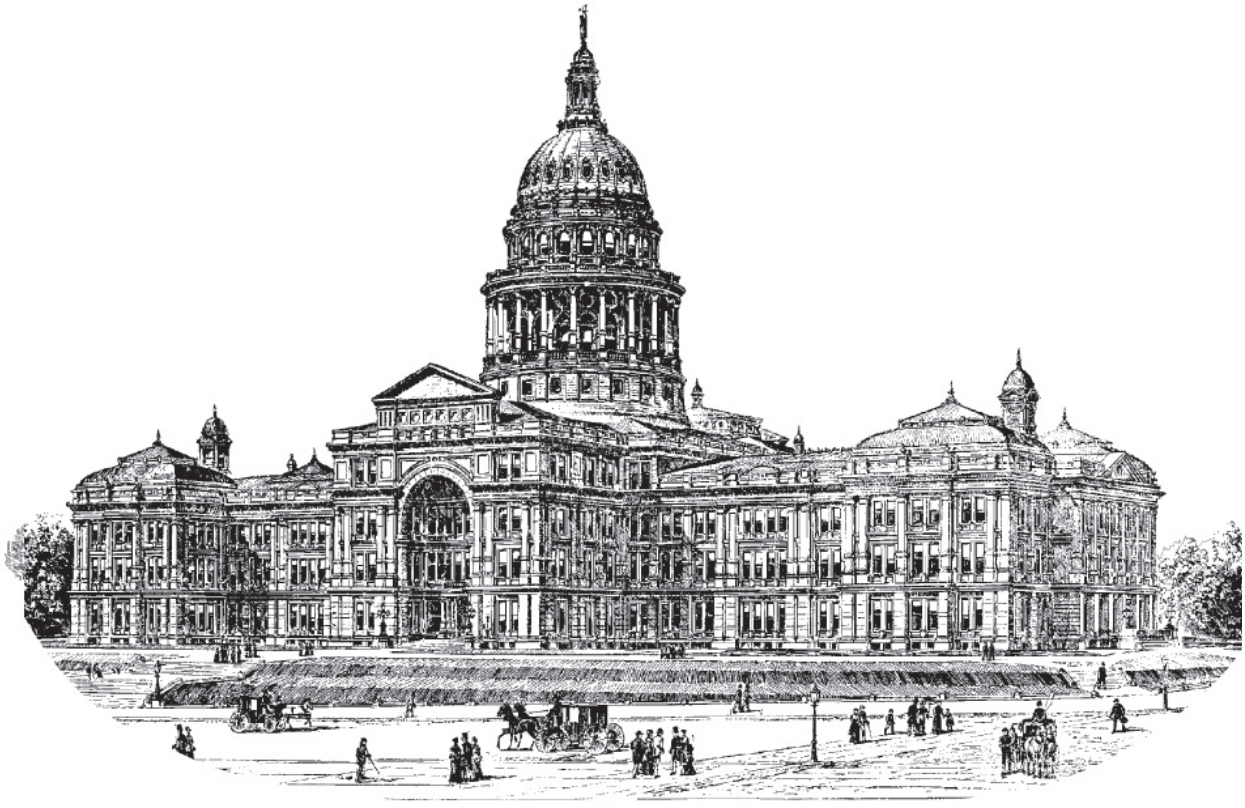
# Interim Report

## to the 83rd Texas Legislature



## House Committee on

# **Transportation**

December 2012

# HOUSE COMMITTEE ON TRANSPORTATION
# TEXAS HOUSE OF REPRESENTATIVES
# INTERIM REPORT 2012

**A REPORT TO THE**
**HOUSE OF REPRESENTATIVES**
**83RD TEXAS LEGISLATURE**

**LARRY PHILLIPS**
**CHAIRMAN**

**COMMITTEE CLERK**
**COURTNEY REID**
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Committee On Transportation

December 20, 2012

Larry Phillips
Chairman

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

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

Dear Mr. Speaker and Fellow Members:

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

Respectfully submitted,

Larry Phillips, Chair

Drew Darby, Vice Chair

Yvonne Davis

Joe Pickett

Ruth Jones McClendon

Dennis Bonnen

Eddie Rodriguez

Linda Harper-Brown

Armando "Mando" Martinez

Allen Fletcher

George Lavender

Drew Darby
Vice-Chairman

Members: Dennis Bonnen, Yvonne Davis, Allen Fletcher, Linda Harper-Brown, George Lavender, Armando 'Mando' Martinez, Ruth Jones McClendon, Joe Pickett, Eddie Rodriguez

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## HOUSE COMMITTEE ON TRANSPORTATION

## INTERIM STUDY CHARGES AND SUBCOMMITTEE ASSIGNMENTS

The House Committee on Transportation was appointed by The Honorable Joe Straus, Speaker of the Texas House of Representatives in February 2011. Larry Phillips was named chair of the committee and Drew Darby was named vice-chair. Committee membership also included: Dennis Bonnen, Yvonne Davis, Allen Fletcher, Linda Harper-Brown, George Lavender, Armando 'Mando' Martinez, Ruth Jones McClendon, Joe Pickett, and Eddie Rodriguez.

The chair assigned two subcommittees: the Subcommittee on Transit Operations and the Subcommittee on Transportation Funding. Members of the Subcommittee on Transit Operations include: Linda Harper-Brown, Chair; Yvonne Davis; Allen Fletcher; George Lavender; and Joe Pickett. Members of the Subcommittee on Transportation Funding include: Drew Darby, Chair; Allen Fletcher; Linda Harper-Brown; Ruth Jones McClendon; and Eddie Rodriguez.

The Committee was charged with studying and making recommendations regarding transportation agencies and programs in the State of Texas. Specifically the committee was charged as follows:

- Review the state of our current transportation infrastructure, including studying roadway, bridge, and waterway quality and long-range plans by the Texas Department of Transportation for maintaining these assets. Explore future needs of our infrastructure for the next decade and make recommendations to ensure long-range sufficiency.

- Study the state's preparedness for the expansion of the Panama Canal and determine whether the state's infrastructure is ready for the increase in commerce.

- Conduct a thorough review of the operations of transit organizations in Texas. Explore possible reforms to streamline and improve services to Texans.

- Study the environmental review process for transportation projects and monitor the implementation of reforms newly passed by the 82nd Legislature. Continue to work with all stakeholders to develop any necessary changes. (*Joint with the House Committee on Environmental Regulation*)

- Study transportation funding reforms and develop long-term state funding recommendations, with an eye on any federal reforms that become law. Explore options to eliminate "diversions" from Fund 6 to non-transportation-related programs. (*Joint with the House Committee on Appropriations*)

- Monitor the agencies and programs under the committee's jurisdiction and the implementation of relevant legislation passed by the 82nd Legislature.

**TRANSPORTATION INFRASTRUCTURE**

## Committee Action

The Committee met on March 22, 2012 to hear testimony regarding the current state of Texas' transportation infrastructure and long range plans by the Texas Department of Transportation (TxDOT) for maintaining those assets. Testimony was given by the following people and/or entities: Texas Department of Transportation; Texas Transportation Institute; Christopher Evilia for Waco Metropolitan Planning Organization; and Ashby Johnson for Texas Association of Metropolitan Transportation Organizations Houston-Galveston Area Council.

## Background

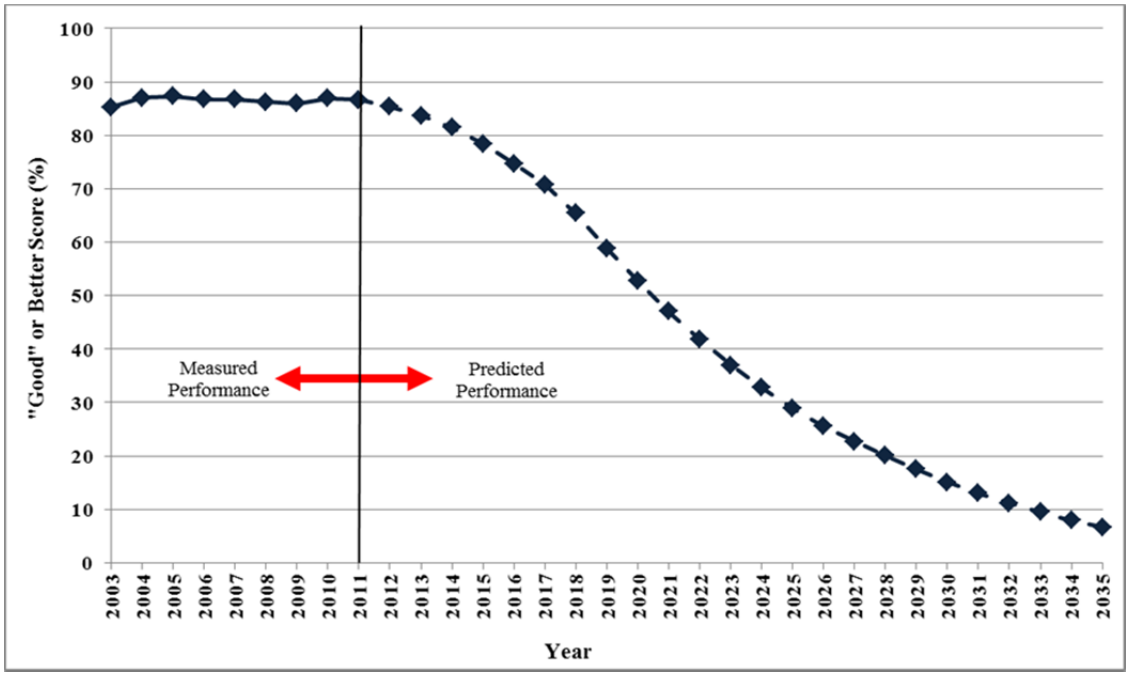
TxDOT manages and maintains a comprehensive transportation system of over 80,000 miles of roadway; over 51,000 bridges; approximately 300 general aviation airports; and over 390 miles of railroad.[1] Over the next 25 years Texas' population is projected to more than double; freight traffic is expected to grow at twice the rate of passenger vehicle traffic; and many miles of roads and bridges are expected to require re-building. As traffic levels increase so will wear and tear on the existing infrastructure, and the demand for additional capacity. At current funding levels the condition of Texas' transportation infrastructure will deteriorate over the next 10 years. State funding for transportation covers just the maintenance costs of the current system, with no money for new projects, while the number of new road users grows each day leading to even more wear and tear on the existing transportation structure. Insufficient maintenance of roads and bridges will mean the need for major reconstruction projects, and as the population grows congestion will increase. Poor road quality, structurally deficient bridges, and increased congestion all contribute to dangerous driving conditions, and affect the safety of the public. Ensuring the state's transportation infrastructure is safe, reliable, comprehensive, and efficient is paramount to maintaining the wellbeing of the growing number of Texans.

## Roadways

TxDOT routinely analyzes the quality and condition of the state's roadways. In 2001, the Texas Transportation Commission (Commission) established a goal of having 90 percent of Texas pavements in "good" or better condition by 2012. TxDOT has emphasized pavement maintenance and used a variety of best-practice methods to manage pavement conditions. Statewide, the percentage of lane miles in "good" or better condition is about 87 percent.[2] This number has decreased over the last couple of years mostly due to ongoing extreme drought conditions and increased oilfield activity.

However, according to the Federal Highway Administration, in 2010, 18 percent of Texas' major urban roads were in poor condition and an additional 27 percent were in mediocre condition.[3] Even with routine maintenance all roads eventually reach a point at which routine paving and maintenance are not adequate to keep pavement surfaces in good condition and reconstruction of the roadway and its underlying surfaces will become necessary. The graph below shows the dramatic decline in pavement conditions TxDOT expects to see unless pavement management efficiency and/or transportation funding are increased.

**Measured and Predicted Pavement Scores 2003-2035**




### Maintenance Strategies

In 2009, TxDOT implemented a four-year Pavement Management Program (PMP) to strategize the use of available funding for existing pavement preservation. The PMP prioritizes roadway maintenance needs according to highway type, degree of damage, financial constraints, history of deterioration, and climate condition. Through this nationally recognized program TxDOT was able to minimize expenditures on non-pavement functions and use available funding for

pavement economically.

Taking proactive maintenance measures to reduce damages to roadways is a much more cost-effective strategy than replacing or restoring roadways after it has been damaged. Proactive maintenance strategies include reconstructing or resurfacing a road to preserve it before damage occurs. Proactive maintenance of the transportation infrastructure reduces overall repair and maintenance costs by approximately 700 percent.[4]

TxDOT also utilizes an Intelligent Transportation System (ITS) network to manage and operate the existing transportation infrastructure at the highest level of efficiency. ITS allows state and local governments to collect and examine data on traffic accidents, travel time, and delay. Fourteen Traffic Management Centers located in individual TxDOT districts around the state are able to collect and share real time data, snapshots, and traffic information over a dedicated communications system. This information can also be shared with the public over dynamic message signs, or through third party data providers.

