

The Senate Transportation Committee

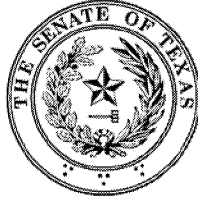


Interim Report to the 83rd Legislature

February 2013

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February 2013

The Honorable David Dewhurst
Lieutenant Governor
State of Texas
Capitol Building, Room 2E.13
Austin, Texas 78701

Dear Governor Dewhurst:

The Senate Transportation Committee of the Eighty-Second Legislature hereby submits its interim report for consideration by the Eighty-Third Legislature. The report does not address charges related to homeland security, as those matters are now under the jurisdiction of the Senate Committee on Agriculture, Rural Affairs and Homeland Security. We thank you for providing us the opportunity to address these important issues.

Respectfully submitted,

Handwritten signature of Robert Nichols in black ink.

Senator Robert Nichols, Chair

Handwritten signature of Kirk Watson in black ink.

Senator Kirk Watson, Vice Chair

Handwritten signature of Wendy Davis in black ink.

Senator Wendy Davis

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Senator Juan "Chuy" Hinojosa

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Senator Tommy Williams

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Interim Charges

1. Examine the anticipated impacts of the Panama Canal expansion on Texas' cargo and shipping industry, intermodal facilities, roadways, and ports. Examine the implementation of the Houston Ship Channel Security District and determine if additional security districts are needed for other ports.
2. Study current state statutes and agency rules regulating oversized and overweight vehicles. Evaluate the public safety benefit of enforcing these regulations and effectiveness in preventing roadway damage, including the cost of repair and maintenance to infrastructure associated with overweight vehicles. Provide recommendations that balance economic productivity, public safety, and protection and maintenance of roadways. Provide recommendations on the need for additional weights and measures training for law enforcement in this state.
3. Study the potential for toll collection and enforcement tools to pursue toll scofflaws for Texas Department of Transportation (TxDOT) and local toll project entities.
4. Examine the need for additional natural gas fueling infrastructure to efficiently utilize Texas' vast domestic reserves of natural gas. Also, examine the future requirements for public and private electric vehicle charging stations and the impact of the increased usage of alternative-fueled vehicles. Include geographic balance in the evaluation of alternative-fuel infrastructure. Assess the impact that increasing numbers of electric vehicles will have on the state's electric grid.
5. Monitor the implementation of legislation addressed by the Senate Committee on Transportation & Homeland Security, 82nd Legislature, Regular and Called Sessions, and make recommendations for any legislation needed to improve, enhance, and/or complete implementation. Specifically, monitor the following:
 - Implementation of the Sunset Advisory Commission recommendations, statutory changes specified in TxDOT's sunset legislation and TxDOT's modernization efforts, including the use of public and private engineering services and the implementation and use of business performance measures;
 - Implementation of Proposition 12 funding provided by the fiscal year 2012-2013 Appropriations Act, including an assessment of the impact of this funding on the state's Top 50 list of congested roadway segments and the funding needed to advance each region's priorities in fiscal year 2014-2015.

Senate Committee on Transportation Interim Hearings

December 18, 2012, Room E1.016

The Committee received invited testimony on Charge Nos. 1 through 5.

The audio/video recordings, minutes, and witness list for the above referenced hearing may be found online at: http://www.senate.state.tx.us/75r/senate/commit/c640/c640_82.htm

*Senate Committee on Transportation
Interim Report to the 83rd Legislature
Interim Hearings*

Panama Canal Expansion and Security Districts

Examine the anticipated impacts of the Panama Canal expansion on Texas' cargo and shipping industry, intermodal facilities, roadways, and ports. Examine the implementation of the Houston Ship Channel Security District and determine if additional security districts are needed for other ports.

BACKGROUND

Panama Canal Expansion

The Panama Canal is undergoing an expansion which will add new locks and deeper channels that can accommodate larger and wider vessels, such as liquefied natural gas tankers, than the current infrastructure allows.¹ It will also add a third lane to reduce congestion, resulting in more reliable and faster transit.² Work is currently scheduled for completion in 2014 or early 2015.³ This expansion, in conjunction with Texas' projected population growth, energy sector developments, and emerging international trade partners, is expected to create more ship traffic for the state's ports.⁴

Annually, Texas ports create almost 1.4 million jobs and generate over \$82 billion in personal income.⁵ In 2011, the maritime cargo activity in Texas generated roughly \$277 billion in total economic activity.⁶ While the actual effects of the expansion will not be known for several years, it is expected to increase both the amount of imports and exports shipped through Texas ports.⁷ As the nation's leading goods exporter, Texas is well situated to capitalize on the opportunities the expansion presents to increase exports such as agricultural goods, coal, manufactured goods, chemicals and petrochemicals, military cargo, paper products, and consumer goods.⁸ The emerging LNG export market is another major opportunity.⁹

The Texas Department of Transportation (TxDOT) formed the Panama Canal Stakeholder Working Group (PCSWG) in early 2012 and sponsored a study conducted by the Texas A&M Transportation Institute (TTI) to examine the anticipated impacts on Texas' cargo and shipping industry, intermodal facilities, roadways, and ports. The PCSWG was charged with examining short-, mid-, and long-range transportation improvements that will better position Texas to take advantage of the expansion and enhance the state's role in global trade.¹⁰ The working group presented their Final Report to the Transportation Commission on December 13, 2012.

Houston Ship Channel Security District

In 2007, Governor Rick Perry signed into law House Bill 3011 of the 80th Texas Legislature allowing the creation of the Houston Ship Channel Security District (HSCSD).¹¹ It is essentially

¹ Katherine F. Turnbull, *Final Report From the Panama Canal Stakeholder Working Group* at ix (Nov. 2012).

² *Id.*

³ *Id.*

⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Phil Wilson, Texas Department of Transportation).

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ Tex. H.B. 3011, 80th Leg., R.S. (2007).

a public-private partnership of the major facilities that comprise the port terminals and industry in the Houston Ship Channel area, along with the Port of Houston Authority and Harris County. The district governs security initiatives within the Houston Ship Channel area by leveraging funds collected from its members to secure federal grants.

FINDINGS

Impacts of the Expansion on Landside Infrastructure

The PCSWG concluded that in the short and mid-term, Texas' landside transportation infrastructure is adequate to the task of accommodating the potential increase in freight traffic associated with the expansion.¹² Texas is well situated and no major bottlenecks are expected.¹³ Rather, it is believed that at least initially growth in freight will be modest and slow.¹⁴

In the long-term, TxDOT and other transportation planners must increase their focus on, and investments in, freight transportation infrastructure.¹⁵ The latest federal surface transportation authorization legislation, Moving Ahead for Progress in the 21st Century (MAP-21), encourages and provides incentives for TxDOT to formally address freight planning by developing a state freight plan and establishing a freight advisory committee. As such, TxDOT has recently hired a new Statewide Freight Planning Coordinator in order to increase their focus on freight transportation infrastructure.¹⁶

Ports

While it is still unknown what effect the Panama Canal expansion will ultimately have, it is clear that there will be bigger ships calling on Texas' ports.¹⁷ The maximum ship size for the Panama Canal will increase from 5,000 20 foot equivalent units (TEUs) to 13,000 TEUs, nearly tripling the amount of cargo they can carry.¹⁸ As such, the PCSWG found that Texas ports must maintain and improve their infrastructure, including channels, harbors, turning basins, terminals, and landside access, in order to remain economically competitive.¹⁹ Specifically, ports must ensure they are deep and wide enough to accommodate the larger ships. Some ports, such as the Port of Houston, have already begun upgrading their facilities, equipment, and shipping channel to efficiently handle the post-expansion ships.²⁰

In addition to the expansion, it is anticipated that the amount of freight moving through Texas ports will increase in the long-term due to factors such as increased oil production and population.²¹ Therefore, Texas should continue to invest in freight transportation infrastructure

¹² Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Phil Wilson, Texas Department of Transportation).

¹³ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Katherine Turnbull, Texas A&M Transportation Institute).

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Phil Wilson, Texas Department of Transportation).

¹⁷ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Colonel Leonard Waterworth, Port of Houston Authority).

¹⁸ Katherine F. Turnbull, *Final Report From the Panama Canal Stakeholder Working Group*, at 7 (Nov. 2012).

¹⁹ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Phil Wilson, Texas Department of Transportation).

²⁰ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Colonel Leonard Waterworth, Port of Houston Authority).

²¹ *Id.*

to not only avoid bottlenecks, but to also increase the tax base and opportunities for Texans by growing commerce.²²

To support the development of the state's ports, the PCSWG suggested that TxDOT create a Maritime Division in order to increase the visibility of port and maritime interests at the state level.²³ In response, TxDOT has created and filled a new Maritime Director position.²⁴

The PCSWG also recommended that the state expand on the Texas Wide Open for Business initiative developed by the Office of the Governor by implementing a "Texas Global Gateway" marketing and information program to promote Texas ports with shippers, carriers, and other international clientele.²⁵ This concept would provide a comprehensive source of information on all the state's transportation modes for use in promoting Texas with shippers, carriers, and other international clientele.²⁶ The first step would be identifying the funding levels required for such a program.²⁷

Highway Infrastructure

TxDOT has been working on port-related issues for many years.²⁸ As such, they already have numerous highway infrastructure projects in different stages of planning, design, and construction.²⁹ The PCSWG found that many of these projects, such as IH-69, are important and should be pursued.³⁰ A full list of these projects can be located in the report on pages 50 through 52.

Rail

The PCSWG report states, "The rail network in Texas is critical to the port system."³¹ The rail industry is confident that they can meet any increased demand with the current rail infrastructure and planned improvements.³² They are actively working with state agencies, ports, and other freight-related entities on logistical issues and they do not anticipate any bottlenecks in the rail system.³³

Gulf Intracoastal Waterway

The Gulf Intracoastal Waterway (GIWW), a part of the nation's Inland Maritime Transportation System, spans over 1,000 miles from Brownsville, Texas, to St. Markso, Florida.³⁴ It connects Texas ports and links them with ports along the Gulf Coast. In 2010, approximately 73 million tons of cargo was transported on the GIWW.³⁵ The PCSWG described the GIWW as "the sleeping giant" in Texas freight movement and a key element of the freight-waterway system.³⁶

²² *Id.*

²³ Katherine F. Turnbull, *Final Report From the Panama Canal Stakeholder Working Group* at xi (Nov. 2012).

²⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Phil Wilson, Texas Department of Transportation).

²⁵ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Katherine Turnbull, Texas A&M Transportation Institute).

²⁶ Katherine F. Turnbull, *Final Report From the Panama Canal Stakeholder Working Group* at xii (Nov. 2012).

²⁷ *Id.* at 48.

²⁸ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Phil Wilson, Texas Department of Transportation).

²⁹ Katherine F. Turnbull, *Final Report From the Panama Canal Stakeholder Working Group* at 9 (Nov. 2012).

³⁰ *Id.*

³¹ *Id.* at 43.

³² Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Dennis Kearns, Texas Railroad Association).

³³ *Id.*

³⁴ Katherine F. Turnbull, *Final Report From the Panama Canal Stakeholder Working Group* at 41 (Nov. 2012).

³⁵ *Id.*

³⁶ *Id.* at 43.

