

In the opinion of co-bond counsel to NTTA, interest on the Bonds (as defined herein) will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date hereof, subject to the matters discussed under "TAX MATTERS" herein, including the alternative minimum tax. Interest on the Bonds will not be an item of tax preference for purposes of determining the alternative minimum tax imposed on individuals under section 57(a)(5) of the Code (as defined herein). See "TAX MATTERS" herein.



**\$652,380,000**

**NORTH TEXAS TOLLWAY AUTHORITY  
SYSTEM REVENUE REFUNDING BONDS, SERIES 2019**

**\$429,870,000  
FIRST TIER BONDS  
SERIES 2019A**

**\$222,510,000  
SECOND TIER BONDS  
SERIES 2019B**

**Dated Date: Date of Delivery**

**Due: As shown herein**

The North Texas Tollway Authority ("NTTA") System Revenue Refunding Bonds, Series 2019, consisting of First Tier Revenue Refunding Bonds, Series 2019A (the "Series 2019A Bonds") and Second Tier Revenue Refunding Bonds, Series 2019B (the "Series 2019B Bonds" and, together with the Series 2019A Bonds, the "Bonds"), will be issued as fully registered obligations of NTTA, a body politic and corporate and a political subdivision of the State of Texas. The Bonds will be issued for the purpose of (i) refunding all of the North Texas Tollway Authority Dallas North Tollway System Variable Rate Revenue Bonds, Series 2005C, (ii) refunding all of the North Texas Tollway Authority System First Tier Tax-Exempt Current Interest Revenue Bonds, Series 2009A, (iii) refunding all of the North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2009C, (iv) refunding all of the North Texas Tollway Authority System First Tier Variable Rate Revenue Refunding Bonds, Series 2014C, (v) refunding all of the North Texas Tollway Authority System Subordinate Lien Taxable Revenue Bonds, Subseries 2010B-2 (Build America Bonds – Direct Payment), (vi) making a deposit to the Shared Second Tier Debt Service Reserve Fund and (vii) paying costs of issuance of the Bonds. See "SCHEDULE I – SCHEDULE OF REFUNDED BONDS." The Bonds will be registered in the nominee name of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds pursuant to its book-entry-only system described herein. No physical delivery of the Bonds will be made to the respective beneficial owners thereof. Principal of, premium, if any, and interest on the Bonds will be payable by Wells Fargo Bank, National Association, as trustee (the "Trustee"), under an Amended and Restated Trust Agreement, dated as of April 1, 2008, between NTTA and the Trustee (as amended and supplemented through the date of delivery of the Bonds, the "Trust Agreement") to DTC, which will make distribution of the amounts so paid to the beneficial owners thereof. See "GENERAL INFORMATION REGARDING THE BONDS — Book-Entry-Only System."

The Bonds are authorized by and issued pursuant to (i) the laws of the State of Texas, particularly Chapter 366, Texas Transportation Code, as amended, and Chapters 1207 and 1371, Texas Government Code, as amended, and (ii) a resolution (the "Resolution") adopted by the Board of Directors (the "Board") of NTTA on May 15, 2019. The Bonds, together with NTTA's outstanding revenue bonds and other obligations secured by the Trust Agreement, are special, limited obligations of NTTA payable solely from, and secured solely by, the tolls and other revenues of the NTTA System (as defined herein) and certain specified funds and accounts created pursuant to the Trust Agreement, on the basis and in the priority set forth therein and described herein.

The Bonds are further described in this Official Statement. See pages (i) and (ii) herein for additional information relating to the Bonds, including provisions relating to maturities, interest rates, yields, optional and mandatory sinking fund redemption, lien priority and tax status.

NTTA IS OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE BONDS ONLY FROM THE TOLLS AND OTHER REVENUES OF THE NTTA SYSTEM AND CERTAIN SPECIFIED FUNDS AND ACCOUNTS CREATED PURSUANT TO THE RESOLUTION AND THE TRUST AGREEMENT ON THE BASIS AND IN THE PRIORITY SET FORTH THEREIN AND DESCRIBED HEREIN. EXCEPT AS SPECIFIED IN THE PRECEDING SENTENCE, NONE OF THE STATE OF TEXAS, NTTA, THE COUNTIES SERVED BY NTTA NOR ANY OTHER AGENCY OR POLITICAL SUBDIVISION OF THE STATE OF TEXAS IS OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF TEXAS, THE COUNTIES SERVED BY NTTA NOR ANY OTHER AGENCY OR POLITICAL SUBDIVISION OF THE STATE OF TEXAS IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS. NTTA HAS NO TAXING POWER. THE BONDS ARE NOT SECURED BY THE REVENUES PROVIDED (i) BY THE 360 TOLLWAY (AS DEFINED HEREIN), (ii) UNDER ANY TOLLING SERVICES AGREEMENT OR (iii) FROM FEES UNDER ANY INTEROPERABILITY AGREEMENT.

This cover page and pages (i) and (ii) contain information for quick reference only. Such pages do not contain a complete summary of the Bonds. Potential investors must read the entire Official Statement to obtain information essential to making an informed investment decision. Investment in the Bonds is subject to certain investment considerations. See "RISK FACTORS."

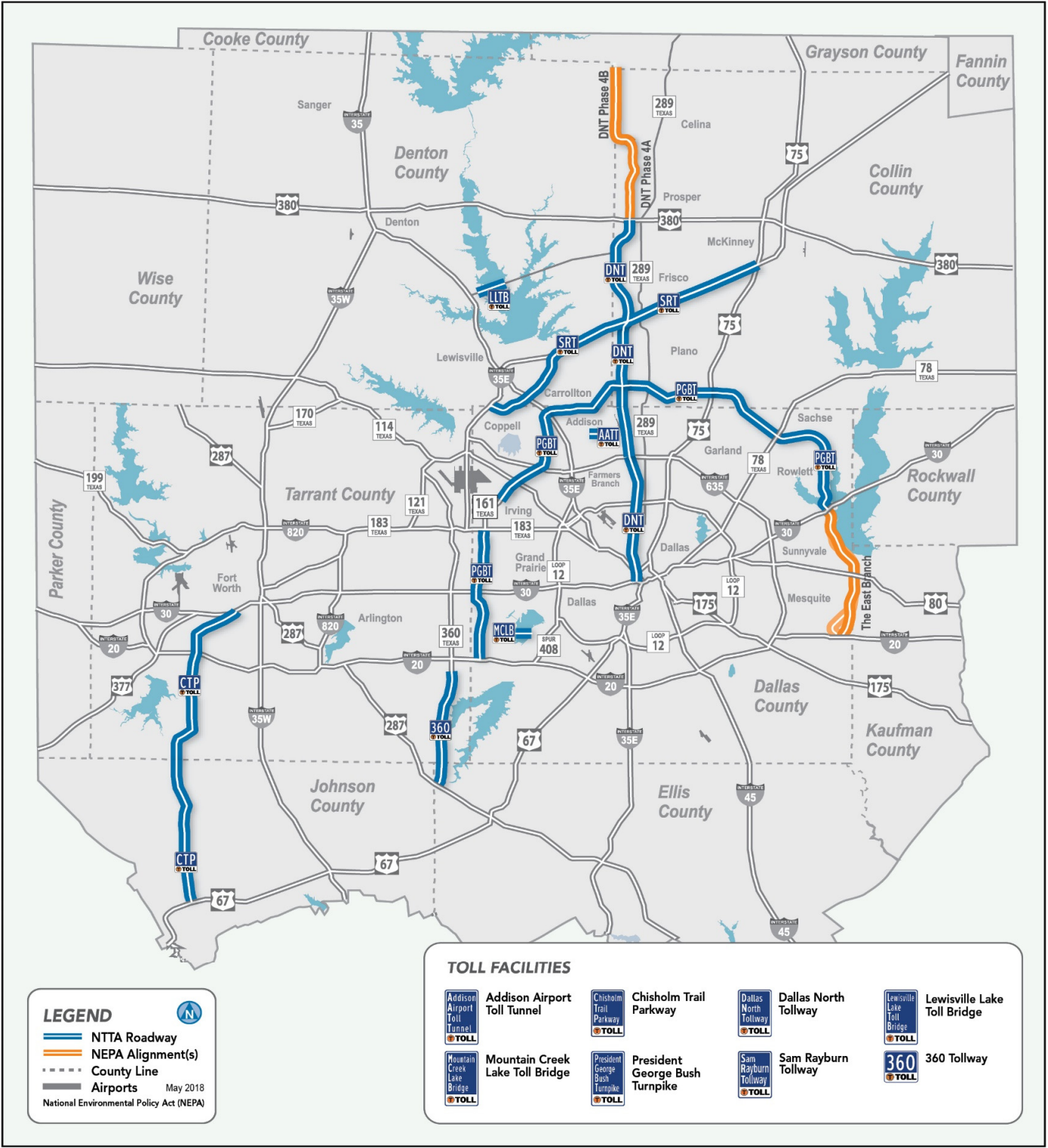
The Bonds are offered for delivery when, as, and if issued and received by the underwriters and subject to the approval of the Attorney General of the State of Texas and the delivery of legal opinions from the law firms of McCall, Parkhurst & Horton L.L.P., Dallas, Texas, and Mahomes Bolden PC, Dallas, Texas, co-bond counsel to NTTA. Certain legal matters will be passed upon for NTTA by Locke Lord LLP, Dallas, Texas, as counsel to NTTA, and by McCall, Parkhurst & Horton L.L.P., Dallas, Texas, and Mahomes Bolden PC, Dallas, Texas, as co-disclosure counsel to NTTA. Certain legal matters will be passed upon for the underwriters by Winstead PC and West & Associates, L.L.P., co-counsel for the underwriters. It is expected that delivery of the Bonds will be made through DTC, New York, New York on or about August 15, 2019.

**BARCLAYS**

**LOOP CAPITAL MARKETS  
RAMIREZ & Co., INC.**

**RAYMOND JAMES**

**PIPER JAFFRAY & Co.  
UBS FINANCIAL SERVICES INC.**



# Facility Map of the North Texas Region



**MATURITIES, INTEREST RATES, YIELDS, CUSIP NUMBERS AND ADDITIONAL  
INFORMATION REGARDING THE SERIES 2019A BONDS**

*General.* The \$429,870,000 North Texas Tollway Authority System First Tier Revenue Refunding Bonds, Series 2019A (the "*Series 2019A Bonds*") will be issued by the North Texas Tollway Authority ("*NTTA*") as fully registered bonds, without coupons, in denominations of \$5,000 or any integral multiple thereof within a maturity and will be dated their date of delivery. Interest will accrue on the Series 2019A Bonds, calculated on the basis of a 360-day year composed of twelve 30-day months, from their date of delivery and will be payable semiannually on January 1 and July 1 of each year, commencing January 1, 2020. Principal will come due on January 1 in the years and in the amounts set forth below or upon the earlier redemption of the Series 2019A Bonds.

**MATURITY SCHEDULE FOR THE SERIES 2019A BONDS**

**SERIAL BONDS**

<b>Stated Maturity (January 1)</b>	<b>Principal Amount (\$)</b>	<b>Interest Rate (%)</b>	<b>Yield (%)</b>	<b>CUSIP No.<sup>(1)</sup></b>
2020	3,690,000	4.000	1.160	66285WYG5
2021	12,365,000	5.000	1.200	66285WYH3
2022	18,195,000	5.000	1.240	66285WYJ9
2023	19,130,000	5.000	1.300	66285WYK6
2024	20,325,000	5.000	1.330	66285WYL4
2025	8,425,000	5.000	1.450	66285WYM2
2026	3,790,000	5.000	1.560	66285WYN0
2027	7,625,000	5.000	1.640	66285WYP5
2028	7,930,000	5.000	1.740	66285WYQ3
2029	8,245,000	5.000	1.820	66285WYR1
2030	4,490,000	5.000	1.910 <sup>(2)</sup>	66285WYS9
2031	1,350,000	5.000	2.000 <sup>(2)</sup>	66285WYT7
2032	1,415,000	5.000	2.070 <sup>(2)</sup>	66285WYU4
2033	1,485,000	4.000	2.390 <sup>(2)</sup>	66285WYV2
2034	5,445,000	4.000	2.450 <sup>(2)</sup>	66285WYW0
2035	22,015,000	3.000	2.940 <sup>(2)</sup>	66285WYX8
2036	43,060,000	4.000	2.580 <sup>(2)</sup>	66285WYY6
2037	65,590,000	4.000	2.620 <sup>(2)</sup>	66285WYZ3
2038	81,765,000	5.000	2.390 <sup>(2)</sup>	66285WZA7
2039	16,120,000	4.000	2.720 <sup>(2)</sup>	66285WZB5

**TERM BOND**

\$77,415,000      4.000%      Term Bond due January 1, 2044;      Priced to yield 2.880%<sup>(2)</sup>;      CUSIP No.<sup>(1)</sup> 66285WZC3

*Optional and Mandatory Sinking Fund Redemption.* The Series 2019A Bonds are subject to optional and mandatory sinking fund redemption as described herein. See "**THE BONDS — The Series 2019A Bonds — Redemption.**"

*Lien Priority.* The Series 2019A Bonds constitute First Tier Bonds within the meaning of the Trust Agreement. See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Priority of Payment.**"

*Tax Status.* In the opinion of co-bond counsel to NTTA, interest on the Series 2019A Bonds will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date thereof, except as explained under "**TAX MATTERS — Opinion**" herein. Interest on the Series 2019A Bonds will not be an item of tax preference for purposes of determining the alternative minimum tax imposed on individuals under Section 57(a)(5) of the Code.

<sup>(1)</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein are provided by CUSIP Global Services managed by S&P Global Market Intelligence on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Global Services. CUSIP numbers have been assigned by an independent company not affiliated with NTTA or the Underwriters and are included solely for the convenience of the owners of the Series 2019A Bonds. None of NTTA, the Co-Financial Advisors or the Underwriters is responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Series 2019A Bonds or as indicated above. The CUSIP number for a specific maturity is subject to being changed after the execution and delivery of the Series 2019A Bonds as a result of subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors applicable to all or a portion of the Series 2019A Bonds.

<sup>(2)</sup> Yield calculated to January 1, 2029, first optional call date at par.

**MATURITIES, INTEREST RATES, YIELDS, CUSIP NUMBERS AND ADDITIONAL  
INFORMATION REGARDING THE SERIES 2019B BONDS**

*General.* The \$222,510,000 North Texas Tollway Authority System Second Tier Revenue Refunding Bonds, Series 2019B (the "*Series 2019B Bonds*") will be issued by NTTA as fully registered bonds, without coupons, in denominations of \$5,000 or any integral multiple thereof within a maturity and will be dated their date of delivery. Interest will accrue on the Series 2019B Bonds, calculated on the basis of a 360-day year composed of twelve 30-day months, from their date of delivery and will be payable semiannually on January 1 and July 1 of each year, commencing January 1, 2020. Principal will come due on January 1 in the years and in the amounts set forth below.

**MATURITY SCHEDULE FOR THE SERIES 2019B BONDS**

**SERIAL BONDS**

<u>Stated Maturity (January 1)</u>	<u>Principal Amount (\$)</u>	<u>Interest Rate (%)</u>	<u>Yield (%)</u>	<u>CUSIP No.<sup>(1)</sup></u>
2022	2,730,000	4.000	1.340	66285WZD1
2023	27,110,000	5.000	1.350	66285WZE9
2024	28,430,000	5.000	1.390	66285WZF6
2025	29,810,000	5.000	1.480	66285WZG4
2026	31,255,000	5.000	1.610	66285WZH2
2027	32,775,000	5.000	1.690	66285WZJ8
2028	34,365,000	5.000	1.790	66285WZK5
2029	36,035,000	5.000	1.870	66285WZL3

*Optional Redemption.* The Series 2019B Bonds are **not** subject to optional redemption.

*Lien Priority.* The Series 2019B Bonds constitute Second Tier Bonds under the Trust Agreement and are subordinate to the First Tier Bonds. See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Priority of Payment.**"

*Tax Status.* In the opinion of co-bond counsel to NTTA, interest on the Series 2019B Bonds will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date thereof, except as explained under "**TAX MATTERS —Opinion**" herein. Interest on the Series 2019B Bonds will not be an item of tax preference for purposes of determining the alternative minimum tax imposed on individuals under Section 57(a)(5) of the Code.

---

<sup>(1)</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein are provided by CUSIP Global Services managed by S&P Global Market Intelligence on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Global Services. CUSIP numbers have been assigned by an independent company not affiliated with NTTA or the Underwriters and are included solely for the convenience of the owners of the Series 2019B Bonds. None of NTTA, the Co-Financial Advisors or the Underwriters is responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Series 2019B Bonds or as indicated above. The CUSIP number for a specific maturity is subject to being changed after the execution and delivery of the Series 2019B Bonds as a result of subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors applicable to all or a portion of the Series 2019B Bonds.

## NTTA BOARD, ADMINISTRATION, CONSULTANTS AND ADVISORS

### Board of Directors<sup>(1)</sup>

Name	Approximate Length of Service	Term Expires August 31	Appointed by	Occupation
John Mahalik, Chairman <sup>(2)</sup>	3 years	2019	Denton County	Businessman
William Moore, Vice Chairman	9 years	2019	Collin County	Businessman
Lynn Gravley	1 year	2019	Governor	Businessman
Mojoy Haddad	6 years	2020	Tarrant County	Businessman
Pete Kamp	2 months	2020	Denton County	Businesswoman
Marcus Knight	2 months	2020	Dallas County	Businessman
George "Tex" Quesada	7 years	2021	Dallas County	Attorney
Jane Willard	8 years	2020	Collin County	Community Advocate
Tim Carter	1 month	2021	Tarrant County	Businessman

### Administration<sup>(3)</sup>

Name	Position
James Hofmann	CEO/Executive Director
Horatio Porter	Chief Financial Officer/Assistant Executive Director of Finance
Dena DeNooyer Stroh	General Counsel/Assistant Executive Director of Legal Services
Elizabeth Mow	Assistant Executive Director of Infrastructure
Sabu Stephen <sup>(4)</sup>	Interim Assistant Executive Director of Operations
Magdalena M. Brady	Director of Internal Audit
Lorelei Griffith	Secretary of the Board

### Consultants and Advisors

Issuer's Counsel	Locke Lord LLP Dallas, Texas
Co-Bond Counsel and Co-Disclosure Counsel	McCall, Parkhurst & Horton L.L.P. Dallas, Texas
	Mahomes Bolden PC Dallas, Texas
Independent Auditors	Crowe Horwath LLP Dallas, Texas
Traffic Engineers	CDM Smith Dallas, Texas
	with the assistance of Baez Consulting, LLC Allen, Texas
Consulting Engineers	Atkins North America Dallas, Texas
Co-Financial Advisors	Hilltop Securities Inc. Dallas, Texas
	Estrada Hinojosa & Co., Inc. Dallas, Texas
	RSI Group LLC Little Rock, Arkansas
Trustee and Paying Agent/Registrar	Wells Fargo Bank, National Association Dallas, Texas

For additional information regarding NTTA, please contact:

Horatio Porter  
Chief Financial Officer  
North Texas Tollway Authority  
5900 West Plano Parkway, Suite 100  
Plano, Texas 75093-4694  
(214) 461-2000

Richard Ramirez  
Managing Director  
Hilltop Securities Inc.  
1201 Elm Street, Suite 3500  
Dallas, Texas 75270  
(214) 953-4000

<sup>(1)</sup> See "GOVERNANCE AND MANAGEMENT — The Board of Directors" in APPENDIX A.

<sup>(2)</sup> Mr. Mahalik was elected Chairman in May 2019 to fill Kenneth Barr's unexpired term as Chairman of the Board. Mr. Barr resigned from the Board after he was elected to the Tarrant County College Board of Trustees.

<sup>(3)</sup> See "GOVERNANCE AND MANAGEMENT — Key Staff Members" in APPENDIX A.

<sup>(4)</sup> Mr. Stephen was appointed Interim Assistant Executive Director of Operations effective January 2019.

## USE OF INFORMATION IN OFFICIAL STATEMENT

No dealer, broker, salesman or other person has been authorized by NTTA or Barclays Capital Inc., Loop Capital Markets LLC, Piper Jaffray & Co., Ramirez & Co., Inc., Raymond James & Co. or UBS Financial Services Inc. (collectively, the "*Underwriters*") to give any information or to make any representation other than those contained in this document, as the same may be supplemented or modified by NTTA (the "*Official Statement*"), and, if given or made, such other information or representation may not be relied upon as having been authorized by NTTA or the Underwriters. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor may there be any sale of the Bonds by any person, in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement, nor any sale of the Bonds shall, under any circumstances, create any implication that there has been no change in the affairs of NTTA since the date hereof. This Official Statement is submitted in connection with the sale of the Bonds and in no instance may this Official Statement be reproduced or used for any other purpose.

CUSIP numbers have been assigned to the Bonds by CUSIP Global Services managed by S&P Global Market Intelligence for the convenience of the owners of the Bonds. None of NTTA, the Co-Financial Advisors or the Underwriters shall be responsible for the selection or the correctness of the CUSIP numbers.

THIS OFFICIAL STATEMENT IS INTENDED TO REFLECT FACTS AND CIRCUMSTANCES ON THE DATE OF THIS OFFICIAL STATEMENT OR ON SUCH OTHER DATE OR AT SUCH OTHER TIME AS IS IDENTIFIED HEREIN. NO ASSURANCE CAN BE GIVEN THAT SUCH INFORMATION WILL NOT BE MISLEADING AT A LATER DATE. CONSEQUENTLY, RELIANCE ON THIS OFFICIAL STATEMENT AT TIMES SUBSEQUENT TO THE ISSUANCE OF THE BONDS DESCRIBED HEREIN SHOULD NOT BE MADE ON THE ASSUMPTION THAT ANY SUCH FACTS OR CIRCUMSTANCES ARE UNCHANGED. SEE "**CONTINUING DISCLOSURE OF INFORMATION**" FOR A DESCRIPTION OF THE UNDERTAKING OF NTTA TO PROVIDE CERTAIN INFORMATION ON A CONTINUING BASIS.

THE TRUSTEE ASSUMES NO RESPONSIBILITY FOR THIS OFFICIAL STATEMENT AND HAS NOT REVIEWED OR UNDERTAKEN TO VERIFY ANY INFORMATION CONTAINED IN THIS OFFICIAL STATEMENT.