**Rider 36 Study**

The general increase in oversize/overweight vehicle traffic on Texas roads prompted the 82nd Legislature to direct TxDOT to study the issue. Rider 36 to the FY 2012-2013 General Appropriations Act requires TxDOT to "evaluate the damage that oversize and overweight vehicles cause on roads including exempt vehicles such as agricultural, garbage collection, grocery, produce, farm produce, concrete, milk, timber, and rock vehicles." Findings of the study, which is being conducted by the Center for Transportation Research at the University of Texas, will be submitted to the Governor and the Legislative Budget Board on December 1, 2012.[5]

## Bridges

Texas' 51,943 bridges represent a twelfth of the bridges in the entire nation, nearly 60 percent more than any other state. Each of those bridges is categorized as either on-system (located on a designated state highway system and maintained by TxDOT) or off-system (not part of the designated state highway system and maintained by a local government or district). There are more than 17,000 on-system bridges and more than 33,000 off-system bridges in Texas.[6] These bridge assets are valued at over $83 billion.[7]

The Federal Highway Administration (FHWA) further classifies bridges according to their condition: sufficient, structurally deficient, functionally obsolete, and substandard for load only.

| FHWA Classification | Characteristics | Number | On-System | Off-System |
|---|---|---|---|---|
| Sufficient | Meets current federal and Texas requirements | 42,035 | 30,253 | 11,782 |
| Structurally Deficient | Extreme restriction on load-carrying capacity; deterioration severe enough | 1,311 | 250 | 1,061 |

| | | | | |
|---|---|---|---|---|
| | to reduce load-carrying capacity below original as-built capacity; closed; and/or frequently over-topped during flooding, creating severe traffic delays. | | | |
| Functionally Obsolete | Fails to meet its design criteria in any one of the following areas: deck geometry, load-carrying capacity, vertical or horizontal clearances and approach roadway alignment. | 7,467 | 3,430 | 4,037 |
| Substandard for Load Only | Not classified as structurally deficient or functionally obsolete, but has load capacity less than maximum permitted by state law. Load-posted or recommended for load posting. | 1,143 | 88 | 1,055 |

While deficient bridges can be strengthened, most bridges have a typical design life of 50 years. A third of the bridges in Texas were built between 1950 and 1970; about half were built after 1970; the remaining 17 percent were built prior to 1950.[8] About 13 percent of the total bridge surface area in Texas will require investment in the next 20 years.[9]

If a bridge fails its inspection it is either closed or posted for a maximum load limit. As a result, vehicles (especially heavy vehicles such as cargo trucks and school buses) must be rerouted resulting in increased travel times and costs, and slower delivery of goods and services. The most recent evaluation of the state highway system identified 11 closed bridges with another four recommended for load-posting or closure. An additional 133 off-system bridges are closed and 161 are recommended for load-posting or closure.[10]

Under the former federal transportation authorization bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) the Highway Bridge Program (HBP) provided approximately $230 million each year to Texas for the replacement, rehabilitation, and maintenance of bridges. TxDOT distributed 75 percent of these funds to on-system bridges and the remaining 25 percent to off-system bridges. TxDOT used HBP funds to replace 185 deficient bridges in FY 2012, bringing the percentage of Texas bridges in good or better condition to an estimated 80.7 percent. Under the new MAP-21 bill the HBP was consolidated into the National Highway Performance Program (on-system bridges) and the Surface Transportation Program (off-system bridges).

In 2011, the Legislature authorized Rider 42 of the General Appropriations Act, which directed TxDOT to use $500 million of Prop 12 Bonds on nine high traffic bridges across the state in

critical need of repairs.

## Rail

TxDOT's Rail Division was established in 2009. In 2010, the Commission approved the Texas Rail Plan, a comprehensive document created in conjunction with the Federal Railroad Administration (FRA) to address future and existing passenger and freight rail service in Texas. Key features of the Texas Rail Plan include: [11]

- future expansion activities;
- possible relocations;
- underlying growth, both in population and freight mobility as trade patterns change;
- evaluation of passenger and freight mobility;
- developing freight and passenger rail policies and principles;
- developing service/investment goals and programs; and
- developing funding and financing for a comprehensive rail network.

A number of current and recently completed TxDOT rail projects have focused on railroad grade crossing improvements to address safety, capacity, and congestion. Projects along the coast and along freight corridors are expected to meet increased trade demands connected to the energy sector and the expansion of the Panama Canal.

Many of the projects of the Rail Division have been funded by federal grants such as those available under the American Recovery and Reinvestment Act (ARRA), High Speed and Intercity Passenger Rail Funding program (HSIPR), and the Transportation Infrastructure Generating Economic Recovery (TIGER) programs. In the last few years over $65 million in grants from these programs has been used for various projects including: adjusting signal timing to increase travel speeds; laying additional track to improve commuter rail; feasibility studies and planning for an 850 mile high-speed rail corridor from south Texas to Oklahoma City; and engineering and environmental studies on a high-speed rail link between Houston and Dallas.

The South Orient Rail Line (SORR) is one of only seven rail gateways between the United States and Mexico. The 391-mile line is owned by TxDOT, but maintained and operated by Texas Pacifico Trasportation, Ltd. (TXPF). It is currently being rehabilitated through a combination of grants, and other public and private funds. Improvements to the SORR are expected to relieve some of the congestion at other border crossings, allow for the shipment of hazardous material, and increase overall freight capacity. New businesses (some that require transportation of petroleum products) are moving in along the line. The number of rail cars interchanged annually has risen from an average of 2,600 in 2006-2010 to nearly 8,000 in 2011. Freight volume on the SORR is expected to double in 2012 and again in 2013.

## General Aviation

Texas has a network of almost 300 publicly accessible airports supporting general aviation activities in Texas. Business and flight support at these airports generate billions of dollars in economic activity, create jobs, and improve business operating efficiencies. In addition, these

airports across the state attract business and leisure visitors, who bring new spending to local economies.

TxDOT's recent Economic Impact Analysis examined the impacts of operational and capital spending at general aviation airports on operating and capital improvements; business operations of airport tenants; and visitor spending by itinerant pilots and their passengers. All of these business activities create downstream spending by vendors and employees, resulting in a multiplier effect. The analysis estimates the impacts of aviation-related spending and business operations on Output, Labor Income and Jobs, which is shown in the table below:[12]

**Economic Impact of Aviation-Related Spending and Business Operations**

| Economic Measure | Description | General Aviation | Commercial Activities | Total Economic Impact |
|---|---|---|---|---|
| Output | Value of all directly and indirectly related business transactions | $15 billion | $45 billion | $60 billion |
| Labor Income | Salaries, wages, and benefits paid to employees | $3 billion | $20 billion | $23 billion |
| Jobs | Number of jobs supported by all related business activities | 56,635 | 714,720 | 771,355 jobs |

## Waterways

Texas' ports and waterways are discussed later in this report under the section relating to preparedness for the expansion of the Panama Canal.

## Mobility

There is an established link between mobility and quality of life for Texans. Traffic congestion imposes social and economic costs by limiting access to work, home, education, goods and services, and recreational activities. Good urban mobility allows people to move when and where they wish within large and small cities; rural connectivity ensures ease of movement along major rural Texas highways, which are the network between cities and towns, points of entry, tourism areas, ports and other key destinations for people and freight. When too many vehicles try to move at the same time on an inadequate transportation network the extra travel time and fuel consumption equate to real costs for people and businesses. These costs can be mitigated by investment in road and public transportation projects that increase the capacity for travel.

Anticipated increase in congestion could result in the loss of over 288,000 Texas jobs by the year 2035 as businesses choose to relocate to areas where they have better access to suppliers, customers, and the labor force. Conversely, it has been suggested by making transportation improvements to keep traffic congestion from worsening, Texas stands to realize an economic

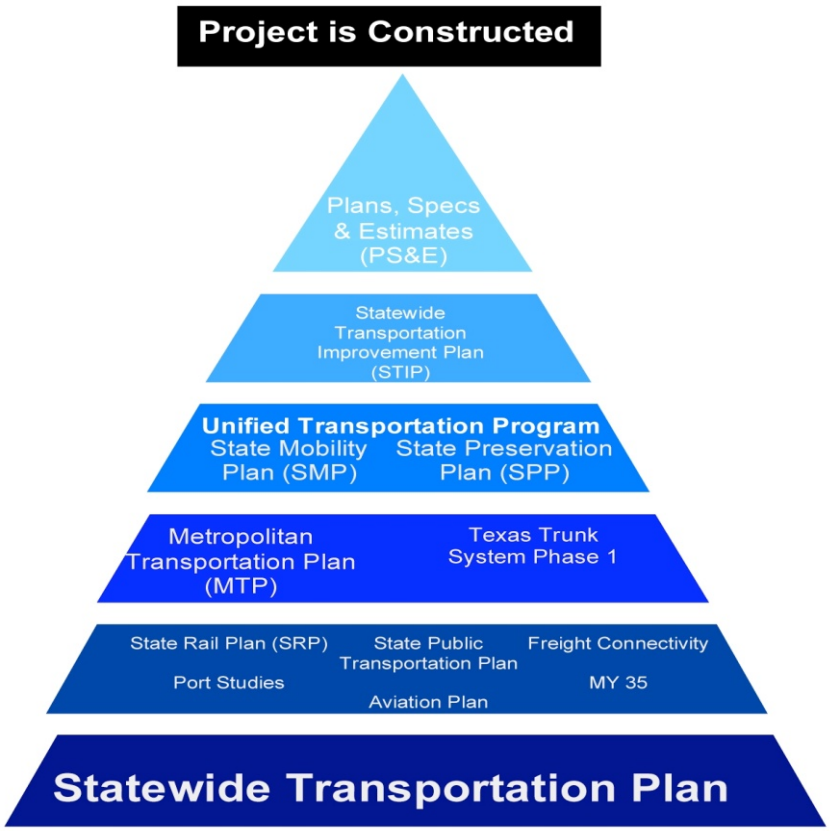
benefit of more than $1 trillion over the same period. Transportation is, and will increasingly be, an important factor in companies' determination on where to locate their employees and operations.[13]

Texas Transportation Institute (TTI) was asked to calculate transportation costs as it relates to common consumer commodities. A 2010 logistics survey report by the Grocery Manufacturers Association and IBM figured the average logistics cost was 6.8 percent of the sales price. Transportation costs accounted for 63 percent of the logistics costs. To use a real world example: For each $1.89 can of soup, 8 cents was spent on transportation costs. As congestion increases and road quality deteriorates, it will cost manufacturers more to move their goods, and those costs can be expected to be passed on to consumers.[14]

The average annual transportation cost for a Texas household is estimated to be about $9,500, which takes into account fuel, maintenance, depreciation, tires, and insurance. The average Texas commuter spends about 38 hours per year stuck in traffic - a delay cost per commuter of $928. Congestion costs per household for Texans living in metropolitan areas will increase from more than $1,700 currently to more than $6,100 per year by 2035. Congestion costs per household for Texans living in rural areas will increase from over $300 currently to more than $700 per year by 2035. The total costs of traffic congestion to the state economy, in terms of delay and excess fuel expenditure, currently exceed $10 billion per year. With no additional transportation infrastructure or improvements, in 25 years the average commuter will spend 140 hours per year in traffic and the delay cost will rise to $3,300 in today's dollars. In 2035, the cost of congestion to the state as a whole will exceed $63 billion in today's dollars.[15]

## Long-Range Planning

TxDOT uses multiple planning documents over the period of years that projects are conceived, planned, and constructed:




### State Long-Range Plan

Federal and state law requires the commission to develop a statewide long-range transportation plan. The Commission adopted the Statewide Long-Range Transportation Plan 2035 (SLRTP) in November 2010. The SLRTP is the 24-year blueprint for the transportation planning process that guides the collaborative efforts between TxDOT, local and regional decision-makers, and all transportation stakeholders to reach a consensus on needed transportation projects and services. The SLRTP provides an inventory of the needed improvements to the State's transportation system-roadways, pedestrian and bicycle facilities, transit, freight and passenger rail, airports, waterways and ports, pipelines, and intelligent transportation systems.

Per federal law, a metropolitan area with a population of 50,000 or more must have a Metropolitan Planning Organization (MPO). For those areas that do not have an MPO, planning is generally conducted by the TxDOT district office. TxDOT districts are responsible for planning the corridors and the other transportation needs of their districts, which are primarily rural areas without an MPO.

TxDOT and the MPO's develop various transportation-related plans and programs in conjunction with other transportation agencies. The SLRTP builds on these ongoing planning efforts. Individual plans prepared by TxDOT such as the Texas Rail Plan, the Texas Airport System Plan, Regional Coordinated Public Transportation planning, and the TxDOT Strategic Plan are incorporated into the SLRTP.[16]

**Unified Transportation Program**

The Unified Transportation Program (UTP) is a ten-year planning document that guides the Commission and local officials in the development and construction of transportation projects.

The UTP is a listing of projects that are planned to be constructed and/or developed within the first 10 years of the 24 year SLRTP. Project development includes activities such as preliminary engineering work, environmental analysis, right of way acquisition, and design. Conversely, projects that are beyond the first 10 years of the long-range plan are generally not authorized for preliminary engineering work other than environmental studies.

The UTP has two major components: mobility and preservation. The mobility portion of the UTP includes projects that add capacity to the transportation system, while the preservation portion includes maintenance and rehabilitation projects.

The UTP is an important part of the planning process in that it triggers more detailed project development work. Despite its importance, however, the UTP is basically a subset of the SLRTP and as such is neither a budget nor a guarantee that projects will or can be built.[17]

**Statewide Transportation Improvement Program**

Projects within the first 4 years of the UTP are incorporated into the Statewide Transportation Improvement Program (STIP). The STIP primarily consists of two components: Transportaion Improvement Plans (TIP's) and statewide corridors that provide regional connectivity. Cash flow for construction is better known within this timeframe; project development activities are being completed and construction estimates are more accurate.

Per federal law, a metropolitan area with a population of 50,000 or more must have a Metropolitan Planning Organization. For those areas that do not have an MPO, planning is generally conducted by the TxDOT district office. TxDOT districts are responsible for planning the corridors and the other transportation needs of their districts, which are primarily rural areas without an MPO.

Each MPO and TxDOT district develops a local Transportation Improvement Plan (TIP) that best suits their region's transportation needs.[18] TIP's from all of the MPO's and districts are combined to comprise the state's overall STIP. Federal law requires MPO TIP's (and long-range plans) to be constrained to a realistic estimate of future funds. As a result of limited availability of funds many small MPO's adopt TIP's with only rehabilitation or preventative maintenance projects. Projects not identified within the TIP may not use federal transportation funds.[19]

The UTP and STIP are used as the backbone for transportation planning in Texas. These plans, in addition to a cash-flow forecast developed by TxDOT, determine what projects are scheduled for letting.

**Texas Rural Transportation Plan**

The Texas Transportation Commission recently approved the rural component of the SLRTP, now referred to as the Texas Rural Transportation Plan (TRTP). The TRTP is a detailed multimodal assessment of rural connectivity needs and include a statewide prioritized list of highway projects for the years 2021-2035. The primary goals of the TRTP include enhancement of rural transportation system connectivity, promotion of rural mobility/congestion relief and enhancement of rural transportation safety.