They concluded that increased use could help avoid overburdening the surface transportation system.³⁷

Houston Ship Channel Security District

The HSCSD raises funding for security initiatives through assessments of its facilities³⁸. This industry support provides the matching funds necessary to secure federal grants. The district does not receive any funding from the state.³⁹ In cooperation with local authorities and law enforcement, the district has used the grants to establish and fund land, water, air and virtual patrols of the Houston Ship Channel area.⁴⁰ They have purchased security items such as cameras, bomb robots, and sensors.⁴¹ The district has also funded four patrol boats for the Harris County Sheriff's Office (HCSO), including a new thirty-six foot SAFE boat.⁴² The HCSO in turn uses these boats to improve the presence of law enforcement on the ship channel.⁴³ The district also provides funding to the City of Houston Police Department for helicopter fuel, allowing the department to utilize helicopters that would otherwise sit dormant due to lack of funds.⁴⁴ Meanwhile, the HSCSD continues to plan for the future. With the aid of a \$1 million federal grant, the district is working to update the Houston-Galveston Port-wide Risk Mitigation and Business Continuity Plan.⁴⁵

RECOMMENDATIONS

Landside Infrastructure

While the current infrastructure and planned improvements should adequately accommodate the expected increase in freight traffic, the traffic should be monitored in order to provide data for transportation planning. This data should focus on the method of transportation - roads or rail - being used to move the goods inland, and the volume and nature of the goods being imported and exported. Consideration should also be given to the number and type of ships using Texas ports that could not have prior to the expansion. Should the data reveal that there is a significant increase of freight volume on the state's roads or rail, additional studies may be required to determine if enhanced infrastructure improvements will be needed.

Texas should follow the PCSWG's recommendations to continue investments in major corridors and freight transportation infrastructure. In order to take advantage of federal funds, TxDOT should continue their efforts to address freight planning by developing a state freight plan and establishing a freight advisory committee.

Likewise, the rail industry should continue with the improvements that have already been identified in previous studies and plans. While these improvements are not specifically linked to

³⁷ *Id.*

³⁸ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Robin Riley, Houston Ship Channel Security District).

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Robin Riley, Houston Ship Channel Security District).

⁴³ *Id.*

⁴⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Robin Riley, Houston Ship Channel Security District).

⁴⁵ *Id.*

the Panama Canal expansion, the completion of these projects will assist in meeting future opportunities associated with the expansion.⁴⁶

Additional Security Districts

The HSCSD would support efforts to create additional security districts, as they feel other counties could benefit from the capabilities they possess to fund security initiatives.⁴⁷ While the HSCSD has been successful, no determination can be made as to whether or not other ports need a security district due to the unique nature of each port. It is recommended that other ports considering the creation of their own security district study the HSCSD before reaching a conclusion.

⁴⁶ Katherine F. Turnbull, *Final Report From the Panama Canal Stakeholder Working Group* at 44 (Nov. 2012).

⁴⁷ *Id.*

Oversize and Overweight Vehicles

Study current state statutes and agency rules regulating oversize and overweight vehicles. Evaluate the public safety benefit of enforcing these regulations and effectiveness in preventing roadway damage, including the cost of repair and maintenance to infrastructure associated with overweight vehicles. Provide recommendations that balance economic productivity, public safety, and protection and maintenance of roadways. Provide recommendations on the need for additional weights and measures training for law enforcement in this state.

BACKGROUND

The trucking industry is central to the modern U.S. and Texas economy. In 1980, Congress removed most economic regulation from the trucking industry. At the time, it was estimated that the broad trucking industry earned about 71 percent of the \$213.7 billion spent on all modes of freight transportation in the United States. By 2005, the broad trucking industry had increased its revenue share to 84.3 percent of the \$739.1 billion spent on all modes of freight transportation in the United States.⁴⁸ In Texas alone, the trucking industry moves three-fourths (by value) or two-thirds (by tonnage) of manufactured goods and raw materials moved through the state.⁴⁹ Texas is the number one exporting state for 10 years running.⁵⁰ One industry where trucking is important is the timber industry which generates \$33.6 billion in industry output but is also critical to the economy in East Texas.⁵¹ Trucking is an essential part of international trade, as well. One of the biggest uses of trucks in international trade is in the land transport of goods between the United States and Mexico, one of its partners in the North American Free Trade Agreement (NAFTA).⁵² Few states play as key a role in cross-border trade like Texas and California. Texas and California represent 49 percent of the total truck-transported imports from Mexico and 62 percent of the exports to Mexico.⁵³ However, a significant proportion of this tonnage translates to oversize and/or overweight (OS/OW) truck loads that have put physical constraints on the state's transportation infrastructure.

Oversize and Overweight trucks have long been an issue for state and local officials. In 1989, the 71st Texas Legislature passed House Bill 2060 which created a state weight tolerance permit known as the "2060/1547" permit allowing for the operation of OS/OW vehicles.⁵⁴ OS/OW permits are issued to transport non-divisible loads with a few exceptions for divisible loads. A non-divisible load is a load that cannot be reduced to a smaller dimension without compromising the integrity of the load or requiring more than eight hours of work using appropriate equipment to dismantle.⁵⁵ However, the 71st Legislature created a process by which vehicles hauling divisible loads could also obtain permits to run at a percentage over the legal Gross Volume

⁴⁸ Transportation Research Board & Trucking Industry Research Committee, *Transportation Research Circular E-C146, Trucking 101-An Industry Primer*, (Dec. 2010).

⁴⁹ Senate Committee on Transportation and Homeland Security hearing, Apr. 18, 2006. (testimony of Michael Behrens, Texas Department of Transportation). 80th Interim Report.

⁵⁰ House Committee on County Affairs hearing, Oct. 24, 2012. (written testimony of Whitney Brewster, Texas Department of Motor Vehicles).

⁵¹ Senate Transportation Committee hearing, Dec. 18, 2012. (testimony of Linda Price, Ward Timber)

⁵² Transportation Research Board & Trucking Industry Research Committee, *Transportation Research Circular E-C146, Trucking 101-An Industry Primer*, (Dec. 2010).

⁵³ American Trucking Associations, *Trucking and the Economy*, 2007-2008 Edition.

⁵⁴ Tex. H.B. 2060, 71st Leg., R.S. (1989).

⁵⁵ Texas Department of Transportation, *Oversize/Overweight Permit Rules and Regulations*, 43 Texas Administrative Code Chapter 28 Subchapter A-K, Motor Carrier Division, Jan. 2011 Edition.

Weight (GVW). These are annual permits that allow the transport of divisible loads that exceed GVW by up to 5 percent, and axle weight tolerances of 12 percent for agricultural commodities and 10 percent for non-agriculture commodities on state and county roads.⁵⁶ These vehicles are not allowed to travel on the interstate system, or exceed posted weights on bridges unless the bridge provides the only vehicular access to or from the transporter's origin or destination.⁵⁷

The demand for OS/OW "2060/1547" permits has climbed steadily over the past several years. Over 570,000 OS/OW permits were issued in FY 2011 and around 720,000 in FY 2012.⁵⁸ In 2011, "2060/1547" permits generated \$111 million in revenue for the state.⁵⁹ As of October 2012, \$147 million had been generated from the sale of "2060" permits. This is due to the availability to obtain a "2060/1547" permit through the Texas Department of Motor Vehicles (TxDMV) website, which is quick and more companies are actually taking the time to do so.⁶⁰ Texas issues more OS/OW permits than any other state.⁶¹

ISSUE/CONCERNS

The increase and widespread use of OS/OW permits has created concern that OS/OW vehicles are damaging roads and the ability to properly maintain and fund them is growing. Increased OS/OW traffic associated with our state's growing economy has amplified longstanding concerns about the impact of that traffic on Texas Highways.⁶² The Legislature's ad hoc system of passage of individual permit bills to grant OS/OW permits to a variety of highway users has greatly increased the cost of maintaining our highway infrastructure and has resulted in a cost shift to other taxpayers and in some cases lead to an increase in safety issues.⁶³ This led to a Rider in the 82nd General Appropriations Act, which directed the Texas Department of Transportation (TxDOT) to conduct a study on road damage caused by oversized and overweight (OS/OW) vehicles and to provide recommendations for permit fee and fee structure adjustments.

Commercial Truck Restrictions and Regulations

Maximum legal sizes and weights are federally mandated.⁶⁴ Current federal regulations limit trucks to a maximum GVW of 80,000 pounds. There is no Federal vehicle height requirement for commercial trucks. Thus, States may set their own height restrictions. The maximum width limit for commercial trucks on the National Highway system and reasonable access routes was originally established at 102 inches. The Federal length limits are principally minimums that States must allow.⁶⁵ In Texas, these requirements are 8 feet 6 inches wide, 14 feet high, 65 feet long for a truck and trailer combination.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Senate Transportation Committee hearing, Dec. 18, 2012. (testimony of Robert Harrison, Center for Transportation Research-The University of Texas at Austin).

⁵⁹ Senate Transportation Committee hearing, Dec. 18, 2012. (testimony of John Esparza, Texas Motor Transportation Association).

⁶⁰ *Id.*

⁶¹ House Committee on County Affairs hearing, Oct. 24, 2012. (written testimony of Whitney Brewster, Texas Department of Motor Vehicles).

⁶² Center for Transportation Research-The University of Texas at Austin, *Rider 36 OS/OW Permit Fee Study: Executive Summary*

⁶³ Senate Transportation Committee hearing, Dec. 18, 2012. (testimony of Jim Allison, County Judges and Commissioners Association).

⁶⁴ Senate Transportation Committee hearing, Dec. 18, 2012. (testimony of John Barton, Texas Department of Transportation).

⁶⁵ Federal Highway Administration, *Oversize/Overweight Load Permits* (Jan. 24, 2013) http://ops.fhwa.dot.gov/freight/sw/permit_report/index.htm (last visited Jan. 31, 2012).

The following are the federally mandated maximum weights thereto (23 CFR Part 658.17):

1. 80,000 pounds gross vehicle weight
2. 20,000 pound single axle weight
3. 34,000 pound tandem axle weight⁶⁶

States may grant special use permits to commercial vehicles for being OS/OW. In Texas, commercial vehicles are allowed to obtain an OS/OW permit to transport loads that cannot be broken down to comply with legal size and weight limits. Loads that exceed 80,000 pounds, or 8.5 feet wide, or 14 feet tall are oversize or overweight and need one of 27 different permit types. Typical permitted loads include construction and oil field equipment, bridge beams, generators and transformers, buildings, wind tower components, and other high value products.⁶⁷

Permitting Process

State law requires certain OS/OW loads to be engineered to minimize damage to roads and bridges. Some types of permitted loads are also required to meet other safety requirements governing signage, lighting, use of escort vehicles, and may be required to travel a specific route.⁶⁸ TxDMV issues about 27 different single trip and specialty permit types each with their own unique requirements and fee structures. Fees vary from \$60 for a single trip permit for a load that is oversize but not overweight, to \$4,000 for an annual permit for unlimited trips for loads up to 12 feet wide, 14 feet high and 120,000 pounds.⁶⁹ Single trip permit applicants also pay a highway maintenance fee based on vehicle weight that ranges from \$150 to \$375 (see chart A.)⁷⁰ These fees were doubled during the 80th Legislature, with additional revenue deposited in the State Highway Fund.⁷¹ Permit holders pay a base fee of \$90, a \$5 administrative fee, and an additional graduated fee based on the number of counties in which they operate as well as post a \$15,000 bond (few exemptions).⁷² Fees are distributed between the State Highway Fund and the counties based on the formula outlined in statute (see chart B.)⁷³

Chart A:

Single-Trip Highway Maintenance Fees Under Current Law	
Weight Range	Amount of Fee
80,001 – 120,000 lbs.	\$150
120,001 – 160,000 lbs.	\$225
160,001 – 200,000 lbs.	\$300
200,001 and above	\$375

⁶⁶ *Id.*

⁶⁷ House Committee on County Affairs hearing, Oct. 24, 2012. (written testimony of Whitney Brewster, Texas Department of Motor Vehicles).

⁶⁸ Center for Transportation Research-The University of Texas at Austin, *Rider 36 OS/OW Permit Fee Study: Executive Summary*.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² Prozzi, J. et al. *Oversize/Overweight Vehicle Permit Fee Study*, Center for Transportation Research-The University of Texas at Austin, Dec. 2012.

⁷³ Senate Transportation & Homeland Security Committee hearing, May 3, 2010. (testimony of John Barton, Texas Department of Transportation).