NONE OF NTTA, THE CO-FINANCIAL ADVISORS OR THE UNDERWRITERS MAKES ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE INFORMATION CONTAINED IN THIS OFFICIAL STATEMENT REGARDING THE DEPOSITORY TRUST COMPANY ("*DTC*") OR ITS BOOK-ENTRY-ONLY SYSTEM, AS SUCH INFORMATION WAS FURNISHED BY DTC.

THE UNDERWRITERS HAVE PROVIDED THE FOLLOWING STATEMENT FOR INCLUSION IN THIS OFFICIAL STATEMENT: THE UNDERWRITERS HAVE REVIEWED THE INFORMATION IN THIS OFFICIAL STATEMENT IN ACCORDANCE WITH, AND AS PART OF, THEIR RESPONSIBILITIES TO INVESTORS UNDER THE FEDERAL SECURITIES LAWS AS APPLIED TO THE FACTS AND CIRCUMSTANCES OF THIS TRANSACTION, BUT THE UNDERWRITERS DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION.

THE PRICE AND OTHER TERMS RESPECTING THE OFFERING AND SALE OF THE BONDS MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS AFTER SUCH BONDS ARE RELEASED FOR SALE, AND SUCH BONDS MAY BE OFFERED AND SOLD AT PRICES OTHER THAN THE INITIAL OFFERING PRICE, INCLUDING SALES TO DEALERS WHO MAY SELL SUCH BONDS INTO INVESTMENT ACCOUNTS. IN CONNECTION WITH THE OFFERING OF THE BONDS, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE BONDS AT A LEVEL ABOVE THOSE THAT MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

No registration statement relating to the Bonds has been filed with the Securities and Exchange Commission (the "*SEC*") under the Securities Act of 1933, as amended, (the "*Act*") in reliance upon an exemption provided thereunder. The Bonds have not been registered or qualified under the Securities Act of Texas in reliance upon

exemptions contained therein; nor have the Bonds been registered or qualified under the securities laws of any other jurisdiction. NTTA assumes no responsibility for the registration or qualification for sale or other disposition of the Bonds under the securities laws of any jurisdiction in which the Bonds may be offered, sold or otherwise transferred. This disclaimer of responsibility for registration or qualification for sale or other disposition of the Bonds shall not be construed as an interpretation of any kind with regard to the availability of any exemption from securities registration or qualification provisions.

IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE BONDS AND THE TERMS OF THE OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED. THE BONDS HAVE NOT BEEN RECOMMENDED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHERMORE, THE FOREGOING AUTHORITIES HAVE NOT CONFIRMED THE ACCURACY OR DETERMINED THE ADEQUACY OF THIS DOCUMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The statements contained in this Official Statement that are not purely historical, are forward-looking statements, including statements regarding NTTA's expectations, hopes, intentions or strategies regarding the future. All forward-looking statements included in this Official Statement are based on information available to NTTA on the date hereof, and NTTA assumes no obligation to update any such forward-looking statements. Readers are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date hereof. See "**RISK FACTORS — Forward-Looking Statements.**"

*[Remainder of page intentionally left blank]*

TABLE OF CONTENTS

INTRODUCTION .....	1	Risks Relating to Build America Bonds .....	34
NORTH TEXAS TOLLWAY AUTHORITY .....	2	Technological and Societal Changes .....	34
PLAN OF FINANCE .....	3	Changes in Law .....	35
General .....	3	Future and Proposed Tax Legislation .....	35
The Refunding .....	3	Information Technology and Other Risk Factors .....	35
Subsequent Financings Secured by the NTTA System Revenues .....	4	Replacement of Back Office Toll Collection System .....	35
Estimated Sources and Uses of Funds .....	4	LITIGATION .....	35
PRO FORMA DEBT SERVICE REQUIREMENTS <sup>(1)</sup> .....	5	TAX MATTERS .....	36
ESTIMATED TOLL REVENUES, EXPENSES, OTHER INCOME, AND ESTIMATED DEBT SERVICE COVERAGE .....	7	Opinion .....	36
THE BONDS .....	9	Federal Income Tax Accounting Treatment of Original Issue Discount .....	36
The Series 2019A Bonds .....	9	Collateral Federal Income Tax Consequences .....	37
The Series 2019B Bonds .....	11	State, Local and Foreign Taxes .....	38
GENERAL INFORMATION REGARDING THE BONDS .....	11	UNDERWRITING .....	38
Trustee .....	11	RATINGS .....	39
Record Date .....	11	LEGAL MATTERS .....	39
Payments in the Event of Weekends and Holidays .....	11	VERIFICATION OF MATHEMATICAL COMPUTATIONS .....	40
Transfers and Exchanges .....	11	FINANCIAL STATEMENTS AND INDEPENDENT AUDITOR .....	40
Defeasance .....	12	PROFESSIONAL ENGINEERS .....	41
Book-Entry-Only System .....	13	CO-FINANCIAL ADVISORS .....	41
Modification of the Trust Agreement .....	15	REGISTRATION AND QUALIFICATION OF BONDS FOR SALE .....	41
SOURCES OF PAYMENT AND SECURITY FOR THE BONDS .....	15	LEGAL INVESTMENTS IN TEXAS .....	41
Security for the Bonds .....	15	CONTINUING DISCLOSURE OF INFORMATION .....	41
Priority of Payment .....	16	Annual Reports .....	42
Funds and Accounts .....	17	Event Notices .....	42
Rate Covenant .....	22	Availability of Information from the MSRB .....	43
Additional Bonds and Other Obligations .....	24	Limitations and Amendments .....	43
Proposed Trust Agreement Amendments .....	25	Compliance with Prior Undertakings .....	43
Outstanding Obligations .....	26	OTHER MATTERS .....	44
The Commercial Paper Program .....	27	SCHEDULE I SCHEDULE OF REFUNDED BONDS	
ISTEA Loan .....	27	APPENDIX A THE NORTH TEXAS TOLLWAY AUTHORITY	
The Subordinate Lien Bonds .....	27	APPENDIX B-1 COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE NORTH TEXAS TOLLWAY AUTHORITY SYSTEM, AN ENTERPRISE FUND OF THE NORTH TEXAS TOLLWAY AUTHORITY, FOR FISCAL YEAR ENDED DECEMBER 31, 2018	
RISK FACTORS .....	27	APPENDIX B-2 UNAUDITED FINANCIAL REPORT OF THE NORTH TEXAS TOLLWAY AUTHORITY SYSTEM, AN ENTERPRISE FUND OF THE NORTH TEXAS TOLLWAY AUTHORITY, FOR THE FOUR-MONTH PERIOD ENDED APRIL 30, 2019	
Financial Forecasts .....	28	APPENDIX C NTTA SYSTEM TOLL RATE SCHEDULES	
Forward-Looking Statements .....	28	APPENDIX D SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO TRUST AGREEMENT	
Market Disruptions and Reliance on Capital Markets .....	28	APPENDIX E FORMS OF CO-BOND COUNSEL OPINION	
Costs of Construction of Toll Facilities .....	28	APPENDIX F DESCRIPTION OF SHARED SECOND TIER DEBT SERVICE RESERVE FUND POLICY AND PROVIDER	
Traffic and Revenue Reports .....	29		
Operating Risks .....	29		
Collection Risks .....	29		
Ability to Maintain or Raise Rates .....	30		
Custodian in Possession of Prepaid Funds .....	30		
Maintenance Costs .....	30		
Motor Fuel Prices and Taxes .....	30		
Retaining Walls .....	31		
Limitation and Enforceability of Remedies .....	31		
Clean Air Act Non-Attainment and Conformity Risk; NEPA Environmental Litigation Risk .....	32		
Continuing Disclosure Obligations .....	33		
Additional Obligations .....	33		
Obligations Relating to 360 Tollway .....	33		
Obligation to Pay for Video Tolls under TSAs Prior to Collection .....	34		



# OFFICIAL STATEMENT

relating to

**\$652,380,000**

## **NORTH TEXAS TOLLWAY AUTHORITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2019**

**\$429,870,000**  
**FIRST TIER BONDS**  
**SERIES 2019A**

**\$222,510,000**  
**SECOND TIER BONDS**  
**SERIES 2019B**

### INTRODUCTION

This Official Statement (this "*Official Statement*") contains certain information relating to the offering and sale by the North Texas Tollway Authority ("*NTTA*") of its \$652,380,000 North Texas Tollway Authority System Revenue Refunding Bonds, Series 2019, consisting of First Tier Revenue Refunding Bonds, Series 2019A (the "*Series 2019A Bonds*") and Second Tier Revenue Refunding Bonds, Series 2019B (the "*Series 2019B Bonds*" and, together with the Series 2019A Bonds, the "*Bonds*"). NTTA is a body politic and corporate and a political subdivision of the State of Texas (the "*State*") currently serving Collin, Dallas, Denton and Tarrant Counties (the "*Member Counties*") and Ellis and Johnson Counties (together with the Member Counties, the "*Project Counties*").

The Bonds are being issued by NTTA pursuant to (i) the laws of the State, particularly Chapter 366, Texas Transportation Code, as amended (the "*NTTA Act*"), and Chapters 1207 and 1371, Texas Government Code, as amended, and (ii) a resolution adopted by the Board of Directors (the "*Board*") of NTTA on May 15, 2019 (the "*Resolution*") authorizing the issuance of the Bonds.

The Bonds, together with certain other NTTA revenue bonds and other obligations, are secured by an Amended and Restated Trust Agreement dated as of April 1, 2008 (as amended and supplemented to and including the date of delivery of the Bonds, the "*Trust Agreement*") between NTTA and Wells Fargo Bank, National Association, as trustee (the "*Trustee*"), and are special, limited obligations of NTTA payable from and secured solely by the tolls and other revenues of the NTTA System (as defined herein) and certain specified funds and accounts created pursuant to the Trust Agreement, on the basis and in the priority provided in the Trust Agreement and described herein. See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Priority of Payment.**"

The Bonds are being issued for the purpose of (i) refunding all of the North Texas Tollway Authority Dallas North Tollway System Variable Rate Revenue Bonds, Series 2005C (the "*Series 2005C Refunded Bonds*"), (ii) refunding all of the North Texas Tollway Authority System First Tier Tax-Exempt Current Interest Revenue Bonds, Series 2009A (the "*Series 2009A Refunded Bonds*"), (iii) refunding all of the North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2009C (the "*Series 2009C Refunded Bonds*"), (iv) refunding all of the North Texas Tollway Authority System First Tier Variable Rate Revenue Refunding Bonds, Series 2014C (the "*Series 2014C Refunded Bonds*"), (v) refunding all of the North Texas Tollway Authority System Subordinate Lien Taxable Revenue Bonds, Subseries 2010B-2 (Build America Bonds – Direct Payment) (the "*Subseries 2010B-2 Refunded Bonds*" and, together with the Series 2005C Refunded Bonds, the Series 2009A Refunded Bonds, the Series 2009C Refunded Bonds and the Series 2014C Refunded Bonds, the "*Refunded Bonds*"), (vi) making a deposit to the Shared Second Tier Debt Service Reserve Fund (as defined herein) and (vii) paying costs of issuance of the Bonds. See "**PLAN OF FINANCE**" and "**SCHEDULE I — SCHEDULE OF REFUNDED BONDS.**"

Investment in the Bonds involves certain risks, some of which are discussed in this Official Statement. The statements contained in this Official Statement, including the schedule and appendices hereto, that are not purely historical, are forward-looking statements, including statements regarding NTTA's expectations, hopes, intentions or strategies regarding the future. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to NTTA as of

the date hereof, and NTTA assumes no obligation to update any such forward-looking statements. See "**RISK FACTORS**" for a discussion of certain risks that should also be considered in evaluating an investment in the Bonds.

This Official Statement contains, in part, estimates and matters of opinion that are not intended as statements of fact, and no representation or warranty is made as to the correctness of such estimates and matters of opinion. This Official Statement speaks only as of its date, and the information contained herein is subject to change. Capitalized terms used in this Official Statement that are not otherwise defined herein have the meanings assigned to them in the Trust Agreement. See "**SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO TRUST AGREEMENT**" in **APPENDIX D**.

NTTA IS OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE BONDS ONLY FROM THE TOLLS AND OTHER REVENUES OF THE NTTA SYSTEM AND CERTAIN SPECIFIED FUNDS AND ACCOUNTS CREATED PURSUANT TO THE RESOLUTION AND THE TRUST AGREEMENT ON THE BASIS AND IN THE PRIORITY SET FORTH THEREIN AND DESCRIBED HEREIN. EXCEPT AS SPECIFIED IN THE PRECEDING SENTENCE, NONE OF THE STATE OF TEXAS, NTTA, THE COUNTIES SERVED BY NTTA NOR ANY OTHER AGENCY OR POLITICAL SUBDIVISION OF THE STATE OF TEXAS IS OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF TEXAS, THE COUNTIES SERVED BY NTTA NOR ANY OTHER AGENCY OR POLITICAL SUBDIVISION OF THE STATE OF TEXAS IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS. NTTA HAS NO TAXING POWER. THE BONDS ARE NOT SECURED BY THE REVENUES PROVIDED (i) BY THE 360 TOLLWAY (AS DEFINED HEREIN), (ii) UNDER ANY TSA (AS DEFINED HEREIN) OR (iii) FROM FEES UNDER ANY INTEROPERABILITY AGREEMENT.

#### **NORTH TEXAS TOLLWAY AUTHORITY**

NTTA is a regional tollway authority governed by the NTTA Act and a political subdivision of the State currently serving the Project Counties. NTTA came into existence on September 1, 1997, as the successor to the Texas Turnpike Authority (the "*TTA*"), an agency of the State created in 1953. At the time of its creation, NTTA assumed ownership of the system of toll roads then owned and operated by the TTA and all obligations of the TTA related to such system of toll roads.

The Board has adopted a mission statement which is "to provide a safe and reliable toll road system, increase value and mobility options for our customers, operate NTTA in a businesslike manner, protect our bondholders and partner to meet our region's growing need for transportation infrastructure."

The NTTA Act authorizes NTTA to acquire, construct, maintain, repair and operate toll projects such as those included in the NTTA System at such locations within its jurisdiction as may be determined by NTTA and to issue bonds and other obligations for the purpose of paying all or any part of the cost of a toll project.

NTTA owns and operates the following toll roads (collectively, the "*NTTA System*"): the Dallas North Tollway ("*DNT*"), the President George Bush Turnpike ("*PGBT*"), the President George Bush Turnpike Eastern Extension ("*PGBT EE*"), the Sam Rayburn Tollway ("*SRT*"), the Mountain Creek Lake Bridge ("*MCLB*"), the Addison Airport Toll Tunnel ("*AATT*"), the Lewisville Lake Toll Bridge ("*LLTB*"), the President George Bush Turnpike Western Extension ("*PGBT WE*") and the Chisholm Trail Parkway ("*CTP*"). The SRT will revert to the Texas Department of Transportation ("*TxDOT*") on September 1, 2058.

The PGBT WE and the CTP were incorporated into the NTTA System on November 1, 2017. Prior to the incorporation, the PGBT WE and the CTP comprised a separate system of NTTA tollways designated the Special Projects System (the "*Special Projects System*").

**The Bonds, together with other revenue bonds and other obligations issued pursuant to the Trust Agreement, will be secured only by the NTTA System revenues and certain funds and accounts established pursuant to the Trust Agreement and not by other revenues or assets of NTTA.**

In addition, NTTA owns and operates a portion of State Highway 360 (the "*360 Tollway*") as a stand-alone toll project that is not part of the NTTA System. Revenues of the 360 Tollway may only be used to pay costs, including debt service, that are related to the 360 Tollway. **Revenues from the 360 Tollway do not secure and are not available to pay debt service on the Bonds or other obligations entitled to the benefit of the Trust Agreement.** See "**THE 360 TOLLWAY**" in APPENDIX A and "**RISK FACTORS – Obligations Relating to 360 Tollway**" for additional information regarding the 360 Tollway.

The NTTA Act provides that NTTA shall provide, for reasonable compensation, tolling services normally provided through its customer service center, including customer service, customer account maintenance, transponder supply and toll collection and enforcement (collectively, "*Tolling Services*") for toll projects in NTTA's service area of Collin, Dallas, Denton and Tarrant counties. Furthermore, the NTTA Act provides that NTTA may enter into a tolling services agreement (a "*TSA*") for any tolling project located in NTTA's boundaries. **Revenues generated by NTTA under any current or future TSA will not secure the Bonds or other obligations entitled to the benefit of the Trust Agreement.** See "**TOLLING SERVICES AGREEMENTS**" in APPENDIX A and "**RISK FACTORS – Obligation to Pay for Video Tolls under TSAs Prior to Collection**" for additional information regarding the TSAs.

See "**THE NORTH TEXAS TOLLWAY AUTHORITY**" in APPENDIX A for additional information regarding NTTA.

## PLAN OF FINANCE

### General

The Bonds are being issued in accordance with the NTTA Act, Chapters 1207 and 1371, Texas Government Code, as amended, the Trust Agreement and the Resolution. See "**SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO TRUST AGREEMENT**" in APPENDIX D.

### The Refunding

The Bonds are being issued for the purpose of (i) refunding all of the Series 2005C Refunded Bonds, (ii) refunding all of the Series 2009A Refunded Bonds, (iii) refunding all of the Series 2009C Refunded Bonds, (iv) refunding all of the Series 2014C Refunded Bonds, (v) refunding all of the Subseries 2010B-2 Refunded Bonds, (vi) making a deposit to the Shared Second Tier Debt Service Reserve Fund and (vii) paying costs of issuance of the Bonds.

On the date of delivery of the Bonds, the Trustee will deposit a portion of the proceeds of the Bonds into the First Tier Sinking Fund for payment of the redemption price of the Series 2005C Refunded Bonds, the Series 2009A Refunded Bonds, the Series 2009C Refunded Bonds and the Series 2014C Refunded Bonds on their respective redemption dates. The Series 2005C Refunded Bonds, the Series 2009A Refunded Bonds, the Series 2009C Refunded Bonds and the Series 2014C Refunded Bonds will be redeemed on or about the date of delivery of the Bonds.

On the date of delivery of the Bonds, the Trustee will transfer a portion of the proceeds of the Bonds to Wells Fargo Bank, National Association, as escrow agent (the "*Escrow Agent*") under an escrow agreement between NTTA and the Escrow Agent (the "*Escrow Agreement*"), establishing one or more escrow funds for the deposit of such bond proceeds (collectively, the "*Escrow Fund*"). The Escrow Agreement will require the Escrow Agent to send out the notices of redemption for the Subseries 2010B-2 Refunded Bonds in a timely manner.

The proceeds of the Bonds transferred to the Escrow Agent will be invested in direct obligations of the United States of America and/or direct obligations of its agencies rated in the highest investment grade rating of at least one nationally recognized rating agency (the "*Federal Securities*") to be held by the Escrow Agent in an amount sufficient to pay the interest on and redemption price of the Subseries 2010B-2 Refunded Bonds.

Public Finance Partners LLC, certified public accountants, will issue a report (the "*Report*") verifying, at the time of delivery of the Bonds to the Underwriters, the mathematical accuracy of the schedules that demonstrate the Federal Securities will mature and pay interest in such amounts which, together with uninvested funds, if any,

in the escrow fund, will be sufficient to pay, when due, the principal of and interest on the Subseries 2010B-2 Refunded Bonds. The maturing principal of and interest on the Federal Securities will not be available to pay the Bonds. See "**VERIFICATION OF MATHEMATICAL COMPUTATIONS**" herein.

By the deposit of the Federal Securities and cash with the Escrow Agent pursuant to the Escrow Agreement, NTTA will have effected the defeasance of the Subseries 2010B-2 Refunded Bonds pursuant to the terms of Chapter 1207, Texas Government Code, as amended, and the resolution authorizing the issuance of the Subseries 2010B-2 Refunded Bonds. As a result of such defeasance, the Subseries 2010B-2 Refunded Bonds will no longer be payable from the net revenues of the NTTA System, but will be payable solely from the principal of and interest on the Federal Securities and cash held for such purpose by the Escrow Agent, the Subseries 2010B-2 Refunded Bonds will be defeased and will not be included in or considered to be indebtedness of NTTA for the purpose of a limitation on indebtedness or for any other purpose, and NTTA will have no further responsibility with respect to amounts available in the Escrow Fund for the payment of the Subseries 2010B-2 Refunded Bonds, including any insufficiency therein caused by the failure to receive payments when due on the Federal Securities.

### **Subsequent Financings Secured by the NTTA System Revenues**

NTTA anticipates spending \$1.6 billion over the 2019-2023 period for major maintenance, rehabilitation, roadway bottleneck improvements, roadway capacity improvements and widening and extending certain roadways of the NTTA System. NTTA anticipates funding these improvements with cash flow or funds in the Capital Improvement Fund. Although not anticipated nor currently planned, NTTA may utilize its commercial paper note program or issue bonds, as needed, to finance these improvements or any new project it deems necessary if cash flow from the NTTA System is not sufficient to fund these improvements or any new project. It is expected any commercial paper notes will be paid from Capital Improvement Fund deposits or proceeds from additional bonds issued under the Trust Agreement. See "**THE NTTA SYSTEM — Multi-Year NTTA System Capital Plan**" in **APPENDIX A**.

### **Estimated Sources and Uses of Funds**

The proceeds from the sale of the Bonds, NTTA contribution, release of reserves related to the Refunded Bonds and the use of such funds are as follows:

<u>Sources of Funds</u>	<u>Series 2019A</u> <u>Bonds</u>	<u>Series 2019B</u> <u>Bonds</u>	<u>Total</u>
Principal Amount	\$ 429,870,000.00	\$ 222,510,000.00	652,380,000.00
Net Original Issue Premium	58,174,477.35	45,270,050.15	103,444,527.50
NTTA Contribution	2,065,408.38	7,768,138.95	9,833,547.33
Release from First Tier Reserve Account	10,662,845.93	-	10,662,845.93
Total	<u>500,772,731.66</u>	<u>275,548,189.10</u>	<u>776,320,920.76</u>
 <u>Uses of Funds</u>			
Deposit to First Tier Sinking Fund	\$ 497,747,345.16	\$ -	\$ 497,747,345.16
Deposit to Escrow Fund	-	269,206,679.65	269,206,679.65
Deposit to Shared Second Tier Debt Service Reserve Fund	-	4,878,069.04	4,878,069.04
Cost of Issuance*	3,025,386.50	1,463,440.41	4,488,826.91
Total	<u>\$ 500,772,731.66</u>	<u>\$ 275,548,189.10</u>	<u>776,320,920.76</u>

---

\* Includes underwriting, legal, financial advisory, rating agency, verification agent, accounting and Trustee fees, publication costs and printing expenses, among other costs of issuance.