As with the SLRTP, development of the TRTP is a collaborative process involving TxDOT, rural stakeholders such as locally elected officials, regional councils of government, rural transportation planning organizations, the traveling public and various public and private transportation organizations. TxDOT will coordinate with rural stakeholders and the public to compile a statewide list of capacity/mobility projects, develop scoring criteria, and prioritize a list of rural roadway projects.[20]

**Recommendations**

1. Monitor the development and implementation of the Texas Rural Transportation Plan and any changes to rural planning organizations affected by MAP-21.

2. Examine the findings of the Rider 36 study.

3. Maintain a transportation infrastructure that provides a solid foundation for economic activity in Texas.

4. Encourage TxDOT to continue to find best practice solutions for maintaining existing roads and funding new development.

5. TxDOT should continue to evaluate and improve railroad grade crossings to ensure the safety of Texans.

**PANAMA CANAL EXPANSION**

## Committee Action

The Committee met on May 24, 2012 to hear testimony regarding the state's readiness for the expansion of the Panama Canal. Testimony was given by the following people and/or entities: Texas Department of Transportation; Commissioner Jeff Austin III for Texas Transportation Commission; Rose Cannaday, Pat McCoy, and Tim Welch for TEX-21; Chad Burke for Economic Alliance Houston Port Rg.; Eduardo Campirano for Texas Ports Association and the Port of Houston; Phyllis Saathoff, for Port Freeport; Luis Crespo and Bradley Walker for E-ndeavor Program Management Inc.; Maureen Crocker for Gulf Coast Rail District; Captain Bill Diehl for the Greater Houston Partnership; James Edmonds for Port of Houston Authority; John Esparza for the Texas Motor Transportation Association; Brian Fielkow; Hugh McCulley for the Port Terminal Railroad Association, Union Pacific, and BNSF Railroad; and Nicholas Pansic for MWH Global.

## Background

The Panama Canal is a 48-mile ship canal that connects the Atlantic Ocean to the Pacific Ocean via the isthmus of Panama. Construction of the Canal, which began in 1881, was completed in 1904 and shortened the voyage from New York to San Francisco by 8,000 miles, or 30 days. The canal, and its locks, which lift ships 80 feet above sea level and back down again, was (and is) considered a marvel of engineering. The locks are able to handle ships with a capacity of 4,000 twenty-foot long containers (TEU's). The largest ships currently able to pass through the locks are known as "Panamax" ships. Today the canal services an average of 35 to 40 ships a day, and its infrastructure remains intact. However, much of the world's freight, cargo, and container ships have grown too large to pass through the canal.[21]

In 1988, the world's first "Post-Panamax" container ship was built so large it could not pass through the existing locks. The "post-Panamax" trend continued to yield larger and larger vessels as shippers and importers could ship more goods with smaller fleets and fewer trips. New infrastructure developed on the west coast where the post-Panamax ships carrying goods from Asia could dock at port in deep water along the coast, unload containers onto railways, and ship them to markets across the United States.

In October 2006, the citizens of Panama approved a $5.25 billion bond referendum to expand the Panama Canal by building a new, wider set of locks alongside the existing canal to handle the larger vessels. The existing locks are 1,000 feet long, 110 feet wide, and 42 feet deep. The new locks will be 1,400 feet long, 180 feet wide, and 60 feet deep; about 48 percent larger and able to handle ships with a capacity of about 13,000 TEU's. After the expansion project is complete the canal's annual capacity will increase by more than 75 percent. The number of container ships traveling through the canal is actually expected to decrease, but the total cargo (TEU's) will go up as larger ships displace smaller ones. Full operability of the new canal is expected in 2015.

The largest container vessels in use are referred to as "Ultra Large Post-Panamax" ships. The MSC Beatrice, one of the largest container ships in service, is the size of two state Capitol buildings and can carry about 14,000 TEU's goods, more than three times the capacity of the largest ships able to pass through Canal today and too large to use the Canal even after expansion. In 2011, Maersk ordered 10 Triple-E class ships, which at 18,000 TEU capacity will also be too large to even pass through the new Canal expansion and will mostly be used for Asia to Europe trade.[22] While economies of scale leads to increasingly larger container vessels, ships this size are still exceptional. However, post-Panamax ships have already begun calling at some Texas ports, and the completion of the expansion project will give these newer and larger ships easier access to Texas ports.

## Implications for Texas

It has been put forth that Texas has an ideal geographic location and climate to serve as a hub for receiving and distributing freight to the rest of the country, and that the expansion of the Canal would be an economic boon for the state. However, there are concerns that Texas' intermodal transportation system is unprepared for the size and quantity of the ships and containers that will

soon be passing through the expanded Canal.

To study the expected impacts and opportunities of the Panama Canal expansion for Texas TxDOT put together the Panama Canal Stakeholder Working Group. The findings from this group will be published in a report due in December 2012.

**Imports and Exports**

Texas is the top exporting state in the country with over $200 billion worth of foreign and domestic goods traded annually. Exports from Texas ports include container cargo such as cotton, pecans, packaged food products, consumer goods, and petrochemical products (especially resins). Other categories of Texas exports include dry bulk goods (including grains and coal), natural gas, military cargo, and paper products.

The largest group of exports for Texas ports are petrochemical and petroleum products from Texas' many oil- and gas-refining facilities. The Panama Canal expansion will benefit this economic sector by allowing for the pass through of liquefied natural gas (LNG) tankers, which are too wide for the current system of locks. Nearly $40 billion in investments have been planned or committed to projects on the Texas coast including LNG plants, and chemical or petrochemical facilities as companies begin to plan for the expansion.

Major trading partners of Texas ports are the Middle East (crude petroleum), Mexico, Central and South America, Europe, Africa, and Asia. East Asian trade represents approximately 7.6 percent of the dollar value of goods through Texas ports. Growing trade between the United States, South America, and Asia puts Texas in a position to capture a larger share of Asian and South American imports, while expanding export markets.[23]

According to an October 2011 study prepared for TxDOT by Cambridge Systematics, the demand for Asian import and export shipments on the West Coast is expected to stay strong, but west coast ports have limitations including physical, labor, and community constraints. Planned capacity for west coast ports over the next 5 years is about 4 million TEU's, compared to 40 million TEU's of capacity planned for eight major Asian intermodal export terminals. Texas may see more cargo diverted from increasingly congested west coast ports.

In 2011, Texas ports handled 564 million tons of domestic and foreign maritime cargo, just about 20 percent of the nation’s total. The Panama Canal Authority estimates that by 2025 the total volume of goods transiting the new canal will reach 508 million tons. Even if ports on either coast get an equal share of these goods, Texas can still expect to receive an additional 6 million tons in imports arriving from the Pacific via canal, and to export an additional 15 million tons. Over 766 million tons of freight are expected to be transported on Texas waterways by 2030.

**Ports and Waterways**

Texas has 270 miles of deep draft channels; 11 deep-draft public ports; 750 miles of shallow-draft channels; and more than nine shallow-draft public ports. Counting public and private facilities, Texas has more than 970 wharves, piers and docks handling waterborne freight. Texas

ports serve nearly one out of five vessels over 10,000 dead weight tons calling on ports in the United States.[24]

To compete for the opportunities created by the Panama Canal expansion Texas ports need landside and channel upgrades: deep draft ship channels; longer docks for longer ships; more storage area; deeper water at docks; and larger cranes to move cargo on and off ships, and from the terminal to a truck or rail.

While many ports on the east and west coast have naturally deep waters, most Texas ship channels are in the mid-thirty to mid-forty foot depth range, too shallow to allow the largest ships to dock, but deep enough for some Post-Panamax vessels. The deepest ports of Houston, Corpus Christi, Texas City, Freeport, and Galveston currently have 45' depths. Several Texas ports are in the process of seeking funding and/or federal approval for widening and deepening their ship channels, and expanding or upgrading their landside facilities preparation of the expansion.[25]

| Texas Ports* | Authorized Depth (ft) | Under Study | |
|---|---|---|---|
| | | Improved Depth (ft) | Status |
| Houston (2) | 45 | 45 | Construction Completed in June 2005 |
| Beaumont (4) | 40 | 48 | Chief's Report Signed July 2011 |
| Corpus Christi (6) | 45 | 52 | Draft LRR to SWD July 2012 |
| Texas City (10) | 45 | 45 | Construction Completed in June 2011 |
| Port Arthur (25) | 40 | 48 | Chief's Report Signed July 2011 |
| Freeport (27) | 45 | 50-55 | Chief's Report December 2012 |
| Galveston (41) | 45 | 45 | Construction Completed March 2011 |
| Matagorda (54) | 38 | 38 | No improvements forecasted |
| Brownsville (78) | 42 | 45-52 | Chief's Report August 2014 |
| Victoria (89) | 12 | 12 | No improvements forecasted |

*****National ranking of port is in parentheses.
**Source:** U.S. Army Corps of Engineers.

Texas ports fund the ongoing costs of dredging and maintenance, as well as improvement projects through a variety of local funding and federal sources. As stated elsewhere in this report the federal MAP-21 bill authorized up to $7 billion of the Harbor Maintenance Trust Fund (HMTF) for improvements to the nation's ports and harbors, but historically allocations to the

states from the HMTF have been minimal. [26]

Although the Legislature created the Port Access Account Fund in 2001 to provide a mechanism for cost sharing between the state and a port on a 50-50 basis for eligible projects, to date, the legislature has not appropriated funding to the account. The Port Advisory Committee, a seven member panel appointed by the TTC, develops an annual Capital Program containing the projects and funding requests submitted by the state's public ports. Examples of projects that may be included in the Capital Program are improvements to landside facilities, port security, rail, off-system roads, new infrastructure, and feasibility studies on deepening and widening channels. The 2013-2014 Capital Program received submissions for 51 projects from 10 ports totaling approximately $240 million in state funding. Twelve of the submitted projects met eligibility guidelines and were included in the 2013-2014 Capital Program at a total estimated cost of $132 million. Although the number of ports submitting projects, the number of projects, and the requested funding varies from year to year the projects represented in the Capital Program represent a small portion of the ports' actual capital programs. For example, the plans to widen the Freeport harbor entrance from 400' to 600' will cost $35 million; and the Port of Houston project to deepen and widen the Bayport Channel will cost an estimated $110-$150 million. Neither of these projects are included in the Capital Program.

The Gulf Intracoastal Waterway (GIWW) is a 1,300-mile-long man-made protected waterway that connects ports along the Gulf of Mexico from St. Marks, Florida to Brownsville, Texas. The GIWW is the nation’s third busiest inland waterway with the 423 mile long Texas portion handling over 60 percent of its traffic. In 2010, the Texas portion of the waterway transported over 70 million short tons of cargo with a commercial value of more than $28 billion. The majority of this cargo is petroleum and chemical related products.[27]

TxDOT is the non-federal sponsor of the GIWW and facilitates in its management, but the waterway is maintained by the United States Army Corps of Engineers (USACE) who provides federal funds to dredge, operate, and maintain it. However, sections of the GIWW are not being maintained at its full 12' depth due to lack of funding for needed dredging. The Galveston District of USACE has been receiving approximately $25 million annually for dredging maintenance of the GIWW, but the need for keeping the waterway at 12' is closer to $60 million. The structures supporting barge traffic along the waterway are over 50 years old, and at only 75' wide not large enough to most efficiently support the increasing barge transportation from oil and gas development.

In meetings of the Panama Canal Stakeholders Working Group, facilitated by TxDOT, the GIWW was identified as a "sleeping giant" not getting much attention, but a critical element of the freight-waterway system.

**Rail and Trucking**

Containers and other freight need to be moved as quickly as possible from ship to port to distribution center to be most economically beneficial. If a post-Panamax ship were able to dock in a Texas port it would then have to be off-loaded and it's freight containers transferred to trucks or railcars. A single post-Panamax ship carrying 12,000 TEU's in 40 foot containers would

require 6,000 trucks, or 3,000 double stacked rail cars to unload, and those same trucks and railcars would have to bring those containers back again filled with exports. The condition of Texas' rail and highway facilities are thus related to the capacity and competitiveness of Texas' ports.

TxDOT's coastal districts are already working on projects in advance of the Canal expansion. Starting at the Texas-Louisiana border, the districts are: Beaumont, Houston, Yoakum, Corpus Christi, and Pharr. These five districts work closely with the ports in their areas to provide and maintain the roadways that support those ports. TxDOT is also working on projects that help develop or support major transportation corridors of statewide significance, such as I-10 and I-37/I-35, and the proposed I-69 corridor, which will extend from the Rio Grande Valley to Texarkana. Additionally, TxDOT's Rail Division is involved with a variety of projects of regional and statewide importance that will assist in addressing increases in port traffic as well as increases in population growth, and energy sector productivity.

## Recommendations

1. Work with our federal officials to obtain a greater return on contributions to the Harbor Maintenance Trust Fund.

2. Consider the establishment of a TxDOT Maritime Division.

3. Encourage TxDOT to study the costs of updating the infrastructure of the Gulf Intracoastal Waterway.

4. Continue to work with Texas ports to capitalize on the opportunities offered by the expansion of the Panama Canal.

5. Review the findings of the Panama Canal Stakeholder Working Group report.

# TRANSIT OPERATIONS

## Committee Action

The Subcommittee on Transit Operations met on August 14, 2012 to hear testimony regarding Texas' transit systems. The committee of the whole also heard testimony on the subject of transit at their meeting May 24, 2012. Testimony at either hearing was given by the following people and/or entities: Texas Department of Transportation; Auturo Jackson and George Greanias for Metropolitan Transit Authority of Harris County; Regina Blye for Rural Transit Alliance and Texas State Independent Living Council; James Cline and Charles Emery for Denton County Transportation Authority; Tim McKay for Dallas Area Rapid Transit (DART); Richard Martinez for VIA Metropolitan Transit; Christopher McGreal for Disability Rights Texas; Sharon Reynerson for Lone Star Legal Aid; Judy Telge for Coastal Bend Center for Independent Living; and Brad Underwood for TAPS Public Transit.