Chart B:

WEIGHT TOLERANCE FEE DISTRIBUTION					
Fee		Deposited To		Distribution/Use	Statute Reference
\$50 Base Fee		General Revenue		Distributed to each county based on the ratio of the number of county road miles in the county to the number of county road miles in the state.	§621.353(a)
\$40 Base Fee		Highway Fund		To be used to administer the weight tolerance permit program, under §623.011, §623.0111, §623.0112	§623.353(a)
Additional Fee for # of Counties Selected		GR	HWY	GR distribution to counties selected on the permit application based on the ratio of county road miles in the county to the number of county road miles of all the counties selected on the permit.	§621.353(c) & 623.0111(a)
1-5	\$175	\$125	\$50		
6-20	\$250	\$125	\$125		
21-40	\$450	\$345	\$105		
41-60	\$625	\$565	\$60		
61-80	\$800	\$785	\$15		
81-100	\$900	\$900	-0-		
101-254	\$1,000	\$1,000	-0-		
\$5 Administrative Fee (set by Administrative Rule)		Highway Fund		To be used for windshield sticker (§623.011(d)), distribution of fees (621.353), and notification to counties (§623.013)	§623.0112

Center for Transportation Research Study-Rider 36

TxDOT commissioned the Center for Transportation Research (CTR) and the University of Texas at San Antonio to evaluate the damage that OS/OW vehicles (including exempt vehicles) cause to the transportation infrastructure (including pavements and bridges) along with direct costs imposed by OS/OW vehicles on highway appurtenances (such as signs, traffic signals, and light poles) and other direct costs that other state agencies and local jurisdictions accrue from OS/OW enforcement or management.⁷⁴

The project developed methodologies to quantify pavement and bridge consumption rates per mile. The consumption rates were calculated for multiple axle loads and axle configuration and are independent of the commodity being transported. Per mile fees for bridges were also calculated for non-routed loads. In addition to the consumption rates for bridges and pavements due to the effect of axle loads, the researchers developed a new fee schedule that considers costs associated with oversize vehicles that exceed legal width, height, or length for 34 rate categories. These new fees were also calculated based on vehicle miles traveled.⁷⁵

Pavement and Bridge Consumption and Costs

The CTR used a pavement structural analysis method, endorsed by the American Association of State Highway Transportation Officials (AASHTO), to develop the pavement consumption model. The model calculates the pavement life, in years, for legal traffic loadings and the reduction in life resulting from the addition of OS/OW traffic loads.⁷⁶ The analysis then determines the additional cost to construct pavement that can carry both the legal and the OS/OW loads for the original design life, which is typically 20 years. This method provides information needed to calculate the OS/OW rate/VMT which only considers the marginal or

⁷⁴ Prozzi, J. et al. *Oversize/Overweight Vehicle Permit Fee Study*, Center for Transportation Research-The University of Texas at Austin, Dec. 2012.

⁷⁵ *Id.*

⁷⁶ Center for Transportation Research-The University of Texas at Austin, *Rider 36 OS/OW Permit Fee Study: Executive Summary*.

increased cost due to the additional load above legal limits (loaded VMT).⁷⁷ By removing all permit types and exemptions, the CTR was able to calculate the marginal consumption of additional weight that is added to a commercial vehicle, not the total weight. The CTR looked at the additional 4,000 pounds carried by a commercial truck not the total of 84,000 pounds in order to see the marginal impact.⁷⁸

The bridge analysis concept is based on a widely-accepted bridge structural analysis method and utilizes bridge information contained in the TxDOT Bridge Inspection and Appraisal Program for each structure.⁷⁹ The bridge analysis evaluates the relationship between bridge life consumption for legal loads and for OS/OW loads to determine the marginal or increased consumption due to the additional load. Since bridges are location specific the bridge rate/VMT was determined as the total cost of bridge consumption for a given route divided by the loaded VMT.⁸⁰ The consumption models are modular in nature and can be used to calculate the consumption costs for a wide range of OS/OW vehicle configurations. The models can also be updated to incorporate unique or unusual vehicle configurations.⁸¹

Cost Analysis

The CTR used its pavement and bridge consumption rates to determine the loaded portion of the estimated VMT for each category of OS/OW truck.⁸² It derived costs for overheight, overwidth and overlength vehicles and presented four case studies to highlight examples from the aggregate cost table. The CTR also examined safety impacts using TxDOT's Crash Record Information System for FY 2010-2013. It identified a total of 1137 crashes, of which 23 percent resulted in damage to TxDOT property.⁸³ Moreover, the CTR determined fatality and injury costs that exceeded \$27 million for these fiscal years—underscoring societal costs of serious accidents involving OS/OW vehicles. The CTR estimated additional costs for OS/OW administrative and enforcement.⁸⁴ It also identified \$60 million in additional annual costs not currently addressed in permit fee calculations. These costs result from TxDOT's obligation to provide routing for certain types of permits and to modify roadways, bridges, and other infrastructure as needed to accommodate certain OS/OW loads.⁸⁵

Permit Fee and Revenue Summary

Permit Fee

The CTR's report focused on a typical "2060/1547" permitted vehicle which travels 100,000 miles per year. For this analysis, the CTR assumed that the loaded VMT represent 50 percent of this number or 50,000 loaded VMT per year. The normalized total consumption rate is 7 cents/VMT for pavements and 6 cents/VMT for bridges for a normalized rate of 13 cents/VMT.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

The total annual consumption cost for a "2060/1547" permitted vehicle is 13 cents/VMT x 50,000 loaded VMT = \$6,500.⁸⁶ The CTR's new "2060/1547" permit fee structure is based on consumption which is \$6,500 and is significantly higher than the current minimum "2060/1547" permit fee of \$265, which allows operation of an 84,000-lb., five-axle tractor trailer unit in five counties. However, this is the true consumption cost for this vehicle operating 50,000 loaded VMT.⁸⁷ It is important to note that fees are not set at \$6,500. An example would be an oil well servicing unit annual permit. If the unit travels approximately a total of 12,000 VMT, factoring in loads and dimensions of the vehicle, per the CTR study the permit fee would be \$3,000. Currently, the annual permit is \$208.

Revenue Summary

The CTR used FY 2011 OS/OW permit sales to analyze the current permit fee structure and revenues.⁸⁸ The pavement and bridge consumption and operational and safety impact fees included in the CTR's model would create an estimated \$521,390,308 in annual permit revenue if the model were adopted. This represents an increase of \$410,024,643 — a 368 percent increase — over actual FY 2011 permit fee revenue of \$111,363,655.⁸⁹ Per the CTR study, the estimated \$521,390,308 in annual permit revenue would simply be allocated to three budget categories: \$515,893,038 to Highway Fund 6, \$4,122,953 to the Texas Department of Motor Vehicles-Motor Carrier Division (TxDMV-MCD) Administration, and \$1,374,318 to fund a new OS/OW Vehicle Education and Study Center. TxDMV-MCD is responsible for administering the OS/OW permitting program among other functions associated with servicing and authorizing the operation of commercial motor carriers.⁹⁰ The \$515,893,038 in the CTR's proposal would essentially be discussed among the legislature and revenue funds would be apportioned accordingly. A graph representing the revenue summary can be viewed in the chart on the following page (Page 12).⁹¹

⁸⁶ Prozzi, J. et al. *Oversize/Overweight Vehicle Permit Fee Study*, Center for Transportation Research-The University of Texas at Austin, Dec. 2012.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

FY 2011 Permit Fee Sales and Revenue by Fund Category										New Proposed OS/OW Revenue Based on FY 2011 Permit Sales					
Permit Type	Number of Permits Sold FY 2011	FY 2011 Temporary Registration Fee - Fund 1	FY 2011 Permit Administration Fee	FY 2011 Fund 6 Base or Permit Fee	FY 2011 GR Fund 1 Base or Permit Fee	FY 2011 HWY Maintenance TxDOT Fund 6	FY 2011 HWY Maintenance GR-Counties Fund 1	FY 2011 Revenue from all fee Categories	New Permit Administration + OS/OW Education and Study Center Fee	New Pavement and Bridge Consumption Fee	New Infrastructure Operations & Safety Impact Fees	New TxDOT Base Fee	GR Fund 1 Base or Permit Fee Now to Fund 6	HWY GR - Counties to Fund 6 for Apportionment	New Permit Revenue
2060/1547 over axle tolerance	33,269		\$166,345	\$831,725	\$1,663,450	\$3,415,886	\$7,265,114	\$13,342,520	\$332,690	\$216,248,500				\$7,265,114	\$223,846,304
General OS/OW single-trip		\$213,595						\$213,595							\$0
< 80,000 lbs / over dimension	184,242			\$5,527,260	\$5,527,260			\$11,054,520	\$1,842,420		\$18,424,200	\$7,369,680	\$5,527,260		\$33,163,560
80,001 - 120,000 lbs	64,530			\$1,935,500	\$1,935,500	\$9,679,500		\$13,550,500	\$645,300	\$11,188,857	\$6,194,880	\$2,581,200	\$1,935,500		\$22,545,737
120,001 - 160,000 lbs	78,147			\$2,344,410	\$2,344,410	\$17,583,075		\$22,271,895	\$781,470	\$20,425,281	\$7,502,112	\$3,125,880	\$2,344,410		\$34,179,153
160,000 - 200,000 lbs	28,102			\$843,060	\$843,060	\$8,430,600		\$10,116,720	\$281,020	\$9,555,804	\$2,697,792	\$1,124,080	\$843,060		\$14,501,756
200,000 - 254,000 lbs	6,919			\$207,570	\$207,570	\$2,836,790		\$3,251,930	\$69,190	\$3,646,244	\$664,224	\$276,760	\$207,570		\$4,863,988
Annual - Envelope (Specific)	1,932			\$5,796,000	\$1,932,000			\$7,728,000	\$19,320	\$10,085,040	\$5,216,400	\$77,280	\$1,932,000		\$17,330,040
Annual - Envelope (Non-Specific)	2,967			\$8,901,000	\$2,967,000			\$11,868,000	\$29,670	\$15,487,740	\$8,010,900	\$118,680	\$2,967,000		\$26,613,990
non-routed 30 day over width	8,449			\$506,940	\$506,940			\$1,013,880	\$84,490		\$10,138,800	\$337,960	\$506,940		\$11,068,190
non-routed 60 day over width	493			\$44,370	\$44,370			\$88,740	\$4,930		\$1,183,200	\$19,720	\$44,370		\$1,252,220
non-routed 90 day over width	11,051			\$551,310	\$551,310			\$1,102,620	\$110,510		\$39,783,600	\$442,040	\$551,310		\$40,887,460
non-routed 30 day over length	3,617			\$217,020	\$217,020			\$434,040	\$36,170		\$2,652,240	\$144,680	\$217,020		\$3,050,110
non-routed 60 day over length	179			\$16,110	\$16,110			\$32,220	\$1,790		\$1,736,160	\$7,160	\$16,110		\$1,761,220
non-routed 90 day over length	3,381			\$405,720	\$405,720			\$811,440	\$33,810		\$128,880	\$135,240	\$405,720		\$703,650
Well Servicing Unit - annual	57			\$5,940	\$5,940	\$2,325		\$14,205	\$570	\$111,150	\$102,600	\$2,280	\$5,940		\$222,540
Well Servicing Unit - mileage	3,008	\$44,040		\$212,561	\$93,248			\$349,849	\$30,080	\$5,865,600	\$5,414,400	\$120,320	\$93,248		\$11,523,648
Concrete Beams - single trip	176				\$5,280	\$13,950		\$19,230	\$1,760	\$62,832	\$8,448	\$7,040	\$5,280		\$85,360
Portable Buildings - single trip	16,002	\$1,710		\$120,000	\$120,000			\$241,710	\$160,020		\$1,728,216	\$640,080	\$120,000		\$2,648,316
Manufactured Housing - single trip	64,127			\$1,301,778	\$1,263,302			\$2,565,080	\$641,270		\$7,182,224	\$2,565,080	\$1,263,302		\$11,651,876
Implement of Husbandry - annual	658			\$86,805	\$86,805	\$22,425		\$196,035	\$6,580		\$1,019,900	\$26,320	\$86,805		\$1,139,605
Fracing Trailers	5			\$1,036				\$1,036	\$50	\$17,500		\$200			\$17,750
Hubometer	14,815				\$459,265	\$6,972,074		\$7,431,339	\$148,150	\$28,889,250	\$26,667,000	\$592,600			\$56,297,000
Temporary Registration	23,601	\$856,785						\$856,785	\$236,010			\$944,040	\$856,785		\$2,036,835
Column Subtotals		\$1,116,130		\$29,856,115	\$21,195,560	\$48,956,625	\$7,265,114		\$5,497,270	\$321,583,798	\$146,456,176	\$20,658,320	\$19,929,630	\$7,265,114	
Total Permits in the analysis	549,727							\$108,555,889							\$521,390,308
Total Permits sold in FY 2011	574,578							\$111,363,655							\$515,893,038
								\$29,576,804							\$4,122,953
								\$78,812,740							\$1,374,318
								\$166,345							
								96%							
								97%							

