



NORTH TEXAS TOLLWAY AUTHORITY

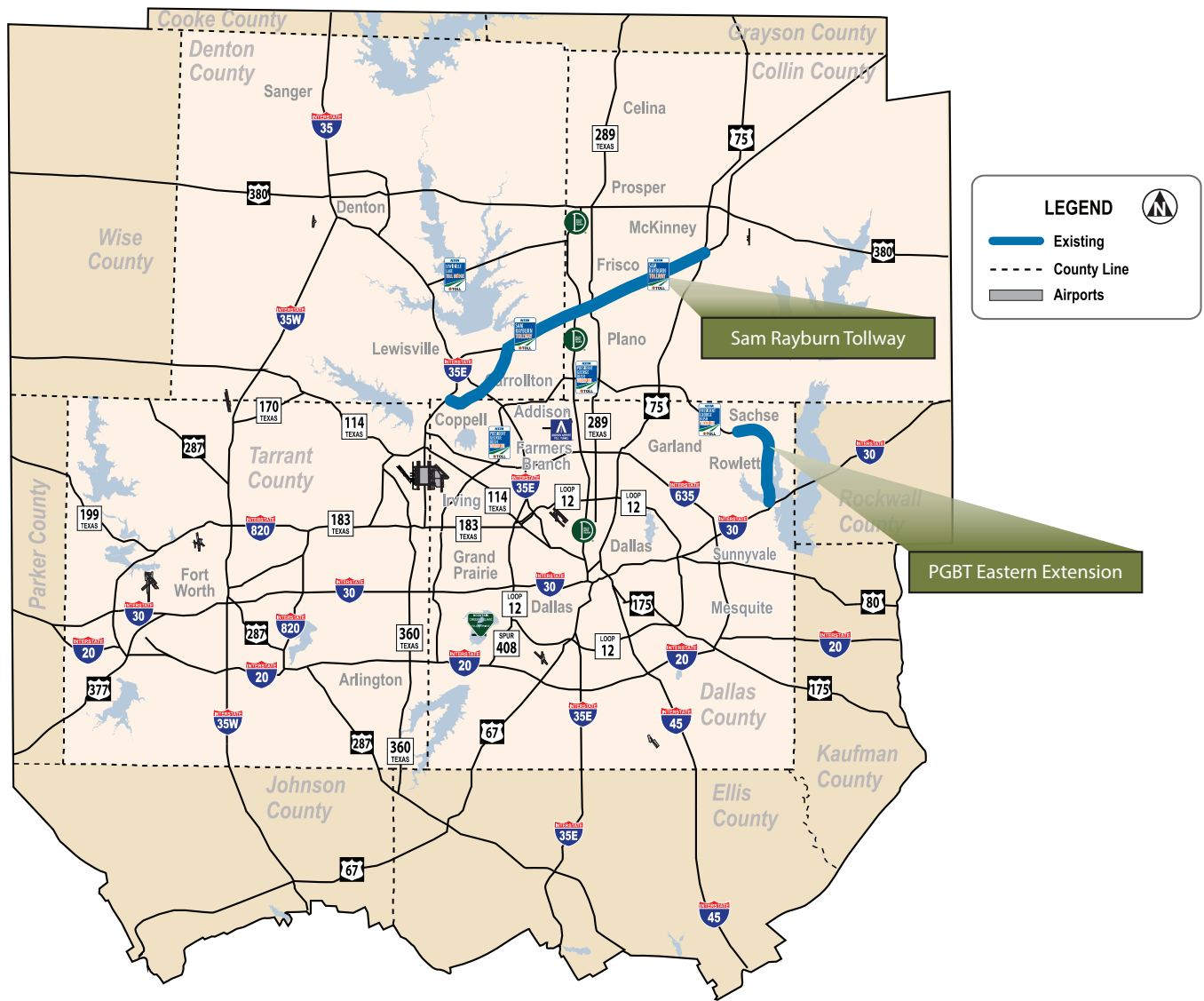
NORTH TEXAS TOLLWAY AUTHORITY SEMI-ANNUAL PROGRESS REPORT SYSTEM

June 2016

SAM RAYBURN TOLLWAY
PGBT EASTERN EXTENSION

Issued August 12, 2016

ATKINS



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August 12, 2016

Gerald Carrigan
Executive Director
North Texas Tollway Authority
5900 W. Plano Parkway
Plano, Texas 75093

