Report on the Elimination of Toll Roads

HB 2612, 84th Texas Legislature

Provided to:
Legislative Budget Board
House Committee on Transportation
Senate Committee on Transportation

September 1, 2016

Contents

Executive Summary

House Bill 2612, 84th Legislature, Regular Session, 2015, requires the Texas Department of Transportation (TxDOT) to prepare a report on the feasibility of eliminating toll roads in the State of Texas. This report is divided into three sections, which correspond to the requirements of the legislation:

- **Section 1.** *"lists the amount of debt service on bonds issued for each toll project in this state;"*

- ***Section 2.*** *"identifies, based on criteria provided by the Texas Transportation Commission, bonds that would be appropriate for accelerated or complete lump-sum payment of debt service;"*

- ***Section 3.*** *"proposes a plan to eliminate all toll roads in this state, except for tolls on roads constructed, operated, or maintained only with proceeds from the issuance of bonds by a toll project entity other than the department, by methods including:*
  - *"the accelerated or complete lump-sum payment of debt service on bonds identified under Subdivision (1); or*
  - *"requiring, as a condition on receipt of state financial assistance, a commitment by a toll project entity to eliminate toll collection on a project for which the financial assistance is provided."*

The report includes a review of the 53 toll roads and 28 financial tolling systems in the state, excluding international bridges. A summary of the outstanding debt for public toll roads in the state, which excludes the five Comprehensive Development agreements (CDAs), as of January 1, 2016 is provided in Section 1 and detailed annual debt service for each of the public toll road entities in the state is provided in Appendix A. As of January 1, 2016, the total public toll road debt principal amount outstanding from these entities was $21.6 billion.

TxDOT would like to express its appreciation to all of the tolling entities in the state for their cooperation in providing this data.

Table 1a: Texas Toll Road Center-Line Miles

	Center-Line Miles
Non-State Publicly-Operated Toll Roads	441
State Toll Roads	230
Total Toll Road Center-Line Miles	**671**
State Roads (Non-Tolled) *	80,241

*As shown TxDOT Roadway Inventory Annual Reports, 2014.

Table 1b: Texas Toll Project Debt, Debt Service, and Upfront Payment

	Total Outstanding Principal *in millions*	Total Debt Service Payments until Final Maturity	Total Upfront Payment Cost *in millions*
Non-TxDOT Publicly-Operated Toll Roads	$15,301.1	$27,920.2	$17,115.1
TxDOT Publicly-Operated Toll Roads	6,285.9	11,965.6	7,120.8
Sub-Total	**$21,587.0**	**$39,935.8**	**$24,235.9***
CDA Toll Road Projects	N/A	N/A	**12,500.0****
Total	N/A	N/A	**$36,735.9**

*Upfront payment cost is as of January 1, 2016.
**Comprehensive Development Agreement (CDA) termination payment amount is as January 1, 2018 and is a preliminary estimate. CDAs are described in detail in Section 3.

Section 2 of this report describes the criteria developed to determine toll road debt suitable for accelerated or lump sum payment.

Eliminating toll road debt is necessary to remove tolls on certain roads in the state. Many of the state's toll roads, both stand-alone projects and toll systems, generate ongoing revenues to pay for long-term maintenance on the facilities and provide the financial capacity to expand and extend these projects. In addition, revenues from toll road projects that are not used for operations, maintenance, and debt service may provide money to fund new transportation projects in their regions. Certain toll road projects have been developed as part of larger regional transportation plans to provide mobility and manage traffic.

The role toll roads play in both transportation funding and regional mobility were considerations in the establishment of criteria used to identify those toll road bonds that could be considered for lump-sum or accelerated payment. Based upon the criteria outlined in Section 2, TxDOT identified two state-owned toll projects with outstanding debt that would be candidates for lump-sum or accelerated payment. As of the date of this report, outstanding bond issues for state-owned toll projects include:

- $3.2 billion in outstanding debt of the Central Texas Turnpike System (Figure A)
- $3.1 billion in outstanding debt of the Grand Parkway Transportation Corporation (Figure B)

Figure A

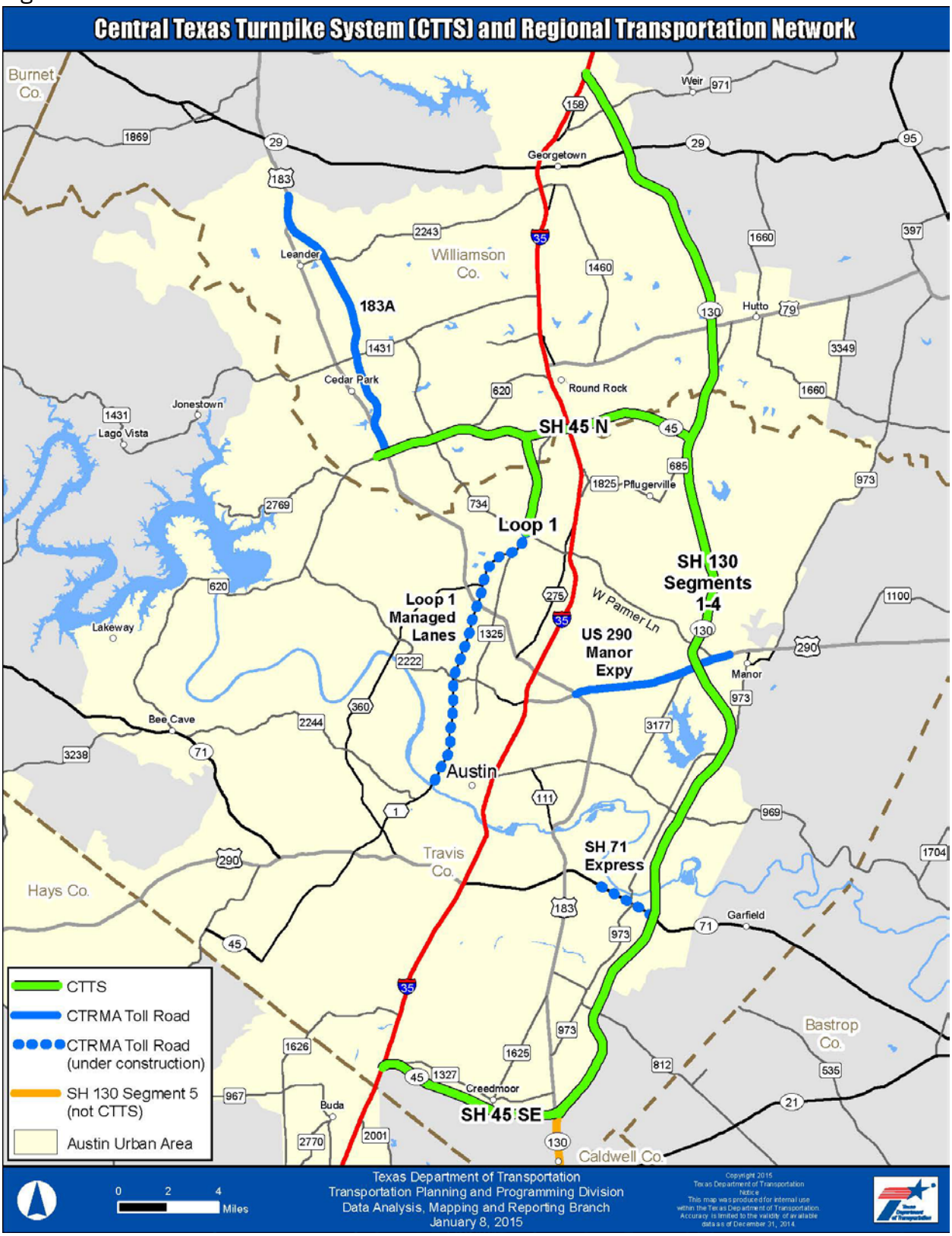
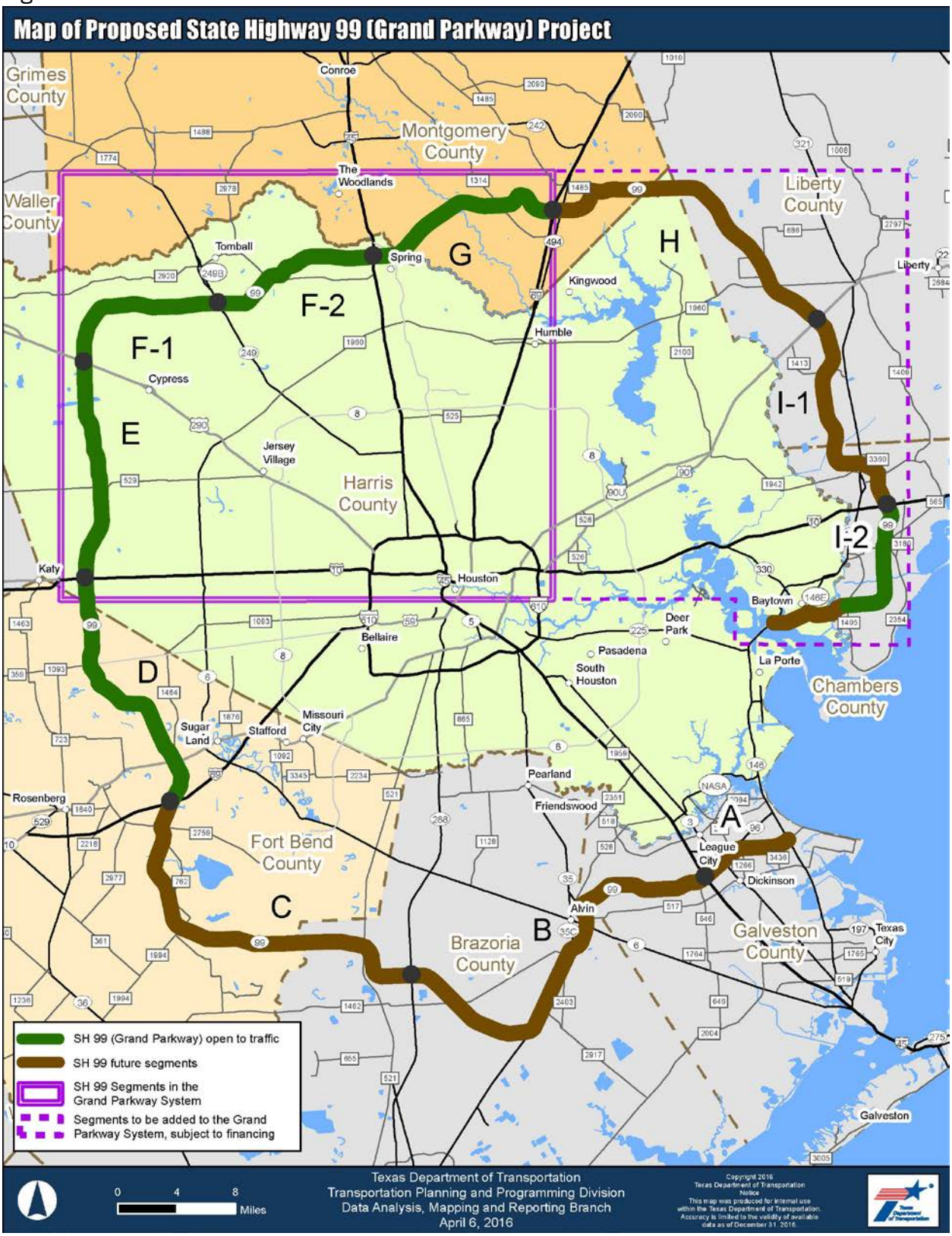

Central Texas Turnpike System (CTTS) and Regional Transportation Network
Burnet Co.
Weir
Georgetown
Leander
Williamson Co.
183A
Cedar Park
Round Rock
Jonestown
Lago Vista
SH 45 N
Pflugerville
Loop 1
SH 130 Segments 1-4
Loop 1 Managed Lanes
W Parmer Ln
US 290 Manor Expy
Manor
Lakeway
Bee Cave
Austin
Travis Co.
SH 71 Express
Garfield
Hays Co.
Bastrop Co.
Creedmoor
SH 45 SE
Buda
Caldwell Co.
CTTS
CTRMA Toll Road
CTRMA Toll Road (under construction)
SH 130 Segment 5 (not CTTS)
Austin Urban Area
0 2 4 Miles
Texas Department of Transportation
Transportation Planning and Programming Division
Data Analysis, Mapping and Reporting Branch
January 8, 2015

Figure B


Map of Proposed State Highway 99 (Grand Parkway) Project
Grimes County
Conroe
Montgomery County
The Woodlands
Waller County
Tomball
Spring
G
H
Liberty County
Liberty
Kingwood
F-2
F-1
Humble
Cypress
I-1
E
Jersey Village
Harris County
I-2
Katy
Houston
Baytown
Deer Park
Bellaire
Pasadena
South Houston
La Porte
Chambers County
D
Missouri City
Sugar Land
Stafford
Pearland
NASA
Rosenberg
Friendswood
A
League City
Fort Bend County
Dickinson
C
Alvin
B
Brazoria County
Galveston County
Texas City
Galveston
SH 99 (Grand Parkway) open to traffic
SH 99 future segments
SH 99 Segments in the Grand Parkway System
Segments to be added to the Grand Parkway System, subject to financing
0 4 8 Miles
Texas Department of Transportation
Transportation Planning and Programming Division
Data Analysis, Mapping and Reporting Branch
April 6, 2016
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Texas Department of Transportation
Notice
This map was produced for internal use within the Texas Department of Transportation. Accuracy is limited to the validity of available data as of December 31, 2016.

Section 3 identifies the upfront cost to remove the obligations on the Central Texas Turnpike System, the Grand Parkway Transportation Corporation, and the five state toll projects developed and funded through Comprehensive Development Agreements (CDA) with private entities. The cost to remove tolls on each of these facilities immediately requires a lump-sum payment of (i) outstanding toll road debt in the case of the Central Texas Turnpike System and the Grand Parkway Transportation Corporation, and (ii) an upfront payment to the private entities operating toll facilities under a CDA. Below are the estimated lump-sum upfront costs for each of these facilities assuming a September 1, 2017 repayment date for the toll bonds and a January 1, 2018 payment to terminate the CDAs, totalling $19.3 billion:

- $3.2 billion: Central Texas Turnpike System
- $3.6 billion: Grand Parkway Transportation Corporation
- $12.5 billion: Five CDA Projects

Section 3 also sets forth a plan that includes alternatives to accelerate or fully pre-pay debt on state-owned toll projects. The alternatives discussed in Section 3 include:

- the lump-sum payment of outstanding toll project debt assuming funds become available as of September 1, 2017; September 1, 2019; September 1, 2021; and September 1, 2023; and
- accelerated repayment alternatives that use the toll projects' projected excess revenue to prepay annually a portion of outstanding bond principal.

The analyses in Section 3 also includes a scenario whereby funding for operations, maintenance, major maintenance, and planned expansions and extensions would be provided by the state to replace toll road revenues originally projected to provide for these expenditures. This would generate more projected excess revenue that could be used to prepay more debt. Considering pay-off dates at different points in the future could lower the lump-sum debt repayment cost for the state as debt service will continue to be funded from toll revenue until the lump-sum payment is made. Reducing the period between the lump-sum repayment date and the maturities should also generally reduce the repayment cost. For the Central Texas Turnpike System and the Grand Parkway Transportation Corporation, the reduction in lump-sum debt repayment costs moving from a lump-sum debt repayment date of September 1, 2017 to September 1, 2023 are estimated as follows:

- $722 million decrease in the lump-sum debt repayment cost for the Central Texas Turnpike System
- $173 million decrease in the lump-sum debt repayment cost for the Grand Parkway Transportation Corporation

In addition, the House Committee on Transportation requested for each standalone toll project or toll system element:

- the original projected volume of traffic;
- the actual volume of traffic;
- length (in miles); and
- the amount of tolls levied (in a comparable format).

This additional information is provided in Appendix C.

Section 1: Debt Service on Bonds Issued for Toll Projects

In accordance with HB 2612, TxDOT has compiled and presents information that *"lists the amount of debt service on bonds issued for each toll project in this state."*

Toll road projects in Texas are owned and managed by TxDOT, regional and county toll authorities, regional mobility authorities, transportation corporations, transit authorities, counties, road improvement districts, and other entities. To facilitate accuracy of the data presented, TxDOT requested that each toll entity provide information on its toll projects and toll-related debt. The debt and debt service information presented in this section are derived from the data TxDOT received from each public toll road entity.

In addition to debt service on debt, the information provided in this section includes:

- The name of each bond issuing entity
- Identification of each toll project or system – Toll road bonds can be payable from the revenues of either a stand-alone toll project or the collective revenues of a toll system, which includes multiple individual project elements.
- The individual toll road elements that comprise a toll system
- Outstanding principal for each toll project or system as of January 1, 2016
- Cost to repay the outstanding principal for each toll project or system based upon a repayment date of January 1, 2016

All data and calculations assume debt outstanding as of January 1, 2016.

Table 2 on the following page summarizes the outstanding toll road debt for all public toll road projects in the state.

Table 2: Debt Service on All Toll Revenue Bonds Issued for Texas Public Toll Projects[1]
(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$1,054,216,043[2]	$723,329,323	$1,777,545,366
2017	169,255,427	792,784,712	962,040,119
2018	174,211,198	822,098,051	996,309,250
2019	242,585,316	818,155,033	1,060,740,349
2020	285,972,401	814,441,260	1,100,413,661
2021	349,218,480	804,038,794	1,153,257,274
2022	374,716,250	801,560,555	1,176,276,805
2023	403,761,825	786,990,100	1,190,751,925
2024	449,564,783	809,919,757	1,259,484,540
2025	473,009,309	801,053,290	1,274,062,599
2026	538,359,431	777,532,429	1,315,891,859
2027	574,215,416	750,611,329	1,324,826,744
2028	651,211,069	727,884,378	1,379,095,446
2029	676,724,631	705,471,504	1,382,196,135
2030	794,576,535	679,814,615	1,474,391,150
2031	793,482,943	650,480,790	1,443,963,733
2032	796,492,000	616,656,383	1,413,148,383
2033	798,450,254	586,332,727	1,384,782,981
2034	805,999,658	556,799,915	1,362,799,572
2035	873,921,032	527,298,533	1,401,219,565
2036	868,884,927	494,584,979	1,363,469,906
2037	895,857,418	466,821,530	1,362,678,949
2038	962,428,896	438,953,924	1,401,382,820
2039	787,800,768	400,455,578	1,188,256,346
2040	822,346,015	359,107,565	1,181,453,580
2041	855,615,879	304,839,043	1,160,454,922
2042	860,947,771	258,783,483	1,119,731,254
2043	598,711,272	216,767,689	815,478,961
2044	478,921,947	189,346,806	668,268,753
2045	517,664,231	158,946,214	676,610,444
2046	486,297,829	131,824,156	618,121,985
2047	436,166,737	107,228,841	543,395,578
2048	258,572,253	86,146,453	344,718,706
2049	302,324,596	70,373,607	372,698,203
2050	332,020,000	58,225,399	390,245,399
2051	399,920,000	42,116,413	442,036,413
2052	212,525,000	21,526,225	234,051,225
2053	214,105,000	5,410,463	219,515,463
Total	$21,571,054,540	$18,364,711,844	$39,935,766,384

[1] Represents debt issued for public toll roads and does not include debt service for any toll roads currently under a CDA.
[2] $924.2 million of Grand Parkway Transportation Corporation debt maturing in 2016 is expected to be refinanced, largely through a federal loan through the Transportation Infrastructure Finance and Innovation Act program that will spread this principal over time.