## PRO FORMA DEBT SERVICE REQUIREMENTS<sup>(1)</sup>

The table below shows the total debt service requirements for the outstanding obligations of NTTA secured by the Pledged Revenues (as defined herein). The table reflects NTTA's assumptions described under "PLAN OF FINANCE" (including the issuance of the Bonds and the refunding of the Refunded Bonds) and in the footnotes below.

FYE (12/31) <sup>(2)</sup>	A Outstanding 1st Tier Net Debt Service <sup>(3)(4)(5)(6)</sup>	B Series 2019A 1st Tier Net Debt Service	C Outstanding 2nd Tier Net Debt Service <sup>(7)(8)</sup>	D Series 2019B 2nd Tier Net Debt Service	E Outstanding ISTE Loan Debt Service	F Outstanding Subordinate Lien Debt Service <sup>(9)(10)</sup>	G Total Net Debt Service
2019	387,897,371	10,839,501	113,268,663	4,192,653	12,250,000	38,874,499	567,322,686
2020	392,414,517	31,142,550	117,782,963	11,098,200	15,322,396	38,872,936	606,633,562
2021	412,210,267	36,354,300	119,609,713	13,828,200	15,322,396	32,922,624	630,247,499
2022	406,133,417	36,379,550	145,505,213	38,099,000	15,322,396	8,639,817	650,079,393
2023	418,649,917	36,618,050	149,631,063	38,063,500	15,322,396	8,637,656	666,922,582
2024	431,865,167	23,701,800	159,257,313	38,022,000	15,322,396	8,641,854	676,810,530
2025	467,718,667	18,645,550	128,502,813	37,976,500	15,322,396	8,645,997	676,811,923
2026	469,833,917	22,291,050	122,786,063	37,933,750	15,322,396	8,643,957	676,811,133
2027	466,118,917	22,214,800	126,624,063	37,885,000	15,322,396	8,644,885	676,810,061
2028	478,381,605	22,133,300	114,488,813	37,836,750	15,322,396	8,647,370	676,810,234
2029	457,554,605	17,966,050	208,475,313	-	-	-	683,995,967
2030	397,023,605	14,601,550	272,372,919	-	-	-	683,998,074
2031	393,176,605	14,599,050	276,220,063	-	-	-	683,995,717
2032	435,733,355	14,598,300	233,664,313	-	-	-	683,995,967
2033	446,892,105	18,498,900	218,604,813	-	-	-	683,995,817
2034	494,242,855	34,851,100	154,904,613	-	-	-	683,998,567
2035	497,478,455	55,235,650	131,285,563	-	-	-	683,999,667
2036	502,514,705	76,043,250	105,438,663	-	-	-	683,996,617
2037	538,876,455	89,594,650	55,525,870	-	-	-	683,996,975
2038	461,863,455	19,861,400	53,272,063	-	-	-	534,996,917
2039	465,555,205	17,106,600	52,336,313	-	-	-	534,998,117
2040	467,483,146	17,106,200	50,410,313	-	-	-	534,999,659
2041	469,534,379	17,088,400	48,372,563	-	-	-	534,995,342
2042	473,755,169	17,093,000	44,150,063	-	-	-	534,998,232
2043	180,754,458	18,673,200	32,163,813	-	-	-	231,591,471
2044	184,690,480	-	59,889,313	-	-	-	244,579,792
2045	142,624,790	-	101,968,063	-	-	-	244,592,852
2046	10,605,040	-	98,196,563	-	-	-	108,801,603
2047	-	-	99,192,063	-	-	-	99,192,063
2048	-	-	77,184,634	-	-	-	77,184,634
2049	-	-	-	-	-	-	-
2050	-	-	-	-	-	-	-
2051	-	-	-	-	-	-	-
	\$ 11,351,582,632	\$ 703,237,751	\$ 3,671,084,561	\$ 294,935,553	\$ 150,151,564	\$ 171,171,595	\$ 16,342,163,657

<sup>(1)</sup>Excludes any payments to be made into the Reserve Maintenance Fund ( "RMF " ) under the Trust Agreement. Payments made into the RMF are made after debt service on the First, Second and Third Tier Bonds but prior to debt service on the ISTE Loan and the Subordinate Lien Bonds. See "ESTIMATED TOLL REVENUES, EXPENSES, OTHER INCOME AND ESTIMATED DEBT SERVICE COVERAGE" for estimated deposits to the RMF.

<sup>(2)</sup>For all bonds other than the Subordinate Lien Bonds, Fiscal Year debt service includes debt service on the following January 1 (e.g., Fiscal Year 2019 includes debt service on January 1, 2020). With respect to the Subordinate Lien Bonds, Fiscal Year debt service in each year for the purposes of the table is assumed to be the required deposit to the CIF Bond Payment Account on January 1 of the following year for the Subordinate Lien Bonds debt service due on August 1 of that year and February 1 of the next succeeding year (e.g., Fiscal Year 2019 includes debt service on August 1, 2020, and February 1, 2021).

<sup>(3)</sup>Net of direct subsidy related to the North Texas Tollway Authority System First Tier Taxable Current Interest Revenue Bonds, Series 2009B (Build America Bonds—Direct Payment) (the "Series 2009B Bonds") issued as Build America Bonds. The Federal Subsidy Payment is reduced by 6.2% due to automatic federal deficit reduction spending cuts known as "sequestration " which took effect on March 1,

2013. Sequestration affects certain federally funded programs, including the Federal Subsidy Payments payable to NTTA with respect to the Series 2009B Bonds. See "**RISK FACTORS – Risks Relating to Build America Bonds.**" It is assumed that this reduction in Federal Subsidy Payments continues at the same rate through the final maturity.

<sup>(4)</sup>Assumes the Series 2014C Bonds bear interest at 2.50% through July 17, 2019 and 2.564% from July 18, 2019 through their date of redemption.

<sup>(5)</sup>Excludes debt service on the Series 2005C Refunded Bonds, the Series 2009A Refunded Bonds, the Series 2009C Refunded Bonds and the Series 2014C Refunded Bonds after the date of redemption.

<sup>(6)</sup>Debt service in Fiscal Years 2046-2051 is net of cash balances in the First Tier Debt Service Reserve Fund, which is required by the terms of the Trust Agreement to be used to retire the last maturities of the outstanding bonds.

<sup>(7)</sup>Debt service in Fiscal Year 2030 is net of cash balance in the 2014 Second Tier Debt Service Reserve Subaccount that is required by the terms of the Trust Agreement to be used to retire the last maturities of the North Texas Tollway Authority System Second Tier Revenue Refunding Bonds, Series 2014B (the "*Series 2014B Bonds*"). Debt service in Fiscal Year 2037 is net of cash balance in the 2015 Second Tier Debt Service Reserve Subaccount that is permitted by the terms of the Trust Agreement to be used to retire the last maturities of the North Texas Tollway Authority System Second Tier Revenue Refunding Bonds, Series 2015A (the "*Series 2015A Bonds*").

<sup>(8)</sup> Debt service in Fiscal Years 2048-2049 is net of cash balance in the Shared Second Tier Debt Reserve Fund that is required by the terms of the Trust Agreement to be used to retire the last maturities of the outstanding North Texas Tollway Authority System Revenue and Refunding Bonds, Series 2017B (the "*Series 2017B Bonds*"), the North Texas Tollway Authority System Second Tier Revenue Refunding Bonds, Series 2018 (the "*Series 2018 Bonds*"), and the Series 2019B Bonds.

<sup>(9)</sup> Net of direct subsidy related to the Series 2010B Subordinate Lien Bonds issued as Build America Bonds. The Federal Subsidy Payment is reduced by 6.2% due to automatic federal deficit reduction spending cuts known as "sequestration" which took effect on March 1, 2013. Sequestration affects certain federally funded programs, including the Federal Subsidy Payments payable to NTTA with respect to the Series 2010B Subordinate Lien Bonds. See "**RISK FACTORS – Risks Relating to Build America Bonds.**" It is assumed that this reduction in Federal Subsidy Payments continues at the same rate through the final maturity.

<sup>(10)</sup>Excludes debt service on the Subseries 2010B-2 Refunded Bonds after the date of defeasance.

**ESTIMATED TOLL REVENUES, EXPENSES, OTHER INCOME,  
AND ESTIMATED DEBT SERVICE COVERAGE**

The table below shows estimated annual net revenues of the NTTA System for the period from January 1, 2019 through December 31, 2051. These net revenues figures were derived by deducting expenses, estimated by the Consulting Engineers, from the annual toll revenues of the NTTA System as estimated by the Traffic Engineers, and adding the other revenues as estimated by NTTA. See "TRAFFIC AND REVENUE STUDY" in APPENDIX A and "RISK FACTORS." The table reflects NTTA's assumptions described under "PLAN OF FINANCE" and "PRO FORMA DEBT SERVICE REQUIREMENTS."

A	B	C	D	E	F	G	H	I	
FYE (12/31) <sup>(1)</sup>	Estimated Toll Revenues <sup>(2)</sup>	Estimated Other Revenues <sup>(3)</sup>	Estimated Expenses <sup>(4)</sup>	Estimated Net Revenue	Estimated Deposit to RMF <sup>(5)</sup>	Estimated Debt Service on all Debt <sup>(6)(7)</sup>	Estimated Coverage on 1st Tier Debt <sup>(7)(8)</sup>	Estimated Coverage on 1st & 2nd Tier Debt <sup>(7)(9)</sup>	Estimated Coverage on all Debt and RMF Deposits
2019	886,775,000	61,062,728	182,529,522	765,308,206	38,053,253	567,322,686	1.92x	1.48x	1.26x
2020	925,052,800	63,323,098	188,969,308	799,406,590	53,311,498	606,633,562	1.89x	1.45x	1.21x
2021	971,161,200	64,894,310	194,638,387	841,417,123	45,097,017	630,247,499	1.88x	1.45x	1.25x
2022	1,027,216,300	67,468,039	200,477,538	894,206,801	40,819,742	650,079,393	2.02x	1.43x	1.29x
2023	1,078,521,700	69,534,842	206,491,865	941,564,677	50,471,303	666,922,582	2.07x	1.46x	1.31x
2024	1,130,572,800	72,055,800	212,686,621	989,941,980	61,445,305	676,810,530	2.17x	1.52x	1.34x
2025	1,184,828,000	74,045,870	219,067,219	1,039,806,651	51,910,494	676,811,923	2.14x	1.59x	1.43x
2026	1,243,694,600	76,823,685	225,639,236	1,094,879,049	28,869,855	676,811,133	2.22x	1.68x	1.55x
2027	1,299,687,500	79,001,994	232,408,413	1,146,281,081	159,161,694	676,810,061	2.35x	1.76x	1.37x
2028	1,363,044,000	82,000,112	239,380,665	1,205,663,447	124,125,175	676,810,234	2.41x	1.85x	1.51x
2029	1,429,968,700	84,424,979	246,562,085	1,267,831,594	161,068,698	683,995,967	2.67x	1.85x	1.50x
2030	1,500,651,200	87,870,612	253,958,948	1,334,562,864	118,685,387	683,998,074	3.24x	1.95x	1.66x
2031	1,575,053,100	90,657,513	261,577,716	1,404,132,896	134,126,971	683,995,717	3.44x	2.05x	1.72x
2032	1,645,209,100	94,225,722	269,425,048	1,470,009,774	217,851,750	683,995,967	3.26x	2.15x	1.63x
2033	1,717,916,700	96,913,201	277,507,799	1,537,322,102	52,015,614	683,995,817	3.30x	2.25x	2.09x
2034	1,794,102,200	100,638,232	285,833,033	1,608,907,399	331,480,114	683,998,567	3.04x	2.35x	1.58x
2035	1,874,192,100	103,609,322	294,408,024	1,683,393,398	156,944,776	683,999,667	3.05x	2.46x	2.00x
2036	1,958,415,900	107,782,709	303,240,265	1,762,958,345	244,838,620	683,996,617	3.05x	2.58x	1.90x
2037	2,044,559,100	110,979,754	312,337,473	1,843,201,381	153,094,644	683,996,975	2.93x	2.69x	2.20x
2038	2,128,226,800	115,305,962	321,707,597	1,921,825,165	74,459,871	534,996,917	3.99x	3.59x	3.15x
2039	2,215,402,400	118,637,912	331,358,825	2,002,681,487	280,982,509	534,998,117	4.15x	3.74x	2.45x
2040	2,305,985,600	123,161,048	341,299,590	2,087,847,059	83,055,276	534,999,659	4.31x	3.90x	3.38x
2041	2,398,908,700	126,698,369	351,538,577	2,174,068,492	400,311,707	534,995,342	4.47x	4.06x	2.32x
2042	2,495,772,000	131,552,946	362,084,735	2,265,240,211	131,243,692	534,998,232	4.61x	4.23x	3.40x
2043	2,598,695,200	135,397,907	372,947,277	2,361,145,830	336,505,015	231,591,471	11.84x	10.20x	4.16x
2044	2,706,563,600	140,846,309	384,135,695	2,463,274,214	194,854,664	244,579,792	13.34x	10.07x	5.61x
2045	2,816,551,900	144,921,100	395,659,766	2,565,813,234	155,756,994	244,592,852	17.99x	10.49x	6.41x
2046	2,924,696,100	149,434,082	407,529,559	2,666,600,623	387,953,657	108,801,603	251.45x	24.51x	5.37x
2047	3,037,191,800	152,604,872	419,755,445	2,770,041,226	117,510,098	99,192,063	-	27.93x	12.78x
2048	3,153,992,700	157,387,402	432,348,109	2,879,031,993	481,353,695	77,184,634	-	37.30x	5.15x
2049	3,274,336,100	160,665,453	445,318,552	2,989,683,001	144,337,042	-	-	-	20.71x
2050	3,399,774,900	165,868,587	458,678,109	3,106,965,378	323,441,196	-	-	-	9.61x
2051	3,524,072,000	169,336,085	472,438,452	3,220,969,633	245,467,587	-	-	-	13.12x
	\$ 65,630,791,800	\$ 3,579,130,554	\$ 10,103,939,450	\$ 59,105,982,904	\$ 5,580,604,913	\$ 16,342,163,657			

<sup>(1)</sup>For all bonds other than the Subordinate Lien Bonds, Fiscal Year debt service includes debt service on the following January 1 (*e.g.*, Fiscal Year 2019 includes debt service on January 1, 2020). With respect to the Subordinate Lien Bonds, Fiscal Year debt service in each year for purposes of the table is assumed to be the required deposit to the CIF Bond Payment Account on January 1 of the following year for the Subordinate Lien Bonds debt service due on August 1 of that year and February 1 of the next succeeding year (*e.g.*, Fiscal Year 2019 includes debt service on August 1, 2020, and February 1, 2021).

<sup>(2)</sup>Estimated toll revenues are provided by CDM Smith, the Traffic Engineers for the NTTA System. Estimated revenues are projected at levels to be actually collected in each year (*i.e.*, cash basis). Historical toll revenues and historical debt service coverage are reported by the Authority on accrual based revenues as recognized under Generally Accepted Accounting Principles. See "**OTHER FINANCIAL INFORMATION – Historical Traffic and Net Revenues**" and "**– Historical Debt Service Coverage**" in **APPENDIX A**.

<sup>(3)</sup>Estimated "Other Revenues" are provided by NTTA and include interest earnings, video tolling administrative fees and other charges.

<sup>(4)</sup>Estimated expenses are net of inter-fund transfers and are provided by Atkins North America, the Consulting Engineers for the NTTA System.

<sup>(5)</sup>Deposits to the RMF are estimated by NTTA based on the current cash balance in the RMF and expenses to be paid out of the RMF are estimated by Atkins North America, the Consulting Engineers for the NTTA System.

<sup>(6)</sup>See column G of the table under the heading "**PRO FORMA DEBT SERVICE REQUIREMENTS**".

<sup>(7)</sup>See "**PRO FORMA DEBT SERVICE REQUIREMENTS**" and related notes for information regarding assumptions included in the estimates.

<sup>(8)</sup>See columns A-B of the table under the heading "**PRO FORMA DEBT SERVICE REQUIREMENTS**" for totals of net debt service for all First Tier Debt.

<sup>(9)</sup>See columns A-D of the table under the heading "**PRO FORMA DEBT SERVICE REQUIREMENTS**" for totals of net debt service for all First Tier and Second Tier Debt.

*[Remainder of page intentionally left blank]*



## THE BONDS

### The Series 2019A Bonds

#### *Description*

The Series 2019A Bonds will be issued as fully registered bonds, without coupons, in denominations of \$5,000 or any integral multiple thereof within a maturity ("*Authorized Denominations*") and will be dated their date of delivery. Interest on the Series 2019A Bonds will accrue at the interest rates specified on page (i), calculated on the basis of a 360-day year composed of twelve 30-day months, from their date of delivery and will be payable semiannually on January 1 and July 1 of each year, commencing January 1, 2020. Principal will come due on January 1 of the years and in the amounts set forth on page (i) hereof or upon earlier redemption of the Series 2019A Bonds as described herein.

#### *Redemption*

Optional Redemption. The Series 2019A Bonds maturing on and after January 1, 2030, may be redeemed prior to their scheduled maturity at the option of NTTA, with funds derived from any available source, on January 1, 2029, or on any date thereafter, in whole or in part, and, if in part, the particular Series 2019A Bonds or portions of Series 2019A Bonds to be redeemed are to be selected and designated by NTTA in its sole discretion, in Authorized Denominations, at the redemption price equal to the par amount thereof plus accrued interest to the date of redemption.

Mandatory Sinking Fund Redemption. The Series 2019A Bonds maturing on January 1, 2044, are subject to mandatory sinking fund redemption prior to maturity with funds derived from the First Tier Sinking Fund created and maintained pursuant to the Trust Agreement, in the amounts and on the dates set forth below, and at a price of par plus accrued interest to the redemption date, with the particular Series 2019A Bonds, or portions thereof to be redeemed to be selected and designated by NTTA in its sole discretion in Authorized Denominations.

#### **\$77,415,000 Bonds maturing January 1, 2044**

<b>Redemption Date (<u>January 1</u>)</b>	<b>Principal <u>Amount</u></b>
2040	\$14,010,000
2041	\$14,570,000
2042	\$15,135,000
2043	\$15,745,000
2044 (maturity)	\$17,955,000

The principal amount of the Series 2019A Bonds required to be redeemed on any date pursuant to the operation of the mandatory sinking fund redemption provisions is required to be reduced, at the option of NTTA, by the principal amount of any Series 2019A Bonds of the maturity scheduled for redemption on such redemption date and bearing interest at the same rate per annum, which, at least 45 days prior to the applicable mandatory sinking fund redemption date, (1) has been acquired by NTTA and delivered to the Trustee for cancellation, (2) has been acquired and canceled by the Trustee at the direction of NTTA, with funds from the First Tier Sinking Fund at a price not exceeding the principal amount of such Series 2019A Bonds plus accrued interest to the date of acquisition thereof, or (3) has been redeemed pursuant to the optional redemption provisions and not previously credited to a scheduled mandatory sinking fund redemption.

Notice of Redemption. At least 30 days prior to the date fixed for optional redemption of the Series 2019A Bonds or portions thereof prior to maturity, at the option of NTTA, a written notice of such redemption is required to be sent by the Trustee by United States mail, first-class postage prepaid, to the registered owner of each Series 2019A Bond to be redeemed at its address as it appeared in the registration books maintained by the Trustee on the 45<sup>th</sup> day prior to such redemption date; *provided, however*, that the failure to send, mail or receive such notice, or any defect therein or in the sending or mailing thereof, will not affect the validity or effectiveness of the

proceedings for the optional redemption of any Series 2019A Bonds. The mailing of such notice as required above in connection with the redemption of Series 2019A Bonds prior to maturity at the option of NTTA will be the only notice actually required in connection with or as a prerequisite to such optional redemption of any Series 2019A Bonds or portions thereof. All redemption notices for the Series 2019A Bonds are required to contain a description of the Series 2019A Bonds to be redeemed and such additional information as may be specified in the Trust Agreement.

In addition to the foregoing, the Trustee is required to give notice of redemption or of defeasance of any Series 2019A Bonds at least 30 days prior to a redemption date and within 30 days after a defeasance date to each registered securities depository and to the Municipal Securities Rulemaking Board (the "MSRB").

If notice of redemption is given and if due provision for such payment is made, the Series 2019A Bonds or portions thereof which are to be redeemed thereby automatically will be treated as redeemed prior to their scheduled maturities, and they will not bear interest after the date fixed for redemption, and they will not be regarded as being outstanding except for the right of the registered owners to receive the redemption price plus accrued interest from the Trustee out of the funds provided for such payment.

So long as a book-entry-only system is used for the Series 2019A Bonds, the Trustee will send any notices with respect to the Series 2019A Bonds only to The Depository Trust Company, New York, New York ("DTC"). Any failure by DTC to advise any DTC participant, or of any DTC participant or indirect participant to notify the beneficial owner, will not affect the validity of the redemption of the Series 2019A Bonds called for redemption or any other action premised on any such notice.

During any period in which ownership of the Series 2019A Bonds is determined by book-entry at a securities depository for the Series 2019A Bonds, if fewer than all of the Series 2019A Bonds of the same maturity are to be redeemed, the particular Series 2019A Bonds of the same maturity will be selected in accordance with the arrangements between NTTA and DTC.

Conditional Notice of Redemption. In the case of an optional redemption of the Series 2019A Bonds, the notice may state (1) that it is conditioned upon the deposit of money, in an amount equal to the amount necessary to effect the redemption, with the Trustee no later than the redemption date or (2) that NTTA retains the right to rescind such notice at any time prior to the scheduled redemption date if NTTA delivers a certificate of a Board Representative to the Trustee instructing the Trustee to rescind the redemption notice (in either case, a "*Series 2019A Conditional Redemption*"), and such notice and optional redemption will be of no effect if such money is not deposited or if the notice is rescinded as described in the paragraph below.

