

# **The Senate Transportation Committee**



## **Interim Report to the 86th Legislature**

**December 2018**

# SENATE TRANSPORTATION COMMITTEE

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December 2018

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

Dear Governor Patrick:

The Senate Transportation Committee of the Eighty-Fifth Legislature hereby submits its interim report for consideration by the Eighty-Sixth Legislature. We thank you for providing us the opportunity to address these important issues.

Respectfully submitted,

Handwritten signature of Robert Nichols in black ink.

Senator Robert Nichols, Chair

Handwritten signature of Bob Hall in black ink.

Senator Bob Hall, Vice Chair

Handwritten signature of Brandon Creighton in black ink.

Senator Brandon Creighton

Senator Sylvia Garcia

Handwritten signature of Kelly Hancock in black ink.

Senator Kelly Hancock

Handwritten signature of Juan "Chuy" Hinojosa in black ink.

Senator Juan "Chuy" Hinojosa

Handwritten signature of Lois W. Kolkhorst in black ink.

Senator Lois Kolkhorst

Handwritten signature of Charles Perry in black ink.

Senator Charles Perry

Handwritten signature of Jose Rodriguez in black ink.

Senator Jose Rodriguez

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## Interim Charges

1. **Hurricane Harvey Response** Study the impact of Hurricane Harvey on the state's transportation infrastructure and make recommendations on how best to rebuild assets efficiently and effectively.
2. **Funding Opportunities for Texas Ports:** Review the state's appropriations for Texas' ports and the Ship Channel Improvement Revolving Fund and make recommendations for increased investment to meet future needs.
3. **Project Acceleration:** Study and make recommendations regarding segregating state and federal transportation funding to accelerate project delivery.
4. **Toll Road Penalties:** Review penalty practices employed by toll authorities throughout the state and make recommendations to improve customer service and eliminate unjustified penalties.
5. **Human Smuggling:** Examine the anti-smuggling efforts of governmental and non-governmental entities under the committee's jurisdiction. Compare the findings to best practices in other states and make recommendations to help advance efforts in the fight against human smuggling.
6. **Highway Naming:** Review the state's policy related to the naming of state highways for individuals and make recommendations to limit and reform the criteria of such designations.
7. **Monitoring Charge:** Monitor the implementation of legislation addressed by the Senate Committee on Transportation during the 85th Legislature, Regular Session and make recommendations for any legislation needed to improve, enhance, and/or complete implementation. Specifically, monitor the following:
  - a. Implementation of statutory changes specified in the Texas Department of Transportation's (TxDOT) sunset legislation. 1) requiring toll road entities to use toll revenue to pay back TxDOT for grants used to construct toll roads. 2) prohibiting TxDOT from operating or transferring a HOV lane as a tolled lane. 3) authorizing TxDOT to convert non-tolled lanes as toll lanes - only if the number of non-tolled lanes is greater than or equal to the number in existence before the toll conversion project. 4) prohibiting TxDOT from awarding contracts unless the contractor participates in E-verify; and
  - b. Progress of the Texas Department of Transportation's (TxDOT) efforts to issue an annual permit for transporting overweight, sealed intermodal shipping containers on TxDOT approved routes within 30 miles of a port of entry or an international bridge.

## Senate Committee on Transportation Interim Hearings

November 15 2017, Room E1.016

The Committee received invited testimony on Charge No. 1.

February 21, 2018 Room E1.028

The Committee received invited testimony on Charge Nos. 2, 5 and 6.

April 24, 2018 Room E1.016

The Committee received invited testimony on Charge Nos. 3 and 7.

August 27, 2018, Room E1.016

The Committee received invited and public testimony on Charge No 4.

*The audio/video recordings, minutes, and witness lists for the above referenced hearings may be found online at: <https://senate.texas.gov/cmte.php?c=640>*

*Senate Committee on Transportation  
Interim Report to the 86th Legislature  
Interim Hearings*

## **2017 Hurricane Harvey Response**

*Study the impact of Hurricane Harvey on the state's transportation infrastructure and make recommendations on how best to rebuild assets efficiently and effectively.*

### **INTRODUCTION**

When Hurricane Harvey made landfall in Texas on August 25, 2017, as a Category 4 hurricane, it became the country's first major — Category 3 or higher — hurricane since Wilma hit Florida in October 2005, and the first major hurricane to strike southern Texas since Celia in 1970. It kicked off a historically destructive 2017 storm season for the Caribbean and the southern U.S.<sup>1</sup>

“This is going to be a massive, massive cleanup process,” Texas Governor Greg Abbott told “ABC news media” September 1, 2017, about a week after Harvey hit. “People need to understand this is not going to be a short-term project. This is going to be a multi-year project for Texas to be able to dig out of this catastrophe.”<sup>2</sup>

Harvey first made landfall over San Jose Island and then near Rockport, in south-central Texas, late August 25 as a Category 4 hurricane, threatening millions of residents with 130-mph winds, heavy rains, and a massive storm surge that swamped coastal areas. It stalled over southern Texas for days as a weakening hurricane, producing catastrophic flash and river flooding. Harvey then downgraded to a tropical storm on August 26.

By August 27, winds died down to as much as 40 mph, but the storm dumped a year of rain in less than a week on Houston and much of southeastern Texas. By August 29, two flood-control reservoirs had breached, increasing water levels throughout the Houston area. Harvey made its third and final landfall August 30 near Port Arthur, Texas. Tropical Storm Harvey was then downgraded to a tropical depression late August 30, but it continued to dump massive amounts of rain on parts of eastern Texas.<sup>3</sup>

### ***How much damage did Harvey cause?***

Causing about \$125 billion in damage, Harvey ranks as the second-most costly hurricane to hit the U.S. mainland since 1900. Adjusting for inflation, only \$160-billion Hurricane Katrina in 2005 caused more damage than Harvey.<sup>4</sup>

“The geographic area and the population affected by this horrific hurricane and flooding ... is far larger than the population and geographic area of Katrina,” Abbott said on “Fox News Sunday.”

With Harvey, an estimated 13 million people were affected, nearly 135,000 homes damaged or destroyed in the historic flooding, and up to a million cars were wrecked. 88 people lost their lives due to Hurricane Harvey.

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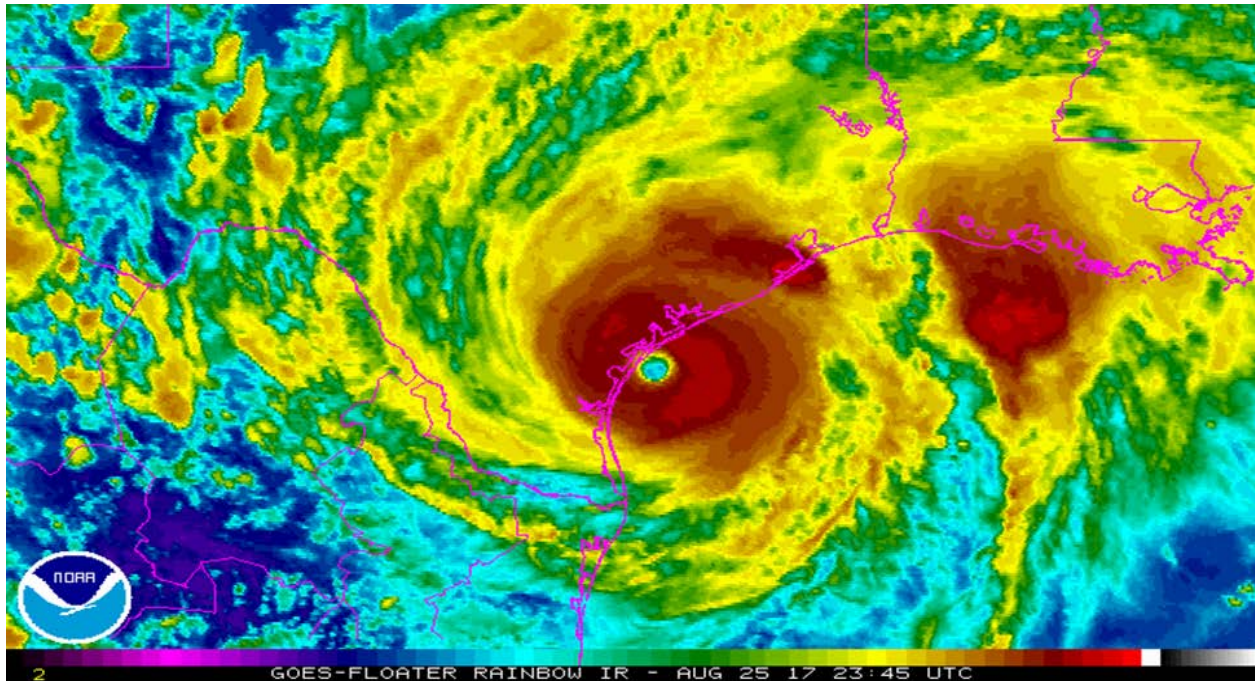
<sup>1</sup> <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>

<sup>2</sup> <https://abcnews.go.com/US/hurricane-harvey-wreaks-historic-devastation-numbers/story?id=49529063>

<sup>3</sup> <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>

<sup>4</sup> <https://www.nhc.noaa.gov/news/UpdatedCostliest.pdf>

Several dozen schools were closed more than a month into the school year, pending repairs from the flooding.



### ***How bad was the flooding after Harvey?***

The storm dumped more than 27 trillion gallons of rain over Texas, making Harvey the wettest Atlantic hurricane ever measured. Some parts of Houston received more than 50 inches of rainfall — so much that the National Weather Service had to update the colors it uses on its weather charts to properly account for it. With one-third of Houston completely flooded, the weight of the water also sank the city temporarily by two centimeters (almost an inch), according to a California geophysicist.<sup>5</sup>

All of the soggy drywall, flooring, furniture, clothing and toys trashed in the clean-up effort adds up to an estimated 8 million cubic yards of garbage in Houston alone, enough to fill up the Houston Texans’ football stadium two times over.<sup>6</sup>

## **STATEWIDE ISSUES**

### ***TxDOT Disaster and Emergency Preparedness, Response and Recovery***

For the Texas Department of Transportation (TxDOT), the importance of safe and reliable transportation systems is heightened before, during and immediately after emergency situations. In a catastrophic disaster, providing safe transportation systems is a critical function of the state. This makes evacuations, search and rescue, mass care and other essential emergency response activities possible.

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<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

TxDOT maintains readiness for all-hazards response with emphasized concentration on the state's imminent large-scale threats, such as major hurricanes. Among other emergency response duties, TxDOT assists the public with getting out of harm's way, performing repairs, and with debris removal to help stabilize an emergency situation as soon as safely possible after a disaster event. TxDOT also ensures safe and reliable transportation routes for the public's return home after an emergency situation.<sup>7</sup>

TxDOT's Emergency Operations Center (EOC) oversees TxDOT's response to emergencies and disasters, including hurricanes, wildfires, tornadoes, winter weather and flooding. The EOC works closely with the Texas Division of Emergency Management, other state agencies, local governments and all TxDOT divisions and geographic districts.<sup>8</sup> In addition, the EOC works with the State Operations Center (SOC), the Federal Emergency Management Agency (FEMA) and the Federal Highway Administration (FHWA) on state reimbursement issues for emergency and disaster response. Interagency coordination is a key element in successful emergency management. Before, during and after a disaster, TxDOT partners with local officials, government agencies, law enforcement, private-sector contractors and relief organizations to minimize disaster impacts and maintain safety for the traveling public.<sup>9</sup>

TxDOT, as a member of the State Emergency Management Council, provides a representative to the SOC as needed. TxDOT is also represented at Texas Department of Public Safety (TxDPS) Emergency Operations Centers located around the state.<sup>10</sup>

TxDOT with its skilled workforce, engineering capabilities and presence in every county of the state is uniquely positioned to take on special duties during emergency operations, including the following:<sup>11</sup>

- As member of the Texas Homeland Security Council, TxDOT provides input and analysis to the Texas Homeland Security Strategic Plan and response efforts;
- As a member of the State Hazard Mitigation Team, TxDOT provides input to the State Hazard Mitigation Plan and grant-funding processes; and
- The State Emergency Management Plan assigns TxDOT specific responsibilities.

### ***EMERGENCY OPERATIONS - PUBLIC INFORMATION***

An essential component of TxDOT's successful emergency preparedness and response operations is effective public communication. As part of its emergency operations, TxDOT continuously

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<sup>7</sup> Senate Committee on Transportation hearing, Nov. 15, 2017 (written testimony of Michael Lee, Texas Department of Transportation)

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*



notifies the public of road closures and changing weather conditions through newspapers, television, the internet, traffic control devices and other methods.<sup>12</sup>

Online road condition information is always available on the DriveTexas.org interactive map at [www.drivetexas.org](http://www.drivetexas.org). DriveTexas.org provides accurate and up-to-date travel-related information to the traveling public.<sup>13</sup> The website is helpful in a variety of conditions, including flooding and winter weather. DriveTexas.org was critically important for residents, first responders and government agencies during the preparation and response to Harvey, as TxDOT updated road conditions in real time. TxDOT also issued social media communications through Facebook and Twitter during emergency operations.<sup>14</sup>

Another important resource is the TxDOT Travel Information phone line (800-452-9292), which is staffed by TxDOT during a disaster response. Recorded information on road conditions is also available on a 24-hour basis. The TxDOT Travel Information line received more than 163,000 calls during and after Harvey.<sup>15</sup>

TxDOT utilized its network of more than 730 dynamic message signs across the state to convey up-to-date information about fuel and shelter and to warn the public about danger zones<sup>16</sup>.

### ***HARVEY PREPAREDNESS AND RESPONSE***

In collaboration with the State Operations Center, TxDOT's Hurricane Response & Re-Entry Plan was activated before Hurricane Harvey made landfall, and TxDOT's EOC was activated on August 24, 2017. As part of the response plan, TxDOT mobilized its personnel and equipment to staging areas in San Antonio and Bryan. By pre-staging both equipment and personnel, TxDOT expedited its entrance to the impacted areas as soon as it was safe for crews to enter. All 25 TxDOT districts were either directly impacted by Harvey or provided assistance in recovery efforts by deploying crews, equipment and personnel for recovery efforts<sup>17</sup>.

Once it was safe for TxDOT personnel to re-enter the impacted areas, TxDOT provided 24-hour, seven-days-a-week support. TxDOT worked around the clock until roadways were open to traffic and signal and sign functions were restored (some roadways remained closed because of damage or high water). TxDOT's response to Harvey included high water support, installation of Aqua Dams sign and signal repair, debris cleanup, bridge and roadway inspections, real time roadway updates through the DriveTexas.org website and equipment and resources for local governments<sup>18</sup>.

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<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

### ***Debris Removal***

After a hurricane makes landfall, one of TxDOT's first priorities is to clear roadways of debris for emergency response operations. TxDOT's convoys of trucks, front-end loaders, dump trucks, backhoes, sign trucks and signal trucks work to clear roads, remove tree limbs and repair traffic signals and highway signs. TxDOT works with the Texas Public Utility Commission and local power companies to address downed power lines in impacted areas.<sup>19</sup> TxDOT had on-call debris removal contracts and monitoring contracts to reduce down-time and to facilitate a more efficient re-entry process for the public. TxDOT assisted cities and counties in the impacted areas of Harvey by removing debris from their roadways.

### ***Repairs and Restoration***

As soon as practicable after Harvey, TxDOT assessed and repaired damage to roads, bridges and other transportation infrastructure. TxDOT crews look for damage to pavement, guardrails, signal lights, bridge supports and driving surfaces. If a bridge or road is unsafe, TxDOT closes the facility until it can be repaired and notifies the public. Local law enforcement officers assist in patrolling signalized intersections and clearing roads while signs and signals are being repaired.<sup>20</sup>

In the immediate aftermath of Harvey, over 500 roadways were closed because of high water and 4,319 on-system bridges (state assets) were impacted. As floodwaters receded, TxDOT and contractors began to inspect roads and bridges for damage and make repairs.<sup>21</sup>

### ***STATE EXPENDITURES & FEDERAL REIMBURSEMENT***

Federal reimbursement programs for disasters are not designed to cover all TxDOT expenses during emergency or disaster situations. Often disasters and emergencies that require TxDOT assistance do not trigger a federal declaration. Due to the limitations of federal reimbursement programs, not all activities or locations of those activities are eligible for federal reimbursement.

When applying for federal reimbursement programs, TxDOT coordinates externally with state and federal partners and internally with financial personnel as well as with employees who responded to the disaster.<sup>22</sup> TxDOT was in constant communication with federal agencies to overcome the challenges of personnel turnover and policy changes throughout the reimbursement process.