Table 3 below identifies each toll road project and system, as well as the toll elements that comprise each regional and local government toll agency. Appendix A provides a summary of annual toll road debt service for each public toll road project and system. The data provided in Appendix A does not include financial obligations associated with the state's concession CDA projects.

As part of the process of identifying costs associated with eliminating toll roads in the state, TxDOT has calculated the upfront cost to repay the debt obligations for each local and regional toll road entity project or system having toll debt outstanding. Table 3 presents the projected cost to repay the debt for each regional and local government toll agency project or system as of January 1, 2016. The assumptions used in the calculation of the lump-sum cost to repay debt are provided in Appendix B.

Table 3: List of Regional and Local Government Toll Agency Projects[3]

System or Project Name	System Elements	Outstanding Principal on Jan. 1, 2016 *in millions*	Upfront Payment Cost as of Jan. 1, 2016 *in millions*	Debt Service Report Page
Cameron County Regional Mobility Authority	SH 550	$49.5	$56.8	A.3
Camino Real Regional Mobility Authority	Cesar Chavez Express Toll Lanes[4]	4.3	4.6	
Camino Real Regional Mobility Authority	Loop 375 Border West Expressway[4]	none	none	
Central Texas Regional Mobility Authority System	US 183A Toll Lanes US 183 South US 290 East	1,495.4	1,811.2	A.4
Central Texas Regional Mobility Authority MoPac Managed Lanes	MoPac Managed Lanes[4]	none	none	
Central Texas Regional Mobility Authority SH 71 Express	SH 71 Express[4]	65.0	65.0	A.5
Ft. Bend Co. Grand Parkway Toll Road Authority	SH 99 Grand Pkwy Segment D - Fort Bend County	155.1	183.6	A.6
Fort Bend County Toll Road Authority	Fort Bend County Toll Road Westpark Tollway	191.7	223.7	A.7
Galveston County Road District #1	San Louis – Vacek Pass Bridge	none	none	
Harris County Toll Road Authority	Hardy Toll Road Katy (I-10) Managed Lanes Sam Houston Tollway Fort Bend Parkway Extension Tomball Tollway Westpark Tollway	2,127.3	2,393.1	A.8
Metro Transit Authority of Harris County	US 290 Northwest Freeway HOT Lanes US 59 North HOT Lanes US 59 Southwest Freeway HOT Lanes I-45 North Gulf Freeway HOT Lanes I-45 South Gulf Freeway HOT Lanes	none	none	
North East Texas Regional Mobility Authority	Loop 49 Toll System[4]	59.1	59.1	A.9
North Texas Tollway Authority System	Addison Airport Toll Tunnel Sam Rayburn Tollway (SH 121) Dallas North Tollway Lewisville Lake Bridge Mountain Creek Lake Toll Bridge President George Bush Turnpike (SH 161)	8,913.9	9,923.0	A.10
North Texas Tollway Authority Special Projects System	President George Bush Turnpike Western Ext.(SH 161) Chisholm Trail Parkway	2,240.5	2,395.0	A.11
North Texas Tollway Authority SH 360	SH 360[4]	none	none	
Totals		**$15,301.1**	**$17,115.1**	

[3] Information does not include international toll bridges.
[4] Certain TxDOT financial agreements do not have set principal and interest repayment schedules and are not included in tables representing annual debt service. These agreements are described under 'TxDOT Financial Assistance' on the next page.

TxDOT Financial Assistance

Many toll projects in Texas have relied on traditional debt issuances to finance construction of projects. As noted in Table 3 above, not all projects have such debt. Below is a discussion of certain toll facilities for which TxDOT provided financial assistance to local tolling entities.

Cesar Chavez Express Toll Lanes – Camino Real Regional Mobility Authority

TxDOT has provided a loan in the amount of $9.4 million for the operations and maintenance of the Cesar Chavez Express Toll Lanes Project in annual draws until 2025. As of January 1, 2016, the drawn amount, including two pre-development loans, is $4.3 million. The payoff amount as of January 1, 2016, if interest is assessed at 4.25%, is $4.6 million. Repayment begins when project revenues cover the operations and maintenance expenses, and the annual repayment amount required is to be at least 10% of net revenues.

Loop 375 Border Highway West - Camino Real Regional Mobility Authority

In August, 2014, the Camino Real Regional Mobility Authority (CRRMA) entered into a Texas Mobility Fund[5] grant agreement with TxDOT for $500 million to fund a portion of this project. TxDOT is also contributing $139 million in capital costs. Upon completion of the project, CRRMA and TxDOT will share the project's net revenues.

SH 71 - Central Texas Regional Mobility Authority

TxDOT and the Central Texas Regional Mobility Authority (CTRMA) entered into a project agreement for SH 71. TxDOT is responsible for funding the development, design, and construction of the project. Upon completion of SH 71, CTRMA will be responsible for operations and maintenance of the project. Toll revenues are expected to cover the costs of operations and maintenance for the project, and one-half of the excess revenues must be used to reimburse TxDOT for up to $65 million plus interest at a rate of 3.62%.

MoPac Managed Lanes – Central Texas Regional Mobility Authority

In June, 2012, the Capital Area Metropolitan Planning Organization (CAMPO) and CTRMA entered into an inter-local agreement in which CAMPO allocated $130 million of their portion of an additional $1.9 billion in funds programed into the 2012 Unified Transportation Program by the Texas Transportation Commission (Commission) to fund a portion of the MoPac Improvement Project in Austin. The $130 million allocation was in addition to $67.6 million that had previously been allocated to the project by CAMPO. In exchange for the $130 million allocation, CTRMA agreed to set up a regional infrastructure fund (RIF) where a portion of the project's net toll revenues would be deposited. CAMPO would select additional projects to make use of the RIF. The Commission approved the total $197.6 million grant in July 2012.

SH 360 - North Texas Tollway Authority

SH 360 is a joint project between TxDOT and the North Texas Tollway Authority (NTTA). Pursuant to the SH 360 Project Agreement, TxDOT is funding and developing the initial SH 360 project, while NTTA will own, operate, and maintain the project once complete. The SH 360 Project

[5] Texas Mobility Fund debt is paid from certain state revenues dedicated to the fund by the Texas Legislature for the purpose of paying debt service on outstanding bonds. It is not payable from toll revenues.

Agreement provides, upon substantial completion (estimated to be late 2017), that project revenues will be used to repay TxDOT for a loan representing up to $294 million for eligible costs incurred for the development, design, and construction of the project plus interest at a rate of 4.25%.

Loop 49 - North East Texas Regional Mobility Authority

North East Texas Regional Mobility Authority (NETRMA) entered into loan agreements with TxDOT to fund the costs of developing certain segments of the Loop 49 Toll System. As of January 1, 2016, two of these loans were still outstanding – a State Infrastructure Bank (SIB) loan and a loan related to a Financial Assistance Agreement (FAA). The annual debt service shown in Appendix A represents the projected annual repayments of the SIB loan. The FAA with TxDOT, which did not have a set repayment schedule, is not included in NETRMA's annual debt service in Appendix A. In April 2016, NETRMA repaid the outstanding balances on both the SIB and FAA through an interim commercial bank loan facility.

Section 2: Bonds Appropriate for Accelerated or Lump-Sum Payment of Debt Service

HB 2612 requires that TxDOT identify '*based on criteria provided by the Texas Transportation Commission, bonds that would be appropriate for accelerated or complete lump-sum payment of debt service.*'

On June 30, 2016 the Texas Transportation Commission directed TxDOT's executive director to examine each toll facility for which debt issued by the Commission or a transportation corporation created by the Commission under Texas Transportation Code Chapter 431 is currently outstanding and evaluate the circumstances under which it may be appropriate for the payment of debt service to be accelerated. The analysis is focused on state-owned toll roads. The following criteria were adopted.

Criteria

The executive director shall:

- Evaluate the accelerated payment/defeasance cost of outstanding bonds using different assumptions about the timing of when the debt may be paid.
- Additionally, consider the potential effects removing tolls could have on:
  - mobility, reliability, and safety in the region in which the toll facility is located;
  - the capacity to continue funding long-term costs for maintenance and rehabilitation of the facility;
  - the capacity to fund improvements including the extension and expansion of the facility as well as direct connections with other facilities; and
  - the capacity to continue planned improvements to other transportation projects in the region that could have been or were expected to be funded or financed in part with the foregone toll revenue.
- Note if removing tolls may impair compliance with existing intergovernmental or other agreements.
- And, note what actions may be required by a metropolitan planning organization (MPO) to remove tolls from a facility located within its boundaries, pursuant to state and federal laws and regulations, including potential steps required by the MPO policy committee to make changes to an MPO's transportation improvement plan, air quality conformity determination, long-range transportation plan and associated regional travel demand or air quality emissions models.

Table 4 provides a summary of the state-owned toll road projects and systems, including the toll road elements that comprise state toll road systems. Table 4 also includes the principal outstanding for each state toll road project as of January 1, 2016.

Table 4: List of State-Owned Toll Projects[6]
(As of January 1, 2016)

System or Project Name	System Elements	Outstanding Principal *in millions*	Debt Service Report Page *In millions*
Camino Colombia Toll Road	SH 255 Camino Colombia	none	
Central Texas Turnpike System	SH 130 Segments 1-4 SH 45 North Loop 1 SH 45 Southeast	$3,172.8	A.12
DFW Connector	DFW Connector Managed Lanes	none	
Grand Parkway Transportation Corporation (From IH 10 west of Houston traveling clockwise to US 59/IH 69)	Grand Pkwy Segment D - Harris Co. Portion Grand Pkwy Segment E Grand Pkwy Segment F1 Grand Pkwy Segment F2 Grand Pkwy Segment G	3,113.1	A.13
SH 99 Grand Parkway Segment I-2A	SH 99 Grand Parkway Segment I-2A	none	
IH 30 Managed Lanes (Tom Landry)	IH 30 Managed Lanes (Tom Landry)	none	
IH 35E Managed Lanes Project	IH 35E Managed Lanes	none	
SH 183 Midtown Express Managed Lanes	SH 183 Midtown Express Managed Lanes	none	

Table 5 below identifies the individual bonds for each of the state-owned toll projects' outstanding debt that would need to be paid off as part of the process to remove tolls from the project. The bonds, by system, are listed in order of the most to least efficient to pay off based upon a ratio of the pay-off amount to the debt amount. Please note the outstanding principal amounts in Table 4 above include deferred interest securities shown at their final maturity value. The corresponding outstanding principal amounts in Table 5 are shown at their accreted value as of January 1, 2016.

Table 5: State Toll Road Bonds Identified for Lump-Sum Payment
(As of January 1, 2016)

System or Project Name	Series	Maturity	Debt Amount (as of Jan 1, 2016) *in millions*	*Pay-Off Amount (as of Jan 1, 2016) in millions*
Central Texas Turnpike System (CTTS)	2002A	8/15/2016	$1.693	$1.740
	2002A	8/15/2017	7.272	7.775
	2002A	8/15/2018	12.446	13.798
	2012A	8/15/2038	123.235	140.529
	2002A	8/15/2019	16.873	19.369
	2002A	8/15/2020	20.921	24.843
	2015C	8/15/2022	2.200	2.655
	2012A	8/15/2039	159.415	192.369
	2012A	8/15/2040	167.385	201.987
	2012A	8/15/2041	135.295	163.263
	2015B	8/15/2036	49.304	60.374
	2015B	8/15/2037	47.023	57.679
	2015C	8/15/2023	5.375	6.594
	2002A	8/15/2021	26.904	33.076

[6] Debt information is as of January 1, 2016 and does not include actual or planned debt refinancing or new issuance after such date.

Table 5: State Toll Road Bonds Identified for Lump-Sum Payment

(As of January 1, 2016)

System or Project Name	Series	Maturity	Debt Amount (as of Jan 1, 2016) *in millions*	*Pay-Off Amount (as of Jan 1, 2016) in millions*
CTTS (continued)	2015B	8/15/2032	40.000	49.855
	2015B	8/15/2036	24.505	30.542
	2015B	8/15/2037	20.000	24.927
	2015C	8/15/2024	8.655	10.787
	2015C	8/15/2025	12.245	15.262
	2015C	8/15/2026	9.825	12.246
	2015C	8/15/2027	14.050	17.511
	2015C	8/15/2028	13.395	16.695
	2015C	8/15/2029	14.620	18.222
	2015C	8/15/2030	16.290	20.303
	2015C	8/15/2031	125.215	156.064
	2015C	8/15/2032	97.730	121.808
	2015C	8/15/2033	151.045	188.258
	2015C	8/15/2034	150.165	187.161
	2015C	8/15/2035	65.900	82.136
	2015C	8/15/2036	50.935	63.484
	2015C	8/15/2037	66.370	82.722
	2015C	8/15/2038	88.315	110.073
	2015C	8/15/2039	61.480	76.627
	2015C	8/15/2040	64.555	80.459
	2015C	8/15/2041	67.780	84.479
	2015C	8/15/2042	71.175	88.710
	2015B	8/15/2035	113.520	141.488
	2002A	8/15/2022	29.971	38.103
	2002A	8/15/2023	32.005	42.242
	2002A	8/15/2024	33.792	46.200
	2002A	8/15/2025	35.176	49.855
	2015A	8/15/2041	40.460	57.504
	2015A	8/15/2042	184.540	262.985
	2002A	8/15/2026	42.410	62.258
	2002A	8/15/2027	43.747	66.439
	2002A	8/15/2028	44.953	70.684
	2002A	8/15/2029	44.831	72.980
	2002A	8/15/2030	44.536	75.034
Total			**$2,699.531**	**$3,450.155**
Grand Parkway Transportation Corporation (GPTC)	2014B	12/15/2016	83.550	83.550
	2014C	12/15/2016	107.180	107.180
	2014A	12/15/2016	733.465	751.347
	2013A	10/1/2031	0.330	0.407
	2013A	10/1/2032	0.740	0.912
	2013A	10/1/2033	1.180	1.454
	2013A	10/1/2034	1.660	2.045
	2013A	10/1/2035	2.175	2.680
	2013A	10/1/2036	2.735	3.370
	2013A	10/1/2037	3.340	4.115
	2013A	10/1/2038	3.990	4.916
	2013A	10/1/2039	4.690	5.779
	2013A	10/1/2040	5.445	6.709

Table 5: State Toll Road Bonds Identified for Lump-Sum Payment

(As of January 1, 2016)

System or Project Name	Series	Maturity	Debt Amount (as of Jan 1, 2016) *in millions*	*Pay-Off Amount (as of Jan 1, 2016) in millions*
GPTC (continued)	2013A	10/1/2041	6.255	7.707
	2013A	10/1/2042	7.125	8.779
	2013A	10/1/2043	8.065	9.937
	2013A	10/1/2044	9.065	11.423
	2013A	10/1/2045	10.175	12.822
	2013A	10/1/2046	11.365	14.321
	2013A	10/1/2047	12.645	15.934
	2013A	10/1/2048	14.015	17.661
	2013A	10/1/2050	17.065	21.504
	2013A	10/1/2051	18.755	23.634
	2013A	10/1/2052	20.560	25.908
	2013A	4/1/2053	23.135	29.153
	2013A	10/1/2049	15.490	19.520
	2013B	10/1/2051	181.000	236.178
	2013B	10/1/2052	190.965	249.180
	2013B	4/1/2053	190.970	249.187
	2013B	10/1/2048	43.205	57.608
	2013B	10/1/2049	68.675	91.569
	2013B	10/1/2050	263.955	351.949
	2013B	10/1/2051	199.165	265.560
	2013E	10/1/2036	15.195	20.596
	2013E	10/1/2037	50.865	69.201
	2013E	10/1/2038	56.805	77.518
	2013E	10/1/2039	62.000	84.814
	2013E	10/1/2040	66.505	91.143
	2013E	10/1/2041	70.035	96.102
	2013E	10/1/2042	40.405	55.484
	2013B	10/1/2029	1.431	2.000
	2013B	10/1/2030	4.807	6.799
	2013B	10/1/2031	8.095	11.649
	2013B	10/1/2032	11.714	17.052
	2013B	10/1/2033	15.517	22.849
	2013B	10/1/2034	19.733	29.225
	2013B	10/1/2035	24.263	36.140
	2013B	10/1/2036	19.078	28.417
	2013B	10/1/2044	48.811	74.815
	2013B	10/1/2046	48.627	74.960
	2013B	10/1/2045	48.897	75.376
	2013B	10/1/2047	47.591	73.782
	2013B	10/1/2048	18.517	28.708
Total			**$2,941.020**	**$3,670.626**

Section 3: Plan to Eliminate Certain State Toll Roads

This section of the report discusses the considerations and circumstances under which tolls could be removed from certain state-owned facilities. In addition to the analysis of the cost and timing of accelerated or lump-sum payment of toll road debt service, the criteria cited in Section 2 include other factors to be considered in the decision to remove tolls.

Toll Debt Repayment

Unlike a mortgage or car loan, which can typically be paid off at any time, long-term fixed-rate toll revenue bonds generally include terms that ensure the bond holder will receive interest payments for a minimum period of time. For bonds that mature 11 years or longer, this minimum period of time is generally 10 years from the date the bonds are issued. These bonds can still be paid off at any time, but the issuer must pay the original principal amount of the bond as well as the interest that is due to the bond holder during this minimum guaranteed period of time.

The lump-sum or accelerated cost of paying down long-term debt in advance, therefore, includes the cost of repaying principal plus the cost of funding interest through the minimum guaranteed time.

Additionally, depending upon the rate of construction cost inflation, it may be cheaper to fund new projects with cash today versus using that same cash to pay off debt today and develop those new projects in the future.

System Financing

TxDOT and other tolling entities are able to finance and operate two or more toll projects in a region as one operational and financial enterprise. The toll road entity may also elect to include future toll projects as additions to or expansions of an existing system.

Generally, system financing spreads the traffic and revenue risk across two or more projects, which normally results in a higher credit rating and a lower borrowing cost for the system enabling, in some cases, for a project to be funded that otherwise could not be completely funded if done independently. Furthermore, a new toll facility added to an existing system may reduce the need for the amount of other alternative funding required to complete the project.

Bonds that are issued to finance toll systems are payable from all revenues of all elements of the system. Removing tolls from one element of the system typically requires all bonds for the entire system to be paid off.

Managed Lanes

TxDOT has constructed managed lanes on certain existing highways to improve reliability and mobility, particularly in urban areas where space for roadway expansion is limited. Typically on managed lanes, drivers choose to pay a toll to avoid congestion on the adjacent non-tolled lanes. To ensure the managed toll lane provides a specified minimum speed, the toll rate is typically adjusted to either encourage or discourage additional traffic.

TxDOT currently operates one managed lane project, the DFW Connector. In addition, TxDOT is developing the IH 30 Managed Lanes (Tom Landry) project in Dallas County, the IH 35E Managed Lanes project in Denton and Dallas Counties, and the SH 183 Midtown Express Managed Lanes project in Tarrant and Dallas Counties.