Dear Mr. Carrigan:

As described in the requirements set forth in the Amended and Restated Trust Agreement Section 411, the Consulting Engineers prepare a progress report at least once every 6 months during the construction of a project financed by public bonds. As defined in the Trust Agreement Section 704, Atkins North America, Inc. (Atkins) was selected as the North Texas Tollway Authority's (NTTA) Consulting Engineer at the December 2012 board meeting. Projects included in the NTTA's System that are subject to this requirement include the Sam Rayburn Tollway (SRT) and the President George Bush Turnpike Eastern Extension (PGBT EE) toll projects.

The NTTA adheres to the requirements outlined in a comprehensive Trust Agreement which governs the affairs of the projects financed with public bonds. As specified in the agreement, this report includes:

- (i) The date each project will be open to traffic
- (ii) The expected date that construction of each project will be completed
- (iii) The cost of each project, excluding any bond obligation discounts and interest during construction and for one year after completion of construction
- (iv) The amount of funds required every 6 months during the remaining estimated period of construction, including comparisons between the actual time elapsed and the actual costs, and the original estimates (budget) of such times and costs.

This information, as well as other items relevant to each corridor, is presented in greater detail within this report.

Respectfully submitted,



R. Keith Jackson, PE
General Engineering Consultant
Project Director

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1.0 Sam Rayburn Tollway, 18th Progress Update (Final)

1.1 Description



The Sam Rayburn Tollway project (SRT), extends about 26 miles from Business State Highway 121 (SH-121) in Denton County to U.S. Highway 75 (US 75) in Collin County. SRT became part of the NTTA system on September 1, 2008.

SRT is an all electronic toll collection facility consisting of six-lane controlled-access main lanes with frontage roads for nearly the entire roadway except between I-35W and Hebron Parkway.

SRT was divided into five sections for purposes of phasing, managing, and expediting the design and construction (refer to **Figure 1**). TxDOT was responsible for the design and construction of Segments 1 and 2. NTTA was responsible for the design and construction of Segments 3, 4 and 5.