TxDOT worked closely with FEMA, FHWA and the Governor's Office on disaster recovery and reimbursement. On August 29, 2017, FHWA announced \$25 million in emergency relief funds for road and bridge repair.<sup>23</sup> TxDOT worked closely with FHWA to coordinate federal reimbursements for Harvey expenses. On September 8, 2017, President Trump signed legislation that provides \$15.25 billion in disaster relief funds, of which \$7.4 billion is for FEMA. Additional

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<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

legislation was signed by President Trump on October 26, 2017 that provides FEMA an additional \$18.7 billion. FEMA will reimburse certain transportation-related expenditures paid by TxDOT.<sup>24</sup>

On November 9, 2017, TxDOT's cost estimates were as follows: Response Mobilization -\$55 million; Roadway Damage - \$110 million; TxDOT Building and Ferry Damage - \$10 million; and Equipment Costs - \$6.2 million. These numbers are expected to increase as additional repairs are identified. These estimated costs represent road and bridge repairs, signals and signs, debris removal, damage to Port Aransas Ferry, Beaumont Travel Information Center and TxDOT facilities in Port Aransas and Beaumont. Also included in the costs are equipment rentals and staff overtime.<sup>25</sup>

TxDOT's response to Harvey represents over 847,457 work hours from approximately 4,847 employees. Five basecamps were deployed to assist in the coordination and response to Harvey. The basecamps also provided housing and meals to TxDOT personnel. Harvey presented a formidable challenge, but TxDOT was prepared to respond and the dedication of TxDOT employees was evident throughout Hurricane Harvey.<sup>26</sup>

TxDOT performed after-action reviews of the response to Harvey. The Hurricane Response Re-Entry plan will be updated to reflect the lessons learned and improve TxDOT's response to future hurricanes. TxDOT also evaluated roadways that have repeatedly flooded during rain events to determine if the roadway could be improved to mitigate future flooding.<sup>27</sup>

In general, FHWA emergency relief program funds are for the use of restoring a road to its pre-disaster condition. However, if the road's pre-disaster condition leaves it vulnerable to future damage, preventative measures may protect the road from upcoming weather events. FHWA emergency relief program funds may be used to rebuild damaged highways in a manner that may prevent damage from future extreme weather events—as long as the rebuilding is consistent with current standards and if the improvements are found to save emergency relief funds over time.

## **REGIONAL IMPACTS (Metropolitan Planning Organizations)**

### **Houston-Galveston Area Council (H-GAC)**

Over the seven day duration of Hurricane Harvey, the 13 counties served by the Houston-Galveston Area Council experienced record rainfall as did much of Southeast Texas. Rainfall of over 50 inches was experienced in Harris, Brazoria and Galveston Counties with more than 30 inches of rainfall in Fort Bend, Waller, Montgomery, Liberty and Chambers Counties. These eight counties comprise the metropolitan region for which H-GAC is the Metropolitan Planning Organization.

As a consequence of Harvey's rainfall, passenger and freight movement across the region was

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<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

severely disrupted. Due to the frequency and severity of flood events, over \$3.1 billion in potential investment was identified to substantially mitigate the flood risk to critical regional and local highways.<sup>28</sup>

#### ***Impact on State Roadways - TxDOT Houston District***

At a meeting in September 2017 with H-GAC and TxDOT's Houston District, it was reported that 486 high water locations had been identified during Harvey within its six counties. 300 local TxDOT employees as well as employees from other TxDOT Districts unaffected by Harvey responded during recovery efforts.

TxDOT crews also performed disaster debris removal on local roads in Harris and Montgomery Counties and the City of Houston. Other recovery efforts included:<sup>29</sup>

- 4 emergency maintenance contracts awarded to restore operations of TxDOT system;
- 3 emergency change orders negotiated to repair critical damages;
- Emergency Contracts of \$8 million;
- Emergency change orders of an additional \$4 million;
- TxDOT FHWA Emergency Relief of \$3 million;
- FEMA debris removal and a FHWA Emergency Relief assessment were underway.

Emergency repairs completed or underway at the time of the meeting included<sup>30</sup>:

- San Jacinto River at I-69 concrete barrier displacement;
- Washout at FM 762 of culvert system;
- Repair of Beltway 8 frontage Road at Boehme Drive (sinkhole under the frontage roads and water pumped out of Beltway 8 main lanes to restore service); and
- Repairs to 1000 signal systems.

*(All repairs have been completed to date)*

#### ***Impact on State Highways: Beaumont District***

Maintenance, operation and construction of State roadways in Liberty and Chambers Counties is performed by TxDOT's Beaumont District. During Harvey, 92 roadway sections closed or flooded in the two counties. The Harvey impacts included:<sup>31</sup>

- 35-37 miles of I-10 closed in Chambers County;
- FM 787 at Trinity River sheet piling damage but no right-of-way above water to perform repairs;
- Flooding of Hwy 146 in Mount Belvieu;
- FM 2090 at county line pavement washout;

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<sup>28</sup> Senate Committee on Transportation hearing, Nov. 15, 2017 (written testimony of Loyd Smith, Harris County Engineering Department)

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

- Multiple locations on all major arterials experienced more than 18-inches of standing water;
- A “portable dam” was used to re-open I-10 at Cedar Bayou (51.9 inches of rain) during the event; and the
- TxDOT Anahuac Maintenance Section flooded and was relocated to Chambers County Airport.

Repair costs by TxDOT in Liberty and Chambers Counties were estimated to include<sup>32</sup>:

- FM 562 (cave in, closed) –\$200,000;
- FM 787 (Trinity River migration/erosion, one way traffic) - \$40 million to extend bridge;
- FM 1985 (bridge abutment damage, closed) - \$250,000; and
- FM 2090 (bridge approach damage, closed) - \$300,000.

### ***Candidate State Roadways for Elevation***

Because of their importance to public safety, mobility, and the state and region’s economy, TxDOT has identified a list of roadways which should be considered for additional flood mitigation. Many of these roadway segments were also flooded by one or more recent flood events (Tax Day Flood, Memorial Day Flood, Hurricane Ike, Tropical Storm Allison, etc.).

The cost estimates to elevate certain state roadway segments above flood levels is at a value of almost \$2.6 billion.<sup>33</sup> It should be noted that roadway elevation may not be the only, best or preferred strategy for mitigation of flooding on critical roadways. Improved capacity for regional and/or localized flood detention, improvements to reservoir capacity, reservoir management and other flood control strategies should be examined as well.

### ***Additional Roadway Infrastructure Impacts Identified by Local Governments and Other Transportation Agencies***

The total estimate of flood related highway needs identified by TxDOT, cities and counties in the eight metropolitan counties is in excess of \$3.1 billion.<sup>34</sup>

The following comments were received by local governments and other transportation agencies:

#### **City of Houston:**

- More than 200 traffic signals were out of order following Harvey and many have or must be replaced;
- Many traffic signal cabinets have been replaced thanks to additional cabinets from Austin and Fort Worth (similar recognition of assistance with replacement traffic control equipment from local governments in less affected Texas cities and counties was made by other local governments

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<sup>32</sup> *Id.*

<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

attending the September MPO meeting);

- 1400 bridges have been inspected; no major structural damage;
- Some sanitary sewer lines beginning to collapse post Harvey and will need repair/replacement;
- Yale Street Bridge over the White Oak Bayou flooded.

#### **Metropolitan Transit Authority of Harris County (METRO)**

- Moved 15,000 people and medical personnel to and from shelters;
- Used preventive measures to forestall as much damage to buses as possible;
- Losses and costs of about \$17 million to METRO.

#### **Port of Houston/Port of Freeport**

- Emergency procedures in place ahead of storm; Ports were prepared and moved commerce and vessels out of the harbors in coordination with the Coast Guard and Corps of Engineers;
- Ceased operations on August 24;
- Not a wind event for the ports, so minimal damages to facilities;
- Coordinated order of vessel sailings as improvements happened;
- Experienced lots of shoaling, requiring additional dredging;
- Channels were checked for submerged vessels and debris.

#### **South East Texas Regional Planning Commission (SETRPC)**

The South East Texas Regional Planning Commission (SETRPC) serves as the Metropolitan Planning Organization (MPO) for Jefferson, Orange, and Hardin Counties.

#### **The Region**

The three-county region covers the corporate limits of the cities of Beaumont, Bevil Oaks, Bridge City, China, Groves, Kountze, Lumberton, Nederland, Nome, Orange, Pine Forest, Pinehurst, Port Arthur, Port Neches, Rose City, Rose Hill Acres, Silsbee, Sour Lake, Taylor Landing, Vidor, and West Orange. Due to the predominance of the petrochemical industry and its significance as major manufacturing and industrial centers, the larger cities of Beaumont, Port Arthur, and Orange are often referred to as the “Golden Triangle”, home to multiple oil refining and petrochemical manufacturing facilities, four ports, Lamar University, Lamar State College-Port Arthur, Lamar State College-Orange, Lamar Institute of Technology, and numerous healthcare institutions.<sup>35</sup>

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<sup>35</sup> *Senate Committee on Transportation hearing, Nov. 15, 2017 (written testimony of Bob Dickinson, South East Texas Regional Planning Commission)*

## Impact of Hurricane Harvey



Southeast Texas was severely affected by the destruction of private property and damage to state, county, and city infrastructure. The hurricane brought over 60 inches of rain which caused flooding that lasted for more than five days resulting in the major connectors to the community, I-10 and U.S. 69 North, being shut down for an extent of time isolating travel in and out of the area.<sup>36</sup> It took more than 10 days

for freight traffic to resume and deliver much needed supplies.

Water, fuel, and other provisions were airlifted into the three-county area. Transportation was brought to a standstill due to multiple roads being under water and for many days the operations of area ports, railroads, freight carriers, and the delivery of goods by truck ceased due to the impassible roadway movement.<sup>37</sup>

### Impacts on Infrastructure

Much of the infrastructure systems had damage, examples are listed<sup>38</sup>:

- The damage to roadway network included debris removal and cleaning.
- The damage to rail network included debris removal and clearing the tracks for safe movement.
- Infrastructure damage at the ports ranged from security and electrical malfunctions, facilities and warehouse repairs, to major shoaling and obstruction in waterways and channels. The closure of waterways and later draft restrictions had a significant impact on the ports both operationally and economically. Preliminary cost of repairs at the public facilities of the Port of Beaumont is estimated at approximately \$6 million.
- Most ports experienced significant economic loss attributed to channel closures and later reduced drafts due to shoaling. The Port of Beaumont reported \$4.88 million in losses for each day that its facilities were not in operation.

### Short Term Needs

SETRPC needs to update its ITS regional architecture to ensure interoperability of traffic signals, dynamic message signs, and traffic operations. This will help to improve communication and coordination in the event of future disasters.

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<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

Travel patterns have changed due to the number of displaced residents and it is reflected in the increased traffic volumes on U.S. 69 between Beaumont and Port Arthur and on IH-10 through Beaumont during peak commuting hours.<sup>39</sup>

Two interchanges have been identified along the I-10 corridor as critical assets that require immediate attention. The interchanges are I-10, US 69, US 96.<sup>40</sup> The reconstruction cost will be around \$400 million. Improvements will strengthen reliability and resiliency, and help minimize the impact of any future disaster or event that would increase the amount of traffic in these two heavily traveled areas.<sup>41</sup>

Currently, there is a Congressionally authorized channel improvements project in the Sabine-Neches Waterway which assists the Port of Beaumont and the Port of Port Arthur for \$1.1 billion. The Sabine-Neches Navigation District estimates that if its deepening project had been constructed prior to Harvey, the waterway would have had only five days of draft restrictions at two feet per day.<sup>42</sup> The draft restrictions imposed due to extreme shoaling resulting from Harvey continue to restrict the ability of the Sabine-Neches Waterway to deliver fuel to the nation, energy exports to global markets, and efficiently deploy military cargoes to foreign theaters. Had the improvement project been constructed, the impact to navigation may have been reduced by 88 percent.<sup>43</sup>

Additionally, if the channel had been at its authorized 48-foot depth prior to the storm, the shoaling would not have impacted the military's ability to rapidly deploy its tonnage on either contracted or military-owned vessels and the waterway would have been closed to LNG vessels only five days instead of 11 days.

A deepened and widened Sabine-Neches Waterway would have had the capability of holding a greater amount of flood water. The additional volume would have stayed in the waterway bank/boundaries therefore reducing flooding and property damage to residences and businesses.

### **Long Term Needs**

SETRPC plans to identify the most crucial and vulnerable links in the transportation system as part of the long-range transportation plan development process. The goal of this effort is to integrate weather risk and transportation resiliency into the planning process. The task will identify vulnerable and critical links in the transportation system and recommend measures to prevent, mitigate, or adapt to inundation.

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<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*



## Corpus Christi MPO

It is estimated that less than half of the residents of the City of Corpus Christi evacuated for Hurricane Harvey. Had a mandatory evacuation order been issued, an additional 200,000 people would have joined those evacuating Port Aransas, Portland, Ingleside, and other communities in San Patricio County, making Hurricane Harvey experience dramatically different.<sup>44</sup>

During the hurricane, the most limiting features of the transportation system in the metropolitan area were:

### 1. The capacity of SH 358<sup>45</sup>

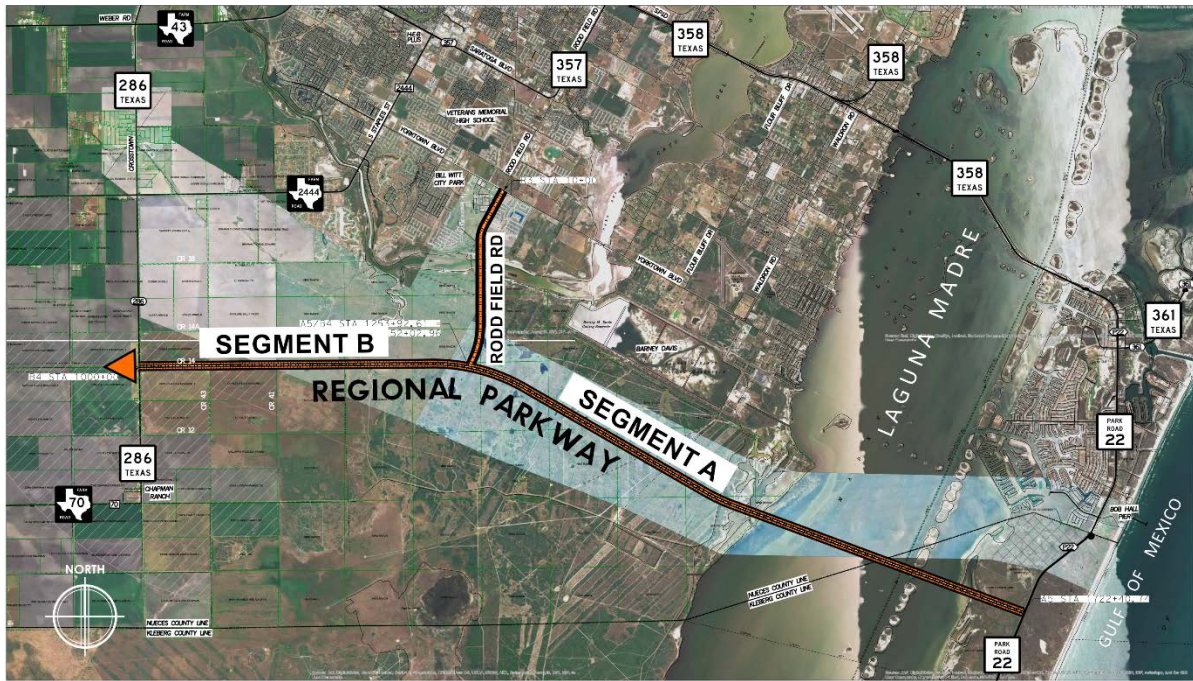
Over the last five years, the Corpus Christi MPO has been planning in earnest a new capacity project that would help offset travel demand on SH 358 and provide critical capacity under a region-wide evacuation scenario. The experience in Corpus Christi during Hurricane Harvey highlighted the importance of this proposed facility, construction of which is not currently programmed in the 25-year planning horizon for the MPO because of funding limitations. A 2013 Feasibility Study found that a regional mobility corridor connecting Park Road 22 on Padre Island to I-37, northwest of Edroy, was merited and feasible if constructed in segments of independent utility. This feasibility study identified a preferred general alignment for the corridor and defined seven segments for the proposed facility, each of which would provide important regional connectivity and, ultimately, facilitate regional evacuation.



A Planning and Environmental Linkages (PEL) study in 2016 identified the highest ranking alternative alignments for two of the seven segments: Segment A, from PR 22 to the proposed extension of Rodd Field Rd. and Segment B, from Rodd Field Rd. to SH 286.

<sup>44</sup> Senate Committee on Transportation hearing, Nov. 15, 2017 (written testimony of Jeff Pollock, Corpus Christi Metropolitan Planning Organization)

<sup>45</sup> *Id.*



While Segment A would provide an evacuation route alternative for Padre and Mustang Islands, including redundancy for the JFK Causeway, completion of any or all of the western segments (Segments B-G) without this second crossing of the Laguna Madre and Gulf Coast Intracoastal Waterway would still help alleviate pressure on SH 358, and would thus promote safe and efficient evacuation.

## 2. The US-181 Nueces Bay Causeway<sup>46</sup>

The portion of US-181 between Rincon Point and Indian Point is susceptible to inundation due to storm surge. Closure of this facility under storm conditions would eliminate one of two evacuation routes out of the City of Corpus Christi and would exacerbate capacity issues on I-37. Upgrade of this facility is not currently programmed in the 25-year planning horizon for the MPO because of funding limitations.

## 3. The confluence of US-181, SH 35, and SH 361 around Gregory<sup>47</sup>

The member agencies in the Corpus Christi MPO have prioritized four critical projects—currently programmed in the TxDOT Unified Transportation Plan (UTP)—to address the capacity and intersection of critical evacuation routes at Gregory; the MPO experience during Hurricane Harvey highlighted the need for the following projects:

Description	Total Cost (M)	Programmed Sources
Construction of a grade separation at the US-181/SH 35 intersection	\$47.34	Categories 4(3c), 12, 1

<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

Operational improvements to US-181 between Portland and Gregory (construct auxiliary lanes and ramp reversals)	\$12.43	Proposition 1
Add capacity to US-181 between FM 3296 and FM 2986	\$11.84	Category 2
Add direct connectors to SH 361 at SH 35 interchange	\$71.01	Category 2

#### 4. The capacity of I-37 north of I-69 and the low water crossing of the Nueces River<sup>48</sup>

The construction of additional capacity on I-37 north of I-69 is currently programmed in the UTP (CSJ 0074-06-241; \$41.42 million; Categories 2, 4(3c), 12). This project includes elevation of the northbound bridge over the Nueces River, but because of funding limitations, this project will not, as designed, get the crossing and adjacent roadway above the 100-year flood elevation. The programmed project does not include elevation of the southbound crossing because of funding limitations.