DFW Connector. The DFW Connector project provided for the reconstruction and expansion of SH 114 and SH 121. At its widest point on SH 114, the project has 14 main lanes, 4 tolled managed lanes, and 6 frontage road lanes. The 14.4 mile-project opened to traffic in April 2014.

IH 35E Managed Lanes. The IH 35E Managed Lanes project is a three-phase project along IH 35E from IH 635 to US 380. The initial Phase 1 improvements include one additional general purpose lane in each direction, two reversible managed lanes, and additional general purpose lanes and frontage roads across Lake Lewisville. Please note that while no debt is currently outstanding, the department plans to draw down a federal Transportation Infrastructure Finance and Innovation Act (TIFIA) loan by the end of this year. Approximately $120 million of the TIFIA loan proceeds will be used to reimburse the Regional Toll Revenue (RTR) fund controlled by the North Central Texas Council of Governments.[7]

IH 30 Managed Lanes (Tom Landry). This project will provide two reversible, barrier-separated HOV/managed lanes on the IH 30 Tom Landry Freeway between the Dallas/Tarrant County Line in the City of Grand Prairie and Sylvan Avenue in the City of Dallas, a distance of approximately 13 miles.

SH 183 Midtown Express Managed Lanes. The project provides for improvements to SH 183 from SH 121 to IH 35E, as well as portions of Loop 12 and SH 114. It involves reconstructing portions of frontage roads, reconstructing portions of main-lanes, and constructing one managed toll lane in each direction in certain locations.

The purpose of tolled managed lanes is to offer drivers of these facilities reliable travel times along congested corridors. The removal of tolls on these facilities would therefore eliminate their very purpose. In addition, TxDOT's managed-lane projects are built within the boundaries and with the concurrence of metropolitan planning organizations. For these reasons, this report does not contemplate in detail the removal of tolls on such facilities.

Surplus Toll Revenue

For most toll roads, toll revenues are sufficient to pay the annual operations, maintenance, and debt service associated with the project. As they mature, toll projects and systems can also be expected to generate surplus revenues that can be used for expansion and construction of additional transportation projects in the area or to pay off debt early. If the TxDOT toll project is within the bounds of a Metropolitan Planning Organization, the MPO selects the transportation projects to make use of the surplus revenues. The removal of tolls would therefore remove a possible source of funding for construction of new transportation facilities. If funds are

[7] The RTR fund is a subaccount held in the State Highway Fund which may only be used on projects in the Dallas-Fort Worth region. The source of funding for the account is payments from the North Texas Tollway Authority for the right to develop certain toll projects in the region.

available for the retirement of toll debt, they could alternatively be used to fund other needed transportation projects.

Maintenance Costs

Maintaining roadways is expensive and the aggregate long-term cost of maintenance, rehabilitation, and reconstruction of roadways eventually surpasses the initial cost of construction. As TxDOT continues to add capacity to the State Highway System and as the existing system continues to age, the pressures on the department's maintenance budget increase commensurately each year. The more money that is spent on maintenance, the less there is available to improve mobility.

One benefit of toll projects is that toll revenue is used to pay for the maintenance of the facility. While more toll road traffic accelerates the deterioration of the highway, it also typically generates toll revenues sufficient to meet those increased maintenance costs. Through tolling, the state is relieved of the burden of funding maintenance costs for this portion of the state's transportation system.

Table 6 presents projected revenues, debt service, operations, and total maintenance expenses for TxDOT-operated toll projects. It should be noted that these are current *projections* of revenues and expenses. Actual revenues and expenses could be more or less than what is projected today. Additionally, toll revenue bonds typically include requirements that projected revenues exceed expected debt service, operations and maintenance each year by a certain measure in order to achieve a lower borrowing cost from investors.

Table 6: List of State-Operated Toll Projects[8]
(As of January 1, 2016)

System or Project Name	Projected Operating Data (2016 – 2035)	Gross Revenues *in millions*	Total Debt Service *In millions*	Total Operations, Maintenance, and Major Maintenance Costs *In millions*
Camino Colombia Toll Road	**Yrs 1 - 5**	$10.2	$0.0	$1.0
	Yrs 1 - 10	21.7	0.0	2.1
	Yrs 1 - 20	48.1	0.0	4.4
Central Texas Turnpike System	**Yrs 1 - 5**	1,013.1	606.2	313.1
	Yrs 1 - 10	2,344.4	1,412.3	696.5
	Yrs 1 - 20	6,330.9	3,641.3	1,793.2
DFW Connector	**Yrs 1 - 5**	13.6	0.0	3.8
	Yrs 1 - 10	32.9	0.0	8.6
	Yrs 1 - 20	90.9	0.0	20.8
Grand Parkway Transportation Corporation	**Yrs 1 - 5**	490.5	375.3	146.6
	Yrs 1 - 10	1,438.0	1,035.5	390.9
	Yrs 1 - 20	4,673.7	2,897.7	1,210.8

[8] The figures shown in Table 6 represent projected cash flows. With respect to the Grand Parkway Transportation Corporation, IH 35E Managed Lanes Project, and SH 183 Midtown Express Managed Lanes, the projected debt service includes currently programmed new money debt issuances and refinancings expected to occur after the date of this report.

Projected Operating Data (2016 – 2035)				
System or Project Name		Gross Revenues *in millions*	Total Debt Service *In millions*	Total Operations, Maintenance, and Major Maintenance Costs *In millions*
SH 99 Grand Parkway Segment I-2A	**Yrs 1 - 5**	12.0	0.0	3.7
	Yrs 1 - 10	35.5	0.0	9.9
	Yrs 1 - 20	118.2	0.0	29.3
I-30 Managed Lanes (Tom Landry)	**Yrs 1 - 5**	61.8	0.0	9.3
	Yrs 1 - 10	177.7	0.0	24.2
	Yrs 1 - 20	528.7	0.0	66.1
IH 35E Managed Lanes Project	**Yrs 1 - 5**	37.8	0.0	9.5
	Yrs 1 - 10	150.5	40.2	41.3
	Yrs 1 - 20	538.4	211.9	139.7
SH 183 Midtown Express Managed Lanes	**Yrs 1 - 5**	31.5	0.0	27.6
	Yrs 1 - 10	112.2	28.1	81.7
	Yrs 1 - 20	415.4	187.4	193.2

Camino Colombia

The Camino Colombia is an all-electronic toll road stretching 22 miles from the Colombia-Solidarity International Bridge to IH 35 north of Laredo. This $90 million project was a private toll road built, operated, and financed by a private company in 2000. The Texas Transportation Commission approved the road's connection with the State Highway System but had no role in initiating development of the facility.

In early 2004 the project's creditors foreclosed on the project after the owners could not meet their debt service obligations. The creditors auctioned the road and TxDOT later acquired it for $20 million. TxDOT converted the road to all-electronic tolling. Toll revenue is currently projected to exceed the costs of operations and maintenance by about ten to one as shown in the table above.

Because there is no debt on the facility, tolls can be removed with no defeasance costs and there would be no adverse impact on congestion, reliability, or safety in the region.

A portion of the road is within the boundaries of the Laredo Metropolitan Planning Organization. TxDOT would need to coordinate with and solicit the approval of the MPO to remove tolls. Pursuant to state and federal laws and regulations, the MPO policy committee would need to make changes to its transportation improvement plan, long-range transportation plan and associated regional travel demand or air quality emissions models.

The State Highway Fund would be responsible for maintenance of the road and the initial purchase price would not be fully recovered.

Central Texas Turnpike System

The Central Texas Turnpike System (CTTS) consists of four elements that provide expanded mobility options in the Central Texas region.

Elements
SH 130 Element. Segments 1 through 4 of SH 130, from IH 35 to US 183. This element is 49.0 miles long extending from IH 35 near SH 195, north of Georgetown, Texas, southward to US 183, southeast of Austin, and provides an eastern alternative to IH 35.

SH 45N Element is 12.8 miles long extending from US 183 on the west to SH 130 on the east and provides an east-west roadway for the Austin metropolitan area.

Loop 1 Element. The north extension of Loop 1. This element is 4.0 miles long extending northward from the non-tolled portion of Loop 1 at Parmer Lane to the SH 45N Element and is a major north-south route of the CTTS.

SH 45SE Element. This element links IH 35 at FM 1327, north of the City of Buda, to the junction of SH 130 and US 183 near Mustang Ridge. The 7.0 mile long facility is a four-lane roadway with controlled access and a wide center median.

Funding of the Project
TxDOT used a combination of state funding, local funding, toll revenue bonds, and a federal loan to finance the construction of the $2.7 billion CTTS.

At the time of the original financing, the state agreed to fund from the State Highway Fund operations and maintenance costs in the event revenues were insufficient to cover those costs plus debt service. However, since 2013 CTTS revenues have been sufficient to pay debt service, operations, and maintenance expenses without contributions from the State Highway Fund and are projected to continue doing so.

Bonds
CTTS bonds, originally issued in 2002, are payable from the revenues of the system. Refinancings for savings, including a refinancing of the federal loan, were completed in 2012 and 2015. Outstanding principal is $3.2 billion[9].

Removing Tolls
To remove tolls from one or more elements of the CTTS, all of the outstanding bonds must be paid off. Table 7 shows how much cash is needed to pay off debt when certain dates are targeted for the repayment on: September 1 of 2017, 2019, 2021, or 2023. The table also shows when these bonds may be paid off if excess revenue (revenue in excess of operations, maintenance or debt service) is also applied to retire debt early. Lastly, Table 7 shows when the debt may be paid if the repayments are accelerated using excess revenue assuming maintenance expenses are paid from other sources.

Final maturity for CTTS bonds would be in the year 2042 if no accelerated payment of debt occurs.

[9] The principal includes deferred interest securities and is shown at their final maturity value.

Table 7: Central Texas Turnpike System Lump-Sum Debt Repayment Costs

Lump-Sum Cost (in millions)	
September 1, 2017 Payoff	$3,195.3
September 1, 2019 Payoff	3,005.8
September 1, 2021 Payoff	2,759.4
September 1, 2023 Payoff	2,473.3
Early Retirement of Debt Over Time Using Excess Revenues – Final Debt Payment Date	
Excess Revenues	Fiscal Year 2035
Excess Revenues including $1.17 billion of revenue currently expected to fund operations and maintenance expenses	Fiscal Year 2030

Other Considerations

Effects on Mobility and Safety. If tolls are removed from CTTS, it is reasonable to expect that congestion on the system will increase. Drivers using the northern portions of SH 130 currently experience congestion during the peak afternoon hours. Congestion would likely occur for a longer period of time if the facility were non-tolled. However, removing tolls from SH 130 could also draw vehicles off of IH 35 in Austin, which could improve overall safety in the region.

Significant analysis would be required to more specifically determine projected traffic and safety implications from removing tolls from the Central Texas Turnpike System.

Costs of Long-term Maintenance. Over the next 20 years, the cost of performing non-toll related operations and maintenance on CTTS is projected to be $444 million. Toll revenues are currently expected to fund these costs. Without tolls these costs would need to be funded from other sources.

Other Planned Improvements. As noted above, drivers experience congestion in the northern portions of SH 130 during peak hours. Excess system revenue could be used to expand the capacity of the system and further improve mobility. Additionally, it has been suggested that some of the excess revenue of the system could possibly be used to support the delivery of new, tolled lanes on IH 35 in Central Texas. If tolls are removed, such improvements would need to be funded from other sources, which have not been identified.

Local Coordination. The CTTS is located within the boundaries of the Capital Area Metropolitan Planning Organization. TxDOT would need to coordinate with and solicit the approval of the MPO. Pursuant to state and federal laws and regulations, the MPO policy committee would need to make changes to its transportation improvement plan, long-range transportation plan and associated regional travel demand or air quality emissions models.

The Grand Parkway Transportation Corporation

The Grand Parkway Transportation Corporation (GPTC) is a public, non-profit Texas corporation created by the Texas Transportation Commission in March 2012. GPTC is authorized to act on behalf of the Texas Transportation Commission for the public purpose of developing, financing, refinancing, designing, constructing, reconstructing, expanding, operating or maintaining some or all of the segments of the Grand Parkway Project. The Grand Parkway Project is a proposed 184-mile long highway traversing seven counties (Harris, Fort Bend, Brazoria, Galveston, Montgomery, Liberty, and Chambers Counties) and encircling the greater Houston area. The Grand Parkway Project is divided into eleven segments designated A, B, C, D, E, F-1, F-2, G, H, I-

1 and I-2. GPTC currently consists of the portion of Segment D located within Harris County, Segment E, Segment F-1 and Segment G (collectively the "Grand Parkway System"). As of March 2016, all of the segments that comprise the GPTC's Grand Parkway System were open to traffic.

Elements

Segment D (Harris County Portion) extends 2.6 miles from the Fort Bend/Harris County line to 0.30 miles north of Colonial Parkway.

Segment E is a 14.4-mile, controlled access toll road with intermittent frontage roads from just north of Colonial Parkway to US Highway 290 through northwest Harris County.

Segment F-1 extends 12.1 miles from US Highway 290 to State Highway 249 through northwest Harris County.

Segment F-2 is 12.2 miles extending from State Highway 249 to Interstate Highway 45 North through northwest Harris County.

Segment G is 13.5 miles extending from Interstate Highway 45 North to Interstate Highway 69 North through northwest Harris County and southeast Montgomery County.

Funding of the Project

Bonds
In August 2013, GPTC financed the capital costs of delivering Segments D-G of the Grand Parkway Project, using toll revenue bonds, some with a Toll Equity Loan Agreement (TELA) component. As of January 1, 2016, a total of approximately $3.1 billion[10] in bonds were outstanding.

TELA is an agreement in which TxDOT would make a loan from the State Highway Fund to the GPTC to cover eligible costs of construction, right-of-way, and operations and maintenance in the event annual toll revenues are insufficient to pay certain operation and maintenance costs plus debt service, up to a maximum annual amount. Any amount drawn must be repaid, with interest. The TELA was utilized to improve the credit rating on some of the bonds, thereby lowering borrowing costs, enabling more of the project to be delivered. Before any such loan is made, available toll revenues along with substantial cash reserves must be used. There is no projected use of the TELA in the next biennium. Without the TELA, the 2013 financing would have required an estimated $980 million of additional up-front public subsidy.

Transportation Infrastructure Finance and Innovation Act (TIFIA)
An $840.6 million TIFIA loan from USDOT for Segments D-G closed in February 2014. Disbursement of the loan proceeds is expected in late 2016 and is not anticipated to increase the total amount of GPTC debt. In October of 2015, a TIFIA Letter of Interest, the first step of the loan process, was submitted to USDOT for Segments H&I. The plan for development of Segments H&I is discussed in more detail in the "Other Planned Improvements" section below.

[10] The principal includes deferred interest securities and is shown at their final maturity value.

Removing Tolls

In order to remove tolls from any element of the GPTC's Grand Parkway System, all of the outstanding GPTC bonds must be paid. Table 8 below shows the timing and required pay-off amounts under different scenarios under which the debt repayment may be accelerated.

The table shows how much cash is needed to pay off debt when certain dates are targeted for the repayment on: September 1 of 2017, 2019, 2021, or 2023.

Additionally, Table 8 below shows when the bonds may be paid off if excess revenue (revenue not needed for operations, maintenance or debt service) is used to retire debt early.

Lastly, the table shows when the debt may be paid if the repayments are accelerated using excess revenue and revenue that would otherwise have been used for maintenance expenses. This scenario assumes that maintenance would be performed using some other eligible source of funding.

Final maturity for GPTC bonds would be in the year 2053 if no accelerated payment of debt occurs.

Table 8: Grand Parkway Transportation Corporation Lump-Sum Repayment Costs

Upfront Cash Cost (in millions)	
September 1, 2017 Payoff	$3,554.3
September 1, 2019 Payoff	3,563.9
September 1, 2021 Payoff	3,504.0
September 1, 2023 Payoff	3,381.0
Early Retirement of Debt Over Time Using Excess Revenues – Final Debt Extinguishment Date	
Excess Revenues Only	Fiscal Year 2042
Excess Revenues including $1.4 billion of revenue currently expected to fund operations and maintenance expenses	Fiscal Year 2036

Effects on Mobility and Safety

If tolls are removed from the segments of the Grand Parkway operated by the Grand Parkway Transportation Corporation, it is reasonable to expect more traffic on the facility. The Grand Parkway, which was originally conceived in 1960, is designed to serve the now rapidly growing areas around Houston.

The Grand Parkway will be the outer-most loop serving the Houston Metropolitan area. The next available loop inward toward Houston is the Sam Houston Toll Road, approximately 14 miles from the Grand Parkway along IH 10. Traffic could be diverted from the Sam Houston Toll Road if drivers whose destinations are north or south of Houston find the Grand Parkway more convenient. The inner-most loop, IH 610, is not tolled. However it is 20 miles from the Grand Parkway along IH 10.

The traffic study conducted for the GPTC's Grand Parkway System financings estimated the travel time savings in 2035 for segments D through G during peak and non-peak periods. The traffic study estimates during peak hours travel time savings increases in a range of 10-11 minutes on Segment F-1 to 47-48 minutes on Segment G.

A detailed traffic study conducted over several months would have to be performed to predict the precise effects of removing tolls from the GPTC's segments of the Grand Parkway. However,

the previous traffic study shows significant estimated time savings, particularly during peak hours. Such time savings would be expected to decrease if the Grand Parkway System was operated as a non-tolled road.

Costs of Long-term Maintenance
Over the next 20 years, the costs of performing non-toll related operations and maintenance on the segments of the Grand Parkway operated by the Grand Parkway Transportation Corporation is projected to be $495 million. Toll revenues are expected to pay these costs. If tolls are removed, the maintenance costs would need to be paid from other sources of revenue available to TxDOT.

Other Planned Improvements
TxDOT is currently procuring a contractor to build Segments H, I-1 and I-2B (Segments H&I). If Segments H&I were to be financed as a stand-alone project, rather than being incorporated into the GPTC's Grand Parkway System, it is estimated that TxDOT would need an additional $340 million up front along with the proceeds of revenue bonds and a TIFIA loan to fund the project.

If tolls are removed before completion of this procurement, the cost of Segments H&I, which will likely far exceed $1 billion, would need to be funded from other sources which are not currently identified. If the state determines it has funds available to pay off toll bond debt, it could be substantially more efficient to continue building the Grand Parkway with those funds rather than issuing new debt and paying interest to continue the project.

Segment I-2A (FM 1405 to SH 146) opened to traffic in 2008 and currently has no debt outstanding. It is expected to be added to the Grand Parkway System upon completion of Segments H & I. If tolls are removed and Segments H & I are not procured, then Segment I-2A will remain a standalone section of the Grand Parkway Project.

Local Coordination
Four counties (Harris, Montgomery, Liberty and Chambers) have ceded to the Commission and TxDOT their primacy rights to develop the Grand Parkway segments in their counties.

TxDOT is a party to the 2009 Market Valuation Waiver Agreement (MVWA) with seven counties (Galveston, Brazoria, Fort Bend, Harris, Montgomery, Liberty and Chambers). The MVWA establishes certain policies and principles for the development of the 184-mile toll project. The MVWA describes the minimum scope and ultimate scope of the Grand Parkway Project and phased construction of a number of direct connectors.