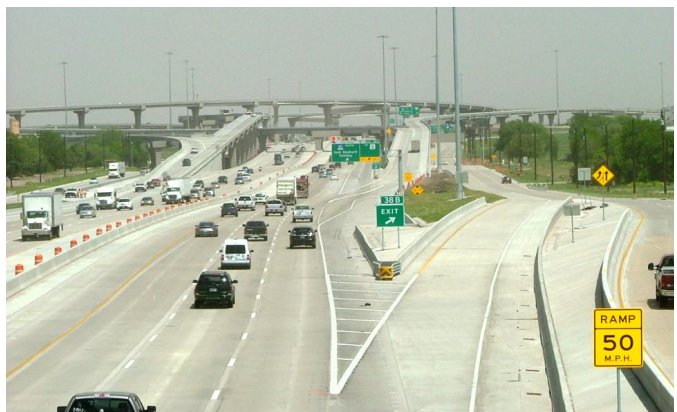
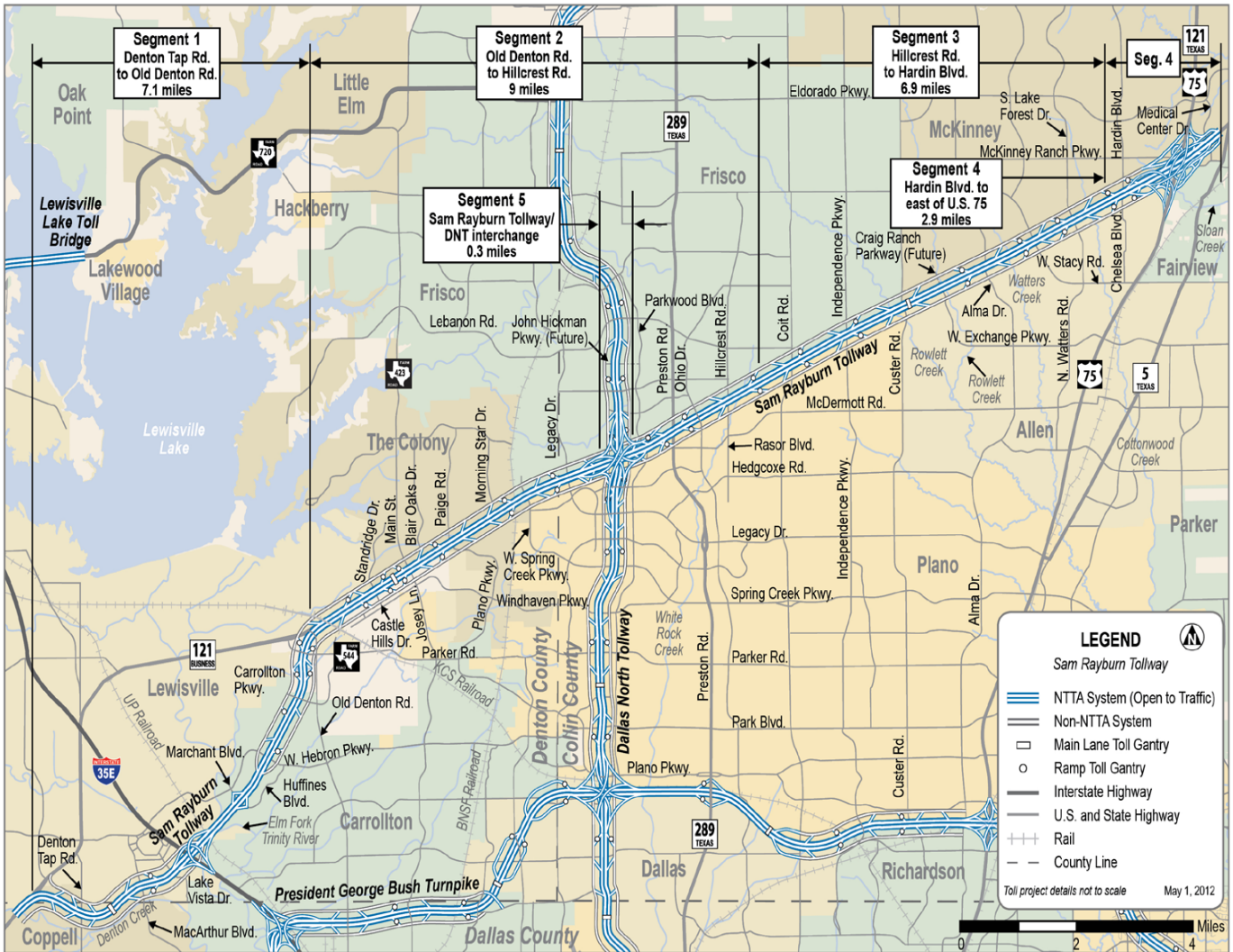


Figure 1: SRT Project Location and Segments



1.2 Financial

As required by Trust Agreement, this section provides the cost of the project and the draw schedule by 6-month increments. The current total estimated cost for all NTTA deliverables for SRT, exclusive of interest, financing, and an upfront acquisition payment, but including a contingency allocation, is \$638,810,700. **Table 1** shows all expenditures through June 2016.

