

Interim Report

to the 84th Legislature

House Committee on Transportation



December 2014

HOUSE COMMITTEE ON TRANSPORTATION TEXAS HOUSE OF REPRESENTATIVES INTERIM REPORT 2014

A REPORT TO THE HOUSE OF REPRESENTATIVES 84TH TEXAS LEGISLATURE

LARRY PHILLIPS CHAIRMAN

COMMITTEE CLERK COURTNEY REID



Committee On Transportation

December 23, 2014

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-third Legislature hereby submits its interim report including recommendations and drafted legislation for consideration by the Eighty-fourth Legislature.

Respectfully submitted,

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HOUSE COMMITTEE ON TRANSPORTATION

INTERIM STUDY CHARGES AND COMMITTEE MEMBERSHIP

The House Committee on Transportation was appointed by The Honorable Joe Straus, Speaker of the Texas House of Representatives in January 2013. Larry Phillips was named chair of the committee and Armando 'Mando' Martinez was named vice-chair. Committee membership also included: Cindy Burkett, Yvonne Davis, Allen Fletcher, Bobby Guerra, George Lavender, Ruth Jones McClendon, Joe Pickett, and Debbie Riddle.

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:

- Evaluate actions by state agencies under the committee's jurisdiction to increase
 transparency, accountability, and efficiency. Consider the cost-saving outsourcing of
 technologies and recently developed practices, such as the conversion of roadways,
 used by the Department of Transportation designed to demonstrate savings. Identify
 and make recommendations on the credibility and effectiveness of these goals.
- Monitor the usage of state funds by the Texas Department of Transportation for improving road quality in areas impacted by Energy Sector activities.
- Evaluate the status of Texas's port system, including a review of the structure and operations of the Maritime Division of the Texas Department of Transportation.
- Evaluate the status of passenger and freight rail in Texas, including a review of the structure and operations of the Rail Division of the Texas Department of Transportation.
- Review the state of our current transportation infrastructure outside of the five most populous areas. Explore future needs of our infrastructure and make recommendations to ensure long-range sufficiency.
- Monitor the implementation of the "Turn-Back Program" by the Texas Department of Transportation, specifically its fiscal impact to municipalities and taxpayers.
- Examine county authority to utilize tax increment financing and transportation reinvestment zones to fund transportation projects.
- Monitor and review the efforts of the Department of Transportation's (TxDOT) Texas
 Technology Task Force (TTTF). The TTTF shall study emerging transportation,
 communication, and computing technologies and determine physical infrastructure and
 system components that TxDOT or other state departments would need to provide to
 enable selected technologies. The task is to be completed by TTTF as directed by SB 1
 (83R), item 44, Article VII-31. (Joint charge with the House Committee on Technology.)

- Conduct legislative oversight and monitoring of the agencies and programs under the committee's jurisdiction and the implementation of relevant legislation passed by the 83rd Legislature. In conducting this oversight, the committee should:
 - a) consider any reforms to state agencies to make them more responsive to Texas taxpayers and citizens;
 - b) identify issues regarding the agency or its governance that may be appropriate to investigate, improve, remedy, or eliminate;
 - c) determine whether an agency is operating in a transparent and efficient manner; and
 - d) identify opportunities to streamline programs and services while maintaining the mission of the agency and its programs.

TRANSPORTATION INFRASTRUCTURE OUTSIDE OF THE	E
STATE'S FIVE MOST POPULOUS REGIONS	

Committee Action

The committee met on April 14 to hear testimony on the state of Texas' current transportation infrastructure outside of the five most populous areas. Written testimony was submitted by the Department of Transportation for later review by committee members.

Background

Texas' rural highways, those outside its five largest metropolitan areas, are a vital part of the state highway system. They comprise 84 percent of the total mileage on that system and carry nearly 65 percent of the state's daily truck traffic. Rural highways provide connectivity, linking Texas' urban population centers with the rural areas that produce goods and resources, and with neighboring states and Mexico.¹

Rising economic activity occurring in many rural areas, particularly in the energy sector, is significantly affecting our rural highway system.

Funding and completing all of the rural priority projects discussed later in this report over the next 20 years, without addressing any future identified rural highway needs, would require over \$1.6 billion each year in today's dollars. This amount represents part of the \$5 billion (\$3 billion for mobility, \$1 billion each for maintenance and energy sector impacts) of new funding needs TxDOT has previously articulated.

State Highway System Usage

The average daily vehicle miles travelled (DVMT) on the state highway system is evenly divided between the 20% of the system within urban areas and the 80% made up of rural roadways. While the major challenge to TxDOT in urban centers is improving system capacity, the major challenge in rural areas is maintaining the expanse of roadways and other transportation infrastructure while enhancing safety.²

As discussed elsewhere in this report, the DVMT by both cars and trucks on rural highways is growing at a rate that exceeds the increase on the overall system. This increase has largely been attributed to traffic related to the energy sector.

State Highway System Road and Bridge Performance

TxDOT documents the condition of state highways using its pavement management information system (PMIS). PMIS records and reports the number of lane miles of each type of roadway, and its level of condition ("very good," "good," "fair," etc.). Currently, 89.3 percent of rated lane miles on the state highway system outside the large metro areas are rated in "good" condition.³ In rural areas the more heavily travelled roads are actually in better condition than secondary roadways such as Farm-to-Market (FM) roads, business routes, and arterials on the state system. In response to this finding TxDOT identified two goals:

- Preserving roadways that are in good condition; and
- Rehabilitating roadways that have significantly deteriorated.

Usually the most cost-effective strategies to maintain existing roadways are pavement preservation and preventative maintenance. Waiting until roads have become heavily deteriorated requires higher incremental costs. Performing timely preventative maintenance enables TxDOT to avoid larger future expenditures.

Preventive Maintenance Needs Outside Largest Metro Areas

Freventive Maintenance Needs Outside Largest Metro Areas			
Highway System	Total Lane Miles Good or Better	Lane Miles Requiring Treatment Each Year	Estimated Cost Per Year
Interstate Highway (IH)	12,799.5	2133.25	\$62,000,000
United States Highway (US)	29,105.1	4850.85	\$141,000,000
State Highway (SH)	28,116.5	4686.08	\$136,000,000
Farm/Ranch to Market (FM/RM)	64,500.7	8062.59	\$234,000,000
Business Route (BR)	1,884.7	235.59	\$7,000,000
Park Route (PR)	429.8	53.73	\$1,600,000
Principal Arterial Streets (PA)	N/A	N/A	N/A
			\$581,600,000/year

Rehabilitation Needs Outside Largest Metro Areas

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Highway System	Total Substandard Lane Miles	Lane Miles Requiring Treatment Each Year	Estimated Cost Per Year
Interstate Highway (IH)	1,415.7	353.93	\$83,880,225
United States Highway (US)	3,386.9	846.73	\$200,673,825
State Highway (SH)	3,122.9	780.73	\$185,031,825
Farm/Ranch to Market (FM/RM)	7,809.0	1952.25	\$462,683,250
Business Route (BR)	482.8	120.70	\$28,605,900
Park Route (PR)	101.6	25.40	\$6,019,800
Principal Arterial Streets (PA)	N/A	N/A	N/A
			\$966,894,825/year

NOTES:

Substandard Lane Miles are addressed based on a 4 year cycle from the 4-year Pavement Management Plan. A Medium Rehab cost of \$237,000/lane mile.

There are 23, 235 bridges on the rural state highway system. In FY 2014 TxDOT rated the condition of 92% of those bridges to be "good" or better. About 7.6% are considered "structurally deficient" or "functionally obsolete; .3% are labeled "substandard" because their load capacity is less than the maximum permitted by state law. TxDOT estimates replacing the 1,821 structurally deficient, functionally obsolete, and substandard bridges in this category would cost approximately \$4.5 billion.

Rural Connectivity and Mobility

TxDOT initiates and works with a variety of stakeholder and advocacy groups that bring TxDOT employees together with rural community leaders and elected officials. These interactions have given rise to the identification of the immediate and short-term needs of rural communities, and the identification of several critical rural connectivity needs which are outlined below. However, it should be noted that TxDOT believes at least another \$10 billion of additional unfunded rural priority projects exist in addition to the \$17.3 billion worth of construction discussed in this report. 4

Expansion of Rural Interstates

Texas' rural interstate highways are integral to the state highway system. TxDOT recently widened from four to six lanes the section of I-35 from Austin to the I-35E and I-35W interchange outside of Hillsboro. I-10 from San Antonio to Houston and from Houston to the Louisiana state line is in need of similar expansion. Additional improvements are needed in other areas of the state including 1-45 from Houston to Dallas, portions of I-20 and I-30 from Dallas to the Louisiana and Arkansas state lines respectively, I-10 in El Paso, I-37 north of Corpus Christi, and I-40 near Amarillo. The cost to expand the priority sections of rural interstates from five to six lanes is \$10 billion.

"Super 2" Upgrades

A super two, super two-lane highway or wide two lane is a two-lane surface road built to highway standards, typically including partial control of access, occasional passing lanes and hard shoulders. It may be built for eventual conversion to freeway or divided highway when traffic volumes rise.

TxDOT has identified several corridors around the state that require upgrading to Super 2 standards as part of their Statewide Super 2 Corridor Plan. Upgrades recently made under the plan include the US 83 corridor in the Rio Grande Valley, progress on establishing hurricane evacuation routes along highways on the Gulf Coast, and the upgrade of segments of the US 281 and US 77/377 corridors.

The cost of current Super2 Corridor Plan needs is currently \$900 million.

Ports-to-Plains Corridor

The Ports to Plains Corridor links energy and agricultural regions in West Texas with key ports of entry along the Texas-Mexico border and deep and shallow draft on the Gulf Coast of Texas. TxDOT has completed (or currently has under construction) 106 miles of four-lane and 192 miles of Super 2 highways funded in great part by Proposition 12 bonds. The only rural portion of the Ports to Plains project that remains to be completed is the upgrade of US 277 from Sonora to Eagle Pass. However, localized relief routes in Amarillo, Lamesa, Midland, Big Spring, and San Antonio also require similar upgrades. TxDOT estimates the cost to complete these projects in approximately \$483 million.

I-69 Committee Priority Segments

One thousand miles of I-69 run through Texas, from Brownsville, Harlingen and Laredo along the Texas-Mexico border, along the Texas Gulf Coast to Houston, and north through East Texas. Leaving the state near Texarkana it continues through the Midwest and on to Canada. I-69 is viewed by many as a critical NAFTA trade corridor and an important link to ports along the Texas coast.

In the last three years TxDOT has invested nearly \$1 billion in projects to upgrade segments of the I-69 corridor. Since 2011, TxDOT has worked closely with a citizen advisory committee to identify and prioritize future improvements to the corridor. Current priority projects include completing portions of US 77 and US 281 to the Lower Rio Grande Valley and upgrading SH 44 between Alice and Robstown, Loop 20 in Laredo and segments of US 59 from Victoria to East Texas. The estimated total cost of addressing these projects is about \$6 billion.

Recommendations

- 1. Explore funding solutions for future rural transportation needs.
- 2. Identify legislative changes to ensure TxDOT continuously and efficiently carries out cooperative efforts with local governments and citizens.
- 3. In addition to performing timely preventative maintenance, encourage TxDOT to explore advancements in the research and development of materials that are more highly durable to reduce the costs of constructing and maintaining roadways.

USE OF STATE FUNDS IN AREAS IMPACTED BY THE ENERGY SECTOR

Committee Action

The committee met on August 26, 2014 to hear testimony regarding the usage of state funds by TxDOT for improving road quality in areas impacted by Energy Sector activities. Invited testimony was given by the following: James LeBas and Debbra Mamula for Texas Oil and Gas Association; Mark Marek for Texas Department of Transportation.

Background

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 about a considerable increase in truck traffic on Farm-to-Market (FM) and Ranch-to-Market (RM) roads. These roads represent 14 percent of the state highway system and were designed to meet local rural needs, but not meant to accommodate the amount, size, and weight of traffic associated with energy sector operations. From 2009 to 2012 the total daily vehicle miles traveled (DVMT), a measure of traffic volume, increased by 2.8 percent on FM/RM highways and by 5 percent on all other onsystem highways outside the largest urban areas. Truck traffic on these roads increased even more significantly during the same time period: 11.2 percent on FM/RM highways, and 8 percent on all other rural state highways. 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 time.

Costs to Local and State Government

According to a 2012 study by the Texas A&M Transportation Institute (TTI) the anticipated annual cost of maintenance and repair needs on state and local roads due to elevated energy sector activity is \$2 billion per year over the next 20 years. These costs can be further broken down into \$1 billion annually for roads on the state highway system and \$1 billion annually for roadways under local jurisdiction. The study also determined that reinforcing or "armoring" roadways prior to their needing to be rebuilt or receive major repairs would substantially reduce those costs. ^{5,6}

Because of the weight that certain variables, such as accelerated pavement and bridge deterioration, carry in the traditional funding formulas there has been an increase in the amount of funding allocated by TxDOT to energy sector areas. The Commission has also directed some discretionary funds to those areas as well as funds specifically appropriated by the Legislature for targeted energy sector projects.

HB 1025

The Supplemental Appropriations Bill of the 83rd Legislature, HB 1025, specifically appropriated \$225 million to TxDOT for maintenance and safety, including repairs to roadways and bridges within the state highway system for damage caused by oversize vehicles or overweight loads used in the development and production of energy or by above normal usage of roadways and bridges within the state highway system by vehicles used in the development and

production of energy. The bill also expressed the legislature's intent that projects be prioritized according to safety issues, traffic volumes, pavement widths and pavement conditions.

Based on these criteria TxDOT selected 41 projects for development and funding. In July 2013, the Commission approved a minute order to fund 37 of the 41 projects. (The remaining four projects were funded through regular appropriations.) These projects are currently under construction and on average are about 30% complete. Twenty seven of the individual projects were combined as a single design-build project and awarded a contract for \$150 million.

Additionally, HB 1025 transferred another \$225 million to the Transportation Infrastructure Fund (TIF) for the purposes of implementing the provisions of SB 1747.

SB 1747

Authored by Senator Uresti and passed by the 83rd Legislature, SB 1747 established a state Transportation Infrastructure Fund (TIF) to fund the repair and maintenance of county roads damaged by energy-related activity. The bill authorized TxDOT to distribute \$225 million (as authorized in HB 1025) among eligible counties that apply for grant funding.

Grants from the TIF distributed during a fiscal year must be allocated among counties as follows:

50% based on well completions (the ratio of well completions in the county to the total number, as determined by the Railroad Commission);

20% based on weight tolerance permits (the ratio of weight tolerance permits issued in the preceding fiscal year for the county to the total number of permits issued in the state as determined by DMV);

20% based on oil and gas production taxes (the ratio of taxes collected in the preceding fiscal year in the county to the total amount of taxes collected in the state for that fiscal year, as determined by the Comptroller);

10% based on the oil and gas waste (the ratio of the volume of oil and gas waste injected in the preceding fiscal year in the county to the total volume of such waste injected in the state as determined by the Railroad Commission);

5% of grant funds received may be used for administrative costs.