In addition, the MVWA sets out principles of governance for all segments of the Grand Parkway Project, including: (1) baseline toll rates and annual toll escalation policy that are based on average per mile toll rates of the Harris County Toll Road Authority in effect in 2009; (2) a prohibition on the use of toll revenues outside the Grand Parkway Project until the ultimate scope has been constructed and placed in service; and (3) limits on competing roads that impact tolled traffic on the corridor Project. TxDOT would work with the other parties to the agreement and amend it as necessary in order to remove tolls from the segments operated by the GPTC.

The GPTC's Grand Parkway System is located within the boundaries of the Houston-Galveston Area Council, the metropolitan planning organization for that region. TxDOT would need to coordinate with and solicit the approval of the council. Pursuant to state and federal laws and

regulations, the MPO policy committee would need to make changes to its transportation improvement plan, air quality conformity determination, long-range transportation plan and associated regional travel demand or air quality emissions models.

Comprehensive Development Agreement Concession Summary

A form of Comprehensive Development Agreement (CDA), concessions are a method of alternative financing that enables the state to access private investment and transfer the risks and responsibilities associated with the design, construction, financing and maintenance of transportation projects.

TxDOT uses different types of CDAs, including design-build contracts and concession agreements. Design-build contracts provide a mechanism for property acquisition, design, and construction to occur simultaneously under a single contract, but do not include private-sector financial participation. Concession agreements require that a private-sector developer be responsible for performing the development, financing, construction, operation, and maintenance of a facility for a specific time period up to 52 years. In exchange, the developer receives a share of revenue from tolls collected. TxDOT has entered into concession CDAs with private-sector developers for five projects in Texas, as shown in Table 9 below.

Table 9: List of Comprehensive Development Agreement Toll Projects in the State of Texas

Project	District	Phase	Limits	Developer	Contract Execution	Total Capital Costs[11]
SH 130 Segments 5 and 6[12]	Austin / San Antonio	Operations & Maintenance	Segment 5 stretches from north of Mustang Ridge to FM 1185 north of Lockhart; Segment 6 runs from FM 1185 to IH 10 northeast of Seguin.	SH 130 Concession Company LLC	March 22, 2007	$1.38 billion
North Tarrant Express Segments 1 & 2W	Fort Worth	Operations & Maintenance	Segment 1 of IH 820 from IH 35W to the Northeast IH 820/SH 121 Interchange Segment 2 from Northeast IH 820/SH 121 Interchange to east of SH 183/SH 121	NTE Mobility Partners LLC	June 23, 2009	2.12 billion
IH-635 LBJ Managed Lanes	Dallas	Operations & Maintenance	From Greenville Avenue to Luna Rd on IH 635 and from Northwest Highway to Valwood Parkway on IH 35 north of Dallas	LBJ Infrastructure Group, LLC	September 4, 2009	2.74 billion
North Tarrant Express Segments 3A[13]	Fort Worth	Design - Construction	Extends along IH 35W from IH 30 to Fossil Creek Boulevard north of Fort Worth	NTE Mobility Partners Segments 3, LLC	March 1, 2013	1.5 billion
SH 288 Toll Lanes in Harris County Project	Houston	Design - Construction	From US 59 to the Harris/Brazoria County line south of Houston	Blueridge Transportation Group, LLC	March 4, 2016	816 million

[11] Total Capital Costs include current Contract Value with Change Order, ROW, Utilities, Tolling/ITS/Contingencies and other financial fees.

[12] Includes final developer expenditures, including the concession payment to TxDOT.

[13] Upon substantial completion, operation of North Tarrant Express Segment 3B will be governed by the North Tarrant Express 3A/3B Facility Agreement.

These toll projects were structured as long-term concession agreements and each of these concessions would require an upfront payment from TxDOT to the developer to terminate the concession agreement and remove tolls. The cost of the up-front payment is substantial and the calculation is more complex compared to TxDOT-operated toll projects.

To remove the debt and other obligations for all of these toll road facilities, TxDOT has calculated the estimated payments to be approximately $12.5 billion. This is a preliminary, estimated amount of upfront payment to be paid to developers if TxDOT were to exercise its right to terminate each CDA. A more rigorous process, including the use of an independent appraiser, pursuant to state law and the contractual agreements would be required in order to determine the actual payments.

Appendix A: Index of Texas Toll Road Bonds

Table A.1: Debt Service on Regional and Local Government Toll Agency Toll Revenue Bonds[14]
(As of January 1, 2016)

Calendar	Principal Due	Interest Due	Total Debt Service
2016	$128,276,043	$599,794,519	$728,070,561
2017	161,370,427	613,755,758	775,126,185
2018	159,986,198	627,135,158	787,121,357
2019	222,220,316	623,192,140	845,412,456
2020	259,257,401	619,478,367	878,735,768
2021	312,738,480	609,075,901	921,814,381
2022	329,366,250	606,597,662	935,963,912
2023	349,446,825	592,137,207	941,584,032
2024	386,184,783	587,578,061	973,762,844
2025	400,354,309	579,144,345	979,498,653
2026	451,329,431	556,235,733	1,007,565,164
2027	475,810,416	529,805,884	1,005,616,299
2028	545,986,069	507,781,432	1,053,767,501
2029	562,974,631	486,038,308	1,049,012,939
2030	669,186,535	461,215,875	1,130,402,409
2031	655,887,943	433,053,837	1,088,941,780
2032	640,452,000	406,133,692	1,046,585,692
2033	622,775,254	383,665,672	1,006,440,926
2034	624,239,658	363,011,884	987,251,542
2035	655,381,032	342,735,285	998,116,317
2036	626,464,927	321,136,174	947,601,102
2037	635,282,418	299,670,354	934,952,772
2038	690,083,896	278,929,264	969,013,160
2039	500,215,768	252,925,326	753,141,095
2040	518,456,015	226,076,506	744,532,521
2041	535,790,879	187,131,660	722,922,539
2042	557,702,771	157,204,033	714,906,804
2043	590,646,272	130,433,741	721,080,012
2044	394,116,947	103,426,188	497,543,136
2045	431,329,231	77,879,222	509,208,452
2046	399,192,829	55,734,068	454,926,897
2047	349,116,737	36,156,748	385,273,485
2048	172,402,253	20,122,528	192,524,781
2049	218,159,596	9,082,344	227,241,940
2050	51,000,000	1,391,524	52,391,524
2051	1,000,000	78,750	1,078,750
2052	1,000,000	26,250	1,026,250
Total	$15,285,184,540	$12,684,971,402	$27,970,155,939

[14] Figures do not include certain loan agreements between TxDOT and local and regional toll entities that do not have a set annual principal and interest payment schedule. Such loans are described under 'TxDOT Financial Assistance'

Table A.2: Debt Service on All Toll Revenue Bonds Issued for State-Owned Toll Projects[15]
(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$925,940,000	$123,534,805	$1,049,474,805
2017	7,885,000	179,028,954	186,913,934
2018	14,225,000	194,962,893	209,187,893
2019	20,365,000	194,962,893	215,327,893
2020	26,715,000	194,962,893	221,677,893
2021	36,480,000	194,962,893	231,442,893
2022	45,350,000	194,962,893	240,312,893
2023	54,315,000	194,852,893	249,167,893
2024	63,380,000	222,341,695	285,721,695
2025	72,655,000	221,908,945	294,563,945
2026	87,030,000	221,296,695	308,326,695
2027	98,405,000	220,805,445	319,210,445
2028	105,225,000	220,102,945	325,327,945
2029	113,750,000	219,433,195	333,183,195
2030	125,390,000	218,598,740	343,988,740
2031	137,595,000	217,426,953	355,021,953
2032	156,040,000	210,522,690	366,562,690
2033	175,675,000	202,667,055	378,342,055
2034	181,760,000	193,788,030	375,548,030
2035	218,540,000	184,563,248	403,103,248
2036	242,420,000	173,448,804	415,868,804
2037	260,575,000	167,151,177	427,726,177
2038	272,345,000	160,024,660	432,369,660
2039	287,585,000	147,530,251	435,115,251
2040	303,890,000	133,031,059	436,921,059
2041	319,825,000	117,707,383	437,532,383
2042	303,245,000	101,579,450	404,824,450
2043	8,065,000	86,333,949	94,398,949
2044	84,805,000	85,920,618	170,725,618
2045	86,335,000	81,066,993	167,401,993
2046	87,105,000	76,090,088	163,195,088
2047	87,050,000	71,072,093	158,122,093
2048	86,170,000	66,023,925	152,193,925
2049	84,165,000	61,291,263	145,456,263
2050	281,020,000	56,833,875	337,853,875
2051	398,920,000	42,037,663	440,957,663
2052	211,525,000	21,499,975	233,024,975
2053	214,105,000	5,410,463	219,515,463
Total	$6,285,870,000	$5,679,740,442	$11,965,610,442

[15] The Grand Parkway Transportation Corporation principal maturing in 2016 in the amount of $924.2 million is expected to be refinanced, largely through a federal loan through the Transportation Infrastructure Finance and Innovation Act program.

Cameron County Regional Mobility Authority

Table A.3: Cameron County Regional Mobility Authority Toll System Debt Service
(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$--	$2,262,813	$2,262,813
2017	840,000	2,250,213	3,090,213
2018	910,000	2,226,900	3,136,900
2019	1,030,000	2,205,338	3,235,338
2020	1,240,000	2,176,550	3,416,550
2021	1,335,000	2,127,050	3,462,050
2022	1,400,000	2,064,550	3,464,550
2023	1,475,000	2,000,569	3,475,569
2024	1,540,000	1,933,575	3,473,575
2025	1,610,000	1,863,894	3,473,894
2026	1,685,000	1,789,388	3,474,388
2027	1,765,000	1,709,963	3,474,963
2028	1,850,000	1,626,313	3,476,313
2029	1,940,000	1,538,178	3,478,178
2030	2,025,000	1,445,744	3,470,744
2031	2,125,000	1,348,794	3,473,794
2032	2,230,000	1,246,044	3,476,044
2033	2,335,000	1,137,331	3,472,331
2034	2,455,000	1,023,078	3,478,078
2035	2,130,000	912,906	3,042,906
2036	2,240,000	807,000	3,047,000
2037	2,350,000	695,563	3,045,563
2038	2,465,000	578,625	3,043,625
2039	2,595,000	455,719	3,050,719
2040	2,720,000	326,594	3,046,594
2041	2,540,000	197,000	2,737,000
2042	2,670,000	66,750	2,736,750
Total	$49,500,000	$38,016,438	$87,516,438

Standalone Toll Road / System Elements

SH550

Central Texas Regional Mobility Authority

Table A.4: Central Texas Regional Mobility Authority Toll System Debt Service
(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$5,175,000	$50,011,700	$55,186,700
2017	6,315,000	56,763,563	63,078,563
2018	8,275,000	56,379,706	64,654,706
2019	11,025,000	55,864,263	66,889,263
2020	12,800,000	56,596,342	69,396,342
2021	15,570,000	57,202,722	72,772,722
2022	16,895,449	56,740,542	73,635,991
2023	19,873,357	57,257,584	77,130,941
2024	23,486,476	63,323,843	86,810,319
2025	20,959,439	73,788,953	94,748,392
2026	24,475,784	71,887,956	96,363,740
2027	29,286,750	69,409,329	98,696,079
2028	30,654,208	68,763,733	99,417,941
2029	42,294,069	67,554,228	109,848,298
2030	49,262,943	65,875,857	115,138,800
2031	52,166,778	62,961,028	115,127,806
2032	54,150,143	60,884,019	115,034,162
2033	56,291,675	58,649,463	114,941,137
2034	58,679,928	56,275,809	114,955,737
2035	61,135,851	53,759,711	114,895,562
2036	65,018,067	49,706,395	114,724,462
2037	67,888,985	46,843,403	114,732,387
2038	70,786,947	43,818,015	114,604,962
2039	74,087,277	40,619,960	114,707,237
2040	77,351,015	37,239,547	114,590,562
2041	92,015,879	23,117,134	115,133,012
2042	72,602,904	19,032,983	91,635,887
2043	70,391,272	15,619,859	86,011,131
2044	73,841,947	12,171,721	86,013,669
2045	104,764,120	7,861,255	112,625,375
2046	54,544,660	3,962,753	58,507,412
2047	23,673,693	2,227,994	25,901,687
2048	24,442,253	1,456,234	25,898,487
2049	25,239,596	660,091	25,899,687
Total	$1,495,421,465	$1,524,287,698	$3,019,709,163

Standalone Toll Road / System Elements

US 183A
US 290 East
US 183 South

Central Texas Regional Mobility Authority

Table A.5: Central Texas Regional Mobility Authority SH 71 Express Debt Service[16]

(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$0		$-
2017	1,335,180		1,335,180
2018	2,385,371		2,385,371
2019	2,744,584		2,744,584
2020	2,954,875		2,954,875
2021	2,788,319		2,788,319
2022	3,391,772		3,391,772
2023	3,617,789		3,617,789
2024	3,848,366		3,848,366
2025	4,083,574		4,083,574
2026	2,315,623		2,315,623
2027	4,524,862		4,524,862
2028	4,734,093		4,734,093
2029	4,943,392		4,943,392
2030	5,155,097		5,155,097
2031	2,094,395		2,094,395
2032	5,579,605		5,579,605
2033	5,791,262		5,791,262
2034	2,711,835		2,711,835
Total	$65,000,000		$65,000,000

Standalone Toll Road / System Elements

SH 71 Express

[16] Debt service is projected based upon net revenues and will change based upon actual revenues and operations and maintenance. Total repayments as of January 1, 2016 were still not fully finalized as to total size of the loan and interest repayments and therefore only the estimated principal payments were contemplated as of that date.

Fort Bend County Grand Parkway Toll Road Authority

Table A.6: Fort Bend County Grand Parkway Toll Road Authority Toll System Debt Service

(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$0	$7,180,200	$7,180,200
2017		7,180,200	7,180,200
2018		7,180,200	7,180,200
2019		7,180,200	7,180,200
2020		7,180,200	7,180,200
2021	1,230,000	7,149,450	8,379,450
2022	2,460,000	7,057,200	9,517,200
2023	3,575,000	6,906,325	10,481,325
2024	3,750,000	6,723,200	10,473,200
2025	3,930,000	6,531,200	10,461,200
2026	4,125,000	6,329,825	10,454,825
2027	4,325,000	6,118,575	10,443,575
2028	4,535,000	5,897,075	10,432,075
2029	4,710,000	5,713,050	10,423,050
2030	4,890,000	5,520,150	10,410,150
2031	5,080,000	5,321,700	10,401,700
2032	5,275,000	5,113,625	10,388,625
2033	5,535,000	4,843,375	10,378,375
2034	5,805,000	4,559,875	10,364,875
2035	6,090,000	4,262,500	10,352,500
2036	6,390,000	3,950,500	10,340,500
2037	6,705,000	3,623,125	10,328,125
2038	7,040,000	3,279,500	10,319,500
2039	7,385,000	2,918,875	10,303,875
2040	7,750,000	2,540,500	10,290,500
2041	8,135,000	2,143,375	10,278,375
2042	8,540,000	1,726,500	10,266,500
2043	8,920,000	1,334,600	10,254,600
2044	9,265,000	970,900	10,235,900
2045	9,630,000	593,000	10,223,000
2046	10,010,000	200,200	10,210,200
Total	$155,085,000	$147,229,200	$302,314,200

Standalone Toll Road / System Elements

SH 99 Grand Pkwy Segment D - Fort Bend County

Fort Bend County Toll Road Authority

Table A.7: Fort Bend County Grand Parkway Toll Road Authority Toll System Debt Service

(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$4,645,000	$8,680,025	$13,325,025
2017	5,390,000	8,508,175	13,898,175
2018	6,260,000	8,276,288	14,536,288
2019	6,820,000	8,011,188	14,831,188
2020	7,345,000	7,714,575	15,059,575
2021	7,780,000	7,363,875	15,143,875
2022	8,230,000	6,987,975	15,217,975
2023	8,630,000	6,587,075	15,217,075
2024	9,085,000	6,164,922	15,249,922
2025	9,510,000	5,720,019	15,230,019
2026	9,980,000	5,251,913	15,231,913
2027	10,470,000	4,758,894	15,228,894
2028	10,975,000	4,240,806	15,215,806
2029	11,510,000	3,694,156	15,204,156
2030	12,105,000	3,125,119	15,230,119
2031	12,660,000	2,527,831	15,187,831
2032	13,280,000	1,893,231	15,173,231
2033	3,370,000	1,491,406	4,861,406
2034	3,520,000	1,334,131	4,854,131
2035	3,680,000	1,169,656	4,849,656
2036	3,845,000	997,631	4,842,631
2037	4,015,000	829,406	4,844,406
2038	4,170,000	664,600	4,834,600
2039	4,340,000	492,144	4,832,144
2040	4,515,000	312,697	4,827,697
2041	2,710,000	167,000	2,877,000
2042	2,820,000	56,400	2,876,400
Total	$191,660,000	$107,021,138	$298,681,138

Standalone Toll Road / System Elements

Fort Bend Co. Pkwy Toll Road
Fort Bend Co. Westpark Tollway

Harris County Toll Road Authority

Table A.8: Harris County Toll Road Authority Toll System Debt Service

(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$93,585,000	$98,732,614	$192,317,614
2017	97,210,000	98,105,350	195,315,350
2018	99,180,000	94,100,520	193,280,520
2019	103,780,000	90,271,570	194,051,570
2020	106,865,000	85,323,187	192,188,187
2021	102,540,000	80,106,825	182,646,825
2022	79,200,000	75,154,962	154,354,962
2023	81,990,000	71,248,194	153,238,194
2024	84,870,000	67,206,475	152,076,475
2025	76,520,000	63,025,631	139,545,631
2026	74,880,000	59,174,181	134,054,181
2027	73,340,000	55,408,619	128,748,619
2028	76,955,000	51,723,894	128,678,894
2029	80,765,000	47,890,706	128,655,706
2030	92,720,000	43,882,956	136,602,956
2031	97,095,000	39,294,044	136,389,044
2032	100,815,000	34,449,844	135,264,844
2033	106,075,000	29,425,069	135,500,069
2034	102,815,000	24,390,656	127,205,656
2035	107,755,000	19,807,739	127,562,739
2036	41,335,000	14,738,488	56,073,488
2037	31,905,000	12,671,738	44,576,738
2038	33,545,000	11,076,488	44,621,488
2039	20,145,000	9,399,238	29,544,238
2040	20,810,000	8,391,988	29,201,988
2041	14,030,000	7,318,213	21,348,213
2042	17,885,000	6,581,638	24,466,638
2043	18,680,000	5,650,425	24,330,425
2044	19,520,000	4,677,475	24,197,475
2045	20,505,000	3,660,425	24,165,425
2046	21,340,000	2,591,913	23,931,913
2047	22,325,000	1,479,313	23,804,313
2048	3,100,000	315,000	3,415,000
2049	3,200,000	160,000	3,360,000
Total	$2,127,280,000	$1,317,435,372	$3,444,715,372

Standalone Toll Road / System Elements

Hardy Toll Road	Tomball Tollway
Katy (I-10) Managed Lanes	Fort Bend Parkway Extension
Sam Houston Tollway	Westpark Tollway

North East Texas Regional Mobility Authority[17]

Table A.9: North East Texas Regional Mobility Authority Toll System Debt Service
(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$0	$1,936,752	$1,936,752
2017		1,956,782	1,956,782
2018		1,956,782	1,956,782
2019		2,893,041	2,893,041
2020	41,757	3,827,593	3,869,350
2021		3,825,885	3,825,885
2022	570,811	3,802,539	4,373,350
2023	709,955	3,750,155	4,460,110
2024	846,448	3,687,725	4,534,174
2025	938,916	3,615,931	4,554,847
2026	1,079,753	3,533,367	4,613,120
2027	1,241,716	3,438,419	4,680,135
2028	1,427,973	3,329,229	4,757,202
2029	1,642,169	3,203,660	4,845,830
2030	1,888,495	3,059,256	4,947,751
2031	2,171,769	2,893,191	5,064,960
2032	2,497,534	2,702,217	5,199,751
2033	2,872,164	2,482,596	5,354,761
2034	3,302,989	2,230,032	5,533,021
2035	3,798,438	1,939,584	5,738,021
2036	4,368,203	1,605,568	5,973,772
2037	5,023,434	1,221,450	6,244,884
2038	5,776,949	779,715	6,556,663
2039	6,643,491	271,719	6,915,210
Total	$46,842,965	$63,943,190	$110,786,155

Standalone Toll Road / System Elements

Loop 49

[17] Debt service does not include a toll equity loan outstanding in the amount of approximately $12 million on January 1, 2016. The toll equity loan was repayable from available excess revenues, and thus did not have a set annual principal and interest repayment schedule. The toll equity loan and existing debt shown above were repaid in full with a bank loan in April 2016.

