing “dynamic pricing”. Dynamic pricing means that the toll rate changes based on variables such as the amount of traffic on the roadway and the time of day. The project is a collaborative effort between TxDOT, HCTRA, the Federal Highway Administration and Houston METRO. HCTRA partnered with TxDOT in order to leverage funding for the project so it could be built in less time and for less money to provide a much-needed option for commuters traveling the congested Katy Freeway; HCTRA is responsible for operating and maintaining this transportation asset.

Appendix C

Charge 6



TEXAS HOUSE OF REPRESENTATIVES
RUTH JONES McCLENDON
State Representative, District 120

COMMITTEES:

Rules and Resolutions - Chair
Appropriations
Transportation
Sunset Advisory Commission

November 24, 2010

TEXAS LEGISLATIVE ORGANIZATIONS:

Mexican American Legislative Caucus
Texas Legislative Sportsman's Caucus
Texas Tourism Caucus
Texas Legislative Black Caucus

The Honorable Joe C. Pickett
House Committee on Transportation
Capitol Extension, Room E1.308
Austin, Texas 78701

Dear Chairman Pickett,

Please consider these comments for preparing the report on the Speaker's Interim Charge we have been studying jointly with the House Committee on Agriculture, which was stated as follows: "Study the safety and efficiency of the existing agriculture-related transportation infrastructure. Consider the air, ground, and rail transportation needs of rural Texas and analyze the effect on economic development."

As you are probably aware, the Texas Rail Plan was adopted by the Transportation Commission on November 18th [see http://www.txdot.gov/public_involvement/rail_plan/trp.htm]. The Plan makes it undeniably clear that the agricultural industry in Texas depends substantially on heavy rail for the transport of commodities within Texas, and in interstate commerce.

For example, the Association of American Railroads (AAR) reported that Texas ranked second in 2008 in tons of coal and farm products terminated, indicating a strong demand from other states for coal and farm products. In the major railroad commodity groups terminating in Texas, the tonnage of coal and farm products transported **increased 32%** between 1991-2008, from 19,373,633 to 25,550,893 tons. Between 2002-2007, farm product transportation moving *through* Texas by rail increased from 6.77 million to 8.38 million tons. Out of 96.6 million tons of commodities originating in Texas, 5 million tons of farm products and 3.5 million tons of food products were moved by rail. The West Texas Region Freight Study of the Rail Plan projected that the overall freight rail tonnage for the West Texas Region will more than double by 2025, and the rail movement of agricultural products (including corn grain, ethanol plants, feed supplements, dairy industry, and cotton) show a projected increase of tonnage by **151 percent**.

This clearly illustrates that the statewide transportation plan must include systematic, substantial contributions to the Rail Relocation and Improvement Fund. Our foresight in meeting freight rail needs will be essential to the continued growth of the agricultural industry in Texas and to our role in interstate commerce.

Respectfully submitted,


Ruth Jones McClendon

cc: The Hon. Joe Straus, Speaker; Members, House Committee on Transportation; Members, House Committee on Agriculture and Livestock; Ms. Deirdre Delisi, Chair, Transportation Commission

District Office: 403 S. W.W. White, Suite 210 • San Antonio, Texas 78219 • (210) 225-2107 • Fax (210) 333-7700
Capitol Office: P.O. Box 2910 • Austin, Texas 78768-2910 • (512) 463-0708 • Fax (512) 463-7071
Email: ruth.mcclendon@house.state.tx.us • 1-800-618-2785