In November 2013 the Texas Transportation Commission adopted final administrative rules governing the TIF grant program, and issued a call for projects. All 254 counties in the state were eligible to submit an application for the grant program under the formula provided by the legislation. There were 191 counties with applications submitted at the closing of the application deadline; all 191 applicant counties met the program requirements and were accordingly awarded grants in April 2014 (see Appendix A). A website on TxDOT.gov was created to provide counties with the latest information and educational resources and TxDOT's district offices are working with their member counties to expedite construction of county roadway projects funded through the grants.

Gravel Roads

In 2013, based on a TTI study outlining the impact of oil and gas in Texas, TxDOT identified and considered the conversion of 83 miles of roadway to high-end unpaved asphalt surface to improve safety. After discussions with industry, the public and Legislators, less than 4 miles were converted on two roadways based on roadway condition, truck volume, eligibility for federal funds, connectivity, and residential density. To date, the traffic level on these roadways has stabilized and the roads have been converted back to a paved surface.

Recommendations

- 1. Explore options to continue to provide funding for energy sector roads.
- 2. Encourage TxDOT to continue working with local governments and citizens to meet transportation needs.
- 3. Reexamine formulas used by TxDOT for the distribution of funds through TIF grants to ensure that funds appropriately target areas most impacted by energy sector activity.
- 4. Ensure TxDOT has the resources needed to identify future areas of energy sector growth in order to take preventative maintenance measures resulting in overall cost savings.

COUNTY AUTHORITY TO UTILIZE TAX INCREMENT FINANCING AND TRANSPORTATION REINVESTMENT ZONES

Committee Action

The committee met on August 26, 2014 to hear testimony regarding county authority to utilize tax increment financing and transportation reinvestment zones (TRZ's) to fund transportation projects. Invited testimony was given by the following: C. Brian Cassidy for Locke Lord LLP; Will Conley for Hays County Commissioners Court; Robert Bass for County Judges and Commissioners Association of Texas; Don Dixon; Duane Gordy for Community Development Education Foundation; and James LeBas for Texas Oil and Gas Association.

Background

TRZ's are a tool for generating transportation project funding by capturing and leveraging the economic growth resulting from a transportation project. Economic development, such as the construction of new homes or businesses, often occurs in areas which have been given improved access by new or expanded road projects. As development or redevelopment occurs, property values in those areas increase. A TRZ allows a municipality, county, or a port authority/navigation district to designate a geographical zone around a transportation project and capture the incremental growth in ad valorem tax revenues resulting from the increase in property values. All or part of that incremental increase can be contributed toward financing the transportation project. A TRZ can also be created to capture the growth in sales tax in an area that results from increased business activity. ^{7,8,9}

State laws relating to TRZ's are laid out in the Texas Transportation Code Chapter 222 §§106-111 and include general provisions for all TRZ's as well as addressing the formation and specific authority of each type of TRZ.

Legislation Affecting TRZ's

80th Legislature, 2007

SB 1266 by Brimer - This legislation created the TRZ structure for counties and municipalities. A municipality or county could only form a TRZ if it was also receiving pass-through funding from TxDOT for a transportation project.

82nd Legislature, 2011

HB 563 by Pickett - Amended TRZ statutes to expand the projects for which a municipality or county has the authority to establish a TRZ to include any transportation project, rather than only a pass-through toll project; prohibited a municipality or county from being penalized with a reduction in traditional transportation funding because of the designation and use of a TRZ; authorized the governing body of a municipality or a county to use a portion of tax increment generated from sales and use taxes imposed for deposit into a tax increment account and to use those funds to pay for projects receiving pass-through funding; authorized a municipality or county to contract with an entity to develop a transportation project in a zone and, among other provisions, authorized a county to assess all or part of the cost of a project against property within the zone and to pledge all or part of the revenue from the assessment to that entity.

HJR 63 by Pickett - This proposed constitutional amendment known as Proposition 4 on the November 2011 ballot would have granted to counties the same authority as municipalities to issue bonds or notes to finance transportation projects within the county and to pledge increases in property tax revenues derived from the project for repayment of those bonds or notes. The amendment failed to pass.

83rd Legislature, 2013

SB 1110 by Nichols - Amended the Transportation Code to authorize a municipality or county to designate a TRZ to promote one or more transportation projects; clarified language regarding the commitment of TRZ revenues to satisfy contractual obligations; authorized the governing body of a county or municipality to designate a transportation reinvestment zone for a transportation project located outside the boundaries of the county or municipality if specified conditions are met; and expanded the types of projects in a TRZ for which a municipality or county may establish a sales tax increment account to include any transportation project (not just projects in the pass-through program).

The bill also repealed a provision authorizing a county that collects a property tax increment to issue bonds to pay all or part of the cost of a transportation project and to pledge or assign all of a specified amount of money in the tax increment account to secure those bonds. This in light of two Attorney General Opinions previously issued in 2012:

GA-0953, which stated a county may pay into a tax increment fund, but had no authority to issue tax increment financing bonds or unilaterally pledge any part of the tax increment fund; and

GA-0981, which concluded "a county's issuance of tax increment financing bonds secured by a pledge of the county's ad valorem tax increment would be subject to constitutional challenge as violating the equal and uniform taxation requirements of article VIII, section 1(a) of the Texas Constitution."

SB 971 by Williams - Authorized port authorities and certain navigation districts to form a TRZ to "improve the security, movement, and intermodal transportation of cargo or passengers in commerce and trade."

SB 1747 by Uresti - Established a Transportation Infrastructure Fund (TIF) to address road quality in areas affected by energy sector activity and created a grant program using TIF funds for county roads in the energy sector; established the County Energy Reinvestment Zone (CETRZ) program; and required counties wishing to access the TIF to form a CETRZ. The bill outlines formulas for the distribution of funds, taking into consideration weight tolerance permits, oil and gas production taxes, the number of well completions submitted to the Railroad Commission, and the volume of oil and gas waste injected per county. To be considered for funding a county must provide a road condition report, a list and scope of transportation infrastructure projects, and matching funds of 20% of the amount of the grant, or 10% if determined to be economically disadvantaged. The TIF allocates about \$225 million per year distributed among eligible counties, and the program is administered by TxDOT.

County TRZ's

The commissioners court of the county may contract with a public or private entity to develop, redevelop, or improve a transportation project in the transportation reinvestment zone, including aesthetic improvements, and may pledge and assign to that entity all or a specified amount of the revenue the county receives from the tax increment for the payment of the costs of that transportation project. After a pledge or assignment is made, the county may not rescind its pledge or assignment until the contractual commitments that are the subject of the pledge or assignment have been satisfied. Any amount received from the tax increment not pledged or assigned in connection with a transportation project may be used for other purposes as determined by the county commissioners.

County TRZ's differ most greatly from municipal TRZ's in that they cannot be constitutionally pledged to secure the issuance of bonds (i.e. county issued bonds cannot issue bonds backed by TRZ revenue). That authority was granted to municipalities in 1999 through passage of a constitutional amendment, but a similar proposition granting the same authority to counties failed to pass in 2011.

A commissioner's court must issue an order or resolution designating an area as a transportation reinvestment zone that:

- (1) describes the boundaries of the zone with sufficient definiteness to identify with ordinary and reasonable certainty the territory included in the zone;
- (2) provides that the zone takes effect immediately on adoption of the order or resolution and that the base year shall be the year of passage of the order or resolution or some year in the future;
- (3) assigns a name to the zone for identification, with the first zone designated by a county designated as "Transportation Reinvestment Zone Number One, County of (name of county)," and subsequently designated zones assigned names in the same form numbered consecutively in the order of their designation;
- (4) designates the base year for purposes of establishing the tax increment base of the county;
- (5) establishes an ad valorem tax increment account for the zone; and
- (6) contains findings that promotion of the transportation project or projects will cultivate the improvement, development, or redevelopment of the zone.

Not later than the 30th day before the date the commissioners court proposes to designate an area as a TRZ, the commissioners court must hold a public hearing on the creation of the zone, its benefits to the county and to property in the proposed zone, and the possible abatement of ad valorem taxes or the grant of other relief from ad valorem taxes imposed by the county on real property located in the zone.

County TRZ statute also authorizes some alternatives for assisting counties in funding transportation projects. A county may elect to abate taxes within a zone in the amount of the tax increment, and then either levy assessments on the property in the zone in an amount that does not exceed the abatement; or create a road utility district (RUD) with the same boundaries as the

TRZ and allow the RUD to levy a tax, which through the RUD's authority can be pledged to bonds, in an amount equal to the amount abated.

County TRZ's lapse on December 31 of the 10th year after the year the zone was designated if not used for the purpose for which they were designated. Alternatively they can be terminated in fewer than 10 years if the contractual obligations of the county related to the TRZ have already been met, or may be pledged for a period of more than 10 years for specific projects. There are approximately 20 TRZ's in Texas, with several more under consideration. TxDOT provides assistance to those municipalities and counties interested in using a TRZ in conjunction with TxDOT funding.

County Energy TRZ's

CETRZ are a means for counties that have experienced significant damage to county road networks due to energy sector activity to raise matching funds for TIF grants and fund one or more transportation projects within the zone. ^{10,11,12}

A county that wishes to access the TIF must first form a CETRZ. Establishing a CETRZ requires the commissioner's court of a county to make a determination that the area within the zone is affected by oil and gas exploration/production and would benefit from a TIF grant. Like other TRZ's the incremental increase in property tax revenue generated in a CETRZ is captured and used to finance a transportation project or projects. The amount of the tax increment for a CETRZ is determined in the same manner the county would determine the tax increment for a County TRZ, and the process for establishing a CETRZ is similar. However, the way in which the tax increment may be used and the financing mechanisms available to the counties are different.

A commissioner's court must dedicate or pledge all of the captured appraised value of real property located in the county energy transportation reinvestment zone to transportation infrastructure projects. Money in the tax increment account may only be used to provide matching funds for the TIF grant program or to fund one or more transportation projects in the zone. This is a limitation that differs from County TRZ statute that allows the county to decide how much captured tax increment revenue to dedicate to a project. A CERTZ also has a limit of 10 years, with the possible extension of an additional five years, but cannot be terminated before or extended beyond this period like a County TRZ might be. After a CERTZ has lapsed any remaining funds must be transferred to the county road and bridge fund.

Before a county can apply for a TIF grant it must appoint an advisory board of directors for the zone. The board must consist of up to three oil and gas representatives who perform company activities in the county and are local taxpayers and two public members. The purpose of the board is to advise on the establishment, administration and expenditures of the CETRZ. If a grant is distributed to the county, it may use up to 5% (not to exceed \$250,000) of grant funds toward the administration of the CETRZ.

As with County TRZ's the tax increment collected in a CETRZ may not be pledged to secure bond debt, but as the 2013 legislation was enrolled it may be transferred to a RUD which can

pledge and assign all or a specified amount of money in the tax increment account to secure those bonds. In contrast the County TRZ statute allows a county to abate taxes on property in a TRZ and then provides that a RUD formed in conjunction with the TRZ must impose its own taxes on property in the district in an amount equal to the amount abated. Any bonds issued by a RUD are therefore backed by the RUD's own tax revenues. This divergence has raised questions concerning the legality of TRZ's which are further discussed below.

Attorney General Opinion GA-1076

The authority of entities to engage in tax increment financing has brought about legal concerns several times in the last 30 years. Texas first passed tax increment financing legislation in 1977, but the accompanying constitutional amendment was defeated. In 1979, the Legislature passed the Tax Increment Financing Act, but did not attach a constitutional amendment. In May of 1981 Attorney General Opinion MW-337 determined the whole of the Act to be unconstitutional because it violated the 'equal and uniform' taxation requirement of article VIII, section 1, of the Texas Constitution. Opinion MW-337 stated that the impact on property inside the reinvestment zone differed from the impact on property outside the reinvestment zone: "[A] parcel of property located in the tax incremental [zone] (if its value has been enhanced) will not pay the same amount or ratio of taxes for the general support of the city that will be paid by a parcel of equal value located outside the [zone]." During the 1981 special session, the Legislature approved another tax increment financing law, Article 1066e, which authorizes cities and towns to engage in tax increment financing. This time, the accompanying constitutional amendment passed at a November 1981 statewide election creating an exception to the taxation requirement referenced in MW-337. An attempt in 2011 to expand that same authority to counties was rejected by voters.

In 2012 Opinion GA-0981 examined a similar provision, which authorized a county to create a TRZ and to issue bonds to pay the costs of TRZ transportation projects. The Opinion concluded that "county's issuance of tax increment financing bonds secured by a pledge of the county's ad valorem tax increment would be subject to constitutional challenge as violating the equal and uniform taxation requirements" earlier outlined in Opinion MW-337 because it diverts a portion of tax revenues collected within the zone from the general support of the county.

In February 2014 a request for an Attorney General opinion on the legality of CETRZ's was submitted on behalf of Webb County. In general, Opinion GA-1076 summarily states that a county's use of tax increment financing to fund projects in a CETRZ could be subject to constitutional challenge under the equal and uniform taxation requirement in article VIII, section 1(a) of the Texas Constitution, and further that a county forming a CETRZ may not place general revenue funds into a tax increment account. GA-1076 also expounds upon the authority of a county to pledge the tax increment to a RUD for the purpose of backing bonds stating that "pledging the tax increment to another entity for use in the CETRZ does not change the fact that the tax increment is dedicated to a use other than the general support of the county." The ultimate concern then is not the county authority to issue and/or back the bonds, but the "tax disparity" resulting from the collection of the tax increment and the pledge of the tax increment to the TRZ. "Neither the prohibition of the use of bonds nor the involvement of a road utility district remedies the potential constitutional infirmity here because neither resolves the disparity

between the tax treatment of property located in the CETRZ and property located outside of the CETRZ."

Although the Opinion only addresses CETRZ's there have been concerns that GA-1076 may have implications for other types of tax increment financing, including County TRZ's, because tax increment financing by its very nature makes certain funds available only for improvements within the zone - and thus unavailable for general county purposes.

Proponents of TRZ's believe concerns regarding equality or uniformity are negated by the fact that although a project is built in a specific zone its enhancement of the greater transportation system benefits the entire county and all roadway users. The economic developments of a project area lead to enhanced tax bases that contribute to the general revenues of the entire county. Further, statute requires that before a County TRZ or CETRZ can be created the county commissioners must hold a public hearing at which the benefits of the TRZ to both the county and the property within the proposed zone are discussed. The zone designated by a TRZ is an area that may be impacted by a project and from which a tax increment can be captured of sufficient value to contribute to the funding of the project to the benefit of the whole county.