North Texas Tollway Authority

Table A.10: North Texas Tollway Authority System Debt Service

(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$9,841,043	$374,072,986	$383,914,029
2017	37,445,247	381,771,430	419,216,677
2018	42,915,827	379,831,596	422,747,423
2019	94,855,732	379,585,776	474,441,507
2020	102,475,769	379,545,121	482,020,889
2021	151,675,161	375,223,393	526,898,554
2022	184,738,218	367,459,589	552,197,807
2023	195,045,723	358,297,052	553,342,774
2024	214,763,493	348,028,783	562,792,276
2025	236,882,380	336,284,060	573,166,440
2026	277,853,270	322,356,022	600,209,291
2027	301,202,087	305,924,790	607,126,877
2028	334,949,795	291,762,544	626,712,339
2029	329,575,000	280,023,698	609,598,698
2030	408,645,000	266,172,623	674,817,623
2031	377,860,000	251,192,930	629,052,930
2032	383,375,000	237,557,212	620,932,212
2033	397,035,000	225,007,812	622,042,812
2034	408,345,000	212,614,783	620,959,783
2035	421,890,000	200,344,769	622,234,769
2036	432,885,000	188,837,241	621,722,241
2037	444,965,000	175,940,874	620,905,874
2038	493,270,000	161,532,626	654,802,626
2039	302,095,000	145,624,727	447,719,727
2040	318,610,000	128,723,180	447,333,180
2041	334,470,000	110,455,569	444,925,569
2042	352,050,000	90,550,442	442,600,442
2043	371,185,000	68,684,637	439,869,637
2044	149,500,000	52,731,004	202,231,004
2045	156,310,000	43,568,491	199,878,491
2046	126,775,000	35,009,606	161,784,606
2047	132,880,000	26,946,689	159,826,689
2048	144,860,000	18,351,294	163,211,294
2049	189,720,000	8,262,253	197,982,253
2050	51,000,000	1,391,524	52,391,524
2051	1,000,000	78,750	1,078,750
2052	1,000,000	26,250	1,026,250
Total	$8,913,943,744	$7,529,772,126	$16,443,715,867

Standalone Toll Road / System Elements

Addison Airport Toll Road	President George Bush Turnpike
Dallas North Tollway	Mountain Creek Lake Toll Bridge
Lewisville Lake Bridge	Sam Rayburn Tollway

North Texas Tollway Authority

Table A.11: North Texas Tollway Authority Special Project System Debt Service
(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$15,030,000	$56,917,429	$71,947,429
2017	12,835,000	57,220,046	70,055,046
2018	60,000	77,183,166	77,243,166
2019	1,965,000	77,180,766	79,145,766
2020	25,535,000	77,114,799	102,649,799
2021	29,820,000	76,076,701	105,896,701
2022	32,480,000	87,330,305	119,810,305
2023	34,530,000	86,090,254	120,620,254
2024	43,995,000	90,509,538	134,504,538
2025	45,920,000	88,314,657	134,234,657
2026	54,935,000	85,913,082	140,848,082
2027	49,655,000	83,037,295	132,692,295
2028	79,905,000	80,437,838	160,342,838
2029	85,595,000	76,420,632	162,015,632
2030	92,495,000	72,134,169	164,629,169
2031	104,635,000	67,514,320	172,149,320
2032	73,249,717	62,287,501	135,537,217
2033	43,470,153	60,628,620	104,098,772
2034	36,604,906	60,583,519	97,188,425
2035	48,901,743	60,538,420	109,440,163
2036	70,383,657	60,493,351	130,877,008
2037	72,430,000	57,844,795	130,274,795
2038	73,030,000	57,199,694	130,229,694
2039	82,925,000	53,142,945	136,067,945
2040	86,700,000	48,542,001	135,242,001
2041	81,890,000	43,733,370	125,623,370
2042	101,134,867	39,189,319	140,324,186
2043	121,470,000	39,144,219	160,614,219
2044	141,990,000	32,875,088	174,865,088
2045	140,120,111	22,196,050	162,316,161
2046	186,523,169	13,969,597	200,492,766
2047	170,238,044	5,502,753	175,740,796
Total	$2,240,451,366	$1,957,266,236	$4,197,717,601

Standalone Toll Road / System Elements

President George Bush Turnpike – Western Extension
Chisholm Trail Parkway

Central Texas Turnpike System

Table A.12: Central Texas Turnpike System Debt Service

(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$1,745,000	$107,051,400	$108,796,400
2017	7,885,000	107,051,400	114,936,400
2018	14,225,000	107,051,400	121,276,400
2019	20,365,000	107,051,400	127,416,400
2020	26,715,000	107,051,400	133,766,400
2021	36,480,000	107,051,400	143,531,400
2022	45,350,000	107,051,400	152,401,400
2023	54,315,000	106,941,400	161,256,400
2024	63,380,000	106,672,650	170,052,650
2025	72,655,000	106,239,900	178,894,900
2026	87,030,000	105,627,650	192,657,650
2027	98,405,000	105,136,400	203,541,400
2028	105,225,000	104,433,900	209,658,900
2029	111,660,000	103,764,150	215,424,150
2030	118,315,000	103,033,150	221,348,150
2031	125,215,000	102,218,650	227,433,650
2032	137,730,000	95,957,900	233,687,900
2033	151,045,000	89,071,400	240,116,400
2034	150,165,000	81,519,150	231,684,150
2035	179,420,000	74,010,900	253,430,900
2036	195,440,000	65,039,900	260,479,900
2037	206,370,000	61,267,900	267,637,900
2038	211,550,000	56,949,400	268,499,400
2039	220,895,000	47,604,250	268,499,250
2040	231,940,000	36,559,500	268,499,500
2041	243,535,000	24,962,500	268,497,500
2042	255,715,000	12,785,750	268,500,750
Total	$3,172,770,000	$2,339,156,200	$5,511,926,200

Standalone Toll Road / System Elements

SH 130 Segments 1-4
SH 45 North
Loop 1
SH 45 Southeast

Grand Parkway Transportation Corporation

Table A.13: Grand Parkway Transportation Corporation System Debt Service[18]

(As of January 1, 2016)

Calendar Year	Principal Due	Interest Due	Total Debt Service
2016	$924,195,000	$16,483,405	$940,678,405
2017		71,977,554	71,977,534
2018		87,911,493	87,911,493
2019		87,911,493	87,911,493
2020		87,911,493	87,911,493
2021		87,911,493	87,911,493
2022		87,911,493	87,911,493
2023		87,911,493	87,911,493
2024		115,669,045	115,669,045
2025		115,669,045	115,669,045
2026		115,669,045	115,669,045
2027		115,669,045	115,669,045
2028		115,669,045	115,669,045
2029	2,090,000	115,669,045	117,759,045
2030	7,075,000	115,565,590	122,640,590
2031	12,380,000	115,208,303	127,588,303
2032	18,310,000	114,564,790	132,874,790
2033	24,630,000	113,595,655	138,225,655
2034	31,595,000	112,268,880	143,863,880
2035	39,120,000	110,552,348	149,672,348
2036	46,980,000	108,408,904	155,388,904
2037	54,205,000	105,883,277	160,088,277
2038	60,795,000	103,075,260	163,870,260
2039	66,690,000	99,926,001	166,616,001
2040	71,950,000	96,471,559	168,421,559
2041	76,290,000	92,744,883	169,034,883
2042	47,530,000	88,793,700	136,323,700
2043	8,065,000	86,333,949	94,398,949
2044	84,805,000	85,920,618	170,725,618
2045	86,335,000	81,066,993	167,401,993
2046	87,105,000	76,090,088	163,195,088
2047	87,050,000	71,072,093	158,122,093
2048	86,170,000	66,023,925	152,193,925
2049	84,165,000	61,291,263	145,456,263
2050	281,020,000	56,833,875	337,853,875
2051	398,920,000	42,037,663	440,957,663
2052	211,525,000	21,499,975	233,024,975
2053	214,105,000	5,410,463	219,515,463
Total	$3,113,100,000	$3,340,584,242	$6,453,684,242

Standalone Toll Road / System Elements

SH 99 Grand Pkwy Segment D - Harris County	SH 99 Grand Pkwy Segment E
SH 99 Grand Pkwy Segment F1	SH 99 Grand Pkwy Segment F2
SH 99 Grand Pkwy Segment G	

[18] All of the principal maturing in 2016 is expected to be refinanced, largely through a federal loan through the Transportation Infrastructure Finance and Innovation Act program that will spread this principal over time.

Appendix B: Assumptions Regarding Toll Road Debt Service Analysis

	Assumption
Principal amount	Capital appreciation bond and convertible capital appreciation bond principal is shown at the maturity value

	Assumption
Defeasance date	January 1, 2016
Outstanding debt	Debt outstanding as of January 1, 2016
Escrow investment securities	SLGS
Escrow investment rates	Rates as of January 1, 2016

Section 3 Analyses - General	Assumption
Defeasance dates	Final defeasance calculated as of September 1, 2017, 2019, 2021, 2023, and final debt run-off date
Final debt run-off scenarios	Two scenarios – with and without expenses; "expenses" includes toll-related O&M, non-toll related O&M, and major maintenance expenses
External cash contribution	Single cash contribution made on date of final debt defeasance for defeasance calculated as of September 1, 2017, 2019, 2021, and 2023
Escrow investment securities	SLGS
Escrow investment rates	Rates as of July 7, 2016
Excess annual cash flow	Starting with the fiscal year ending August 31, 2017, used to repay all outstanding debt
Reserve funds	Remain at their current level for the duration of the analysis (no increases or decreases) Released upon final debt defeasance and used to pay portion of final debt defeasance cost

Central Texas Turnpike System Analyses	Assumption
Revenue projections	As shown in the Series 2015 A, B, C official statement
O&M projections	As shown in the Series 2015 A, B, C official statement
Major maintenance projections	As shown in the Series 2015 A, B, C official statement
Debt service reserve fund balance	$125 million senior DSRF, $53.1 million junior debt service reserve fund balance as of April 1, 2016
Rate stabilization fund balance	$67.8 million balance as of May 31, 2016
Series 2015 A Put Bonds	Bonds refunded at mandatory tender date of Apr 1, 2020 with 5.00% fixed rate and bonds callable at any time

Grand Parkway Transportation Corporation Analyses	Assumption
Revenue projections	Series 2014 A official statement
O&M projections	Series 2014 A official statement
Major maintenance projections	Series 2014 A official statement
First tier reserve fund balance	$18.1 million as of May 31, 2016
Rate stabilization fund balance	$100.5 million as of May 31, 2016 Due to insufficient project cash flow, a portion of O&M and major maintenance expenses during fiscal years 2018-2021 are paid from the rate stabilization fund
Enhancement fund balance	$6.7 million as of May 31, 2016

TIFIA loan debt service	$840.6 million single TIFIA loan draw on Dec 15, 2016. Loan interest and principal repayment per Grand Parkway TIFIA Loan Agreement Appendix Two to Exhibit A.
Series 2014-B bond debt service	Bonds refunded on Dec 15, 2016 with 5.00% fixed rate bonds callable at any time
	Assumption
Local and regional toll entity debt service	Annual principal and interest was provided by each individual local and regional toll entity

Appendix C: Toll Road Project Actual Traffic Versus Projected Traffic

Disclaimer: Projected and actual traffic volume data, length of toll facility, and toll rate per mile information was provided to TxDOT by each local and regional toll agency for their respective toll road projects and system elements. The source of projected traffic volume has been identified for each toll road project and system element where projection data was provided.

Table C.1: Cameron County Regional Mobility Authority
Toll Project: SH 550

Toll Project Length: Lane Miles: 26.4 Center-Line Miles: 6.7 Opening of Project to Traffic: May 2011 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.15 Passenger Non-Electronic Toll Rate: $0.20			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013	n/a	323,126	
2014	n/a	492,644	
2015	n/a	997,293	
2016	1,533,000	n/a	n/a
2017	1,822,080	n/a	n/a
2018	2,131,965	n/a	n/a
2019	2,217,244	n/a	n/a
2020	2,305,933	n/a	n/a
2021	2,398,171	n/a	n/a
2022	2,494,098	n/a	n/a
2023	2,593,861	n/a	n/a
2024	2,697,616	n/a	n/a
2025	2,805,520	n/a	n/a
2026	2,917,741	n/a	n/a
2027	3,034,451	n/a	n/a
2028	3,155,829	n/a	n/a
2029	3,282,062	n/a	n/a
2030	3,413,345	n/a	n/a
2031	3,549,878	n/a	n/a
2032	3,691,874	n/a	n/a
2033	3,839,549	n/a	n/a
2034	3,993,130	n/a	n/a
2035	4,152,856	n/a	n/a

Projection source: Cameron County Regional Mobility Authority's engineering consultant

Table C.2: Camino Real Regional Mobility Authority
Toll Project: Cesar Chavez Express Toll Lanes

Toll Project Length: Lane Miles: 8.9 Center-Line Miles: 8.9 Opening of Project to Traffic: January 2014 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.10 Passenger Non-Electronic Toll Rate: $0.21			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014	438,000	380,571	-13%
2015	610,000	521,140	-15%
2016	740,000	n/a	n/a
2017	809,000	n/a	n/a
2018	883,000	n/a	n/a
2019	966,000	n/a	n/a
2020	1,055,000	n/a	n/a
2021	1,180,000	n/a	n/a
2022	1,319,000	n/a	n/a
2023	1,475,000	n/a	n/a
2024	1,649,000	n/a	n/a
2025	1,846,000	n/a	n/a
2026	2,063,000	n/a	n/a
2027	2,305,000	n/a	n/a
2028	2,577,000	n/a	n/a
2029	2,883,000	n/a	n/a
2030	3,225,000	n/a	n/a
2031	3,484,000	n/a	n/a
2032	3,766,000	n/a	n/a
2033	4,069,000	n/a	n/a
2034	4,400,000	n/a	n/a
2035	4,757,000	n/a	n/a

Projection source: 2010 Traffic and Revenue study

Table C.3: Camino Real Regional Mobility Authority
Toll Project: Loop 375 Border West Expressway

Toll Project Length: Lane Miles: 28 Center-Line Miles: 7 Opening of Project to Traffic: February 2018 (estimated) Average Toll Per Mile (estimated): Passenger Electronic Toll Rate: $0.07 Passenger Non-Electronic Toll Rate: $0.18			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016		n/a	n/a
2017		n/a	n/a
2018	3,637,000	n/a	n/a
2019	4,672,000	n/a	n/a
2020	5,438,000	n/a	n/a
2021	5,766,000	n/a	n/a
2022	6,095,000	n/a	n/a
2023	6,424,000	n/a	n/a
2024	6,433,000	n/a	n/a
2025	6,442,000	n/a	n/a
2026	6,450,000	n/a	n/a
2027	6,459,000	n/a	n/a
2028	6,468,000	n/a	n/a
2029	6,476,000	n/a	n/a
2030	6,485,000	n/a	n/a
2031	6,672,000	n/a	n/a
2032	6,860,000	n/a	n/a
2033	7,048,000	n/a	n/a
2034	7,235,000	n/a	n/a
2035	7,423,000	n/a	n/a

Projection source: 2016 Traffic and Revenue update

Table C.4: Central Texas Regional Mobility Authority System
Toll Element: US 183A Toll Lanes

Toll Element Length: Lane Miles: 106.0 Center-Line Miles: 11.6 Opening of Element to Traffic: March 2007 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.33 Passenger Non-Electronic Toll Rate: $0.44			
Year Ending 6/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	23,393,825	22,704,780	-3%
2012	33,569,575	29,238,220	-13%
2013	37,975,925	35,069,657	-8%
2014	41,454,400	40,498,180	-2%
2015	44,545,150	45,850,495	3%
2016	46,606,300	n/a	n/a
2017	48,766,250	n/a	n/a
2018	50,248,250	n/a	n/a
2019	51,775,100	n/a	n/a
2020	53,348,425	n/a	n/a
2021	54,969,525	n/a	n/a
2022	56,639,700	n/a	n/a
2023	58,360,900	n/a	n/a
2024	59,996,300	n/a	n/a
2025	61,678,825	n/a	n/a
2026	63,410,425	n/a	n/a
2027	65,192,075	n/a	n/a
2028	67,025,725	n/a	n/a
2029	68,912,675	n/a	n/a
2030	70,854,875	n/a	n/a
2031	72,202,650	n/a	n/a
2032	73,579,025	n/a	n/a
2033	74,984,975	n/a	n/a
2034	76,421,150	n/a	n/a
2035	77,888,200	n/a	n/a

Projection source: Official Statement dated June 10, 2011 .