Endnotes

- ¹ Texas Department of Transportation, "Department Implementation of Sunset Advisory Commission Recommendations" September 2010, Page 4.
- ² Sunset Advisory Commission, "Staff Report, Texas Department of Transportation" June 2008, Page 1
- ³ Ibid.
- ⁴ Ibid., Page 2.
- ⁵ Ibid., Page 3.
- ⁶ Ibid., Page 4.
- ⁷ Texas Department of Transportation, "Department Implementation of Sunset Advisory Commission Recommendations" September 2010, Page 4.
- ⁸ Ibid.
- ⁹ Ibid., Page 5.
- ¹⁰ Ibid., Page 6.
- ¹¹ Ibid., Page 8.
- ¹² Ibid., Page 9.
- ¹³ Ibid., Page 10.
- ¹⁴ Ibid., Page 11.
- ¹⁵ Ibid., Page 12.
- ¹⁶ Ibid., Page 13.
- ¹⁷ Ibid., Page 14.
- ¹⁸ Ibid., Page 15.
- ¹⁹ Ibid., Page 16.
- ²⁰ Ibid., Page 17.
- ²¹ Ibid., Page 18.
- ²² Howard Wolf, TxDOT Restructure Council, written testimony provided for the House Committee on Transportation, 26 October 2010.
- ²³ Fikac, Peggy. "Perry, White say hiking gas tax not viable but differ on options." Houston Chronicle. 4 Oct. 2010. (<http://www.chron.com/disp/story.mpl/metropolitan/7231761.html>)
- ²⁴ "TxDOT Legislative Appropriations Request for Fiscal Years 2012 and 2103." As submitted to the Governor's Office of Budget, Planning and Policy and the Legislative Budget Board, November 1, 2010 (ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/gov/2011_lar.pdf)
- ²⁵ "TxDOT Legislative Appropriations Request for Fiscal Years 2012 and 2103." As submitted to the Governor's Office of Budget, Planning and Policy and the Legislative Budget Board, November 1, 2010 (ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/gov/2011_lar.pdf)
- ²⁶ "Highway Funding Primer." Texas Legislative Budget Board. (February 2009)
- ²⁷ North Texas Tollway Authority, "About the NTTA," (<http://www.ntta.dst.tx.us.html>)
- ²⁸ "State Boosts Tolls to Finance Highways." House Research Organization: Focus Report. Nov. 2004.
- ²⁹ "State Boosts Tolls to Finance Highways." House Research Organization: Focus Report. Nov. 2004.
- ³⁰ Texas Comptroller of Public Accounts. "Paving the Way: A Review of the Texas Department of Transportation." (<http://window.state.tx.us/txdot/txdot202.html>)
- ³¹ Written Testimony provided by John Barton, Assistant Executive Director of Engineering Operations, TxDOT, to the Texas Senate, Committee on Transportation and Homeland Security, October 13, 2010.
- ³² Texas Comptroller of Public Accounts. "Paving the Way: A Review of the Texas Department of Transportation." (<http://window.state.tx.us/txdot/txdot202.html>)
- ³³ Ibid.
- ³⁴ "State Boosts Tolls to Finance Highways." House Research Organization: Focus Report. Nov. 2004
- ³⁵ Ibid.
- ³⁶ Ibid.
- ³⁷ Ibid.
- ³⁸ Ibid.
- ³⁹ Ibid.
- ⁴⁰ Ibid.
- ⁴¹ Ibid.
- ⁴² Ibid.
- ⁴³ Ibid.
- ⁴⁴ Ibid.