Recommendations

- 1. Reevaluate legislation granting counties clear constitutional authority to utilize tax increment financing in transportation reinvestment zones.
- 2. Provide counties with a means to evaluate the ways to most effectively meet local transportation needs.

TEXAS' MARITIME PORT SYSTEM

Committee Action

The committee met on April 14, 2014 to hear testimony on the status of Texas' port system, including a review of the structure and operations of the Maritime Division of the Texas Department of Transportation. Invited testimony was given by the following: Dan Harmon for Texas Department of Transportation, and Eduardo Campirano for the Texas Ports Association.

Background

There are 26 deep and shallow draft ports operated by port authorities and navigation districts in Texas. (Appendix B). These ports are gateways for domestic and international freight, and connect the Gulf of Mexico, one of the world's most important oil and gas production and refining zones to regional and national markets.

Texas ports can be classified by size, based on tonnage handled - as well as by their markets: comprehensive, diversified, specialized and niche. ¹³ For example:

- In 2013, the **Port of Houston** handled more foreign tonnage than any other U.S. port. According to U.S. Department of Commerce data, the port is the nation's number one port for imports. On average, 70 ships travel up and down the Houston Ship Channel each day. Plants located along the channel account for more than 40 percent of the nation's petrochemical manufacturing capacity. The port's container facilities handle almost 70 percent of all container traffic in the Gulf of Mexico.
- The federal Maritime Administration has designated three Texas ports: the Port of Beaumont, Port Arthur and the Port of Corpus Christi, as part of its National Port Readiness Network, which supports deployment of U.S. military forces during defense emergencies. The Port of Beaumont handles military equipment shipped to and from Fort Hood and the Red River Army Depot and is recognized as the world's busiest port of military embarkation.
- The **Port of Beaumont** recently completed a new state-of-the-art petroleum terminal that can handle 120-car unit trains. The facility is capable of handling all types of US and Canadian crude.
- The **Port of Brownsville** imports and exports steel and other metal products and hosts a shipyard specializing in constructing and refurbishing offshore drilling rigs. The port is also the nation's leader in ship recycling.
- The **Port of Corpus Christi** recently celebrated the opening of its La Quinta Ship Channel. This deep-draft waterway, located across Corpus Christi Bay from the port's inner harbor, helped convince Tianjin Pipe Corporation to locate its \$1 billion+ seamless pipe mill in Texas.
- The **Port of Galveston** is the leading port on the Gulf of Mexico for Roll-on Roll-off (RORO) vessels, which transport automobiles and other wheeled vehicles, as well as a major port of embarkation for cruise ships.
- The **Port of Victoria** has an important function in the Eagle Ford Shale play, having quadrupled its activity in the last two years. A \$1.5 million liquid cargo dock that the port constructed at the beginning of the recent production boom now handles more than one

- million barrels of crude each month. In fact, from January of 2013 to December of 2013, the amount of crude shipped through the port more than doubled.
- The Caterpillar plant in Victoria transports both components and finished products by barge on the GIWW and Victoria Barge Channel.
- **Port Isabel** is both a deep and shallow water port. Its largest tenant works offshore in the pipeline industry. Following a setback in 2009 after the BP oil spill off-shore oil work has greatly increased in the last 6 months and the port continues to expect increased activity and vessel calls.

Comprehensive ports, like the Port of Houston, can handle a wide variety of cargo, generally at a high volume. Diversified ports, such as the Port of Victoria, handle more than one type of cargo, but with less variety than the comprehensive ports, and with no one type of cargo predominating. Specialized ports are set up to handle a specific type of cargo on a large scale, such as the Port of Texas City (liquid bulk), and Port Lavaca-Point Comfort (chemicals, petrochemicals, aluminum ore, and agricultural fertilizer). Niche ports provide a service other ports do not, such as the Port of Palacios, which serves a large shrimping fleet. 14

Access to ports and waterways influences nearly every industrial sector in Texas and plays a vital role in our state's economic success. Texas ports handle more than 550 million tons of foreign and domestic cargo annually.¹⁵, about 20% of the nation's total.

Imports and Exports

Texas is the top exporting state in the country with over \$200 billion worth of foreign and domestic goods traded annually. ¹⁶ In 2013, waterborne trade accounted for over 46 percent of all exports by value from Texas. ¹⁷ 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 groups of exports for Texas ports are petrochemical and petroleum products from Texas' many oil- and gas-refining facilities. The expansion of the Panama Canal, expected to be completed in 2015, 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. Two years ago nearly \$40 billion in investments had been planned or committed to projects on the Texas coast including LNG plants, and chemical or petrochemical facilities as companies prepared for the Panama Canal expansion. Recently, the American Chemistry Council released a list of 100 new projects planned by U.S. petrochemical companies, worth a total of \$71 billion, and many planned along the Texas Gulf Coast. Examples of the investments made in Texas ports by the oil and gas industry include:

• **Port of Port Arthur**: Motiva Enterprises' Port Arthur Refinery is now the largest refinery in North America. Construction of the facility required moving some of the world's largest modular components through the port. Additionally, both the Valero and Total refineries at the port have invested approximately \$2 billion to expand their facilities. All of these facilities rely on existing port infrastructure. All three have also

- significantly increased exports through the port, which has ancillary impacts to nearby distribution points and terminals.
- **Houston-area Ports**: Over \$30 billion has been committed or planned to be invested in the Houston port region between 2012 and 2015. These investments are predominantly linked to the refining and petrochemical industry, which has seen a resurgence resulting from rapid expansion of the Texas energy sector.
- **Port Freeport**: Freeport LNG currently operates a liquefied natural gas (LNG) regasification facility at Port Freeport. It has an export license from the Federal Energy Regulatory Commission (FERC) and stands ready to export LNG upon completion of a liquefaction facility. Storage offered by the Port and transit through the Freeport Harbor Channel are essential to the facility's operations.
- The **Ports of Brownsville**, **Corpus Christi** and facilities at **Sabine Pass** are also poised to export LNG. Cheniere Energy has recently announced that its wholly owned subsidiary, Corpus Christi Liquefaction, LLC, will develop a \$10 billion LNG export terminal at a site previously used as a regasification terminal.

Texas is also the nation's largest producer of wind power and many turbine components, including the large blades and center poles, are shipped through Texas ports.

Gulf Intracoastal Waterway

The Gulf Intracoastal Waterway (GIWW) is a 1,050-mile-long man-made protected waterway that connects ports along the Gulf of Mexico from St. Marks, Florida to Brownsville, Texas. ²⁰ Its main channel runs 379 miles along the length of the Texas coast, handling 67 percent of its traffic and providing access to more than 1,000 individual port and terminal facilities located at the state's deep- and shallow-draft seaports. ²¹ Fifty-two thousand barge trips, carrying cargo with a commercial value over \$25 billion, are made up and down the GIWW annually. ²²

The GIWW is the nations' third busiest inland waterway. In 2012, shippers moved more than 78 million tons of cargo between ports on the Texas portion of the GIWW. Petroleum, petroleum products, and petrochemicals accounted for 91 percent of that cargo.²³

Marine transportation along the GIWW provides an alternative to roadways. One liquid cargo barge can transport as much freight as 144 trucks, or 46 rail cars. Accidents along the GIWW are 25 to 50 percent less frequent than on road and railways. Barge transportation is also more fuel efficient than rail and trucks. According to the Texas Transportation Institute, barges and towboats are 29 percent more efficient than rail and more than four times more efficient than trucks. The use of barges can reduce the numbers of miles traveled by trucks on highways, saving energy, increasing safety, and reducing highway congestion and carbon emissions.

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. ²⁴ The Galveston District of USACE has been receiving approximately \$25 million annually for dredging maintenance of the GIWW, but the cost for keeping the waterway at 12' is closer to \$60 million.

Shoaling, the accumulation of sand or sediment usually due to weather occurs at different rates along the waterway creating areas of inconsistent depth along the length of the GIWW. Since barges must be loaded to a draft that can accommodate the shallowest point along a waterway that depth becomes the effective depth for the entire channel. At present, the GIWW's effective depth is nine feet.. As a result, carriers have to load barges at less than their rated capacities to ensure the barge does not scrape bottom at any point during transit. This practice raises the cost of shipping goods on the GIWW-T on a per-unit basis because additional trips are required to move freight. Ultimately, the end consumer pays the final price hike resulting from this shipping inefficiency. In 2013, the need to light load barges increased the cost of doing business by roughly \$58.7 million for carriers—or nearly 15 percent.. 26

The Brazos River Floodgates and the Colorado River Locks are two lock-type structures on the GIWW that support barge traffic on the waterway. They are over 60 years old, and at only 75 feet wide not large enough to most efficiently support the increasing barge transportation from oil and gas development. To pass through them towboat operators must park their tows, separate the barges, move them through individually or in smaller sets, and then reconnect them on the other side. Known as "tripping," this process reduces efficiency and causes delays at the two structures.

Tripping at the Brazos River Floodgates costs shippers and waterway operators more than \$11 million each year. Additionally, the costs for repairs for damages to the floodgates by barges striking the facility add an estimated \$1 million. Replacing the floodgates with improved structures would cost about \$60 million. ²⁷

Barge navigation along the Texas portion of the GIWW is also hampered by a shortage of locations for mooring structures, which are buoys outside the navigable channel to which a barge can be tied or moored. These structures are vital to waterway operators, especially during high wind and foggy conditions, and in areas where infrastructure such as locks or encroachment from shoreline development dictate one-way traffic flow.

The USACE is in the final phase of a study to assess the condition and adequacy of mooring areas along the GIWW. That study indicates that it is unnecessary to add new mooring areas, but recommends rehabilitating and expanding existing mooring areas. The estimated total cost of implementing the anticipated recommendations, which call for placing 61 new buoys and creating an additional 8,115 linear feet of mooring space, is \$7 million. Funding for these improvements would come from the USACE Galveston District's operations and maintenance funds.

Panama Canal Expansion

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 twenty foot equivalent units (TEU's), nearly triple the current capacity, as well as a new generation of LNG and bulk carriers, to transit the canal. 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. ²⁸ 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. ²⁹

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.

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. Although the ultimate effects of the canal's expansion will not be known for many years over 766 million tons of freight are expected to be transported on Texas waterways by 2030.

Although the ultimate effects of the canal's expansion will not be known for several years, expansion may increase the amount of goods shipped through ports on the Texas Gulf Coast and along the GIWW. Some of the projected increase may come from shipping diverted to Texas ports from U.S. and Canadian ports on the West Coast, and some may result from greater numbers of smaller vessels available to serve Gulf Coast ports after being displaced by the newer, larger ships able to transit the canal as a result of its expansion.

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-foot depths. Several Texas ports are in the process of seeking permits and funding from the USACE to deepen their draft and expand or upgrade their landside facilities in order to accommodate larger, "Post-Panamax" vessels, which when fully loaded, require a 50-foot draft. Presently, this process can take up to a decade or more, and requires Congressional authorization and appropriation of funds to pay for the necessary dredging and related improvements.

Water Resources Development Act

The federal Water Resources Development Act (WRDA) addresses the USACE permitting process and specifically authorizes dredging and improvement projects for individual ports and waterways. The current legislation, having been passed by both the U.S. House and Senate, is currently in conference committee. Both versions include provisions that would:

• Speed up the project authorization process as well as establish a process for deauthorizing projects that Congress authorized in previously-enacted legislation but

- have failed to move forward;
- Encourage larger expenditures from the Harbor Maintenance Trust Fund, which is funded by a tax imposed on shippers based on the value of goods imported and which Congress uses as a source of appropriations for maintaining, deepening and widening marine channels under U.S. jurisdiction;
- Encourage expansion of non-federal opportunities to deliver water resources projects by amending federal laws and regulations governing in-kind crediting for non-federal work and expanding authority for non-federal contributions and non-federal project management and financing;
- Encourage the USACE to complete environmental and other studies within three years of their inception and streamline compliance with applicable environmental laws, including the National Environmental Policy Act (NEPA)

Additionally, both the House and Senate versions of the bill include provisions authorizing two projects in Texas:

- The Sabine Neches Waterway Channel Improvement Project seeks to deepen and widen the 62-mile waterway, which serves the Ports of Orange, Port Arthur, Sabine Pass and Beaumont, and make other improvements that would enable it to accommodate larger vessels, including a new generation of LNG carriers that would serve newly-constructed export facilities; and
- The Freeport Harbor Channel Improvement Project, which includes dredging and widening Freeport Channel to allow fully-loaded oil tankers and other large vessels to enter the port and eliminate the current need to offload, or "lighter," some of their cargo in order to do so.

Assuming that Congress authorizes and appropriates funding for these projects, their non-federal sponsors – the Sabine-Neches Navigation District and the Port Authority of Freeport, respectively – will have to provide local matching funds.

TxDOT Maritime Division

At the suggestion of the House Transportation Committee at a 2012 hearing at the Port of Houston, TxDOT created the Maritime Division in November 2012 to support the development of Texas' maritime system. The purpose of the maritime division is to serve as a liaison between national and statewide transportation policymakers, port and waterway operators, the private sector freight community, and local partners to identify and strategically address needs and issues. The Division serves as a resource for Texas ports and an advocate for the GIWW, promoting waterborne transportation and related intermodal projects essential to maintaining Texas' economic competitiveness.³⁰

The division has recently expanded and reorganized to better address the state's maritime needs. Dan Harmon, a former U.S. Navy commander, serves as Division Director. The division's Planning and Strategy Section focuses on the overarching strategy of the division, legislative issues, assisting with

innovative financing opportunities and ensuring the consistency of plans and reports. The section also includes a Ports Coordinator, who serves as the point of contact for the port community and manages the Port Authority Advisory Committee (PAAC). The section's Waterways Coordinator serves as the point of contact for the US Army Corps of Engineers (USACE) and lead on GIWW-related issues. A Special Projects Coordinator helps manage maritime studies and projects, and prepares educational materials such as the division newsletter, website, handouts and brochures.³¹

The Maritime Division contracted with TTI to develop a report completed in August 2014 outlining a master plan for the GIWW. The master plan describes what is needed to restore and sustain the GIWW at its optimum level, as well as TxDOT's role in working with GIWW stakeholders to realize that goal. It identifies the needs, costs, shortfall in federal funding levels, potential funding sources to fill the funding gap, and metrics to enable TxDOT to measure the condition and utility of the GIWW.

The division also works closely with the Texas Freight and Port Authority Advisory Committees. Work with the Freight Advisory Committee ensures port and waterway data, challenges, and projects are incorporated into state and regional plans to increase the efficient flow of freight.