Any Series 2019A Conditional Redemption may be rescinded in whole or in part at any time prior to the redemption date if NTTA delivers a certificate of a Board Representative to the Trustee instructing the Trustee to rescind the redemption notice. The Trustee is required to give prompt notice of such rescission or failure to deposit funds to the affected registered owners. Any Series 2019A Bonds subject to a Series 2019A Conditional Redemption where redemption has been rescinded or funds to effect the redemption have not been deposited will remain outstanding, and the rescission or failure to deposit funds will not constitute an event of default under the Trust Agreement.

#### *Lien Priority*

The Series 2019A Bonds constitute First Tier Bonds under the Trust Agreement. See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS**" herein.

#### *Tax Status*

In the opinion of co-bond counsel to NTTA, interest on the Series 2019A Bonds will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date hereof, except as explained under "**TAX MATTERS — Opinion**" herein. Interest on the Series 2019A Bonds will not be an item of tax preference for purposes of determining the alternative minimum tax imposed on individuals under Section 57(a)(5) of the Code.

## **The Series 2019B Bonds**

### *Description*

The Series 2019B Bonds will be issued as fully registered bonds, without coupons, in Authorized Denominations and will be dated their date of delivery. Interest on the Series 2019B Bonds will accrue at the interest rates specified on page (ii), calculated on the basis of a 360-day year composed of twelve 30-day months, from their date of delivery and will be payable semiannually on January 1 and July 1 of each year, commencing January 1, 2020. Principal will come due on January 1 of the years and in the amounts set forth on page (ii) hereof.

### *Redemption*

The Series 2019B Bonds are **not** subject to redemption prior to maturity at the option of NTTA.

### *Lien Priority*

The Series 2019B Bonds constitute Second Tier Bonds under the Trust Agreement. See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS**" herein.

### *Tax Status*

In the opinion of co-bond counsel to NTTA, interest on the Series 2019B Bonds will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date hereof, except as explained under "**TAX MATTERS – Opinion**" herein. Interest on the Series 2019B Bonds will not be an item of tax preference for purposes of determining the alternative minimum tax imposed on individuals under Section 57(a)(5) of the Code.

## **GENERAL INFORMATION REGARDING THE BONDS**

### **Trustee**

NTTA has appointed Wells Fargo Bank, National Association to serve as Trustee and Paying Agent under the Trust Agreement. Any trustee must be a bank or trust company duly organized and doing business under the laws of the United States of America and located in the State of Texas, authorized under such laws to exercise corporate trust powers and subject to examination by federal or state authority, in good standing, and having, at the time of its appointment, a combined capital and surplus aggregating not less than \$100,000,000. The Trustee may be removed or may resign as provided in the Trust Agreement. If the Trustee resigns, is removed, is dissolved, otherwise becomes incapable of acting or is taken over by a supervisory agency, NTTA is required to appoint a successor trustee to fill such vacancy.

Upon any appointment of any successor Trustee, NTTA will either promptly cause a written notice thereof to be sent to each registered owner by United States mail, first-class postage prepaid, or publish notice of such appointment once in each week for four successive weeks in a financial journal of general circulation published in the City of New York, New York.

### **Record Date**

The Record Date for the payment of interest is the 15<sup>th</sup> day of the calendar month immediately preceding an interest payment date.

### **Payments in the Event of Weekends and Holidays**

If the date for payment of the principal of or interest on the Bonds is not a Business Day, then the date for such payment will be the next succeeding day which is a Business Day; and payment on such date will not increase the amount of interest due and will have the same force and effect as if made on the original date payment was due.

### **Transfers and Exchanges**

Beneficial ownership of the Bonds registered in the name of Cede & Co. will initially be transferred as described under "**— Book-Entry-Only System**" below.

As initial bond registrar, the Trustee is required to maintain registration books for the registration and transfer of the Bonds in accordance with the terms of the Trust Agreement.

Upon surrender of any Bonds at the corporate trust office of the Trustee, together with a written request therefor duly executed by the current registered owner of such Bonds or such registered owner's duly authorized attorney or representative with guarantee of signatures satisfactory to the Trustee, such Bonds may, at the option of the registered owner, be exchanged for an equal aggregate principal amount of Bonds of the same maturity, of Authorized Denominations and bearing interest at the same rate and in the same form as the Bonds being surrendered for exchange, registered in the name or names of the registered owner, assignee or assignees; *provided* that the Trustee is not required to exchange or register the transfer of Bonds (i) during the period commencing with the close of business on any Record Date and ending with the opening of business on the next following principal or interest payment date, or (ii) with respect to any Bonds or any portion thereof called for redemption prior to maturity, within 45 days prior to its redemption.

NTTA has covenanted to pay the Trustee's standard or customary fees and charges for transferring or exchanging any Bonds or any portion thereof, but the person requesting any such transfer or exchange is required to pay any taxes or governmental charges required to be paid with respect thereto as a condition precedent to the exercise of such privilege of transfer or exchange.

The designated office of the Trustee is 1445 Ross Avenue, 43<sup>rd</sup> Floor, Suite 4300, Dallas, Texas 75201, MAC T9216-430.

#### **Defeasance**

Any Bond will be deemed to be paid and no longer Outstanding within the meaning of the Trust Agreement (a "*Defeased Debt*"), when payment of the principal of, redemption premium, if any, on such Defeased Debt, plus interest thereon to the due date thereof (whether such due date is by reason of maturity, upon redemption, mandatory or optional tender, or otherwise), either (i) has been made in accordance with the terms thereof, or (ii) has been provided by irrevocably depositing with the Trustee, in trust, and irrevocably set aside exclusively for such payment, (a) money sufficient to make such payment, or (b) Government Obligations, as defined below, certified by an independent public accounting firm of national reputation to mature as to principal and interest in such amount and at such times as will insure the availability, without reinvestment, of sufficient money to make such payment, and all necessary and proper fees, compensation and expenses of the Trustee and the Paying Agent pertaining to the Defeased Debt with respect to which such deposit is made have been paid or the payment thereof provided for to the satisfaction of the Trustee and the Paying Agent. At such time as a Defeased Debt is deemed to be paid under the Trust Agreement, it will no longer be secured by or entitled to the benefits of the Trust Agreement except for the purposes of any such payment from such money or (x) direct, noncallable obligations of the United States of America, including obligations that are unconditionally guaranteed by the United States of America, and (y) noncallable obligations of an agency or instrumentality of the United States of America, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date of the purchase thereof are rated as to investment quality by a nationally recognized investment rating firm not less than "AAA" or its equivalent ("*Government Obligations*").

Any money so deposited with the Trustee may at the direction of NTTA also be invested in Government Obligations, maturing in the amounts and times as hereinbefore set forth, and all income from all Government Obligations in the hands of the Trustee which is not required for the payment of the Defeased Debt, the redemption premium, if any, and interest thereon, with respect to which such money has been so deposited, will be turned over to NTTA.

Any determination not to redeem Defeased Debt that is made in conjunction with the payment arrangements specified above in **clauses (ii)(a) or (ii)(b)** above is not irrevocable, *provided that*: (i) in the proceedings providing for such defeasance, NTTA expressly reserves the right to call the Defeased Debt for redemption; (ii) NTTA gives notice of the reservation of that right to the owners of the Defeased Debt immediately following the defeasance; (iii) NTTA directs that notice of the reservation be included in any defeasance or redemption notices that it authorizes; and (iv) at or prior to the time of the redemption, NTTA satisfies the conditions of the preceding paragraph with respect to such Defeased Debt as though it was being defeased at the time of the exercise of the

option to redeem the Defeased Debt, after taking the redemption into account in determining the sufficiency of the provisions made for the payment of the Defeased Debt.

### **Book-Entry-Only System**

This section describes how ownership of the Bonds is to be transferred and how the principal of, premium, if any, and interest on the Bonds are to be paid to and credited by DTC while the Bonds are registered in its nominee name.

NTTA cannot and does not give any assurance that (1) DTC will distribute payments of debt service on the Bonds, or redemption or other notices, to DTC participants, (2) DTC participants or others will distribute debt service payments paid to DTC or its nominee (as the registered owner of the Bonds), or redemption or other notices, to the Beneficial Owners (defined below), or that they will do so on a timely basis, or (3) DTC will serve and act in the manner described in this Official Statement. The current rules applicable to DTC are on file with the Securities and Exchange Commission, and the current procedures of DTC to be followed in dealing with DTC participants are on file with DTC.

The Trustee and NTTA, so long as the DTC book-entry-only system is used for the Bonds, will send any notice of redemption, notice of proposed amendment to the Resolution or other notices with respect to such Bonds only to DTC. Any failure by DTC to advise any DTC participant, or of any Direct Participant or Indirect Participant (defined below) to notify the Beneficial Owners, of any notices and their contents or effect will not affect the validity of the redemption of the Bonds called for redemption or of any other action premised on any such notice. Redemption of portions of the Bonds by NTTA will reduce the outstanding principal amount of such Bonds held by DTC. In such event, DTC may implement, through its book-entry-only system, a redemption of such Bonds held for the account of DTC participants in accordance with its own rules or other agreements with DTC participants, and then Direct Participants and Indirect Participants may implement a redemption of such Bonds from the Beneficial Owners. Any such selection of the Bonds to be redeemed will not be governed by the Trust Agreement and will not be conducted by NTTA or the Trustee. Neither NTTA nor the Trustee will have any responsibility or obligation to Direct Participants, Indirect Participants or the persons for whom DTC participants act as nominees, with respect to the payments on the Bonds or the providing of notice to Direct Participants, Indirect Participants or Beneficial Owners of the selection of portions of the Bonds for redemption.

While the Bonds are in the book-entry-only system, reference in other sections of this Official Statement to Beneficial Owners of the Bonds should be read to include any person for whom a Participant acquires an interest in the Bonds, but (i) all rights of ownership, as described herein, must be exercised through DTC and the book-entry-only system and (ii) notices that are to be given to Beneficial Owners by the Trustee will be given only to DTC. DTC is required to forward (or cause to be forwarded) the notices to the DTC participants by its usual procedures so that such DTC participants may forward (or cause to be forwarded) such notices to the Beneficial Owners.

*The following information in this section concerning DTC and DTC's Book-Entry-Only system has been obtained from DTC. Neither NTTA nor the Underwriters take any responsibility for the accuracy thereof.*

DTC will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered certificate will be issued for each maturity of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million of U.S. and non-U.S. equity issues, corporate and municipal debt issues and money market instruments from over 100 countries that DTC's participants ("*Direct Participants*") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities

certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation ("*DTCC*"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("*Indirect Participants*"). DTC has a S&P (as defined herein) rating of: "AA+." The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com).

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of the Bonds ("*Beneficial Owner*") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults and proposed amendments to the Bond documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Bonds unless authorized by a Direct Participant in accordance with DTC's Money Market Instruments Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Trustee as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from NTTA or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by DTC participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such DTC

participant and not of DTC nor its nominee, the Trustee or NTTA, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of NTTA or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to NTTA or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

NTTA may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered.

### **Modification of the Trust Agreement**

The Trust Agreement may be amended by NTTA and the Trustee, with bondholder consent required for certain of such amendments. See "**SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO TRUST AGREEMENT**" in **APPENDIX D**. Such bondholder consents could be provided by holders of bonds and underwriters of bonds issued under the Trust Agreement other than the holders of the Bonds. See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS – Proposed Trust Agreement Amendments.**"

## **SOURCES OF PAYMENT AND SECURITY FOR THE BONDS**

### **Security for the Bonds**

The Series 2019A Bonds are special, limited obligations of NTTA payable solely from, and secured by a First Tier lien on and pledge of the tolls and other revenues of the NTTA System and all money held by the Trustee in the various funds and accounts created under the Trust Agreement (the "*Pledged Revenues*") to the extent provided therein and as further described under this caption. Pledged Revenues do not include revenues of the 360 Tollway, revenues under any TSA (see "**TOLLING SERVICES AGREEMENTS**" in **APPENDIX A**) or fee revenue under any interoperability agreement, or any other revenues or assets of NTTA not pledged under the Trust Agreement.

The Series 2019B Bonds are special, limited obligations of NTTA payable solely from, and secured by a Second Tier lien on the Pledged Revenues to the extent provided in the Trust Agreement and as further described under this caption. **The Series 2019B Bonds, as Second Tier Bonds, are subordinate to the First Tier Bonds.**

The Pledged Revenues are pledged to the Trustee pursuant to the Trust Agreement for the benefit and security of all owners of First Tier Bonds, First Tier Payment Obligations, Second Tier Bonds, Second Tier Payment Obligations, Third Tier Bonds and Third Tier Payment Obligations, on the basis, and in the priority described herein and therein. See "**Priority of Payment**" below. **Notwithstanding the foregoing, payments from the Revenue Fund must, to the extent required by the Trust Agreement, first be deposited to the Operation and Maintenance Fund and used for operating and maintenance expenses.** See "**Priority of Payment**" and "**Funds and Accounts — Revenue Fund**" for a description of the application and priority of payment for funds contained therein. See "**SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO TRUST AGREEMENT**" in **APPENDIX D**.

NTTA IS OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE BONDS ONLY FROM THE TOLLS AND OTHER REVENUES OF THE NTTA SYSTEM AND CERTAIN SPECIFIED FUNDS AND ACCOUNTS CREATED PURSUANT TO THE RESOLUTION AND THE TRUST AGREEMENT ON THE BASIS AND IN THE PRIORITY SET FORTH THEREIN AND DESCRIBED HEREIN. EXCEPT AS SPECIFIED IN THE PRECEDING SENTENCE, NONE OF THE STATE OF TEXAS, NTTA, THE COUNTIES SERVED BY NTTA NOR ANY OTHER AGENCY OR POLITICAL SUBDIVISION OF THE STATE OF TEXAS IS OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF

TEXAS, THE COUNTIES SERVED BY NTTA NOR ANY OTHER AGENCY OR POLITICAL SUBDIVISION OF THE STATE OF TEXAS IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS. NTTA HAS NO TAXING POWER. THE BONDS ARE NOT SECURED BY THE REVENUES PROVIDED (i) BY THE 360 TOLLWAY, (ii) UNDER ANY TSA OR (iii) FROM FEES UNDER ANY INTEROPERABILITY AGREEMENT.

NTTA has not mortgaged, assigned or pledged any interest in any real or personal property or improvements, including any interest in the NTTA System or the expansions or extensions thereto, as security for payment of the Bonds other than the pledge of Pledged Revenues under the Trust Agreement. NTTA has pledged funds on deposit in certain accounts in the Capital Improvement Fund to the payment of Subordinate Lien Bonds (defined below) and the ISTEAL Loan (defined below). See "**— ISTEAL Loan**" and "**— The Subordinate Lien Bonds.**"

Pursuant to Chapter 1208, Texas Government Code, the pledge of, lien on and security interest in the Pledged Revenues granted by NTTA under the Trust Agreement, is valid, effective and perfected. If State law is amended at any time while the Bonds are outstanding and unpaid such that the pledge of, lien on and security interest in the Pledged Revenues granted by NTTA under the Trust Agreement is to be subject to the filing requirements of Chapter 9 of the Texas Business & Commerce Code, NTTA has agreed to take such measures as it determines are reasonable and necessary under State law to comply with the applicable provisions of Chapter 9, Texas Business & Commerce Code, to perfect such pledge of, lien on and security interest in the Pledged Revenues.

### **Priority of Payment**

NTTA has pledged and assigned the tolls and other revenues of the NTTA System and the various funds and accounts (to the extent created and described in the Trust Agreement) to the Trustee as security:

FIRST: for the payment of the First Tier Bonds and the interest thereon and any future obligations issued on a parity therewith;

SECOND: subject to the payment of the obligations described in Clause FIRST above, for the payment of the Second Tier Bonds and the interest thereon and any future obligations issued on a parity therewith; and

THIRD: subject to the payment of the obligations described in Clause FIRST and Clause SECOND above, for the payment of the Third Tier Bonds and the interest thereon and any future obligations issued on a parity therewith.

**Notwithstanding the foregoing, amounts on deposit in the Revenue Fund will first be applied to make a deposit to the Operation and Maintenance Fund for the payment of operating and maintenance expenses of the NTTA System.** See "**— Funds and Accounts — Revenue Fund**" for a description of the application and priority of payment for funds contained therein.

First Tier Bonds have a security interest in the tolls and other revenues of the NTTA System senior to that securing the Second Tier Bonds and Third Tier Bonds. Second Tier Bonds have a security interest in the tolls and other revenues of the NTTA System senior to that securing the Third Tier Bonds. See "**— Outstanding Obligations**" herein for a description of the First Tier, Second Tier and Third Tier Bonds outstanding under the Trust Agreement.

The Trust Agreement also allows for securing "First Tier Payment Obligations," "Second Tier Payment Obligations" and "Third Tier Payment Obligations" in order to secure payments due pursuant to credit agreements, including loan agreements, revolving credit agreements, lines of credit, letters of credit, reimbursement agreements, insurance contracts, commitments to purchase bonds, purchase or sale agreements, interest rate swaps, caps and floor agreements or commitments or other contracts or agreements authorized, recognized and approved by NTTA. First Tier Payment Obligations are secured on a parity with First Tier Bonds, Second Tier Payment Obligations are secured on a parity with Second Tier Bonds and Third Tier Payment Obligations are secured on a parity with Third Tier Bonds. In addition, NTTA may establish additional levels of priority of payment and security within the Third Tier Payment Obligation category.



## Funds and Accounts

*General.* The Trust Agreement establishes certain special funds of NTTA. Such funds are designated as the "First Tier Sinking Fund," the "Second Tier Sinking Fund," the "Third Tier Sinking Fund" (collectively, the "*Sinking Funds*"), the "Revenue Fund" and the "Construction Fund," all of which are held by the Trustee, and the "Reserve Maintenance Fund," the "Operation and Maintenance Fund" and the "Capital Improvement Fund," all of which are held by NTTA.

Amounts on deposit in the Revenue Fund (subject to required transfers to the Operation and Maintenance Fund) and the Sinking Funds are pledged to secure the payment of the bonds issued under the Trust Agreement. Amounts on deposit in the Operations and Maintenance Fund, Capital Improvement Fund, Reserve Maintenance Fund and customer deposits held by NTTA are not pledged to secure the payment of the bonds secured by the Trust Agreement.

*Master Custodial Account Agreement.* NTTA has entered into a Master Custodial Account Agreement (the "*Master Custodial Account Agreement*") with Wells Fargo Bank, National Association, as custodian (the "*Custodian*"). Under the Master Custodial Account Agreement, all toll revenues collected by NTTA from all toll projects owned or operated by NTTA, including the toll revenues derived from the operation of the NTTA System, are deposited into custodial accounts with the Custodian. On each Business Day, NTTA is required to direct the Custodian to transfer to the Trustee all toll revenues deposited into such custodial accounts that constitute available funds and that have been reconciled to transactions on the NTTA System.

*Revenue Fund.* NTTA covenants that all gross revenues (all tolls, other revenues and income) arising or derived by NTTA from the operation and ownership of the NTTA System (excepting investment income from all Funds and Accounts other than the Revenue Fund) will be collected by NTTA and deposited daily, as far as practicable, with the Trustee for the credit of the Revenue Fund; provided, however, that where NTTA has entered into an arrangement (i) for the collection on behalf of NTTA of current or past-due tolls or other amounts, including arrangements with tolling service providers, collection agencies, or other tolling operators, or (ii) for the payment of tolls or other amounts on behalf of the NTTA System user, including arrangements with credit/debit card companies, the tolls or other amounts subject to such arrangements arising or derived by NTTA from the operation and ownership of the NTTA System to be deposited for the credit of the Revenue Fund may be net of fees and expenses associated with any such arrangement.\* In addition, tolls collected on behalf of TxDOT pursuant to a project agreement that provides for revenue sharing with TxDOT are required to be collected by NTTA and to be held and transferred to or upon the order of TxDOT as set forth in such project agreement. See "**THE NTTA SYSTEM — Sam Rayburn Tollway — SRT Project Agreement — Banded Revenue Sharing,**" "**President George Bush Turnpike Eastern Extension — PGBT EE Project Agreement — Revenue Sharing**" and "**President George Bush Turnpike Western Extension — PGBT WE Project Agreement — Net Revenue and Capital Improvement Sharing**" in APPENDIX A and "**THE NTTA TOLL RATE SCHEDULES**" in APPENDIX C. The Trustee is required to disburse amounts which are required to be on deposit in the various funds and accounts described below from the Revenue Fund on the required dates. The balance in the Revenue Fund as of April 30, 2019 was approximately \$204,361,893.

Under the Trust Agreement, the tolls and other revenues of the NTTA System on deposit in the Revenue Fund are applied in the following manner with each deposit being made as specified below in the sequence noted:

- *First*, on or before the first day of each month, funds are deposited to the Operation and Maintenance Fund in an amount sufficient to make the balance of the Operation and Maintenance Fund equal to one-sixth of the amount of the total Current Expenses in the current Annual Budget, plus all prior accruals for insurance and other periodic or regularly scheduled recurring expenses.
- *Second*, on or before the last Business Day preceding each interest payment date or principal (or sinking fund redemption) payment date for the First Tier Bonds (including First Tier Payment Obligations) or such other day as set forth in a Supplemental Agreement, funds are deposited to the

---

\* The foregoing proviso will only be effective upon obtaining the approval of the holders of a majority in principal amount of the outstanding First Tier Bonds and Second Tier Bonds in accordance with the terms of the Trust Agreement.

applicable account in the First Tier Sinking Fund (or to a fund or account created to pay or repay amounts owed under a Credit Agreement entered into in connection with a series of First Tier Bonds in lieu of either of the foregoing) in the amounts due on any First Tier Bond (including First Tier Payment Obligations).