Table C.5: Central Texas Regional Mobility Authority System
Toll Element: US 183 South Toll Lanes

Toll Element Length: Lane Miles: 67.4 Center-Line Miles: 8.0 Opening of Element to Traffic: Under Construction Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: Not Available Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 6/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016		n/a	n/a
2017		n/a	n/a
2018		n/a	n/a
2019	1,794,773	n/a	n/a
2020	17,030,484	n/a	n/a
2021	38,542,477	n/a	n/a
2022	45,850,474	n/a	n/a
2023	49,977,786	n/a	n/a
2024	51,298,822	n/a	n/a
2025	52,654,777	n/a	n/a
2026	54,046,572	n/a	n/a
2027	55,475,157	n/a	n/a
2028	56,941,502	n/a	n/a
2029	58,446,607	n/a	n/a
2030	59,991,495	n/a	n/a
2031	61,310,596	n/a	n/a
2032	62,658,703	n/a	n/a
2033	64,036,451	n/a	n/a
2034	65,444,494	n/a	n/a
2035	66,883,497	n/a	n/a

Projection source: Official Statement dated June 10, 2011

Table C.6: Central Texas Regional Mobility Authority System
Toll Element: US 290 East

Toll Element Length: Lane Miles: 81.4 Center-Line Miles: 6.2 Opening of Element to Traffic: 2012 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.27 Passenger Non-Electronic Toll Rate: $0.35			
Year Ending 6/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013	2,944,500	6,898,562	134%
2014	3,539,250	13,554,399	283%
2015	13,357,500	20,880,591	56%
2016	15,785,250	n/a	n/a
2017	16,965,000	n/a	n/a
2018	18,232,500	n/a	n/a
2019	19,090,500	n/a	n/a
2020	21,365,500	n/a	n/a
2021	22,737,000	n/a	n/a
2022	24,196,250	n/a	n/a
2023	25,753,000	n/a	n/a
2024	27,407,250	n/a	n/a
2025	29,172,000	n/a	n/a
2026	30,043,000	n/a	n/a
2027	30,940,000	n/a	n/a
2028	31,863,000	n/a	n/a
2029	32,818,500	n/a	n/a
2030	33,800,000	n/a	n/a
2031	34,944,000	n/a	n/a
2032	36,127,000	n/a	n/a
2033	37,349,000	n/a	n/a
2034	38,613,250	n/a	n/a
2035	39,923,000	n/a	n/a

Projection source: Official Statement dated June 10, 2011.

Table C.7: Central Texas Regional Mobility Authority
Toll Project: MoPac Managed Lanes

Toll Project Length: Lane Miles: 134.4 Center-Line Miles: 11.0 Opening of Project to Traffic: Under Construction Average Toll Per Mile (estimated): Passenger Electronic Toll Rate: Not Available Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 6/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016	9,141,000	n/a	n/a
2017	9,795,500	n/a	n/a
2018	10,472,000	n/a	n/a
2019	11,173,250	n/a	n/a
2020	11,899,250	n/a	n/a
2021	11,998,250	n/a	n/a
2022	12,113,750	n/a	n/a
2023	12,240,250	n/a	n/a
2024	12,380,500	n/a	n/a
2025	12,534,500	n/a	n/a
2026	12,600,500	n/a	n/a
2027	12,680,250	n/a	n/a
2028	12,776,500	n/a	n/a
2029	12,886,500	n/a	n/a
2030	13,120,250	n/a	n/a
2031	13,153,250	n/a	n/a
2032	13,202,750	n/a	n/a
2033	13,274,250	n/a	n/a
2034	13,359,500	n/a	n/a
2035	13,461,250	n/a	n/a

Projection source: Intermediate Level-2 Traffic and Toll Revenue Study MoPac (Loop 1) Express Lanes dated August 2011

Table C.8: Central Texas Regional Mobility Authority
Toll Project: SH 71 Express

Toll Project Length: Lane Miles: 38.5 Center-Line Miles: 5.0 Opening of Project to Traffic: Under Construction Average Toll Per Mile (estimated): Passenger Electronic Toll Rate: Not Available Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 6/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016		n/a	n/a
2017	5,815,680	n/a	n/a
2018	6,319,360	n/a	n/a
2019	6,936,960	n/a	n/a
2020	7,222,080	n/a	n/a
2021	7,507,200	n/a	n/a
2022	7,792,640	n/a	n/a
2023	8,077,760	n/a	n/a
2024	8,362,880	n/a	n/a
2025	8,648,000	n/a	n/a
2026	8,840,320	n/a	n/a
2027	8,986,240	n/a	n/a
2028	9,132,160	n/a	n/a
2029	9,278,400	n/a	n/a
2030	9,424,320	n/a	n/a
2031	9,570,240	n/a	n/a
2032	9,716,160	n/a	n/a
2033	9,862,080	n/a	n/a
2034	10,008,000	n/a	n/a
2035	10,153,920	n/a	n/a

Projection source: SH 71 Express Toll Lanes Traffic and Revenue Forecasts dated April 30, 2013

Table C.9: Fort Bend County Grand Parkway Toll Road Authority
Toll Project: SH 99 Grand Pkwy Segment D - Fort Bend County

Toll Project Length: Lane Miles: 32 Center-Line Miles: 8 Opening of Project to Traffic: April 2014 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.31 Passenger Non-Electronic Toll Rate: $0.44			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014	14,604,500	17,849,680	22%
2015	35,833,000	44,900,022	25%
2016	43,314,000	n/a	n/a
2017	50,675,000	n/a	n/a
2018	58,208,000	n/a	n/a
2019	68,317,000	n/a	n/a
2020	78,617,000	n/a	n/a
2021	84,688,000	n/a	n/a
2022	90,798,000	n/a	n/a
2023	97,192,000	n/a	n/a
2024	104,030,000	n/a	n/a
2025	110,512,000	n/a	n/a
2026	114,170,000	n/a	n/a
2027	117,953,000	n/a	n/a
2028	121,865,000	n/a	n/a
2029	125,910,000	n/a	n/a
2030	130,094,000	n/a	n/a
2031	134,420,000	n/a	n/a
2032	142,751,000	n/a	n/a
2033	146,617,000	n/a	n/a
2034	154,729,000	n/a	n/a
2035	160,247,000	n/a	n/a

Projection source: Grand Parkway Segment D Comprehensive Traffic and Revenue Study 2011 (June 2011)

Table C.10: Fort Bend County Toll Road Authority
Toll Element: Fort Bend Parkway Toll Road

Toll Element Length: Lane Miles: 24.8 Center-Line Miles: 6.2 Opening of Element to Traffic: August 2004 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.23 Passenger Non-Electronic Toll Rate: $0.30			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	13,334,200	7,049,289	-47%
2012	13,780,800	7,346,366	-47%
2013	14,227,400	7,896,828	-44%
2014	14,674,000	8,859,986	-40%
2015	15,120,600	14,927,001	-1%
2016	15,847,920	n/a	n/a
2017	16,575,240	n/a	n/a
2018	17,302,560	n/a	n/a
2019	18,029,880	n/a	n/a
2020	18,757,200	n/a	n/a
2021	19,507,488	n/a	n/a
2022	20,287,788	n/a	n/a
2023	21,099,300	n/a	n/a
2024	21,943,272	n/a	n/a
2025	22,821,003	n/a	n/a
2026	23,733,843	n/a	n/a
2027	24,683,197	n/a	n/a
2028	25,670,525	n/a	n/a
2029	26,697,346	n/a	n/a
2030	27,765,240	n/a	n/a
2031	28,875,850	n/a	n/a
2032	30,030,884	n/a	n/a
2033	31,232,119	n/a	n/a
2034	32,481,404	n/a	n/a
2035	33,780,660	n/a	n/a

Projection source: Fort Bend Parkway Traffic & Revenue Study (Feb 2003) through 2020; 2021 through 2035 represents a 4% increase each year based on the increase projected for 2020 from the previous year.

Table C.11: Fort Bend County Toll Road Authority
Toll Element: Fort Bend Westpark Tollway

Toll Element Length: Lane Miles: 24 Center-Line Miles: 6 Opening of Element to Traffic: August 2005 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.22 Passenger Non-Electronic Toll Rate: $0.27			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	16,932,000	15,224,942	-10%
2012	18,287,000	16,741,990	-8%
2013	19,740,000	18,586,669	-6%
2014	21,309,000	20,121,013	-6%
2015	23,372,000	21,391,903	-8%
2016	24,728,000	n/a	n/a
2017	25,768,000	n/a	n/a
2018	26,716,000	n/a	n/a
2019	27,637,000	n/a	n/a
2020	28,634,000	n/a	n/a
2021	29,104,000	n/a	n/a
2022	29,581,000	n/a	n/a
2023	30,066,000	n/a	n/a
2024	30,559,000	n/a	n/a
2025	31,060,000	n/a	n/a
2026	31,914,000	n/a	n/a
2027	32,791,000	n/a	n/a
2028	33,692,000	n/a	n/a
2029	34,618,000	n/a	n/a
2030	35,569,000	n/a	n/a
2031	36,547,000	n/a	n/a
2032	37,551,000	n/a	n/a
2033	38,583,000	n/a	n/a
2034	39,643,000	n/a	n/a
2035	40,733,000	n/a	n/a

Projection source: Fort Bend County Toll Road Authority Traffic & Revenue Study (January 2014). Original projections were included in table for the system.

Table C.12: Fort Bend County Toll Road Authority
Toll Element: Fort Bend Parkway Toll Road

Toll Element Length: Lane Miles: 4.8 Center-Line Miles: 1.2 Opening of Element to Traffic: May 2014 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.33 Passenger Non-Electronic Toll Rate: $0.46			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014	2,449,000	552,555	-77%
2015	3,626,000	762,257	-79%
2016	4,307,000	n/a	n/a
2017	4,818,000	n/a	n/a
2018	5,120,000	n/a	n/a
2019	5,441,000	n/a	n/a
2020	6,471,000	n/a	n/a
2021	7,178,000	n/a	n/a
2022	7,769,000	n/a	n/a
2023	8,339,000	n/a	n/a
2024	8,878,000	n/a	n/a
2025	9,451,000	n/a	n/a
2026	9,939,000	n/a	n/a
2027	10,452,000	n/a	n/a
2028	10,991,000	n/a	n/a
2029	11,559,000	n/a	n/a
2030	12,155,000	n/a	n/a
2031	12,783,000	n/a	n/a
2032	13,442,000	n/a	n/a
2033	14,136,000	n/a	n/a
2034	14,866,000	n/a	n/a
2035	15,633,000	n/a	n/a

Projection source: Fort Bend County Toll Road Authority Traffic & Revenue Study (January 2014)

Table C.13: Galveston County Road District #1
Toll Project: San Luis Pass (Vacek) Toll Bridge

Toll Project Length: Lane Miles: 2.6 Center-Line Miles: 1.3 Opening of Project to Traffic: 1969 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $1.54 Passenger Non-Electronic Toll Rate: $1.54			
Year Ending 6/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	255,000	258,092	1%
2012	250,000	276,825	11%
2013	250,000	256,239	2%
2014	250,000	253,502	1%
2015	237,500	270,103	14%
2016	240,000	136,993 *	-43%
2017		n/a	n/a
2018		n/a	n/a
2019		n/a	n/a
2020		n/a	n/a
2021		n/a	n/a
2022		n/a	n/a
2023		n/a	n/a
2024		n/a	n/a
2025		n/a	n/a
2026		n/a	n/a
2027		n/a	n/a
2028		n/a	n/a
2029		n/a	n/a
2030		n/a	n/a
2031		n/a	n/a
2032		n/a	n/a
2033		n/a	n/a
2034		n/a	n/a
2035		n/a	n/a

* Actual transaction data through 05/09/2016.

Projection source: The final toll-revenue budgets for the respective fiscal years, extracted from budget-to-actual reports generated via the county's financial accounting software and divided by 2 (i.e., the toll per vehicle). Galveston County does not make multi-year projections.

Table C.14: Harris County Toll Road Authority
Toll Element: Hardy Toll Road

Toll Element Length: Lane Miles: 130 Center-Line Miles: 24 Opening of Element to Traffic: September 1987 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.13 Passenger Non-Electronic Toll Rate: $0.15			
Year Ending 2/28	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2012	39,346,000	37,999,977	-3%
2013	39,958,000	39,671,025	-1%
2014	40,946,000	42,327,879	3%
2015	44,308,000	48,307,553	9%
2016	46,380,000	50,730,619	9%
2017	45,786,000	n/a	n/a
2018	48,049,000	n/a	n/a
2019	50,311,000	n/a	n/a
2020	52,574,000	n/a	n/a
2021	54,837,000	n/a	n/a
2022	56,398,000	n/a	n/a
2023	57,959,000	n/a	n/a
2024	59,520,000	n/a	n/a
2025	61,081,000	n/a	n/a
2026	62,642,000	n/a	n/a
2027	64,020,000	n/a	n/a
2028	65,399,000	n/a	n/a
2029	66,778,000	n/a	n/a
2030	68,157,000	n/a	n/a
2031	69,536,000	n/a	n/a
2032	70,128,000	n/a	n/a
2033	70,721,000	n/a	n/a
2034	71,313,000	n/a	n/a
2035	71,905,000	n/a	n/a
2036	72,497,000	n/a	n/a

Projection source: The Wilbur Smith 2009 Traffic and Revenue Forecast was used for fiscal years 2012-2014. The CDM Smith 2014 Traffic and Revenue Forecast was used for fiscal years 2015 and beyond.

Table C.15: Harris County Toll Road Authority
Toll Element: Sam Houston Tollway

Toll Element Length: Lane Miles: 476 Center-Line Miles: 70 Opening of Element to Traffic: June 1988 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: $0.19			
Year Ending 2/28	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2012	305,089,000	309,818,817	2%
2013	309,777,000	322,202,455	4%
2014	320,957,000	328,853,180	2%
2015	340,179,000	355,964,268	5%
2016	351,501,000	374,665,959	7%
2017	361,134,000	n/a	n/a
2018	372,649,000	n/a	n/a
2019	381,654,000	n/a	n/a
2020	391,158,000	n/a	n/a
2021	399,664,000	n/a	n/a
2022	405,868,000	n/a	n/a
2023	412,072,000	n/a	n/a
2024	419,182,000	n/a	n/a
2025	424,932,000	n/a	n/a
2026	407,936,000	n/a	n/a
2027	418,616,000	n/a	n/a
2028	430,851,000	n/a	n/a
2029	442,671,000	n/a	n/a
2030	452,751,000	n/a	n/a
2031	461,338,000	n/a	n/a
2032	466,799,000	n/a	n/a
2033	472,260,000	n/a	n/a
2034	477,721,000	n/a	n/a
2035	483,182,000	n/a	n/a
2036	488,643,000	n/a	n/a

Projection source: The Wilbur Smith 2009 Traffic and Revenue Forecast was used for fiscal years 2012-2014. The CDM Smith 2014 Traffic and Revenue Forecast was used for fiscal years 2015 and beyond.

Table C.16: Harris County Toll Road Authority
Toll Element: Westpark Tollway

Toll Element Length: Lane Miles: 50 Center-Line Miles: 13 Opening of Element to Traffic: May 2004 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.23 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 2/28	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2012	41,884,000	41,234,056	-2%
2013	43,746,000	43,575,876	0%
2014	45,691,000	45,957,937	1%
2015	47,832,000	48,915,625	2%
2016	49,703,000	51,855,139	4%
2017	51,185,000	n/a	n/a
2018	52,667,000	n/a	n/a
2019	54,149,000	n/a	n/a
2020	55,631,000	n/a	n/a
2021	57,113,000	n/a	n/a
2022	58,237,000	n/a	n/a
2023	59,361,000	n/a	n/a
2024	60,485,000	n/a	n/a
2025	61,609,000	n/a	n/a
2026	62,733,000	n/a	n/a
2027	63,698,000	n/a	n/a
2028	64,664,000	n/a	n/a
2029	65,629,000	n/a	n/a
2030	66,595,000	n/a	n/a
2031	67,560,000	n/a	n/a
2032	68,242,000	n/a	n/a
2033	68,923,000	n/a	n/a
2034	69,604,000	n/a	n/a
2035	70,286,000	n/a	n/a
2036	70,967,000	n/a	n/a

Projection source: The Wilbur Smith 2009 Traffic and Revenue Forecast was used for fiscal years 2012-2014. The CDM Smith 2014 Traffic and Revenue Forecast was used for fiscal years 2015 and beyond.

Table C.17: Harris County Toll Road Authority
Toll Element: Fort Bend Parkway Extension

Toll Element Length: Lane Miles: 10 Center-Line Miles: 2 Opening of Element to Traffic: March 2005 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.75 Passenger Non-Electronic Toll Rate: $0.88			
Year Ending 2/28	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2012	3,622,000	3,182,925	-12%
2013	3,844,000	3,456,988	-10%
2014	4,015,000	3,728,952	-7%
2015	3,934,000	4,013,391	2%
2016	4,138,000	4,338,216	5%
2017	4,318,000	n/a	n/a
2018	4,498,000	n/a	n/a
2019	4,678,000	n/a	n/a
2020	4,857,000	n/a	n/a
2021	5,037,000	n/a	n/a
2022	5,181,000	n/a	n/a
2023	5,324,000	n/a	n/a
2024	5,467,000	n/a	n/a
2025	5,611,000	n/a	n/a
2026	5,754,000	n/a	n/a
2027	5,837,000	n/a	n/a
2028	5,921,000	n/a	n/a
2029	6,004,000	n/a	n/a
2030	6,087,000	n/a	n/a
2031	6,171,000	n/a	n/a
2032	6,221,000	n/a	n/a
2033	6,272,000	n/a	n/a
2034	6,322,000	n/a	n/a
2035	6,373,000	n/a	n/a
2036	6,424,000	n/a	n/a

Projection source: The Wilbur Smith 2009 Traffic and Revenue Forecast was used for fiscal years 2012-2014. The CDM Smith 2014 Traffic and Revenue Forecast was used for fiscal years 2015 and beyond.

Table C.18: Harris County Toll Road Authority
Toll Element: Tomball Tollway

Toll Element Length: Lane Miles: 37 Center-Line Miles: 6 Opening of Element to Traffic: April 2015 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.25 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 2/28	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2012			
2013			
2014			
2015			
2016	4,931,000	10,744,952	118%
2017	9,814,000	n/a	n/a
2018	11,752,000	n/a	n/a
2019	13,253,000	n/a	n/a
2020	14,200,000	n/a	n/a
2021	15,214,000	n/a	n/a
2022	16,067,000	n/a	n/a
2023	16,969,000	n/a	n/a
2024	17,920,000	n/a	n/a
2025	18,926,000	n/a	n/a
2026	19,988,000	n/a	n/a
2027	20,578,000	n/a	n/a
2028	21,186,000	n/a	n/a
2029	21,811,000	n/a	n/a
2030	22,455,000	n/a	n/a
2031	23,119,000	n/a	n/a
2032	23,802,000	n/a	n/a
2033	24,505,000	n/a	n/a
2034	25,228,000	n/a	n/a
2035	25,973,000	n/a	n/a
2036	26,740,000	n/a	n/a

Projection source: The CDM Smith 2014 Traffic and Revenue Forecast was used for fiscal years 2016 and beyond.