## Background

Eight metropolitan transit systems, thirty-nine rural transit districts, and thirty-three urban transit districts operate public transportation in Texas. Public transportation includes all multiple occupancy vehicle services designed to transport customers on local and regional routes. These services include: private and public buses; trolleybuses; vanpools; jitneys; demand response services; heavy and light rail; commuter rail; automated guide-way transit; cable cars; monorails; tramways; and ferryboats.[28]

The federal Highway Trust Fund designates a portion of federal money for transit purposes; that money is deposited in Fund 6 and then distributed to local transit authorities. Local dollars also provide funding for transit.

Transit Advocates claim that effective transit services have the potential to reduce congestion and help an urban area comply with federal air quality standards by servicing commuters that would otherwise drive their personal vehicle. Transit is an integral part of the transportation puzzle, and will play an increasing role in our transportation needs as the state's population continues to grow.

The committee heard testimony from individuals in the disabled community on the importance of having access to transportation. Especially in rural areas, access to reliable public transportation is a gateway to building social networks, gaining employment, accessing health care, and meeting obligations and personal needs; it can be the deciding factor in whether an individual is able to realize their goal of self-sufficiency. Testimony was also given on the need for providing more opportunities for representatives of the disabled community to give input into the planning of innovative para-transit services.

## Para-transit Services

The Committee particularly focused on transportation services for individuals with disabilities. The needs of this particular group were brought to the attention of the Committee during the 82nd legislative session. An estimated 3.3 million individuals with disabilities live in Texas, with substantially more individuals with disabilities residing in urban areas than rural areas.[29] However, rural areas have a disproportionately high number of individuals with disabilities.

**Total Texas Population and Population with Disabilities by Transit Service Area Type and as a Proportion of State Total, 2010**

| Transit Service Area Type | Total Texas Population | | Total Population with Disabilities | |
|---|---|---|---|---|
| | Number of Persons | Proportion of Total | Number of Persons | Proportion of Total |
| Counties Served by Metropolitan Transportation Authorities | 13,460,380 | 53.0 % | 1,539,011 | 46.7% |
| Counties Served by Urban | 5,753,687 | 22.7% | 760,931 | 23.1% |

| | | | | |
|---|---|---|---|---|
| Transportation Providers | | | | |
| Counties Served by Rural Transportation Providers | 6,159,880 | 24.3% | 996,555 | 30.2% |
| **State Total** | 25,373,947 | 100.00% | 3,296,497 | 100.00% |

Source: U S Census Bureau; RMC 0-6199-1, Estimated Impacts of the 2010 Census on the Texas Transit Funding Formula

TxDOT administers four federal programs to address the transportation needs of individuals with disabilities:

***Elderly Individuals and Individuals with Disabilities Program***
The purpose of this program is to provide assistance meeting the transportation needs of individuals where public transportation services are unavailable, insufficient, or inappropriate. Vehicles under this program may also be used to meet the transportation needs of the general population in so much as such usage does not interfere with meeting the transportation needs of elderly individuals and persons with disabilities.

For FY 2011, funding for this program was near $8.49 million. Funds are distributed across the state according to a set formula: 25 percent of total available funds distributed equally among 25 TxDOT districts; 75 percent of total available funds allocated based upon the proportionate amount of the population of the elderly and persons with disabilities residing in each district.

***Job Access / Reverse Commute Program (JARC)***
Projects funded by JARC transport individuals with low incomes to and from jobs (and employment related activities such as job training), or take individuals of all income levels from urbanized and rural areas to suburban employers.

TxDOT receives from the FTA approximately $4.6 million annually for small urban areas and $3.2 annually for rural areas. These funds may be accessed through TxDOT's annual call for projects. One of these grant funded projects, the "Mobility Options Project Feasibility Study," was presented to the committee. The study, carried out by the Coastal Bend Center for Independent Living, examined gaps between available transportation options and choices for people with disabilities in rural areas on employment-related trips.

***New Freedom Program***
New Freedom funds help individuals with disabilities by providing both new public transportation and public transportation alternatives beyond those required by the Americans with Disabilities Act of 1990 (ADA), including transportation to and from jobs and employment-support services. Private-for-profit companies that provide public transportation (taxis and inter-city bus carriers) are eligible for these funds.

These projects often allow spontaneous access to transportation services, rather than making a reservation 24 hours in advance as with some other transit programs. New Freedom funds may also be used to construct accessible pathways to transit, usually in partnership with a

municipality, and to educate individuals with disabilities on how to use and access transportation services.

Annual funding for this program is around $1.4 million for small urban communities and $1.3 million for rural communities.

***Planning for Public Transportation Services***
Planning funds reimburse costs to conduct regionally coordinated transportation planning activities that emphasize the needs of persons with human service needs, including individuals with disabilities, in compliance with state and federal requirements. Funding is provided to lead agencies throughout the state who work with stakeholders to develop a regionally coordinated transportation plan. TxDOT anticipates awarding an estimated $1.5 million to lead agencies in FY 2013.

**Medicaid Non-Emergency Medical Transportation Program**

Each state operates a Medicaid Non-Emergency Medical Transportation (NEMT) program. NEMT services include bus tickets or vouchers for public transportation, rides from contracted providers, mileage reimbursement, and out of state travel, if treatment requires it. In recent years a number of states have chosen, either in whole or in part, to employ the use of brokers to manage their Medicaid Transportation program. In March and April 2012, full risk brokers (FRB's) started managing non-emergency medical transportation (NEMT) services in the Houston- Beaumont and Dallas-Ft. Worth service delivery areas as part of a pilot study.

In Texas NEMT is operated by HHSC, but testimony was given to the committee regarding concerns with the pilot program and the implementation of FRB's administering NEMT services statewide. Among these were concerns about: dollars leaving Texas to pay out of state for profit companies; employing a third party to administer transit services for a specific ridership group leading to duplication of costs when Texas has already invested so much in public transit programs; riders in the pilot study areas reportedly receiving very poor services that have actually hampered their access to transportation. [30]

## Regional Cooperation Efforts

The committee heard testimony from Dallas Area Rapid Transit (DART) and Denton County Transportation Authority (DCTA) about ways that transit agencies can partner to collectively improve regional mobility. By working collaboratively transit entities can increase service to riders while saving taxpayer dollars. For example, there can be shared equipment and rolling stock; integrated fare structures and regional fare passes; compatible facilities and infrastructure; special event operations coordination; and regional project development and procurement.

DART and DCTA highlighted their work along with the Fort Worth Transportation Authority (The T) on the North Texas Regional Rail Partnership. Together they are working to address the regional rail component of the Dallas-Ft. Worth area long-range transportation plan, emphasizing closing service gaps while improving and expanding regional passenger rail.

## Passenger Rail Service

Passenger rail service has recently garnered a lot of discussion as a way to address urban mobility issues, and enhance interconnectivity between Texas cities. Passenger rail service can be: high speed, intercity, commuter and regional, light rail and trolley, or tourism rail. Intercity rail operates at speeds slower than high speed, and thus is used more by general travelers and not by commuters. Commuter and regional service covers daily trips between suburban and urban areas and may run on freight corridors. Light rail generally serves commuters but is typically operated within urban areas, on dedicated corridors with specialized equipment and is usually electrified. Tourism rail typically serves sightseeing or entertainment purposes.

High speed rail is generally considered to be intercity service at speeds greater than 110 mph on a dedicated track. Texas currently does not have high-speed rail service. Higher speeds, advanced technology, and more passenger amenities differentiate high speed rail from current intercity passenger and commuter rail.[31]

While ridership on intercity passenger trains has steadily increased in past years it has not reflected the same trend as statewide population growth. Intercity travelers are relying on competing modes of travel: air and motor vehicle. Improvements to the intercity rail system, such as additional routes and frequencies; improved efficiency and speed; and/or improved connections with local rail and bus transit may help get cars off the road while still getting Texans safely to their destinations.

## Recommendations

1. Encourage local transit authorities and TxDOT to find ways to involve para-transit users in the planning of para-transit services.

2. The Legislature should evaluate the pilot program for full risk broker management of Medicaid Non-Emergency Medical Transportation.

3. TxDOT should evaluate current statues and rules in place to protect the safety of riders on commuter rail to determine if additional legislation or rulemaking authority is needed to ensure the safety of rail passengers.

4. Require TxDOT to work with the private sector to determine the feasibility of high speed rail in Texas.

**TXDOT ENVIRONMENTAL REVIEW**

## Committee Action

The Committee met jointly with the House Committee on Environmental Regulation on March 22, 2012 to hear testimony regarding the environmental review process for transportation projects and the implementation of reforms to that process. Testimony was given by the following people and/or entities: Texas Department of Transportation; Texas Parks and Wildlife; Texas Historical Commission; Susan Alford for Berg-Oliver Associates; and Brian Cassidy for Alamo Regional Mobility Authority (RMA), Camino Real RMA, Cameron County RMA, Central Texas RMA, North East Texas RMA, and Grayson County RMA.

## Background

The National Environmental Policy Act ("NEPA") is a federal law that requires federal agencies to consider the environmental effects of programs and projects before implementing them. Transportation projects that utilize federal funds to construct highways and other transportation infrastructure must undergo a NEPA assessment. In order to meet the requirements of NEPA the federal Council on Environmental Quality and the Federal Highway Administration (FHWA) have established rules requiring state transportation departments to submit written reports on the environmental effects of proposed transportation projects. These rules further specify that the federal, state, and local entities that have jurisdiction or expertise related to the project must work together to determine those effects. An opportunity for public involvement in the process must also be included. The coordination of agencies, the written environmental assessment, and the forum for public involvement must be completed before a project can receive federal approval. The Texas Transportation Code requires TxDOT to develop rules and procedures similar to the federal guidelines for projects at the state level. [32]

The environmental review process includes several distinct tasks: determining the scope of the project, field work, technical analysis and report development, compiling documentation, developing plans for mitigating impacts, agency coordination, public involvement, obtaining permits, and finally approval of the environmental document. Depending on the scope of the project studies may be conducted to examine impacts to wetlands, habitats, water quality, flora, fauna, flood plains, air quality, farmlands, parks, endangered species, and cultural resources. Other hazards and community issues are also investigated. Environmental documentation for transportation projects varies in complexity and detail according to the project's complexity and anticipated environmental impact; a completed environmental document includes an analysis of a project's effect on the natural environment and the humans living in the area, and shows how the project will be completed in accordance with existing laws, rules and agreements.[33]

The environmental documentation for transportation projects falls into four different categories:

- *Programmatic Categorical Exclusion (PCE)/Blanket Categorical Exclusion (BCE)* are the most common and least complex projects, and require minimal documentation. Examples include utility installation, construction of sidewalks, landscaping, highway resurfacing, or bridge rehabilitation.
- *Categorical Exclusions (CE)* include projects that are more somewhat more complex, and may require FHWA review.
- *Environmental Assessments(EA)* refer to projects that do not qualify as CE's and thus require more detailed and complex documentation; may require FHWA review.
- *Environmental Impact Statements(EIS)* are required for the most complex projects with the highest potential for significant environmental impact. This documentation is the most detailed and complex, and may require FHWA review.

A limited number of highly specialized TxDOT personnel perform the work associated with the environmental review process. Each of TxDOT's 25 districts has staff working on project design, location and environmental studies, and public involvement. In TxDOT's largest district (Houston) there are 11 personnel responsible for environmental planning and studies, in small

districts those duties may be assigned to a single individual. Each district also has a Director of Transportation Planning and Development who has general oversight over planning projects, including environmental matters. District staff are assisted by staff in TxDOT's Environmental Affairs Division (ENV). ENV staff are subject matter experts who provide detailed technical assistance to districts, and coordinate as required with other state and federal agencies. ENV helps manage and review the environmental process for projects, and oversees the development of policies, procedures, standards and training to promote consistency and efficiency for environmental compliance.[34]

TxDOT staff work in conjunction with staff at the Texas Historical Commission (THC), Texas Parks and Wildlife Department (TPWD), and the Texas Commission on Environmental Quality (TCEQ). These collaborations are required by state law and clarified in Memoranda of Understanding (MOU's) between TxDOT and each agency.[35]

### Issues with Environmental Reviews

The environmental review process is a fundamental part of transportation project development, but the extensive amount of time required to complete the process has been a source of frustration for TxDOT and its planning partners. In some cases the environmental review for a project has taken years to complete.

TxDOT identified some internal issues contributing to extended review times:[36]

- Limited numbers of staff working on a large number of submitted projects.
- Projects submitted with unclear or shifting priorities.
- Submission of projects for review before they have been planned, funded, or scheduled.
- Lack of consistency in the preparation, review, and approval of environmental documents.
- Late identification of technical issues requiring sections of the review to be repeated.

### Actions of the 82nd Legislature & TxDOT Implementation of Reforms

Seeking to make the environmental review process more efficient the 82nd Legislature enacted three bills to address the review process at the state level. SB 548 and SB 1420 imposed deadlines on environmental review, required TxDOT to adopt standards for the review process, required project sponsors to collaborate with TxDOT to develop a detailed project scope, and limited the number of projects eligible for review. HB 630 granted permission to TxDOT to enter into funding agreements to employ additional staff for the purpose of expediting the environmental review of certain transportation projects. These bills also allow local entities to serve as project sponsors and advance projects not otherwise eligible for review by covering the associated costs.[37]

Rulemaking authority was granted in all three bills to both TxDOT and the Texas Transportation Commission (TTC) allowing it to revise its administrative rules to implement the new legislation. The new administrative rules were adopted by the Commission on February 23, 2012 and took effect April 16, 2012. One key aspect of the new rules is the eligibility

requirements for project review. To be eligible for review, a project must: be included in the financially-constrained portion of the State Transportation Improvement Program (STIP) or Unified Transportation Plan (UTP); be approved for development by a Commission order; or be sponsored by a local government that has paid a fee to TxDOT to cover the cost of review. This reform is intended to manage workloads and increase the efficiency of the process by limiting review to clearly defined, funded projects.