- *Third*, on or before the first day of each month, funds are deposited to the credit of the First Tier Reserve Account (1) in the amount, if any, required to restore any deficiency in the First Tier Reserve Account due to a withdrawal or change in value of Authorized Investments in order to make the amount on deposit in the First Tier Reserve Account equal to the First Tier Required Reserve, which restoration is intended to occur within 12 months of the occurrence of any such deficiency in 12 substantially equal monthly installments, and (2) in the amount set forth in a Supplemental Agreement if an amount different from the First Tier Required Reserve is required.
- *Fourth*, on or before the last Business Day preceding each interest payment date or principal (or sinking fund redemption) payment date for the Second Tier Bonds (including Second Tier Payment Obligations) or such other day as set forth in a Supplemental Agreement, funds are deposited to the applicable account in the Second Tier Sinking Fund (or to a fund or account created to pay or repay amounts owed under a Credit Agreement entered into in connection with a series of Second Tier Bonds in lieu of either of the foregoing) in the amounts due on any Second Tier Bond (including Second Tier Payment Obligations).
- *Fifth*, on or before the first day of each month, funds are deposited to the credit of the Second Tier Reserve Account or subaccount therein, if one is provided for in a Supplemental Agreement, in the amounts set forth in the Supplemental Agreement establishing the Second Tier Required Reserve or authorizing Additional Second Tier Bonds.
- *Sixth*, on or before the last Business Day preceding each interest payment date or principal (or sinking fund redemption) payment date for the Third Tier Bonds (including Third Tier Payment Obligations) or such other day as set forth in a Supplemental Agreement, funds are deposited to the applicable account in the Third Tier Sinking Fund (or to a fund or account created to pay or repay amounts owed under a Credit Agreement entered into in connection with a series of Third Tier Bonds in lieu of either of the foregoing) in the amounts due on any Third Tier Bond (including Third Tier Payment Obligations).
- *Seventh*, on or before the first day of each month, funds are deposited to the credit of the Third Tier Reserve Account or subaccount therein, if one is provided for in a Supplemental Agreement, in the amounts set forth in the Supplemental Agreement establishing the Third Tier Required Reserve or authorizing Additional Third Tier Bonds.
- *Eighth*, on or before the first day of each month, funds are required to be deposited in the Reserve Maintenance Fund in an amount equal to one-twelfth of the amount necessary in such Fiscal Year to accumulate in the Reserve Maintenance Fund an amount equal to the greater of (1) \$5,000,000, and (2) the amount as may be required in the then current Annual Budget to be deposited to the credit of the Reserve Maintenance Fund during the then current Fiscal Year; *provided, however*, that if the amount so deposited to the credit of the Reserve Maintenance Fund in any Fiscal Year is less than the budgeted amount, the requirement therefore will nevertheless be cumulative and the amount of any deficiency in any Fiscal Year is required to be added to the amount otherwise required to be deposited in each Fiscal Year thereafter until such time as such deficiency has been made up, unless such budget requirement has been modified by NTTA.
- *Ninth*, at the end of each Fiscal Year any remaining funds on deposit in the Revenue Fund may be transferred to the Capital Improvement Fund to the extent such funds are determined by the Chief Financial Officer to be in excess of the amounts required to be reserved in the Revenue Fund for transfers to be made in the first two months of the following Fiscal Year to the First Tier Bond Interest Account and First Tier Redemption Account of the First Tier Sinking Fund, the Second Tier Bond Interest Account and Second Tier Redemption Account of the Second Tier Sinking Fund,

the Third Tier Bond Interest Account and the Third Tier Redemption Account of the Third Tier Sinking Fund or any fund or account established for the payment or security for any bond.

*Operation and Maintenance Fund.* On or before the first day of each month, the Trustee is required to withdraw from the Revenue Fund and deposit to the Operation and Maintenance Fund, on the written request of NTTA, an amount which the Chairman or Vice Chairman and the Chief Financial Officer certify to be required to make the total amount in the Operation and Maintenance Fund equal to one-sixth of the amount of the total Current Expenses scheduled for the current Fiscal Year in the current Annual Budget, plus all prior accruals for insurance and other periodic or regularly recurring expenses. Except as otherwise provided in the Trust Agreement, all Current Expenses are required to be paid directly by NTTA by drawing checks or drafts on the Operation and Maintenance Fund in the manner determined by NTTA, and such Fund may not be used for any other purpose. The balance in the Operation and Maintenance Fund as of April 30, 2019 was approximately \$39,291,415.

*Sinking Funds.* The three separate Sinking Funds (one for each of the First Tier Bonds, Second Tier Bonds and the Third Tier Bonds) have each been divided into three separate accounts, designated as "Bond Interest Accounts," "Redemption Accounts" and "Reserve Accounts" (one for each of the First Tier Bonds, the Second Tier Bonds and the Third Tier Bonds) and the amounts in such accounts are to be used for the following purposes:

Bond Interest Accounts. Funds in the Bond Interest Accounts are available to pay interest on all bonds issued under the Trust Agreement that bear the same designation (*i.e.*, First Tier, Second Tier or Third Tier, as the respective account bearing the same designation) on each interest payment date. In addition to the foregoing, a subaccount of the First Tier Bond Interest Account was established by the Trustee for the deposit of the direct subsidy payments for the Series 2009B Bonds previously issued as "Build America Bonds." Amounts held in such subaccount are required to be used to reduce the amount of the regularly scheduled debt service payments on the Series 2009B Bonds. The balance in the Bond Interest Accounts as of April 30, 2019 was approximately \$131,115,711, including approximately \$1,781 in the Build America Bonds subaccount.

Redemption Accounts. Funds in the Redemption Accounts are available to pay the principal of bonds issued under the Trust Agreement and the amounts of Payment Obligations that bear the same designation (*i.e.*, First Tier, Second Tier or Third Tier, as the respective account bearing the same designation) which are scheduled to mature or be mandatorily redeemed prior to maturity on each principal payment or redemption date or, in the case of Payment Obligations, which are due for payment. The balance in the Redemption Accounts as of April 30, 2019 was approximately \$38,807,696.

Reserve Accounts.

*First Tier Reserve Account.* With respect to the First Tier Reserve Account, an amount equal to the average annual Debt Service Requirements of all First Tier Bonds Outstanding calculated as of the date of issuance of any First Tier Bonds is to be maintained in such Reserve Account (unless provided by a First Tier Reserve Surety Agreement as defined in the Trust Agreement). A First Tier Reserve Surety Agreement may be in the form of a surety bond or insurance policy from an issuer with a claims paying ability rating of "AAA," "AAA" and "Aaa" by S&P, Fitch Ratings ("*Fitch*"), and Moody's, respectively, or an unconditional, irrevocable letter of credit issued by a bank rated at least "AA," "AA" and "Aa" by S&P, Fitch and Moody's, respectively.

Funds in the First Tier Reserve Account are required to be used to (i) pay interest on and principal of the First Tier Bonds to the extent that the funds in the First Tier Bond Interest Account and the First Tier Redemption Account are insufficient for such purpose, and (ii) retire the last of the Outstanding First Tier Bonds. As of April 30, 2019, the First Tier Reserve Account was fully funded with investments with an amortized value, calculated in accordance with the Trust Agreement, of approximately \$385,945,317 which amount exceeded the required balance of \$381,465,417. The First Tier Reserve Account will continue to be fully funded upon the issuance of the Bonds. Upon the issuance of the Bonds, the required balance for the First Tier Reserve Account will be \$376,713,137.

Second Tier Reserve Account.

2014 Second Tier Reserve Subaccount. The Eighteenth Supplement to the Trust Agreement, pursuant to which the Series 2014B Bonds were issued, provides for a separate sub-account within the Second Tier Reserve Account (the "*2014 Second Tier Reserve Subaccount*") solely securing the Series 2014B Bonds and any Second Tier Bonds issued to refund the Series 2014B Bonds (or to refund any such refunding bonds) for debt service savings purposes. The amount required to be maintained in the 2014 Second Tier Reserve Subaccount (unless provided by a Second Tier Reserve Surety Agreement) is \$8,160,143 (the "*2014 Second Tier Required Reserve*"), which is an amount equal to one-half of the average annual Debt Service Requirements of the Series 2014B Bonds calculated as of the date of issuance of the Series 2014B Bonds. As of April 30, 2019, the 2014 Second Tier Reserve Subaccount was fully funded with investments with an amortized value, calculated in accordance with the Trust Agreement, of approximately \$8,631,551, which amount exceeded the required balance.

Funds in the 2014 Second Tier Reserve Subaccount are required to be used to (i) pay interest on and principal of the Series 2014B Bonds (or Second Tier Bonds issued to refund the Series 2014B Bonds) to the extent that the funds in the Second Tier Bond Interest Account and the Second Tier Redemption Account are insufficient for such purpose, and (ii) retire the last of the Outstanding Series 2014B Bonds (or Second Tier Bonds issued to refund the Series 2014B Bonds).

2015 Second Tier Reserve Subaccount. The Twentieth Supplement to the Trust Agreement, pursuant to which the Series 2015A Bonds were issued, provides for a separate sub-account within the Second Tier Reserve Account (the "*2015 Second Tier Reserve Subaccount*") solely securing the Series 2015A Bonds and any Second Tier Bonds issued to refund the Series 2015A Bonds (or to refund any such refunding bonds) for debt service savings purposes. The amount required to be maintained in the 2015 Second Tier Reserve Subaccount (unless provided by a Second Tier Reserve Surety Agreement) is \$34,702,942 (the "*2015 Second Tier Required Reserve*"), which is an amount equal to one-half of the average annual Debt Service Requirements of the Series 2015A Bonds calculated as of the date of issuance of the Series 2015A Bonds. As of April 30, 2019, the 2015 Second Tier Reserve Subaccount was fully funded with investments with an amortized value, calculated in accordance with the Trust Agreement, of approximately \$36,615,712, which amount exceeded the required balance.

Funds in the 2015 Second Tier Reserve Subaccount are required to be used to pay interest on and principal of the Series 2015A Bonds (or Second Tier Bonds issued to refund the Series 2015A Bonds) to the extent that the funds in the Second Tier Bond Interest Account and the Second Tier Redemption Account are insufficient for such purpose, and may be used by NTTA to retire the last of the Outstanding Series 2015A Bonds (or Second Tier Bonds issued to refund the Series 2015A Bonds).

Shared Second Tier Debt Service Reserve Fund. The Twenty-Fifth Supplement to the Trust Agreement, pursuant to which the Series 2017B Bonds were issued, provides for a separate sub-account within the Second Tier Reserve Account designated the "*2017 Shared Second Tier Reserve Subaccount*" (referred to herein as the "*Shared Second Tier Debt Service Reserve Fund*") solely securing the Series 2017B Bonds and all other 2017 Shared Second Tier Reserve Subaccount Secured Bonds. "*2017 Shared Second Tier Reserve Subaccount Secured Bonds*" are the Series 2017B Bonds, the Series 2018 Bonds and any Additional Second Tier Bonds designated by NTTA as 2017 Shared Second Tier Reserve Subaccount Secured Bonds in the Supplemental Agreement under which such Additional Second Tier Bonds are issued and secured by the Shared Second Tier Debt Service Reserve Fund. The amount required to be maintained in the Shared Second Tier Debt Service Reserve Fund (the "*2017 Shared Second Tier Required Reserve*"), is an amount equal to one-half of average annual Debt Service Requirements of all Outstanding 2017 Shared Second Tier Reserve Subaccount Secured Bonds as calculated and established on, and as of, the date of issuance of any 2017 Shared Second Tier Reserve Subaccount Secured Bonds. As of April 30, 2019, the 2017 Shared Second Tier Required Reserve was funded with a Second Tier Reserve Surety Agreement in the amount of \$11,326,078 and investments with an amortized value, calculated in accordance with the Trust Agreement, of approximately \$22,669,549 which amounts together exceeded the current required balance of \$33,748,081.

NTTA has designated the Series 2019B Bonds as 2017 Shared Second Tier Reserve Subaccount Secured Bonds secured by the Shared Second Tier Debt Service Reserve Fund. Upon the issuance of the Series 2019B

Bonds, the 2017 Shared Second Tier Required Reserve for the Shared Second Tier Debt Reserve Fund will be \$38,878,756.

With the issuance of the Series 2017B Bonds, NTTA elected to fund the Shared Second Tier Debt Service Reserve Fund in part with a municipal bond debt service reserve policy (the "*Reserve Policy*") from Assured Guaranty Municipal Corp. ("*AGM*"), in the amount of \$11,326,078, which constitutes a Second Tier Reserve Surety Agreement as described below. The Reserve Policy will be drawn upon if no cash or investments are available to be used to pay a debt service deficiency payable from the Shared Second Tier Debt Service Reserve Fund. Certain financial information about AGM is provided in **APPENDIX F**.

The Twenty-Fifth Supplement to the Trust Agreement provides that a Second Tier Reserve Surety Agreement may be substituted by NTTA at any time and from time to time for all or any part of the money held for the credit of the Shared Second Tier Debt Service Reserve Fund, and such money may be withdrawn and used for any lawful purpose. Any such Second Tier Reserve Surety Agreement may be in the form of a surety bond or insurance policy from an issuer with a claims paying ability rating of "AA," "AA," or "Aa," respectively, by S&P, Fitch or Moody's at the time of issuance of the surety bond or insurance policy. Any such Second Tier Reserve Surety Agreement may also be in the form of an unconditional irrevocable letter of credit issued by a bank rated at least "AA" or "Aa" by any two of the three rating agencies, S&P, Fitch or Moody's, at the time of issuance of the letter of credit. In the event the issuer of a Second Tier Reserve Surety Agreement for the Shared Second Tier Debt Service Reserve Fund defaults in its payments thereunder or becomes insolvent, NTTA is required to, within six months of such occurrence, either (1) transfer funds from the Revenue Fund for deposit into the Shared Second Tier Debt Service Reserve Fund in an amount sufficient to cause the money on deposit in the Shared Second Tier Debt Service Reserve Fund to accumulate to the 2017 Shared Second Tier Required Reserve, or (2) replace such instrument with a surety bond, insurance policy, or letter of credit meeting the requirements described above. See "**Funds and Accounts — Revenue Fund**" for a description of the application and priority of payment for funds contained in the Revenue Fund.

Funds in the Shared Second Tier Debt Service Reserve Fund are required to be used to pay interest on and principal of the Series 2019B Bonds, the Series 2017B Bonds, the Series 2018 Bonds or any Additional Second Tier Bonds designated as "2017 Shared Second Tier Reserve Sub Account Secured Bonds" in the Supplemental Agreement under which such Additional Second Tier Bonds are issued to the extent that the funds in the Second Tier Bond Interest Account and the Second Tier Redemption Account are insufficient for such purpose, and may be used by NTTA to retire the last of the Outstanding 2017 Shared Second Tier Reserve Subaccount Secured Bonds.

*General.* Upon a deficiency in the 2014 Second Tier Reserve Subaccount, the 2015 Second Tier Reserve Subaccount or the Shared Second Tier Debt Service Reserve Fund due to a withdrawal or change in value of Authorized Investments, on or before the first day of each month, funds from the Revenue Fund are required to be deposited to the credit of the 2014 Second Tier Reserve Subaccount, the 2015 Second Tier Reserve Subaccount or the Shared Second Tier Debt Service Reserve Fund, as applicable, in the amount of such deficiency in order to make the amount on deposit in the 2014 Second Tier Reserve Subaccount equal to the 2014 Second Tier Required Reserve, or in the 2015 Second Tier Reserve Subaccount equal to the 2015 Second Tier Required Reserve or in the Shared Second Tier Debt Service Reserve Fund equal to the 2017 Shared Second Tier Required Reserve, as applicable, which restoration is intended to occur within 12 months of the occurrence of any such deficiency in 12 substantially equal monthly installments. See "**Funds and Accounts — Revenue Fund**" for a description of the application and priority of payment for funds contained in the Revenue Fund.

*Third Tier Reserve Account.* As of the date hereof, no Third Tier Bonds for which a reserve is required have been issued under the Trust Agreement and the Third Tier Reserve Account has no funds credited thereto.

*Reserve Maintenance Fund.* Amounts in the Reserve Maintenance Fund are to be used for paying the costs of repairs, painting, renewals, replacements, improvements and other costs and expenses necessary for safe or efficient operations of the NTTA System or to prevent loss of revenues, for engineering expenses related to NTTA, for equipment, for expenses of maintenance and for operating expenses not occurring at annual or shorter periods. To the extent that the amounts on deposit in the Bond Interest Accounts, the Redemption Accounts and the Reserve Accounts are insufficient to pay the principal of and interest on the bonds issued under the Trust Agreement and

Payment Obligations when due, NTTA is required to transfer money from the Reserve Maintenance Fund to the appropriate account in the Sinking Funds for such purposes; *provided, however*, that no such transfer may be made of money in the Reserve Maintenance Fund which is, in the opinion of NTTA, then needed for repairs or replacements necessary to maintain safe operation of the NTTA System or to prevent loss of revenue of the NTTA System. The balance in the Reserve Maintenance Fund as of April 30, 2019 was approximately \$54,629,084.

*Additional Accounts.* NTTA can create additional accounts within the Sinking Funds, and has created a special subaccount to be held by the Trustee within the Third Tier Redemption Account designated as the "Swap Termination Payment Subaccount." Payments required to be made under a swap agreement or other qualified credit agreement or a transaction entered into pursuant thereto upon termination of such transaction or agreement that are specified as Third Tier Payment Obligations under the swap agreement or credit agreement will be secured by and payable from the Net Revenues required to be deposited into the Swap Termination Payment Subaccount. The Trustee is required to transfer funds from the Revenue Fund into the Swap Termination Payment Subaccount in such amounts as are necessary for NTTA to pay such Third Tier Payment Obligations. All Third Tier Payment Obligations payable out of the Swap Termination Payment Subaccount are secured on an equal and ratable basis by money on deposit on the Swap Termination Payment Subaccount. As of the date of the Official Statement, NTTA does not have any outstanding swap transactions that are payable out of the Swap Termination Payment Subaccount.

*Capital Improvement Fund.* Amounts in the Capital Improvement Fund may be used to pay the cost of repairs, enlargements, extensions, resurfacing, additions, renewals, improvements, acquisition of rights-of-way, reconstruction and replacements, capital expenditures, engineering studies and other expenses relating to the powers and functions of NTTA in connection with the NTTA System, or for any other purpose authorized by law, including the payment of debt service and other payments secured by a lien on all or a portion of the amounts deposited in the Capital Improvement Fund and the payment of costs for the 360 Tollway and any other toll project of NTTA or for TSAs. The balance in the Capital Improvement Fund as of April 30, 2019 was approximately \$444,987,645. Of such amount, approximately \$24,017,436 is restricted for Capital Improvement Fund bond payments, approximately \$346,406,568 is not restricted in use and approximately \$74,563,641 is reserved as a "rainy-day" fund. See "**THE NTTA SYSTEM — Multi-Year NTTA System Capital Plan**" in **APPENDIX A**. The Subordinate Lien Bonds (as defined herein) and the ISTEALoan are secured by funds in certain accounts held in the Capital Improvement Fund. See "**— ISTEALoan**" and "**— The Subordinate Lien Bonds**."

*Construction Fund.* The Construction Fund is used to pay the costs associated with constructing or acquiring improvements to the NTTA System. Portions of the proceeds of several of the outstanding bond issues under the Trust Agreement are in the Construction Fund in separate subaccounts established for such proceeds and are also to be used to fund the improvements to the NTTA System. The balance in the Construction Fund as of April 30, 2019 was approximately \$86,341,845. In addition to the foregoing, proceeds in the Construction Fund may be used to pay debt service on certain bonds.

The money, including all obligations purchased as an investment of the money, in each account and subaccount within the Construction Fund, is deemed at all times to be a part of such account or subaccount, and the interest accruing thereon and any profit realized from any investment is credited to such account or subaccount, and any loss resulting from any investment is charged to such account or subaccount. See "**INVESTMENTS**" in **APPENDIX A**.

## **Rate Covenant**

The NTTA Act authorizes NTTA to fix, revise, charge and collect tolls for the use of the NTTA System, and provides that such tolls will be so fixed and adjusted as to provide funds sufficient with other revenues, if any, to pay the cost of maintaining, repairing and operating the NTTA System and the principal of and the interest on bonds issued in connection with the NTTA System as the same become due and payable, and to create reserves for such purposes. The NTTA Act states that such tolls will not be subject to supervision or regulation by any agency of the State or other local governmental entity.

NTTA has adopted a toll rate schedule for the NTTA System in substantial conformity with the recommendations of the Traffic Engineers. NTTA covenants in the Trust Agreement that it will keep in effect a toll rate schedule that will raise and produce Net Revenues sufficient to satisfy its Debt Service Requirements (as

defined in **APPENDIX D**). In addition, NTTA may change the toll rate schedule, but only if the Traffic Engineers certify either:

- (1) that if such proposed toll rate schedule had been in effect during the preceding Fiscal Year, it would not have caused a decrease in the Net Revenues for said preceding Fiscal Year; or
- (2) that the adoption of such toll rate schedule will not adversely affect the ability of NTTA to comply with its rate covenants in the Trust Agreement.

Any such certificate by the Traffic Engineers is required to be based on their own opinion as to gross revenues to be derived by NTTA from the ownership and operation of the NTTA System (which revenues will be deemed to include all investment income, as estimated by the Chief Financial Officer of NTTA), and upon a certificate of the Consulting Engineers, stating their opinion as to the amount of Current Expenses during any pertinent Fiscal Year or period, assuming that the proposed program or schedule had been in effect during such pertinent Fiscal Year or period.

Under the Trust Agreement, NTTA covenants to keep in effect a toll rate schedule for the NTTA System during each Fiscal Year to produce Net Revenues during each Fiscal Year sufficient to satisfy the greatest of (i) 1.35 times the scheduled Debt Service Requirements on all outstanding First Tier Bonds for the Fiscal Year, (ii) 1.20 times the scheduled Debt Service Requirements on all outstanding First Tier Bonds and Second Tier Bonds for the Fiscal Year or (iii) 1.00 times the scheduled Debt Service Requirements on all outstanding First Tier Bonds, Second Tier Bonds and Third Tier Bonds, and all other outstanding obligations of NTTA secured by Net Revenues for the Fiscal Year.