Rider 36 requires the OS/OW study to consider all OS/OW vehicles, including trucks that state law currently exempts from permit requirements, i.e. milk, produce, timber, agricultural products, concrete, groceries, garbage, and rock.⁹² The CTR developed and applied load adjustment factors to account for travel when the trucks are loaded and empty. The CTR could only provide an estimate, because it needed more information regarding exempt vehicle configurations, vehicle numbers, actual loadings, and total VMT. Of the \$521 million in projected annual permit revenue if the CTR recommendations are adopted, \$216 million would come from “2060/1547” permits.⁹³

The CTR Study Conclusion

The study’s comprehensive review of the state’s current OS/OW permit system confirms that fees charged for most permits fail to cover the marginal consumption (road damage) that OS/OW vehicles impose—either annually or by trip—on the state highway system and other transportation infrastructure. This is particularly evident on rural secondary roads, some load zoned, where OS/OW trucks operate.⁹⁴

⁹² Center for Transportation Research-The University of Texas at Austin, *Rider 36 OS/OW Permit Fee Study: Executive Summary*.

⁹³ *Id.*

⁹⁴ *Id.*

Enforcement Activities

Texas Department of Transportation

Most enforcement activity is the responsibility of the Department of Public Safety (DPS), however, during the 80th session House Bill 2093 created a size and weight administrative enforcement program at TxDOT.⁹⁵ This division's investigations are similar to audits, in that TxDOT staff reviews law enforcement citations, company records, shipping documents and permits to determine if violations have occurred. In this process, TxDOT has the authority to assess fines as well as revoke a carrier's right to obtain oversize/overweight permits and request that the Department of Motor Vehicles (DMV) also revoke a carrier's operating authority. Administrative penalties are set by statute at an amount up to \$30,000 for multiple violations, with each day a violation continues or occurs being a separate violation. All fines collected are deposited to the general revenue.⁹⁶

Texas Department of Public Safety

DPS Highway Patrol Commercial Vehicle Enforcement (CVE) section has primary responsibility across the state for the enforcement of commercial vehicle laws and regulations, including restrictions on size and weight. Size and weight restrictions can be found in Texas Transportation Code Chapter 622, and the commercial vehicle regulations and enforcement procedures can be found in Title 37, Part 1, and Chapter 4 of the Texas Administrative Code.⁹⁷

DPS Resources for Commercial Vehicle Enforcement

To enforce commercial vehicle laws and regulations, DPS is equipped with the following resources, 481 Highway Patrol Troopers with additional CVE training and inspection authority, 149 non-commissioned inspectors, and 47 commercial vehicle inspection stations.⁹⁸

Citations Issued

Efforts by CVE to enforce weight restrictions can be found in the chart below:

CY	Vehicles Weighed	Vehicles Cited for Overweight	Overweight Violations (Includes Warnings)	Out of Service Overweight Vehicles
2010	1,663,500	47,571	214,180	16,378
2011	2,025,528	43,183	185,225	14,346
2012	1,581,482	40,264	168,127	13,281

**Note: Fines associated with overweight citations, like all traffic citations, are handled and collected by the courts.*

Inspection Process

All trucks pull over when a signal device flashes at an inspection station that is operational (as operated by a CVE trooper). The vehicle is screened through a basic visual inspection and checked for weight and size. If the truck is oversize, the trooper will review the oversize permit and take measurements. Each inspection facility has an in-ground scale that measures in 20 pound increments, displayed on a digital board that looks similar to a scoreboard. The trooper

⁹⁵ Senate Transportation & Homeland Security Committee hearing, May 3, 2010. (testimony of John Barton, Texas Department of Transportation). 82nd Interim report.

⁹⁶ *Id.*

⁹⁷ Email between Jonathan Sierra-Ortega and Candace Nolte at Texas Department of Public Safety on Dec. 19, 2012.

⁹⁸ *Id.*

talks with the driver and reviews his or her logbook. If additional inspection is needed, there are several levels of inspection - descriptions which can be found on the Federal Motor Carrier Safety Administration website.⁹⁹

City and County Enforcement Assistance

DPS assists local enforcement agencies by providing basic CVE (weight, size, authority, registration) to what the Transportation Code (TRC) refers to as “weight enforcement officers”, which includes county deputies. That training is one week long, held at the Motor Carrier Bureau, and is free to the agency other than costs they incur (such as equipment and per diem). Many agencies have taken advantage of this program.¹⁰⁰

A strong vehicle size and weight enforcement program is necessary to help reduce increased consumption due to illegal OS/OW loads.

Conclusion

The trucking industry is a valuable and integral part of the economic stability and development of the state. While the state economy clearly benefits from heavier, more productive trucks hauling agriculture, energy related, and other cargoes, the cost to maintain state highways and county roads has increased. Maintaining and improving Texas roads is a vital part of keeping this industry strong and meeting the needs of the citizens of this state.

State officials, legislators and other policy makers can use the data in the CTR report to determine how best to make the system more equitable while continuing to benefit our state’s agricultural, industrial, and business sectors that depend on using OS/OW trucks. However, if road conditions deteriorate much further, OS/OW trucks and other road users will face substantially higher operating costs that will exceed the revenues needed to maintain the state’s transportation infrastructure in good condition.

RECOMMENDATIONS

The issue of enforcing current oversize/overweight requirements should continue to be studied by the Legislature. It is recommended that permit fees be studied in relation to the economic benefits to the state. The CTR study concluded that the state's current OS/OW permit fee structure is inadequate to recover OS/OW truck-related infrastructure consumption costs. However, it is important to point out that while permit fees may not cover the calculated damage to the state transportation infrastructure, the Legislature will need to carefully balance the need to raise OS/OW permit fees with the possible economic impact it could have on different industries.

In addition, it is recommended that the Legislature look at enforcement measures with a focus on increasing the minimum overweight truck fines and possibly escalated fines for repeat violators. There is a tendency by some haulers to calculate the risk of low fines as compared to a high fee if they do not get caught. Thus, an escalated penalty structure may discourage illegal OS/OW operations on Texas roads and bridges.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

Toll Collection and Enforcement

Study the potential for toll collection and enforcement tools to pursue toll scofflaws for Texas Department of Transportation (TxDOT) and local toll project entities.

BACKGROUND

Texas drivers will encounter over 370 centerline miles of toll roads.¹⁰¹ This number pales in comparison to the over 80,000 centerline miles of interstate, state highway, and farm to market roads. As the state's population continues to grow, Texas will add millions of new automobiles to the roads in the next few years. Our current funding system is inadequate and cannot keep up with our growing infrastructure demands. As an alternative to traditionally funded roads, TxDOT and local communities have turned to toll roads as a way to offer congestion relief and keep people and commerce moving.

Most toll roads today use electronic processes such as toll tags or pay by mail options to collect tolls. As of 2012, there were over 5.8 million drivers using some type of electronic toll transponders and that number is expected to grow in 2013.¹⁰² The Harris County Toll Road Authority (HCTRA), which uses a combination of electronic processes and managed toll booths, is one of the only entities that does not allow travelers to "pay by mail". While most travelers are diligent about paying their tolls, there is an increasing number of drivers who, knowingly or not, do not pay the required tolls. Some entities are limited in what they can do to prosecute toll violators and collect unpaid tolls in a timely and efficient manner. This presents a significant problem for the operating entities as well as sets a poor example for law abiding motorists who pay their tolls. In addition to fairness to lawful drivers, habitual toll violators present a challenge for operating entities to access the capital markets, pay back bond holders, and secure new bonds to expand their systems.

Access to Capital Markets

Toll entities need to be able to assure rating agencies and investors that they have the tools necessary to enforce toll violations and collect revenue so that they will be in a position to repay their toll revenue bonds. Without adequate toll enforcement measures in place, rating agencies and investors may conclude that an entity is at risk for not being able to collect sufficient revenue to repay its obligations and is therefore not creditworthy.¹⁰³

Direct Financial Implications

While access to capital markets is an issue of perception (i.e., Do rating agencies and investors perceive that toll entities have the tools necessary to effectively enforce toll violations?), the absence of adequate enforcement remedies can have an obvious and direct financial impact on the collection of toll revenues. That, in turn, can make it more difficult to meet project financing requirements or to generate revenues that will help to support future projects. In a sense, every dollar not collected is a dollar that is not available for other projects in the region.¹⁰⁴

¹⁰¹ Texas Comptroller of Public Accounts, *Texas in Focus: A Statewide View of Opportunities* (Jan. 17, 2008) <http://www.window.state.tx.us/specialrpt/tif/> (last visited Jan. 31, 2012).

¹⁰² Email between Steven Albright and Chuy Gonzales of Texas Department of Transportation on Jan. 15, 2013.

¹⁰³ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of C. Brian Cassidy, Locke Lord LLP).

¹⁰⁴ *Id.*

Deterrence

If people perceive that they can use toll roads without paying for them, and with little likelihood that anything bad will happen, it is obvious that violation rates will increase. Having efficient and effective remedies available will discourage that behavior- hopefully, to the point where the remedies will rarely need to be used. While the current procedures (fees and fines which may have to be judicially imposed) are helpful, they can also be costly and time-consuming to implement.¹⁰⁵

FINDINGS

Toll Entities

Toll roads are operated and maintained by one of four entities: (1) the Texas Department of Transportation (TxDOT); (2) Regional Mobility Authorities (RMAs); (3) Regional Toll Authorities (RTAs); or (4) County Toll Road Authorities. Each entity has its own chapter in the Texas Transportation Code which governs its powers, limitations, and toll enforcement abilities. Additionally, each entity has its own unique form of electronic toll transponder which can be used on any system in Texas.

Texas Department of Transportation

Authority Created:	1999
1st Project Completed:	2006
Miles Operated:	118
Number of "TxTags":	1.08 million ¹⁰⁶

TxDOT's toll road system consists of:

1. Central Texas Turnpike System (CTTS) through central Texas;
2. Loop 49 in Tyler;
3. Camino Colombia (SH 255) near Laredo; and
4. SH 99 in Chambers County just outside of Houston.¹⁰⁷

Drivers can currently use all forms of electronic toll transponders on TxDOT's toll roads, but the unique TxDOT collection device is a TxTag. Additionally, TxDOT employs video billing which allows a motorist to receive a toll bill by mail rather than paying cash at the time of the transaction.

Video billing or "pay by mail", however, presents a unique challenge for actual toll collection. While most motorists pay their toll, plus the nominal administrative fee associated with using "pay by mail", hundreds of individuals do not. TxDOT is currently authorized to assess late penalties for those who do not pay on time, but these too are often ignored.

At present, TxDOT's only option for collecting tolls and fees are contracted collection efforts and filing a Class C criminal misdemeanor complaint in the various Justice of the Peace (JP) courts where TxDOT operates toll facilities.¹⁰⁸

¹⁰⁵ *Id.*

¹⁰⁶ Email between Steven Albright and Chuy Gonzales of Texas Department of Transportation on Jan. 15, 2013.