On the periphery of the metropolitan area, SH 361 on Mustang Island between Corpus Christi and Port Aransas poses safety concerns and potentially capacity limitation under conditions of evacuation. The recent addition of passing lanes by the TxDOT Corpus Christi District was an important interim step as alternatives for the ultimate treatment of this facility are evaluated. Upgrade of this facility is not currently programmed in the 25-year planning horizon for our MPO because of funding limitations.

#### *Industry Impacts*

##### **Union Pacific**

Hurricane Harvey affected the entire operating area in the Gulf Coast region, not just the Houston area. Unfortunately, Union Pacific (UP) had many experiences with bad weather and implemented the following hurricane protocol:<sup>49</sup>



- Positioned generators, crews and recovery supplies
- Cleared cars and locomotives from key areas
- Secured safe accommodations for employees
- Established dedicated UP command center
- Assigned UP personnel to County EOCs
- Proactively shut-down affected subdivisions and yards
- Identified alternative and shared route options
- Moved Spring, TX Dispatch Center to Omaha, NE
- Implemented Houston-area embargoes
- Maintained communications with customers via dedicated Hurricane Hotline, email, up.com, Twitter, etc.

<sup>48</sup> *Id.*

<sup>49</sup> *Senate Committee on Transportation hearing, Nov. 15, 2017 (written testimony of Brenda Mainwaring, Union Pacific/Texas Railroad Association)*

Due to the amount of hurricane experiences over the past decades, after Harvey, UP implemented the following Hurricane Recovery efforts:<sup>50</sup>



- Conference calls around the clock with all UP departments to discuss impacts and develop strategies
- Maintained dedicated Customer Hotline
- Relocated crews to affected areas, and provided Omaha relief teams for managers
- Added locomotives to handle return surge traffic
- Secured necessary fuel to serve customers
- Visually inspected 35,000 cars in the affected area for exposure to flood water
- Targeted repairs to open key routes as quickly as possible
- Collaborated with other railroads to accelerate recovery

### Harris County Toll Road Authority



*During Harvey*

The Harris County Toll Road Authority (HCTRA) manages 745 lane miles (127 distance miles) of roadway, and processes approximately 1.4 million transactions daily. As a fully encompassed county agency, HCTRA reports to the Harris County Commissioners Court.

HCTRA's infrastructure damage was relatively minor in light of Harvey's magnitude and overall Harris County impact.<sup>51</sup> Nevertheless, total storm costs exceeded \$40 million (including 16

days of system-wide toll waivers). Closures, pumping, and cleanup were required at multiple locations during and after the storm.<sup>52</sup>

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> *Senate Committee on Transportation hearing, Nov. 15, 2017 (written testimony of Gary Trietsch, Harris County Toll Road Authority)*

Sustained closures and significant damage occurred at two primary locations. All roadways were fully repaired and operational by September 11, 2017. Expenses associated with Hurricane Harvey fell into three main categories; purchase orders for infrastructure repair, staff overtime, and waived tolls.<sup>53</sup> Waived tolls accounted for roughly \$35 million, but all three categories together totaled \$41 million.<sup>54</sup>

### **Sam Houston Tollway (the “Second Belt”)**

Overflow from the Buffalo Bayou filled the West Sam Houston Tollway under Boheme Dr. (between US 59 and I-10). When the bayou receded to a level that water displacement was possible (September 6th), 22 hours of pumping permitted assessment of the roadway itself. The northbound lanes were undamaged, but the southbound lanes incurred erosion and lane upheaval.



*After Harvey*

### **Houston Airport System**

The Houston Airport System began preparations 120 hours before landfall. The airports have a hurricane plan in place, whether it's a Cat 1, Cat 2, Cat 3, Cat 4, or Cat 5 hurricane, as well as a plan for pre, during, and post efforts. Emergency plans and checklists were utilized and meetings with stakeholders were conducted to ascertain their response posture and coordinate activities.<sup>55</sup> There are numerous airlines at each of Houston's commercial airports - Houston Hobby (HOU) and George Bush Intercontinental (IAH), and a military airport that is located in Ellington Field (EFD). Each airport operates an emergency operations center that is in concert with the city's Office of Emergency Management to coordinate all of the checklists during all phases of any disaster relief. This includes airlines, federal agencies, the Transportation Security Administration (TSA), and Customs and Border Patrol CBP). Each entity attend meetings to discuss plans going forward.

Airport emergency operations centers at George Bush, Hobby, and Ellington were activated in unison with the City of Houston emergency operations center. As part of the emergency plan, employees at each airport were asked to ride out the storm to quickly assess and initiate recovery efforts once the storm had passed.<sup>56</sup> When deemed safe to proceed, initial damage assessments were completed. IAH, HOU, and EFD Air Fields sustained varying degrees of ponding water on runways and taxiways. Notifications were sent to the Federal Aviation Administration offices,

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<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> *Senate Committee on Transportation hearing, Nov. 15, 2017 (oral testimony of Jesus Saenz, Texas Commercial Airports Association)*

<sup>56</sup> *Id.*

closing the airports until further notice. Roads surrounding the airports also had varying degrees of flooding, so access to and from the facilities was nearly impossible, except by high water vehicles.<sup>57</sup> Rainfall at HOU and EFD totaled over 37 inches and was over 31 inches at IAH. Airport facilities received minor water damage, mostly in non-public areas.<sup>58</sup>

Remediation began immediately after the storm passed and efforts to reopen the airports was the priority. The biggest challenge was adequate staff. The Houston Airport system employs over 32,000 badged employees that work at their facilities. In light of road damage and flooding of ingress and egress of roadways and highways into the facilities, access was extremely limited.<sup>59</sup> Hundreds of airport employees, including those working for the City of Houston, airlines, TSA, and CBP were personally impacted by the storm.

Although closed to commercial and general aviation operations, all three airports were open for military, humanitarian, and medical relief flights, with both fixed and rotary wing operations. Airports not only provided fuel and landing areas, but hangers, IT services, and a variety of other needs.<sup>60</sup> IAH resumed air carrier operations on August 31st, and HOU and EFD resumed flight operations on September 2nd, with limited flight schedules and concessions. The airports returned to full service on September 5th. An after action report has been conducted and many areas for improvement have been identified to improve airport response for future events.<sup>61</sup>

## **RECOMMENDATIONS**

### **How Best to Rebuild Assets Efficiently and Effectively**

Addressing the flood risks on the highways identified in this report efficiently and effectively will require careful consideration of the potential benefits from:

- working with federal, state and local partners to reduce regional flood risk through improved capacity for regional and/or localized storm water detention;
- developing of additional reservoir management options;
- increasing storm water detention and drainage capacity on high flood risk roadway segments;
- revising development standards and incentives to encourage open space preservation that decreases storm water runoff; and

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<sup>57</sup> *Id.*

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

- elevation of high flood risk roadway segments, bridges and bridge approaches where adjacent land uses and access to them can be maintained or acquired at reasonable cost.

Where elevation of existing or proposed roadways appears to be the most cost-effective solution, opportunities may exist to modify plans already under development so that the accommodation adds only an incremental cost and tolerable delay to a planned project letting. Because of the potential visual, noise, drainage and right of way impacts to adjacent land uses, early discussions with affected residents and businesses will be essential to achieving timely solutions. In locations where the flood risk has led to a determination that acquisition and removal of existing land uses from the floodplain is necessary, conflicts with existing land uses may be mitigated.

Many strategies may significantly reduce flood risk individually or in combination. Because of the cost and potential for undesired impacts, selective use of roadway elevation may be necessary and should be applied where possible in coordination with larger flood management and mitigation strategies.

## **Funding Opportunities for Texas Ports**

*Review the state's appropriations for Texas' ports and the Ship Channel Improvement Revolving Fund and make recommendations for increased investment to meet future needs.*

### **Legislative Background**

#### **TEXAS PORT AND FUNDING OPPORTUNITIES**

Texas has 11 deep-draft ports, with channels at least 30 feet deep, and six shallow-draft commercial ports. Ten of the state's ports rank among the top 100 U.S. ports in total tonnage, including both deep-draft and shallow-draft channels. Texas Ports have worked hard to promote the importance of our ports to Texas and the national economy.

#### **SHIP CHANNEL IMPROVEMENT REVOLVING FUND**

The 85th Texas Legislature passed Senate Bill (SB) 28, which established the Ship Channel Improvement Revolving Fund (fund) as an account in the general revenue fund. The bill requires the Texas Transportation Commission to establish a revolving loan program to finance qualified projects for navigation districts to deepen or widen ship channels, provided that the project is authorized by the U.S. Congress and meets other standards provided by Commission rule. Money credited to the fund can include gifts, grants, donations, and money appropriated to the Commission for certain purposes, loan repayments and interest earned.

#### **TEXAS MOBILITY FUND**

Established in 2001, the Texas Mobility Fund (TMF) was only authorized to be used for the construction, reconstruction, acquisition, and expansion of state highways; participation by the state in the payment of a portion of the costs of constructing and providing publicly owned toll roads; and other public transportation projects. The TMF was modified in 2013 by House Bill 1, 83rd (3rd Called Special Session) Session, to specifically expand eligible uses of the fund and authorized funds to be expended on qualified port projects.

#### **RIDER 48 (2015)**

In 2015, the 84th Texas Legislature included Rider 48 in the General Appropriations Act (HB 1, 84R, 2015), which authorized the Texas Department of Transportation to use up to \$20 million from the Texas Mobility Fund for the 2016-2017 biennium to provide funding for port capital improvement projects selected by the Port Authority Advisory Committee (PAAC) and approved by the Commission.<sup>62</sup>

This rider marked the first time that explicit funding for port projects had been included in Texas' state budget.<sup>63</sup> Rider 48 included a signing statement from Governor Greg Abbott that recognized the value of ports to the Texas economy but cited concerns regarding the constitutionality of using

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<sup>62</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Dan Harman, Texas Department of Transportation)*

<sup>63</sup> *Id.*



the TMF for port capital projects. Therefore, in implementing Rider 48, TxDOT worked to ensure that all projects selected by the Commission for Rider 48 funding were public roadways that enhanced port connectivity.<sup>64</sup>

### **RIDER 45 (2017)**

In 2017, the 85th Texas Legislature included Rider 45 in the General Appropriations Act (SB 1, 85R, 2017), to once again explicitly authorize funding for certain port projects selected by the (PAAC) and approved by the Commission. Rider 45 authorized TxDOT the use of up to \$20 million in each fiscal year of the 2018-2019 biennium to provide funding for public roadway projects that improve connectivity to Texas ports.<sup>65</sup> Unlike Rider 48 in 2015, the funds authorized this biennium in Rider 45 may come from any available source of revenue, including but not limited to the TMF.

At its January 4, 2018 meeting, the PAAC selected a final list of projects for recommendation to the Commission, totaling \$18.2 million in Fiscal Year (FY) 2018 and \$16.1 million in FY 2019. TxDOT will administer the funds as a grant to local governments.<sup>66</sup>

### **Regional Findings (Port Authorities)**

#### ***Port of Houston Overview***

The Port of Houston is comprised of more than 150 different entities along the upper 26 miles of the Houston Ship Channel. Private industry, including petrochemical manufacturing and refining, comprises the majority of the facilities, but the Port of Houston also includes the organization, the Port of Houston Authority (POHA).

POHA is a governmental entity with a public mission given by the state to support maritime transportation. The Port Authority was created by the Texas Legislature and voters of Harris County over 100 years ago. POHA also serves as the federal government's local partner to help maintain the Houston Ship Channel, and also own or operate seven public terminals that handle roughly 20 percent of the Port of Houston's total cargo. As a government agency, POHA is governed by state law, and is accountable to the local governments in the region which appoint the members of the Port Commission.

The Port of Houston Authority has developed nationally-significant terminals. POHA operates the largest container terminals in the Gulf Coast, handling 95 percent of waterborne containers in Texas and 67 percent for the U.S. Gulf. POHA also has the largest breakbulk terminal in the United States, handling commodities such as steel, automobiles, wind turbine blades, and "project cargo."<sup>67</sup>

All together, in combination with the many private industrial facilities along the channel, this makes the greater Port of Houston the largest port in the nation for foreign waterborne tonnage, and second in the nation for overall tonnage.<sup>68</sup> It is home to the largest petrochemical complex in the United

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<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Roger Guenther, Port of Houston)*

<sup>68</sup> *Id.*

States and is first in national exports, helping Texas achieve distinction as the largest exporting state.<sup>69</sup>

A testament to the success of POHA maritime is the \$265 billion in economic activity the Port of Houston generates in Texas each year, sustaining 1.2 million jobs, and generating \$5 billion in state and local taxes.<sup>70</sup>

### ***Infrastructure/Houston Ship Channel***

It is no surprise that infrastructure is critical to the Port of Houston. As the local partner with the U.S. Army Corps of Engineers to maintain and grow the Houston Ship Channel, they constantly work with the Texas Congressional Delegation and the White House Administration to secure funds necessary for the Corps to dredge this critical national waterway.<sup>71</sup> Continued challenges exist in securing maintenance dredging funds through the Federal Harbor Maintenance Trust Fund.

Once a channel improvement project is authorized by Congress, the typical cost-share is 75 percent federal funds and 25 percent local funds. Projects of this scope and magnitude are expensive.<sup>72</sup> For example, the last improvement of the Houston Ship Channel was opened in 2007. It deepened the channel to 45 feet from the Gulf of Mexico to the Beltway 8 Bridge. The total cost of that project was \$508 million. The federal government paid \$286 million and the non-federal share was \$222 million.<sup>73</sup> It is worth noting that the infrastructure package proposed by the White House on February 12, 2018 would flip that cost sharing arrangement to 20 percent federal and 80 percent local.<sup>74</sup>

The federal process can be too cumbersome to meet the demands of the marketplace. As a result, the Port of Houston Authority recently completed improving Bayport and Barbours Cut channels with their own funds.<sup>75</sup> Both were federal channels, but POHA needed to deepen them from 40 to 45 feet in order to accommodate larger vessels that were coming faster than the potential 10-plus years it might take to authorize and fund a federal improvement project.<sup>76</sup>

Keeping the Houston Ship Channel deep and wide is essential to remain competitive with other U.S. and world ports.<sup>77</sup> Dredging is crucial to the channel's safety and efficient operation, ensuring that it is a cost-effective link in the supply chain.<sup>78</sup> Ships are getting bigger. The Panama Canal has expanded and is providing significant opportunities for Texas ports to grow.

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<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

It is a worthwhile investment to dredge the Houston Ship Channel to maintain the current flow of commerce as well as stay ahead of the demands of the marketplace.

### ***Infrastructure/Freight Mobility***

The State of Texas also plays a critical role in ensuring the efficiency of ports. POHA channels and terminals are only as efficient as the rest of the transportation network.

According to the Texas Freight Mobility Plan, in 2014, more than 2.6 billion tons of freight were moved in Texas, and it is projected that between 2014 and 2040, total tonnage in Texas is expected to increase to 3.8 billion tons.<sup>79</sup>

Texas is in the midst of an energy renaissance. With affordable natural gas, the Port of Houston has seen more than \$50 billion of capital investments in facilities and domestic manufacturing, much of this in petrochemical manufacturing.<sup>80</sup>

This growth means jobs, exports, and other economic benefits for Texas, and the transportation network needs to be ready to meet this demand.

Sometimes a critical link in the supply chain is a local roadway that connects a terminal to a state highway or interstate. Local governments may not have the resources necessary to make these investments. Particularly in the case of POHA container terminals, which handle 35,000 truck visits each week, the efficient flow of this commerce over the roadway is critical.<sup>81</sup>

### ***Texas Ports for Texas Exports***

The Port of Houston is constantly working to attract business and improve its terminals to meet market demands. For many businesses, transportation infrastructure and access to the global marketplace through ports are important to their business plans and growth strategies.

There is significant investment and growth in petrochemical manufacturing in Texas. The increase in exports of plastic resins is certain over the next few years, so the Port Authority is building additional container yards at its Bayport container terminal and reconfiguring its pioneering Barbours Cut Terminal for increased container capacity.<sup>82</sup>

East Asia trade lane has grown rapidly over the last decade, and will continue to do so. These all-water services via the Panama Canal to Houston are a strongly competitive option to the alternative route of exporting these Texas-made petrochemical products through West Coast ports via rail.<sup>83</sup>

### ***Innovation/Freight Shuttle***

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<sup>79</sup> <http://ftp.dot.state.tx.us/pub/txdot/move-texas-freight/studies/freight-mobility/2014/plan.pdf>

<sup>80</sup> Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Roger Guenther, Port of Houston)

<sup>81</sup> *Id.*

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*

It is also imperative to explore and invest in new technologies and freight alternatives, as well as continuing to prioritize and invest in the freight network. The Port of Houston Authority is currently evaluating the feasibility of an innovative technology related to their container terminals.

The Freight Shuttle System concept was developed at the Texas A&M Transportation Institute for the purposes of finding a low-emissions alternative to moving freight and relieving congestion created by trucks in heavy freight corridors. The Freight Shuttle would move truck trailers up to 53 feet, domestic intermodal containers up to 53 feet, and all sizes of ocean shipping containers via emissions-free, electric-powered transporters on elevated guideways in the medians of highways or other rights-of-way over distances of up to 500 miles. The concept is based on a patented application of existing technologies.<sup>84</sup> Freight Shuttle is a first-of-its-kind energy efficient, low emission, freight-only transportation system.