If, during any Fiscal Year, Net Revenues are less than the amounts contemplated in the preceding paragraph, NTTA is required, before the 15th day of March of the following Fiscal Year, to request the Traffic Engineers to make and file their recommendations with NTTA and the Trustee as to a revision in the toll rate schedule then in effect, in order to cause the raising and production of Net Revenues in a manner which will enable NTTA to produce at the earliest feasible time Net Revenues in at least the amounts described in the rate covenant above for each such Fiscal Year. NTTA covenants that it will promptly and carefully consider such recommendations, and that it will, within 60 days after receipt of such recommendations, either (1) place into effect any toll rate schedule as so recommended by the Traffic Engineers, or (2) place into effect any alternative toll rate schedule which, in the opinion of the Board, will enable it to comply with its covenants specified in the preceding paragraph.

If NTTA complies with all recommendations of the Traffic Engineers (or a successor independent engineer or engineering firm or corporation as provided for in the Trust Agreement) with respect to the toll rate schedule, an Event of Default will not occur solely as the result of the occurrence of a deficiency in any Fiscal Year(s) between the Net Revenues for such Fiscal Year(s) and the amount required to be produced for such Fiscal Year(s). In the event of any such deficiency, however, and regardless of any recommendations of the Traffic Engineers or others, or compliance therewith by NTTA, the Trustee or the holders of not less than 15% in aggregate principal amount of the bonds then outstanding under the Trust Agreement may, and the Trustee must upon the written request of the holders of not less than 10% in aggregate principal amount of the bonds issued under the Trust Agreement then outstanding and upon being indemnified to its satisfaction, institute and prosecute in a court of competent jurisdiction an appropriate action to compel NTTA to comply with its covenant to adopt and keep in effect a toll rate schedule which will raise and produce during each Fiscal Year an amount of Net Revenues as required above for such Fiscal Year, or to comply with any other rate covenant in the Trust Agreement. NTTA covenants that it will comply with any final order, decree or judgment entered in any such proceeding, or any modification thereof.

If the Traffic Engineers, after a request by NTTA for the above-described recommendations, fail to file with NTTA and with the Trustee such recommendations in writing within 120 days after the request, the Trustee must forthwith designate and appoint an independent engineer or engineering firm or corporation having a nationwide and favorable reputation for skill and experience in such work, in lieu of the Traffic Engineers, to make the necessary survey and study and to make the required recommendations as to the aforesaid revision, which recommendations will be reported in writing to NTTA and to the Trustee on or before the 1st day of October of said year. Such recommendations will for all purposes be considered to be the equivalent of and a substitute for the recommendations of the Traffic Engineers hereinabove mentioned.

## **Additional Bonds and Other Obligations**

NTTA reserves and has the right and power to issue or incur additional First Tier Bonds, First Tier Payment Obligations, Second Tier Bonds, Second Tier Payment Obligations, Third Tier Bonds and Third Tier Payment Obligations (and within the Third Tier, additional bonds or payment obligations secured on different levels of priority). Such obligations may be issued under the Trust Agreement for any purpose then authorized by law, including the refunding of obligations at any time authorized and issued by NTTA and/or interest thereon; *provided, however*, no First Tier Bonds, Second Tier Bonds or Third Tier Bonds may be issued unless NTTA has met certain conditions concerning the additional bonds test established pursuant to the Trust Agreement. In addition, NTTA may issue additional debt secured by revenues in its Capital Improvement Fund or debt secured by revenues of projects that are not part of the NTTA System.

Among other requirements, the Trust Agreement authorizes the issuance of additional First Tier Bonds if (a) actual Net Revenues for the preceding Fiscal Year or for any twelve-month period ending not more than 90 days prior to the date of calculation are at least 1.35 times the average annual Debt Service Requirements for all then outstanding First Tier Bonds (including those proposed to be delivered) and Second Tier Bonds (excluding any First Tier or Second Tier Bonds being refunded) or (b) estimated Net Revenues for the current and each future Fiscal Year are at least (i) 1.35 times the Debt Service Requirements for each such Fiscal Year for all First Tier Bonds (including those proposed to be delivered but excluding those being refunded), (ii) 1.20 times the Debt Service Requirements for each such Fiscal Year for all then outstanding First Tier Bonds (including those proposed to be delivered but excluding those being refunded) and Second Tier Bonds (excluding those being refunded) and (iii) 1.00 times the Debt Service Requirements for each such Fiscal Year for all then outstanding First Tier Bonds (including those proposed to be delivered), Second Tier Bonds, Third Tier Bonds and all other outstanding obligations of NTTA secured by Net Revenues (excluding, in each case, those being refunded). NTTA may also issue additional First Tier Bonds in a principal amount not to exceed 10% of the original First Tier Bonds issued to finance a project to complete such project without meeting the above-described requirements. Additional bonds issued to refund outstanding First Tier Bonds which do not cause an increase in the then-existing average annual debt service requirements of the First Tier Bonds may be issued without meeting the above-described requirements.

The Trust Agreement authorizes the issuance of Additional Second Tier Bonds not constituting Short-Term Indebtedness if (a) actual Net Revenues for the preceding Fiscal Year or for any twelve-month period ending not more than 90 days prior to the date of calculation are at least 1.20 times the average annual Debt Service Requirements for all then outstanding First Tier Bonds and Second Tier Bonds (including those proposed to be delivered but excluding those being refunded) or (b) the estimated Net Revenues for the current and each future Fiscal Year are at least (i) 1.20 times the Debt Service Requirements for each such Fiscal Year for all First Tier Bonds and Second Tier Bonds (including those proposed to be delivered) and (ii) 1.00 times the Debt Service Requirements for each such Fiscal Year for all then outstanding First Tier Bonds, Second Tier Bonds (including those proposed to be delivered), Third Tier Bonds and all other outstanding obligations of NTTA secured by Net Revenues (excluding, in each case, those being refunded). Additional bonds issued to refund outstanding First Tier Bonds or Second Tier Bonds which do not cause an increase in the then-existing average annual debt service requirements of the First Tier Bonds and Second Tier Bonds may be issued without meeting the above-described requirements.

The Trust Agreement authorizes the issuance of Third Tier Bonds not constituting Short-Term Indebtedness if (a) actual Net Revenues for the preceding Fiscal Year or for any twelve-month period ending not more than 90 days prior to the date of calculation are at least 1.00 times the average annual Debt Service Requirements for all then outstanding First Tier Bonds, Second Tier Bonds and Third Tier Bonds (including those proposed to be delivered) or (b) the estimated Net Revenues for the current and each future Fiscal Year are at least 1.00 times the Debt Service Requirements for each such Fiscal Year for all then outstanding First Tier Bonds, Second Tier Bonds, Third Tier Bonds (including those proposed to be delivered) and all other outstanding obligations of NTTA secured by Net Revenues (excluding, in each case, those being refunded). Additional bonds issued to refund outstanding First Tier Bonds, Second Tier Bonds or Third Tier Bonds which do not cause an increase in the then-existing average annual debt service requirements of the First Tier Bonds, Second Tier Bonds and Third Tier Bonds may be issued without meeting the above-described requirements.



NTTA is also authorized to incur "Short-Term Indebtedness" consisting of bonds that mature in less than 365 days, and such indebtedness may be secured as Second Tier Bonds or Third Tier Bonds, *provided, however*, that immediately after the incurrence of Short-Term Indebtedness, the aggregate principal amount of Short-Term Indebtedness outstanding divided by the aggregate principal amount of all Outstanding Bonds may not exceed 35%. If a Credit Provider has extended a line of credit or NTTA has undertaken a commercial paper program or similar program, only amounts actually borrowed under such line of credit or program and repayable in less than 365 days will be considered Short-Term Indebtedness and the full amount of such commitment or program will not be treated as Short-Term Indebtedness to the extent that such facility remains available but undrawn. NTTA is not required to satisfy the additional bonds tests described herein when incurring Short-Term Indebtedness.

### **Proposed Trust Agreement Amendments**

The Twenty-Fourth Supplement to the Trust Agreement amends the Trust Agreement to allow for (i) the engagement of third parties as agents of NTTA to collect accounts receivable, such as tolls for ZipCash transactions, on behalf of NTTA where collections are paid to NTTA net of fees and expenses of the third parties and (ii) the sale of accounts receivable, such as tolls for ZipCash transactions, to third parties. Pursuant to the amendments, NTTA may sell accounts receivable if:

- (1) the sale is, in the judgment of NTTA, on commercially reasonable terms; or
- (2) after giving effect to the sale either (i) NTTA would be permitted to issue at least \$1.00 of additional First Tier Bonds pursuant to the requirements of the Trust Agreement or (ii) NTTA will, in the judgment of NTTA, be able to comply with the rate covenants in the Trust Agreement.

Any amounts received by NTTA in connection with the sale of accounts receivable will constitute tolls or other revenue derived from the ownership and operation of the NTTA System for purposes of the Trust Agreement, and be deposited into the Revenue Fund. Any lien under the Trust Agreement on any accounts receivable sold by NTTA may be released with such sale. See "**APPENDIX D - SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO TRUST AGREEMENT**," which includes Trust Agreement amendments in the Twenty-Fourth Supplement to the Trust Agreement.

By purchasing the Bonds, the registered owners of the Bonds are deemed to have consented to the amendments. The amendments will not become effective until NTTA has obtained the consent of the owners of a majority in principal amount of First Tier Bonds and Second Tier Bonds. NTTA may solicit the consent of the necessary owners pursuant to the terms of the Trust Agreement. Otherwise, the amendments will not take effect until and unless a substantial portion of the currently outstanding First Tier Bonds and Second Tier Bonds are refunded or a sufficient amount of Additional Bonds are issued. Upon the issuance of the Bonds and redemption of the Refunded Bonds, \$2,124,355,000 of the outstanding First Tier Bonds and \$1,339,610,000 of the outstanding Second Tier Bonds, for a total \$3,463,965,000 or 38.3%, of the registered owners of outstanding First Tier Bonds and Second Tier Bonds will have been deemed consented to the amendments.

*[Remainder of page intentionally left blank]*

## Outstanding Obligations

After the issuance of the Bonds and the application of the proceeds thereof, the obligations listed below will be outstanding under the Trust Agreement in the following principal amounts:

<u>First Tier Bonds</u>	<u>Principal Amount</u>
North Texas Tollway Authority System First Tier Insured Capital Appreciation Revenue Refunding Bonds, Series 2008D (accreted amount calculated through August 15, 2019)	\$ 778,263,189
North Texas Tollway Authority System First Tier Convertible Capital Appreciation Revenue Refunding Bonds, Series 2008I (accreted amount through June 30, 2015 Conversion Date)	295,165,000
Series 2009B Bonds	825,000,000
North Texas Tollway Authority System First Tier Revenue Refunding Bonds, Series 2011B	245,705,000
North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2012A	25,930,000
North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2012B	383,625,000
North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2012D	32,815,000
North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2014A	310,415,000
North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2015B	747,860,000
North Texas Tollway Authority System First Tier Current Interest Revenue Refunding Bonds, Series 2016A	952,820,000
North Texas Tollway Authority System First Tier Revenue and Refunding Bonds, Series 2017A	1,694,485,000
Series 2019A Bonds	429,870,000
Total First Tier Bonds	\$ 6,721,953,189
 <u>Second Tier Bonds</u>	
Series 2014B Bonds	\$ 146,420,000
Series 2015A Bonds	836,605,000
Series 2017B Bonds	761,015,000
Series 2018 Bonds	356,085,000
Series 2019B Bonds	222,510,000
North Texas Tollway Authority System Commercial Paper Notes, Series A	0 <sup>(1)</sup>
Total Second Tier Bonds	\$ 2,322,635,000
 <u>Third Tier Bonds</u>	
None	
Total	\$ 9,044,588,189

<sup>(1)</sup> NTTA may issue commercial paper notes at one time, or from time to time, in a principal amount of up to \$200,000,000. See " – The Commercial Paper Program."

The Trust Agreement allows for securing "First Tier Payment Obligations," "Second Tier Payment Obligations" and "Third Tier Payment Obligations" in order to secure payments due pursuant to credit agreements, including reimbursement agreements and interest rate swap agreements. First Tier Payment Obligations, Second Tier Payment Obligations and Third Tier Payment Obligations are secured on a parity with, respectively, First Tier Bonds, Second Tier Bonds and Third Tier Bonds. Additionally, NTTA may establish additional levels of priority of payment and security within the Third Tier Payment Obligations category.

Additionally, the Trust Agreement secures the Payment Obligations of NTTA under (i) an advised line note purchase agreement relating to NTTA's Commercial Paper Program (the "*Advised Line Note Purchase Agreement*"), and (ii) certain insurance agreements. Additionally, NTTA has pledged revenues on deposit in certain accounts held in the Capital Improvement Fund on a basis subordinate to the Third Tier Payment Obligations to the payment of the ISTEALoan, NTTA's North Texas Tollway Authority System Subordinate Lien Revenue Bonds, Series 2010A, North Texas Toll Way Authority System Subordinate Lien Taxable Revenue Bonds, Subseries 2010B-1 (Build America Bonds — Direct Payment) and the Subseries 2010B-2 Refunded Bonds (the "*Subordinate Lien Bonds*"). See "— ISTEALoan" and "— The Subordinate Lien Bonds."

### **The Commercial Paper Program**

In order to finance construction of various components of the NTTA System, NTTA utilizes its existing commercial paper note program which allows for the issuance, at one time, or from time to time, of up to \$200,000,000 aggregate principal amount of commercial paper notes (the "*CP Notes*"). The CP Notes are secured as Second Tier Bonds. NTTA has entered into the Advised Line Note Purchase Agreement under which NTTA may request a commercial bank to purchase, but such commercial bank is not obligated to purchase, CP Notes from NTTA in the aggregate principal amount at any one time outstanding not to exceed \$200,000,000. As of June 1, 2019, NTTA has no CP Notes outstanding.

### **ISTEALoan**

In connection with the design and construction of the PGBT, NTTA and TxDOT entered into an agreement pursuant to the provisions of the Intermodal Surface Transportation Efficiency Act under which NTTA borrowed \$135,000,000 from TxDOT (the "*ISTEALoan*"), with approximately \$120,101,628 currently outstanding. Interest accrued and compounded on the ISTEALoan from 2000 to 2004 and annual payments began in 2004. The principal of and interest on the ISTEALoan is payable only out of amounts on deposit in the ISTEALoan Debt Service Account in the Capital Improvement Fund. No other funds or other assets of NTTA are pledged to the repayment of the ISTEALoan and NTTA is under no obligation to make any payment on the ISTEALoan from any other source.

### **The Subordinate Lien Bonds**

In connection with the development of the PGBT WE and the CTP, NTTA issued the Subordinate Lien Bonds in the aggregate principal amount of \$400,000,000 to pay a portion of the costs of the PGBT WE and the CTP. The Subordinate Lien Bonds include the Subseries 2010B-2 Refunded Bonds. After the refunding of the Subseries 2010B-2 Refunded Bonds, \$140,000,000 of Subordinate Lien Bonds will be outstanding. The Subordinate Lien Bonds are payable solely from and secured by Net Revenues deposited in the CIF Bond Payment Account of the Capital Improvement Fund and are not secured by any other funds or accounts under the Trust Agreement.

## **RISK FACTORS**

The Bonds are special and limited obligations of NTTA payable solely from the Pledged Revenues. The following is a discussion of certain risk factors that should be considered in evaluating an investment in the Bonds. This discussion does not purport to be either comprehensive or definitive. The order in which risks are presented is not intended to reflect either the likelihood that a particular event will occur or the relative significance of such an event. Moreover, there are other risks associated with an investment in the Bonds in addition to those set forth herein.

## **Financial Forecasts**

The financial forecasts in this Official Statement are based generally upon certain assumptions and projections as to estimated revenues and Operating Expenses. See "**TRAFFIC AND REVENUE STUDY**" in **APPENDIX A**. Inevitably, some underlying assumptions and projections used to develop the forecasts will not be realized, and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the forecast periods will vary from the forecasts, and such differences may be material.

## **Forward-Looking Statements**

The statements contained in this Official Statement, and in any other information provided by NTTA, that are not purely historical, are forward-looking statements, including statements regarding NTTA's expectations, hopes, intentions or strategies regarding the future and the projections in the 2019 T&R Study (as defined below). Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to NTTA on the date hereof, and NTTA assumes no obligation to update any such forward-looking statements. NTTA's actual results could differ materially from those discussed in such forward-looking statements.

The forward-looking statements herein are necessarily based on various assumptions and estimates that are inherently subject to numerous risks and uncertainties, including risks and uncertainties relating to the validity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the control of NTTA. Any such assumptions could be inaccurate and, therefore, there can be no assurance that the forward-looking statements included in this Official Statement will prove to be accurate.

## **Market Disruptions and Reliance on Capital Markets**

Credit markets experience substantial disruption from time to time. There can be no assurance as to the timing of any disruption or the extent of any recovery that may be made by the credit markets. NTTA's future capital plans may include raising additional funds through bond financings for various projects. If NTTA is unable to access the credit markets as a result of any such disruption, it is likely to delay the completion of certain projects until such time as the capital markets stabilize. The effect of such delays could result in increased costs for such projects and a delay in the receipt of revenues from such projects.

## **Costs of Construction of Toll Facilities**

In projects of the magnitude of the toll facilities developed, operated and improved by NTTA, there is a possibility of time delays and cost increases resulting from (i) design and construction problems and resulting change orders, (ii) environmental litigation or environmental administrative matters, (iii) the unavailability or cost of acquiring rights-of-way, (iv) archeological, historic and unidentified subsurface conditions, (v) utility relocation problems, (vi) hazardous materials, (vii) force majeure events, (viii) litigation or (ix) inflation. Additionally, tariffs on steel and aluminum imports recently imposed by the United States may adversely impact construction costs for NTTA toll facilities or the ability of NTTA to accurately estimate construction costs. As a result, there can be no assurance that the costs of completion for any NTTA toll facilities or improvements to NTTA toll facilities will not exceed current estimates, or that the completion of such projects or improvements to such projects will not be delayed beyond the scheduled completion date. Variations in cost estimates and delays in construction could be material.

There is also a possibility of insolvency or bankruptcy of the contractors during construction. While the contractors are and will be required to provide performance bonds and payment bonds, there can be no assurance that such bonds will be sufficient to assure timely completion of any NTTA toll facility or improvements under construction. Moreover, if a default occurs under a construction contract by the contractor, there is a possibility of litigation between NTTA and the providers of the performance bonds and payment bonds and/or the contractor, which could further delay construction and the opening of the applicable NTTA toll facility or improvements. Any

such delays and/or cost overruns could result in the delay or reduction in the collection of revenues and an increase in costs, thereby making it more difficult for NTTA to generate sufficient revenues to pay principal of and interest on the Bonds and other obligations under the Trust Agreement.

### **Traffic and Revenue Reports**

The revenue forecasts in the North Texas Tollway Authority System Comprehensive Traffic and Toll Revenue Study dated September 2017 (the "*September 2017 T&R Study*") updated by the August 2018 NTTA System Traffic and Revenue Letter Update and the April 2019 NTTA System Traffic and Revenue Bringdown Letter (collectively, the "*2019 T&R Study*") as prepared by CDM Smith, the traffic engineers for the NTTA System, are based upon certain assumptions set forth or incorporated therein. See "**TRAFFIC AND REVENUE STUDY**" in **APPENDIX A**. In addition, the NTTA website, [www.ntta.org](http://www.ntta.org), provides other studies, such as the March 2016 C&M Associates, Inc. Comprehensive Traffic and Revenue Update for the Special Projects System and the December 2016 CDM Smith NTTA System Comprehensive Traffic and Toll Revenue Study, although such other studies should not be relied upon in evaluating an investment in the Bonds. The 2019 T&R Study is not a guarantee of any future events or trends and the forecasts therein are subject to future economic and social conditions and demographic developments that cannot be predicted with certainty. Further, the estimates and assumptions in the 2019 T&R Study are inherently subject to significant economic and competitive uncertainties and contingencies, many of which are beyond the control of NTTA. Failure to achieve or realize any of the assumptions listed in the 2019 T&R Study may have a materially adverse effect upon the net revenues actually realized. Currently, the toll rates in effect on the NTTA System are set at rates that are expected to produce a First Tier debt service coverage ratio of at least 1.50 times in each future year. In 2021, the First Tier debt service coverage ratio is expected to be 1.88 times, the lowest projected level. If there is a decrease in vehicle transactions on the NTTA System or if there is a period of significant inflationary pressure, NTTA's actual First Tier debt service coverage ratio could decline below 1.50 times, which could adversely affect the market value of the Bonds. While NTTA has a goal of maintaining a First Tier debt service coverage ratio of 1.50 times, the Trust Agreement only requires that it maintain a First Tier debt service coverage ratio of 1.35 times. If the First Tier debt service coverage ratio falls below 1.35 times (or such other levels as are specified in the Trust Agreement for First and Second Tier debt or on all debt), NTTA would be required to raise toll rates or reduce expenses to maintain the minimum coverage ratios required by the Trust Agreement. In order to better understand the ramifications of a potential decline in vehicle transactions on the NTTA System, NTTA stressed the results of the 2019 T&R Study for the NTTA System. NTTA estimates that it would still maintain a minimum debt service coverage ratio on all outstanding First Tier debt of 1.35 times if actual toll revenues each year were 24.3% below projections, a minimum debt service coverage ratio on all outstanding First Tier and Second Tier debt of 1.20 times if actual toll revenues each year were 13.9% below projections and a minimum debt service coverage on all outstanding debt (excluding Reserve Maintenance Fund Deposits) of 1.00 times if actual toll revenues each year were 20.8% below projections.

### **Operating Risks**

The ability of NTTA's toll facilities to generate revenues in amounts sufficient to pay debt service on the obligations of NTTA when due will be subject to the risks inherent in the establishment and operation of any toll facility. The ability to repay the obligations of NTTA issued pursuant to the Trust Agreement will be dependent on the volume of traffic that utilizes NTTA's toll facilities and the ability of NTTA and its computer systems to accurately process data. Revenues to be generated through such use will be influenced by numerous factors, including, among other things, the ability to manage toll evasion and toll collection and enforcement practices; the ability to control expenses; the availability of adequately-trained personnel; population, employment and income trends within the region; the congestion on alternative freeways, highways and streets; time savings experienced by motorists utilizing the toll facilities; the toll rates; the availability and price of fuel; and the construction of new or improved competitive roadways or other transit facilities.