The Port Authority Advisory Committee (PAAC), established under Chapter 55, Transportation Code, is a seven member panel appointed by the Transportation Commission. It provides a forum for exchange between the commission, TxDOT, representatives of the port industry, and other stakeholders with maritime interests.

The PAAC is responsible for developing Port Capital Program containing projects and funding requests submitted by the state's public ports, which TxDOT submits to the Governor, Lt. Governor and Speaker of the House by December 1 of even-numbered years. 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 11 ports with a total cost of almost \$780 million. State funding requirements for all of these projects at a maximum cost share level of 50 percent from the Port Access Account Fund would necessitate legislative appropriations of \$340 million.³² 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.

The PAAC is also responsible for making recommendations on projects to be funded by the Port Access Fund. Although the Legislature created the 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.

Recommendations

- 1. Encourage and monitor the continued efforts of TxDOT's Maritime Division.
- 2. Review replacing the locks on GIWW to increase ease of travel and decrease maintenance costs of the locks in the long term.
- 3. Identify ways to increase efficiency of travel along the GIWW including dredging and additional mooring facilities.
- 4. Monitor the WRDA bill and encourage its passing so long as it benefits Texas and does not burden the state's control of its waterways.
- 5. Identify resources to fund the Port Authority Fund.

TEXAS PASSENGER AND FREIGHT RAIL

Committee Action

The committee met on April 14, 2014 to hear testimony on the status of passenger and freight rail in Texas, including a review of the structure and operations of the Rail Division of the Texas Department of Transportation. Invited testimony was given by the following: James Bass for Texas Department of Transportation; Erik Steavens for Texas Department of Transportation; Robert Travis for Texas Department of Transportation; and Elizabeth Grindstaff for Texas Pacifico Transportation, Ltd.

Background

TxDOT's Rail Division was established in 2009. In 2010, the Commission approved the Texas Rail Plan.³³, 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: ³⁴

- 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.

The Rail Plan is set to be updated by the Rail Division in 2015.

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. ³⁵

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.

Freight Rail in Texas

Texas has 10,425 miles of freight railroad tracks, more miles of track than any other state in the United States. Commodities moved by rail in Texas include coal, chemicals, petrochemicals, agricultural products, concrete, crushed stone, automobiles, and automobile components.

Three Class 1 and 43 short-line railroads operating in the state employ over 16,000 Texans. In 2010 roughly 24 percent of the freight tonnage (and 27 percent of the total freight values) in the state were moved by freight rail. In 2012, more than 373 million tons of freight was moved by Texas freight railroads.³⁶

The current 2010 Rail Plan identifies more than \$3.9 billion in infrastructure improvements needed on the state's freight rail system.³⁷ These projects include rail-roadway crossing grade separations, crossing closures, double-tracking, sidings, and yard improvements. Bypass routes around major metropolitan areas could add an additional \$3.6 billion or more to the plan.

South Orient Rail Line

In 2009, TxDOT undertook a rehabilitation project to make the 391 mile, state owned South Orient rail line (SORR), which runs from San Angelo Junction to Presidion on the Texas-Mexico border, more competitive. The project to increase the maximum speed on the line from San Angelo Junction to San Angelo was funded with \$16.3 million in federal funds; \$6.3 million in private funds from the lessee, Texas Pacifico (TXPF); \$3.7 million in state funds; and \$250,000 from the City of San Angelo. By increasing operating efficiency, the project created 43 new jobs at TXPF and 60 new jobs at customer facilities. This investment and regional economic activity has increased traffic on the line, from an average of 2,031 carloads a year to 23,358 carloads in 2013. ³⁸

The 83rd Legislature appropriated \$5 million for additional rehabilitation work on the SORR in the San Angelo area to improve operating safety and support increased rail traffic. This project will be let in April 2014 and completed by the spring of 2015.

TxDOT is applying for a federal TIGER grant to rehabilitate the SORR from the west side of Fort Stockton to Sulphur Junction. The project would replace substandard rail and increase train speeds. This \$15.3 million project would be funded with \$7,701,690 in private funds from Texas Pacifico and \$7,258,390 in TIGER funds.

The SORR also needs significant rehabilitation from Fort Stockton to the interchange with Union Pacific at Alpine, a distance of approximately 62 miles. The existing rail on this segment of the rail line is undersized for today's freight rail loadings. Upgrading this rail would cost \$40 million.

A section of the International Rail Bridge south of the levee at Presidio burned to the ground in February 2008 and another fire extensively damaged a section north of the levee in March 2009. TxDOT has completed initial plans to reconstruct the bridge. Those plans were presented to the U.S. Army Corps of Engineers (USACE) and the International Boundary Waters Commission (IBWC) in February 2014. USACE has requested the submission of more detailed plans for review.

TxDOT anticipates receiving authority by December 31, 2014 to reconstruct the bridge at the existing elevation. When USACE and IBWC approve the plans responsibility for reconstruction

of the bridge will fall to TXPF which is expected to begin construction in 2015 to be completed by summer 2016.

Tower 55

Tower 55 in Fort Worth is one of the most congested at-grade rail-to-rail crossings in the nation, with more than 100 trains crossing the intersection daily, causing delays to freight trains, passenger trains, and vehicular traffic from blocked roadway crossings. In July 2011, TxDOT and the Federal Railroad Administration (FRA) executed a grant agreement under which the state was awarded \$34 million (33.6 percent of the total project cost) in federal funding toward the \$101.293 million project costs for improvements at and near Tower 55 in Fort Worth. BNSF Railway (BNSF) and Union Pacific (UP) are providing \$65.293 million, while TxDOT and the city of Fort Worth are each providing \$1 million in matching funds. ³⁹

The Tower 55 project consists of final design and construction of track, signal, at-grade crossing, bridge and roadway infrastructure improvements along BNSF's Fort Worth and Wichita Falls Subdivisions and UP's Duncan, Choctaw, Fort Worth and Dallas Subdivisions. The project will reduce delays to both passenger and freight trains, improve on-time performance for Amtrak's Heartland Flyer and Texas Eagle, increase capacity at Tower 55 and avoid diversions associated with Tower 55 congestion.

Neches River Rail Bridge

The Neches River Rail Bridge is a single-track lift bridge over the Neches River in Beaumont. Constructed in 1942, the bridge is part of a major east-west rail corridor from Los Angeles/Long Beach to New Orleans that carries 40 to 50 freight trains each day. Because of the condition of the bridge and tracks, train speeds over the bridge are limited to 20 mph, creating a significant bottleneck that adversely affects both freight movements and Amtrak's Sunset Limited route. 40

In 2013, TxDOT completed a study to determine the feasibility of improving rail operations through Beaumont. The Rail Division is currently working with an engineering consultant to complete the preliminary engineering (PE) and environmental process (NEPA) required to determine the final approved alignment and advance the project to the construction stage. The project is considered a priority by the railroads and would be a likely candidate for a public-private partnership similar to that used for improvements at Tower 55. The division anticipates working with rail companies and local officials to pursue grant funding for the project once the PE/NEPA study is complete.

Passenger Rail in Texas

As Texas' population has continued to grow, increasing congestion on already busy highways, attention has been given to the expansion of passenger rail as an alternative mode of transportation. The Rail Division prepares an annual update about the status of existing and potential passenger rail system in Texas. A copy of the most-recent annual update is available at the following URL:

http://www.txdot.gov/inside-txdot/division/rail/texas-rail-plan/final.html

Intercity Passenger Rail

The National Railroad Passenger Corporation (Amtrak) is the only provider of intercity passenger Rail service in Texas. It does not directly connect all urban areas, but does work with motor coach services to provide bus connections from its stations to other parts of the state.

Amtrak currently has three routes in Texas: The Heartland Flyer; The Texas Eagle; and the Sunset Limited. The Heartland Flyer, which makes one trip daily in each direction between Fort Worth and Oklahoma City, is state supported jointly with Oklahoma. The 83rd Legislature appropriated \$2.5 million annually for FY 2014-2015. This funding is required by the federal Passenger Rail Investment and Improvement Act of 2008. A one way trip on the Heartland Flyer is just over four hours.

The Texas Eagle provides daily service between San Antonio and Chicago via Ft. Worth and Dallas; it is considered a long distance route and is therefore not subsidized by the states. The journey from San Antonio to Dallas takes more than eight hours on the Texas Eagle.

The Sunset Limited route runs three times a week in each direction between New Orleans and Los Angeles via Houston, San Antonio, and El Paso, with stops in some smaller towns as well. A trip from Houston to El Paso on the Sunset Limited takes about 19 hours.

Ridership on all three lines has increased substantially over the last ten years.

Commuter, Regional, and Light Rail

Three commuter rail services currently operate in Texas:

- The Trinity Railway Express (TRE) between the cities of Dallas and Fort Worth;
- The A-train between the cities of Denton and Carrollton; and
- The MetroRail Red Line between downtown Austin and the city of Leander.

TRE is a joint project of Dallas Area Rapid Transit (DART) and the Fort Worth Transportation Authority (The T). It operates daily, except Sundays and holidays at 10 stations over 34 miles. It also provides special services for events at the American Airlines Center. In 2009 ridership on the TRE was around 3 million passenger boardings; ridership dropped down to about 2 million shortly after that period during the economic downturn, which was concurrent with a fare increase, but has been climbing again since July 2013.

In June 2011 Denton County Transportation Authority began its 21 mile A-Train service between Denton and Carrollton. The line serves 5 stations, including a terminal transfer station connecting passengers to the DART Green Line in Carrollton. In 2011 there were 130,846 passenger trips made on the A-Train, and in 2012 there were 387,478.

In the Austin area, Capital Metro's 32-mile MetroRail Red Line operates between downtown Austin and Leander. The MetroRail Red Line operates in an existing freight corridor. When initial service began in 2010, ridership was just under 20,000 passenger boardings per month. In 2012, annual ridership totaled 575,120 passenger boardings.

The Lone Star rail district is also working with TxDOT to develop passenger rail service between San Antonio and Austin. The environmental review process has been initiated and funding options for the project are being identified. The Lone Star plan would ultimately include 32 trains per day in each direction, 7 days a week. The line would serve Georgetown to the south side of San Antonio with stations in between, and a 75-minute express train from downtown Austin to downtown San Antonio.

The two light rail systems in Texas are operated by DART and the Metropolitan Transit Authority of Harris County (METRORail). DART's service area covers 13 cities with an 85-mile light rail system with 61 stations and 163 vehicles. DART is a regional transit authority funded since 1983 by a once-cent local sales tax. In 2013 total ridership was 29.5 million passenger trips.

METRORail operates a 12.8 mile system with 16 stations and 37 vehicles. It is supported by a local one-cent sales tax and revenue from fares; revenue service began in 2004. Ridership in 2013 was 11.3 million passenger trips.

Passenger Rail Studies

TxDOT has been engaged in a number of passenger rail studies to examine the feasibility of passenger rail, including high speed intercity passenger rail (HSIPR), in four different corridors. Expanding passenger rail service in Texas has the potential to reduce congestion and travel times on major roadways while providing travelers alternative methods for transport between urban areas.

Texas-Oklahoma Passenger Rail Study (TOPRS)

TxDOT, in cooperation with the Oklahoma Department of Transportation, is evaluating a range of service options from conventional passenger rail service up to high-speed service in an 850-mile corridor from Oklahoma City to South Texas. The costs, benefits and impacts of rail service alternatives compared to a no-build alternative will be presented in a service-level Environmental Impact Statement. During the public meeting process, some participants suggested extending the study limits to Monterrey, Mexico. Members of TxDOT's administration and U.S. Representative Henry Cuellar met with U.S. Secretary of Transportation Anthony Foxx in January 2014 to request an additional \$400,000 to extend the study into Mexico.

Dallas/Ft. Worth to Houston

TxDOT was awarded a \$15 million Federal Railroad Administration (FRA) grant in May 2011 for the initial engineering and environmental review work for "new core express service" (i.e., high-speed rail) in the Dallas/Fort Worth-Houston corridor. In January 2014, a memorandum of

understanding (MOU) was signed by TxDOT, FRA, Texas Central High-Speed Railway and its consultant for environmental analyses and documentation relating to high-speed rail service between Dallas and Houston. The MOU outlines the procedures and policies pertaining to preparing and submitting environmental documentation for the Dallas to Houston high-speed rail corridor.

Dallas/Fort Worth Area

TxDOT has also signed a MOU with FRA to consider potential environmental impacts for passenger rail service between Fort Worth and Dallas. As joint lead agencies, TxDOT and FRA will assess how this rail facility would affect local transportation issues.

The "Commission for High-Speed Rail in the Dallas/Fort Worth Region" appointed in January 2014 will advise the Transportation Commission and TxDOT's executive director on developing passenger rail service connecting the Dallas and Fort Worth areas.

Dallas/Ft. Worth to Shreveport/Bossier City, Louisiana

TxDOT contracted with Amtrak to conduct a feasibility study of adding passenger rail service from Dallas/Fort Worth to Shreveport/Bossier City, Louisiana. This potential new service would have used part of the existing Texas Eagle route and consisted of two round trip trains. However, the study, which was completed in February 2014, showed that increasing passenger service in this corridor did not appear to be financially feasible.

TxDOT Rail Division

In November 2013, TxDOT reorganized the Rail Division by transferring the rail-highway grade crossing program and the state rail safety inspection program to the Traffic Operations Division. The Rail Division is organized into four operational areas. The operational areas and responsibilities are: 41

Rail Division Administration & Support

The Division Director manages all aspects of statewide rail programs; division support staff performs administrative & budgetary duties.

Rail Planning & Development Section

The Rail Planning & Development Section is responsible for the following activities:

- Planning a statewide freight and passenger rail system;
- Developing and coordinating rail system projects;
- Analyzing the impact of proposals to abandon portions of the state rail system;
- Providing rail planning support to TxDOT districts, rail districts and other entities within the state that have rail authority or interests;
- Working with railroad operators in the state to determine freight needs;

- Coordinating state plans with FRA and Amtrak;
- Working with FRA to obtain funding for programs and projects that benefit Texas;
- Providing technical assistance and support for Rural Rail Districts' planning and projects;
- Developing environmental and systems planning studies for passenger and freight projects; and
- Analyzing the effect of state and federal regulations and legislation on the state's freight and passenger rail system.

Rail Programs Management Section

The Rail Programs Management Section is responsible for the following activities:

- Managing and overseeing state and federally funded rail programs and projects;
- Planning, designing and managing construction contracts for state rail facilities;
- Managing the lease and operating contract between TxDOT and TXPF on the South Orient rail line, and other leases and operating contracts for the Bonham Subdivision and other state facilities;
- Inspecting and overseeing operations and conditions on state rail facilities and state-funded or subsidized passenger rail services;
- Monitoring potential rail line abandonments and coordinating state and local responses;
- Assessing the viability of rail lines and rail facilities TxDOT is considering for acquisition and conducting due-diligence inspections and negotiations related to any acquisitions;
- Coordinating and reviewing plans, specifications and estimates (PS&E's) for state and federally funded rail projects;
- Analyzing and conducting needs assessments of the state's existing public and private rail infrastructure; and
- Providing technical expertise on rail operations, infrastructure and equipment for TxDOT's divisions and districts, local governments, etc.