### ***Port of Corpus Christi Overview***

Port of Corpus Christi Authority is the Nation's fourth largest seaport in total tonnage, moving over 100 million tons in 2017. The Port of Corpus Christi is an economic engine for the South Texas Coastal Bend, the State of Texas, and the Nation.<sup>85</sup> Seaport cargo activity accounts for 26 percent of U.S. GDP, over 23 million American jobs, and generates over \$320 billion annually in federal, state and local tax revenues. The 12 Texas public Port Authorities represent over five million jobs, nearly 235 billion in personal income, and over \$1.1 trillion in annual economic output.<sup>86</sup>

Since the export ban on U.S. produced crude oil was repealed in December 2015, the Port of Corpus Christi has exported over \$6 billion of crude oil to global trading partners, and currently is the largest export port of U.S. produced energy in the Nation. The Port is one of two National Strategic Military Seaports in Texas in support of the U.S. warfighter overseas. As a major economic engine, the Port of Corpus Christi supports over 80,000 direct jobs in the Coastal Bend alone and over one million indirect and induced jobs nationwide, with over \$150 billion in economic output annually for the United States.<sup>87</sup>

Over the past decade the Port of Corpus Christi has attracted over \$50 billion in privately funded industrial investment to the Coastal Bend - more investment than some entire states. These large-scale, job-creating projects include significant foreign direct investment, as well as American companies placing their hard-earned capital in South Texas.<sup>88</sup> They made their investment decisions based on a winning formula for success, a formula that includes close proximity to the soon-to-be 54 foot deep Corpus Christi Ship Channel, the lifeblood of the Port; the availability of abundant, competitive energy supplies; the availability of low-cost land

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<sup>84</sup> <https://tti.tamu.edu/freight-shuttle/>

<sup>85</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Sean Strawbridge, Port of Corpus)*

<sup>86</sup> *Id.*

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

for development; and the fact that the Coastal Bend still enjoys its air attainment status. Ports clean air saves these companies millions of dollars a year in credits.<sup>89</sup>

The Port of Corpus Christi is at the forefront of this energy renaissance as more oil and gas production from the Permian Basin must find a clear path to the consumer markets overseas.

The Port of Corpus Christi is not immune from funding shortfalls, and is currently at a time when the need for infrastructure investment has never been higher.

### ***Port of Beaumont Overview***

Beaumont, located in Southeast Texas, is experiencing unprecedented growth in their three-county region and is being proactive in its approach from a port perspective. At the public port facilities of the Port of Beaumont, a number of significant projects that will benefit Southeast Texas tremendously upon completion and with the recent passing of an \$85 million bond referendum, Beaumont residents have once again demonstrated they are invested in the growth of the region via Port infrastructure improvements.<sup>90</sup> One significant project is the rebuild of Docks 2, 3 and 4, which failed in 2012 due to aging infrastructure. The failed docks will be replaced with one state-of-the-art 1,400 linear foot dock with rail connectivity. The significance of this is that it will increase the port's capacity by 25 percent.<sup>91</sup> Statewide, Texas ports have hundreds of projects in their pipelines waiting to be funded.

The Port of Beaumont is fortunate to be located on the Sabine Neches Waterway. The waterway is the third largest in the nation in terms of tonnage, the largest exporter of LNG in the country, home to 55 percent of the nation's strategic petroleum reserves, the number one refiner of jet fuel in the nation and the number one bulk liquid cargo waterway in our nation's infrastructure.<sup>92</sup>

Fortunately, the Sabine-Neches waterway has a "shovel-ready" project to deepen the ship channel to 48 feet. Congress included the project in the 2014 Water Resources Reform and Development Act, however the Sabine Neches Navigation District is still awaiting federal appropriations.<sup>93</sup>

The revolving loan program for channel improvements provided for in Senate Bill 28, if funded, would afford the Port the needed support from the state to ensure the deepening project moves forward to completion, which will allow the Port to capitalize on its unique position in the petrochemical, agricultural, and industry markets and the growth the Port is poised to experience.<sup>94</sup>

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<sup>89</sup> *Id.*

<sup>90</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Chris Fisher, Port of Beaumont)*

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> *Id.*

<sup>94</sup> *Id.*

It will also assist the Port of Beaumont, the number one strategic military outload port in the nation, and Port Arthur, as strategic seaports, in supporting national defense efforts.

For example, over the last five years the Port of Beaumont invested approximately \$50 million in the development of basic infrastructure (dock, rail, roadway and utilities) on a 240 acre tract of property in Orange County.<sup>95</sup> This facility is developing into a diversified liquid hydrocarbon transportation facility that has attracted over \$600 million in private investment with approximately \$1 billion more expected in the next several years. This project alone has leveraged the Port's public investment by 12 to one in private investment dollars. These private investment dollars, and the subsequent commerce and jobs they generate when turned over in the Texas economy, considering the direct, indirect and induced economic impacts, provides an extremely positive benefit. It has been 55 years since improvements were made to waterway.<sup>96</sup>

### ***Port Freeport Overview***

Port Freeport is a fast-growing Texas port for many reasons with the growth of production from shale oil and gas being one and proximity to a large consumer population another. Within Brazoria County, approximately \$26 billion of new projects (Dow, BASF, Phillips 66, Freeport LNG, Tenaris) are coming on line or being constructed, of which \$18.5 billion are along the Channel. Port Freeport's economic impact and the jobs created are growing dramatically, having doubled since 2012.<sup>97</sup>

This is further evident in the 2016 sales tax receipts of \$31 million in Brazoria County, which have also doubled during that same period. Freeport wants to ensure that waterways in Texas are adequately maintained at their designed depth and width and investments are made in modernizing and improving these vital waterways. Bottom line, the waterways were not designed for the size of vessels in service today.

Ports work every day with the U.S. Army Corps of Engineers to support maintenance dredging of our channels. Ports face significant challenges in these efforts. The Corps relies on federal appropriations, and must compete with the many other pressing issues facing Washington. Even the money collected by the federal government through the Harbor Maintenance Tax is not fully appropriated for its intended purpose of maintaining the nation's waterways, but are instead spent on other federal programs. While the Texas Congressional Delegation works closely with ports to address this issue, and there has been much progress made in recent years, it remains an ongoing effort and challenge.

Similarly, the federal government authorizes improvements to these waterways. As state navigation districts, many serve as the local sponsor for our various federal waterways. As a result,

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<sup>95</sup> *Id.*

<sup>96</sup> *Id.*

<sup>97</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Phyllis Saathoff, Port of Freeport)*

ports are responsible for sharing the cost of approved channel improvements and modernizations with the federal government.<sup>98</sup>

The Freeport Harbor Channel is one of five congressionally authorized channel improvement projects in Texas. The Freeport Harbor Channel Improvement Project was authorized by Congress in 2014 and will deepen the Freeport Harbor Channel from its current depth of 45 feet to permitted depths of 51-55 feet making it the deepest port in Texas.<sup>99</sup> Additionally, the project includes enhancements to the upper turning basin, as well as widening of the channel and lower bend, making it easier and safer for modern ships to navigate the channel.<sup>100</sup> Project construction is expected to begin in 2020 and take approximately five years to complete if timely funded. It will have state and national significance in providing a lower distribution cost for container cargo for the southern and central U.S. markets including Dallas-Fort Worth.

Additionally, larger tankers carrying LNG, crude oil and petroleum derivatives will be able to deliver Texas petroleum produced in Neo Panamax quantities to all reaches of the globe. Due to a shorter channel transit from open sea to the inner harbor, the costs to make these improvements and for future maintenance dredging will be significantly less when compared to other ports with longer channels. This federal cost-shared project will cost \$295 million, with the federal portion being \$165 million and the Port/local sponsor share being \$130 million.<sup>101</sup>

In addition to the Freeport Harbor Channel Improvement Project, Port Freeport has other strategic infrastructure initiatives underway. Port Freeport has filed an application for a permit to construct the next phase of its container terminal. The container terminal site is approximately 250 acres. The build-out design for the container terminal calls for three berths of 3,200 linear feet total and 50+ foot depth.<sup>102</sup> Another 200-acre site is being developed for rail-served warehousing and distribution with 21,000 feet of rail currently under construction.<sup>103</sup>

Brazoria County, Fort Bend County and Port Freeport have also embarked on what could be one of the most significant infrastructure development projects in the State, the Texas Trade Transportation Corridor project. In addition to supporting the Texas Department of Transportation projects to widen SH36 to four lanes, these entities have formed a special district charged with developing a greenfield rail line from Freeport to Rosenberg.<sup>104</sup> With this rail link, Port Freeport will have connection to three Class 1 railroads. The Brazoria Fort Bend Rail District was recently awarded a grant from the Texas Department of Transportation to study the feasibility of this

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<sup>98</sup> *Id.*

<sup>99</sup> *Id.*

<sup>100</sup> *Id.*

<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> <https://www.houstonchronicle.com/neighborhood/fortbend/news/article/Fort-Bend-Brazoria-eye-new-freight-line-from-port-6411037.php>

<sup>104</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Phyllis Saathoff, Port of Freeport)*

project. With the expanded Panama Canal, the economics change has allowed Texas ports (e.g. Port Freeport) to play an ever-increasing role in global trade delivery to Dallas -Fort Worth and Middle America. For this opportunity to materialize, we must develop and enhance the infrastructure necessary to access Texas’s largest Inland Ports (Dallas-Fort Worth and San Antonio).<sup>105</sup>

### ***Port of Brownsville Overview***

The Port of Brownsville is strategically located as the only deepwater U.S. port directly on the U.S./Mexico border. The port is the largest land-owning public port authority in the nation, and plays a vital role in the movement of cargo domestically between the United States and Mexico, and other nations worldwide. Foreign Trade Zone (FTZ) No. 62 is the port’s FTZ and consistently ranks in the top three of more than 195 FTZs nationwide for the value of foreign exports. FTZ No. 62 registered more than \$2.7 billion in the value of foreign exports in 2016, ranking second nationally.<sup>106</sup> FTZ No. 62 moves mainly petroleum and steel products. No port in the U.S. moves more steel into Mexico than the Port of Brownsville.<sup>107</sup>

The Port of Brownsville is well known as the premiere port in the U.S. for ship recycling. Obsolete U.S. Maritime Administration and U.S. Naval vessels are sent to Brownsville for steel recycling.

The Port of Brownsville is also homeport to the largest domestic oil rig fabricator in the U.S. Keppel AmFELS is a full service facility that fabricates oil rigs from design to delivery. Keppel recently announced contracts to construct two 774 foot-long container ships valued at more than \$400 million, with options to build two more.<sup>108</sup> This activity introduces a new industry of ship building to the State, with initial sector employment expected to exceed 3,000 high paying jobs.

Additionally, 2018 is expected to be a pivotal year in the port’s 82-year history. Three LNG liquefaction projects, two potential steel mills, Valley Crossing Pipeline, and other major investors are all expecting to, or are already moving forward on projects valued at more than \$43 billion.<sup>109</sup>

The Port of Brownsville is the undeniable champion of the region’s economic vitality. Even without these remarkable new industries, attracted by abundant developable land on or adjacent to the port’s deep-water channel, the Port of Brownsville achieved both record revenues and tonnage for FY 2017.<sup>110</sup>

The reality is there are challenges of sustainability, requiring modernization, expansion and channel deepening. In fact, the U.S. Congress authorized the port’s channel deepening project –

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<sup>105</sup> *Id.*

<sup>106</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Patty Gonzalez, Port of Brownsville)*

<sup>107</sup> *Id.*

<sup>108</sup> *Id.*

<sup>109</sup> *Id.*

<sup>110</sup> *Id.*



improving the port’s channel depth from 42 feet to 52 feet – in December of 2016.<sup>111</sup> This project alone is expected to exceed \$200 million dollars, and is the responsibility of the project sponsor – the Port of Brownsville. Combined with correlated and necessary dock and infrastructure improvements associated with the channel deepening, add another \$60 million. These are big challenges for an emerging port like Brownsville. The Port itself is presently investing millions in new docks, roads, rail and transitional storage capacity to meet the growing demands of existing customers.<sup>112</sup>

Neighboring Gulf of Mexico states offer surprisingly more financial support for their ports, even though Texas is the nation’s leading state for all exports.<sup>113</sup> Texas is also the nation’s leading energy export state because of the 15 ports in Texas.<sup>114</sup>

### ***Port of Galveston Overview***

Situated on Galveston Island two miles off the Texas coast on the Gulf of Mexico and approximately 50 miles south of Houston, the Port of Galveston is Texas’ oldest commercial enterprise. Galveston was used for shipping as long ago as 1820 and on October 17, 1825, became a provisional port and customs entry port by Act of Congress in Mexico.<sup>115</sup>

The Galveston Wharves (“Port of Galveston”) was created by city ordinance in 1940 as a separate utility of the City of Galveston to manage, maintain, operate and control all existing port properties and all additions, improvements, or extensions to such properties. The City of Galveston Charter directs that all City-owned wharf and terminal properties, and all income and revenue there from, is to be set aside, controlled, and maintained and operated by a “Board of Trustees of the Galveston Wharves.”<sup>116</sup>

The Galveston Wharves’ facilities, located at the entrance to Galveston Bay, constitute a large portion of the greater Port complex. This complex is situated on the north side of the island city with property and facilities also located on adjacent Pelican Island.

### ***Cruise Business***

The Port of Galveston is currently the fourth busiest cruise port in North America and ranks 12th in the world’s top 20 cruise ports. For continued growth, and to accommodate larger cruise ships cruising out of the Port, expansion of Cruise Terminal Two was necessary.<sup>117</sup> The additional square footage allows more room for passenger processing and permit servicing vessels carrying in excess

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<sup>111</sup> *Id.*

<sup>112</sup> *Id.*

<sup>113</sup> *Id.*

<sup>114</sup> *Id.*

<sup>115</sup> *Senate Committee on Transportation hearing, Feb. 21, 2018 (written testimony of Rodger Rees, Port of Galveston)*

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

of 4,000 passengers. Included in this expansion are various waterside improvements including dock and wharf improvements, additional moorings and updates to the existing structure.<sup>118</sup>

In 2017, the Port reached a record high with 1,961,549 passenger movements through the port, which includes passengers embarking on and disembarking from the port. This number represents an increase of 7.5 percent compared to 2016. Total sailings increased from 235 in 2016, to 255 in 2017, and are projected to be 308 this year. Cruise passenger volumes is projected to increase further in 2018, with approximately 2,068,000 passenger movements projected to embark from the port this year. This will be an additional 9.1 percent increase in passenger embarkations from year-end 2017 to year-end 2018.<sup>119</sup>

The Port of Galveston is an important contributor to sustaining a diverse and healthy state economy with cruise operations producing \$1.42 billion in direct spending and 25,166 jobs generating \$1.62 billion in income. Texas accounted for 6.6 percent of the cruise industry's direct expenditures, 6.5 percent of the cruise industry's total employment impact and 7.9 percent in income impact.<sup>120</sup>

### ***Cargo Business***

The Port of Galveston is a significant contributor to the local, regional and Texas state economies. The Port, through its activities, provides an annual estimated economic impact to the State of Texas of over \$2.3 billion, and generates approximately 13,890 jobs and \$869.6 million in income for Texas workers.<sup>121</sup>

The Port realized an increase in general cargoes to approximately 97,296 million short tons during 2017, a 58.38 percent increase over the previous year.<sup>122</sup> This increase was primarily due to wind turbine and wind energy related cargo moving through the Port, including several large wind energy projects shipped through the Port to destinations in four different states. The wind energy related cargo continues to be attracted to the Port of Galveston because of a mini public-private partnership investment made in the Port's facilities.

In early 2012, a Port customer involved in wind turbine manufacturing was looking for a rail-related logistics solution as an alternative to trucking. The Port of Galveston, together with BNSF Railway Company and the Port's short line/terminal railway operating tenant, Galveston Railroad, L.P., invested approximately \$1.5 million in building a rail car storage track system to handle over-dimensional cargo north of the ADM Export Grain Elevator in the Pier 30-34 area.<sup>123</sup> The rail yard allows an entire unit train of over-sized wind turbine tower components to be put together on the

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<sup>118</sup> *Id.*

<sup>119</sup> *Id.*

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> *Id.*

<sup>123</sup> *Id.*

cargo terminal for movement inland or received for export, which provides significant time and cost savings to the manufacturers and shippers of that cargo.

In addition to the wind energy-related cargo, Roll-On/Roll-Off (Ro-Ro) cargo increased at the Port to 39,864 short tons in 2017, a 22.48 percent increase from approximately 22,950 short tons in 2016. Ro-Ro cargo activity at the Port has developed as a significant niche since the mid-1990's, when the Port started with one ocean carrier calling once or twice per month. Today the Port has six regular major Ro-Ro ocean carriers calling at the Port with 15-20 port calls per month, depending on schedules, with cargo service to and from countries (export and import cargo) around the globe, including in Europe, Africa, South America, the Mediterranean and the Asia-Pacific region.