For purposes of assembling this report, the cutoff date for all financial information is June 30, 2016, while information in the narrative may include details as current as the report release date, August 12, 2016.

Table 1 also shows a summary of the engineer's estimate as of November 2007 as well as the current estimated cost at completion. The total project cost includes engineering, legal and administrative, materials testing, and utility relocation costs that are the NTTA's responsibility.

Several factors, including unforeseen escalation of prices and wages, labor or material shortages, or changes in economic conditions, can significantly affect (escalate or reduce) construction costs. Appropriate contingencies are added to the cost of the project to mitigate the impact of unforeseen escalations. The estimated project cost reflects the most current bids, approved change orders, and Atkins' professional judgment of the construction industry; it is our belief that the SRT including the active projects can be constructed within the limits described for the estimated cost given herein.

However, due to the nature of the construction industry, Atkins cannot guarantee that the actual project cost will not vary from the estimated cost.

The current cost estimate represents the best good-faith judgment from design professionals familiar with the highway construction industry. Neither the NTTA nor its consulting engineers have control over the labor, material or equipment costs, contractors' methods of determining bid prices, competitive bidding, market or negotiating conditions. The estimate of construction costs given in this progress report will be monitored as work progresses.

The estimated semi-annual amount of funds (Draw Schedule) required for the projected period of construction necessary to meet the cost of the SRT Project, including funds allocated for project contingencies, is shown in **Table 2**.

1.3 Summary

The SRT project was opened to traffic in phases between July 2006 and November 2011. The NTTA service commencement on Segments 1 and 2 occurred September 2008.

All post-open-to-traffic projects have also been completed. Therefore, this will be the final semi-annual progress report for this project.

Table 1: Sam Rayburn Tollway Estimate of Project Costs at Completion

No.	Description	Engineer's Report Estimate, Nov. 2007 (\$)	Estimate at Completion Cost, as of June 2016 (\$)	Actual Expenditures, as of June 2016 (\$)
1	Segments 1 and 2	14,163,718	18,868,250	18,868,250
2	Segment 3N ¹	72,575,945	64,011,520	64,011,520
3	Segment 3S	57,851,840	52,602,322	52,602,322
4	Exchange Parkway Improvements ¹	-	15,793,523	15,793,523
5	Segment 4	155,085,553	208,600,549	208,600,549
6	Segment 5	92,843,188	79,329,016	79,329,016
7	Toll Gantries, Equipment ²	17,626,759	12,547,104	12,547,104
8	Construction Management	33,138,619	34,285,724	34,285,724
9	Miscellaneous Construction ³	21,172,724	56,146,826	56,146,763
-	Reimbursement ⁴	-	(14,308,828)	(14,308,828)
Subtotal (1-9) Construction ⁵		464,458,346	527,876,006	527,875,943
10	Plans, Specifications, & Estimates ¹	37,213,460	57,167,364	57,167,364
11	Administrative	11,437,618	34,253,042	34,253,042
12	Other Agency Costs	150,000	3,295,393	2,885,459
Subtotal (10-12) Engineering		48,801,078	94,715,799	94,305,865
13	Project Contingency	125,551,276	16,218,895	
Project Total (1-13) ⁵		638,810,700	638,810,700	622,181,809

Notes:

- ¹ An Interlocal Agreement (ILA) with the City of McKinney, City of Allen, and Collin County was approved to fund a change to the Exchange Parkway intersection to improve access to the SRT. A deductive change order was executed in the amount of \$5.6M to remove the prior Exchange Parkway scope from the Segment 3N contract. A separate contract was create to address the revised requirements for the Exchange Parkway improvements.
- ² The NTTA toll gantry standard was implemented in Segments 3-5 as per the NTTA Board of Directors Resolution dated November 2007.
- ³ The estimated miscellaneous construction costs include material testing, utility relocations, proposed right-of-way and easements, landscape and fiber optic cable installation. This cost also included \$11.3M in right-of-way purchases reimbursed by TxDOT.
- ⁴ Includes the reimbursements from the City of McKinney, City of Allen, and Collin County for the Exchange Parkway improvements, reimbursement from City of Coppell for Segment 2 sound wall coatings, reimbursements from Segment 4 third-party damages, TxDOT right-of-way reimbursements, reimbursements from The Colony and Nebraska Furniture Mart for interchange at Nebraska Furniture Mart, and Engineer's errors and omissions.
- ⁵ The amount shown above does not include bond discounts, interest during and after construction, and other financing costs and future capacity improvements for Segments 1-5 are not included.
- ⁶ Project contingency used above in items 1-12.

Source: NTTA Project Delivery

Table 2: SRT Draw Schedule

Period Ending	Original Semi-Annual Estimate, Dec. 2007 (\$)	Original Cumulative Estimate, Dec. 2007 (\$)	Semi-Annual Actual, June 2016 (\$)	Cumulative Actual, June 2016 (\$)	Semi-Annual Estimate, June 2016 ¹ (\$)	Cumulative Estimate, June 2016 ¹ (\$)
12/31/2007	12,804,925	12,804,925	12,804,925	12,804,925		
6/30/2008	66,689,438	79,494,363	41,070,815	53,875,740		
12/31/2008	84,918,350	164,412,713	102,075,318	155,951,059		
6/30/2009	103,636,169	268,048,882	128,276,304	284,227,363		
12/31/2009	106,341,227	374,390,109	74,454,634	358,681,997		
6/30/2010	125,468,501	499,858,610	55,111,412	413,793,409		
12/31/2010	56,476,173	556,334,783	86,008,900	499,802,309		
6/30/2011	31,527,887	587,862,670	44,459,339	544,261,648		
12/31/2011	25,383,916	613,246,586	36,136,206	580,397,854		
6/30/2012	11,432,366	624,678,952	10,018,852	590,416,706		
12/31/2012	8,041,313	632,720,265	17,753,349	608,170,055		
6/30/2013	6,090,435	638,810,700	3,718,894	611,888,949		
12/31/2013			4,520,190	616,409,139		
6/30/2014			1,745,891	618,155,029		
12/31/2014			1,638,859	619,793,880		
6/30/2015			684,378	620,478,266		
12/31/2015			1,090,772	621,569,039		
6/30/2016			612,769	622,181,808		
12/31/2016					391,156	622,572,964
06/30/2017 ¹					16,237,736	638,810,700

Notes: ¹ Includes contingency that may or may not be expended.

Source: NTTA Project Delivery

2.0 President George Bush Turnpike Eastern Extension, 16th Progress Update (Final)

2.1 Description



The President George Bush Turnpike, Eastern Extension project (PGBT EE), extended the PGBT about 9.9 miles east from State Highway 78 (SH-78) in Garland to Interstate 30. The entire PGBT EE is located in Dallas County. PGBT EE is an all electronic toll collection facility consisting of six-lane

PGBT EE was divided into five sections for purposes of phasing, managing, and expediting the design and construction (refer to **Figure 2**). NTTA was responsible for the design and construction of Sections 28, 29, 30, and 31. TxDOT was responsible for the design and construction of Section 32.

controlled-access main lanes.