¹⁰⁷ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Phil Wilson, Texas Department of Transportation).

¹⁰⁸ *Id.*

While TxDOT has experienced a 100 percent success rate in all cases filed in JP courts, capacity of the courts to handle the volume of cases limits the number of accounts that can be taken to court, resulting in over 374,000 accounts that are backlogged.¹⁰⁹

Regional Mobility Authorities

Authority Created:	2001
1st Project Completed:	2007
Miles Operated:	14
Number of "TxTags":	1.08 million (same transponder used by TxDOT) ¹¹⁰

There are currently eight RMAs in the state. They are:

1. Alamo RMA (Bexar County);
2. Cameron County RMA (Cameron County);
3. Camino Real RMA (City of El Paso);
4. Central Texas RMA (Travis and Williamson Counties);
5. Grayson County RMA (Grayson County);
6. Hidalgo County RMA (Hidalgo County);
7. North East Texas RMA (12 counties: Smith, Gregg, Cherokee, Harrison, Rusk, Upshur, Bowie, Cass, Panola, Titus, Van Zandt, and Wood); and
8. Sulphur River RMA (Delta, Hunt, and Lamar Counties).¹¹¹

RMAs are formed at the request of local entities. In most cases one or more counties have chosen to form an RMA for a specific project or purpose. These entities petition the Texas Transportation Commission for authority to create an RMA, and following a public hearing process, the Commission can approve the formation after making certain required findings. RMAs are governed by a board of directors appointed by the entities forming the authority, with the chairman of the board appointed by the Governor. The result is that RMAs are locally formed and locally controlled.

Of the eight RMAs listed above, two currently have operating toll projects (Cameron County RMA and Central Texas RMA), and two more will have projects open and operating within the next several months (Camino Real RMA and North East Texas RMA). Of the remaining four RMAs, two (Alamo RMA and Hidalgo County RMA) are actively pursuing toll projects and will likely have projects in revenue operation within 2-4 years.

Like TxDOT, RMAs' customers primarily use TxTags as their preferred electronic toll transponder; however, RMA toll roads accept all transponders issued in Texas. Also, like TxDOT, RMAs employ video billing or "pay by mail" and they experience the same collection challenges TxDOT faces. Limited to administrative late penalties and prosecution in a JP court, RMAs are faced with the increasing challenge of securing payment from habitual toll violators with only the use of inefficient tools.

An RMA's ability, or lack thereof, to collect tolls from violators has a very real impact on their ability to secure financing and expand their systems. When securing funding for projects from

¹⁰⁹ *Id.*

¹¹⁰ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of C. Brian Cassidy, Locke Lord LLP).

¹¹¹ Email between Steven Albright and Chuy Gonzales of Texas Department of Transportation on Jan. 15, 2013.

the capital markets, RMAs are initially viewed as “start-up” entities. Until an RMA has a track record of successfully developing and operating projects, rating agencies and investors will look closely at the administration and management of the RMA to determine whether it may be viewed as creditworthy. If an RMA does not have adequate tools to run a successful toll road, including the ability to effectively prosecute habitual toll violators, they will ultimately struggle to succeed and expand.

While RMAs are currently limited to ineffective toll violation enforcement tools, it is important to note that by virtue of the Texas Transportation Code RMAs are allowed to use any and all enforcement tools given to other tolling entities.¹¹²

Regional Toll Authorities

Authority Created:	1953
1st Project Completed:	1957
Miles Operated:	131
Number of "Toll Tags":	2.6 million

There is only one RTA in the state and that is the North Texas Tollway Authority (NTTA). Originally the Texas Turnpike Authority (TTA), the NTTA was created in 1997 when the TTA was abolished and its toll roads were turned over to a new local tolling entity (NTTA). The NTTA is governed by a nine-member Board of Directors composed of two appointees from each of its four member counties Collin, Dallas, Denton, and Tarrant counties, and one appointee by the Governor.¹¹³

NTTA's toll road system consists of:

1. Dallas North Tollway;
2. President George Bush Turnpike;
3. Addison Airport Toll Tunnel;
4. Mountain Creek Lake Bridge;
5. Sam Rayburn Tollway; and
6. Lewisville Lake Toll Bridge.

In 2010, NTTA went to an entirely electronic tolling system.¹¹⁴ Most motorists pay by the preferred transponder Toll Tag, or they may use any other transponder issued in Texas. Motorists who do not have a Toll Tag are subject to video tolling or "Zip Cash". Those who choose this option are mailed a "Zip Cash" bill for their toll and a nominal fee associated with using this service. All bills are mailed to the address at which the vehicle is registered.

Like TxDOT and RMAs, the switch to a "pay by mail" system has presented toll enforcement challenges for NTTA. More than 90 percent of all NTTA users pay their tolls as they should during the normal toll-collection process; however, a small percentage of drivers are habitual

¹¹² Tex. Transp. Code § 370.177.

¹¹³ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Kenneth Barr, North Texas Tollway Authority).

¹¹⁴ *Id.*

violators who unfairly shift roadway costs onto law-abiding users. The number of violations totaled \$12.5 million in tolls alone, in 2011.¹¹⁵

Like the previously discussed tolling entities, the only deterrent and enforcement options available to the NTTA are (1) imposition of administrative fees in connection with violations and (2) issuance of citations to violators to appear in the appropriate JP court, where they may be ordered to pay only the single toll and administrative fee that is the subject of the citation, plus a maximum fine of \$250.¹¹⁶ This process has not proven to be an effective deterrent to habitual toll violators.

As an alternative to criminal prosecution, NTTA published online, and routinely updates, a list of its top toll violators. Individuals who incur more than 100 unpaid toll violations will have their name published on a list that is sent to media outlets throughout the North Texas region. The toll violators list has produced some success in getting individuals to come forward to pay their bill, but many have yet to respond. NTTA reports over \$370 million in unpaid tolls, and administrative fees, as of November 2012.¹¹⁷

While RTAs are currently limited to inefficient toll violation enforcement tools, it is important to note that by virtue of Texas Transportation Code RTAs are allowed to use any and all enforcement tools given to other tolling entities.¹¹⁸

County Toll Road Authorities

Authority Created:	1983
1st Project Completed:	1987
Miles Operated:	120
Number of "EZ Tags":	2.2 million ¹¹⁹

While there are several county toll road authorities in Texas, the largest is the Harris County Toll Road Authority (HCTRA). Unlike other tolling entities, HCTRA operates solely within a single county and its board of directors are elected. While other tolling entities have an appointed board, HCTRA's board is comprised of the elected members of the Harris County Commissioners Court.

HCTRA's toll road system consists of:

1. Sam Houston Tollway;
2. Westpark Tollway;
3. Hardy Tollroad; and
4. Katy Managed Lanes.

Unlike the previously discussed tolling entities, county toll authorities (CTAs) have additional toll enforcement tools available to them besides violations and JP court. Due to the fact that CTAs are an extension of the county government, they enjoy the same enforcement mechanisms

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ Email between Steven Albright and Carrie Rogers of North Texas Tollway Authority on Jan. 21, 2013.

¹¹⁸ Tex. Transp. Code § 366.178(j).

¹¹⁹ Email between Steven Albright and Chuy Gonzales of Texas Department of Transportation on Jan. 15, 2013.

that a county employs for any number of violations, such as failure to pay property taxes. One such enforcement tool is placing a vehicle registration block on a habitual toll violator's car.

HCTRA employs this tool and has found it to be a highly effective deterrent to would be toll violators and also effective in getting violators to pay their overdue tolls. Unlike other tolling entities, HCTRA does not allow motorists to use a "pay by mail" system. All drivers on the HCTRA system must use an EZ Tag (the preferred electronic transponder) or another transponder issued in Texas. Motorists who use the toll road without a transponder are subject to a \$10 fee per violation. Each transaction made (driving through a toll gantry) without a transponder is immediately considered a violation. This includes stopping to pay cash.

Motorists are sent a violation notice requiring them to pay (1) the original toll (2) a \$10 violation per transaction and (3) a \$1 administrative fee. If violations cannot be resolved, HCTRA turns the matter over to a third party collection firm. The third-party collection agency will add an additional \$14 third party collection fee per violation event and attempt to collect the tolls, charges and fees by telephone and letter for 60 days.¹²⁰

Failure to pay the tolls, charges and fees as required will result in an Administrative Adjudication Hearing. A third party citation fee in the amount of \$50 is added to the total amount owed for the violations when the hearing is scheduled. If the Administrative Hearing Officer finds the registered owner of the vehicle liable for all tolls and associated fees, a judgment will be rendered by the Hearing Officer against the registered owner. The official signed judgment is sent to the Harris County Clerk's Office. The registered owner has 30 days to resolve the judgment amount.¹²¹

In addition, a county fine of \$1 to \$500 can be assessed against the registered owner of the vehicle at the discretion of the hearing officer. Harris County also assesses a \$60 county hearing fee (court costs) at the completion of the hearing process, and a \$50 third party hearing fee will be assessed by the collection firm.¹²² It can be very expensive to be a toll violator in Harris County.

If there is no resolution within the allotted time, on the 31st day documentation is presented to the Texas Department of Motor Vehicles requesting a scofflaw block on the owner's vehicle registration. The block remains in place until notified by HCTRA to release it.¹²³ This threat of a vehicle registration block has proven to be an effective tool in deterring toll violators. HCTRA reports over 96 percent of tolls are paid in full and claims very little in unpaid toll violations.

Potential Toll Enforcement Remedies

The following remedies were discussed in public testimony as a means of additional enforcement for individuals with 100 or more violations. All violators would be afforded an administrative hearing and an appeal before the additional enforcement action would be taken. These remedies include:

¹²⁰ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of James Hernandez, Harris County Tollroad Authority).

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

- Vehicle registration block - Habitual violators would be unable to register their vehicles until unpaid tolls and fees have been satisfied.¹²⁴
- Vehicle ban - Habitual violators would be subject to an order banning them from use of tolled facilities. Violations of the ban would be punishable as a criminal trespass and subject to the appropriate punishment under the Texas Penal Code.¹²⁵
- Toll violator list - Expressly authorize all tolling authorities to publish the names of their top toll violators (individuals with 100 or more violations).¹²⁶
- International toll violator remedy - There are inherent difficulties in enforcing toll violations against residents of neighboring states and Mexico. Additional tools may be necessary to enforce toll collection with drivers from neighboring states and countries.¹²⁷

RECOMMENDATIONS

There is little debate that toll entities need additional enforcement tools. Existing mechanisms are highly ineffective and do little to deter bad behavior. Poor toll enforcement is unfair to individuals who pay tolls as required and can threaten the financial stability of the toll road itself.

The model employed by the Harris County Toll Road Authority has proven to be effective, but would require statutory changes if other entities were to utilize vehicle registration block for unpaid tolls. However, there are inherent challenges to allowing county tax assessor collectors to block automobile registration on vehicles that travel on toll roads not in the county in which they are registered, and additional clarity may be needed on how the process would be implemented between the tolling authority and the tax assessor collector.

Additionally, toll entities should assess if there is a better way to administer toll collection than "pay by mail". While the Committee agrees that utilizing an electronic toll collection system decreases travel time and increases safety on toll roads, this system is inherently flawed.

The Committee agrees there is a problem with toll violation enforcement and the issue should be addressed. The Legislature should look at all options to ensure toll road users are paying their tolls.

¹²⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of C. Brian Cassidy, Locke Lord LLP).

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ *Id.*

Natural Gas Fueling and Electric Vehicles

Examine the need for additional natural gas fueling infrastructure to efficiently utilize Texas' vast domestic reserves of natural gas. Also, examine the future requirements for public and private electric vehicle charging stations and the impact of the increased usage of alternative-fueled vehicles. Include geographic balance in the evaluation of alternative-fuel infrastructure. Assess the impact that increasing numbers of electric vehicles will have on the state's electric grid.