Another area of continued cargo growth for the Port in 2017 was new vehicle imports. The BMW Vehicle Processing Center located at the Port's Pier 10 Ro-Ro Terminal was inaugurated early in 2016 and handled 15,933 new BMWs and Minis through the end of 2016.<sup>124</sup> In 2017, imports of BMW and Mini vehicles increased 8.04 percent to more than 17,200 vehicles. New vehicles are imported from Northern Europe, South Africa and Brazil.<sup>125</sup>

It is estimated that 11,375 Texas jobs are in some way related to Port activities generated by cargo handled at the public and private marine terminals. In 2015, marine cargo activity at the public and private terminals generated a total of \$2.1 billion of total economic activity in the State of Texas.

## CONCLUSION

While the port enjoys strong bi-partisan support from members of Congress, securing funding is a tremendous challenge. Waterways are primarily a federal responsibility, as most Texas ports and navigation districts were created to serve as the partner with the U.S. Army Corps of Engineers to facilitate commerce along these channels. As part of that mission, Texas ports have significant responsibilities to fund many activities related to their waterways and invest millions in other landside infrastructure necessary to facilitate the handling of cargo on vessels and movement of cargo to and from our ports.

Make no mistake, Texas is in competition with other states for more business investment, and the State is not immune from today's funding challenges facing the State's and Nation's infrastructure projects. While other seaports in the country benefit from state funding to carry out infrastructure improvement projects, Texas does not provide a recurring state funding source to aid in the development of seaports. In turn, seaports in Texas are somewhat disadvantaged when competing for new business opportunities. Goods movement is about fluidity and optionality, and shippers will select a transportation routing based in part on the

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<sup>124</sup> *Id.*

<sup>125</sup> *Id.*

economics of their supply chain. Ports with deeper channels, sufficient dockside infrastructure and improved road and rail connections typically thrive over those with insufficient capabilities.

The Ship Channel Improvement Revolving Fund created in the last session was a huge step. If funded, it would provide critical assistance to Texas Ports as they work to widen or deepen their federal channels. Other competing maritime states along the East Coast are not waiting for the federal government and are advancing funding for projects to deepen and improve their ports and waterways. The Legislature needs to work together to insure Texas has the waterway infrastructure needed to remain competitive and is prepared for the continued growth in oil and gas exports.

However, the state has done a great job in providing funds for ports outside the gates. As previously described the State awarded \$18.2 million in Fiscal Year (FY) 2018 and \$16.1 million in FY 2019 with Rider 45. And in the prior session, the state authorized TxDOT to use up to \$20 million from the Texas Mobility Fund (TMF) for the 2016-2017 biennium to provide funding for port capital improvement projects.

### **Recommendations**

Expand SB 28 by amending Section 55.001 (4-a) of the Transportation Code, by including language directing that eligibility for funds shall include all Texas ports, whether a navigation district operating under the Water Code or a port governed by the Transportation Code. This would allow Port of Galveston to be eligible for critical dredging funds to maintain sufficient channel depths and infrastructure projects.

The legislature should continue to monitor this issue. A study comparing best practices across the country would also be beneficial.

## **Project Acceleration**

*Study and make recommendations regarding segregating state and federal transportation funding to accelerate project delivery.*

Transportation projects take many years to develop and construct. This involves the design, engineering, public involvement, right-of-way acquisition, environmental analysis and oversight of highway construction projects. Funding for a transportation project often comes from multiple revenue sources over a period of years with different permissible uses.

## **BACKGROUND**

Funding is the key to project acceleration. Traditional sources of TxDOT funding have similar rules and guidelines. Deposits occur on a monthly basis. Non-traditional sources of funding, state funding sources such as Proposition 1, Proposition 7 and bond proceeds, depend on certain industry markets and legislative decisions. These funds are crucial to the delivery of numerous projects, but they tend to be more difficult to forecast mid- to long-term, making it riskier to commit funds in advance of deposit.<sup>126</sup> This affects the efficiency of project delivery. Non-traditional funds also tend to have varying rules related to their use, which require the funds to be held in separate accounts.<sup>127</sup>

## **FINDINGS**

Would segregating federal funds from state funds assist with project acceleration?

- No, it does not save time.
- It does not reduce unnecessary project scopes.

Do federal funds create project delivery time delays?

- No, TxDOT has assumed certain federal oversight roles, which has increased efficiencies in the project planning process.

Do federal funds create unnecessary project scope?

- No, TxDOT develops the vast majority of projects with the same design and safety standards whether they involve federal funds or not. One exception might be off-system bridge projects.

Would it be effective to pay for projects with only state funds and without the use federal funds?

- TxDOT doesn't believe so. Often times the decision to use federal funds on a project is made very near the time of award. To ensure that Texas commits all of our federal

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<sup>126</sup> Senate Committee on Transportation hearing, April. 24, 2018 (written testimony of Brian Ragland and James Bass, Texas Department of Transportation)

<sup>127</sup> *Id.*

funds available, we must develop our projects to ensure they remain eligible for federal funds.

- Approximately 90 - 95 percent of all TxDOT projects competitively bid for contract in the last five years have been funded in part with federal funds.
- Projects with state-only funding account for only 50 - 80 total projects per year. These projects are often not eligible for federal participation.
- These projects include, but are not limited to, safety treatments, bridge maintenance, and major roadway maintenance improvements to extend the life of a roadway and new roadway construction on low volume roads.

### ***Procedural Efficiencies with Federal Funding – NEPA Assignment***

All federally funded projects require environmental review and approval under the National Environmental Policy Act of 1969 (NEPA). If there is no federal funding or other federal nexus with the project, the project is subject to Section 201.604, Texas Transportation Code, and Chapter 2, Title 43, Texas Administrative Code, which requires a state mandated environmental review. In 2011, the Texas Transportation Code was amended to closely follow the federal environmental process. The time required to complete the environmental process has long been a concern at both the state and federal levels. TxDOT focuses on implementing improvements that streamline the process.

During the 83rd Texas Legislature in 2013, Senate Bill (SB) 466 granted TxDOT the necessary authority to pursue NEPA Assignment. SB 466 is intended to expedite the development and construction of highways and other transportation infrastructure projects by reducing the amount of time it currently takes for TxDOT to obtain approval of environmental documents required under the NEPA and other federal laws.

SB 466 satisfied the requirements in 23 U.S.C. Sections 326 and 327 concerning the terms of delegation, including the requirement that the state waive sovereign immunity from suit in federal court for its NEPA decisions, which will enable TxDOT to obtain authority from FHWA to review and approve environmental documents.

The NEPA Assignment Program has allowed Texas to undertake greater control of the environmental process by allowing TxDOT to assume some of the oversight of the federal government. The Federal Highway Administration (FHWA) assigned TxDOT some FHWA NEPA responsibilities for environmental review, consultation and other actions required under federal environmental law that pertain to the review or approval of specific highway projects. The responsibilities were assigned under the Surface Transportation Project Delivery Program and codified in Title 23, United States Code, Chapter 327. Texas is one of six states in the country with NEPA assignment responsibilities. NEPA assignment has allowed TxDOT to

reduce the processing time on environmental assessments from 30 months on average to 18 months on average.

### ***Budget Success Story – Highway Bridge Program***

Budget flexibility, in general, allows TxDOT to deliver projects more quickly. One example of this funding flexibility is evident in the Highway Bridge Program (HBP). The HBP is a federal-aid program that provides funding to enable states to improve the condition of highway bridges through replacement, rehabilitation and systematic preventive maintenance. TxDOT has created efficiencies in the HBP by allowing local governments to maximize state and federal funding resources and distribute local cost participation to other areas of regional need.

The Participation-Waived/Equivalent-Match Project Program (PWP/EMP) allows a local government to waive 10 percent of its cost participation requirement in a federal HBP off-system bridge project, if it agrees to use an equivalent dollar amount to improve other deficient structures in its jurisdiction. Many structures that had deficiencies but were not programmed in TxDOT's off-system bridge program have been scheduled for improvements that will increase safety and efficiency. Overall, the program is accelerating the rate at which structurally deficient and functionally obsolete off-system bridges are improved throughout the state.

### ***Federal Funding/Reimbursement***

For many roadway construction projects, federal funds make up 80 percent and the state match is 20 percent. If TxDOT prioritized roadway projects solely with state funds, TxDOT would run the risk that federal matching funds used to construct new projects might no longer be available. Federal funds allocated to Texas could then be redistributed to other states, and the state would lose its share of federal gas tax paid by Texans. Additionally, TxDOT combines federal and state funding in order to be flexible in case planned projects are delayed and contingency projects are needed.

Another reason for blending traditional funding sources has to do with cash flow and guaranteed funding. Traditional highway funding has similar rules for use and is easier to estimate over time. Federal reimbursement amounts are predictable once the initial payments on a project have already occurred.

## **RECOMMENDATIONS**

### ***Budget Flexibility is Key to Project Acceleration***

The TxDOT budget has restrictions. Two primary examples are Rider 3 – Transfer Authority which states TxDOT must receive prior written approval of the Legislative Budget Board to transfer funding among project-related strategies such as project engineering, right of way, construction contracts, maintenance contracts and construction grants and services. The other is Proposition 1 and Proposition 7, derived from different sources, yet have similar characteristics

and spending restrictions. Combining the two budget strategies could accelerate project development and delivery.



## **Toll Road Penalties**

*Review penalty practices employed by toll authorities throughout the state and make recommendations to improve customer service and eliminate unjustified penalties.*

For the purposes of this report, it's important to distinguish the difference between a toll violator and a habitual toll violator. Habitual violator (HV) is defined by Section 372.106, Transportation Code, as someone who has been issued two notices of non-payment with 100 or more events of non-payment within a period of one year. A toll violator is a driver who passes through a toll facility and does not pay for a multitude of reasons. It is important to note that this driver is not repeatedly doing so. The Texas Department of Transportation (TxDOT) and the Texas Transportation Commission (Commission) have limited legal oversight roles for tolling because governing statutes vary for each different type of toll authority in Texas.

## **BACKGROUND**

### **SB 1792 by Watson<sup>128</sup>**

Senate Bill 1792 (SB 1792), passed during the 83rd Legislative Session, helped to augment a Local Tolling Project Entity's (LTPE's) ability to recoup tolls and fees resulting from drivers that repeatedly and knowingly travel on Texas' toll roads without paying. The bill created a new subchapter in Chapter 372, Transportation Code, related to remedies for nonpayment of tolls.

The bill authorizes a LTPE, under certain circumstances, to determine that a registered owner of a vehicle is an HV for the non-payment of tolls and administrative fees. The bill establishes procedures by which the LTPE may make such a determination and provides for notice to the registered owner. The bill also creates an administrative hearing process carried out by a local justice of the peace court (JP) and authorizes the person to seek an appeal of the decision in the applicable county court. Additionally, a LTPE may seek HV remedies against vehicles and owners of vehicles not registered in Texas.<sup>129</sup>

The bill authorizes a LTPE to report the HV determination to a county assessor-collector or the Texas Department of Motor Vehicles (TxDMV) and authorizes a county assessor-collector to refuse to register or renew the registration of a motor vehicle owned by the HV. The LTPE's governing body is also able to issue an order prohibiting the operation of the HV's vehicle on a toll project and provides that violation of the order is a Class C misdemeanor and law enforcement may ticket the HV for violating the ban. A second violation of the prohibition order and second moving violation could result in impoundment of the vehicle, subject to certain personal notice requirements.<sup>130</sup>

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<sup>128</sup> Transportation Interim Report 2013

<sup>129</sup> Senate Committee on Transportation hearing. September 17, 2014 (written testimony of the Texas Department of Transportation)

<sup>130</sup> *Id.*

Additionally, a LTPE can publish online certain information regarding HVs who at the time of publication have unpaid tolls and fees.

### ***NTTA Implementation***

When implemented NTTA was by far the most aggressive in implementing the tools afforded in SB 1792. NTTA has also sent ban notice to certain individuals prohibiting them from using NTTA facilities. Of those who received notice, a large number of motorists have come forward and settled their accounts with NTTA.

### ***TxDOT Implementation***

In early October 2013, TxDOT sent letters to the top habitual toll violators. The letters notified them of a 14 day grace period to settle their outstanding tolls with TxDOT before their names were shared publicly. Then, on Oct. 17, 2013 TxDOT published its first list of names and has updated this list periodically since then.

If the violator resolves the account, TxDOT discontinues the HV process. If there is no resolution after the notice, TxDOT mails a final notice to the violator. The violator then has 30 days from the date the mailing date of the final notice to resolve their account(s). If the customer account is resolved, the HV process is discontinued.

Upon receiving notification from TxDOT, law enforcement and the county tax assessor/ collectors may add the HV information to their prohibition list. While the HV is on a prohibition list, law enforcement may enforce the prohibition on TxDOT-operated toll facilities until the account is resolved. While the HV is on a prohibition list, the county tax assessor/ collector may also deny registration renewal for the vehicle used to incur the violations until the account is resolved.<sup>131</sup>

### ***Habitual Violator Process***

- Chapter 372, Subchapter C, of the Transportation Code sets forth various toll enforcement remedies, including a process for determining “habitual violators” – generally a registered owner of a vehicle who was issued at least two written notices of nonpayment that contained an aggregate of 100 or more events of nonpayment within 1 year (subject to defenses of theft of the vehicle or a lease to a third party);
  - The two written notices must have contained a warning that the failure to pay could result in the exercise of “habitual violator remedies”.
  - After a person fails to pay in response to the two written notices, a toll authority shall notify the person that they have been determined to be a habitual violator, and

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<sup>131</sup> Senate Committee on Transportation hearing. September 17, 2014 (written testimony of the Texas Department of Transportation)

that they have 30 days in which to request a hearing to contest that determination. If a hearing is requested:

- the hearing will be before a justice of the peace in a county where at least 25 percent of the events of nonpayment occurred (note that a justice of the peace court is authorized to adopt administrative hearings processes to expedite these types of hearings);
  - the toll authority must pay a \$100 filing fee; the fee is subject to reimbursement to the toll authority by the habitual violator if the toll authority prevails;
  - the toll authority must show, by a preponderance of the evidence, that (i) the registered owner was issued at least two written notices of 100 or more events of nonpayment within a year (excluding those due to theft or leasing of the vehicle); and (ii) that the total amount due for tolls and fees was not paid in full and remains not fully paid as of the date of the hearing; and
  - an adverse finding (confirming that a person is a habitual violator) is appealable.
- Failure to request a hearing, or the failure to appear for a hearing after one was requested, will result in the toll authority's determination of habitual violator status being deemed final and not appealable.
- Identification of "habitual violator remedies". Once a habitual violator determination has been made (and confirmed through a hearing, if requested), a toll authority may:
- report the habitual violator determination to a county assessor collector or to the Texas Department of Motor Vehicles and request that the vehicle registration (or renewal) be refused (compliance with the request is not mandatory); and
  - adopt an order (by action of its governing body) prohibiting the operation of a vehicle on a toll project of the authority and mail notice of the order to the habitual violator.
    - A person commits an offense (Class C misdemeanor) if they operate a vehicle on a toll project in violation of the order of prohibition.
    - A person may have their vehicle impounded if the vehicle was previously operated on a toll project in violation of an order of prohibition and personal notice was given to the registered owner of the vehicle of the toll authority's intent to have the vehicle impounded for a second or subsequent violation of the order of prohibition at (i) the previous hearing (if any) on habitual violator status; (ii) at a previous

traffic stop involving a violation of the order of prohibition; or (iii) by personal service. Prior to release of a vehicle all impoundment, towing and storage fees must be paid, and the toll authority must make a determination that unpaid tolls and fees have been paid or have been otherwise addressed.

- A process for addressing nonresident violators. A toll authority may serve written notice of nonpayment in person to an owner of a vehicle not registered in Texas. This can include a notice served by an employee of a governmental entity operating an international bridge as a vehicle seeks to enter or leave the state.
  - The notice must include a warning that failure to pay may result in the exercise of habitual violator remedies.
  - Each owner who receives a notice of nonpayment and fails to timely pay the toll and fee commits an offense (each failure to pay is a separate offense – a misdemeanor punishable by a fine not to exceed \$250).
    - A toll authority may seek to exercise habitual violator remedies (including vehicle impoundment) against a nonresident vehicle if: (i) the person is served with two or more notices of nonpayment and the amounts remain unpaid; and (ii) notice of intent to seek habitual violator remedies was served on the person in the same manner as allowed for a notice of nonpayment.
    - A nonresident who receives a notice of intent to seek habitual violator remedies may request a hearing in the same manner as provided for a resident habitual violator.
    - A justice of the peace conducting a hearing against a nonresident violator must find that the person was served with two or more notices of nonpayment and the amounts remain unpaid, and that a notice of intent to seek habitual violator remedies was served.

Section 372.106, Transportation Code, defines a “habitual violator” as someone who has: Been issued two notices of non-payment; 100 or more events of non-payment within a period of one year; received notices that contain a warning that the failure to pay the amounts specified in the notices may result in the toll project entity’s exercise of habitual violator remedies; and not paid the full total amount due for tolls and the administrative fees under those notices.

## **PENALTY PRACTICES BY TOLL AUTHORITIES**

***TXDOT***

TxDOT’s authority is located in Chapter 228, (State Highway Toll Projects), Transportation Code. SB 312 made significant changes to TxDOT’s toll collection, enforcement and Pay By Mail processes. The changes in law made by SB 312 allow TxDOT customers to send a written request for a review of the toll assessments contained in an invoice; limit the amount of the administrative fee to a maximum of \$48 in a 12-month period (\$6 per month); and limit the current \$250 Class C Misdemeanor to one charge per year for a customer that has two or more unpaid invoices. SB 312 allows TxDOT to provide Pay By Mail toll customers the option to receive invoices electronically. The previous law required TxDOT to send paper invoices for all Pay By Mail toll transactions.<sup>132</sup> The changes in law to toll collections, enforcement and Pay By Mail processes made in SB 312 only apply to TxDOT-operated toll roads. On January 25, 2018, the Texas Transportation Commission adopted administrative rules in accordance with SB 312. As of March 1, 2018, the maximum amount of the administrative fee to be charged for failure to pay for the use of a toll road was set at \$4 per month (\$48 per year) as long as a toll remain unpaid.<sup>133</sup>

SB 312 only applies to TxDOT facilities including:<sup>134</sup>

- SH 130 (Austin);
- Loop 1 (Austin) - excludes MoPac managed lanes operated by Central Texas Regional Mobility Authority;
- SH 45N (Austin);
- SH 45SE (Austin); and
- SH 99 (Houston - Grand Parkway) – excludes portions operated by Fort Bent County Toll Road Authority.