Rail Federal Oversight

Rail Federal Oversight is responsible for the following activities:

- Managing the statewide Rail Transit Fixed Guideway Public Transportation Systems (RFGPTS) rail safety and security program in conjunction with the Federal Transit Administration (FTA);
- Coordinating with the RFGPTS program to ensure compliance with federal regulations, the TxDOT State Safety Oversight Program Standard, state laws and administrative rules;
- Performing on-site safety and security inspections and reviews of RFGPTS transit controlled property, rail transit vehicles and rail operations;
- Ensuring that each RTA performs annual internal safety and security audits;
- Advising rail transit agencies and FTA on safety and security issues;
- Ensuring new RFGPTS compliance with state and federal before revenue service begins; and
- Reporting annually and as requested to FTA.

Recommendations

- 1. Encourage and monitor the continued efforts of TxDOT's Rail Division.
- 2. Identify any necessary legislative authority to allow the Rail Division to effectively promote the needs of Texas' rail system.
- 3. Identify resources to fund the Rail Relocation Fund.

TEXAS TECHNOLOGY TASK FORCE

Committee Action

The Committee was asked to monitor and review the efforts of the Department of Transportation's (TxDOT) Texas Technology Task Force (TTTF). Committee staff, in joint operation with staff of the House Committee on Technology, monitored the activities of the TTTF which included three full-day workshops in Austin on April 29, June 12, and July 31, 2013; and the production of a report.

Background

The TTTF was created to identify a path for Texas to follow so that it is strongly positioned to best implement, finance, or otherwise leverage emerging technologies in the near and mid-term with the objectives of addressing congestion, improving safety, and fostering economic development. This necessitates overcoming (1) a lack of awareness of those technologies and their interactions with the transportation system, (2) dated planning and financing mechanisms, and (3) conflicts between new technologies and existing enforcement frameworks. The General Appropriations Act, S.B.1, Eighty-third Legislature, item 44, VII-31 (2013) was passed after the Task Force had been formed and directs TxDOT to oversee a study on transportation technology.

Specifically, TxDOT was charged with examining and evaluating innovative transportation technologies for purposes of cost savings, reducing traffic congestion, enhancing safety, and increasing economic productivity. TxDOT was charged with examining and evaluating innovative transportation technologies to achieve cost savings, reduce traffic congestion, enhance safety, and increase economic productivity. As a result of this charge to TxDOT, the TTTF was created to complete the task. The TTTF was directed to study emerging transportation, communication, and computing technologies and determine physical infrastructure and system components that TxDOT or other state departments would need to provide to enable selected technologies.

The TTTF was formally created in February 2013 and began with an internal core group that sought experts in various transportation technologies to share knowledge and provide direction for the Task Force. The TTTF held three full-day workshops in Austin on April 29, June 12, and July 31, 2013. At each meeting, the internal core group and the panel of experts discussed various technologies and their development status, technology evaluation methods, and the short-and long-term vision for these technologies in Texas. Below is an edited version of the executive summary of the report produced by the Task Force. The complete Texas Technology Task Force report is available online at http://library.ctr.utexas.edu/ctr-publications/0-6803-1.pdf

TTTF Report Executive Summary

The Texas Department of Transportation (TxDOT) has been directed to examine and evaluate innovative transportation technologies for purposes of cost savings, reducing traffic congestion, enhancing safety, and increasing economic productivity. As a result, the Texas Transportation Task Force (TTTF) was formed, encompassing a group of experts who discussed emerging

transportation technologies, their development status, evaluation methods, and the short- and long-term vision for these technologies in Texas. This report summarizes the Task Force findings.

In 2012, there were 3,399 fatalities on Texas roads, with total state crash costs reaching \$26 billion. Five Texas cities ranked among the 56 worst nationally in terms of traffic delay, with annual commute-time delays in these cities ranging from 32 to 52 hours. Texas consumed over 15.6 billion gallons of gasoline and diesel fuels in 2009, ranking second nationally. The adoption and diffusion of emerging transportation technologies have the potential to limit crash frequency and severity, enhance mobility for Texas residents while spurring economic growth, and reduce wasted fuel for state residents stuck in traffic.

To these ends, four areas of emerging transportation technology were investigated in this report, including connected vehicles (vehicles able to communicate with other vehicles or roadway infrastructure), autonomous vehicles (also known as automated or self-driving vehicles), electric systems (such as DC fast charging and in-road inductive charging stations), and cloud computing/crowdsourcing technologies (allowing for travelers to access and provide road data, enabling better system management).

The Task Force developed an assessment methodology of each of these technologies using a four-stage process. First, an understanding of technology development phases was developed, as each technology progressed from prototyping to public road testing to initial deployment and commercialization. Next, current (2013) and near-term (2018) technology maturity perspectives were assessed, from the perspective of both TxDOT and potential consumers. While these technologies will likely remain stand-alone applications in the near future, as time progresses the technologies should become integrated—for example, combining increasing degrees of connectivity and automation to enable new joint technology safety and mobility systems. Therefore, an assessment of these joint technology synergies was conducted to understand the potential benefits and new systems that could be enabled.

After this groundwork was completed, two final assessments were conducted. The first evaluated how each technology (or joint technology systems) could serve Texas' statewide goals of economic development; TxDOT's goals of safety enhancement, congestion mitigation, connecting Texas communities, and becoming a best-in-class agency; and USDOT goals of maintaining infrastructure condition, ensuring system reliability, providing environmental sustainability, and reducing project delivery. Issues and concerns were evaluated for each technology or joint technology system as they progressed through development stages, including public agency concerns (institutional, infrastructure, regulatory, policy, and public cost); societal concerns (safety, energy, and other public concerns [e.g., privacy, disparate income impact, neighborhood concerns, etc.]); and technology-to-market concerns (private cost, time required for development and deployment, and technology concerns).

From this set of evaluations, several conclusions may be drawn. First, near-term benefit-cost ratios are likely the highest for connected vehicle and electric vehicle solutions, from both TxDOT and consumer standpoints. This observation stems from the fact that these technologies are the most advanced in terms of technological and application maturity. Second, autonomous

vehicles and joint-technology systems using automation and connectivity have the potential for the greatest long-term benefits, although these technologies and systems also have the greatest costs. As such, future efforts may seek multiple paths in order to quickly take advantage of technologies and systems that are or will be ready within a short timeframe, while also planning for future developments in order to seize those truly large opportunities as they emerge.

The Task Force also identified five key enablers to help eliminate non-technical barriers and promote technology development. TxDOT could help provide a rich data environment to technology developers, allowing them to harness data in order to accelerate service delivery. A conducive testing environment should be fostered, including the potential temporary provision of infrastructure to technology developers for testing on closed systems, as well as consideration of measures for regulatory reform transportation and technology-based project streamlining. Public relations efforts would likely be necessary to attract new companies involved in emerging transportation technologies, as well as private capital to fund such efforts and public outreach to garner valuable public input. Limited funding for these efforts will also be necessary, although the Task Force anticipates that the majority of technology development and deployment will be funded and conducted by private entities. Finally, the Task Force envisions that these efforts will be spearheaded by a public-private partnership, involving government agency, research institute, and industry collaborations.

With this evaluation in hand, the Task Force developed a vision for moving forward, identifying four implementation strategies to be conducted over the next 5 years:

- 1) Incubator Create an organization to act as a technology incubator focused on disruptive transportation technologies. The key differentiator for this incubator is the public partnership with TxDOT where ideas and innovations can be tested and proven in a real-world environment. Technology support services and resources may be offered to emerging technology partners.
- 2) Public-Private Partnership Utilize range of approaches to creating an organizational structure that facilitates economic development in emerging industries via collaboration and coordination among the public, private, and not-for-profit/academic sectors. Such partnerships will create intellectual capital and technology that can be shared to the common benefit or focus on bringing new and evolving technologies to market.
- 3) Pilot Program Conduct a pilot program within Texas to encourage and enable the development of new transportation technologies. The pilot program would collect specific data through testing for evaluating alternatives to the regulations, or create innovative approaches to safety and ensure that the safety performance goals of the regulations are satisfied for a preselected technology.
- 4) Legislative and Regulatory Changes Identify regulatory and legislative barriers to emerging transportation technologies, and provide support on how to address them. If pursued, these actions should help make Texas a leader in the development and commercialization of emerging and ultimately disruptive transportation technologies. These actions should further the state's economic development, and ultimately lead to a

safe, efficient, seamless, and enjoyable transportation system.

Texans are privileged to have a dynamic economy, growing population, and vibrant culture. Texas also has increasing levels of congestion, a critical need to find more efficient ways to move commodities, and an obligation to find ways to make travel safer, all in an environment of stagnant-to-declining revenue streams and increasing costs. The TTTF was created to identify a path for Texas to follow so that it is strongly positioned to best implement, finance, or otherwise leverage emerging technologies in the near and mid-term with the objectives of addressing congestion, improving safety, and fostering economic development.

Adoption of transportation technology, information technology (IT), and communication technology entails the use of new hardware, software, applications, and communications in all aspects of TxDOT's operations, including transactions that are inter- and intra-agency, and with consumers. Given the potential benefits of technology investment, emerging technology adoption and diffusion in Texas should be encouraged. At least four major external trends align to support this encouragement.

- 1. Texas' role in the global marketplace should only grow over time, as the economy continues to move toward higher value-added production and services. The transformation of Texas from a commodity producer to a center of knowledge and technology is virtually complete, notwithstanding the recent surge in energy production. Until recently, the structure of the Texas economy was similar in many ways to that of a developing nation: the state sold basic products such as food and energy, and tended to purchase more sophisticated manufactured goods. That trend has been turned upside down in recent years, as Texas has become a center of research, advanced technology, and high value-added services.
- 2. Rapid population growth relative to the rest of the nation will likely characterize Texas over the next 30 years. Three main factors influencing the Texas demographics landscape over the coming decades are relatively high birthrates, in-migration, and an aging population—with each factor creating new challenges for the public sector. Strong overall population growth will place greater strain on an already overstressed road and highway network, as well as prompting continued interest in alternative forms of transportation.
- 3. The physical character of Texas communities will continue to evolve. The traditional model of community development is changing. Urban areas in Texas have long been characterized by relatively low density, as abundant land fostered spread-out cities that relied almost exclusively on the automobile. In recent years, the rate of population and traffic growth has outstripped the road system in many areas, leading to increased congestion. Partially as a result, many communities are now focusing on "traditional" neighborhood design. The defining characteristics of this development approach are walkability or pedestrian-oriented design; transportation options; a mix of land uses that integrate housing, shops, civic facilities, and work places; and maintenance or creation of green space.

4. Providing adequate funding of basic infrastructure, including the transportation network, has become increasingly challenging. As a result, the focus has shifted toward alternatives to traditional general obligation debt financing of basic infrastructure, with a greater emphasis on tolls, tax-increment financing, development fees, and other alternative financing structures.

Collectively, these factors will require Texas to leverage its existing transportation infrastructure as efficiently as possible, as continued growth runs head on into evolving development patterns and constrained resources. Meanwhile, the nature and scope of the state's infrastructure is changing. Much of the modern economy's development can be traced to the implementation of networks: highways, rail, telecommunications, and energy. The ability to efficiently move goods, people, capital, energy, and ideas continues to transform the way humans live, work, and play.

Throughout history, transportation was the first network system to be comprehensively deployed, with improvements in the movement of goods and people preceding every stage of urbanization. As outlined by Dr. John Kasarda of the University of North Carolina, transportation was a critical ingredient in the four major waves of industrialization that have occurred to date:

- The first great cities developed around seaports and along trade routes.
- The second wave of development—and the beginning of the Industrial Revolution—occurred when factories used canals and rivers for power and shipping.
- The third wave of industrial development started with the railroad system, which opened up landlocked resources.
- The fourth wave of development began with massive investments in highway infrastructure that increased traffic, expanded personal mobility, and accelerated metropolitan growth.

According to the Federal Highway Administration, the current (fifth) wave of industrialization is based on innovations in logistics and manufacturing. Increasingly, components are manufactured offshore, and are then assembled into finished products near the point of their final consumption or use. This business model depends strongly on a fast and reliable transportation network that minimizes the cost of production. Just as highway infrastructure made the fourth wave possible in the United States, the country's current performance depends heavily on a seamless, intermodal transportation system.

While the future is somewhat uncertain, the sixth wave might well entail the integration of different types of networks into a seamless and invisible underpinning for the movement of goods and people. In particular, the nascent efforts in developing connected and autonomous vehicles and smart grids, as well as a general orientation toward minimizing and ultimately removing human beings from a direct operational role in transportation, promises a range of social and economic benefits. It is the promise of these benefits, along with the economic gains associated with first-mover advantage and the pressures outlined above, that make the exploration of better integrating technology and transportation such a timely issue for Texas.

Recommendations

- 1. TxDOT should monitor technological advancements in transportation and report those findings to the legislature.
- 2. Ensure that Texas remains competitive, mobile, and safe by developing and utilizing technological advancements in transportation.

TXDOT "TURNBACK" PROGRAM

Committee Action

The committee met on August 26, 2014 to hear testimony on the implementation of TxDOT's "Turnback Program." Invited testimony was given by the following: Mark Marek for Texas Department of Transportation; Jordan Jungus for Texas Municipal League.

Background

In August 2013 the Texas Department of Transportation held public meetings to discuss a program to "turn back" ownership and maintenance of some state-owned roadways to local governments. The roads under consideration were roads mostly developed from 1920 to 1940, which at the time of their construction served as primary routes through communities and also as connectors between them. Approximately 10,000 lane miles of these non-freeway highways are on the state highway system in 59 communities with populations greater than 50,000 people. The expansion of the state highway system since 1950 with its network of freeways and loops through and around cities has led to those older roadways being generally used as arterial roads for local traffic. TxDOT determined about 6,900 lanes miles of these non-freeway highways are no longer integral parts of the connectivity of the state highway system, and public perception is that many of these roads are local streets. Examples include Lamar Street in Austin, Westheimer Boulevard in Houston, and Northwest Highway in Dallas. The annual cost to the state to maintain non-freeway highways is about \$165 million. 42

A letter sent from TxDOT to city and county officials described the program as a "cooperative venture" between TxDOT and local jurisdictions and an effort to "increase local control" (see Appendix C). However, the program initially met with disapproval, and was viewed by several municipalities as an attempt by TxDOT to avoid its responsibility for maintaining the highway system and transfer the financial burden to local governments. There was confusion also about whether the program was voluntary or mandatory, and concern by local governments that mobility might be limited if they could not afford to take on the maintenance costs. The Texas Transportation Commission responded by directing TxDOT staff to re-examine what came to be known as the "Turnback Program" and to work with local governments to find a mutually acceptable solution. 44

Current Program Status

In January and February 2014 TxDOT met with members of the Texas Municipal League (TML) and the Texas Association of Metropolitan Planning Organizations (TEMPO); the result of these meetings was a memorandum of understanding (MOU) agreeing to a framework for accomplishing the goals of the Turnback Program (see Appendix D).