TxDOT rules now require each project to have a project sponsor (TxDOT district or a local government) who prepares the environmental documents and an assigned 'department delegate' (a TxDOT district, division, or region) who has approval authority for each type of project and may review and approve environmental work for TxDOT. A district, division, or region may serve as both sponsor and department delegate. [38]

The new rules eliminate the submission of a full, formal document for minor and straightforward projects. For these projects the required documentation includes a simple environmental issues checklist and the completion of any environmental studies needed to support the conclusions in the checklist. Larger, more complex projects, and those using federal funds and requiring approval by the FHWA will continue to involve a formal environmental review document. TxDOT is working with the FHWA to have the checklist format approved for use with certain federally funded projects.[39]

There is also a provision in the new rules wherein the project sponsor and department delegate must work collaboratively at the outset of the project development process to determine a "project scope." The project scope defines the issues to be covered in the environmental review process. Using a form provided by TxDOT the project sponsor submits a draft scope to the department delegate whereupon they work together toward finalizing the project scope. It is also in this section of the rules that the option for local governments to pay a fee for environmental review of an otherwise ineligible project is laid out. The fee is calculated during the scope development phase of the project and would be due before the review process can continue beyond this point. The scope of the project is considered complete when an agreement has been made regarding: environmental tasks that must be undertaken related to the project; assignment of roles and responsibilities related to those tasks; the schedule for completing those tasks; and items to be included in the documentation for the project. After reaching an agreement on project scope, the project sponsor and project delegate may proceed with the project as outlined in the scope. If a sponsor completes a study for the review document prior to the submission deadline for the environmental review they may submit that portion early for comments. Project sponsors who take advantage of this opportunity have a chance to identify and correct any issues that may arise during technical review before they reach that phase, leading to a more streamlined review process overall.[40]

Under the new rules an environmental document must be "administratively complete" before it can proceed to technical review by TxDOT staff. An administrative completeness review is a preliminary check to confirm that: all requirements outlined in the project scope have been met; all tasks identified in the project scope as required before submittal of the environmental review documents have been completed; coordination between entities required before submittal of the environmental review documents have been completed; and the document address all issues state

and federal laws require TxDOT to consider before making environmental decisions. Because incomplete documentation can lead to project delays, project sponsors are notified of obvious errors or the need for supplemental materials promptly. TxDOT has 20 days after receiving an environmental document to finish the administrative completeness review.

There are new statutory deadlines for technical review of environmental documents as well. Deadlines vary by project type, and become effective once TxDOT determines a document to be administratively complete. A PCE review may not exceed 60 days, and a CE review may not exceed 90 days. The implementation of the checklist format and the administrative review process are expected to allow TxDOT to meet these deadlines by minimizing the need to suspend the review to obtain additional information. There are two components to the deadline for TxDOT's environmental assessments: 90 days to provide comments after a draft document is received and an additional 60 days to make a decision on the document. A 120 day deadline was established for TxDOT review of environmental impact statements.

SB 548 also requires that existing memoranda of understanding (MOU) between TxDOT and TPWD, the Texas Historical Commission, and the Texas Commission on Environmental Quality be updated to specify a time period not to exceed 45 days during which that agency reviews and provides comments to TxDOT regarding the environmental, historical, or archeological effect of a highway project. The bill required TxDOT, by rule, to establish procedures for coordinating with state agencies in carrying out the responsibilities under such MOU's. At the time of this report those MOU's have not been finalized, but are under development.

As discussed elsewhere in this report new federal guidelines on environmental review will also help reduce project delivery time and costs.

**Recommendations**

1. Continue to monitor the implementation of the new TxDOT rules governing the environmental review process.

2. Continue to find ways to reduce project timeframes and ultimate project cost.

**TRANSPORTATION FUNDING**

## Committee Action

The Subcommittee on Funding met jointly with the House Appropriations Subcommittee on Article VI, VII and VIII on July 09, 2012 to hear testimony regarding transportation funding reforms and the development of long-term state funding recommendations. The committee was also directed to consider new federal legislation and to explore options to eliminate "diversions" from the State Highway Fund (Fund 6) in making their recommendations. Testimony was given by the following people and/or entities: Texas Department of Transportation; The Legislative Budget Board; Texas Department of Motor Vehicles; Texas Department of Public Safety; Tim Lomax for Texas Transportation Institute; Bill Hammond for Texas Association of Business; Bob Lanham for Associated General Contractors of Texas; and Joe Stewart for Texas Association of REALTORS.

## Funding Mechanisms

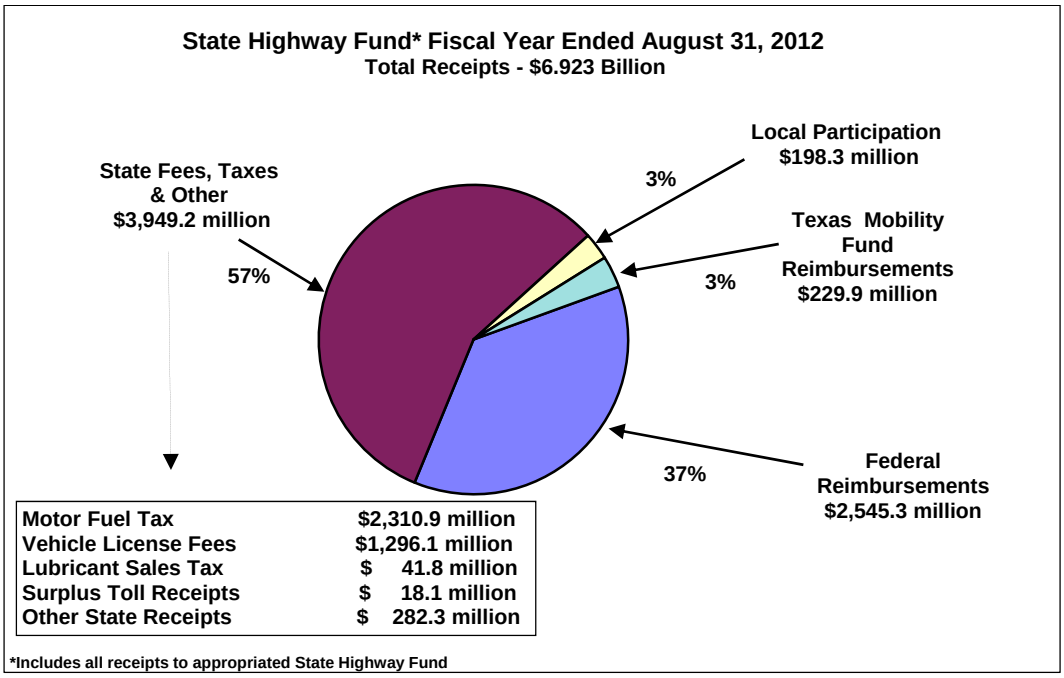
### Federal Highway Trust Fund

The United States Highway Trust Fund (HTF) is a transportation fund which receives money from a federal fuel tax of 18.4 cents per gallon on gasoline and 24.4 cents per gallon of diesel fuel as well as taxes and fees on special fuels; tires; truck and trailer sales; and heavy vehicle use. The HTF is the source of funding for the programs of the Federal Highway Administration (FHWA), which are administered by the states.[41]

In early 2012 the Congressional Budget Office issued a report which stated that at current funding levels the HTF will be depleted as early as 2014.[42] Since the federal gasoline tax does not provide enough to cover that level of funding, the new transportation reauthorization bill uses $18.8 billion of general tax revenue to bridge the gap over the next two fiscal years.

### State Highway Fund

Currently, state transportation funding is segregated into two main accounts: the State Highway Fund (Fund 6) and the Texas Mobility Fund. The State Highway fund consists of dedicated revenue from the state gas tax, reimbursement from the federal gas tax from the HTF; registration and vehicle fees; local participation; and reimbursements from the Texas Mobility Fund.




The state motor fuels tax, which is more commonly referred to as the state gas tax, currently generates approximately $2.3 billion dollars to the State Highway Fund annually. The current tax, which was last adjusted in 1991, is $.20 per gallon; one quarter of each 20 cents is constitutionally dedicated to fund education. The gas tax revenue comprised roughly 33 percent

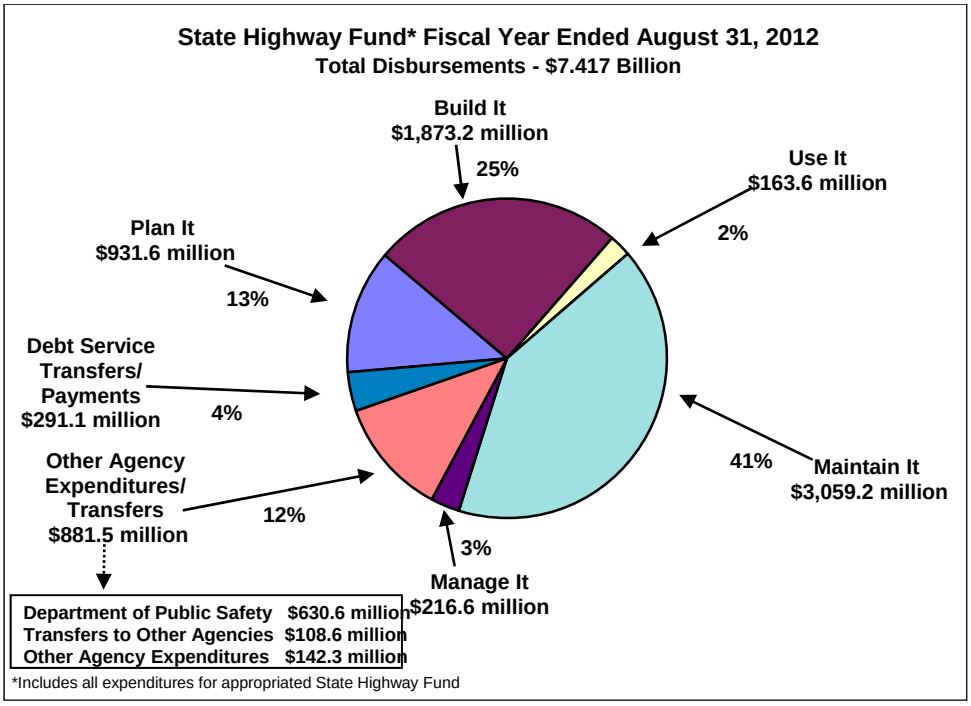
of the deposits to Fund 6 in FY 2012, down from 35 percent in FY 2011.[43] Texas ranks 29th in state gasoline tax rates.

Vehicle license fees, or vehicle registration fees, are collected by county tax assessor and collectors; the counties retain about 24 percent of the vehicle license fees, and the remainder is deposited to the State Highway Fund. Vehicle registration fees comprised about 19 percent of the deposits to Fund 6 in FY 2012.[44] Texas ranks 18th in vehicle registration fees, and 44th in overall annual cost of vehicle ownership.[45]

Transportation expenditures ultimately funded by the Texas Mobility Fund are initially paid out of the State Highway Fund. The Mobility Fund then reimburses the Highway Fund for the project. The reimbursements from the Mobility Fund comprised approximately 3 percent of the deposits to Fund 6 in FY 2012.

Local participation is money provided by local entities to assist in the funding of a local transportation project and accounted for 3 percent of the deposits to Fund 6 in FY 2012. Other revenues, such as the sales tax on lubricants and surplus toll receipts, accounted for 5 percent of the deposits to the fund in FY 2012.

Federal reimbursements are funds received from the Highway Trust Fund (HTF) and other federal appropriations and are for federal-aid highway projects. The source of HTF is derived mainly from the federal gas tax of $.182 per gallon. Federal reimbursements comprised 37 percent of the deposits to Fund 6 in FY 2012.




Roughly 88 percent of the SHF goes to TxDOT for the general purposes of planning, building, and maintaining roads. $154 million from the SHF was appropriated in FY 2012 to the

Department of Motor Vehicles, which is the agency that oversees collection of vehicle registration and other fees deposited into the fund. Another $728 million of state highway funds were sent to various other agencies, with the bulk appropriated to the Department of Public Safety.

**Mobility Fund**

The Mobility Fund is a revolving fund used to finance the acquisition, construction, maintenance, reconstruction, and expansion of state highways. Money in the fund can also be obligated for the state's participation in the construction of public toll roads and other public transportation projects. The sources of revenue to the fund are bonds; certain fees and fines collected by the Department of Public Safety; and a percentage of surcharges assessed under the Driver Responsibility Program (DRP).[46] There is a requirement that the revenue from DRP and other state fines must generate $250 million per year in General Revenue, and the surplus is then dedicated to the Mobility Fund. As of this date, the revenue generated by the combination of state fines and surcharges from the DRP has not exceeded $250 million, thus no funds from this program have been deposited to the Mobility Fund. The Mobility Fund is required to maintain a balance that equals 110 percent of that year's debt service payments.[47]

The Fund was created in 2001 but did not become active until 2003, when Proposition 14 authorizing the issuance of short-term and long-term debt for transportation projects was passed by voters. Through constitutional amendments passed in 2003 (Proposition 14) and 2007 (Proposition 12), the Texas Transportation Commission was authorized to issue long-term bonds. Proposition 14 allowed the commission to issue $3 billion in bonds, the debt service of which is funded through Fund 6. Proposition 12 authorized the issuance of $5 billion in bonds, the debt service of which is funded through the state's general revenue. The entirety of the Prop 14 bonds and $2 billion of the Prop 12 bonds have been issued; the 82nd Legislature authorized the issuance the remaining $3 billion Prop 12 bonds. Interest paid on bonds to finance road construction totals almost $300 million each year.[48]

**Stimulus Funds**

In 2009 additional funds were made available to TxDOT through the federal American Recovery and Reinvestment Act (ARRA). This stimulus funding was temporary, however TxDOT was apportioned $2,636,961,347. TxDOT has obligated all of the ARRA funds.

**Public Private Partnerships and Comprehensive Development Agreements**

Public Private Partnerships (P3's) leverage limited funds by partnering with the private sector. A comprehensive development agreement (CDA) is a contract between TxDOT, a Regional Mobility Authority (RMA), or tolling authority and a private entity to design, develop, finance, construct, maintain, repair, operate, extend, or expand a project. At a minimum, a CDA must provide for the design and construction of a project after which the facility is transferred back to the public transportation entity.[49] A state highway subject to a CDA with a private entity is public property.