Fee Structure Prior to March 1, 2018		
THIS FEE STRUCTURE IS PER TRANSACTION		
Example	Description	Total
First Statement	Mail Fee	(\$1.15) \$1.15
Past Due Statement	2nd Mail Fee	(\$1.15+ \$1.15) \$2.30
Final Notice	Violation Fee	(\$5.00) \$5.00
Transferred to Collections	Collection Fee	(\$25.00) \$25.00
Transferred to Court	Court Fee, Fines	(Up to \$350.00) Up to \$350.00
Fee Structure Beginning March 1, 2018		
THIS FEE STRUCTURE IS PER INVOICE/STATEMENT		
Example	Description	Total
First Statement	Mail Fee	(\$1.15) \$1.15
Past Due Statement	Add 2nd Mail Fee + Late Fee	(\$1.15 + \$1.15 + \$4.00) \$6.30
Final Notice	Add 3rd Mail Fee + 2nd Late Fee	(\$1.15 + \$1.15 + \$1.15 + \$4.00 + \$4.00) \$11.45
Eligible for Collections	Balance due sent to Collections + Mail Fee + Late Fee	(\$11.45 + \$1.15 + \$4.00) \$16.60

<sup>132</sup> Senate Committee on Transportation hearing. August 27, 2018 (written testimony of Brian Ragland, the Texas Department of Transportation)

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

## ***HCTRA***

Harris County Toll Road Authority (HCTRA) was created by the Harris County Commissioners Court in 1983, after Harris County voters approved a referendum to release \$900 million in bonds to construct, maintain, and operate toll roads in the rapidly growing Greater Houston Metropolitan area.

HCTRA expressly reserves the right to implement practices and procedures with respect to the collection of tolls that factor in, among other things, the costs of collection in time, effort, resources and dollars and the benefit to the toll road system and its operations of revenue collected or projected to be collected from toll transactions as described in its policy.<sup>135</sup>

**Violations Invoice Waivers** Once a violation invoice is issued, certain fees may be added and assessed against a patron or toll road user, including County Fees and Other Fees. There are certain circumstances when such fees can be waived.<sup>136</sup> HCTRA policy outlines the following circumstances under which the County, acting through HCTRA, reserves the right to waive fees (but not the tolls):

For Patron Account Holders:<sup>137</sup>

- o HCTRA data error results in a violation letter to the patron
- o Patron failed to update vehicle information and account is in good standing
- o Patron failed to update credit card expiration date on account
- o Patron reported stolen or lost credit card within a timely period
- o Patron provides acceptable proof that the vehicle was sold, stolen, repossessed, traded-in, given to charity or sold for salvage prior to the occurrence of the violation
- o Patron received violations regarding a rented, leased, or borrowed vehicle that patron used temporarily as a substitute for a vehicle covered by a valid account

For Non-Account Holders:<sup>138</sup>

- o HCTRA data error results in a violation letter to the patron
- o License plate error

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<sup>135</sup> *Senate Committee on Transportation hearing. August 17, 2018 (written testimony of Gary Trietsch, Harris County Toll Road Authority)*

<sup>136</sup> *Id.*

<sup>137</sup> *Id.*

<sup>138</sup> *Id.*

- o Patron provides acceptable proof that the vehicle was sold, stolen, repossessed, traded-in, given to charity or sold to a salvage yard prior to the occurrence of the violation
- o Department of Motor Vehicles record error occurred Patrons who fail to take any of the following actions before the matter is set for a court hearing will be responsible for Other Fees that may have to be paid before any waiver under this policy will be applicable:
  - update vehicle information;
  - update credit card information;
  - provide acceptable proof that the vehicle was sold, stolen, repossessed, traded-in, given to charity or sold for salvage; or establish that a violation was incurred while temporarily using a rented, leased or borrowed vehicle.

Harris County reinvests \$120 Million annually from toll revenue into non-toll county road and bridge projects, which helps to keep property taxes lower. In addition, Harris County paid \$200 Million to TxDOT toward US 290 reconstruction (non-toll).<sup>139</sup>

How to improve service to customers:<sup>140</sup>

- HCTRA continuously evaluates its programs and processes to improve customer service and implements improvements at the direction of the elected members of Harris County Commissioners Court.
- The primary hardships endured by toll customers in the Houston region (over 2.7 million EZ TAG customers) are the complications created by different agency back office along Grand Parkway.
- HCTRA is seeking legislative action requiring state-owned (not local) toll projects within the region to go through their system. All local toll agencies are currently under contract to go through HCTRA's back office.

### ***NTTA***

North Texas Tollway Authority (NTTA) is a regional tollway authority organized under Chapter 366 of the Texas Transportation Code.

NTTA Facts:<sup>141</sup>

- Process 2.5 million transactions daily on roadway network.

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<sup>139</sup> *Id.*

<sup>140</sup> *Id.*

<sup>141</sup> *Senate Committee on Transportation hearing, August 27, 2018 (written testimony of Kenneth Barr, North Texas Tollway Authority)*

- NTTA serves 10.5 million unique customers every year.
- Maintain a 97 percent customer satisfaction rating, which is verified by a third party.

NTTA staffs a call center and five brick-and-mortar customer service centers with agents trained in customer interaction. NTTA handles 3.3 million phone calls annually with an average answer time of 15 seconds.

The vast majority of customer interactions involve simple fixes for expired credit cards and helping customers who forget to update their address on file with NTTA.

NTTA works with more than 2,000 retail partners, including grocery stores, offering customers a multitude of options to recharge a TollTag with cash, pay a bill, or update their accounts.

Because customers have an option to pay for tolls without having to get a TollTag or pay at a toll booth, tools are needed to make sure those tolls can be collected. Late fees are one tool available for encouraging payment of tolls.<sup>142</sup>

NTTA's customer base is comprised of three groups:<sup>143</sup>

- 81 percent who have a TollTag, with tolls automatically deducted from the customer's account; late fees don't come into play with these customers.
- Approximately 11 percent of transactions are billed and paid through monthly invoices.
- The third group – about eight percent of customer base – choose to ride toll roads without paying.
- These represent toll bills that are at least several months old, and in many cases, accounts that show years of unpaid tolls.

The issue here is one of expectation of payment for use of a service. If you use a service, there's an expectation of paying for that service. Ninety-two percent of NTTA customers pay the tolls owed. The remaining eight percent simply do not pay.<sup>144</sup>

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<sup>142</sup> *Id.*

<sup>143</sup> *Id.*

<sup>144</sup> *Id.*



The following is a monthly billing process. This is for customers who choose to not get a TollTag:<sup>145</sup>

- A customer rides the toll road and receives a bill for those transactions. They have 25 days to pay that bill – no fees of any kind are applied.
- If the customer doesn't pay the invoice on time, a late notice with the tolls due plus a \$10 late fee is sent. The customer has another 25 days to pay the tolls and the fee.
- If the late notice is not paid – we're now at two months from the initial bill – NTTA will send another late notice to the customer, informing them the tolls are past due, and a second fee of \$25 is assessed. Again, the customer has 25 days to pay.
- At this point, the customer now owes the tolls plus total late fees of \$35. The fees on that bill are capped at \$35. Customer service continues to reach out to the customer to collect the amount due.

At any point in the billing process, a customer can contact NTTA to discuss payment options. And, if they're using toll roads more than they expected to or monthly invoices are not the right choice for them, the customer can open a TollTag account – and fees will be waived for that customer.

NTTA makes two million contacts through text messages, notifications through NTTA's mobile app, and phone calls, letting customers know that they have an outstanding toll bill or a negative TollTag balance.<sup>146</sup> NTTA wants to help customers avoid late fees and collect the tolls – as required by statute and bond contracts.<sup>147</sup>

- NTTA does not charge interest on outstanding toll debt – no matter how old the debt is or how much is owed.
- NTTA does not report customers with outstanding toll debt to credit bureaus.

NTTA's billing process and fee structure mirrors best practices used by credit card companies, utilities, and other service providers. The major difference when it comes to encouraging payment is a utility can shut off service. NTTA can not shut off the road for drivers who refuse to pay and who accrue considerable toll balances after months or years of nonpayment.<sup>148</sup>

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<sup>145</sup> *Id.*

<sup>146</sup> *Id.*

<sup>147</sup> *Id.*

<sup>148</sup> *Id.*

Customers want a reliable and predictable billing process so they can trust the invoice they get in the mail. NTTA works with customers and the circumstances of their case to find a resolution to issues that arise.<sup>149</sup>

In the last three and a half years, NTTA has generated 81.5 million statements, 99.97 percent of them on time.

In 2010, NTTA went to full electronic tolling, eliminating the toll booth lines that used to back up on NTTA roads, contributing to slowdowns and congestion. Paper invoices were a relatively new thing at the time and NTTA has worked hard over the years to improve processes.

The North Texas legislative delegation has been a big part of that improvement. They have worked with NTTA to pass bills that give NTTA the tools and flexibility to implement best practices. As part of that, in 2013 the NTTA board of directors adopted a late fee schedule that reduced fees by 85 percent.<sup>150</sup>

NTTA continues to identify ways of offering customers better payment options. More than 380,000 customers have enrolled in the electronic statement system – a number that is increasing. Those customers receive and pay their invoices faster.<sup>151</sup>

NTTA launched At Your Service, a system that lets customers schedule appointments to speak with an NTTA customer service agent at a time most convenient to the customer. 38,000 customers have taken advantage of that service.

NTTA operates and maintains 1,000 lane miles, serving millions of customers, moving people, goods and services across Dallas-Fort Worth. They enhance roads' capacity to meet the demand for mobility in North Texas and are an integral part of the economic engine of the region. This is accomplished without legislative appropriations.<sup>152</sup>

## **CTRMA**

With the support and guidance of Travis and Williamson counties, and in collaboration with regional partners, the Central Texas Regional Mobility Authority (CTRMA) has evolved as proposed by the Texas Legislature more than 15 years ago. Since its inception, the agency has delivered critically needed infrastructure for Central Texas with roads such as 183A, 290 Toll, 71 Toll and the MoPac Express Lane, all of which provide options and congestion relief to drivers.<sup>153</sup>

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<sup>149</sup> *Id.*

<sup>150</sup> *Id.*

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

<sup>153</sup> *Senate Committee on Transportation hearing, August 27, 2018 (written testimony of Central Texas Regional Mobility Authority)*

Two projects are under construction and more are on the horizon to meet the exploding population and economy of Central Texas, None of these projects would have been possible without the ability to access financial markets and ultimately pay back the debt to investors. CTRMA assets (roads open to traffic and under construction) total over \$2 billion in investments in Central Texas.<sup>154</sup>

### ***Fees and Penalty Practices***

Fees and fines associated with tolls are necessary to ensure toll compliance and implement the administration of the Pay-By-Mail (PBM) program and ensure payment of the debt secured to build roads and improve mobility.<sup>155</sup> It is also a matter of fairness and equity to all those who utilize CTRMA projects and pay their tolls. CTRMA believes tolling is a necessary funding alternative to provide mobility improvements laid out by the Capital Area Metropolitan Planning Organization (CAMPO) when there isn't enough state funding.<sup>156</sup> CTRMA is constantly considering ways to ensure the proper payment of user fees, to create stability in its system and reinvest that revenue into improving the region's mobility, which is CTRMA primary objective. The credit markets, the lifeline to project funding, take our enforcement efforts very seriously.<sup>157</sup>

The Pay by Mail (PBM) billing system was created in 2007 as a courtesy to provide a payment option to customers. CTRMA processed an average of 301,000 daily transactions (in 2017) with a total electronic tag penetration of 65 percent. The electronic tags accepted on CTRMA roads are: TxTAG, EZ Tag, TollTag and K-Tag.<sup>158</sup>

In 2017, CTRMA processed an average of 300,000 bills per month through the Pay-By-Mail system. Approximately 99.9 percent of those PBM customers paid \$16 or less in tolls and approximately 98 percent of customers paid \$16 or less in administrative fees for those tolls. CTRMA proactively tries to help customers before they get to this stage or help pull them out of that status once they have gone into the habitual violator category. The current fee/payment schedule is:<sup>159</sup>

- Toll Bill = tolls + \$1 invoice fee
- Notice of Non-payment = tolls +\$16 after 30 days
- Second Notice of Non-Payment = tolls +\$31 after 60 days
- Final Notice of Non-Payment / Collections = tolls +\$61 after 90 days
- Admin fees capped at \$3,000 per plate

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<sup>154</sup> *Id.*

<sup>155</sup> *Id.*

<sup>156</sup> *Id.*

<sup>157</sup> *Id.*

<sup>158</sup> *Id.*

<sup>159</sup> *Id.*

### ***Current Customer Service:***

CTMRA is committed to providing the best customer experience possible with every encounter. Average call wait times are just over two minutes for PBM customers, and CTRMA is always trying to improve its customer service operations.<sup>160</sup>

When CTRMA anticipates surges in call volumes due to collection campaigns or a new road being opened, PBM team adds more staff to handle the incoming calls. In addition, PBM agents are fully trained and prepared to answer most customer questions.<sup>161</sup> However, as more complex questions arise, special reports must sometimes be generated.

### ***Improved Customer Experience:***

CTRMA new vendor's system (Cofiroute) will go live in late November of 2018. Enhanced offerings include:<sup>162</sup>

- Monthly billing vs current 15-day billing structure
  - Mail and non-payment fees reduced by 50 percent with the billing frequency change alone
- The offering of registered accounts and pre-paid accounts
  - These pre-paid accounts provide the ability to send e-notices and SMS
  - They also provide the ability to manage accounts online
  - Enhanced customer service capabilities that include:
    - New website and mobile app (PlusPass) through the vendor's partnership
    - Additional self-service opportunities
    - Additional walk-up center at Cofiroute's offices in north Austin (*Howard Ln & Summit Ave*)
    - Offerings for unbanked customer population to pay for toll usage with cash through a vendor's partnership with BancPass
- Additional support
  - New tools for interoperability research to assist in customer disputes
  - Staff support for enforcement (*court, habitual violator, etc.*)
- Additional customer relationship management tools
- Service level agreements to ensure vendor accountability
- Reconciliation back to CTRMA Host, system of record for all toll information, which provides greater monitoring and reporting abilities

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<sup>160</sup> *Id.*

<sup>161</sup> *Id.*

<sup>162</sup> *Id.*

CTRMA anticipates some level of confusion and have an expansive informational campaign planned to launch several weeks prior to Cofiroute's system going live to customers.<sup>163</sup> The efforts will include extensive media and social media efforts to ensure the public.

Customer service is an important part of the CTRMA mission. Having knowledgeable, trained staff to help the public with their issues as they utilize CTRMA (and other) tollroads will undoubtedly lead to major improvements in their efforts.

There are a few additional things that CTRMA believes could improve customer billing process even more. They are outlined below:<sup>164</sup>

- Amendment to legislation to allow toll bills to be sent to the best-known address instead of registered address. This would greatly reduce billing issues that arise due to mailing address inaccuracies.
- Legislative help to encourage DMV to enforce update of account information compliance from all of their customers. The DMV provides us with address information, so it's critical to our billing process for the DMV's information to stay current.
- Lower the number of offenses required to qualify as habitual violator (catching them earlier in the process would help reduce cumulative fines, etc.)
- Require vehicle registration holds for unpaid tolls – this would greatly reduce the large accumulation of fees and fines.

## **NET RMA**

Regional mobility authorities, or "RMAs," are local toll project entities formed under Chapter 370 of the Transportation Code. The NET RMA is governed by a 19-member board of directors that represent each of the 12 member counties. The NET RMA's primary project is Toll 49, a 26-mile toll road around the south and west sides of Tyler. They are currently constructing Segment 4 to serve Lindale, Texas, and planning is underway for Segments 6 and 7 on the east side of Tyler.

Toll 49 averages over 30,000 toll transactions per day and had almost 950,000 transactions in the month of June.<sup>165</sup>

The NET RMA does not impose taxes and rely on toll revenue to fund operations. To help keep costs low, NET RMA has partnered with the CTRMA to utilize the service of their toll processing vendor. The majority of the NET RMA's toll transactions are paid through a registered Toll Tag.

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<sup>163</sup> *Id.*

<sup>164</sup> *Id.*

<sup>165</sup> *Senate Committee on Transportation hearing, August 27, 2018 (written testimony of Chris Miller, Northeast Texas Regional Mobility Authority)*

The remainder of tolls are collected through “Pay-by-Mail” billing. The Pay-by-Mail billing is not without administrative challenges such as misreads of license plates and incorrect address information - but fortunately, have been insulated from the problems encountered by some other toll entities.

Nonetheless, NET RMA works to ensure that road users have quick access to customer service and a fair process that follows the law. In fact, they have an in-house court liaison dedicated to assisting customers through the toll payment process.<sup>166</sup>

The more significant Pay-by-Mail billing issue encountered is road users who neglect to pay their tolls.