The MOU was executed by TxDOT, TML, and TEMPO* in March 2014 and accepted by the

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^{*}TEMPO is an association of Metropolitan Planning Organizations (MPO's) composed of staff members from the state's 25 MPO's. TEMPO does not have the ability to authorize or sign the agreements on behalf of policy boards of the state's MPO's. As a result, each TEMPO member agency has been requested to bring the MOU before their policy boards for ratification.

Texas Transportation Commission at its March 2014 meeting.

Points of the MOU include: the Turnback Program is voluntary; no local government will be forced to assume responsibility for a state-owned roadway or be penalized for choosing not to participate; local governments will have to formally request to assume ownership from TxDOT; and there will be formal contracts to execute the transfer. TxDOT will provide the local government the equivalent of one year's worth of maintenance costs for transferred roadways (estimated to be \$22,000 per lane mile or less). Additionally, TxDOT will assure that any roadway turned back to a local government is in an acceptable state of repair, and local governments will not have to reimburse the state for any transfer of rights-of-way. Future savings to TxDOT will be used back in the city on other highway projects.

Highways accepted for turnback retain their federal eligibility for funding for mobility and operations as determined by federal rules. Bridges on these roadways will retain their federal eligibility as well and continue to be on TxDOT's two-year inspection cycle.

The Turnback Program is expected to benefit communities by allowing local governments control over decisions that protect property values and respond to the needs of local residents and businesses such as:

- Access control (driveways)
- Capturing franchise fees for utility installations
- Road closures for special events, etc.
- Allowing and controlling on-street parking
- Landscape and green belt requirements, including monuments and signs
- Implementing hike and bike facilities
- Control over speed limits.

Cities have already begun to work with TxDOT to move roads off the state highway system:

- Irving Boulevard (SH 356) in Dallas and Irving
- Mills Road (SH 3504) in Lewisville
- Main Street (SH 720) in Frisco
- Lancaster Avenue in Fort Worth
- Northwest Highway in Grapevine
- South Main in Fort Worth (Stockyards)
- Buda taking over FM 967 within city limits
- Round Rock assumed responsibility for 379 east of I-35
- NASA1 outside Houston

Recommendations

- 1. The Committee would like to thank the local communities and entities that worked with TxDOT to resolve the confusion surrounding the Turnback Program and would encourage TxDOT and its local partners to continue to work together to find mutually beneficial ways to increase local mobility and efficiency.
- 2. Any turnback program should continue to be voluntary.
- 3. Explore alternatives for enabling legislation to allow local governments to utilize funding mechanisms which would provide the means of increasing local mobility and efficiency.

DMV OVERSIGHT

Committee Action

At the interim meetings of the Committee representatives of the Department of Motor Vehicles (DMV) were asked to give updates on the status of the agency, their programs, and the implementation of relevant legislation passed by the 83rd Legislature. Reports on the Department of Motor Vehicles were made by Shelly Mellott and Whitney Brewster on April 14, 2014 and August 26, 2014 respectively. Additional testimony on the implementation of a single vehicle inspection/registration sticker was provided on August 26, 2014 by RenEarl Bowie for Texas Department of Public Safety and Les Findeisen for Texas Trucking Association. Additional testimony on the implementation of legislation related to oversize/overweight vehicles was provided on August 26, 2014 by William Harbeson for Texas Department of Motor Vehicles and Chris Nordloh for the Texas Department of Public Safety.

Background

In their overview of the department the DMV outlined their organizational chart and department structure, which includes the new Office of Administrative Hearings (OAH) created by HB 1692 during the 83rd Legislature. The OAH now conducts contested case hearings on all warranty performance and "Lemon Law" complaints. By taking this role over from the State Office of Administrative Hearings it is expected that complaints making it to the hearing stage will be resolved up to 100 days sooner. 45

DMV also reported on the renewal of the "My Plates" contract and facilities issues. Since its inception in 2009 the DMV has leased several buildings from TxDOT. In October 2013 TxDOT notified the DMV that the building serving as the TxDMV Houston Regional Service Center had been sold and must be vacated on or before September 26, 2014. TxDOT has since given notice that the buildings at TxDOT's Bull Creek and Camp Hubbard campuses in Austin will soon be sold or reclaimed for use by TxDOT employees. These buildings house roughly 75 % of DMV's total FTE's. Thus DMV is in the process of working with the Texas Facilities Commission to find space to accommodate the needs of both the Houston and Austin offices.

The DMV also reported on a number of technological and database improvements including the ability to query the National Motor Vehicle Title Information System (NMVTIS) to eliminate title fraud, and WebDEALER, which allows motor vehicle dealers to process title applications and new registrations online.

"Single Sticker" Implementation

HB 2305 by Rodriguez included an amendment that consolidated the state's motor vehicle inspection and registration stickers. Effective March 1, 2015 the vehicle inspection sticker will be discontinued and the state will moved to a "single sticker" program based on the vehicle registration sticker. Under this new program the issuance of a vehicle registration sticker will depend upon the vehicle passing its vehicle safety inspection and any required emissions inspections. Inspection will be verified electronically, and if there is no record of inspection or if the inspection failed then no registration sticker will be issued. (Manual verification processes, including a Vehicle Inspection Report given to the driver at the time of inspection that indicates

whether the vehicle failed or passed, are available in case of a technical glitch.)

The DMV has developed transition plans for motorists to "sync up" their registration and inspection expiration dates. In the first year of the program a vehicle can be registered so long as the vehicle's current inspection is valid the day the vehicle is registered. Beginning March 1, 2016 motorists will have a 90 day window to complete their vehicle inspection and registration. This means that the vehicle inspection must be completed 90 days before the registration sticker on the vehicle expires. Various considerations have also been made for groups that will be uniquely impacted by this new system. A media campaign, "Two Steps, One Sticker" and website have been put together as an effort to educate the public on the new program. The website can be found at: http://txdmv.gov/motorists/register-your-vehicle/two-steps-one-sticker.

Oversize/Overweight Permitting

HB 2741 by Phillips authorized changes to the Oversize/Overweight (OS/OW) permitting process and penalty structure. The DMV was authorized to create three new OS/OW permits:

Ready-Mixed Concrete Truck: Annual permit allowing ready-mix concrete trucks and concrete pump trucks to exceed single and tandem axle weight allowances by 10 percent if the truck's gross weight is not more than 69,000 pounds. Allows travel on state, municipal or county roads including county roads load zoned less than 69,000 pounds if the county is specified on the permit. The fee for this permit is \$1,000. As of August 11, 2014 a total of 5,427 had been issued.

Timber: Annual permit for the transport of unrefined timber, wood chips or woody biomass by a truck of up to 44,000 pounds on a tandem axle provided the gross weight of the vehicle does not exceed 84,000 pounds. Permit holder may travel on county roads and state roads in timber counties as noted on the permit application. To be eligible for the permit the motor carriers must have a timber permit bond in the amount of \$15,000 or an irrevocable, hard copy letter of credit on file with the TxDMV. The fee for this permit is \$1,500. As of August 11, 2014 a total of 42 permits had been issued.

Permit to Deliver Relief Supplies: Also called an Emergency Relief or MAP-21 permit. This permit is only available during national emergencies or major disasters declared by the President, and expires 120 days after the declaration of emergency. Allows for the transportation of divisible commodities consisting of emergency supplies to and within the geographical area affected by the emergency. There is no fee for this permit and none have been issued to date.

HB 2741 also created penalty structure for both general violations of overweight regulations and escalating penalties for varying weight limits and repeated violations:

Overweight Penalty Comparison			
Penalties Prior to Sept 1, 2013		Current Penalties as Result of HB 2741	
Less than 5,000 lbs	\$100 to \$150	Less than 2,500 lbs	\$100 to \$500
5,001 to 10,000 lbs	\$300 to \$500	2,501 to 5,000 lbs	\$500 to \$1,000
Over 10,000 lbs	\$500 to \$1,000	5,001 to 10,000 lbs	\$1,000 to \$2,500
		10,001 to 20,000 lbs	\$2,500 to \$5,000
		20,001 to 40,000 lbs	\$5,000 to \$7,000
		Over 40,000 lbs	\$7,000 to \$10,000
		Axle penalties stop at 5,001 to 10,000 lbs level	
Penalties could double after 1st offense within 1 year		Penalties can double after 2nd offense within 1 year	
Penalty - not having permit for non-divisible load:		Penalty - not having permit for non-divisible load:	
No provision		\$500 to \$1,000 first offense	
		\$2,500 to \$5,000 additional offenses	
Penalty - over 84,000 lbs with divisible load:		Penalty - over 84,000 lbs with divisible load:	
No provision		\$500 to \$1,000 first offense	
		\$2,500 to \$5,000 additional offenses	

HB 2741 also authorized TxDMV to levy administrative penalties on loaders of motor carriers if the load exceeds the allowed weight limit. Since the expanded enforcement authority regarding loaders went into effect September 1, 2013, the DMV has initiated five investigations. Four have had enforcement proceedings filed, and of those four, three have already been resolved resulting in the assessment of more than \$22,000 in civil penalties deposited into General Revenue.

APPENDICES

Appendix A

County	District	Grant Award Amount (State Allocation)	Total Grant (Total Project Cost)	Economically Disadvantaged County (Y/N)	County Match %		ching Funds By the
ANDERSON	TYL	· · · · · · · · · · · · · · · · · · ·	•		10%	Cou	41,876
		\$ 376,882	\$ 418,758 \$ 44,774,377	Yes	20%	\$	
ANDREWS	ODA	\$ 9,419,502	\$ 11,774,377	No		\$	2,354,875
ANGELINA	LFK	\$ -	\$ -	Yes	10%	\$	-
ARANSAS	CRP	\$ -	\$ -	No	20%	\$	-
ARCHER	WFS	\$ 971,438	\$ 1,214,298	No	20%	\$	242,860
ARMSTRONG	AMA	\$ 173,161	\$ 216,451	No	20%	\$	43,290
ATASCOSA	SAT	\$ -	\$ -	Yes	10%	\$	-
AUSTIN	YKM	\$ 459,207	\$ 574,008	No	20%	\$	114,802
BAILEY	LBB	\$ 158,362	\$ 197,953	No	20%	\$	39,591
BANDERA	SAT	\$ -	\$ -	No	20%	\$	-
BASTROP	AUS	\$ 301,769	\$ 335,299	Yes	10%	\$	33,530
BAYLOR	WFS	\$ 237,976	\$ 297,470	No	20%	\$	59,494
BEE	CRP	\$ -	\$ -	Yes	10%	\$	-
BELL	WAC	\$ -	\$ -	No	20%	\$	-
BEXAR	SAT	\$ -	\$ -	No	20%	\$	-
BLANCO	AUS	\$ -	\$ -	No	20%	\$	-
BORDEN	ABL	\$ 815,486	\$ 1,019,357	No	20%	\$	203,871
BOSQUE	WAC	\$ 245,567	\$ 272,852	Yes	10%	\$	27,285
BOWIE	ATL	\$ 174,705	\$ 194,116	Yes	10%	\$	19,412
BRAZORIA	HOU	\$ 1,162,398	\$ 1,452,998	No	20%	\$	290,600
BRAZOS	BRY	\$ 656,325	\$ 820,406	No	20%	\$	164,081
BREWSTER	ELP	\$ -	\$ -	No	20%	\$	-
BRISCOE	CHS	\$ -	\$ -	No	20%	\$	_
BROOKS	PHR	\$ 550,065	\$ 611,183	Yes	10%	\$	61,118
BROWN	BWD	\$ 349,771	\$ 437,214	No	20%	\$	87,443
BURLESON	BRY	\$ 429,658	\$ 537,073	No	20%	<u>\$</u>	107,415
BURNET	AUS	\$ 429,038 \$ 142,160	\$ 177,700	No	20%	•	35,540
CALDWELL	AUS			Yes	10%	\$ \$	
		\$ 1,127,962 \$ 260,700					125,329
CALHOUN	YKM	\$ 360,799	\$ 400,888	Yes	10%	\$	40,089
CALLAHAN	ABL	\$ 264,114	\$ 330,143	No	20%	\$	66,029
CAMERON	PHR	\$ 267,106	\$ 296,784	Yes	10%	\$	29,678
CAMP	ATL	\$ 188,593	\$ 209,548	Yes	10%	\$	20,955
CARSON	AMA	\$ 418,678	\$ 523,348	No	20%	\$	104,670
CASS	ATL	\$ 224,646	\$ 249,607	Yes	10%	\$	24,961
CASTRO	LBB	\$ -	\$ -	No	20%	\$	-
CHAMBERS	BMT	\$ 751,759	\$ 939,699	No	20%	\$	187,940
CHEROKEE	TYL	\$ 434,186	\$ 482,429	Yes	10%	\$	48,243
CHILDRESS	CHS	\$ -	\$ -	No	20%	\$	-
CLAY	WFS	\$ 417,163	\$ 521,453	No	20%	\$	104,291
COCHRAN	LBB	\$ -	\$ -	No	20%	\$	
COKE	SJT	\$ 582,681	\$ 728,352	No	20%	\$	145,670
COLEMAN	BWD	\$ 465,961	\$ 582,451	No	20%	\$	116,490
COLLIN	DAL	\$ -	\$ -	No	20%	\$	-
COLLINGSWORTH	CHS	\$ -	\$ -	No	20%	\$	-
COLORADO	YKM	\$ 451,205	\$ 564,006	No	20%	\$	112,801
COMAL	SAT	\$ 247,409	\$ 309,262	No	20%	\$	61,852
COMANCHE	BWD	\$ -	\$ -	No	20%	\$	- ,
CONCHO	SJT	\$ 257,074	\$ 285,638	Yes	10%	\$	28,564
COOKE	WFS	\$ 1,403,555	\$ 1,754,444	No	20%	\$	350,889
CORYELL	WAC	\$ 1,403,333 \$ 172,308	\$ 215,385	No	20%	\$ \$	43,077
COTTLE	CHS	\$ 172,308	\$ 215,365	No	20%	э \$	75,011
CRANE	ODA	\$ -	\$ - \$ 2.504.534	No	20%	\$	- -
CROCKETT	SJT	\$ 2,075,625	\$ 2,594,531	No	20%	\$	518,906