Design/build CDA's contract with a private entity to design and build a project, however the public transportation entity administers and collects the toll revenue. These types of CDA's are frequently used by RMA's in developing their local projects. The 82nd Legislature gave TxDOT and RMA's authority to enter into a limited number of design/build CDA's per fiscal year if they meet criteria set forth in the legislation. Additionally, RMA's were granted authority to enter into a limited number of design/build/finance CDA's, which allows an RMA to seek some financing through the competitive procurement process as a way to cover the difference between what can be financed through the bond market and the cost of the project. The authority granted to TxDOT for design/build contracts expires in 2015.[50]

Authority for concession CDA's expired in August 2009. Concession CDA's include long-term finance, operations, and maintenance features coupled with long-term contractual relationships. Concession CDA projects must be authorized by the legislature on a project-specific basis.

**Rider 42**

TxDOT Rider 42 to the General Appropriations Act was passed by the 82nd Legislature to set aside $300 million to address the state's highest-priority roadway and bridge projects. The focus of Rider 42 was the 50 most congested roads in the state as identified by the 2030 Committee in their 2011 report. Texas A&M Transportation Institute (TTI) was tasked with partnering with MPO's, TxDOT offices, RMA's, major city and county governments, transit agencies, and other stakeholders to develop projects and programs to address urgent mobility concerns and to report back to the Legislature and Transportation Commission.[51]

The first year of the Mobility Investment Priorities Project produced the following:

- An Early Recommendations Report identifying and recommending funding for $248 million of projects that will improve the most congested roadway segments;
- A Public Engagement Report providing a set of best practices for public engagement and detailing the state of public engagement in each of the four major metropolitan areas;
- Strategy descriptions for how to use congestion reduction, public engagement, and funding strategies;
- A summary of the key improvement projects and programs that are being developed in the most congested corridors;
- Congestion mitigation strategies to improve response to accidents, stalled vehicles and other congestion causing events; and
- A model to estimate the economic benefits of the congestion reduction efforts.

Rider 42 also directed TxDOT to use $500 million of Prop 12 Bonds on nine high traffic bridges across the state in critical need of repairs.[52]

## Federal Funding Reforms

### Moving Ahead for Progress in the 21st Century (MAP-21)

A new two-year authorization of the federal surface transportation program, Moving Ahead for Progress in the 21st Century (MAP-21), was signed by the President on July 6, 2012 after a series of short term extensions since the previous authorization expired in 2009. MAP-21 provides about $105 billion nationally, and maintains current federal funding levels for the federal-aid highway, highway safety, and public transit programs for FY 2013-2014.[53] This would give Texas an estimated $3.056 billion for FY 2013 and $3.082 billion for FY 2014.[54] Effectively, funding for Texas remains static plus inflation.

Although Texas remains a donor state, meaning it gets back in federal highway and transit money less than it collects in federal gas taxes, MAP-21 establishes a new state guaranteed rate of return of 95 percent on the amount of motor fuel tax revenue collected.[55] At the previous 92 percent guaranteed level under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) the observed rate of return for every dollar Texans paid in federal motor fuels taxes was about 78 percent (.70 cents for highway programs, .08 cents for transit programs).[56, 57]

MAP-21 increases funding for the Transportation Infrastructure Finance and Innovation Act (TIFIA) program from $122 million to $750 million in FY 2013 and $1 billion in FY 2014. It also increases the maximum share of project costs that can be funded through the TIFIA program from 33 percent to 49 percent. TIFIA provides loans, loan guarantees and lines of credit to states; Texas has benefitted from the TIFIA loan program in past years.

The new bill also authorized up to $7 billion of the Harbor Maintenance Trust Fund (HMTF) for improvements to the nation's ports and harbors.[58] The HMTF receives funds from taxes generated by domestic and imported harbor traffic. MAP-21 encourages the appropriation of all tax revenues collected for the fund, but historically allocations to the states from the HMTF have been minimal. Members of Congress have announced intentions to address this issue with the next Water Resources Development Act, which could be considered in committees and passed as early as next year.[59]

Programs under MAP-21 will be measured under an outcome-driven approach that tracks performance. States and metropolitan planning organizations will be accountable for improving their transportation systems; those that do not meet established targets are subject to penalties.[60]

MAP-21 reduces the number of discrete funding programs by two-thirds to roughly 30 programs. Most of this reduction is accomplished by absorbing formerly separate activities and eligibilities into five new core programs: National Highway Performance Program (NHPP), Surface Transportation Program (STP), Highway Safety Improvement Program (HSIP), Congestion Mitigation and Air Quality Improvement Program (CMAQIP), and the Transportation Alternatives Program (TA), formerly the Transportation Enhancement Program.

The core programs have many areas of overlapping eligibility and MAP-21 permits states to transfer up to 50 percent of any apportionment to any other apportionment Program, except funds allocated to areas by population (such as STP) or Metropolitan Planning funds.[61]

MAP-21 also makes streamlining changes to the environmental review process to reduce project delivery time and costs. These changes include the establishment of a timeline in which review must be complete, the exemption of some small projects from the NEPA process if they meet certain criteria, and the inclusion of projects within the existing right of way as categorical exclusions.

For many years Texas has looked to P3's as an innovative financing method to move projects forward as traditional revenues have declined. The conference report on MAP-21 requires the Secretary of Transportation to: compile best practices for working with the private sector regarding transportation facilities; provide technical assistance for public-private partnerships; and develop standard P3 model contracts and make those documents available to state and local governments. The conference report also establishes P3 authority for the Federal Transit Administration, which may provide Texas transit agencies another means for getting projects underway.

Additional changes for the Federal Transit Administration include a streamlined path to project development . Duplicate steps in the review process for certain projects have been removed and projects under $100 million can utilize an expedited review process if they meet the stands of similar, highly qualified projects. Certain existing projects received authorization to make necessary and significant investments resulting in a minimum 10 percent increase in capacity.

Federal funding may be used for the construction, rehabilitation or replacement of a tolled highway, bridge, or tunnel facility as long as the number of toll-free non-high occupancy vehicle (HOV) lanes is not reduced. Funding may also be used to convert HOV lanes to high occupancy toll (HOT) lanes subject to certain terms. While toll facilities may be privately owned, the public authority with jurisdiction over the facility maintains responsibility for ensuring the program complies with all related statutes. If the toll facility is subject to a P3 agreement, toll revenue may be used to provide a reasonable return on the investment, as determined by the state or interstate compact of states concerned, in addition to any costs related to the improvement, proper operation, and maintenance of the facility.

## Transportation Funding Shortages and Future Funding Challenges

It is anticipated that by 2015 the cost of maintaining Texas' transportation infrastructure in its current condition will exceed forecasted funding.[62] At that point, transportation funding will return to 2002 levels, leaving enough money available to maintain the transportation system in its current state, as long as TxDOT forgoes any new transportation projects. If no action is taken, Texas' roads and bridges will deteriorate while congestion and the cost of repairs will continue to rise.

In May of 2008, Texas Transportation Commission Chair Deirdre Delisi appointed a volunteer committee of 12 people to provide an independent, authoritative assessment of the state's

infrastructure and mobility needs from 2009-2030. The members of this committee, known as the 2030 Committee, consisted of business leaders, prominent researchers, and respected members of the transportation community. The committee looked at the costs over 20 years if Texas maintains its current funding trend; the costs to prevent the worsening of the physical quality of our infrastructure and maintain congestion time; and the costs to improve our infrastructure and reduce congestion.[63]

The 2030 Committee released a comprehensive report that outlined the costs of maintaining current transportation infrastructure and improving mobility given the state's rapid increase in population. According to the 2030 report, Texas the state would need to spend $270 billion (not accounting for inflation) over the next 20 years just to maintain its existing infrastructure, prevent worsening metropolitan traffic congestion, and ensure safety and mobility on urban roadways. That amount would allow the maintenance of the current roadways through the year 2035. The Texas Transportation Institute (TTI) estimates that if Texas does not maintain current mobility levels, and continues spending at current levels, roughly 288,000 Texas jobs could be lost, and cost the state's economy roughly $1.1 trillion over the next 25 years. Per capita this could mean annual delay costs of $928 per commuter and 140 hours stuck in traffic. [64]

Under current funding scenarios, overall pavement quality is projected to decrease by 30 percent by 2022. Failing to address pavement deterioration in a timely manner increases repair costs over time. In Texas, underfunding maintenance on the state's roads will increase the cost to preserve and restore the pavement by $6.5 billion over the next ten years.

Transportation plays a major role in allowing Texans to live and work where they choose, and ensuring businesses can efficiently transport goods to markets and manufacturers. While Texas has been blessed with 4 decades of strong economic growth, investments in transportation have not kept pace. The 2030 committee identified several factors impacting the quality of Texas transportation:[65]

- *Rapidly increasing population and job growth* as 15 million new Texans are projected to arrive over the next 25 years.
- *An increase in freight traffic* at twice the rate of passenger vehicle traffic over the next 25 years.
- *Increased time and costs for system improvement*. As problems escalate the monetary costs associate with addressing the problem also increase. Transportation projects can take years to plan, design and build.
- *Road preservation and replacement*. It is much less costly to maintain a road over time than to rebuild it, and preventive maintenance can extend the life of a roadway. Many of the state's Farm-to-Market roads and State Highways were built in the 1940's, 1950's and 1960's. The typical design life of these roads is 15-20 years.
- *Deficient bridges*. At least 13 percent percent of bridges in Texas have surpassed their 50 year design life and will require major investment in the next 20 years. Deficient bridges have weight restrictions placed on them, which can cause inconvenience for travelers and result in increased costs for freight and commercial vehicles who must seek alternate routes.
- *Traditional funding sources*. Income provided by current taxes and fees is no longer

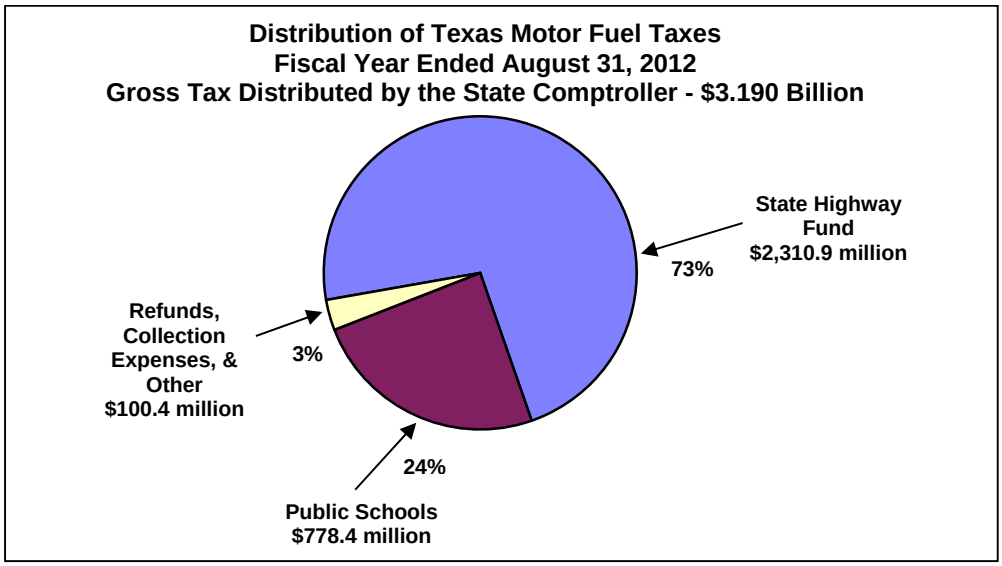
sufficient to keep pace with the current and projected highway construction and maintenance needs.

- *Reliance on recent one-time funding* from a variety of sources have allowed the state to maintain road and bridge conditions, even while traditional funding sources declined, thereby temporarily masking the severity of the issues facing the state.

Addressing these issues now will help to ensure the safety, mobility, and prosperity of Texans.

**Declining Motor Fuel Tax Revenue**

Transportation at the federal and state levels is funded primarily with a flat gas tax. The state gas tax of $.20 per gallon was established in 1991, and the federal rate of $.184 in 1993. The Texas Constitution, Art. 8, sec. 7-a, dedicates one-fourth of state motor fuels tax revenue to the Available School Fund. The State Comptroller estimates motor fuels taxes will generate $6.3 billion in all funds in FY 2012-2013. This would be a 3.5 percent increase from motor fuel tax revenues in FY 2010-2011; the increase in revenue is explained by Texas' rapid population growth.[66]




Since the current gas tax rates were enacted, vehicle fuel efficiency has increased dramatically. Over the last 25 years, Texas' population increased by 54.5 percent, the use of our roads on the state system increased 60 percent, while our road capacity has only increased by about 11 percent. Demographics indicate that over the next 25 years Texas' population could grow to 35 million and our use of road will continue to increase.[67] With the advent of electric cars, other alternative fuel sources, and increasing fuel efficiency, the ability of the current gas tax to meet the future transportation needs of the state is insufficient. With a declining primary revenue source for transportation projects, Texas must explore other sources of funding.

## Energy Sector Impact on Roadways

The oil and natural gas business has long been an economic boon for Texas. However, the recent surge in the state's oil and gas production, while bringing great economic opportunities, has had a costly impact on our roads.

Oil and gas exploration and production activities have brought on a massive increase in truck traffic on roads that were not designed for such heavy use. Forecasts that the current boom could last for at least another 20 or 30 years convey that this traffic will continue to steadily increase over that time period.

In February 2012, TxDOT outlined to the Commission a plan to coordinate efforts with the Texas Railroad Commission, Department of Public Safety, Department of Motor Vehicles, energy industry members, and local governments and law enforcement to address immediate, mid-term, and long-term concerns associated with energy sector activity. Some of the goals of this task force include: research; gathering and sharing of information; identification of future energy developments; identification of future legislative issues; and development of funding strategies.