### **Collection Risks**

NTTA previously experienced downward trends in the percentage of total transactions constituting TollTag (as defined in **APPENDIX A**) transactions and in ZipCash (as defined herein and in **APPENDIX A**) revenue recovery. In response, NTTA implemented various improvements to its systems, processes and procedures designed to increase the percentage of TollTag transactions, pursuable ZipCash transactions and ZipCash revenue recovery

with positive results. NTTA intends to continue to review and implement additional improvements in these areas. Any future downward trends in the percentage of total transactions constituting TollTag transactions and/or in ZipCash revenue recovery may have a material adverse effect on the net revenues actually realized from the NTTA System. See "**OPERATION OF THE NTTA SYSTEM — Operations — Toll Collection**," "*— Toll Collection Variance*" and "*— Revenue Recovery Assumptions in Traffic and Revenue Study*" in **APPENDIX A**.

### **Ability to Maintain or Raise Rates**

NTTA may need to raise toll rates in the future above the scheduled toll rate increases under the current toll rate schedule to support its debt service requirements. Although the 2019 T&R Study suggests there is an ability to raise rates further, the effect of any future rate increase is unknown. It is possible that a future increase in rates could result in reduced usage of the NTTA System, resulting in decreased revenues. Additionally, political pressure could result in hesitance by NTTA to raise rates further, if needed. See "**CURRENT AND HISTORICAL INFORMATION – NTTA System Toll Rate Schedule**" in **APPENDIX A** for a discussion of automatic increases in toll rates every two years pursuant to the existing NTTA System toll rate schedule, absent action by NTTA.

### **Custodian in Possession of Prepaid Funds**

NTTA has entered into the Master Custodial Account Agreement with the Custodian. See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Funds and Accounts — Master Custodial Account Agreement**." NTTA is required to deposit all prepaid funds of its TollTag customers in a single custodial account (the "*Prepaid Funds Account*") held by the Custodian for the benefit of NTTA and the other beneficiaries under the Master Custodial Account Agreement. The Custodian will hold all funds in the Prepaid Funds Account until such time as the customers utilize the NTTA System (or other toll road of NTTA or a third-party operator for which NTTA provides toll collection services), and will then transfer funds as directed by NTTA to the Trustee for toll transactions on the NTTA System or other appropriate person for non-NTTA System toll transactions.

Funds in the Prepaid Funds Account are not subject to the lien created under the Trust Agreement until they are transferred by the Custodian to the Trustee as payment for tolls of the NTTA System. On each business day, NTTA is required to deliver to the Custodian a certificate specifying the amount of the funds in the Prepaid Funds Account to be paid to the Trustee, and the Custodian is required to apply such funds as directed. Nonetheless, no assurance can be given that, should the Custodian go into receivership or conservatorship, such agreement will be effective to assure that the Trustee or NTTA will receive timely payment of such tolls.

Funds in the Prepaid Funds Account are required to be segregated from all other funds and accounts of the Custodian and the Custodian has no interest in the Prepaid Funds Account. In the event of the Custodian's receivership or conservatorship, the Prepaid Funds Account should not be considered part of the Custodian's property subject to receivership or conservatorship. However, there may be delays in payments from the Prepaid Funds Account to the Trustee, or other possible negative consequences, which could have an adverse effect on the liquidity and value of the Bonds.

### **Maintenance Costs**

Successful operation of the NTTA System will require timely and complete maintenance and replacement of components of the NTTA System. No assurance can be given that sufficient funds will be available to maintain the NTTA System adequately. Any significant deterioration in the NTTA System may result in increased operating costs and in reduced usage, as well as temporary lane closures, and could adversely affect the amount of funds available to pay debt service on NTTA's obligations.

### **Motor Fuel Prices and Taxes**

There is no assurance that motor fuel will remain in adequate supply or that motor fuel prices and federal and State motor fuel taxes will not increase. Increases in motor fuel pump prices could negatively impact the revenues of NTTA. Additionally, if motor fuel prices increase, it could have a material adverse effect on the economy of the north central Texas region and the revenues of NTTA.

## Retaining Walls

In 2010, a portion of a mechanically stabilized earth ("MSE") wall located on the westbound main lanes of the PGBT between Kelly Boulevard and Josey Lane in the City of Carrollton (the "Kelly Wall") buckled. In February 2012, NTTA filed a lawsuit against the general contractor that built the Kelly Wall and NTTA's construction manager and wall supplier. The lawsuit was settled in 2015. Pursuant to the settlement, defendants paid NTTA \$4 million and agreed to repair the Kelly Wall and six walls in the immediate vicinity of the Kelly Wall. Work is progressing towards the final repair.

In May 2013, NTTA filed a lawsuit against its general contractor and construction manager related to other MSE walls within Section V of the PGBT. The lawsuit was settled in 2016. Pursuant to the settlement, defendants paid NTTA \$11.9 million for the repair of the MSE walls. NTTA has active construction contracts ongoing to fix these PGBT walls.

In 2013, NTTA engaged forensic engineering consultants to inspect MSE walls on the DNT and the SRT (the "2013 DNT/SRT Study"). In March 2015, NTTA received the results of the 2013 DNT/SRT Study, which identified certain retaining walls that need or may need stabilization repairs. NTTA is currently engaging engineering consultants to further investigate and to recommend stabilization repairs for such retaining walls identified in the 2013 DNT/SRT Study and to prepare plans, specifications and estimates for specific repairs. In 2017, NTTA filed a lawsuit against its design contractors, construction managers, general engineering consultants and construction contractors regarding DNT MSE walls. The cost estimate for the repair of retaining walls identified in the 2013 DNT/SRT Study is approximately \$100 million. The lawsuit was settled in 2018. Pursuant to the settlement, defendants paid NTTA \$52.2 million for the repair of the DNT MSE walls. NTTA has funds in the Capital Improvement Fund for the stabilization and strengthening of existing MSE walls along the PGBT, DNT and SRT.

NTTA conducts annual inspections of the retaining walls on the NTTA System. NTTA has detected some MSE wall movement along the frontage road of the PGBT WE. NTTA has also detected some wall movement along the DNT/LBJ interchange ramp walls. An investigation of these walls is currently being conducted. At this time, no estimates for repair have been completed.

The estimated construction costs described above with respect to the retaining walls are included in NTTA's multi-year NTTA System capital improvement plan. Such costs, net of legal recoveries, could exceed current estimates, and variations in such costs could be material.

## Limitation and Enforceability of Remedies

### *Limitation of Remedies under the Trust Agreement.*

The remedies available to owners of the Bonds upon an event of default under the Trust Agreement are limited to seeking specific performance in a writ of mandamus or other suit, action or proceeding compelling and requiring NTTA and its officers to observe and perform any covenant, condition or obligation prescribed in the Trust Agreement. The enforcement of the remedy of mandamus may be difficult, time-consuming, and must be exercised on an ongoing basis in the event of multiple payment defaults. No assurance can be given that a mandamus or other legal action to enforce a default under the Trust Agreement would be successful. Even if a judgment against NTTA could be obtained, it could not be enforced by direct levy and execution against NTTA's property. Owners do not have the right to accelerate the maturity of the Bonds as a remedy in the event of a default by NTTA.

Under current State law, NTTA may waive sovereign immunity from suit or liability for the purpose of adjudicating a claim to enforce an obligation issued or incurred (including credit agreements entered into) under Chapter 1371 of the Texas Government Code, such as the Bonds, or for damages for breach of such obligation. **NTTA HAS NOT AGREED TO WAIVE SOVEREIGN IMMUNITY UNDER THE TRUST AGREEMENT.** However, State courts have held that mandamus proceedings, such as those discussed in the preceding paragraph, are not prohibited by sovereign immunity. See "**SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO TRUST AGREEMENT**" in **APPENDIX D**.

### *Enforceability of Remedies.*

The remedies available under the Trust Agreement are in many respects dependent upon regulatory and judicial actions that are often subject to discretion and delay. Under existing law, such remedies may not be readily available. In addition, enforcement of such remedies (i) may be subject to general principles of equity which may permit the exercise of judicial discretion, (ii) are subject to the exercise in the future by the State and its agencies and political subdivisions of the police power inherent in the sovereignty of the State and (iii) are subject to the exercise by the United States of the powers delegated to it by the federal Constitution.

The enforceability of the rights and remedies of registered owners of the Bonds may be limited by laws now or hereafter in effect relating to bankruptcy, reorganization or other similar laws of general application affecting the rights of creditors of political subdivisions such as NTTA. If NTTA were allowed to proceed voluntarily under Chapter 9 of the United States Bankruptcy Code, it could file a plan for an adjustment of its debts. If such a plan were confirmed by the bankruptcy court, it could, among other things, affect registered owners by reducing or eliminating the amount of indebtedness, deferring or rearranging the debt service schedule, reducing or eliminating the interest rate, modifying or abrogating collateral or security arrangements, substituting (in whole or in part) other securities and otherwise compromising and modifying the rights and remedies of the registered owners' claims against NTTA.

The various legal opinions to be delivered concurrently with the delivery of the Bonds will be qualified to the extent that the enforceability of certain legal rights related to the Bonds is subject to limitations imposed by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors generally and by equitable remedies and proceedings generally.

### **Clean Air Act Non-Attainment and Conformity Risk; NEPA Environmental Litigation Risk**

The air quality provisions of the Clean Air Act, 42 U.S.C. §7401 et seq., as amended (the "CAA"), and the transportation planning provisions of Title 23 and Title 49 of the United States Code, are intended to ensure that integrated transportation and air quality planning occur in those areas designated by the United States Environmental Protection Agency (the "EPA") as non-attainment areas.

The CAA requires the EPA to set National Ambient Air Quality Standards ("NAAQS") for widespread pollutants from numerous and diverse sources considered harmful to public health and the environment. The CAA establishes two types of NAAQS: Primary Standards set limits to protect public health, including the health of "sensitive" populations; Secondary Standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation and buildings. The CAA requires periodic review of the science upon which the standards are based and the standards themselves. NAAQS have been set for the following pollutants: Ozone, Carbon Monoxide, Particulate Matter, Sulfur Dioxide, Nitrogen Oxides and Lead. An area in which one or more of the six regulated pollutants exceeds the NAAQS is designated as a "non-attainment" area, based on the area's failure to attain compliance with NAAQS for any particular pollutant. On April 15, 2004, EPA designated a nine-county area as non-attainment under the 8-hour NAAQS for ozone proposed in 1997, which became effective June 15, 2004 (the "1997 Ozone Standard"). The nine-county area includes Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall and Tarrant Counties (the "DFW Non-Attainment Area"). The 1997 Ozone Standard of 84 parts per billion ("ppb") was lowered to 75 ppb in 2008 and Wise County was added as part of the DFW Non-Attainment Area in 2012 (the "2008 Ozone Standard"). EPA then began the rulemaking process to reconsider the 75 ppb, which resulted in EPA establishing a new standard of 70 ppb on October 26, 2015 (the "2015 Ozone Standard"). On September 30, 2016, the State of Texas made its recommendations to EPA that the DFW Non-Attainment Area be designated as non-attainment under the new 2015 Ozone Standard. EPA designated the DFW Non-Attainment Area as non-attainment under the 2015 Ozone Standard on June 4, 2018, except for Rockwall County, which was classified as attainment. After its promulgation, the 2015 Ozone Standard was challenged by several states, energy companies and interest groups. That litigation is currently ongoing. What effect, if any, the non-attainment designation under the 2015 Ozone Standard and ongoing litigation may have on the DFW Non-Attainment Area cannot be determined at this time.

Transportation projects, including those of NTTA, must comply with and conform to the CAA. Although the area is currently designated as non-attainment for ozone under the 2015 Ozone Standard, voluntary pollution



reduction efforts made in the area have kept the area's transportation projects, including NTTA's projects, in compliance and conformity with the CAA.

Should the DFW Non-Attainment Area fail to achieve attainment or should the DFW Non-Attainment Area fail to satisfy the then-effective CAA State Implementation Plan ("*SIP*") (for non-attainment or otherwise), or for any other reason should a lapse in conformity with the CAA occur, the DFW Non-Attainment Area may be subjected to sanctions pursuant to Section 179 of the CAA. Under such circumstances, the Texas Commission on Environmental Quality would be required under the CAA to submit to EPA a new SIP for the area. Due to the complexity of the non-attainment/conformity analysis, the status of EPA's implementation of the 2015 Ozone Standard, and the incomplete information surrounding any SIP requirements for areas designated non-attainment under this new standard, the exact nature of sanctions or any potential SIP for the DFW Non-Attainment Area is currently unknown. Nevertheless, it is possible that all or some of the transportation control measures available as sanctions under the CAA may be imposed. The CAA also provides for mandatory sanctions, including the suspension of highway funding, should the State fail to submit a proper SIP, or associated submissions, fail to revise or implement a SIP or fail to comply with an existing SIP. Subject to certain exceptions, if the DFW Non-Attainment Area falls out of conformity and the mandatory highway funding suspension sanction is implemented, the Secretary of Transportation may be prohibited from approving or awarding transportation projects or grants within the area failing to conform to the CAA.

NTTA expects that its existing toll facilities would not be directly affected by a lapse in conformity or non-attainment sanctions. The Mobility 2045: The Metropolitan Transportation Plan (the "*Mobility 2045 Plan*") was approved by the Regional Transportation Council associated with the North Central Texas Council of Governments in June 2018. The Mobility 2045 Plan received a favorable air quality conformity determination from the U.S. Department of Transportation in November 2018. NTTA's toll facilities are included in the Mobility 2045 Plan.

It is possible that non-attainment, a lapse in conformity under the CAA, or other environmental issues may result in litigation involving injunctive or other relief that could delay or increase the cost of the construction of improvements or additions to, or adversely impact the operation of, the NTTA System. Litigation under the National Environmental Policy Act or other State or federal environmental laws may also result in injunctive or other relief that could delay or increase the cost of construction of improvements or additions to, or adversely impact the operation of, the NTTA System. See "**— Costs of Construction of Toll Facilities.**"

### **Continuing Disclosure Obligations**

In connection with the issuance of the Bonds and other previously issued obligations, NTTA has agreed to file continuing disclosure information on an ongoing basis. Any failure by NTTA to comply with its continuing disclosure obligations may adversely affect the liquidity of the Bonds and their market prices in the secondary market. See "**CONTINUING DISCLOSURE OF INFORMATION — Compliance with Prior Undertakings.**"

### **Additional Obligations**

There is no restriction on NTTA's ability to enter into additional hedging arrangements or to issue additional bonds (except for the satisfaction of the additional debt test contained in the Trust Agreement). See "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Additional Bonds and Other Obligations.**" Future toll projects of NTTA may be financed as part of the NTTA System or independently of the NTTA System and in such event may require the issuance of additional bonds. See "**OTHER POTENTIAL PROJECTS (ON SYSTEM AND OFF SYSTEM)**" in **APPENDIX A**. The execution of such hedging arrangements and the issuance of such additional bonds could adversely affect the ability of NTTA to repay the Bonds.

### **Obligations Relating to 360 Tollway**

Under the terms of the 360 Tollway Project Agreement (as defined in **APPENDIX A**) between NTTA and TxDOT, if the 360 Tollway revenues are insufficient to make any scheduled payment on the Project Loan (as defined in **APPENDIX A**), NTTA may, but is not obligated to, use funds from other sources available to pay such shortfall. Funding of any such shortfall is likely to come from revenues generated by the NTTA System and payment of any such shortfall could have a material adverse effect on NTTA's ability to repay the Bonds. Failure to make any such payment to TxDOT will not constitute a default under the 360 Tollway Project Agreement, but

may lead to a termination of the 360 Tollway Project Agreement and a reversion of the 360 Tollway to TxDOT. See "THE 360 TOLLWAY—Reverter and Nonrecourse" in APPENDIX A.

### **Obligation to Pay for Video Tolls under TSAs Prior to Collection**

Under the terms of the TSAs between NTTA and the developers of the IH 635 Project (as defined in APPENDIX A) and the NTE Segment 1/2W Project (as defined in APPENDIX A), NTTA has agreed to pay such developers an amount equal to the transponder toll for each video transaction (NTTA retains all collected video toll premiums), less its fee, within two business days after the date the video transaction has been properly transmitted to NTTA. Until the tolls for such video transactions are collected, the funding of the payments to such developers for such tolls will come from funds in the NTTA Enterprise Fund to the extent funds are available therein. However, to the extent that funds in such Enterprise Fund are insufficient to cover such required payments, NTTA may use funds from the Capital Improvement Fund to cover such payments, which could have a material adverse effect on NTTA's ability to repay the Bonds. Any future downward trends in the percentage of total transactions constituting TollTag transactions, pursuable ZipCash transactions and/or ZipCash revenue recovery may have a material adverse effect on NTTA's ability to recover its payments for ZipCash transactions to developers under the above described TSAs and its costs to collect revenue attributable to the ZipCash transactions. See "OPERATION OF THE NTTA SYSTEM — Operations — Toll Collection" and "— Toll Collection Variance" and "TOLLING SERVICES AGREEMENTS" in APPENDIX A.

### **Risks Relating to Build America Bonds**

NTTA previously issued certain bonds under the Trust Agreement as "Build America Bonds." NTTA elected to receive a subsidy payment from United States Treasury equal to 35% of the taxable interest NTTA pays on such bonds. In order to receive the subsidy, NTTA is required to make certain filings with the Internal Revenue Service. If NTTA fails to make the required filings, it will not be eligible to receive the subsidy payments. Additionally, the proceeds of "Build America Bonds" have a number of limitations on their use. If NTTA used the proceeds of such bonds for expenditures other than capital expenditures, reasonably required reserve funds and costs of issuance, such bonds would not be eligible for the subsidy payments. Additionally, the federal government can refuse to pay subsidy payments to offset amounts owed by NTTA to the federal government. It is also possible that the subsidy payments could be reduced or eliminated as a result of a change in law. Any reduction or loss of the subsidy payments could have a material adverse effect on NTTA's ability to repay the Bonds.

When Congress failed to enact legislation to reduce the federal deficit by \$1.2 trillion, as required by the Budget Control Act of 2011, the Sequestration Transparency Act of 2012 ("STA") automatically triggered large scale cuts in the federal budget. The STA went into effect January 2, 2013. Since then, subsidy payments authorized for the issuers of Build America Bonds have been reduced by 6.2% to 7.6%. For federal fiscal year 2019, the Internal Revenue Service established a 6.2% sequestration cut for Build America Bonds, which rate will be applied from October 1, 2018 until September 30, 2019, absent intervening Congressional action. For federal fiscal year 2020, the Internal Revenue Service has established a 5.9% sequestration cut for Build America Bonds, which rate will be applied from October 1, 2019 until September 30, 2020, absent intervening Congressional action, at which time the sequestration rate is subject to change. NTTA issued its Series 2009B Bonds and Series 2010B Subordinate Lien Bonds as direct payment Build America Bonds. Since the STA went into effect, NTTA has received less than the total annual subsidy payments it was scheduled to receive, and anticipates receiving \$1,796,641 less than it is scheduled to receive in federal fiscal year 2019. NTTA calculates its debt service and debt service coverage net of the direct subsidy payments NTTA expects to receive for the Series 2009B Bonds and Series 2010B Subordinate Lien Bonds. See "PRO FORMA DEBT SERVICE REQUIREMENTS."

### **Technological and Societal Changes**

Neither NTTA nor the Traffic Engineers can predict the technological and societal changes that may affect the use of the NTTA System during the term of the Bonds. Societal changes may include, for example, the increased use of telecommuting, which could have an adverse impact on usage of the NTTA System. Other technologies or societal changes could have a similar detrimental effect on the NTTA System.

## **Changes in Law**

State and federal legislation is introduced and enacted from time to time that could have a direct impact on NTTA's financial condition or its operations. The likelihood of any such legislation being introduced or enacted cannot be predicted.

## **Future and Proposed Tax Legislation**

Tax legislation, administrative actions taken by tax authorities or court decisions, whether at the Federal or state level, may adversely affect the tax-exempt status of interest on the Bonds under Federal or state law and could affect the market price or marketability of the Bonds. Any such proposal could limit the value of certain deductions and exclusions, including the exclusion for tax-exempt interest. The likelihood of any such proposal being enacted cannot be predicted. Prospective purchasers of the Bonds should consult their own tax advisors regarding the foregoing matters.

## **Information Technology and Other Risk Factors**

NTTA is dependent on information and computing technology to conduct general business operations, including electronic toll transactions, toll collections and customer account services. These systems may be subject to disruptions or security breaches, which could materially disrupt NTTA's business operations, cause reputational damage, and/or give rise to losses or legal liability. NTTA's information technology department continually monitors these threats and has implemented practices, policies, security systems, and design features to protect the security of its information technology systems and data, including the use of redundant off-site server systems, back-up generators and firewalls. However, no assurance can be given that such measures will fully prevent potential business continuity or cybersecurity risks arising from events wholly or partially beyond NTTA's control, including electrical telecommunications outages, natural disasters, or cyber-attacks, or larger scale political events, including terrorist attacks. Any such occurrence could materially and adversely affect NTTA's operations and reputation, which could lead to decreased financial performance that insurance may not cover and may require NTTA to expend significant resources to correct the failure or disruption.

## **Replacement of Back Office Toll Collection System**

NTTA intends to replace its back office toll collection system by the end of 2020 to provide (i) enhanced and more efficient tools for customer service representatives, (ii) more robust self-service tolls and payment options for customers and (iii) a technology platform built on best practices in software and architecture, which will allow NTTA to more quickly implement new features and reduce overall system lifecycle costs. The new system is anticipated to cost \$77.8 million and is expected to be paid from the Capital Improvement Fund. Such replacement carries inherent risks, including, but not limited to, disruption of vehicle identification/transaction detection, billing and collection of tolls. The new system, as with the replacement of any system, is subject to failure and/or other significant shortcomings. Many of these factors are beyond the control of the NTTA and, should they occur, could increase costs and have a negative impact on NTTA's revenues.

## **LITIGATION**

On the date of delivery of the Bonds, NTTA will execute and deliver to the Underwriters a certificate to the effect that no litigation of any nature has been filed or is pending as of such date seeking to restrain or enjoin the issuance or delivery of the Bonds or which would affect the provisions made for their payment or security, or in any manner questions the validity of the Bonds.