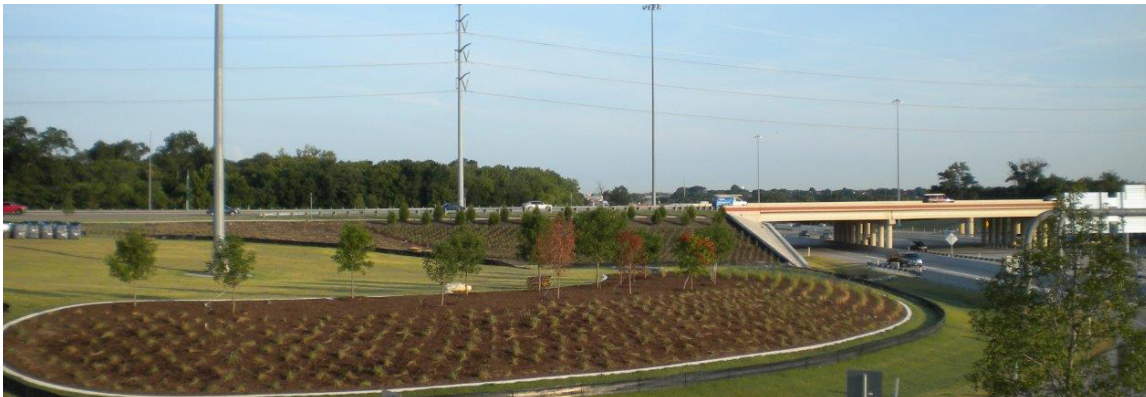
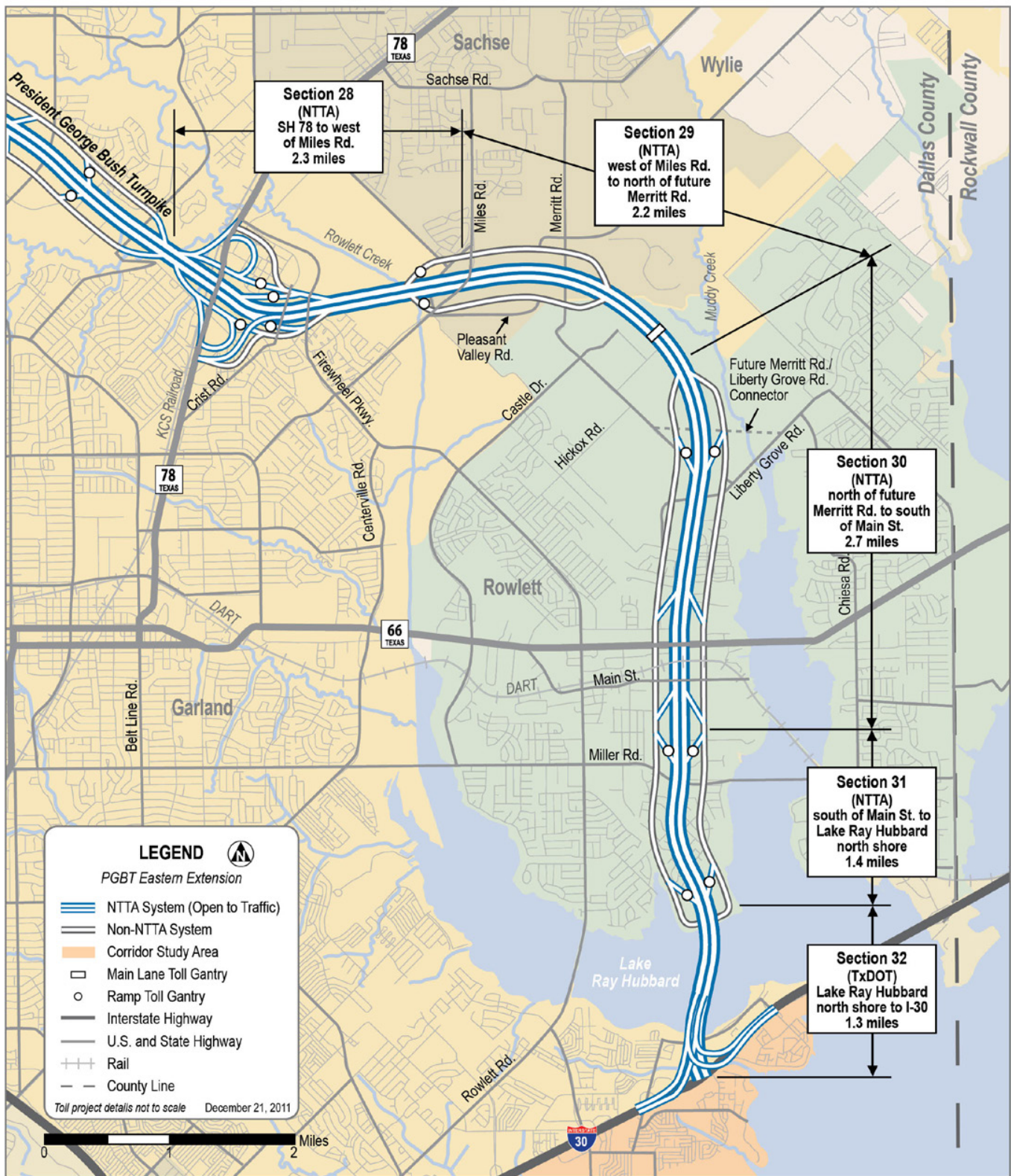