## Diversions

"Diversion" is the term that has been given to appropriations to Fund 6 that do not go toward the state highway system. Some diversions have recently been eliminated or reduced, but about 12 percent ($881.5 million) of the appropriations to Fund 6 in FY 2012 went to agencies and purposes not directly related to highway construction and/or maintenance. Of this amount, the largest sum ($630.6 million), went to the Department of Public Safety. DPS uses these monies for law enforcement activities including traffic enforcement, and driving and motor vehicle safety. Fund 6 dollars also support activities of the department's crime and terrorism unit, and administrative costs. Eighty-one percent of the DPS budget for FY 2012-13 was appropriated out of Fund 6.[68]

| Purpose | AY 2008-2009 | % of TxDOT Appn | AY 2010-2011 | % of TxDOT Appn | AY 2012-13 **HB (as of 05/19/11)** | % of TxDOT Appn |
|---|---|---|---|---|---|---|
| Attorney General - Mineral Rights Litigation [4] | $ 1,700,000 | 0.01% | $ 1,700,000 | 0.01% | $ 1,700,000 | 0.01% |
| Health and Human Services Commission | $ 20,000,000 | 0.12% | | | | |
| Texas Education Agency - School Buses | $ 100,000,000 | 0.60% | | | | |
| Texas Transportation Institute | $ 14,317,605 | 0.09% | $ 14,937,767 | 0.08% | $ 15,335,546 | 0.08% |
| Department of Public Safety | $ 1,263,024,785 | 7.47% | $ 1,125,019,694 | 6.01% | $ 1,310,359,267 | 6.62% |
| Texas Workforce Commission - Client Transportation | $ 13,658,704 | 0.08% | | | | |
| Gross Weight Axle Fees | $ 10,800,000 | 0.06% | | | $ 15,000,000 | 0.08% |
| Commission on the Arts | $ 1,340,000 | 0.01% | $ 1,340,000 | 0.01% | | |
| Historical Commission | $ 1,000,000 | 0.01% | $ 1,000,000 | 0.01% | | |
| State Office of Administrative Hearings | $ 6,736,395 | 0.04% | $ 6,885,647 | 0.04% | $ 6,875,500 | 0.03% |
| Lufkin Tourist Information Center | $ 150,000 | 0.00% | $ 150,000 | 0.00% | | |
| Texas Dept of Insurance - TexasSure Motor Vehicle Financial Responsibility Verification | | | | | $ 8,454,532 | 0.04% |
| Salary Increase for Schedule C | $ 22,291,710 | 0.13% | | | | |
| Regulation of Controlled Substances | $ 804,972 | 0.00% | | | | |
| Silver Alert | $ 224,990 | 0.00% | | | | |
| Client Transportation Services | $ 22,363,606 | 0.13% | | | | |
| Medical Trans - Medicaid Match | $ 85,381,725 | 0.51% | | | | |
| Auto Theft Prevention | $ 27,558,755 | 0.17% | | | | |
| Total | $ 1,591,353,247 | | $ 1,151,033,108 | | $ 1,357,724,845 | |
| Total TxDOT Appropriation[1, 2] | $ 16,678,016,740 | 9.54% | $ 18,720,448,879 | 6.15% | $ 19,801,159,662 | 6.86% |
| TxDOT **and TxDMV**[3] State Highway Fund Appropriation [1] | $ 5,643,425,735 | 28.20% | $ 5,711,558,500 | 20.15% | $ 6,282,811,421 | 21.61% |

[1] DMV appropriations are included in AY 2010-2011

[2] AY 2010 - 2011 includes ARRA appropriations totaling $1,637,800,000

[3] AY 2012 - 2013 includes TxDOT and TxDMV direct SHF appropriations

[4] For AY 2012 - 2013 the applicable Attorney General Rider 17 did not contain estimates for the amount of State Highway Fund appropriated for Mineral Rights litigation as had been done in previous biennium's. For the purposes of this document - the same amount that was appropriated for AY 2010 - 2011 ($1.7 million) is used as an estimate.

Updated - June 24, 2011

An additional $97 million of Fund 6 went to other agencies and expenditures outside of TxDOT and the DMV in FY 2012 including appropriations to: the Attorney General, Texas Transportation Institute, Gross Weight Axle Fees, State Office of Administrative Hearings, and Texas Department of Insurance.

The motor fuel tax revenue dedicated to the Available School Fund is also sometimes included under the diversion umbrella. Last year this amount totaled over $778 million. While not technically a diversion because it goes directly to the Available School Fund rather than being passed through Fund 6, it does bring attention to the issue of financial transparency.

Taxpayers expect their money to fund transportation as advertised; they expect that taxes and fees associated with motor vehicle and roadway use will be returned to the transportation system. Diversions from Fund 6 and the dedication of part of the state gas tax to the Available School Fund contribute to taxpayer confusion over how money is used to fund transportation.

## Transportation Revenue

The three major sources of state highway revenue in Texas are the state fuel tax, the federal fuel tax, and vehicle registration fees. The estimated total annual amount of taxes and fees paid by the average Texan is $167.10. Texas ranks 18th in vehicle registration fees, 29th in state gasoline tax rate, and 44th in overall annual cost of vehicle ownership (See Appendix A). Many other states levy property taxes and additional miscellaneous taxes on vehicles, which Texas does not have. For example, the average driver in Connecticut pays over $1,500 in property taxes on the vehicle every year.[69]

Given the projection that the motor fuels tax will continue to be a declining revenue source, transportation and business advocates have suggested alternate or supplemental funding mechanisms. The possible revenue sources listed in this section have been suggested as solutions to Texas' transportation funding shortage in testimony before the committee, in publications, and/or in prior legislation; each has pros and cons. Their inclusion in this list does not necessarily reflect support by the committee, but is meant to illustrate the variety of potential funding sources that have entered the conversation over a period of several years.

### Local-level and Targeted Sources

#### *State Infrastructure Bank Enhancement*

State Infrastructure Banks (SIB's) have federal authorization from the 1995 National Highway Designation Act. They are intended to accelerate mobility improvements through financial assistance options to local entities.

In 1997 the Texas Legislature authorized a SIB program in Texas administered by the Texas Transportation Commission and TxDOT. The SIB is a revolving loan fund, which offers borrowers favorable terms to make roadway improvements by leveraging existing project funding and providing flexible financial assistance to expedite needed projects.

Legislation authorizing the deposit of additional revenue and the enhancement of the SIB program would be required to allow transportation agencies and developers access to: loans, credit enhancement, establishing a reserve fund, providing capitalized interest, and guaranteeing payment of costs.

***Transportation Reinvestment Zones***

Legislation passed in 2007 and 2011 permitted cities and counties to enter into pass-through agreements with TxDOT by designating an area adjacent to a road project as a Transportation Reinvestment Zone (TRZ). Through a TRZ, a city or county is allowed to capture a portion of the increased property tax revenues resulting from the roadway project's positive effect on property values. A base property and tax value is determined prior to construction, and the tax increment between the base value and the observed increase in property taxes after completion of the roadway project is used to service bonds that are issued to finance the project. Upon the expiration of the TRZ the full amount of tax revenue is returned to the tax rolls. TRZ's are relatively newly authorized and as such not widely employed. Over time TRZ's may become a more common means of investing in local projects.

***Transportation Finance Zones***

In 2009 a bill was introduced in the Senate which would have allowed the Texas Transportation Commission, with approval of the Legislative Budget Board, to create Transportation Finance Zones. This refers to the designation of a zone around a project in which the state's portion of sales and use taxes would be collected to pay off bonds issued to improve a highway within the zone. The proceeds from the state sales and use tax imposed in a transportation finance zone would be deposited into a revolving fund (rather than General Revenue) until the bonds are paid off, or the revenue generated within the zone met an established cap. These proceeds could be used only for the repayment of financial assistance provided to the Texas Department of Transportation for tolled or non-tolled highway projects within the zone in which the taxes were collected. This type of action would require voter approval of a constitutional amendment.

***Local Option Taxes and Fees***

Allowing voters to choose from a variety of solutions to raise revenue for projects within their region is referred to as a "local option."[70] Many states already utilize some of these methods in to fund their transportation needs.

All vehicles registered in the state of Texas pay a base vehicle registration fee of $50. 75. On top of that counties may collect an optional road and bridge fee up to $10 of which 3 percent goes to the SHF and 97 percent goes to the county road and bridge fund.

If counties were allowed an additional vehicle registration fee, or an increase in the road and bridge fee, the resulting additional revenue could be dedicated only for local transportation projects. In 2009, the Legislature passed a bill authorizing county commissioners to collect an additional $10 vehicle registration fee from residents of Hidalgo and Cameron counties for regional mobility. TTI estimated the funding yield for a $5 local registration fee, from 2012 to 2015, in some Texas cities:[71]

- $34.9 million in Austin

- $114.6 million in Dallas-Ft. Worth
- $102.1 million in Houston
- $34.6 million in San Antonio

Local entities could also be given the option to levy an additional gas and diesel tax on local fuel sales. As with the local registration fee alternative, the revenue generated could be dedicated for local transportation projects. However, the sustainability of funding from this option is questionable as fuel tax revenues decrease over time due to decreasing fuel consumption. TTI estimated the funding yield for a local 1 cent per gallon tax, from 2012 to 2015, in some Texas cities:[72]

- $37 million in Austin
- $140 million in Dallas-Ft. Worth
- $126 million in Houston
- $44 million in San Antonio

A measure filed in 2009 in the Senate would have allowed a county to impose and collect a tax of 10 cents per gallon on the sale of gasoline and diesel fuel if the measure were approved by a majority of voters in the county. The bill died in the House Calendars Committee.[73]

**System-wide Sources**

***State Motor Fuel Taxes***

The current state fuel tax rate is 20 cents per gallon for gasoline and diesel fuel. Five cents of every 20 cents collected is dedicated not to the State Highway Fund, but to the Available School Fund. The gas tax rate was last raised in 1991, well before vehicles were capable of the same fuel efficiency they are today.

A one cent increase in state motor fuels tax would generate approximately $110 million per year for the State Highway Fund and about $37 million for the Available School Fund.[74] An increase of 5 cents per gallon would generate an estimated $420 million per year today, but only $280 million in 2030. The decline is explained by the increase in vehicle fuel efficiency, which is expected to continue over time.[75]

In 2011 legislation filed in the Senate proposed a constitutional amendment to increase motor fuel taxes for the specific purpose of paying down state highway bond debt. The maximum annual debt service on these bonds may reach $410 million. A gas tax increase of 27 cents per gallon would be required to cover that amount of debt if that increase were deposited into Fund 6 without splitting off 25 percent for the Available School Fund.[76]

The gas tax could be indexed to some measure of inflation such as the Consumer Price Index or the Highway Cost Index, which would protect the purchasing power of motor fuel tax revenue against inflation. Indexing the state fuel tax to inflation would yield just over $40 million for the State Highway Fund. Alternatively, the gas tax could be indexed to vehicle fuel efficiency such that as fuel efficiency increases and motorists purchase less gas, the amount contributed to transportation costs stays the same.

***Vehicle Registration Fees***

The current annual vehicle registration fee in Texas is $50.75 plus local fees for personal cars below 6,000 pounds (about the weight of a full size pick-up truck or SUV). For commercial vehicles, the registration fee is based on weight categories, and can range from about $50 to more than $800. According to the DMV, adding an additional $10 to vehicle registration fees across the board would generate an estimated $214.8 million per year for the State Highway Fund.[77] An increase of $25 would produce an estimated $570 million per year, and an increase of $50, another $1.2 billion.[78]

In 2009, the Legislature collapsed the vehicle registration fee structure for vehicles over 6,000 pounds such that some Texans saw an increase in their registration fee, while others saw no change, or a decrease. In some cases, individuals saw their registration fee go up between $70 and $400; vehicles in this range include heavy duty pick-ups and medium duty trucks (often purchased for agricultural use), RV's, on up to fully loaded 5-axle trucks for commercial use. Some suggest that those who recently saw a significant increase in their registration fees be exempted from a second increase, if one were to be considered, in the next legislative session.

***Vehicle Mileage Fee***

A vehicle mileage fee is based on the number of miles traveled by a vehicle in a set period. Users would only pay for their usage of the road. In practice this fee would replace the motor fuels tax and address the problem associated with rising fuel efficiency. Privacy concerns, potentially high administrative costs, and enforcement issues have been cited as objections to this method. Technology to assess this type of fee while protecting public confidentiality is in development. TTI estimated the funding yield for a 1 cent per mile fee from 2012 to 2015 would be $997 million. At 5 cents per mile, during the same time frame, the fee would yield $4.9 billion for transportation.[79]

***Vehicle Fuel Equalization Fee***

A vehicle fuel equalization fee is a fee imposed on vehicles with higher than average fuel efficiency to compensate for a loss of fuel tax revenue. The fee is based on the concept that fuel efficient vehicles use the roadways as much as less fuel efficient vehicles, but pay less in motor fuel tax toward maintaining the roadways. The fee would cover the difference between actual fuel usage and the fuel consumption of the average vehicle. A $10 vehicle fuel equalization fee would provide $180 million annually by 2030.[80]

Conversely, prior to the 2011 Legislative session the Legislative Budget Board proposed a fuel inefficiency surcharge of $100 on the sale of a vehicle with high emissions as determined by federal fuel economy standards. The LBB estimated this surcharge would raise $115 million in FY 2012-13.[81]

***Driver's License Surcharge***

Texas drivers pay $25 every six years to apply for or renew their driver's license. This fee is dedicated to the Mobility Fund. An additional $5 per license would generate $220 million per year for transportation projects today and $310 million in 2030.

***State Sales Tax***
The current sales tax rate in Texas is 6.25 percent. A variety of proposals have been made to fund transportation through various handlings of the state sales tax.

Gas and diesel sales are not subject to the sales tax. One suggestion has been to apply the state sales tax of 6.25 percent to motor fuels. Six and a quarter percent of gas priced at $3.50 per gallon and diesel priced at $3.75 per gallon would yield over $115 billion for transportation by 2015.[82] Revenue derived from motor fuel sales will vary with the price of fuel, and is subject to decline over time as motor vehicle fuel efficiency increases.