Toll 49 was primarily financed through a bond issuance, and toll revenue is the only revenue to satisfy those obligations.

If NET RMA is unable to collect from all toll road users, ultimately, toll rates increase to account for a higher rate of scofflaws.<sup>167</sup> This, in turn, causes drivers who pay consistently to pay more in order to subsidize those breaking the law. The NET RMA currently is seeking to collect approximately \$23 million in unpaid tolls which pursue through various methods available through statute.<sup>168</sup>

A toll road user has five opportunities to pay before a toll is referred to the court. The vehicle owner is first mailed a toll bill that includes zero fees. Then, the NET RMA uses an escalating fee to encourage payment. Every 30 days a new notice of nonpayment is provided to the customer with a fee that starts at \$15 and escalates to \$60 with the third and final nonpayment notice. If the toll is still unpaid after the final notice, the vehicle owner may face misdemeanor charges for toll evasion.<sup>169</sup>

In 2013, the Legislature also created the habitual violator program which allows the NET RMA to implement additional penalties on users who have 100 or more events of nonpayment within one year. Habitual violators may be blocked from renewing their vehicle registration or from traveling on Toll 49.<sup>170</sup>

All of these repayment remedies are important, but in some instances they are inadequate to meet their intended purpose. For example, the NET RMA has challenges recouping repayment from commercially owned vehicles and large vehicle fleets. Vehicle registration information can be difficult to obtain for these customers.<sup>171</sup> NET RMA also faces

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<sup>166</sup> *Id.*

<sup>167</sup> *Id.*

<sup>168</sup> *Id.*

<sup>169</sup> *Id.*

<sup>170</sup> *Id.*

<sup>171</sup> *Id.*

problems implementing habitual violator remedies, such as vehicle registration blocks, when local governments are unable or unwilling to assist. And finally, toll road users who have under 100 events of nonpayment may still owe a significant amount of money to the RMA, but it is difficult to recoup repayment when users willfully disregard the law and ignore NET RMA outreach.<sup>172</sup>

The toll collection process needs to be transparent and fair for the customer. The NET RMA is incentivized to provide excellent customer service so paying customers will continue using Toll 49 for years to come. However, the process must also properly penalize road users who blatantly disregard the law.<sup>173</sup>

### ***CCRMA***

Cameron County Regional Mobility Authority (CCRMA) utilizes the local vehicle registration fee authorized by the State Legislature to supplement the needs of mobility. Offices are centrally located in Cameron County to service all area residents. The CCRMA currently owns and operates the SH 550/I-169 toll road, which is approximately 10 miles in length connecting I-69E to the deep water Port in Brownsville, TX. The CCRMA opened its first segment of the road to tolling in 2011, with the following segments in 2013, 2015 and 2018. The SH 550/I-169 serves as a major freight corridor providing fast, convenient, non-stop access for heavy commercial traffic traveling from the International Bridges and northern part of the State to the Port of Brownsville. The SH 550/I-169 also serves as the Non-Radioactive Hazardous Material Route for the City of Brownsville, directing these loads away from the more populated and urbanized areas.

In calendar year 2017 the SH 550/I-169 had approximately 2.2M in toll transactions with an estimated vehicle demographic of 35 percent commercial to 65 percent passenger. The accrued revenue generated from the toll transactions in 2017 amounted to approximately 60 percent commercial vehicles and 40 percent passenger vehicles.

### ***Electronic Tolling Collection***

The SH 550/I-169 is geographically separated by over 300 miles from other open road toll systems in the State. It was the first all-electronic toll road to be opened in the Rio Grande Valley, and is currently the only one that operates its internal video toll processing and customer service center in the area. Currently the SH550/I-169 has averaged 32 percent of its toll transactions to be electronically tolled with valid transponder accounts with the remaining transactions to be billed using the video tolling or Pay by Mail process.<sup>174</sup>

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<sup>172</sup> *Id.*

<sup>173</sup> *Id.*

<sup>174</sup> *Senate Committee on Transportation hearing, August 17, 2018 (written testimony of Pete Supelveda, Jr. Cameron County Regional Mobility Authority)*

Currently the CCRMA promotes TxTAG as the primary transponder for electronic toll collection and is interoperable with the other agencies connected to the Central United States Interoperability HUB. CCRMA offers additional means of electronic invoicing in the form of post payment accounts such as Register by Plate and PlusPass.<sup>175</sup>

### ***Video Tolling/Pay by Mail***

CCRMA currently offers Pay by Mail for all video toll transactions that do not have a means of Electronic Toll Collection Payment associated with the vehicle. The CCRMA Pay by Mail process affords a customer to pay a toll bill that includes the tolls and only a small invoice fee of \$1. When the toll bill is not paid within 35 days, the customer shall accrue late penalty.

### ***How Is a Video Toll Bill Created?***

In order to reduce the number of outgoing toll bills and number of invoices a customer will receive, the CCRMA uses a 15 day window to accumulate transactions of the same vehicle to generate an invoice. All video transactions within this 15-day window are added to one toll bill when mailed out. Using a 15-day cycle helps with gathering multiple transactions into one bill and maintains a reasonable time frame, from when the customer uses the toll road to when the first bill arrives.<sup>176</sup> This time frame can be affected by how quickly the video toll can be processed through the back office image review and converted into a bill. It is important for the CCRMA to have its invoices within the customer's hands within 45 days of toll road usage.<sup>177</sup>

### **Challenges Unique to CCRMA in Electronic Toll Collection**

As mentioned earlier, the SH 550/I-169 traffic incurs more video tolling traffic compared to Electronic Toll Collection traffic. The following are a couple of the major challenges identified and currently being addressed by the CCRMA.<sup>178</sup>

- Geographical distance between other toll roads
- A customer is more likely to have a form of pre-paid transponder the more frequently it will be used. In areas where more toll roads are found, a larger percentage of the traffic has been seen to have a form of Electronic Toll Collection.
- The SH550/I-169 is the first toll road in the Rio Grande Valley to use an All Electronic Toll Collection System; therefore many of the customers do not have a form of pre-paid transponder.
  
- International Traffic from Trade
- The SH550/I-169 toll road services the freight industry in which much of the traffic crosses the US/Mexico border through the local international bridges to access the deep water Port of

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<sup>175</sup> *Id.*

<sup>176</sup> *Id.*

<sup>177</sup> *Id.*

<sup>178</sup> *Id.*



Brownsville. This traffic from Mexico is not required to have vehicles registered through the Texas Department of Motor Vehicles, making the video tolling collection/billing process difficult due to the inability to gather owner information.

***How Is CCRMA Improving Electronic Toll Collection and Reducing Pay by Mail Invoice Penalties Currently?***

Video Tolling and Pay by Mail processing is costlier to operate than Electronic Toll Collection. The CCRMA has implemented many operational changes to improve the collection of Video Tolling and capture the Cross Border traffic.<sup>179</sup>

- CCRMA opened its local Pay by Mail Processing and Customer Service Center
  - In 2016 the CCRMA opened this operation locally to handle 100 percent of all Video Tolling and Customer Service. Since this operation began the CCRMA has been able to increase its net profit nearly 80 percent.
- CCRMA promotes Electronic Toll Collection
  - CCRMA includes signage along its toll road and information on every invoice to promote the savings of using an electronic transponder such as TxTAG.
- A New “Register by Plate” Post Paid Account
  - Through its local Customer Service Center, the CCRMA created a Register by Plate account. This account allows for the registration of an unlimited number of vehicle license plates in one account for simplified account management. The account uses Video Tolling; however, it does not physically mail invoices to customers, but rather emails the invoices to the customer on a monthly basis. The account offers a post-payment methodology allowing customers to receive bills electronically with 20 days to pay. The account allows for automatic payment with a Credit Card and is excellent for fleet accounts for commercial customers. The CCRMA has been able to capture and bill effectively many of its international customers from Mexico using this account. In 2017 and YTD 2018 the Register by Plate account has amounted to 27 percent and 40 percent of total Video Tolling Revenue, respectively. This account is primarily used by Mexico and Domestic Commercial companies and local individual customers.
- International Bridge Interoperability
  - The CCRMA is effectively partnering with the local International Bridges in the Rio Grande Valley and creating interlocal agreements for the development of Electronic Toll Collection interoperability. The CCRMA has just implemented the Toll Collection System of the City of Pharr, at the Pharr International Bridge. The Pharr International Bridge happens to be the second largest land port of entry along the Southwest Border. The Pharr International Bridge transponder will be interoperable with the SH550/I- 169 toll road, improving the convenience for customers utilizing the bridge and the Electronic

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<sup>179</sup> *Id.*

Toll Road Collection of vehicles crossing the border from Mexico. The CCRMA also has an agreement with Cameron County for interoperability of the International Bridges and is currently developing the project.

- Local Interoperability with Cameron County Parks and Port of Brownsville
  - Cameron County Parks has tolling systems to allow access to the various parks on South Padre Island and other popular fishing and camping locations. The CCRMA is currently working on interoperability by developing a local transponder that will provide interoperability for the Cameron County International Bridges, Cameron County Parks, the Port of Brownsville, and the CCRMA SH 550/I-169 toll road.
- CCRMA Pay by Mail process automatically reduces fees for first time user.
  - The Pay by Mail process for CCRMA will automatically remove the second and final violation late fees for customers who have used the road for the first time.
- CCRMA Customer Service Practices
  - For all customers who call in and request a reduction in penalties, the CCRMA customer service staff will work with customers and reduce penalties if the customer signs up for a TxTAG, Register by Plate, or other form of Electronic Toll Collection.
- CCRMA Collections Referral
  - When an invoice is referred to Collections, it does not accrue any additional penalties or fees. The Collections process provides additional expertise in locating customers and providing an additional 90 to 180 days for the customer to pay, prior to court referral.

CCRMA has seen the value in providing the local customer service and partnering with Local Governments in improving the Electronic Toll Collection and anticipates additional improvement in the years to come in reducing the number of Pay by Mail invoices and late payment penalties.

## **CONCLUSION**

Raising new revenue is never popular, especially in a time of economic stress. The federal fuel tax has not been raised since 1993 and Texas has not seen a state gas tax increase since 1991. However, numerous toll facilities have been approved in the anti-tax environment of recent decades, and opinion polls consistently show that motorists prefer project specific tolls over general taxes and support the expansion of toll roads to improve driver options and more efficient travel times. In one poll, 84 percent of Americans said tolls should be considered as an additional source of transportation revenue on a project-by-project basis. Critics often throw out the term double taxation, but with toll roads, usage is a voluntary, individual decision that differentiates it from a tax. You take the road when you need to use it; it's your choice. It's not a tax, it's a user fee, and if it's business use, it's tax deductible.

## RECOMMENDATIONS

Cooperation and communication between toll project entities is imperative to improving customer service. Currently, electronic toll collection customer account information, including contact and payment information and trip data, is confidential and not subject to disclosure under the Public Information Act. This precludes toll project entities from sharing information that would streamline customer service and toll collection efforts. At a minimum, toll project entities should be permitted by statute to share customer email addresses, zip codes, and phone numbers to allow communication of billing issue and emergency notices to the customer and for overall enhancement of the customer's experience. Any proposed legislation should include customer protections such as provisions explicitly stating that the information is confidential and may only be shared between toll entities for the limited purpose of facilitating customer service issues and toll collection efforts.

1. Require first invoice to explicitly state that the violator has 30 days to file a written dispute of the tolls assessed.

- Under Sec. 228.0547(a)(2), a violator has 30 days from receipt of a first invoice to pay the toll or submit a "written request to the [toll authority] for a review of the toll assessment".

2. Improve interoperability between toll authorities when account (payment/address) information is updated.

- For example, X toll tag is operated by toll road 1 and can be used to cover toll usage on toll road 2. The tag will only cover toll usage when an owner goes through the toll on the toll road 2. It does not cover toll violations incurred on toll road 2. Owner realizes they have an expired credit card on file with toll road 1 (tag operator), they contact toll road 1 fix credit card issue and pay all violations that may have occurred on toll road due to expired card. However, their new credit card information is not sent to toll road 2 and in some cases, they don't know or understand that they must pay toll road 2 separately for violations incurred on the toll road 2 because of their expired credit card.

3. Require all toll roads to explicitly list on their invoices the specific toll roads they operate. [Note: Some toll roads already do this.]

4. Expand the authority to send invoices via email to regional mobility authorities under Chapter 284, Transp. Code.

## **Human Smuggling**

*Examine the anti-smuggling efforts of governmental and non-governmental entities under the committee's jurisdiction. Compare the findings to best practices in other states and make recommendations to help advance efforts in the fight against human smuggling.*

### **BACKGROUND**

There is an immediate need to address human trafficking in Texas. According to the Texas Department of Public Safety (DPS), "sex trafficking is the fastest growing business of organized crime, and the third-largest criminal enterprise in the world," and Texas' attorney general, Ken Paxton, has said "human trafficking is modern day slavery, and Texas is one of the top destination points for victims and traffickers in the nation." In a 2015 report, the National Human Trafficking Resource Center (NHTRC) found that Texas ranked second in number of human trafficking cases, behind California. In 2016, NHTRC reports that there were 2,135 calls to the National Human Trafficking Hotline from Texas, which resulted in 670 cases of human trafficking. Eighty-five percent of those victims were female. Another source, the Federal Bureau of Investigation's national Uniform Crime Report (UCR), found that from 2013 to 2015 Texas reported 285 human trafficking offenses, resulting in 565 arrests, which was the highest out of the 27 participating states and U.S. territories. But innovative solutions are possible to help track, report, and prevent human trafficking in Texas. By partnering with Truckers Against Trafficking (TAT), Texas could tap into a huge network of eyes and ears in the areas most frequented by traffickers and victims, such as public rest stops, travel plazas, restaurants, hotels, and out on the roads. As of 2016, there are approximately 685,000 licensed commercial drivers in Texas, so equipping members of the trucking industry with the knowledge on how to spot and report potential signs of sex trafficking can ultimately lead to the investigation, arrest, and prosecution of traffickers and freedom for victims. Before TAT existed, only sporadic tips were being reported by the trucking industry, but now they have made over 1,534 calls to NHTRC, generating 471 cases of sex trafficking involving 1,033 victims, 285 of those minors, making them one of the fastest growing demographics of callers nationwide. TAT reports that as of December 2016, Ohio is the only state that requires commercial driver's license (CDL) applicants to train in human trafficking prevention, so Texas has an opportunity to lead in the fight against trafficking and set the model for increased awareness and reporting.

### **Legislative History:**

Senate Bill 128 by Senator Garcia passed during the 85th Regular Session amended the Transportation Code to require DPS, by rule, to prescribe minimum standards for a training course on the recognition and prevention of human trafficking that is required for CDL applicants, and develop an approval procedure for these courses. DPS may consult with organizations that develop such courses in adopting this rule. Support for SB 128 includes TAT, Children at Risk, United Against Human Trafficking, and the Texas Truckers Association, all of whom were ready and willing to assist DPS with the implementation of the rule.

SB 128 amends current law relating to the inclusion of education and training regarding human trafficking in the curriculum of commercial driver's license training programs offered by public junior colleges and career schools and colleges and to certain requirements for commercial driver's licenses.

During the hearing, spokesperson for the Attorney General, Kirsta Leeburg Melton, made a key point to point out that human smuggling and human trafficking are two separate issues.

Human trafficking involves exploiting men, women, or children for the purposes of forced labor or commercial sexual exploitation.

Human smuggling involves the provision of a service—typically, transportation or fraudulent documents—to an individual who voluntarily seeks to gain illegal entry into a foreign country.

However, human smuggling can easily become human/labor trafficking.

### **Labor trafficking**

Labor trafficking is the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.<sup>180</sup> According to the International Labour Organization (ILO), an estimated 21 million people around the globe are forced labor victims in either the private economy or state imposed forms of forced labor. Sixty-six percent of professional respondents to the University of Texas (UT) Human Trafficking by the Numbers: The Initial Benchmark of Prevalence and Economic Impact for Texas Report web-based survey noted that labor trafficking is a serious or very serious problem in their area, with 86 percent believing that it is bigger problem than most people think.<sup>181</sup>

Fundamentally, UT's approach to estimating the prevalence of labor trafficking requires three levels of information: i) identification of commercial activities that are at higher-than-average risk for human trafficking, ii) the number of workers participating in the at-risk activity, and iii) a quantification of the risk of victimization within that activity. It is also worth noting that there is an intersection of sex and labor trafficking in some industries (see section Our Understanding of Human Trafficking in Texas). That intersection is minimized in this report by our choice of labor sectors.

Verité's (2015) methodology assesses risk of labor trafficking by evaluating five factors, concluding that these industries possess at least four out of five of the following: i) Hazardous/undesirable work, ii) vulnerable, easily replaced, and/or low-skilled workforce, iii)

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<sup>180</sup> <https://sites.utexas.edu/idvsa/files/2017/02/Human-Trafficking-by-the-Numbers-2016.pdf>

<sup>181</sup> *Id.*

Migrant workforce, iv) presence of labor contractors, recruiters, agents, or other middlemen in labor supply chain, and v) Long, complex, and/or non-transparent supply chains.

Polaris provides a largely corroborating view of vulnerable industries in Texas. Data from 2013 through 2015 indicate that the following industries are represented by human trafficking cases reported to the National Human Trafficking Hotline from Texas.<sup>182</sup>

- Agriculture
- Begging rings
- Construction
- Domestic service
- Health and beauty services
- Landscaping
- Restaurant and food services
- Traveling sales crews

Although all of these industries have relevancy for Texas, for this report we only consider agriculture, construction, and restaurant and food services.<sup>183</sup> These are three vulnerable industries for which we argue that the overlap in the associated workforce is minimal.