Figure 2: PGBT EE Project Location and Sections



2.2 Financial

As required by Trust Agreement, this section provides the cost of the project and the draw schedule by 6-month increments. The current total estimated cost for all NTTA deliverables for PGBT EE, exclusive of interest, financing, and an upfront acquisition payment, but including a contingency allocation, is \$621,017,100. **Table 3** shows all expenditures through June 2016.

For purposes of assembling this report, the cutoff date for all financial information is June 30, 2016, while information in the narrative may include details as current as the report release date, August 12, 2016.

Table 3 also shows a summary of the engineer's estimate as of August 2008 as well as the current estimated cost at completion. The total project cost includes engineering, legal and administrative, materials testing, and utility relocation costs that are the NTTA's responsibility.

Several factors, including unforeseen escalation of prices and wages, labor or material shortages, or changes in economic conditions, can significantly affect (escalate or reduce) construction costs.

Appropriate contingencies are added to the cost of the project to mitigate the impact of unforeseen escalations. The estimated project cost reflects the most current bids, approved change orders, and Atkins' professional judgment of the construction industry; it is our belief that the PGBT EE including the active and planned projects can be constructed within the limits described, for the estimated cost given herein. However, due to the nature of the construction industry, Atkins cannot guarantee that the actual project cost will not vary from the estimated cost.

The current cost estimate represents the best good-faith judgment from design professionals familiar with the highway construction industry. Neither the NTTA nor its consulting engineers have control over the labor, material or equipment costs, contractors' methods of determining bid prices, competitive bidding, market or negotiating conditions. The estimate of construction costs given in this progress report will be monitored as work progresses.

The estimated semi-annual amount of funds (Draw Schedule) required for the projected period of construction necessary to meet the cost of the PGBT EE Project, including funds allocated for project contingencies, is shown in **Table 4**.

Table 3: PGBT EE Estimate of Project Costs at Completion

No.	Description	Engineer's Report Estimate, Aug. 2008 (\$)	Estimate at Completion Cost, as of June 2016 (\$)	Actual Expenditures, as of June 2016 (\$)
1	Section 28	124,785,106	116,136,082	116,136,082
2	Section 29	86,658,563	59,684,362	59,685,362
3	Section 30	160,936,511	128,107,304	128,097,355
4	Section 31	65,980,548	57,978,724	57,978,724
5	Toll and ITS Equipment ¹	9,817,500	3,931,154	3,931,154
6	Construction Management	31,371,535	23,057,704	23,057,704
7	Miscellaneous Construction ²	8,235,919	11,983,922	11,983,922
Subtotal (1-9) Construction		487,785,682	400,880,253	400,870,304
8	Plans, Specifications & Estimates and Administration	30,367,525	52,683,610	52,577,195
9	ROW Acquisition and Utility Relocations	166,844,730	126,218,936	124,508,945
10	Other Agency Costs	11,095,916	2,906,259	2,904,925
Subtotal (10-12) Engineering		208,308,171	181,808,805	179,991,065
11	Project Contingency	92,643,362	22,859,652	-0-
Project Subtotal (1-11) ³		788,737,215	605,548,710	580,861,369
12	Section 32 (TxDOT) ⁴	251,014,339	228,951,290	
Project Total (1-12) ⁵		1,039,751,554	834,500,000	