-
- ⁴⁵ "Highway Funding in Texas: A Status Report." House Research Organization Focus Report. Feb. 2009
- ⁴⁶ "Major Issues of the 81st Legislature, Regular Session and First Called Special Session." House Research Organization Focus Report. (Sept. 2009)
- ⁴⁷ Am
- ⁴⁸ V.T.C.A., Transportation Code §361.101 authorizes the authority to construct, maintain, repair, and operate turnpike projects within the state as may be determined by the authority subject to approval as to location by the commission. Transportation Code §361.043 authorizes the authority to designate the location, and establish, limit, and control such points of ingress and egress, for each project as may be necessary and desirable in the judgment of the authority and the department to ensure the proper operation and maintenance of the project.
- ⁴⁹ Press Release can be found at www.JimDunnam.com
- ⁵⁰ Letter sent on behalf of Representative Jim Dunnam on April 19, 2010 to Mr. Amadeo Saenz, Jr., Executive Director, Texas Department of Transportation . Letter can be found in the appendix of this report.
- ⁵¹ Ibid.
- ⁵² National Transportation Operations Coalition, *National Traffic Signal Report Card Technical Report 2007*, Washington, DC: 2007, page 10.
- ⁵³ Ibid., page 8.
- ⁵⁴ US Department of Transportation, *Intelligent Transportation Systems for Traffic Signal Control*.
- ⁵⁵ Ibid.
- ⁵⁶ Srinivasa Sunkari, "The Benefits of Retiming Traffic Signals," *ITE Journal*, April 2004, page 28.
- ⁵⁷ US Department of Transportation, Federal Highway Administration, *Improving Traffic Signal Operations, A Primer*, 1995, page 5.
- ⁵⁸ Srinivasa Sunkari, "The Benefits of Retiming Traffic Signals," *ITE Journal*, April 2004, page 26.
- ⁵⁹ US Department of Transportation, *Intelligent Transportation Systems for Traffic Signal Control*, _____.
- ⁶⁰ Sources for data in the text box: Daniel Fambro, Carlos Lopez, and Srinivasa Sunkari, *Benefits of the Texas Traffic Light Synchronization(TLS) Grant Program I*, College Station, Texas: 1992, title page; and Daniel Fambro, Srinivas Sangineni, Carlos Lopez, Srinivasa Sunkari, and Ronald Barnes, *Benefits of the Texas Traffic Light Synchronization(TLS) Grant Program II*, College Station, Texas: 1995, title page.
- ⁶¹ Daniel Fambro, Carlos Lopez, and Srinivasa Sunkari, *Benefits of the Texas Traffic Light Synchronization(TLS) Grant Program I*, College Station, Texas: 1992, title page.
- ⁶² Daniel Fambro, Srinivas Sangineni, Carlos Lopez, Srinivasa Sunkari, and Ronald Barnes, *Benefits of the Texas Traffic Light Synchronization(TLS) Grant Program II*, College Station, Texas: 1995, title page.
- ⁶³ According to the GAO, in the late 1980's the FHWA eliminated the requirement that a cost-benefit evaluation be submitted for signal system projects receiving federal dollars because the studies were becoming redundant: the benefits always exceeded the costs. (See: GAO, page 5)
- ⁶⁴ Federal Highway Administration, *Improving Traffic Signal Operation, A Primer*, 1995, page 7.
- ⁶⁵ National Transportation Operations Coalition, *National Traffic Signal Report Card Technical Report 2007*, Washington, DC: 2007, page 16.
- ⁶⁶ Federal Highway Administration, *Improving Traffic Signal Operation, A Primer*, 1995, page 7.
- ⁶⁷ Data aggregated from: Daniel Fambro, Carlos Lopez, and Srinivasa Sunkari, *Benefits of the Texas Traffic Light Synchronization(TLS) Grant Program I*, College Station, Texas: 1992, title page; and Daniel Fambro, Srinivas Sangineni, Carlos Lopez, Srinivasa Sunkari, and Ronald Barnes, *Benefits of the Texas Traffic Light Synchronization(TLS) Grant Program II*, College Station, Texas: 1995, title page.
- ⁶⁸ National Transportation Operations Coalition, *National Traffic Signal Report Card Technical Report 2007*, Washington, DC: 2007, page 14.
- ⁶⁹ Ibid.
- ⁷⁰ US Energy Information Administration, Independent Statistics and Analysis, US Retail Gasoline Prices, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_home_page.html (accessed on 21 October 2010).
- ⁷¹ Oakland County, Michigan identified a 2.5 percent reduction of carbon monoxide, 3.5 percent reduction of nitrous oxide, and a 4.2 percent reduction of hydrocarbons in the first phase of its traffic light retiming program in 2002. Source: John Halkias and Michael Schauer, "Red Light, Green Light," *Public Roads*, November/December 2004, URL: www.tfrc.gov/pubrds/04nov/07.htm, accessed on 25 May 2010. The City of Alpharetta, Georgia's traffic signal retiming efforts yielded an emissions reduction of 16,118 fewer pounds of hydrocarbons, 4,464 fewer pounds of nitrous oxides, and 247,147 fewer pounds of carbon monoxide. Source: National Transportation Operations Coalition, *National Traffic Signal Report Card Technical Report 2007*, Washington, DC: 2007, page 15.
- ⁷² Ibid.