BACKGROUND

In 2001, the 77th Texas Legislature established the Texas Emissions Reduction Plan (TERP) to provide financial incentives to reduce nitrogen oxides emissions from polluting vehicles and equipment.¹²⁸ More recent legislation has expanded on these efforts by establishing programs that direct TERP funding to alternative-fuel vehicles and the infrastructure necessary to fuel these vehicles.¹²⁹ The Texas Commission on Environmental Quality (TCEQ) administers these TERP programs. Alternative fuels available for funding under the programs include natural gas, propane, hydrogen, methanol, biodiesel, and electricity.¹³⁰ To date, natural gas and electricity related projects have received a large portion of TERP funds.

Natural Gas Fueling Infrastructure and Alternative-Fueled Vehicles

Natural gas is considered a liquefied gas under the Texas Tax Code.¹³¹ Liquefied gases include, but are not limited to, compressed natural gas (CNG), liquefied natural gas (LNG), propane, and butane. Of these, CNG and LNG have emerged as the most promising fuel sources for alternative-fueled vehicles. CNG is used in vehicles such as cars, buses, and small trucks, whereas LNG is best utilized in vehicles such as long-haul trucks. Both CNG and LNG are generically referred to as “natural gas.”

Dramatic development of the state's shale resources has resulted in a rapidly increasing supply of natural gas. Coupled with relatively slow demand, this has led to significantly lower prices for natural gas compared to gasoline and diesel fuel.¹³² Meanwhile, natural gas fueling infrastructure projects funded by both TERP programs and by the private sector are beginning to provide some assurance that using natural gas vehicles will be viable in the long-term.¹³³ The private sector has also taken great strides in reducing the costs of converting existing vehicles to natural gas and in producing new natural gas vehicles. As a result of these developments, businesses and government entities have begun transitioning their fleets to capitalize on the benefits of natural gas.¹³⁴

¹²⁸ Tex. S.B. 5, 77th Leg., R.S. (2001).

¹²⁹ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Joe Walton, Texas Commission on Environmental Quality).

¹³⁰ *Id.*

¹³¹ Tex. Tax Code §162.001.

¹³² Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of John Esparza, Texas Motor Transportation Association).

¹³³ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Joe Walton, Texas Commission on Environmental Quality).

¹³⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Reagan Noll, Clean Energy Fuels Corporation).

Electric Vehicles and Electric Vehicle Charging Stations

As noted above, in addition to liquefied gas, electricity is also considered an alternative fuel. Electricity is used to charge the batteries of electric vehicles (EVs). Currently, there are only about 2,000 EVs estimated in Texas, but that number is expected to increase to roughly 60,000 by 2020.¹³⁵ Hybrid vehicles, which use traditional fuel sources to charge batteries, are not considered EVs for the purposes of this report, but they are considered to be alternative-fuel vehicles.

There are varying options available for charging EV batteries. In the near future, it is expected that most charging will occur at owners' homes or in fleet yards.¹³⁶ However, charging stations along highways and key corridors will be important for longer range travel.¹³⁷ At this time, there are charging stations available in a number of Texas cities, especially in the metropolitan areas of the Texas Triangle (Dallas-Fort Worth, Houston, San Antonio, and Austin).¹³⁸

FINDINGS

Natural Gas Fueling Infrastructure and Alternative-Fueled Vehicles

Historically, the lack of natural gas infrastructure and vehicles has prevented the widespread use of natural gas as fuel.¹³⁹ In recent years, the Texas Legislature has created several programs under TERP aimed at reducing air emissions and increasing the use of alternative fuels. The funding of natural gas infrastructure and natural gas vehicle replacements or conversions has been a focus of these programs. The private sector has also made large investments in natural gas infrastructure and natural gas vehicles. Together, Texas and the industry have solved the problem of whether to first build infrastructure or manufacture natural gas vehicles.

Programs Funded Through TERP

From the beginning of the TERP program in Fiscal Year 2002 through Fiscal Year 2012, the TCEQ awarded grants for 8,956 projects totaling \$858,145,220.¹⁴⁰ This resulted in the upgrade or replacement of over 14,500 vehicles and pieces of equipment.¹⁴¹ Many of the grants awarded were also for natural gas and alternative-fuel infrastructure. The criteria for what can be funded and for which geographical areas the funding can be provided varies amongst the different TERP funded programs.

During the 81st Regular Session, the Legislature passed Senate Bill 1759 by Senator Watson establishing the Texas Clean Fleet Program.¹⁴² This program provides grants through TERP to encourage owners of large vehicle fleets in Texas to replace diesel vehicles with alternative fuel or hybrid vehicles.¹⁴³ This program is statewide, but the TCEQ has focused funding to vehicles

¹³⁵ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Russ Keene, Plug-In Texas).

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ Center for the Commercialization of Electric Technologies, *Volume 2 Texas Triangle Plug-in Electric Vehicle Readiness Plan* at 39 (Oct. 2012).

¹³⁹ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Reagan Noll, Clean Energy Fuels Corporation).

¹⁴⁰ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Joe Walton, Texas Commission on Environmental Quality).

¹⁴¹ *Id.*

¹⁴² Tex. S.B. 1759, 81st Leg., R.S. (2009).

¹⁴³ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Joe Walton, Texas Commission on Environmental Quality).

operating in the counties with ground-level ozone issues.¹⁴⁴ To date, \$23.8 million in grants have been granted for 10 projects through this program under the guidance of the TCEQ.¹⁴⁵ The purchases of natural gas, propane, hybrid, and electric vehicles have all been funded.

The 82nd Texas Legislature established several more TERP-funded programs related to alternative fuels in Senate Bill 385.¹⁴⁶ First, the Texas Natural Gas Vehicle Incentive Program focuses on replacing or converting gasoline or diesel vehicles in the Texas Triangle with natural gas vehicles and engines. To date, \$10.1 million has been awarded under this program.¹⁴⁷ Next, the Alternative Fueling Facilities Program provides grants for alternative fuel infrastructure in those areas designated as nonattainment under the Federal Clean Air Act requirements.¹⁴⁸ These areas include Dallas-Fort Worth, Houston-Galveston-Brazoria, and El Paso County.¹⁴⁹ For Fiscal Year 2012, the TCEQ has selected six projects totaling \$2.8 million for funding under this program including several natural gas fueling stations and a hydrogen fueling station.¹⁵⁰ Lastly, the Clean Transportation Triangle Program provides funding for natural gas fueling stations along the interstate highways in the Texas Triangle.¹⁵¹ Under this program, ten projects have been selected by the TCEQ for this biennium for \$3.25 million of funding.¹⁵²

Private Sector Investment

The efforts of the Texas Legislature and the TCEQ have contributed to the use of natural gas and other alternative-fuels by businesses and government entities. However, widespread adoption would not be possible without investments by the private sector. The private sector has embraced alternative-fuels, particularly LNG and CNG, and is consequently delivering the necessary infrastructure and vehicles to make natural gas fueling a reality.

With regards to LNG infrastructure, the America's Natural Gas Highway project calls for a network of 150 LNG truck fueling stations along the nation's major freight trucking corridors.¹⁵³ Approximately 70 of these fueling stations have been completed, with plans to build another 70-80 stations in 2013.¹⁵⁴ Several major corridors in Texas have completed stations already, including the Texas Triangle, the Southwest Corridor, Texas to Atlanta, and Texas to Chicago.¹⁵⁵ It is hoped that this project, along with other infrastructure improvements, will allow the long-haul trucking industry to widely adopt LNG as a vehicle fuel in the near future.¹⁵⁶

There has been progress in CNG fueling infrastructure, as well. Technological advances have made it possible for traditional fueling stations or industrial locations to compress natural gas on-

¹⁴⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Joe Walton, Texas Commission on Environmental Quality).

¹⁴⁵ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Joe Walton, Texas Commission on Environmental Quality).

¹⁴⁶ Tex. S.B. 385, 82nd Leg., R.S. (2011).

¹⁴⁷ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Joe Walton, Texas Commission on Environmental Quality).

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Reagan Noll, Clean Energy Fuels Corporation).

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

site without sacrificing a lot of space.¹⁵⁷ This addresses the previous problem of the CNG fueling infrastructure footprint being too large and increases opportunities for existing fueling stations to offer CNG fueling.¹⁵⁸ Additionally, the CNG fueling equipment is “Plug & Play” allowing it to be relocated if needed at a limited cost.¹⁵⁹ Meanwhile, progress is being made towards offering consumers a low-cost device for residential fueling.¹⁶⁰ This device would connect to existing home gas lines and allow market reach to the average consumer.¹⁶¹

Advancements are also being made in the area of natural gas vehicles. In 2012, roughly 40 percent of new trash trucks were natural gas models.¹⁶² That percentage is expected to increase to nearly 50 percent in 2013.¹⁶³ Engine manufacturers and truck manufacturers have presented plans to introduce a variety of new natural gas trucks and engines in the near future.¹⁶⁴ Additionally, the industry is developing new technology to reduce the costs of converting existing vehicles to natural gas.¹⁶⁵ For example, the cost of CNG fuel tanks could be reduced by \$1,000 per tank compared to current tanks.¹⁶⁶

Impact of Increased Alternative-Fuel Vehicle Usage

As noted previously, many of the fuels used in alternative-fuel vehicles are defined as liquefied gas. The tax rate on liquefied gas is 15 cents per gallon.¹⁶⁷ An interstate trucker operating a motor vehicle licensed in another state, or any other out-of-state user, pays the tax when the fuel is purchased.¹⁶⁸ Likewise, an interstate trucker whose vehicle is registered in Texas but may operate in other states under a multistate tax agreement pays the tax at the pump.¹⁶⁹ However, the remainder of Texas-registered vehicles using liquefied gas purchase a liquefied gas tax decal by prepaying their gas taxes annually based on the registered gross weight and mileage driven the previous year in the schedule on the following page (Page 26):

¹⁵⁷ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Christopher "Chip" Haass, Chesapeake Energy).

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of John Esparza, Texas Motor Transportation Association).

¹⁶³ *Id.*

¹⁶⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Reagan Noll, Clean Energy Fuels Corporation).

¹⁶⁵ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Christopher "Chip" Haass, Chesapeake Energy).

¹⁶⁶ *Id.*

¹⁶⁷ Tex. Tax Code § 162.301.

¹⁶⁸ *Id.* at § 162.302.

¹⁶⁹ *Id.*

	Less than 5,000 miles	5,000 to 9,999 miles	10,000 to 14,999 miles	15,000 miles and over
Class A: Less than 4,000 pounds	\$30	\$60	\$90	\$120
Class B: 4,001 to 10,000 pounds	\$42	\$84	\$126	\$168
Class C: 10,001 to 15,000 pounds	\$48	\$96	\$144	\$192
Class D: 15,001 to 27,500 pounds	\$84	\$168	\$252	\$336
Class E: 27,501 to 43,500 pounds	\$126	\$252	\$378	\$504
Class F: 43,501 pounds and over	\$186	\$372	\$558	\$744

*Chart Source: Texas Tax Code Section 162.305¹⁷⁰

It is currently unknown what impact the increased use of alternative-fuel vehicles will have on transportation funding, but TxDOT has noted the existing use of such vehicles is extremely limited relative to gas and diesel-fueled vehicles.¹⁷¹ There were 22,616,153 vehicles registered in Texas in Fiscal Year 2012.¹⁷² While it is unknown how many of those were alternative-fuel vehicles, 33,409 vehicles had purchased a prepaid liquefied gas tax decal as of December 31, 2012.¹⁷³ Of that total, there were 26,691 propane vehicles, 6,147 CNG vehicles, and 528 LNG vehicles.¹⁷⁴ However, it should be noted that LNG vehicles include long-haul trucks and that interstate truckers do not purchase decals for those vehicles.

In Fiscal Year 2012, the gross revenue from the liquefied gas tax totaled \$1.1 million.¹⁷⁵ Comparatively, in that same time frame the revenue from the gasoline tax was almost \$2.4 billion, and the revenue from the diesel fuel tax was approximately \$780 million.¹⁷⁶ These figures further drive home the point that alternative-fuel vehicles do not have a significant impact on transportation funding at the present time.