Notes:

- ¹ The cost of the toll gantries and ITS infrastructure construction is included within the construction cost of each section.
- ² The estimated miscellaneous construction costs include material testing and other special features.
- ³ A Toll Equity Grant in the amount of \$160M has been supplied by TxDOT to be used primarily for right-of-way acquisitions, utility relocations, or any other costs for the Project agreed to mutually between TxDOT and the NTTA. The City of Rowlett reimbursed the NTTA for \$788,000 of requested design and construction accommodations. In addition to these enhancements, the City of Rowlett requested utility betterments in the amount of \$3,376,851, which have been reimbursed to the NTTA.
- ⁴ Under the two-party agreement, TxDOT is responsible for the design, construction and construction management of Section 32.
- ⁵ The amount shown above does not include bond discounts, interest during and after construction, and other financing costs.
- ⁶ Project contingency used above in items 1-10.

Source: NTTA Project Delivery

Table 4: PGBT EE Draw Schedule

Period Ending	Original Semi-Annual Estimate, Dec. 2008 (\$)	Original Cumulative Estimate, Dec. 2008 (\$)	Semi-Annual Actual, June 2016 (\$)	Cumulative Actual, June 2016 (\$)	Semi-Annual Estimate, June 2016 ² (\$)	Cumulative Estimate, June 2016 ² (\$)
6/30/2005 ¹	4,582,276	4,582,276	4,582,276	4,582,276		
12/31/2005 ¹	9,708,328	14,290,604	9,708,328	14,290,604		
6/30/2006 ¹	2,043,202	16,333,806	2,043,202	16,333,806		
12/31/2006 ¹	164,407	16,498,212	164,407	16,498,212		
6/30/2007 ¹	298,728	16,796,941	298,728	16,796,941		
12/31/2007 ¹	39,736	16,836,677	39,736	16,836,677		
6/30/2008 ¹	0	16,836,677	0	16,836,677		
12/31/2008	124,031,352	140,868,029	124,031,352	140,868,029		
6/30/2009	120,169,173	261,037,203	106,566,929	247,434,959		
12/31/2009	77,128,238	338,165,441	56,003,487	303,438,445		
6/30/2010	127,802,395	465,967,836	65,227,194	368,665,639		
12/31/2010	56,109,695	522,077,531	65,204,966	433,870,605		
6/30/2011	51,948,261	574,025,791	43,065,165	476,935,770		
12/31/2011	47,803,671	621,829,462	69,367,404	546,303,174		
6/30/2012	166,907,753	788,737,215	20,093,906	566,397,080		
12/31/2012			6,527,971	572,925,051		
6/30/2013			2,709,286	575,634,337		
12/31/2013			2,948,713	578,583,050		
6/30/2014			676,863	579,259,913		
12/31/2014			297,882	579,557,795		
6/30/2015			193,795	579,751,590		
12/31/2015			1,107,143	580,858,733		
6/30/2016			2,636	580,861,369		
12/31/2016					72,191	580,933,559
6/30/2017 ²					24,615,150	605,548,710

Notes:

¹ In 2005, the NTTA initiated the construction of the frontage roads from SH 78 to Firewheel Parkway. Construction was completed by June 30, 2008.

² Includes contingency that may or may not be expended.

Source: NTTA Project Delivery

2.3 Summary

The PGBT EE project was opened to traffic on December 21, 2011. All post-open-to-traffic projects to be funded with this project's bond proceeds have also been completed. Therefore, this will be the final semi-annual report for this project.