Table C.19: Harris County Toll Road Authority
Toll Element: Katy (I-10) Managed Lanes

Toll Element Length: Lane Miles: 44 Center-Line Miles: 12 Opening of Element to Traffic: April 2009 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.08 Passenger Non-Electronic Toll Rate: $0.58			
Year Ending 2/28	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2012	n/a	16,071,614	
2013	n/a	19,320,467	
2014	n/a	22,388,942	
2015	n/a	28,243,333	
2016	n/a	31,615,049	
2017		n/a	
2018		n/a	
2019		n/a	
2020		n/a	
2021		n/a	
2022		n/a	
2023		n/a	
2024		n/a	
2025		n/a	
2026		n/a	
2027		n/a	
2028		n/a	
2029		n/a	
2030		n/a	
2031		n/a	
2032		n/a	
2033		n/a	
2034		n/a	
2035		n/a	
2036		n/a	

Projection source: Not applicable

Table C.20: Metro Transit Authority of Harris County
Toll Element: I-45 South Gulf Freeway HOT Lanes

Toll Element Length: Lane Miles: 15.5 Center-Line Miles: 15.5 Opening of Element to Traffic: March 2012 Average Toll Per Mile (as of 4/30/16): Passenger Minimum Toll Rate: $0.06 Passenger Maximum Toll Rate: $0.29 Passenger Average Toll Rate: $0.18			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012	58,200	99,205	70%
2013	263,725	314,794	19%
2014	340,935	408,275	20%
2015	340,935	490,676	44%
2016	340,935	329,423 *	-3%
2017	340,935	n/a	n/a
2018	340,935	n/a	n/a
2019	340,935	n/a	n/a
2020	340,935	n/a	n/a
2021	340,935	n/a	n/a
2022	340,935	n/a	n/a
2023	340,935	n/a	n/a
2024	340,935	n/a	n/a
2025	340,935	n/a	n/a
2026	340,935	n/a	n/a
2027	340,935	n/a	n/a
2028	340,935	n/a	n/a
2029	340,935	n/a	n/a
2030	340,935	n/a	n/a
2031	340,935	n/a	n/a
2032	340,935	n/a	n/a
2033	340,935	n/a	n/a
2034	340,935	n/a	n/a
2035	340,935	n/a	n/a

* Actual transaction data through April 30, 2016.

Projection source: Metro Transit Authority of Harris County internal projections. No growth was forecast after the ramp up period due to the capacity constraints in the single lane and conformance to FTA performance criteria.

Table C.21: Metro Transit Authority of Harris County
Toll Element: I-45 North Gulf Freeway HOT Lanes

Toll Element Length: Lane Miles: 19.9 Center-Line Miles: 19.9 Opening of Element to Traffic: December 2012 Average Toll Per Mile (as of 4/30/16): Passenger Minimum Toll Rate: $0.05 Passenger Maximum Toll Rate: $0.35 Passenger Average Toll Rate: $0.14			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013	107,310	333,309	211%
2014	307,674	471,892	53%
2015	357,059	502,102	41%
2016	218,046 *	317,590 *	46%
2017	357,059	n/a	n/a
2018	357,059	n/a	n/a
2019	357,059	n/a	n/a
2020	357,059	n/a	n/a
2021	357,059	n/a	n/a
2022	357,059	n/a	n/a
2023	357,059	n/a	n/a
2024	357,059	n/a	n/a
2025	357,059	n/a	n/a
2026	357,059	n/a	n/a
2027	357,059	n/a	n/a
2028	357,059	n/a	n/a
2029	357,059	n/a	n/a
2030	357,059	n/a	n/a
2031	357,059	n/a	n/a
2032	357,059	n/a	n/a
2033	357,059	n/a	n/a
2034	357,059	n/a	n/a
2035	357,059	n/a	n/a

* Actual transaction data through April 30, 2016. Traffic projections are adjusted through April 30, 2016.

Projection source: Metro Transit Authority of Harris County internal projections. No growth was forecast after the ramp up period due to the capacity constraints in the single lane and conformance to FTA performance criteria.

Table C.22: Metro Transit Authority of Harris County
Toll Element: US 59 Southwest Freeway HOT Lanes

Toll Element Length: Lane Miles: 14.3 Center-Line Miles: 14.3 Opening of Element to Traffic: July 2012 Average Toll Per Mile (as of 4/30/16): Passenger Minimum Toll Rate: $0.07 Passenger Maximum Toll Rate: $0.31 Passenger Average Toll Rate: $0.20			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012	14,796	37,073	151%
2013	273,026	332,447	22%
2014	510,869	436,605	-15%
2015	529,802	489,943	-8%
2016	323,942 *	313,126 *	-3%
2017	529,802	n/a	n/a
2018	529,802	n/a	n/a
2019	529,802	n/a	n/a
2020	529,802	n/a	n/a
2021	529,802	n/a	n/a
2022	529,802	n/a	n/a
2023	529,802	n/a	n/a
2024	529,802	n/a	n/a
2025	529,802	n/a	n/a
2026	529,802	n/a	n/a
2027	529,802	n/a	n/a
2028	529,802	n/a	n/a
2029	529,802	n/a	n/a
2030	529,802	n/a	n/a
2031	529,802	n/a	n/a
2032	529,802	n/a	n/a
2033	529,802	n/a	n/a
2034	529,802	n/a	n/a
2035	529,802	n/a	n/a

* Actual transaction data through April 30, 2016. Traffic projections are adjusted through April 30, 2016.

Projection source: Metro Transit Authority of Harris County internal projections. No growth was forecast after the ramp up period due to the capacity constraints in the single lane and conformance to FTA performance criteria.

Table C.23: Metro Transit Authority of Harris County
Toll Element: US 59 North HOT Lanes

Toll Element Length: Lane Miles: 20.2 Center-Line Miles: 20.2 Opening of Element to Traffic: July 2013 Average Toll Per Mile (as of 4/30/16): Passenger Minimum Toll Rate: $0.05 Passenger Maximum Toll Rate: $0.22 Passenger Average Toll Rate: $0.14			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013	4,796	36,728	666%
2014	63,910	276,936	333%
2015	112,466	362,425	222%
2016	70,928 *	261,359 *	268%
2017	116,002	n/a	n/a
2018	116,002	n/a	n/a
2019	116,002	n/a	n/a
2020	116,002	n/a	n/a
2021	116,002	n/a	n/a
2022	116,002	n/a	n/a
2023	116,002	n/a	n/a
2024	116,002	n/a	n/a
2025	116,002	n/a	n/a
2026	116,002	n/a	n/a
2027	116,002	n/a	n/a
2028	116,002	n/a	n/a
2029	116,002	n/a	n/a
2030	116,002	n/a	n/a
2031	116,002	n/a	n/a
2032	116,002	n/a	n/a
2033	116,002	n/a	n/a
2034	116,002	n/a	n/a
2035	116,002	n/a	n/a

* Actual transaction data through April 30, 2016. Traffic projections are adjusted through April 30, 2016.

Projection source: Metro Transit Authority of Harris County internal projections. No growth was forecast after the ramp up period due to the capacity constraints in the single lane and conformance to FTA performance criteria.

Table C.24: Metro Transit Authority of Harris County
Toll Element: US 290 HOT Lanes

Toll Element Length: Lane Miles: 13.5 Center-Line Miles: 13.5 Opening of Element to Traffic: May 2013 Average Toll Per Mile (as of 4/30/16): Passenger Minimum Toll Rate: $0.07 Passenger Maximum Toll Rate: $0.52 Passenger Average Toll Rate: $0.21			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013	32,352	121,140	274%
2014	221,036	529,051	139%
2015	341,456	677,165	98%
2016	210,475 *	382,626 *	82%
2017	344,228	n/a	n/a
2018	344,228	n/a	n/a
2019	344,228	n/a	n/a
2020	344,228	n/a	n/a
2021	344,228	n/a	n/a
2022	344,228	n/a	n/a
2023	344,228	n/a	n/a
2024	344,228	n/a	n/a
2025	344,228	n/a	n/a
2026	344,228	n/a	n/a
2027	344,228	n/a	n/a
2028	344,228	n/a	n/a
2029	344,228	n/a	n/a
2030	344,228	n/a	n/a
2031	344,228	n/a	n/a
2032	344,228	n/a	n/a
2033	344,228	n/a	n/a
2034	344,228	n/a	n/a
2035	344,228	n/a	n/a

* Actual transaction data through April 30, 2016. Traffic projections are adjusted through April 30, 2016.

Projection source: Metro Transit Authority of Harris County internal projections. No growth was forecast after the ramp up period due to the capacity constraints in the single lane and conformance to FTA performance criteria.

Table C.25: North East Texas Regional Mobility Authority
Toll Project: Loop 49 Toll System

Toll Project Length: Lane Miles: 54.0 Center-Line Miles: 25.6 Opening of Project to Traffic: August 2006 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.171 Passenger Non-Electronic Toll Rate: $0.227			
Year Ending 9/30	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	1,782,900	1,846,300	4%
2012	2,086,600	2,011,800	-4%
2013	4,570,800	6,504,400	42%
2014	7,650,200	10,033,700	31%
2015	10,326,000	11,688,300	13%
2016	11,389,300	n/a	n/a
2017	11,899,500	n/a	n/a
2018	13,050,600	n/a	n/a
2019	15,689,100	n/a	n/a
2020	16,887,200	n/a	n/a
2021	17,506,300	n/a	n/a
2022	17,904,000	n/a	n/a
2023	18,299,000	n/a	n/a
2024	18,691,400	n/a	n/a
2025	19,154,900	n/a	n/a
2026	19,625,700	n/a	n/a
2027	20,087,000	n/a	n/a
2028	20,545,100	n/a	n/a
2029	21,000,100	n/a	n/a
2030	21,221,500	n/a	n/a
2031	21,564,500	n/a	n/a
2032	21,984,300	n/a	n/a
2033	22,404,100	n/a	n/a
2034	22,823,900	n/a	n/a
2035	24,574,600	n/a	n/a

Projection source: 2011-2013 estimates are from CDM Smith Comprehensive Traffic and Toll Revenue Study December 2010; 2014 estimates are from CDM Smith 2014 Bring Down Study Report; 2015 estimates are from CDM Smith Comprehensive Traffic and Toll Revenue Study May 2016.

Table C.26: North Texas Tollway Authority System
Toll Element: Addison Airport Tunnel

Toll Element Length: Lane Miles: 1.4 Center-Line Miles: 0.7 Opening of Element to Traffic: February 1999 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.59 Passenger Non-Electronic Toll Rate: $0.89			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	1,804,800	1,942,937	8%
2012	1,819,100	2,012,376	11%
2013	1,828,400	2,101,001	15%
2014	1,840,400	2,290,426	24%
2015	1,852,400	2,438,046	32%
2016	1,857,500	n/a	n/a
2017	1,863,100	n/a	n/a
2018	1,869,100	n/a	n/a
2019	1,875,500	n/a	n/a
2020	1,886,700	n/a	n/a
2021	1,897,900	n/a	n/a
2022	1,909,200	n/a	n/a
2023	1,920,600	n/a	n/a
2024	1,932,000	n/a	n/a
2025	1,943,600	n/a	n/a
2026	1,953,100	n/a	n/a
2027	1,962,700	n/a	n/a
2028	1,972,400	n/a	n/a
2029	1,982,100	n/a	n/a
2030	1,992,000	n/a	n/a
2031	2,001,800	n/a	n/a
2032	2,011,600	n/a	n/a
2033	2,021,500	n/a	n/a
2034	2,031,500	n/a	n/a
2035	2,041,600	n/a	n/a

Projection source: North Texas Tollway Authority System T&R Letter Update - October 2010 - WSA/CDM Smith

Table C.27: North Texas Tollway Authority System
Toll Element: Dallas North Tollway

Toll Element Length: Lane Miles: 179.3 Center-Line Miles: 30.7 Opening of Element to Traffic: June 1968 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: $0.26			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	218,617,400	215,636,493	-1%
2012	230,103,700	230,301,519	0%
2013	238,239,300	233,151,429	-2%
2014	245,550,400	243,969,234	-1%
2015	250,187,900	256,410,901	2%
2016	265,645,100	n/a	n/a
2017	273,724,300	n/a	n/a
2018	282,305,200	n/a	n/a
2019	291,434,000	n/a	n/a
2020	297,216,600	n/a	n/a
2021	302,931,200	n/a	n/a
2022	308,951,800	n/a	n/a
2023	315,296,600	n/a	n/a
2024	321,985,800	n/a	n/a
2025	328,379,100	n/a	n/a
2026	331,427,100	n/a	n/a
2027	334,600,400	n/a	n/a
2028	337,906,100	n/a	n/a
2029	341,352,400	n/a	n/a
2030	344,949,000	n/a	n/a
2031	348,556,000	n/a	n/a
2032	352,277,800	n/a	n/a
2033	356,124,900	n/a	n/a
2034	360,054,700	n/a	n/a
2035	364,112,200	n/a	n/a

Projection source: North Texas Tollway Authority System T&R Letter Update - October 2010 - WSA/CDM Smith

Table C.28: North Texas Tollway Authority System
Toll Element: Lewisville Lake Toll Bridge

Toll Element Length: Lane Miles: 8.2 Center-Line Miles: 2.0 Opening of Element to Traffic: August 2009 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $1.18 Passenger Non-Electronic Toll Rate: $1.77			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	3,642,800	3,561,534	-2%
2012	4,304,800	3,923,244	-9%
2013	5,036,700	4,058,915	-19%
2014	5,803,500	4,385,259	-24%
2015	6,605,100	4,651,534	-30%
2016	7,406,600	n/a	n/a
2017	8,173,400	n/a	n/a
2018	8,940,100	n/a	n/a
2019	9,647,300	n/a	n/a
2020	10,344,400	n/a	n/a
2021	11,041,500	n/a	n/a
2022	11,738,500	n/a	n/a
2023	12,435,600	n/a	n/a
2024	13,062,900	n/a	n/a
2025	13,585,700	n/a	n/a
2026	13,934,300	n/a	n/a
2027	14,186,500	n/a	n/a
2028	14,444,100	n/a	n/a
2029	14,707,000	n/a	n/a
2030	14,975,300	n/a	n/a
2031	15,247,100	n/a	n/a
2032	15,523,900	n/a	n/a
2033	15,805,800	n/a	n/a
2034	16,092,700	n/a	n/a
2035	16,384,800	n/a	n/a

Projection source: North Texas Tollway Authority System T&R Letter Update - October 2010 - WSA/CDM Smith

Table C.29: North Texas Tollway Authority System
Toll Element: Mountain Creek Lake Toll Bridge

Toll Element Length: Lane Miles: 3.9 Center-Line Miles: 2.0 Opening of Element to Traffic: April 1979 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.59 Passenger Non-Electronic Toll Rate: $0.89			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	2,905,500	2,458,693	-15%
2012	3,136,200	2,521,470	-20%
2013	3,303,500	2,361,453	-29%
2014	3,404,200	2,399,750	-30%
2015	3,504,900	2,540,770	-28%
2016	3,559,400	n/a	n/a
2017	3,615,300	n/a	n/a
2018	3,672,600	n/a	n/a
2019	3,731,300	n/a	n/a
2020	3,771,900	n/a	n/a
2021	3,814,300	n/a	n/a
2022	3,858,700	n/a	n/a
2023	3,905,000	n/a	n/a
2024	3,953,400	n/a	n/a
2025	4,003,900	n/a	n/a
2026	4,027,500	n/a	n/a
2027	4,051,300	n/a	n/a
2028	4,075,200	n/a	n/a
2029	4,099,200	n/a	n/a
2030	4,123,400	n/a	n/a
2031	4,147,800	n/a	n/a
2032	4,172,300	n/a	n/a
2033	4,196,900	n/a	n/a
2034	4,221,700	n/a	n/a
2035	4,246,500	n/a	n/a

Projection source: North Texas Tollway Authority System T&R Letter Update - October 2010 - WSA/CDM Smith

Table C.30: North Texas Tollway Authority System
Toll Element: President George Bush Turnpike

Toll Element Length: Lane Miles: 243.7 Center-Line Miles: 41.2 Opening of Element to Traffic: December 1998 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: $0.26			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	193,963,500	192,376,645	-1%
2012	219,847,300	237,407,472	8%
2013	230,731,000	250,820,068	9%
2014	240,891,500	262,547,335	9%
2015	248,438,300	271,287,317	9%
2016	254,668,000	n/a	n/a
2017	261,167,400	n/a	n/a
2018	268,021,200	n/a	n/a
2019	282,413,200	n/a	n/a
2020	287,268,700	n/a	n/a
2021	292,196,900	n/a	n/a
2022	297,289,800	n/a	n/a
2023	302,554,600	n/a	n/a
2024	307,998,900	n/a	n/a
2025	315,989,800	n/a	n/a
2026	320,705,800	n/a	n/a
2027	325,542,600	n/a	n/a
2028	330,505,200	n/a	n/a
2029	335,599,300	n/a	n/a
2030	340,830,600	n/a	n/a
2031	346,167,900	n/a	n/a
2032	351,639,900	n/a	n/a
2033	357,251,900	n/a	n/a
2034	363,010,000	n/a	n/a
2035	368,920,300	n/a	n/a

Projection source: North Texas Tollway Authority System T&R Letter Update - October 2010 - WSA/CDM Smith

Table C.31: North Texas Tollway Authority System
Toll Element: Sam Rayburn Tollway

Toll Element Length: Lane Miles: 307.9 Center-Line Miles: 28.5 Opening of Element to Traffic: 2008 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: $0.26			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	101,058,000	99,387,292	-2%
2012	112,204,600	111,585,595	-1%
2013	119,655,700	119,951,721	0%
2014	126,029,000	131,626,873	4%
2015	132,402,200	141,791,807	7%
2016	139,475,200	n/a	n/a
2017	147,079,700	n/a	n/a
2018	155,274,600	n/a	n/a
2019	168,773,800	n/a	n/a
2020	174,771,100	n/a	n/a
2021	181,035,200	n/a	n/a
2022	187,579,300	n/a	n/a
2023	194,417,100	n/a	n/a
2024	201,563,100	n/a	n/a
2025	209,033,100	n/a	n/a
2026	212,891,600	n/a	n/a
2027	216,840,200	n/a	n/a
2028	220,881,200	n/a	n/a
2029	225,016,700	n/a	n/a
2030	229,248,900	n/a	n/a
2031	233,580,100	n/a	n/a
2032	238,012,700	n/a	n/a
2033	242,549,200	n/a	n/a
2034	247,192,000	n/a	n/a
2035	251,943,700	n/a	n/a

Projection source: North Texas Tollway Authority System T&R Letter Update - October 2010 - WSA/CDM Smith.