-
- ⁷³ Texas Department of Transportation, Cost of New Traffic Signal Installation, prepared for the Traffic Efficiency Subcommittee of the House Committee on Transportation, May 2010.
- ⁷⁴ National Transportation Operations Coalition, *National Traffic Signal Report Card Technical Report 2007*, Washington, DC: 2007, page 16.
- ⁷⁵ Srinivasa Sunkari, "The Benefits of Retiming Traffic Signals," *ITE Journal*, April 2004, page 28.
- ⁷⁶ Testimony of Gilmer Gaston, President, Texas District, Institute of Traffic Engineers, Traffic Efficiency Subcommittee, House Transportation Committee, 26 May 2010.
- ⁷⁷ E-mail from Christopher Poe, Assistant Agency Director, Texas Transportation Institute, to Jeremy Mazur, Chief of Staff, Office of Texas State Representative Bill Callegari, 27 May 2010.
- ⁷⁸ Joseph Hummer and Jonathan Reid, "Unconventional Left-Turn Alternatives for Urban and Suburban Arterials," *TRB Circular E-C019: Urban Street Symposium*, page E-3/2.
- ⁷⁹ *Ibid.*, page E-3/13.
- ⁸⁰ Joseph Hummer and Jonathan Reid, "Unconventional Left-Turn Alternatives for Urban and Suburban Arterials," *TRB Circular E-C019: Urban Street Symposium*, page E-3/3.
- ⁸¹ Dr. John Mounce, Texas Transportation Institute, written testimony provided for the House Committee on Transportation Subcommittee on Vulnerable Road User Safety, August 10, 2010.
- ⁸² TxDOT Update, "Safer Roads Contribute to Significant Drop in Highway Fatalities, August 31, 2010.
- ⁸³ Dr. John Mounce, Texas Transportation Institute, written testimony provided for the House Committee on Transportation Subcommittee on Vulnerable Road User Safety, August 10, 2010.
- ⁸⁴ David Casteel, Texas Department of Transportation, written testimony, August 10, 2010.
- ⁸⁵ *Ibid.*
- ⁸⁶ *Ibid.*
- ⁸⁷ *Ibid.*
- ⁸⁸ Dr. John Mounce, Texas Transportation Institute, written testimony, August 10, 2010.
- ⁸⁹ *Ibid.*
- ⁹⁰ David Casteel, Texas Department of Transportation, written testimony, August 10, 2010.
- ⁹¹ Dr. John Mounce, Texas Transportation Institute, written testimony, August 10, 2010.
- ⁹² David Casteel, Texas Department of Transportation, written testimony, August 10, 2010.
- ⁹³ *Ibid.*
- ⁹⁴ *Ibid.*
- ⁹⁵ Dr. John Mounce, Texas Transportation Institute, written testimony, August 10, 2010.
- ⁹⁶ David Casteel, Texas Department of Transportation, written testimony, August 10, 2010.
- ⁹⁷ Jon Boyd, Citizens' Transportation Coalition, written testimony, August 10, 2010.
- ⁹⁸ Bill Analysis, CSHB 827, 81R.
- ⁹⁹ Joann Messina, Southwest Tow Operators, written testimony, August 10, 2010.
- ¹⁰⁰ Dr. John Mounce, Texas Transportation Institute, written testimony, August 10, 2010.
- ¹⁰¹ Letter written by Representative Ruth Jones McClendon, November 24, 2010 .
- ¹⁰² Written testimony submitted by Mr. Jim Allison, General Counsel of the County Judges and Commissioners Association of Texas, to the House of Representatives Committee on Transportation on April 28, 2010.
- ¹⁰³ Written Testimony submitted by Mr. Amadeo Saenz, Executive Director, TxDOT, to the House of Representatives Committee on Transportation on April 28, 2010.
- ¹⁰⁴ "Developing Measures of Effectiveness for Truck Weight Enforcement Activities," National Transportation Research Board, March 1998.