County	District		ant Award Amount ate Allocation)	Total Grant (Total Project Cost)		Economically Disadvantaged County (Y/N)	County Match %		ching Funds By
	LBB		- Allocation)				10%		County
CROSBY		\$	<u> </u>	\$	<u> </u>	Yes		\$	-
CULBERSON	ELP	\$	-	\$	-	No	20%	\$	-
DALLAM	AMA	\$		\$	-	No	20%	\$	-
DALLAS	DAL	\$	352,798	\$	440,998	No	20%	\$	88,200
DAWSON	LBB	\$	1,116,516	\$	1,240,574	Yes	10%	\$	124,057
DEAF SMITH	AMA	\$	190,668	\$	238,335	No	20%	<u>\$</u>	47,667
DELTA	PAR	\$	-	\$	-	Yes	10%	\$	-
DENTON	DAL	\$	1,212,611	\$	1,515,764	No	20%	\$	303,153
DE WITT	YKM	\$	4,957,614	\$	6,197,018	No	20%	\$	1,239,404
DICKENS	CHS	\$	-	\$	-	Yes	10%	\$	
DIMMIT	LRD	\$	6,784,028	\$	8,480,035	No	20%	\$	1,696,007
DONLEY	CHS	\$	-	\$	-	No	20%	\$	-
DUVAL	LRD	\$	953,024	\$	1,058,916	Yes	10%	\$	105,892
EASTLAND	BWD	\$	305,886	\$	382,358	No	20%	\$	76,472
ECTOR	ODA	\$	7,788,594	\$	9,735,743	No	20%	\$	1,947,149
EDWARDS	SJT	\$	251,201	\$	314,002	No	20%	\$	62,800
ELLIS	DAL	\$	346,583	\$	385,092	Yes	10%	\$	38,509
EL PASO	ELP	\$	-	\$	-	Yes	10%	\$	-
ERATH	FTW	\$		\$	·	No	20%	\$.
FALLS	WAC	\$	230,099	\$	255,665	Yes	10%	\$	25,567
FANNIN	PAR	\$	223,009	\$	247,788	Yes	10%	\$	24,779
FAYETTE	YKM	\$	784,720	\$	980,901	No	20%	\$	196,180
FISHER	ABL	э \$	606,405	\$	758,006	No	20%	\$	151,601
FLOYD	LBB	\$	154,391	\$	171,546	Yes	10%	\$	17,155
FOARD	HOU	\$	185,671	\$	232,089	No	20%	\$	46,418
FORT BEND		\$	-	\$	- 440.074	No		\$	-
FRANKLIN	PAR	\$	354,377	\$	442,971	No	20%	\$	88,594
FREESTONE	BRY	\$	792,653	\$	990,816	No	20%	\$	198,163
FRIO	SAT	\$	1,235,860	\$	1,544,825	No	20%	\$	308,965
GAINES	LBB	\$	4,124,733	\$	5,155,916	No	20%	\$	1,031,183
GALVESTON	HOU	\$	-	\$	-	No	20%	\$	-
GARZA	LBB	\$	670,068	\$	837,585	No	20%	\$	167,517
GILLESPIE	AUS	\$	-	\$	-	No	20%	\$	-
GLASSCOCK	SJT	\$	6,078,868	\$	7,598,585	No	20%	\$	1,519,717
GOLIAD	CRP	\$	545,509	\$	681,887	No	20%	\$	136,377
GONZALES	YKM	\$	4,124,708	\$	5,155,885	No	20%	\$	1,031,177
GRAY	AMA	\$	-	\$	-	No	20%	\$	-
GRAYSON	PAR	\$	516,855	\$	574,283	Yes	10%	\$	57,428
GREGG	TYL	\$	1,161,539	\$	1,451,924	No	20%	\$	290,385
GRIMES	BRY	\$	434,423	\$	482,692	Yes	10%	\$	48,269
GUADALUPE	SAT	\$	1,679,176	\$	2,098,969	No	20%	\$	419,794
HALE	LBB	\$	-	\$		No	20%	\$	-
HALL	CHS	\$		\$		Yes	10%	\$	
HAMILTON	WAC	\$	-	\$	-	No	20%	\$	-
HANSFORD	AMA	\$ \$	271,624	\$	339,529	No	20%	\$	67,906
HARDEMAN	CHS	\$	243,149	\$	303,936	No	20%	\$	60,787
HARDIN	BMT	э \$	827,240	\$	1,034,049	No	20%	\$	206,810
			321,240		1,034,049				200,010
HARRIS	HOU	\$	4 000 000	\$	4.000.050	No	20%	\$	252 470
HARRISON	ATL	\$	1,009,880	\$	1,262,350	No	20%	\$	252,470
HARTLEY	AMA	\$	261,999	\$	327,499	No	20%	\$	65,500
HASKELL	ABL	\$	338,623	\$	423,279	No	20%	\$	84,656
HAYS	AUS	\$		\$	-	No	20%	\$	
HEMPHILL	AMA	\$	2,071,776	\$	2,589,720	No	20%	\$	517,944

County	District	Grant Award Amount (State Allocation)	Total Grant (Total Project Cost)	Economically Disadvantaged County (Y/N)	County Match %	Matching Funds By the County	
HENDERSON	TYL	\$ 346,311	\$ 384,790	Yes	10%	\$	38,479
HIDALGO	PHR	\$ 908,285	\$ 1,009,206	Yes	10%	\$	100,921
HILL	WAC	\$ 318,719	\$ 354,132	Yes	10%	\$	35,413
HOCKLEY	LBB	\$ 2,092,859	\$ 2,616,074	No	20%	\$	523,215
HOOD	FTW	\$ -	\$ -	No	20%	\$	-
HOPKINS	PAR	\$ 217,550	\$ 271,937	No	20%	\$	54,387
HOUSTON	LFK	\$ 788,085	\$ 875,650	Yes	10%	\$	87,565
HOWARD	ABL	\$ 3,852,544	\$ 4,815,680	No	20%	\$	963,136
HUDSPETH	ELP	\$ -	\$ -	No	20%	\$	-
HUNT	PAR	\$ -	\$ -	Yes	10%	<u> </u>	
HUTCHINSON	AMA	\$ 368,724	\$ 460,905	No	20%	\$	92,181
IRION	SJT	\$ 2,474,430	\$ 3,093,037	No	20%	\$	618,607
JACK	FTW	\$ 1 ,404,939	\$ 1,756,173	No	20%	\$	351,235
JACKSON	YKM	\$ 1,404,939 \$ 696,412		No	20%	\$ \$	174,103
JASPER	BMT	\$ 333,350	\$ 870,515 \$ 370,389	Yes	10%	\$ \$	37,039
							37,039
JEFF DAVIS JEFFERSON	ELP BMT	\$ 1.140.125	\$ - 1.425.156	No	20%	\$	205 024
		\$ 1,140,125	\$ 1,425,156	No	20%	\$	285,031
JIM HOGG	PHR	\$ -	\$ -	No	20%	\$	-
JIM WELLS	CRP	\$ 511,935	\$ 639,919	No	20%	\$	127,984
JOHNSON	FTW	\$ 1,347,576	\$ 1,497,307	Yes	10%	\$	149,731
JONES	ABL	<mark>\$ 489,973</mark>	\$ 544,415	Yes	10%	\$	54,441
KARNES	CRP	<mark>\$ 7,754,964</mark>	\$ 8,616,627	Yes	10%	\$	861,663
KAUFMAN	DAL	<mark>\$ 299,979</mark>	\$ 333,310	Yes	10%	\$	33,331
KENDALL	SAT	\$ -	\$ -	No	20%	\$	-
KENEDY	PHR	\$ 386, 2 79	\$ 482,849	No	20%	\$	96,570
KENT	ABL	\$ -	\$ -	No	20%	\$	-
KERR	SAT	\$ -	\$ -	No	20%	\$	
KIMBLE	SJT	\$ 134,447	\$ 168,059	No	20%	\$	33,612
KING	CHS	\$ 344,908	\$ 431,135	No	20%	\$	86,227
KINNEY	LRD	\$ 160,859	\$ 178,732	Yes	10%	\$	17,873
KLEBERG	CRP	\$ 622,746	\$ 778,433	No	20%	\$	155,687
KNOX	CHS	\$ 205,404	\$ 256,756	No	20%	\$	51,351
LAMAR	PAR	\$ 173,403	\$ 192,670	Yes	10%	\$	19,267
LAMB	LBB	\$ 231,898	\$ 289,873	No	20%	\$	57,975
LAMPASAS	BWD	\$ -	\$ -	No	20%	\$	
LA SALLE	LRD	\$ 6,456,703	\$ 8,070,878	No	20%	\$	1,614,176
LAVACA	YKM	\$ 1,004,598	\$ 1,255,747	No	20%	\$	251,149
LEE	AUS	\$ 420,242	\$ 525,302	No	20%	\$	105,060
LEON	BRY	\$ 746,873	\$ 829,859	Yes	10%	\$	82,986
LIBERTY	BMT	\$ 782,889	\$ 869,877	Yes	10%	\$	86,988
LIMESTONE	WAC	\$ 503,797	\$ 629,747	No	20%	\$	125,949
LIPSCOMB	AMA	\$ 1,332,741	\$ 1,665,926	No	20%	\$	333,185
LIVE OAK	CRP	\$ 2,468,331	\$ 3,085,414	No	20%	\$	617,083
LLANO	AUS	\$	\$ -	No	20%	\$	52.,000
LOVING	ODA	\$ 1,674,950	\$ 2,093,688	No	20%	\$	418,738
LUBBOCK	LBB	\$ 1,874,950 \$ 402,855	\$ 503,569	No	20%	\$ \$	100,714
LYNN	LBB	\$ 402,855	\$ 387,327	No	20%	\$ \$	77,465
MADISON	BRY	\$ 903,646 c	\$ 1,004,052	Yes	10%	\$	100,405
MARION	ATL	\$ - 7.166.680	\$ -	Yes	10%	\$	1 704 670
MARTIN	ODA	\$ 7,166,689 \$ 426,685	\$ 8,958,361	No	20%	\$	1,791,672
MASON	AUS	\$ 136,995 540,995	\$ 171,244	No	20%	\$	34,249
MATAGORDA	YKM	\$ 542,839	\$ 603,155	Yes	10%	\$	60,315
MAVERICK	LRD	\$ 396,593	\$ 440,659	Yes	10%	\$	44,066

County	District	Grant Award Amount (State Allocation)	Total Grant (Total Project Cost)		Economically Disadvantaged County County (Y/N) Match S		Matching Funds By the County	
MCCULLOCH	BWD	\$ 167,948	\$	209,935	No	20%	\$	41,987
MCLENNAN	WAC	\$ 249,602	\$	277,336	Yes	10%	<u>\$</u>	27,734
MCMULLEN	SAT	\$ 4,662,592	\$	5,828,240	No	20%	<u>\$</u>	1,165,648
MEDINA	SAT	\$ 652,692	\$	725,213	Yes	10%	<u>\$</u>	72,521
MENARD	SJT	\$ 203,464	\$	254,329	No	20%	\$ \$	50,866
MIDLAND	ODA	\$ 5,962,582	\$	7,453,227	No	20%	-	1,490,645
MILAM	BRY	\$ 2,247,103	\$	2,496,781	Yes	10%	\$ \$	249,678
MILLS	BWD	\$ 2,241,103	э \$	2,490,781	No	20%	\$	249,078
MITCHELL	ABL	\$ 1,519,927	\$	1,688,808	Yes	10%	\$ \$	168,881
MONTAGUE	WFS	\$ 2,664,128	\$	3,330,160	No	20%	\$ \$	666,032
MONTGOMERY	HOU	\$ 2,004,128	э \$	3,330,100	No	20%	\$	000,032
MOORE	AMA	\$ 619,022	\$	773,778	No	20%	\$	154,756
MORRIS	ATL	\$ 019,022	φ \$	113,116	Yes	10%	\$	154,750
MOTLEY	CHS	φ - ¢			No	20%	э \$	-
NACOGDOCHES	LFK	\$ 538,486	\$	673 107	No	20%	\$	124 621
NAVARRO	DAL	\$ 538,486 \$ 384,175	\$ \$	673,107	Yes	10%	\$	134,621 42,686
NEWTON	BMT	\$ 384,175 \$ 341,933	\$	426,861	Yes	10%	\$	
NOLAN	ABL	\$ 341,933 \$ 751,155	\$	379,926 938.944	No Yes	20%	\$	37,993 187,789
NUECES		+,	_	/ -			\$ \$	· ·
	CRP	\$ 671,441 \$ 1,201,586	\$	839,302	No No	20%	\$ \$	167,860
OCHILTREE	AMA	\$ 1,291,586 \$ 383,844	\$	1,614,483	No	20%	_ •	322,897
OLDHAM	AMA	\$ 383,844	\$	479,805	No	20%	\$	95,961
ORANGE	BMT	\$ 473,972	\$	592,466	No	20%	\$	118,493
PALO PINTO	FTW	\$ 643,202	\$	804,002	No	20%	\$	160,800
PANOLA	ATL	\$ -	\$		No	20%	\$	-
PARKER	FTW	\$ 1,422,491	\$	1,778,114	No	20%	\$	355,623
PARMER	LBB	\$ -	\$	-	No	20%	\$	-
PECOS	ODA	\$ 2,040,289	\$	2,550,361	No	20%	\$	510,072
POLK	LFK	\$ 519,595	\$	649,494	No	20%	\$	129,899
POTTER	AMA	\$ -	\$	-	No	20%	\$	-
PRESIDIO	ELP	\$ 118,566	\$	131,740	Yes	10%	\$	13,174
RAINS	PAR	\$ 179,652	\$	199,614	Yes	10%	\$	19,961
RANDALL	AMA	-	Ψ	- 445.050	No	20%	\$	-
REAGAN	SJT	\$ 3,532,296	\$	4,415,370	No	20%	\$	883,074
REAL	SJT	\$ 141,791	\$	177,239	No	20%	\$	35,448
RED RIVER	PAR	\$ 201,819	\$	224,244	Yes	10%	\$	22,424
REEVES	ODA	\$ 2,903,567	\$	3,226,185	Yes	10%	\$	322,619
REFUGIO	CRP	\$ 1,455,598	\$	1,819,497	No	20%	\$	363,899
ROBERTS	AMA	\$ 1,090,976	\$	1,363,720	No	20%	\$	272,744
ROBERTSON	BRY	\$ 800,048	\$	1,000,060	No	20%	\$	200,012
ROCKWALL	DAL	\$ 224,588	\$	280,735	No	20%	\$	56,147
RUNNELS	SJT	\$ 386,785	\$	429,761	Yes	10%	\$	42,976
RUSK	TYL	\$ 1,290,278	\$	1,612,847	No	20%	\$	322,569
SABINE	LFK	\$ -	\$	-	Yes	10%	\$	-
SAN AUGUSTINE	LFK	\$ 493,603	\$	548,448	Yes	10%	\$	54,845
SAN JACINTO	LFK	\$ 351,349	\$	390,387	Yes	10%	\$	39,039
SAN PATRICIO	CRP	\$ 764,254	\$	955,318	No	20%	\$	191,064
SAN SABA	BWD	\$ -	\$	-	Yes	10%	\$	-
SCHLEICHER	SJT	\$ 493,252	\$	616,565	No	20%	\$	123,313
SCURRY	ABL	\$ 2,074,427	\$	2,593,034	No	20%	\$	518,607
SHACKELFORD	ABL	\$ 686,041	\$	857,551	No	20%	\$	171,510
SHELBY	LFK	\$ 591,707	\$	657,452	Yes	10%	\$	65,745
SHERMAN	AMA	\$ 296,577	\$	370,722	No	20%	\$	74,144
SMITH	TYL	\$ 512,715	\$	640,894	No	20%	\$	128,179