Increasing the state sales tax and dedicating that increase to the SHF, or to pay off debt service to previously issued highway bonds, has also been presented. A dedicated increase of one-quarter of one percent would yield about $750 million per year for projects today, and over $1 billion per year by 2030.[83]

**Revenues Collected but not Dedicated to Transportation**

***Motor Vehicle Sales Tax***
Texas has a motor vehicle sales tax rate of 6.25 percent of the sales price. Of this tax, 25 percent is dedicated to the Foundation School Fund, and the remainder into General Revenue. Over $2.5 billion in vehicle sales and use tax was deposited in the General Revenue Fund in 2011.[84] Alternatively, increasing the state vehicle sales tax by 1 percent and dedicating the increase to transportation would provide $510 million per year today, and $760 million in 2030.[85] Legislation was filed, but not passed, in both the House and Senate in 2011 to incrementally send the proceeds of motor vehicle sales tax revenue from the GR Fund to the SHF over a period of 10 years.

Other transportation- related taxes and fees that are also currently deposited into General Revenue include:[86]

- $100 million in permit fees for over-sized and over-weight trucks;
- $111 million the motor vehicle-seller financed sales tax;
- $130 million from the motor vehicle rental gross tax; and
- $756 million from 75 percent of the oil production tax.

Some have suggested that these monies should be dedicated to the state highway fund. Redirecting any of this revenue would result in a General Revenue loss.

***TERP***
The Texas Emissions Reduction Plan (TERP) was created by the legislature in 2001 to address the state's environmental problems. Major sources of revenue deposited to the TERP account include: a portion of vehicle certificate of title fees; 2 percent fee on sale or lease of off-road diesel; on-road diesel fees; 10 percent commercial vehicle registration surcharge; and $10 commercial vehicle inspection surcharge. Beginning in FY 2009, a portion of vehicle certificate of title fees is deposited to the Texas Mobility Fund and an equal amount of funds are transferred from the State Highway Fund for deposit to the TERP account. It had been expected that TERP

would be left to expire in 2008 and the fees being deposited into the TERP account would be swept into the Mobility Fund. Instead TERP was reauthorized, and without this arrangement TxDOT bonds backed by the receipt of those fees would have been left in jeopardy.

The Comptroller projected $306.5 million would be received into the TERP account (including $153.6 million transferred from the SHF) during the 2012-13 biennium.[87] In May of 2012, TCEQ reported that actual TERP revenues are being collected at a level 18.1 percent higher than originally expected. Meanwhile, TCEQ appropriations from TERP have consistently declined over the last few years. During the 2008-09 biennium, TCEQ received $337.8 million in total funding for TERP; in the 2012-13 biennium, TCEQ was appropriated $114.3 million for TERP. The projected fund balance for the TERP account as of August 2013 is $601.7 million, assuming TCEQ and Texas Engineering Experiment Station expend all appropriations out of the account.

***Limiting Diversions***

Eliminating diversions from the state highway fund would make available up to around $700 million per year for construction and maintenance of Texas roadways. Additionally, ensuring transportation related revenues are reinvested into transportation projects reinforces funding transparency and voter confidence that their dollars are being spent as advertised.

## Recommendations

1. Evaluate ending all diversions from the State Highway Fund.

2. The Legislature should work to establish long-term solutions to address the declining revenue from the state gas tax.

3. Increase accountability for and transparency of how transportation dollars are spent by TxDOT.

## LETTER TO THE CHAIR AND APPENDICES

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

COMMITTEES:
*Rules and Resolutions - Chair*
*Appropriations*
*Transportation*

TEXAS LEGISLATIVE ORGANIZATIONS:
*Mexican American Legislative Caucus*
*Texas Legislative Sportsman's Caucus*
*Texas Tourism Caucus*
*Texas Legislative Black Caucus*

December 14, 2012

The Honorable Larry Phillips
Chair, House Committee on Transportation
Capitol Building, 4N.5
Austin, Texas 78701

Dear Mr. Chairman,

Please accept this letter to be published along with the Committee's Report, in response to the Interim Charges assigned to our Committee by the Speaker. These are some major points I wish to add, in order to heighten awareness about the state's needs for rail relocation and improvement in addition to the statements included in the Committee Report. As you know, meeting the state's needs for rail infrastructure will require advance planning and budgeting for the long term and not just for a single budget cycle. We cannot continue overlooking these needs simply because they cannot be met within a two-year time frame.

State policy should address the entire transportation system, as opposed to concentrating just on the highway system. Freight goods movement – expected to double over the next 20 years – is a critical issue for the state and national economies. Texas is truly the crossroads to interstate commerce between the east and west coasts, and in international commerce between Mexico and Canada. The state has an economic interest in shifting freight loads currently moving by truck transport onto the Texas freight rail system, particularly in congested trade corridors such as Interstate 35 between Laredo and Dallas. Transport by truck will continue to be needed in conjunction with the transport options provided by rail. A moderate amount of money invested in this transition could reap disproportionately positive benefits in congestion relief, reduced highway maintenance costs, improved air quality, and improved public safety.

The Texas Department of Transportation (TxDOT) has a limited ability to make this transition effectively at present, because their major source of revenue, the gas tax, is constitutionally-restricted to highway construction and maintenance. That may have been appropriate to a largely rural state a generation ago, but it will not service adequately the transportation needs of a modern urban state, geographically the second largest in the nation. While the Legislature makes plans for dealing with that issue on a long term basis, the Legislature should adopt policies in the meantime to improve the statewide freight rail network, particularly in congested trade corridors, and seed the development of alternative transportation modes wherever possible, including:

1) Developing a reliable, bondable source of revenue for financing the Texas Railroad Relocation and Improvement Fund, which was approved by voters by constitutional amendment in 2005, but which has never been funded. The Committee should encourage TxDOT to work with the Legislature to provide financing and regulatory oversight to the Rail Relocation Fund. The Committee recommends an annual

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

appropriation of $25 million to the Rail Relocation and Improvement Fund from revenues currently flowing into Fund 6 from the Oversize-Overweight Permit Fees paid by trucks that use the state highway system;

2) Encouraging the use of non-constitutionally restricted revenues available to TxDOT (including toll road revenues and franchise fees) for developing statewide freight railroad and passenger rail improvements dedicated to reducing congestion, reducing highway maintenance fees, improving air quality, transporting goods and products, and improving public safety; and

3) Continuing to develop those long term projects in heavily-congested trade corridors will enable increased trade, reduce congestion, and provide alternative modes of travel, including the Tower 55 railroad relocation project in the Dallas-Ft. Worth area and the Lone Star Rail Project between Austin and San Antonio.

Thank you for considering these points, and for accepting them for presentation in conjunction with the Committee's Interim Report on Transportation.

I invite other Members of the Committee to join me in signing this letter. Also, I would welcome any thoughts or questions you or other Committee Members may have on these important issues, and look forward to a continuing dialog with you and other Members in the future.

Respectfully submitted,

Ruth Jones McClendon
State Representative, District 120

Drew Darby
State Representative, District 72

Joe C. Pickett
State Representative, District 79

Eddie Rodriguez
State Representative, District 51

Allen Fletcher
State Representative, District 130

Armando "Mando" Martinez
State Representative, District 39

# APPENDIX A

## Total Annual Vehicle Fees and Taxes (Ranked by Total Fees Paid)

Assumptions made for calculations: All passenger fees based on a 2008 Ford Taurus SEL Sedan having a market value of $15,880, a curb weight of 3,643 lbs, and an average fule economy of 23 mpg.

| | Vehicle Registration Fee- Passenger Vehicles | Property Tax | Other Vehicle Tax | Gas Tax Rate | Average Annual Gas Tax Paid (12,000 miles) | Total Annual Vehicle Fees | Total Fees Rank | |
|---|---|---|---|---|---|---|---|---|
| Connecticut | $62.50 | $1,155.91 | $0.00 | 0.250 | $130.43 | $1,348.84 | 1 | |
| Rhode Island | $30.00 | $758.59 | $0.00 | 0.300 | $156.52 | $945.11 | 2 | |
| South Carolina | $12.00 | $363.34 | $0.00 | 0.160 | $83.48 | $458.82 | 3 | |
| Mississippi | $27.75 | $328.29 | $0.00 | 0.184 | $96.00 | $452.04 | 4 | |
| New Hampshire | $43.20 | $0.00 | $285.84 | 0.196 | $102.26 | $431.30 | 5 | |
| Montana | $217.00 | $54.79 | $0.00 | 0.278 | $144.78 | $416.57 | 6 | |
| Missouri | $54.75 | $265.44 | $0.00 | 0.170 | $88.70 | $408.88 | 7 | |
| Maine | $35.00 | $0.00 | $214.38 | 0.295 | $153.91 | $403.29 | 8 | |
| West Virginia | $30.00 | $190.56 | $0.00 | 0.322 | $168.00 | $388.56 | 9 | |
| Nebraska | $75.50 | $0.00 | $162.00 | 0.268 | $139.83 | $377.33 | 10 | |
| Virginia | $38.75 | $235.02 | $0.00 | 0.175 | $91.30 | $365.08 | 11 | |
| Arkansas | $25.00 | $223.91 | $0.00 | 0.215 | $112.17 | $361.08 | 12 | |
| Colorado | $77.50 | $0.00 | $161.98 | 0.220 | $114.78 | $354.26 | 13 | |
| **California** | **$77.00** | **$0.00** | **$182.62** | **0.180** | **$93.91** | **$353.53** | **14** | |
| **Georgia** | **$20.00** | **$0.00** | **$290.61** | **0.075** | **$39.13** | **$349.74** | **15** | |
| Nevada | $33.00 | $0.00 | $190.08 | 0.240 | $125.22 | $348.30 | 16 | |
| Iowa | $222.32 | $0.00 | $0.00 | 0.210 | $109.57 | $331.89 | 17 | |
| Wyoming | $253.20 | $0.00 | $0.00 | 0.140 | $73.04 | $326.24 | 18 | |
| Utah | $43.50 | $0.00 | $150.00 | 0.245 | $127.83 | $321.33 | 19 | |
| Massachusetts | $50.00 | $0.00 | $158.80 | 0.210 | $109.57 | $318.37 | 20 | Median Fees |
| Minnesota | $175.05 | $0.00 | $0.00 | 0.271 | $141.39 | $316.44 | 21 | |
| Kentucky | $21.00 | $154.99 | $0.00 | 0.241 | $125.74 | $301.73 | 22 | |
| Arizona | $8.00 | $0.00 | $193.14 | 0.180 | $93.91 | $295.05 | 23 | |
| Washington | $43.75 | $0.00 | $47.64 | 0.375 | $195.65 | $287.04 | 24 | |
| **North Carolina** | **$28.00** | **$97.50** | **$0.00** | **0.302** | **$157.30** | **$282.81** | **25** | |
| Indiana | $21.05 | $0.00 | $156.00 | 0.180 | $93.91 | $270.96 | 26 | |
| Kansas | $39.00 | $105.71 | $0.00 | 0.240 | $125.22 | $269.93 | 27 | |
| **New York** | **$29.50** | **$0.00** | **$80.00** | **0.252** | **$131.22** | **$240.72** | **29** | |
| Hawaii | $151.18 | $0.00 | $0.00 | 0.170 | $88.70 | $239.88 | 29 | |
| Wisconsin | $75.00 | $0.00 | $0.00 | 0.309 | $161.22 | $236.22 | 30 | |
| North Dakota | $93.00 | $0.00 | $0.00 | 0.230 | $120.00 | $213.00 | 31 | |
| **Ohio** | **$34.50** | **$0.00** | **$20.00** | **0.280** | **$146.09** | **$200.59** | **32** | |
| Maryland | $77.50 | $0.00 | $0.00 | 0.235 | $122.61 | $200.11 | 33 | |
| **Illinois** | **$99.00** | **$0.00** | **$0.00** | **0.190** | **$99.13** | **$198.13** | **34** | |
| Alabama | $23.00 | $76.22 | $0.00 | 0.180 | $93.91 | $193.14 | 35 | |
| **Pennsylvania** | **$36.00** | **$0.00** | **$0.00** | **0.300** | **$156.52** | **$192.52** | **36** | |
| Idaho | $56.25 | $0.00 | $0.00 | 0.250 | $130.43 | $186.68 | 37 | |
| **Michigan** | **$86.00** | **$0.00** | **$0.00** | **0.190** | **$99.13** | **$185.13** | **38** | |
| Tennessee | $24.00 | $0.00 | $55.00 | 0.200 | $104.35 | $183.35 | 39 | |
| Oklahoma | $92.50 | $0.00 | $0.00 | 0.170 | $88.70 | $181.20 | 40 | |
| Vermont | $68.00 | $0.00 | $0.00 | 0.210 | $109.57 | $177.57 | 41 | |
| South Dakota | $43.00 | $0.00 | $12.00 | 0.220 | $114.78 | $169.78 | 42 | |
| Oregon | $43.00 | $0.00 | $0.00 | 0.240 | $125.22 | $168.22 | 43 | |
| **Texas** | **$62.75** | **$0.00** | **$0.00** | **0.200** | **$104.35** | **$167.10** | **44** | |
| **Florida[1]** | **$70.75** | **$0.00** | **$0.00** | **0.181** | **$94.43** | **$165.18** | **45** | |
| New Mexico | $62.00 | $0.00 | $0.00 | 0.189 | $98.48 | $160.48 | 46 | |
| Delaware | $40.00 | $0.00 | $0.00 | 0.230 | $120.00 | $160.00 | 47 | |
| Alaska | $50.00 | $0.00 | $60.50 | 0.080 | $41.74 | $152.24 | 48 | |
| New Jersey | $84.00 | $0.00 | $0.00 | 0.105 | $54.78 | $138.78 | 49 | |
| Louisiana | $16.00 | $0.00 | $0.00 | 0.200 | $104.35 | $120.35 | 50 | |

**Gas Tax Rate Source: Federal Highway Administration Table MF-121T**

1 Florida Gas Tax Rate: Fuel tax ranges from 15.6 cents to 18.1 cents per gallon, depending on the county. Less than 2% of the state's population live in counties that have a tax rate less than 18.1 cents.

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