Furthermore, for clarity, within these industries we focus on sub-segments of workers who are at the highest risk of exploitation.<sup>184</sup>

- Migrant farmworkers
- Cleaning Services
- Construction
- Kitchen Workers in Restaurants
- Landscaping and Grounds Keeping Workers

### **How large are these labor segments?**

We use secondary sources to establish the size of the selected segments, shown below.

#### **Examples of Industry Segment Sizes in Texas at High Risk for Labor Trafficking**

High-Risk Labor Trafficking Segments	Size of Community Segment
Migrant farmworkers	132,034
Cleaning services	233,610
Construction	101,250
Kitchen workers in restaurants	190,390
Landscaping and grounds keeping workers	63,050

Sources: Texas Department of Housing and Community Affairs; Bureau of Labor Statistics

### **How many workers are at risk?**

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<sup>182</sup> *Id.*

<sup>183</sup> *Id.*

<sup>184</sup> *Id.*

We have applied Barrick et al. (2014) and Zhang et al. (2014) victimization rates to our selected industry segments.<sup>185</sup> We view this approach as conservative because the screening process by Barrick and Zhang already partitions trafficking victimization as being distinctly different than exploitation that occurs without the required elements of force, fraud, or coercion. Furthermore, our own labor trafficking pilot project has provided preliminary data that suggest that labor trafficking prevalence in Texas may be substantially higher than seen in their studies.<sup>186</sup> This approach allows us to conservatively estimate the number of workers in the example industries who have likely experienced some form of trafficking victimization. Table 22 shows these results for select agriculture, construction, and restaurant and food service industry segments.

<b>Labor Trafficking in Texas High-Risk Labor Trafficking Segments*</b>	<b>Community Size Segment</b>	<b>Victimization Rate</b>	<b>Estimated Victims</b>
Migrant farmworkers	132,034	28%	36,970
Cleaning services	233,610	36%	84,100
Construction	101,250	35%	35,438
Kitchen workers in restaurants	190,390	32%	60,925
Landscaping and grounds keeping workers	63,050	27%	17,024

\* The research team acknowledges the limitations of this narrow definition of human trafficking.

Since these are example industry segments, they in no way represent the entirety of the labor force in Texas. As such, we have not summed the individuals at high risk of trafficking victimization across these industry segments.<sup>187</sup> We offer this example list as illustrative only of the methods we are using to estimate the prevalence of trafficking in Texas. We plan on expanding this list to include industries that emerge from our primary data collection efforts in Houston and elsewhere.

### **Economic Impact of Human Trafficking in Texas**

There are two main aspects to the economic impact of ; i) Measuring the value of the economic output, including the value of the labor, produced by human trafficking activity; ii) Quantifying the costs to provide care to victims and survivors of human trafficking, including costs related to law enforcement, prosecution, and social services.<sup>188</sup>

### **RECOMMENDATIONS**

Senate Bill 128 was a good bill in the right direction, it required TxDPS by rule to make a curriculum for human trafficking. It would be beneficial, if other agencies required their employees to take an optional course regarding human trafficking and human smuggling. An

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<sup>185</sup> *Id.*

<sup>186</sup> *Id.*

<sup>187</sup> *Id.*

<sup>188</sup> *Id.*

example would be the Texas Department of Transportation, an agency that is visible and operational in 254 counties but also is out at a lot of construction projects where they interact with multiple stakeholders that are involved in the act of transporting and delivering goods. The Legislature should continue to monitor this issue and look to other industries for best practices.



## **Highway Naming**

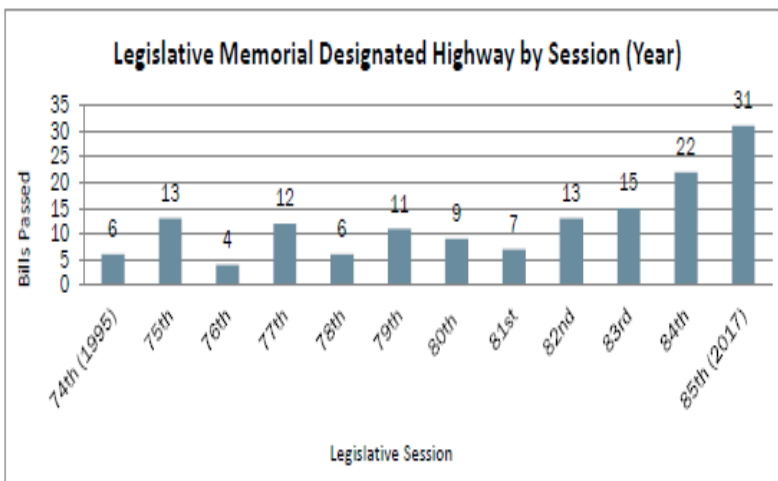
*Review the state’s policy related to the naming of state highways for individuals and make recommendations to limit and reform the criteria of such designations.*

### **BACKGROUND**

Over the years, the Texas Legislature established several memorial sign programs to honor certain individuals, places or organizations. Examples include designating a highway in honor of a public safety officer killed in the line of duty, memorializing a loved one killed by a drunk driver or recognizing volunteers who help keep Texas roadways clean and beautiful.

The Texas Department of Transportation (TxDOT) is prohibited from officially naming any portion of the state highway system with anything other than the regular highway number. However, state law allows for a section of the state highway system to be designated by the name of a person, if the person is deceased and was significant in the state's history or in the lives of the people of this state. There are two processes that can be taken to designate a “memorial” highway—legislative and local ordinance or resolution.<sup>189</sup> When state law or local ordinance or resolution designates a section of the state highway system, costs for the original signs and installation are required by state law to be paid in full by grant or donation.<sup>190</sup>

### **STATE LEGISLATION**



The Texas Legislature may make a memorial designation on the state highway system by passing a bill specifying the designation. Once the bill becomes law, TxDOT works with the bill author, co-sponsor and all interested parties to manufacture and install the sign at the designated locations.<sup>191</sup> In accordance with state law, TxDOT will only manufacture and install a

memorial designation sign after the costs of the sign and associated installation costs are paid in full by grant or donation to the state highway fund. After a sign is installed, TxDOT’s budget is responsible for the repair, replacement and ongoing maintenance of the sign in perpetuity.

<sup>189</sup> Senate Committee on Transportation hearing. February 21, 2018 (written testimony of Michael Chacon, Texas Department of Transportation)

<sup>190</sup> *Id.*

<sup>191</sup> *Id.*

### ***Local Ordinance or Resolution***

State law also grants local governments the authority to make a memorial or other designation to the state highway system.<sup>192</sup> Local governments must provide TxDOT with an authorizing resolution or municipal ordinance and a proposed sign location. The size, type and location of the sign must be approved by TxDOT. As with state legislative designations, in accordance with state law, TxDOT will only manufacturer and install the signs after the costs of the sign and associated installation costs are paid in full by grant or donation to the state highway fund. Unlike a state designated sign, the sponsoring local government is responsible for ongoing maintenance of the sign designated by the local process.<sup>193</sup>

### ***Sign Location and Display***

With both state and local designations, various federal and state laws and regulations control where signs can be placed, what may be displayed on the sign and how many signs can be erected:<sup>194</sup>

- One sign is allowed on each end of the designation route;
- Any intermediate signs, if necessary, must be spaced at least 75 miles apart; and
- Signs may only be located on the designated route and not on cross streets or intersecting highways.

The signs are required to be rectangular in shape with a brown background and white legend and borders. The legend is limited to the person's name and a simple message following the name, such as "Memorial Parkway." Biographical information and decorative elements are not allowed.

### ***Cost Information and Numbers of Designations***

TxDOT is prohibited from expending state dollars for the original design, construction, or erecting of a sign. Therefore, when a designation is proposed either at the state or local level, TxDOT works closely with and communicates the anticipated cost of each sign with the appropriate persons. TxDOT also works with Legislative offices to identify roadways that are available for designation to avoid dual designations. Once a designation is completed at the state or local level and a donor has committed to funding the project, TxDOT will enter into an agreement with the donor for TxDOT to install the signs.<sup>195</sup> The cost of a sign varies based on size, the number of characters and where the sign is located on the highway system. Signs may cost anywhere between \$1,000 and \$20,000 to design, construct and erect.<sup>196</sup>

The Texas Legislature has passed 149 memorial designations since 1995. TxDOT is responsible for the repair, replacement and maintenance of the signs. TxDOT currently maintains memorial designated highway signs at an estimated cost of approximately \$280,000 annually. One full-time employee is assigned to manage memorial and named highway programs.

## **CONCLUSION**

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<sup>192</sup> *Id.*

<sup>193</sup> *Id.*

<sup>194</sup> *Id.*

<sup>195</sup> *Id.*

<sup>196</sup> *Id.*

TxDOT has tracked the implementation of legislative memorial designations and their funding since the 83rd (2013) Legislative Session. Since 2013, there have been 23 designations not funded to date and therefore no signs have been fabricated or installed at those designated locations. The state should continue to monitor the number of highways named after individuals that lack donor funds and determine if after a certain period that legislation is null and void if the sign is never erected.

<b>83<sup>rd</sup> Legislature, Regular Session, 2013</b>	<b>84<sup>th</sup> Legislature, Regular Session, 2015</b>	<b>85<sup>th</sup> Legislature, Regular Session, 2017</b>
<ul style="list-style-type: none"><li>• 5 bills not implemented due to a lack of donors.</li><li>• One bill was for a historic highway (Texas Historical Commission (THC)).</li></ul>	<ul style="list-style-type: none"><li>• 5 bills not implemented due to a lack of donors.</li><li>• Two bills were for a historic highway (THC).</li></ul>	<ul style="list-style-type: none"><li>• 13 bills have not been implemented due to a lack of donors.</li><li>• One bill was for a historic highway (THC).</li></ul>

**85th Legislature Monitoring Charge**

1. *Monitor the implementation of legislation addressed by the Senate Committee on Transportation during the 85th Legislature, Regular Session and make recommendations for any legislation needed to improve, enhance, and/or complete implementation. Specifically, monitor the following:*

a. *Implementation of statutory changes specified in the Texas Department of Transportation’s (TxDOT) sunset legislation. 1) requiring toll road entities to use toll revenue to pay back TxDOT for grants used to construct toll roads. 2) prohibiting TxDOT from operating or transferring a HOV lane as a tolled lane. 3) authorizing TxDOT to convert non-tolled lanes as toll lanes - only if the number of non-tolled lanes is greater than or equal to the number in existence before the toll conversion project. 4) prohibiting TxDOT from awarding contracts unless the contractor participates in E-verify; and*

<p>Added by Legislature</p> <p><b>Toll-Financing</b></p>	<p>Requires toll project entities to repay any funds received for a toll project originating from the Texas Mobility Fund, State Highway Fund, or other sources. Requires TxDOT to annually determine for each district the amount of money to be repaid in the previous year attributable to projects in that district and allocate those funds to the same district to be used for other projects. Provides exceptions to this repayment requirement for toll projects funded using subaccounts and for toll projects that began the environmental review process on or before January 1, 2014.</p>	<p><b>Implemented.</b></p> <p>The Commission adopted rules to require that any funds provided by the department as participation in the cost of a toll facility of a public or private entity must be repaid unless the funds are provided as participation in the cost of a project of a toll project entity and: (1) the funds are held in a subaccount created under Transportation Code, §228.012; or (2) a toll project entity commenced the environmental review process for the project on or before January 1, 2014. The rules also requires TxDOT to annually determine for each district the amount of money to be repaid in the previous year attributable to projects in that district and allocate those funds to the same district to be used for other projects.</p> <p>See <a href="#">Minute Order 115129 (01/25/18 – Proposed)</a> &amp; <a href="#">Minute Order 115202 (04/26/18 – Adopted)</a>.</p>
<p>Added by Legislature</p> <p><b>Toll-Conversion</b></p>	<p>Prohibits TxDOT from converting a non-tolled high-occupancy vehicle lane to a tolled lane. Makes exceptions for existing roadways operated as toll roads and for projects already included in the state’s air quality implementation plan on September 1, 2017.</p>	<p><b>Implemented.</b></p> <p>A memo was sent to all TxDOT District Engineers to inform them of the requirements of Senate Bill 312 regarding legislative changes that affect the addition of new tolled lanes to existing non-tolled state highways. Stating, “Section 228.201(a)(3), Transportation Code authorizes the department to add tolled lanes to an existing non-tolled state highway if the highway is reconstructed so that the number of non-tolled lanes on the highway is greater than or equal to the number in existence before the reconstruction. Senate Bill 312 includes a change in how to determine the number of non-tolled lanes. The change means that only general purpose lanes, and not any frontage road lanes, may be included when determining the number of non-tolled lanes before and after a proposed reconstruction project. Additionally, the legislation repeals the ability of the department to operate a high-occupancy vehicle lane as a</p>

		tolled lane. These changes become effective September 1, 2017.”
Added by Legislature  <b>Toll- Conversion</b>	When complying with existing law limiting toll facility designations, require TxDOT to consider only general purpose lanes and not frontage roads in determining the number of non-tolled lanes of a highway or highway segment.	<b>Implemented.</b> A memo was sent to all TxDOT District Engineers to inform them of the requirements of Senate Bill 312 regarding legislative changes that affect the addition of new tolled lanes to existing non-tolled state highways. Stating, “Section 228.201(a)(3), Transportation Code authorizes the department to add tolled lanes to an existing non-tolled state highway if the highway is reconstructed so that the number of non-tolled lanes on the highway is greater than or equal to the number in existence before the reconstruction. Senate Bill 312 includes a change in how to determine the number of non-tolled lanes. The change means that only general purpose lanes, and not any frontage road lanes, may be included when determining the number of non-tolled lanes before and after a proposed reconstruction project. Additionally, the legislation repeals the ability of the department to operate a high-occupancy vehicle lane as a tolled lane. These changes become effective September 1, 2017.”
Added by Legislature  <b>E-verify</b>	Prohibits TxDOT from awarding a highway contract to a contractor unless the contractor and any registered subcontractors participate in the E-Verify program to verify employee information. Requires contractors and subcontractors to continue participating in E-Verify during the term of the contract. Requires TxDOT to develop procedures for the administration and enforcement of these requirements.	<b>Implemented.</b> Effective with October 2017-let projects, TxDOT will not award a contract to a contractor that is not registered in the Department of Homeland Security’s E-Verify program. Contractors must remain active in E-Verify throughout the life of the contract. Subcontractors must remain active in E-Verify until their work is completed.  <i>See <a href="#">TxDOT E-Verify System - Important Affirmation Requirement</a>.</i>

SB 312 by Nichols, 85<sup>th</sup> Regular Session contained the following statutory changes: requiring toll road entities to use toll revenue to pay back TxDOT for grants used to construct toll roads; prohibiting TxDOT from operating or transferring a HOV lane as a tolled lane; authorizing TxDOT to convert non-tolled lanes as toll lanes - only if the number of non-tolled lanes is greater than or equal to the number in existence before the toll conversion project; and prohibiting TxDOT from awarding contracts unless the contractor participates in E-verify. All statutory provisions have been implemented by TxDOT.

- b. *Progress of the Texas Department of Transportation’s (TxDOT) efforts to issue an annual permit for transporting overweight, sealed intermodal shipping containers on TxDOT approved routes within 30 miles of a port of entry or an international bridge.*

SB 1524 by Nichols, 85<sup>th</sup> Regular Session authorized an overweight permit for sealed intermodal shipping containers. The annual permit is priced at \$6,000 with 50 percent going to the State Highway Fund, 30 percent distributed among the counties selected on the permit application, 16 percent to municipalities selected on the application, and four percent going to the Texas Department of Motor Vehicles (TxDMV) Fund. The permit may only be used within 30 miles of a port authority or port of entry in a county contiguous to the Gulf of Mexico or a bay or inlet opening into the gulf, and travel must begin or end at port authority or port of entry only on Texas Department of Transportation (TxDOT) designated routes. The permit allows a maximum gross weight of 93,000 pounds for a truck-tractor and semitrailer combination with a total of six axles and a maximum gross weight of 100,000 pounds of the same type combination if there are a total of seven axles. Certain axle related spacing and weight limits also exist as does a requirement that combination have roll stability and truck blind spot systems for increased safety.

The statute authorizing the permit also requires TxDOT to conduct a study and report its results, beginning in 2022, by September 1 of each even numbered year. The study is required to collect data regarding and examine the following:

- the weight and configuration of vehicles operating under a permit issued under this subchapter that are involved in a motor vehicle accident;
  - the types of vehicles operating under a permit issued under this subchapter;
  - traffic volumes and variations of vehicles operating under a permit issued under this subchapter;
  - weigh-in-motion data for highways and roads located in and around the area described by Section 623.405(b) [highways and roads approved by the Texas Department of Transportation for use with the permit];
  - impacts to state and local bridges, including long-term bridge performance, for bridges located in and around the area described by Section 623.405(b) [highways and roads approved by the Texas Department of Transportation for use with the permit];
- and
- impacts to state and local roads, including changes in pavement design standards, construction specification details, maintenance frequency and types, and properties of pavement and underlying soils resulting from or necessitated by vehicles operating under a permit issued under this subchapter.

TxDOT has completed all necessary, functional implementation tasks under its purview related to the permit. The permit has been available for stakeholders to purchase since January 1, 2018, and TxDOT has completed all necessary functions under its purview. The agency has analyzed the bridges and roads around the ports. Currently only the Port of Houston region is seeing activity. The permit is still very early on its implementation stage so no further recommendations are suggested at this time.