County	District		Grant Award Amount Total Grant (Tot (State Allocation) Project Cost)		·	Economically Disadvantaged County (Y/N)	County Match %	Matching Funds By the County	
SOMERVELL	FTW	\$		\$	-	No	20%	\$	
STARR	PHR	\$ \$	909,504	\$	1,010,560	Yes	10%	\$	101,056
STEPHENS	BWD	\$	1,335,200	\$	1,669,000	No	20%	\$	333,800
STERLING	SJT	\$	712,107	\$	890,134	No	20%	\$	178,027
STONEWALL	ABL	\$	587,382	\$	734,228	No	20%	\$	146,846
SUTTON	SJT	\$	-	\$	-	No	20%	\$	-
SWISHER	LBB	* \$	174,627	\$	218,283	No	20%	\$	43,657
TARRANT	FTW	\$	2,686,345	\$	3,357,931	No	20%	\$	671,586
TAYLOR	ABL	\$	-	\$	-	No	20%	\$	-
TERRELL	ODA	<u>\$</u>	208,120	\$	260,150	No	20%	\$	52,030
TERRY	LBB	\$	664,640	\$	830,800	No	20%	\$	166,160
THROCKMORTO	N WFS	\$	494,080	\$	617,600	No	20%	\$	123,520
TITUS	ATL	\$	366,029	\$	406,699	Yes	10%	\$	40,670
TOM GREEN	SJT	\$	462,441	\$	578,051	No	20%	\$	115,610
TRAVIS	AUS	\$	-	\$	-	No	20%	\$	-
TRINITY	LFK	\$	207,438	\$	230,487	Yes	10%	\$	23,049
TYLER	BMT	\$	463,521	\$	515,023	Yes	10%	\$	51,502
UPSHUR	ATL	\$	729,078	\$	911,348	No	20%	\$	182,270
UPTON	ODA	\$	5,813,660	\$	7,267,075	No	20%	\$	1,453,415
UVALDE	SAT	\$	260,578	\$	289,531	Yes	10%	\$	28,953
VAL VERDE	LRD	\$	166,661	\$	185,179	Yes	10%	\$	18,518
VAN ZANDT	TYL	\$	-	\$	-	No	20%	\$	-
VICTORIA	YKM	\$	738,241	\$	922,801	No	20%	\$	184,560
WALKER	BRY	\$	288,828	\$	320,920	Yes	10%	\$	32,092
WALLER	HOU	\$	407,291	\$	452,545	Yes	10%	\$	45,255
WARD	ODA	\$	4,174,013	\$	5,217,516	No	20%	\$	1,043,503
WASHINGTON	BRY	\$	341,037	\$	426,297	No	20%	\$	85,259
WEBB	LRD	\$	5,592,743	\$	6,214,159	Yes	10%	\$	621,416
WHARTON	YKM	\$	1,028,251	\$	1,142,502	Yes	10%	\$	114,250
WHEELER	CHS	\$	3,678,909	\$	4,598,636	No	20%	\$	919,727
WICHITA	WFS	\$	1,236,857	\$	1,546,072	No	20%	\$	309,214
WILBARGER	WFS	\$	547,945	\$	684,931	No	20%	\$	136,986
WILLACY	PHR	\$	401,113	\$	445,681	Yes	10%	\$	44,568
WILLIAMSON	AUS	\$	-	\$	-	No	20%	\$	-
WILSON	SAT	\$	959,192	\$	1,198,991	No	20%	\$	239,798
WINKLER	ODA	\$	1,391,828	\$	1,739,785	No	20%	\$	347,957
WISE	FTW	\$	2,396,427	\$	2,995,534	No	20%	\$	599,107
WOOD	TYL	\$	-	\$	-	Yes	10%	\$	-
YOAKUM	LBB	\$	3,035,154	\$	3,793,943	No	20%	\$	758,789
YOUNG	WFS	\$	655,214	\$	819,017	No	20%	\$	163,803
ZAPATA	PHR	\$	597,988	\$	664,431	Yes	10%	\$	66,443
ZAVALA	LRD	\$	1,006,991	\$	1,118,879	Yes	10%	\$	111,888
STATEWIDE T	OTAL	\$	224,500,000						

NOTE: Grayed out counties did not apply and will not receive any grant funds under this program.

Appendix B



Appendix C



August 13, 2013



Dear (Section 1988)

As you know, transportation infrastructure is an important component of the Texas economy and quality of life for Texans. As such, the key to sustainability in transportation is meeting future needs, such as population growth, urban development, and market-driven changes, while also maintaining our current system. This is a daunting task when demand so often outpaces revenue.

However, the Texas Department of Transportation (TxDOT) is committed to solving our transportation challenges with practical and publicly acceptable solutions. To that end, the Texas Transportation Commission (Commission) is considering a highway transfer turnback program that will allow the transfer of state-owned roads, which are functionally local, from the state back to the local governments.

The turnback program is envisioned as a cooperative venture between TxDOT and local jurisdictions to increase local control. The roads under consideration are state-owned, but serve primarily local traffic. Some benefits to local jurisdictions include the ability to control driveway access, speed limits, on-street parking, and road closures, and the ability to control maintenance scheduling that is more responsive to the needs of local residents and businesses. TxDOT will work with you and your staff to ensure the roadway is in satisfactory condition before a transfer occurs.

Your TxDOT District Engineer will reach out to you in the near future to introduce you to the proposed program. In partnership, candidate roadways will be discussed to ensure any concerns and questions you may have are addressed. In addition, this proposal will be up for discussion only, with no action taken, at the August 29th Commission meeting. You may wish to attend or watch online at www.txdot.gov.

OUR GOALS

MAINTAIN A SAFE SYSTEM • ADDRESS CONGESTION • CONNECT TEXAS COMMUNITIES • BEST IN CLASS STATE AGENCY

An Equal Opportunity Employer

Appendix D

MEMORANDUM OF UNDERSTANDING REGARDING THE TEXAS DEPARTMENT OF TRANSPORTATION'S VOLUNTARY TURNBACK PROGRAM

This Memorandum of Understanding (MOU) is by and between the Texas Department of Transportation (TxDOT), an agency of the State of Texas; the Texas Municipal League (TML); and the Association of Texas Metropolitan Planning Organizations (TEMPO).

Whereas, TxDOT is the state agency that has traditionally maintained the state's highways;

Whereas, TML is a non-profit association consisting of 1,136 member cities;

Whereas, TEMPO represents the state's 25 metropolitan planning organizations;

Whereas, on August 13, 2013, TxDOT sent a letter to mayors and county judges in certain, populous areas of the state;

Whereas, that letter informed mayors and county judges of a newly-proposed "Highway Turnback Program" from TxDOT;

Whereas, on August 29, 2013, the Texas Transportation Commission (TIC) conducted a public meeting on the Turnback Program;

Whereas, numerous city and other local officials testified at the meeting, speaking primarily to clarify that the Turnback Program be voluntary on the part of cities;

Whereas, a select committee of city officials appointed by TML President Jungus Jordan and leaders from TEMPO, met with TxDOT officials on January 6, 2014, to discuss cooperative efforts in relation to the Turnback Program;

Whereas, what was originally perceived by city officials as a unilateral, unfunded mandate on cities has become a cooperative effort between cities and TxDOT to address the state's highway maintenance needs;

Whereas, the committee met with TxDOT officials again on January 6 and February 7, 2014, to develop this written MOU governing the general parameters for TxDOT and the cities that voluntarily choose to take over control of certain state highways, as well as written confirmation of the program's voluntary nature.

Whereas, a city will own and have local control over a turned back highway, such as access management, parking, signage, markings, speed limits, signals, and other issues;

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Whereas, Texas Transportation Code chapter 311 grants a city control over the streets within its city limits, Chapter 201 allows the TIC to remove a segment of the state highway system that it determines is not needed for the system, and Chapter 202 allows for the transfer of highway right-of-way no longer needed for a state highway purpose.

Now, therefore, TxDOT, TML, and TEMPO agree to and acknowledge the following in relation to the voluntary Turnback Program:

I. General Items:

- a. The Turnback Program is a cooperative program between cities and TxDOT.
- b. City participation in the program is voluntary.
- c. The objective of the Turnback Program is to transfer ownership of some state-owned roads, used primarily for local traffic purposes, to cities.
- d. TxDOT will ensure that a candidate highway is in satisfactory condition before a transfer occurs, and no highway will be turned back unless the city agrees that it is in satisfactory condition.
- e. The Turnback Program is available to any city within the boundaries of a metropolitan planning organization (MPO).

2. Financial Items:

- a. As an incentive to cities, TxDOT will use a portion of its future maintenance savings from the Turnback Program in a participating city in accordance with Sections 2(b) and (c) below and the local implementation plan under section 3 of this MOU (the "Turnback Expenditures").
- b. Turnback Expenditures in connection with the Turnback Progran1 will be capped at a statewide total of \$100 million and will be offered on a first come/first served basis.
- c. Turnback Expenditures will be used by TxDOT on eligible mobility, safety, and preservation projects within the same city that accepts the responsibilities for a turned back road pursuant to a local implementation plan.
- d. TxDOT will not use a city's refusal to accept a turned back highway as justification to reduce spending in the city or TxDOT district in which the city is located.
- e. A city should confirm with both TxDOT and its MPO that any highway accepted for turnback retains federal eligibility for funding as determined by state and federal law and rules. TxDOT will work with TEMPO to prevent financial harm to an MPO that contains a highway that is turned back to a city in that MPO.

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- f. Before transferring a highway to a city under the Turnback Program, TxDOT will implement any project currently in the State Transportation Improvement Plan and in its current four-year pavement preservation plan, and current local participation percentages will not be increased.
- g. Bridges located on a turned back highway will retain their federal eligibility and continue to be on TxDOT's two-year inspection cycle. Before transferring a bridge currently programmed for replacement in TxDOT's

four-year plan to a city under the Turnback Program, the bridge replacement will be completed at the current participation levels.

3. Local Implementation Plan:

- a. A city, its MPO, and the local TxDOT district will meet and develop a local implementation plan for the highways within their region, including highways that: (1) do not fit the functional classification and need to remain as state highways; and (2) fit the functional classification and can be part of the voluntary Turnback Program.
- b. If a city requests a transition or phasing plan to allow it to take over the responsibility for some highways over time to fit within its budgetary constraints and project scheduling, that phasing plan should be included.
- c. The local implementation plan should jointly identify any immediate pavement maintenance needs on highways proposed to be transferred.
- d. No binding commitments will be made during the development of the plan.
- e. The local implementation plan will be reviewed and approved by TxDOT administration before submission to the city's governing body in order to maintain consistency and uniformity.
- f. A city's municipal maintenance agreement will be updated to reflect the turned back highways.
- g. The local implementation plan will be provided to the city's governing body for its consideration and approval.

4. Right-of-way Transfer:

- a. The intent of the voluntary Turnback Program is to convey the real estate or right-of-way property that underlies a highway to the city at no cost to the city. Right-of-way value and administrative costs related to conveyance will not be deducted from TxDOT funding that would otherwise be spent in the city.
- b. The appropriate mechanism for the transfer of the real estate ownership will depend upon the type of title that the state holds.
- c. An adequate delineation or survei of the right-of-way that is legally sufficient to convey title to the real estate is required. This does not

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- necessarily require a new survey if a previous survey reflects a precise delineation of the right-of-way to be transferred to local ownership.
- d. A quitclaim deed may be used for the state to generally disclaim any unrecorded and un-delineated rights that the state may have in order to clear the title to a highway. For instance, if the property interest was originally acquired and held by a city or county in its own name for use by the state, or if there is no record title to the property.
- e. Title by deed may be used to convey state ownership to a city as described in section 202.021(e)(l) of the Texas Transportation Code, which provides the authority to transfer the title to the right-of-way in consideration of the savings of the estimated future cost of maintenance and operation of the public road.

5. Other Items:

- a. The parties will work together in good faith to ensure the effective and efficient implementation of TxDOT's voluntary Turnback Program.
- b. The parties will meet to re-evaluate the terms of this MOU on or about January 1 of each even-numbered year for the duration of this MOU's term.
- c. In the event there is a disagreement between TxDOT and TML or TEMPO about the implementation of the voluntary Tumback Program, the parties agree to meet within 30 days of receiving a written request from the other party of a desire to meet to resolve any disagreement. The parties will make good faith efforts to resolve any disagreement as efficiently as is reasonably possible.
- d. An amendment to this MOU must be in writing and signed by all parties.

This MOU becomes effective upon execution by all parties and automatically renews each year, unless a party notifies the other parties of its intent to terminate the agreement.

The following procedure shall be observed by the parties in regard to any notifications:

Any notice required or permitted to be given under this MOU shall be in writing and may be effected by personal delivery, by hand delivery through a courier or a delivery service, or by registered or certified mail, postage prepaid, return receipt requested, addressed to the proper party, at the address set forth below the signature of the party:

By:	Date:
Dy.	Date,
Texas Department of Transportation	
HALLES MY BASS	4/4/14
Name: James M BASS	
Executive Director	
125 E. 11th Street	
Austin, Texas 78701	
Texas Municipal League	*
Name: Jungus Jordan Procident	3/28/201
President	
1821 Rutherford Lane, Suite 400	
Austin, Texas 78754	
Texas Association of Metropolitan Planning Organizations	
askly Johnson	
	3/28/201
Name: Ashby Johnson	5,23,201

Name: Ashby Johnson
Executive Director
c/o Houston-Galveston Area Council (HGAC)
P.O. Box 22777
Houston, TX 77227-2777

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ENDNOTES

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- ¹⁵ Dan Harmon, Texas Department of Transportation. Written testimony before the Committee. "Status of Texas' Port System," 14 April 2014.
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