Table C.32: North Texas Tollway Authority Special Project System
Toll Element: President George Bush Turnpike – Western Extension

Toll Element Length: Lane Miles: 106.1 Center-Line Miles: 11.5 Opening of Element to Traffic: 2012 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: $0.26			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012	23,390,200	12,642,870	-46%
2013	52,451,900	34,433,016	-34%
2014	62,477,500	45,194,673	-28%
2015	68,052,500	51,925,106	-24%
2016	70,781,900	n/a	n/a
2017	73,641,600	n/a	n/a
2018	76,637,100	n/a	n/a
2019	80,081,500	n/a	n/a
2020	85,759,900	n/a	n/a
2021	87,783,600	n/a	n/a
2022	89,858,700	n/a	n/a
2023	91,986,900	n/a	n/a
2024	94,169,200	n/a	n/a
2025	89,847,900	n/a	n/a
2026	92,091,300	n/a	n/a
2027	94,400,900	n/a	n/a
2028	96,779,700	n/a	n/a
2029	99,229,000	n/a	n/a
2030	101,751,700	n/a	n/a
2031	112,213,300	n/a	n/a
2032	115,075,500	n/a	n/a
2033	118,022,900	n/a	n/a
2034	121,058,600	n/a	n/a
2035	124,185,600	n/a	n/a

Projection source: North Texas Tollway Authority System President George Bush Turnpike – Western Extension Investment Grade Study - Wilbur Smith – December 2010

Table C.33: North Texas Tollway Authority Special Project System
Toll Element: Chisholm Trail Parkway

Toll Element Length: Lane Miles: 100.0 Center-Line Miles: 27.5 Opening of Element to Traffic: May 2014 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.22 Passenger Non-Electronic Toll Rate: $0.33			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014	6,940,600	3,737,236	-46%
2015	24,562,100	21,188,303	-14%
2016	31,197,200	n/a	n/a
2017	37,991,700	n/a	n/a
2018	45,616,700	n/a	n/a
2019	53,007,900	n/a	n/a
2020	57,162,000	n/a	n/a
2021	59,355,700	n/a	n/a
2022	60,951,400	n/a	n/a
2023	62,514,700	n/a	n/a
2024	64,082,500	n/a	n/a
2025	65,579,800	n/a	n/a
2026	67,372,100	n/a	n/a
2027	69,101,400	n/a	n/a
2028	71,030,300	n/a	n/a
2029	72,668,400	n/a	n/a
2030	74,537,700	n/a	n/a
2031	76,340,700	n/a	n/a
2032	78,263,500	n/a	n/a
2033	79,988,900	n/a	n/a
2034	81,970,600	n/a	n/a
2035	83,854,400	n/a	n/a

Projection source: North Texas Tollway Authority System Chisholm Trail Parkway Investment Grade Study - Wilbur Smith – September 2011

Table C.34: North Texas Tollway Authority
Toll Project: SH 360

Toll Project Length: Lane Miles: 38.8 Center-Line Miles: 9.7 Opening of Project to Traffic: Under Construction Average Toll Per Mile (Projected): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: $0.26			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016			
2017	475,100	n/a	n/a
2018	11,255,000	n/a	n/a
2019	14,096,200	n/a	n/a
2020	17,296,700	n/a	n/a
2021	20,895,200	n/a	n/a
2022	24,158,300	n/a	n/a
2023	25,138,600	n/a	n/a
2024	26,311,100	n/a	n/a
2025	27,491,300	n/a	n/a
2026	28,559,600	n/a	n/a
2027	29,669,900	n/a	n/a
2028	30,823,100	n/a	n/a
2029	31,921,700	n/a	n/a
2030	33,059,200	n/a	n/a
2031	35,832,300	n/a	n/a
2032	36,536,100	n/a	n/a
2033	37,255,100	n/a	n/a
2034	37,988,600	n/a	n/a
2035	38,737,600	n/a	n/a

Projection source: CDM Smith - SH 360 Scenario 3b - November 2012, shifted transactions down a year to reflect 2017 opening vs. original 2016 projection.

Table C.35: Camino Colombia Toll Road
Toll Project: SH 255

Toll Project Length: Lane Miles: 49.5 Center-Line Miles: 22.0 Opening of Project to Traffic: October 2000 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.14 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 12/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011		329,625	
2012		300,079	
2013		471,516	
2014		443,872	
2015		504,719	
2016		n/a	n/a
2017		n/a	n/a
2018		n/a	n/a
2019		n/a	n/a
2020		n/a	n/a
2021		n/a	n/a
2022		n/a	n/a
2023		n/a	n/a
2024		n/a	n/a
2025		n/a	n/a
2026		n/a	n/a
2027		n/a	n/a
2028		n/a	n/a
2029		n/a	n/a
2030		n/a	n/a
2031		n/a	n/a
2032		n/a	n/a
2033		n/a	n/a
2034		n/a	n/a
2035		n/a	n/a

Table C.36: Central Texas Turnpike System
Toll Element: SH 130 Segments 1-4

Toll Element Length: Lane Miles: 214.1 Center-Line Miles: 49.0 Opening of Element to Traffic: November 2006 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.14 Passenger Non-Electronic Toll Rate: $0.19			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	27,074,240	30,585,675	13%
2012	30,657,280	34,352,100	12%
2013	33,782,080	41,365,500	22%
2014	35,958,720	46,210,700	29%
2015	38,135,360	54,785,716	44%
2016	32,279,360	n/a	n/a
2017	34,864,960	n/a	n/a
2018	37,450,240	n/a	n/a
2019	40,035,840	n/a	n/a
2020	42,621,440	n/a	n/a
2021	47,562,880	n/a	n/a
2022	51,421,440	n/a	n/a
2023	55,280,320	n/a	n/a
2024	59,138,880	n/a	n/a
2025	62,997,440	n/a	n/a
2026	54,562,240	n/a	n/a
2027	57,291,200	n/a	n/a
2028	60,017,600	n/a	n/a
2029	62,727,360	n/a	n/a
2030	65,406,400	n/a	n/a
2031	68,040,320	n/a	n/a
2032	70,614,400	n/a	n/a
2033	73,112,960	n/a	n/a
2034	75,521,280	n/a	n/a
2035	77,824,000	n/a	n/a

Projection source: Central Texas Turnpike System 2002 Traffic and Revenue Forecast

Table C.37: Central Texas Turnpike System
Toll Element: SH 45 North

Toll Element Length: Lane Miles: 98.5 Center-Line Miles: 12.8 Opening of Element to Traffic: November 2006 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: $0.22			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	25,760,700	33,541,799	30%
2012	28,734,600	35,790,100	25%
2013	30,352,500	37,126,440	22%
2014	31,970,400	38,255,800	20%
2015	33,588,600	42,686,069	27%
2016	32,033,100	n/a	n/a
2017	33,188,400	n/a	n/a
2018	34,344,000	n/a	n/a
2019	35,499,600	n/a	n/a
2020	36,655,200	n/a	n/a
2021	38,841,600	n/a	n/a
2022	41,371,500	n/a	n/a
2023	43,901,400	n/a	n/a
2024	46,431,000	n/a	n/a
2025	48,960,900	n/a	n/a
2026	47,980,800	n/a	n/a
2027	49,611,000	n/a	n/a
2028	51,241,200	n/a	n/a
2029	52,871,100	n/a	n/a
2030	54,501,300	n/a	n/a
2031	56,131,500	n/a	n/a
2032	57,761,700	n/a	n/a
2033	59,391,900	n/a	n/a
2034	61,022,100	n/a	n/a
2035	62,652,300	n/a	n/a

Projection source: Central Texas Turnpike System 2002 Traffic and Revenue Forecast

Table C.38: Central Texas Turnpike System
Toll Element: Loop 1

Toll Element Length: Lane Miles: 31.9 Center-Line Miles: 4.0 Opening of Element to Traffic: November 2006 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.27 Passenger Non-Electronic Toll Rate: $0.35			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011	22,127,700	18,882,398	-15%
2012	23,632,500	19,889,700	-16%
2013	23,972,400	19,715,300	-18%
2014	24,312,300	19,839,100	-18%
2015	24,652,500	21,468,026	-13%
2016	23,891,400	n/a	n/a
2017	24,375,000	n/a	n/a
2018	24,858,600	n/a	n/a
2019	25,342,200	n/a	n/a
2020	25,825,800	n/a	n/a
2021	26,496,000	n/a	n/a
2022	27,228,300	n/a	n/a
2023	27,960,600	n/a	n/a
2024	28,693,200	n/a	n/a
2025	29,425,500	n/a	n/a
2026	29,032,200	n/a	n/a
2027	29,639,700	n/a	n/a
2028	30,246,900	n/a	n/a
2029	30,854,100	n/a	n/a
2030	31,461,300	n/a	n/a
2031	32,068,800	n/a	n/a
2032	32,676,000	n/a	n/a
2033	33,283,200	n/a	n/a
2034	33,890,400	n/a	n/a
2035	34,497,900	n/a	n/a

Projection source: Central Texas Turnpike System 2002 Traffic and Revenue Forecast

Table C.39: Central Texas Turnpike System
Toll Element: SH 45 Southeast

Toll Element Length: Lane Miles: 30.4 Center-Line Miles: 7.0 Opening of Element to Traffic: May 2009 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.15 Passenger Non-Electronic Toll Rate: $0.20			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011		3,178,000	
2012	2,715,200	3,842,000	41%
2013	2,987,520	4,300,000	44%
2014	3,279,040	4,743,000	45%
2015	3,596,480	5,565,864	55%
2016	3,772,160	n/a	n/a
2017	3,901,120	n/a	n/a
2018	4,034,560	n/a	n/a
2019	4,172,800	n/a	n/a
2020	4,315,520	n/a	n/a
2021	4,463,360	n/a	n/a
2022	4,616,000	n/a	n/a
2023	4,773,760	n/a	n/a
2024	4,937,280	n/a	n/a
2025	5,106,240	n/a	n/a
2026	5,280,960	n/a	n/a
2027	5,461,760	n/a	n/a
2028	5,648,640	n/a	n/a
2029	5,841,920	n/a	n/a
2030	6,041,600	n/a	n/a
2031	6,248,640	n/a	n/a
2032	6,462,400	n/a	n/a
2033	6,683,520	n/a	n/a
2034	6,912,000	n/a	n/a
2035	7,148,800	n/a	n/a

Projection source: Central Texas Turnpike System 2012 Traffic and Revenue Forecast

Table C.40: DFW Connector Managed Lanes

Toll Project Length: Lane Miles: 4 Center-Line Miles: 4 Opening of Project to Traffic: July 2014 Average Toll Per Mile (as of 3/30/16): Passenger Minimum Toll Rate: $0.06 Passenger Maximum Toll Rate: $0.15			
Year Ending 7/1	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014		235,544	
2015		1,905,451	
2016	3,267,814		n/a
2017	3,304,074		n/a
2018	3,420,767		n/a
2019	4,417,802		n/a
2020	4,516,171		n/a
2021	4,690,068		n/a
2022	4,859,359		n/a
2023	5,024,225		n/a
2024	5,184,837		n/a
2025	5,415,544		n/a
2026	5,713,700		n/a
2027	5,932,108		n/a
2028	6,216,612		n/a
2029	6,494,220		n/a
2030	6,737,283		n/a
2031	6,990,445		n/a
2032	7,254,135		n/a
2033	7,528,802		n/a
2034	7,814,913		n/a
2035	8,112,956		n/a

Table C.41: Grand Parkway Transportation Corporation
Toll Element: Grand Parkway Segment D – Harris County

Toll Element Length: Lane Miles: 10.4 Center-Line Miles: 2.6 Opening of Element to Traffic: February 2014 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014	465,000	621,584	34%
2015	1,110,000	1,181,283	6%
2016	1,381,000	n/a	n/a
2017	1,587,000	n/a	n/a
2018	1,685,000	n/a	n/a
2019	1,796,000	n/a	n/a
2020	1,909,000	n/a	n/a
2021	2,008,000	n/a	n/a
2022	2,072,000	n/a	n/a
2023	2,144,000	n/a	n/a
2024	2,200,000	n/a	n/a
2025	2,251,000	n/a	n/a
2026	2,312,000	n/a	n/a
2027	2,359,000	n/a	n/a
2028	2,418,000	n/a	n/a
2029	2,461,000	n/a	n/a
2030	2,512,000	n/a	n/a
2031	2,562,000	n/a	n/a
2032	2,615,000	n/a	n/a
2033	2,668,000	n/a	n/a
2034	2,727,000	n/a	n/a
2035	2,782,000	n/a	n/a

Projection source: Grand Parkway Comprehensive Traffic and Revenue Study dated June 26, 2013

Table C.42: Grand Parkway Transportation Corporation
Toll Element: Grand Parkway Segment E

Toll Element Length: Lane Miles: 57.6 Center-Line Miles: 14.4 Opening of Element to Traffic: February 2014 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.21 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014	5,877,000	8,874,381	51%
2015	14,446,000	20,521,681	42%
2016	19,596,000	n/a	n/a
2017	22,950,000	n/a	n/a
2018	25,346,000	n/a	n/a
2019	27,694,000	n/a	n/a
2020	30,049,000	n/a	n/a
2021	32,225,000	n/a	n/a
2022	34,926,000	n/a	n/a
2023	37,869,000	n/a	n/a
2024	40,940,000	n/a	n/a
2025	43,939,000	n/a	n/a
2026	46,268,000	n/a	n/a
2027	47,828,000	n/a	n/a
2028	50,269,000	n/a	n/a
2029	53,822,000	n/a	n/a
2030	55,728,000	n/a	n/a
2031	57,853,000	n/a	n/a
2032	60,044,000	n/a	n/a
2033	62,172,000	n/a	n/a
2034	64,560,000	n/a	n/a
2035	66,592,000	n/a	n/a

Projection source: Grand Parkway Comprehensive Traffic and Revenue Study dated June 26, 2013

Table C.43: Grand Parkway Transportation Corporation
Toll Element: Grand Parkway Segment F1

Toll Element Length: Lane Miles: 48.4 Center-Line Miles: 12.1 Opening of Element to Traffic: February 2016 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.19 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016	4,532,000	n/a	n/a
2017	10,982,000	n/a	n/a
2018	14,610,000	n/a	n/a
2019	16,854,000	n/a	n/a
2020	18,757,000	n/a	n/a
2021	20,907,000	n/a	n/a
2022	22,481,000	n/a	n/a
2023	24,226,000	n/a	n/a
2024	26,035,000	n/a	n/a
2025	28,054,000	n/a	n/a
2026	30,237,000	n/a	n/a
2027	31,165,000	n/a	n/a
2028	31,885,000	n/a	n/a
2029	32,011,000	n/a	n/a
2030	33,147,000	n/a	n/a
2031	34,278,000	n/a	n/a
2032	35,632,000	n/a	n/a
2033	36,973,000	n/a	n/a
2034	38,475,000	n/a	n/a
2035	39,961,000	n/a	n/a

Projection source: Grand Parkway Comprehensive Traffic and Revenue Study dated June 26, 2013

Table C.44: Grand Parkway Transportation Corporation
Toll Element: Grand Parkway Segment F2

Toll Element Length: Lane Miles: 48.8 Center-Line Miles: 12.2 Opening of Element to Traffic: February 2016 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.19 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016	7,155,000	n/a	n/a
2017	17,007,000	n/a	n/a
2018	22,023,000	n/a	n/a
2019	26,107,000	n/a	n/a
2020	28,917,000	n/a	n/a
2021	31,447,000	n/a	n/a
2022	33,390,000	n/a	n/a
2023	35,616,000	n/a	n/a
2024	37,734,000	n/a	n/a
2025	39,959,000	n/a	n/a
2026	41,872,000	n/a	n/a
2027	42,634,000	n/a	n/a
2028	43,545,000	n/a	n/a
2029	44,363,000	n/a	n/a
2030	45,311,000	n/a	n/a
2031	46,286,000	n/a	n/a
2032	47,411,000	n/a	n/a
2033	48,463,000	n/a	n/a
2034	49,681,000	n/a	n/a
2035	50,697,000	n/a	n/a

Projection source: Grand Parkway Comprehensive Traffic and Revenue Study dated June 26, 2013

Table C.45: Grand Parkway Transportation Corporation
Toll Element: Grand Parkway Segment G

Toll Element Length: Lane Miles: 54.0 Center-Line Miles: 13.5 Opening of Element to Traffic: March 2016 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.21 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012			
2013			
2014			
2015			
2016	10,955,000	n/a	n/a
2017	26,281,000	n/a	n/a
2018	34,203,000	n/a	n/a
2019	40,052,000	n/a	n/a
2020	43,851,000	n/a	n/a
2021	47,019,000	n/a	n/a
2022	50,352,000	n/a	n/a
2023	54,053,000	n/a	n/a
2024	57,736,000	n/a	n/a
2025	61,172,000	n/a	n/a
2026	63,469,000	n/a	n/a
2027	65,065,000	n/a	n/a
2028	67,187,000	n/a	n/a
2029	69,737,000	n/a	n/a
2030	71,575,000	n/a	n/a
2031	73,528,000	n/a	n/a
2032	75,669,000	n/a	n/a
2033	77,708,000	n/a	n/a
2034	80,029,000	n/a	n/a
2035	84,109,000	n/a	n/a

Projection source: Grand Parkway Comprehensive Traffic and Revenue Study dated June 26, 2013

Table C.46: SH 99 Grand Parkway Segment I-2A

Toll Project Length: Lane Miles: Center-Line Miles: 7.4 Opening of Project to Traffic: November 2011 Average Toll Per Mile (as of 3/30/16): Passenger Electronic Toll Rate: $0.17 Passenger Non-Electronic Toll Rate: Not Available			
Year Ending 8/31	Original Projected Traffic Transactions	Actual Traffic Transactions	Over / (Under) Actual Traffic vs. Projected
2011			
2012		713,210	
2013		863,101	
2014		978,699	
2015		1,394,915	
2016	1,588,000	n/a	n/a
2017	1,674,000	n/a	n/a
2018	1,765,000	n/a	n/a
2019	1,864,000	n/a	n/a
2020	1,965,000	n/a	n/a
2021	2,661,000	n/a	n/a
2022	3,088,000	n/a	n/a
2023	3,364,000	n/a	n/a
2024	3,639,000	n/a	n/a
2025	3,896,000	n/a	n/a
2026	4,154,000	n/a	n/a
2027	4,420,000	n/a	n/a
2028	4,701,000	n/a	n/a
2029	4,999,000	n/a	n/a
2030	5,308,000	n/a	n/a
2031	5,637,000	n/a	n/a
2032	5,987,000	n/a	n/a
2033	6,359,000	n/a	n/a
2034	6,755,000	n/a	n/a
2035	7,174,000	n/a	n/a

Appendix D: House Bill 2612

AN ACT

relating to a report to the legislature regarding the elimination of toll roads.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Not later than September 1, 2016, the Texas Department of Transportation shall submit to each standing committee of the senate and house of representatives that has primary jurisdiction over transportation matters a report that:

(1) lists the amount of debt service on bonds issued for each toll project in this state;

(2) identifies, based on criteria provided by the Texas Transportation Commission, bonds that would be appropriate for accelerated or complete lump-sum payment of debt service; and

(3) proposes a plan to eliminate all toll roads in this state, except for tolls on roads constructed, operated, or maintained only with proceeds from the issuance of bonds by a toll project entity other than the department, by methods including:

(A) the accelerated or complete lump-sum payment of debt service on bonds identified under Subdivision (1); or

(B) requiring, as a condition on receipt of state financial assistance, a commitment by a toll project entity to eliminate toll collection on a project for which the financial assistance is provided.

SECTION 2. This Act takes effect September 1, 2015.

Texas Department of Transportation - Rider 46. Report on the Elimination of Toll Roads.

Out of funds appropriated above, it is the intent of the Legislature that the Texas Department of Transportation conduct a study on the feasibility of eliminating toll roads and the payment of debt to accomplish this purpose. It is the intent of the
Legislature that the report:

i. list the amount of debt service on bonds issued for each toll project in this state;

ii. identify, based on criteria provided by the Texas Transportation Commission, bonds that would be appropriate for accelerated or complete lump-sum payment of debt service; and

iii. propose a plan to eliminate all toll roads in this state, except for tolls on roads constructed, operated, or maintained only with proceeds from the issuance of bonds by a toll project entity other than the department, by methods including:

(A) the accelerated or complete lump-sum payment of debt service on bonds identified under Subdivision (1); or

(B) requiring, as a condition on receipt of state financial assistance, a commitment by a toll project entity to eliminate toll collection on a project for which the financial assistance is provided.

It is the intent of the Legislature that the report is completed by September 1, 2016, and a copy be provided to the Legislative Budget Board and the standing committees of each house of the Legislature with primary jurisdiction over transportation matters.