In the long term, alternative-fuel vehicles, and rising fuel efficiency in general, could have a significant impact on the amount of motor fuels tax revenue collected by TxDOT.¹⁷⁷ More fuel efficient vehicles will result in less fuel being purchased and, in turn, less revenue being collected.¹⁷⁸ This does not even factor in EVs, which currently pay no fuel taxes or fees. In its 2013 program, the TxDOT research division will include a study of the impact of increased use

¹⁷⁰ *Id.* at § 162.305.

¹⁷¹ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Phil Wilson, Texas Department of Transportation).

¹⁷² Email between Jonathan Sierra-Ortega and Cori Thomason at Texas Department of Motor Vehicles on Jan. 30, 2013.

¹⁷³ Email between Paul Townsend and Kirk Davenport at Texas Comptroller of Public Accounts on Jan. 30, 2013.

¹⁷⁴ *Id.*

¹⁷⁵ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Phil Wilson, Texas Department of Transportation).

¹⁷⁶ Texas Comptroller of Public Accounts, *State of Texas 2012 Annual Cash Report* (Nov. 5, 2012) http://www.window.state.tx.us/finances/pubs/cashrpt/12/texas_annual_cash_report_2012.pdf (last visited Jan. 31, 2012).

¹⁷⁷ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Phil Wilson, Texas Department of Transportation).

¹⁷⁸ *Id.*

of alternative-fuel vehicles on state transportation funding.¹⁷⁹ TxDOT will then report its findings to the Committee.¹⁸⁰

Electric Vehicles and Electric Vehicle Charging Stations

As noted in the background section, the number of EVs in Texas is expected to increase significantly in the future. The private sector has already invested roughly \$20 billion in EVs and is expected to produce 30 models by 2014.¹⁸¹ As the technology improves and more EVs come to market, it is believed private industry will provide the necessary charging stations.¹⁸² The private industry, often with government assistance, is already making significant investments in the metropolitan areas of Dallas, Houston, San Antonio, and Austin.¹⁸³ However, there is very little investment planned in the intercity corridors or rural areas.¹⁸⁴ Having such infrastructure along the corridors connecting Texas cities will be vital to the long-term increase in EV market penetration.¹⁸⁵

There are currently three types of commercial charging options for EVs¹⁸⁶:

Name	Power Source	Charge Time
Level 1	120v outlet	6-8 hours
Level 2	240v outlet	2-3 hours
Level 3	DC	5 minutes

Level 1 and Level 2 chargers can be utilized in most homes and businesses. Level 1 chargers draw roughly the same amount of power as a hair dryer (1.2kW), while Level 2 chargers draw approximately half the power of an electric clothes dryer (3.3kW).¹⁸⁷ Level 3, or DC Chargers, are largely for commercial use. They cost between \$20,000 and \$50,000, and are about the size of a traditional gas pump.¹⁸⁸ Of note, Houston and the Dallas-Fort Worth area have the greatest concentration of DC chargers in the country.¹⁸⁹

TERP funds are available for EVs and for EV charging stations. The Texas Clean Fleet Program has provided funding for EVs.¹⁹⁰ However, only the City of Austin has applied for EVs under this program.¹⁹¹ Therefore, it is difficult to gauge the potential demand for grant funding of EVs

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Russ Keene, Plug-In Texas).

¹⁸² *Id.*

¹⁸³ Center for the Commercialization of Electric Technologies, *Volume 2 Texas Triangle Plug-in Electric Vehicle Readiness Plan* at 39 (Oct. 2012).

¹⁸⁴ *Id.*

¹⁸⁵ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Russ Keene, Plug-In Texas).

¹⁸⁶ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Russ Keene, Plug-In Texas).

¹⁸⁷ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Russ Keene, Plug-In Texas).

¹⁸⁸ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Russ Keene, Plug-In Texas).

¹⁸⁹ Center for the Commercialization of Electric Technologies, *Volume 2 Texas Triangle Plug-in Electric Vehicle Readiness Plan* at 39 (Oct. 2012).

¹⁹⁰ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Joe Walton, Texas Commission on Environmental Quality).

¹⁹¹ Senate Committee on Transportation hearing, Dec. 18, 2012 (written testimony of Joe Walton, Texas Commission on Environmental Quality).

and EV charging infrastructure.¹⁹² While the industry supports the grants for EVs and charging stations, it is confident the private sector will meet the need as market demands increase.¹⁹³

Impact of Electric Vehicles on the State's Electric Grid

In the near term, widespread EV adoption should have no impact on the state's electric grid.¹⁹⁴ EV charging could actually present some opportunities for the grid. First, EVs and charging stations could be made a "controllable load" that can participate in demand response programs.¹⁹⁵ This could provide the benefit of helping reduce loads when needed.¹⁹⁶ Second, EVs could be programmed to charge when renewable output is highest. Specifically, they could come online during peak periods of wind power.¹⁹⁷ Third, and perhaps the most important, EVs could be programmed to charge during off-peak times.¹⁹⁸

In the long term, there could be a challenge to resource adequacy.¹⁹⁹ The key will be ensuring that charging is not done during peak times, especially summer afternoons.²⁰⁰ In preparation for the future, the Electric Reliability Council of Texas (ERCOT) is actively working to build expertise in the area of EVs and EV charging.²⁰¹ This includes performing tests and coordinating with other independent system operators on EV integration issues.²⁰²

RECOMMENDATIONS

Natural Gas Fueling Infrastructure and Alternative-Fueled Vehicles

The increase of natural gas infrastructure and fueling stations should be encouraged in order to efficiently utilize Texas' vast domestic reserves of natural gas. The low cost of natural gas is a "game changer" for industries such as long-haul trucking.²⁰³ As such, the private sector should continue their current plans and efforts to build fueling stations. Additionally, further usage of natural gas, and alternative-fuel in general, has the benefits of reducing emissions and improving air quality. Therefore, the state should ensure it does not hinder the adoption of natural gas use, particularly in long-haul trucks. To that end, the state should also continue to fund TERP and allow its programs to award grants for alternative-fuel vehicles and infrastructure, particularly natural gas fueling stations. Lastly, TxDOT should proceed with their planned study of the impact of alternative-fuel vehicles on state transportation funding and then report their findings to the Committee.

Electric Vehicles and Electric Vehicle Charging Stations

Increased numbers of EVs should not have any impact on the state's electric grid. ERCOT should continue to monitor and build expertise in the area of EVs and EV charging in order to

¹⁹² *Id.*

¹⁹³ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Russ Keene, Plug-In Texas).

¹⁹⁴ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of Trip Doggett, Electric Reliability Council of Texas).

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ *Id.*

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² *Id.*

²⁰³ Senate Committee on Transportation hearing, Dec. 18, 2012 (testimony of John Esparza, Texas Motor Transportation Association).

ensure there are no negative impacts in the long-term. Texas should continue to support EV adoption through TERP, but allow for private industry to meet the demands as the number of EVs increases.

Report on Legislation of the 82nd Legislature

Monitor the implementation of legislation addressed by the Senate Committee on Transportation & Homeland Security, 82nd Legislature, Regular and Called Sessions, and make recommendations for any legislation needed to improve, enhance, and/or complete implementation. Specifically, monitor the following:

- *Implementation of the Sunset Advisory Commission recommendations, statutory changes specified in TxDOT's sunset legislation and TxDOT's modernization efforts, including the use of public and private engineering services and the implementation and use of business performance measures;*
- *Implementation of Proposition 12 funding provided by the fiscal year 2012-2013 Appropriations Act, including an assessment of the impact of this funding on the state's Top 50 list of congested roadway segments and the funding needed to advance each region's priorities in fiscal year 2014-2015;*

The 82nd Texas Legislature (2011) considered several important transportation bills relevant to the committee. One of the most important bills effecting transportation policy was Senate Bill (S.B.) 1420, the Texas Department of Transportation (TxDOT) Sunset bill.²⁰⁴

BACKGROUND

TxDOT Sunset

During the 81st Legislature, House Bill (H.B.) 300, TxDOT's Sunset bill would have revised policy and oversight bodies, statewide and local transportation planning, funding for transportation projects, toll road authority, and TxDOT powers, duties, and regulatory oversight.²⁰⁵ The bill also would have continued TxDOT for four years, until September 1, 2013, but it failed to pass the Legislature. However a "safety net" bill, Senate Bill 2 was enacted during the first called session, essentially extending the TxDOT for an additional two years until September 1, 2011. In 2010, Grant Thornton, LLP, conducted a top down management and organizational review of TxDOT and presented those findings to the Texas Transportation Commission. Several of Grant Thornton's final recommendations were implemented into S.B. 1420, which passed during the 82nd Regular Session. It adopted several provisions that were substantially similar to the Sunset legislation for TxDOT which failed to pass during the 81st Legislative session. S.B. 1420 continues the agency and contains several additional statutory modifications that seek to address the demand for more transparency, accountability, and responsiveness from TxDOT.²⁰⁶

DISCUSSION

TxDOT Sunset Legislation

S.B. 1420, as adopted by the 82nd Legislature, continued TxDOT for four years. The legislation included 28 changes requiring action. One of those provisions in S.B. 1420 authorized TxDOT

²⁰⁴ Tex. S.B. 1420, 82nd Leg., R.S. (2011).

²⁰⁵ Tex. H.B. 300, 82nd Leg., R.S. (2011).

²⁰⁶ Tex. S.B. 1420, 82nd Leg., R.S. (2011).

to enter into comprehensive development agreements (CDAs). The following chart summarizes three provisions that are still in progress and provides the status of each.²⁰⁷

Bill Provisions	Implementation	
	Status	Comments
<p>1. Requires TxDOT to develop and implement a public involvement policy that guides and encourages more meaningful public involvement efforts agency-wide. Requires the Department's public involvement policy to make efforts toward clearly tying public involvement to decisions made by the Department and providing clear information to the public about specific outcomes of public input.</p>	In Progress	<p>The Transportation Commission has adopted a Public Involvement Policy that requires the agency to "purposefully involve the public in planning and project implementation by providing for early, continuous, transparent and effective access to information and decision-making processes." The agency is preparing guidance for staff to ensure that efforts are made to tie public input to Department decisions, and to notify the public on the specific outcomes of public input. The agency anticipates this guidance will be completed and distributed by mid-2013.</p>
<p>2. Authorizes TxDOT to enter into comprehensive development agreements (CDAs) for all or part of the following projects, with this authority expiring on August 31, 2015 for all of the projects except the State Highway 99 (Grand Parkway) project:</p> <ul style="list-style-type: none"> ➤ the State Highway 99 (Grand Parkway) project; ➤ the Interstate Highway 35E managed lanes project in Dallas and Denton Counties from Interstate Highway 635 to U.S. Highway 380; ➤ the North Tarrant Express project in Tarrant and Dallas Counties, including on State Highway 183 from State Highway 121 to State Highway 161 (Segment 2E); on Interstate Highway 35W from Interstate Highway 30 to State Highway 114 (Segments 3A, 3B, and 3C); and on Interstate Highway 820 from State Highway 183 North to south of Randol Mill Road (Segment 4); ➤ the State Highway 183 managed lanes project in Dallas County from State Highway 161 to Interstate Highway 35E; ➤ the State Highway 249 project in Harris and Montgomery Counties from Spring Cypress Road to Farm-to-Market Road 1774; ➤ the State Highway 288 project in Brazoria County and Harris County; and 	In Progress	<p>Six of the authorized projects are currently in various stages of procurement or implementation. The seventh, U.S. Highway 290 in Houston, is being constructed via the traditional design-bid-build method, rather than as a CDA.</p> <p>The following projects have not received full environmental clearance:</p> <ul style="list-style-type: none"> ➤ The State Highway 99 (Grand Parkway) project, Segments B, C, H, and I-1. Anticipate clearance late 2013/2014. ➤ The North Tarrant Express project in Tarrant and Dallas Counties, including on Interstate Highway 820 from State Highway 183 North to south of Randol Mill Road (Segment 4). Currently under review. ➤ The State Highway 288 project in Brazoria County and Harris County. Currently under review; anticipate clearance in 2013. ➤ The U.S. Highway 290 Hempstead managed lanes project in Harris County from Interstate Highway 610 to State Highway 99. Record decision approved August 2012; anticipate remaining re-evaluations by 2013.

²⁰⁷ Sunset Advisory Commission, *Compliance Report*, Implementation of 2011 Sunset Legislation.

<ul style="list-style-type: none"> ➤ the U.S. Highway 290 Hempstead managed lanes project in Harris County from Interstate Highway 610 to State Highway 99. <p>Before entering into a CDA for these projects, requires the Department to obtain the appropriate environmental clearance by August 31, 2013 for any project other than the State Highway 99 (Grand Parkway) project, and present a full financial plan for the project, including costing methodology and cost proposals, to the Commission. Requires the Department to present a report to the Commission on the status of each CDA project, including status of environmental clearance, explanation of any project delays, and anticipated procurement completion date, by December 1, 2012.</p>		
<p>3. Authorizes TxDOT or certain Regional Mobility Authorities (RMAs) to enter into a CDA relating to improvements to or construction of the following projects, with this authority expiring on August 31, 2015:</p> <ul style="list-style-type: none"> ➤ the Loop 1 (MoPac Improvement) project from Farm-to-Market Road 734 to Cesar Chavez Street; ➤ the U.S. 183 (Bergstrom Expressway) project from Springdale Road to Patton Avenue; or ➤ a project consisting of the construction of the Outer Parkway Project from U.S. Highway 77/83 to Farm-to-Market Road 1847; and the South Padre Island Second Access Causeway Project from State Highway 100 to Park Road 100. <p>Before entering into a CDA for these projects, requires the Department or RMA as applicable to obtain the appropriate environmental clearance by August 31, 2013 and present a full financial plan for the project, including costing methodology and cost proposals, to the Commission. Requires the Department or RMA to present a report to the Commission on the status of each CDA project, including status of environmental clearance, explanation of any project delays, and anticipated procurement completion date, by December 1, 2012.</p>	<p>In Progress</p>	<p>These projects are currently in various stages of procurement or implementation.</p> <p>The following projects have not received full environmental clearance:</p> <ul style="list-style-type: none"> ➤ The U.S. 183 (Bergstrom Expressway) project from Springdale Road to Patton Avenue. Anticipate completion of environmental study in 2014. ➤ A project consisting of the construction of the Outer Parkway Project from U.S. Highway 77/83 to Farm-to-Market Road 1847. Environmental study in progress. ➤ The South Padre Island Second Access Causeway Project from State Highway 100 to Park Road 100. Final Environmental Impact Statement in progress.

TxDOT Modernization

Modernization is the process of improving TxDOT business practices to increase efficiency, spend tax dollars wisely, and become a more nimble agency that is prepared to respond to state's

changing transportation needs.²⁰⁸ The Transportation Commission asked three outside experts, Jay Kimbrough, David Laney, and Howard Wolf to serve as the TxDOT Restructure Council.²⁰⁹ After reviewing the Grant Thornton report and several other audit and reviews, the Restructure Council provided TxDOT with a report of their findings which lead to the foundation of the Modernization Project. In June 2011, TxDOT hired the Kaepfel Consulting firm to assist TxDOT in implementing the recommendations from the Restructure Council report.²¹⁰ Some of TxDOT's modernization efforts include:

- Separating the Government Relations and Communications functions at TxDOT to ensure role clarity and adequate focus in accomplishment of TxDOT mission;
- Combining HUB and DBE functions into one office;
- Establishing a compliance office to ensure compliance with applicable legal statutes;
- Establishing a Project Management Office;
- Expanding streamlined environmental review process;
- Expanding streamlined Right-of-Way acquisition and Utility Accommodation process;
- Developing a function and process for long-term, multi-modal transportation planning; and
- Increasing development of rural planning organizations.²¹¹

Modernization and implementation of Sunset has created a positive change at TxDOT.²¹²

Implementation of Prop 12 Bonds

In 2001, the Legislature armed TxDOT with a tool so it could provide project planning through the issuance of bonds.²¹³ Proposition 12 Highway Improvement General Obligation Bonds (Prop 12) have allowed the state to fund and advance \$5 billion worth of projects.²¹⁴ Construction contracts for the first \$2 billion in projects were approved in 2010.

House Bill 1 (82nd Texas Legislature, Regular Session) appropriated the remaining \$3 billion allowed under its constitutional jurisdiction.²¹⁵ Along with appropriating the additional \$3 billion, the Legislature provided an outline of the type of projects which were to be funded with these bond proceeds. TxDOT has worked with local partners and the public to identify priority projects.

Project Selection Process

TxDOT used the same collaborative method used to select American Recovery and Reinvestment Act (ARRA) projects. TxDOT districts and Metropolitan Planning Organizations (MPOs) were asked to develop a list of all needed projects that fit the bond program's

²⁰⁸ Committee on Transportation hearing, Dec. 18, 2012. (written testimony of Phil Wilson, Texas Department of Transportation).

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ *Id.*

²¹² *Id.*

²¹³ Tex. H.B. 3064, 77th Leg., R.S. (2001); Tex. H.J.R. 97, 77th Leg., R.S. (2001).

²¹⁴ Committee on Transportation hearing, Dec. 18, 2012. (written testimony of Phil Wilson, Texas Department of Transportation).

²¹⁵ Tex. H.B. 1, 82nd Leg., R.S. (2011).

requirements. In all, Texas MPOs and TxDOT districts identified over 850 possible projects with a construction value of over \$8.9 billion.²¹⁶

TxDOT staff chose to divide those projects among three areas and use the following metrics to determine which would be recommended for funding:

1. Corridors of State Significance, which were recommended based on traffic density and crash rates;
2. Rehabilitation and Safety projects, which were recommended based on pavement improvement index and safety improvement index; and
3. Mobility Projects, which were recommended based on the amount of delay reduced and their correlation to the Top 100 Most Congested Segments of Roadway.²¹⁷

Bond Allocations

The Texas Transportation Commission (TTC) issued the first billion dollars of Prop 12 bonds in September of 2012 which had an annual debt service of approximately \$63.5 million of which \$12.5 million is paid for by the Federal government through the Build American Bond and \$51 million is paid from the state's GR fund.²¹⁸ In December 2012, TTC issued another \$1.1 billion in Prop 12 bonds which has a lower full debt service payment of \$59.9 million.²¹⁹ The remaining \$3 billion in bonds will be issued in approximately \$1 billion increments each year to make progress payments to contractors.²²⁰ The General Appropriations Act specified that the funding would be allocated as follows:

Program 2 of Proposition 12:

- \$1.4 billion for rehabilitation and safety projects distributed to TxDOT's 25 districts;
- \$600 million for metropolitan and urban mobility projects to the 25 Metropolitan Planning Organizations (MPOs);
- \$200 million for statewide connectivity projects selected by the commission;
- \$500 million for bridge projects; and
- \$300 million for development work to address congestion in the four most congested metropolitan regions in the state (Rider 42 study, directed TxDOT to contract with Texas A&M Transportation Institute (TTI) to coordinate studies of the projects in the four most congested regions of the state).²²¹

TxDOT has worked with MPOs, cities, counties and corridor associations to help identify and prioritize state needs.²²² Through several meetings with stakeholders and public hearings, TxDOT was to create strategic partnerships which include the following:

- Ports to Plains Corridor;
- IH 69 Corridor (Pharr and Corpus Christi districts);

²¹⁶ Texas Department of Transportation, *Proposition 12 - Program 1 Factsheet*, http://www.dot.state.tx.us/project_information/prop12/facts.htm (last visited Jan. 31, 2013).

²¹⁷ *Id.*

²¹⁸ Committee on Transportation hearing, Dec. 18, 2012. (written testimony of Phil Wilson, Texas Department of Transportation).

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.*

²²² *Id.*

- Dallas Horseshoe Project (largest funded Prop 12 funded project at over \$800 million); and
- Expansion of the main lanes of I-35 through Temple (Vision: six lanes from San Antonio to Hillsboro “Y”).²²³

Prop 12 Projects

<u>CITY</u>	<u>COUNTY</u>	<u>ROAD</u>	<u>COST</u>	<u>TYPE OF PROJECT</u>
Waco	Bell	IH 35	\$138,380,621.55	CONSTRUCT NEW ROADWAY LANES
Waco	Bell	IH 35	\$72,636,928.58	CONSTRUCT NEW ROADWAY LANES
San Antonio	Bexar	MH	\$28,245,996.54	CONSTRUCT NEW ROAD
San Antonio	Bexar	PS	\$28,010,284.73	CONSTRUCT NEW ROAD
San Antonio	Bexar	MH	\$59,664,996.54	CONSTRUCT NEW ROAD
Pharr	Cameron	FM 800	\$5,571,833.28	INSTALL/UPGRADE DRAINAGE STRUCTURES
Dallas	Collin	FM 6	\$5,094,493.53	REPAIR ROADWAY
Dallas	Collin	FM 545	\$2,514,960.71	REPLACE BRIDGE
Dallas	Collin	FM 546	\$3,859,730.32	REBUILD ROADWAY
Dallas	Denton	FM 156	\$3,520,968.47	WIDEN ROADWAY
Dallas	Denton	FM 156	\$6,016,416.10	WIDEN ROADWAY
Dallas	Ellis	IH 35E	\$19,269,812.96	RESURFACE ROADWAY
El Paso	El Paso	LP 375	\$67,760,553.38	WIDEN ROADWAY
El Paso	El Paso	LP 375	\$7,244,231.00	STATE PARK IMPROVEMENTS
Houston	Harris	US 290	\$61,256,824.94	CONSTRUCT NEW ROADWAY LANES
Houston	Harris	IH 610	\$171,576,455.47	CONSTRUCT INTERCHANGE DIRECT CONNECTION
Houston	Harris	IH 45	\$88,166,945.55	WIDEN ROADWAY
Pharr	Hidalgo	US 281	\$11,267,080.85	WIDEN AND REHABILITATE ROADWAY
Pharr	Hidalgo	US 281	\$4,688,134.58	REBUILD ROADWAY
Waco	Hill	IH 35	\$105,200,890.74	CONSTRUCT NEW ROADWAY LANES
Waco	Hill	FM 933	\$4,175,376.00	WIDEN ROADWAY
Paris	Hunt	IH 30	\$10,663,114.42	REPAIR ROADWAY
Paris	Hunt	SH 11	\$5,973,839.39	REPAIR ROADWAY
Dallas	Kaufman	FM 148	\$8,419,793.74	REPLACE BRIDGE
Lubbock	Lubbock	US 62	\$10,315,372.88	REPAIR ROADWAY
Waco	McLennan	IH 35	\$180,539,828.83	CONSTRUCT NEW ROADWAY LANES
Dallas	Navarro	SH 31	\$8,849,756.66	REPAIR ROADWAY
Fort Worth	Parker	IH 20	\$4,000,000.00	REBUILD ROADWAY
Fort Worth	Parker	IH 20	\$26,913,963.48	REPAIR ROADWAY
Amarillo	Randall	IH 27	\$3,831,938.14	REPAIR ROADWAY
Pharr	Starr	US 83	\$17,385,598.54	REBUILD ROADWAY

²²³ *Id.*

Pharr	Zapata	US 83	\$7,850,602.07	REBUILD ROADWAY
Pharr	Zapata	US 83	\$24,973,064.57	REBUILD ROADWAY

CONCLUSION

Sunset legislation and Modernization of TxDOT has provided the agency with much needed change. TxDOT has made significant strides to improve their business practices and has become a much improved agency that is prepared to respond to the state's transportation needs. After the 82nd Legislature funded the debt service on all \$3 billion of unissued Prop 12 bonds, TxDOT did significant work to meet the directives that were made and all Prop 12 bonds have been used by TxDOT as directed.