As of the date of this Official Statement, NTTA is not a party to any litigation, claim or other proceeding pending or, to its knowledge, threatened, in any court, agency or other administrative body (either state or federal) which, if decided adversely to NTTA, could have a material adverse effect on the financial condition or operations of NTTA or the NTTA System.

## TAX MATTERS

### Opinion

On the date of initial delivery of the Bonds, co-bond counsel will each render an opinion with respect to the Bonds that, in accordance with statutes, regulations, published rulings and court decisions existing on the date thereof ("*Existing Law*"), (1) interest on the Bonds for federal income tax purposes will be excludable from the "gross income" of the holders thereof and (2) the Bonds will not be treated as "specified private activity bonds" the interest on which would be included as an alternative minimum tax preference item under section 57(a)(5) of the Internal Revenue Code of 1986 (the "*Code*"). Except as stated above, co-bond counsel will not express an opinion as to any other federal, state or local tax consequences of the purchase, ownership or disposition of the Bonds. See "**FORMS OF CO-BOND COUNSEL OPINION**" in **APPENDIX E**.

In rendering the opinions, co-bond counsel will rely upon (a) certain information and representations of NTTA, including information and representations contained in NTTA's federal tax certificate, (b) covenants of NTTA contained in the Trust Agreement relating to certain matters, including arbitrage and the use of the proceeds of the Bonds and the Refunded Bonds and the property financed or refinanced therewith and (c) the verification report of Public Finance Partners LLC. Failure by NTTA to observe the aforementioned representations or covenants could cause the interest on the Bonds to become includable in gross income retroactively to the date of issuance of the Bonds.

The Code and the regulations promulgated thereunder contain a number of requirements that must be satisfied subsequent to the issuance of the Bonds in order for interest on the Bonds to be, and to remain, excludable from gross income for federal income tax purposes. Failure to comply with such requirements may cause interest on the Bonds to be included in gross income retroactively to the date of issuance of the Bonds. The opinion of co-bond counsel is conditioned on compliance by NTTA with such requirements and the representations and covenants described in the previous paragraph, and co-bond counsel has not been retained to monitor compliance with these requirements subsequent to the issuance of the Bonds.

Co-bond counsel's opinion represents their legal judgment based upon their review of Existing Law and reliance on the aforementioned information, representations and covenants. Co-bond counsel's opinion is not a guarantee of a result. Existing Law is subject to change by the Congress and to subsequent judicial and administrative interpretation by the courts and the United States Department of the Treasury. There can be no assurance that Existing Law or the interpretation thereof will not be changed in a manner which would adversely affect the tax treatment of the purchase, ownership or disposition of the Bonds.

A ruling was not sought from the Internal Revenue Service by NTTA with respect to the Bonds or property financed or refinanced with the proceeds of the Bonds or the Refunded Bonds. No assurances can be given as to whether or not the Internal Revenue Service will commence an audit of the Bonds, or as to whether the Internal Revenue Service would agree with the opinions of co-bond counsel. If an audit is commenced, under current procedures the Internal Revenue Service is likely to treat NTTA as the taxpayer and the Bondholders may have no right to participate in such procedure. No additional interest will be paid upon any determination of taxability.

### **Federal Income Tax Accounting Treatment of Original Issue Discount**

The initial public offering price to be paid for one or more maturities of the Bonds may be less than the principal amount thereof or one or more periods for the payment of interest on the Bonds may not be equal to the accrual period or be in excess of one year (the "*Original Issue Discount Bonds*"). In such event, the difference between (i) the "stated redemption price at maturity" of each Original Issue Discount Bond, and (ii) the initial offering price to the public of such Original Issue Discount Bond would constitute original issue discount. The "stated redemption price at maturity" means the sum of all payments to be made on the Bonds less the amount of all periodic interest payments. Periodic interest payments are payments which are made during equal accrual periods (or during any unequal period if it is the initial or final period) and which are made during accrual periods which do not exceed one year.

Under Existing Law, any owner who has purchased such Original Issue Discount Bond in the initial public offering is entitled to exclude from gross income (as defined in section 61 of the Code) an amount of income with

respect to such Original Issue Discount Bond equal to that portion of the amount of such original issue discount allocable to the accrual period. For a discussion of certain collateral federal tax consequences, see "**Collateral Federal Income Tax Consequences**" set forth below.

In the event of the redemption, sale or other taxable disposition of such Original Issue Discount Bond prior to stated maturity, however, the amount realized by such owner in excess of the basis of such Original Issue Discount Bond in the hands of such owner (adjusted upward by the portion of the original issue discount allocable to the period for which such Original Issue Discount Bond was held by such initial owner) is includable in gross income.

Under Existing Law, the original issue discount on each Original Issue Discount Bond is accrued daily to the stated maturity thereof (in amounts calculated as described below for each six-month period ending on the date before the semiannual anniversary dates of the date of the Bonds and ratably within each such six-month period) and the accrued amount is added to an initial owner's basis for such Original Issue Discount Bond for purposes of determining the amount of gain or loss recognized by such owner upon the redemption, sale or other disposition thereof. The amount to be added to basis for each accrual period is equal to (a) the sum of the issue price and the amount of original issue discount accrued in prior periods multiplied by the yield to stated maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period) less (b) the amounts payable as current interest during such accrual period on such Original Issue Discount Bond.

The federal income tax consequences of the purchase, ownership, redemption, sale or other disposition of Original Issue Discount Bonds which are not purchased in the initial offering at the initial offering price may be determined according to rules which differ from those described above. All owners of Original Issue Discount Bonds should consult their own tax advisors with respect to the determination for federal, state and local income tax purposes of the treatment of interest accrued upon redemption, sale or other disposition of such Original Issue Discount Bonds and with respect to the federal, state, local and foreign tax consequences of the purchase, ownership, redemption, sale or other disposition of such Original Issue Discount Bonds.

### **Collateral Federal Income Tax Consequences**

The following discussion is a summary of certain collateral federal income tax consequences resulting from the purchase, ownership or disposition of the Bonds. This discussion is based on Existing Law, which is subject to change or modification, retroactively.

The following discussion is applicable to investors, other than those who are subject to special provisions of the Code, such as financial institutions, property and casualty insurance companies, life insurance companies, individual recipients of Social Security or Railroad Retirement benefits, individuals allowed an earned income credit, certain S corporations with Subchapter C earnings and profits, foreign corporations subject to the branch profits tax, taxpayers qualifying for the health insurance premium assistance credit and taxpayers who may be deemed to have incurred or continued indebtedness to purchase tax-exempt obligations.

THE DISCUSSION CONTAINED HEREIN MAY NOT BE EXHAUSTIVE. INVESTORS, INCLUDING THOSE WHO ARE SUBJECT TO SPECIAL PROVISIONS OF THE CODE, SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX TREATMENT WHICH MAY BE ANTICIPATED TO RESULT FROM RECENTLY ENACTED LEGISLATION OR THE PURCHASE, OWNERSHIP AND DISPOSITION OF TAX-EXEMPT BONDS BEFORE DETERMINING WHETHER TO PURCHASE THE BONDS.

Under section 6012 of the Code, holders of tax-exempt obligations, such as the Bonds, may be required to disclose interest received or accrued during each taxable year on their returns of federal income taxation.

Section 1276 of the Code provides for ordinary income tax treatment of gain recognized upon the disposition of a tax-exempt obligation, such as the Bonds, if such obligation was acquired at a "market discount" and if the fixed maturity of such obligation is equal to, or exceeds, one year from the date of issue. Such treatment applies to "market discount bonds" to the extent such gain does not exceed the accrued market discount of such bonds, although for this purpose, a de minimis amount of market interest is ignored. A "market discount bond" is one which is acquired by the holder at a purchase price which is less than the stated redemption price at maturity

or, in the case of a bond issued at an original issue discount, the "revised issue price" (*i.e.*, the issue price plus accrued original issue discount). The "accrued market discount" is the amount which bears the same ratio to the market discount as the number of days during which the holder holds the bond bears to the number of days between the acquisition date and the final maturity date.

### **State, Local and Foreign Taxes**

Investors should consult their own tax advisors concerning the tax implications of the purchase, ownership or disposition of the Bonds under applicable state or local laws. Foreign investors should also consult their own tax advisors regarding the tax consequences unique to investors who are not United States persons.

Subject to certain exceptions, information reports describing interest income, including original issue discount, with respect to the Bonds will be sent to each registered holder and to the Internal Revenue Service. Payments of interest and principal may be subject to backup withholding under section 3406 of the Code if a recipient of the payments fails to furnish to the payor such owner's social security number or other taxpayer identification number ("*TIN*"), furnishes an incorrect TIN, or otherwise fails to establish an exemption from the backup withholding tax. Any amounts so withheld would be allowed as a credit against the recipient's federal income tax. Special rules apply to partnerships, estates and trusts, and in certain circumstances, and in respect of Non-U.S. Holders, certifications as to foreign status and other matters may be required to be provided by partners and beneficiaries thereof.

## **UNDERWRITING**

The Underwriters for the Series 2019A Bonds have agreed, subject to certain customary conditions to delivery, to purchase the Series 2019A Bonds from NTTA at the price of \$486,229,010.27, reflecting the par amount of \$429,870,000, plus original issue premium of \$58,174,477.35 and less an underwriter's discount of \$1,815,467.08. The Underwriters for the Series 2019A Bonds will be obligated to purchase all of the Series 2019A Bonds and Series 2019B Bonds if any Series 2019A Bonds are purchased. The right of the Underwriters to receive compensation in connection with the Series 2019A Bonds is contingent upon the actual sale and delivery of the Series 2019A Bonds.

The Underwriters for the Series 2019B Bonds have agreed, subject to certain customary conditions to delivery, to purchase the Series 2019B Bonds from NTTA at the price of \$266,945,167.19, reflecting the par amount of \$222,510,000, plus original issue premium of \$45,270,050.15 and less an underwriter's discount of \$834,882.96. The Underwriters for the Series 2019B Bonds will be obligated to purchase all of the Series 2019A Bonds and Series 2019B Bonds if any Series 2019B Bonds are purchased. The right of the Underwriters to receive compensation in connection with the Series 2019B Bonds is contingent upon the actual sale and delivery of the Series 2019B Bonds.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Under certain circumstances, the Underwriters and their affiliates may have certain creditor and/or other rights against NTTA in connection with such activities. In the various course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of NTTA (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with NTTA. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Piper Jaffray & Co., one of the underwriters of the Bonds, has entered into a distribution agreement ("*Distribution Agreement*") with Charles Schwab & Co., Inc. ("*CS&Co*") for the retail distribution of certain

securities offerings, including the Bonds, at the original issue prices. Pursuant to the Distribution Agreement, CS&Co will purchase Bonds from Piper at the original issue price less a negotiated portion of the selling concession applicable to any Bonds that CS&Co sells.

## RATINGS

The Series 2019A Bonds received ratings of "A1" by Moody's and "A+" by S&P. The Series 2019B Bonds received ratings of "A2" by Moody's and "A" by S&P. An explanation of the significance of each rating may be obtained from the company furnishing the rating. The ratings reflect only the views of such companies at the time such ratings are given, and NTTA makes no representation as to the appropriateness of the ratings. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by such companies, if in the judgment of such companies, circumstances so warrant. Any such downward revision or withdrawal of any rating may have an adverse effect on the market price of the Bonds.

## LEGAL MATTERS

Legal matters incident to the authorization, issuance and sale of the Bonds are subject to approval of legality by the Attorney General of the State, and certain legal matters will be passed upon by McCall, Parkhurst & Horton L.L.P., Dallas, Texas, and Mahomes Bolden PC, Dallas, Texas, co-bond counsel to NTTA. Attached hereto as **APPENDIX E** are the forms of opinion that co-bond counsel will each render in connection with the issuance of the Series 2019A Bonds and the Series 2019B Bonds. The legal opinions will accompany the Bonds deposited with DTC or will be printed on the Bonds in the event of the discontinuance of the Book-Entry-Only System. While co-bond counsel is not passing upon and does not assume any responsibility for the accuracy, completeness or fairness of the statements contained in the Official Statement, and has not undertaken independently to verify any of the information contained herein, in its capacity as co-bond counsel, such firms have reviewed the information in this Official Statement appearing under the captions and subcaptions "**INTRODUCTION**" (excluding the information in the first, fifth and sixth paragraphs under such caption as to which no opinion will be expressed), "**PLAN OF FINANCE – The Refunding**," "**THE BONDS**," "**GENERAL INFORMATION REGARDING THE BONDS**" (excluding the information under the subcaption "**Book-Entry-Only System**," as to which no opinion will be expressed), "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS**" (excluding the information regarding outstanding obligations under the subcaptions "**Outstanding Obligations**," "**The Commercial Paper Program**," "**ISTEA Loan**" and "**The Subordinate Lien Bonds**" as to which no opinion will be expressed, and excluding, in particular, the current balances in various funds and accounts, as to which no opinion will be expressed), "**TAX MATTERS**," "**LEGAL MATTERS**" (excluding the second, third, fourth and fifth paragraphs under such caption as to which no opinion will be expressed), "**REGISTRATION AND QUALIFICATION OF BONDS FOR SALE**," "**LEGAL INVESTMENTS IN TEXAS**" and "**CONTINUING DISCLOSURE OF INFORMATION**" (excluding the information under the subcaption "**Compliance with Prior Undertakings**," as to which no opinion will be expressed) and **APPENDIX D** and such firms are of the opinion that the information contained under such captions and subcaptions is an accurate and fair description of the laws and legal issues addressed therein and, with respect to the Bonds, such information conforms to the Resolution and the Trust Agreement.

CDM Smith, the Traffic Engineers, has reviewed the information contained in "**APPENDIX A — OPERATION OF THE NTTA SYSTEM — Operations — Revenue Recovery Assumptions in Traffic and Revenue Study**" and "**TRAFFIC AND REVENUE STUDY**" and has found that such statements therein are true, correct and complete in all material respects and do not omit any material fact, which in their opinion should be included or referred to therein so as to make the information or statements made therein not misleading. CDM Smith has reviewed the 2019 T&R Study incorporated by reference herein and found that nothing has come to their attention that would cause them to believe the 2019 T&R Study is or was inaccurate in any material respect.

Atkins North America, the Consulting Engineers, have reviewed the information contained in "**ESTIMATED TOLL REVENUES, EXPENSES, OTHER INCOME AND ESTIMATED DEBT SERVICE COVERAGE**" and in "**APPENDIX A — THE NTTA SYSTEM**," "**OTHER POTENTIAL PROJECTS (ON SYSTEM AND OFF SYSTEM)**," "**THE 360 TOLLWAY**" and "**ENGINEERING REPORTS AND PROGRESS REPORTS**" and has found that such statements therein are true, correct and complete in all material

respects and do not omit any material fact, which in their opinion should be included or referred to therein so as to make the information or statements made therein not misleading.

Locke Lord LLP, counsel to NTTA, has reviewed the information contained in "**RISK FACTORS — Clean Air Non-Attainment and Conformity Risk; NEPA Environmental Litigation Risk,**" "**LITIGATION,**" "**APPENDIX A — INTRODUCTION AND OVERSIGHT,**" "**— GOVERNANCE AND MANAGEMENT,**" "**— THE NTTA SYSTEM,**" "**— OTHER POTENTIAL PROJECTS (ON-SYSTEM AND OFF-SYSTEM),**" "**— TOLLING SERVICES AGREEMENTS**" and "**— THE 360 TOLLWAY**" (other than any financial or statistical data or biographies contained therein) and has found that such statements made therein are a fair and accurate summary of the matters set forth therein and are true and correct in all material respects.

The payment of certain legal fees to co-bond counsel in connection with the issuance of the Bonds is contingent on the sale and delivery of the Bonds. Certain legal matters will be passed upon for NTTA by Locke Lord LLP, Dallas, Texas, counsel to NTTA. Certain legal matters will be passed upon for NTTA by McCall, Parkhurst & Horton L.L.P., Dallas, Texas and Mahomes Bolden PC, Dallas, Texas, as co-disclosure counsel to NTTA. The payment of certain legal fees to co-disclosure counsel in connection with the issuance of the Bonds is contingent on the sale and delivery of the Bonds. Certain legal matters will be passed upon for the Underwriters by Winstead PC and West & Associates, L.L.P., co-counsel for the Underwriters. The payment of legal fees to co-counsel for the Underwriters in connection with the issuance of the Bonds is contingent on the sale and delivery of the Bonds. In connection with the issuance of the Bonds, co-bond counsel has been engaged by, and only represents, NTTA.

#### **VERIFICATION OF MATHEMATICAL COMPUTATIONS**

Public Finance Partners LLC will deliver to NTTA, on or before the settlement date of the Bonds, its verification report indicating that it has verified the mathematical accuracy of (a) the mathematical computations of the adequacy of the maturing principal of and interest on the Federal Securities, to pay, when due, the maturing principal of, interest on and related call premium requirements, if any, of the Subseries 2010B-2 Refunded Bonds and (b) the mathematical computations of yield used by co-bond counsel to support its opinion that interest on the Bonds will be excluded from gross income for federal income tax purposes.

Public Finance Partners LLC relied on the accuracy, completeness and reliability of all information provided to it by, and on all decisions and approvals of, NTTA. In addition, Public Finance Partners LLC has relied on any information provided to it by NTTA's retained advisors, consultants or legal counsel.

The verification report or reports will be relied upon by co-bond counsel in rendering their opinions with respect to the tax-exemption of interest on the Bonds and with respect to the defeasance of the Subseries 2010B-2 Refunded Bonds.

#### **FINANCIAL STATEMENTS AND INDEPENDENT AUDITOR**

The financial statements of NTTA's North Texas Tollway Authority System, an Enterprise Fund of the North Texas Tollway Authority, as of December 31, 2018, and for the year then ended included in **APPENDIX B-1** (the "*Audited Report*") have been audited by Crowe Horwath LLP, independent auditors. Crowe Horwath LLP has not been engaged to perform and has not performed, since the date of the Audited Report, any procedures on the financial statements addressed in such Audited Report.

The unaudited financial statements of the NTTA's North Texas Tollway Authority System, an Enterprise Fund of the North Texas Tollway Authority, as of April 30, 2019, and for the four months then ended, are included in **APPENDIX B-2** to this Official Statement. Crowe Horwath LLP has not been engaged to perform and has not performed any procedures on the unaudited financial statements.



## **PROFESSIONAL ENGINEERS**

CDM Smith, the traffic engineers for the NTTA System, prepared the 2019 T&R Study to estimate traffic and toll revenues for the NTTA System. The 2019 T&R Study is incorporated by reference herein and has been incorporated by reference in this Official Statement in reliance on CDM Smith's expertise as professional consultants and CDM Smith has consented to its inclusion in this Official Statement.

## **CO-FINANCIAL ADVISORS**

Hilltop Securities Inc., Estrada Hinojosa & Co., Inc. and RSI Group, LLC are acting as Co-Financial Advisors to NTTA. Hilltop Securities Inc., Estrada Hinojosa & Co., Inc. and RSI Group, LLC in their respective capacities, have not verified and do not assume any responsibility for the information, covenants, and representations contained in this Official Statement or any of the legal documents with respect to the federal income tax status of the Bonds, or the possible impact of any present, pending or future actions taken by any legislative or judicial bodies.

## **REGISTRATION AND QUALIFICATION OF BONDS FOR SALE**

The sale of the Bonds has not been registered under the Federal Securities Act of 1933, as amended, in reliance upon the exemption provided thereunder by Section 3(a)(2); and the Bonds have not been qualified under the Securities Act of Texas in reliance upon various exemptions contained therein; nor have the Bonds been qualified under the securities acts of any jurisdiction. NTTA assumes no responsibility for qualification of the Bonds under the securities laws of any jurisdiction in which the Bonds may be sold, assigned, pledged, hypothecated or otherwise transferred. This disclaimer of responsibility for qualification for sale or other disposition of the Bonds shall not be construed as an interpretation of any kind with regard to the availability of any exemption from securities registration provisions.

## **LEGAL INVESTMENTS IN TEXAS**

Section 1201.041 of the Public Security Procedures Act (Chapter 1201, Texas Government Code) provides that the Bonds are negotiable instruments, investment securities governed by Chapter 8, Texas Business and Commerce Code and legal and authorized investments for insurance companies, fiduciaries, and trustees and for the sinking funds of municipalities or other political subdivisions or public agencies of the State. With respect to investment in the Bonds by municipalities or other political subdivisions or public agencies of the State, the Public Funds Investment Act, Chapter 2256, Texas Government Code, requires that the Bonds be assigned a rating of at least "A" or its equivalent as to investment quality by a national rating agency. In addition, various provisions of the Texas Finance Code provide that, subject to a prudent investor standard, the Bonds are legal investments for state banks, savings banks, trust companies with at least \$1 million of capital and savings and loan associations. The Bonds are eligible to secure deposits of any public funds of the State, its agencies and its political subdivisions, and are legal security for those deposits to the extent of their market value. No review by NTTA has been made of the laws in other states to determine whether the Bonds are legal investments for various institutions in those states.

NTTA makes no representation that the Bonds will be acceptable to banks, savings and loan associations or public entities for investment purposes or to secure deposits of public funds. NTTA has made no investigation of other laws, regulations or investment criteria that might apply to or otherwise limit the availability of the Bonds for investment or collateral purposes. Prospective purchasers are urged to carefully evaluate the investment quality of the Bonds and as to the acceptability of the Bonds for investment or collateral purposes.

## **CONTINUING DISCLOSURE OF INFORMATION**

In the Trust Agreement, NTTA has made the following agreement for the benefit of the holders and beneficial owners of the Bonds. NTTA is required to observe the agreement for so long as it remains obligated to advance funds to pay the Bonds. Under the agreement, NTTA will be obligated to provide certain updated financial information and operating data annually, and timely notice of specified events, to the MSRB.

## Annual Reports

NTTA will provide certain updated financial information and operating data to the MSRB. The information to be updated includes (i) either as part of its comprehensive annual financial reports, or by notice referencing a recently released official statement or other offering document of NTTA, all quantitative financial information and operating data with respect to NTTA and the NTTA System of the general type included in this Official Statement under the captions or subcaptions "**SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Outstanding Obligations,**" "**PRO FORMA DEBT SERVICE REQUIREMENTS,**" "**ESTIMATED TOLL REVENUES, EXPENSES, OTHER INCOME, AND ESTIMATED DEBT SERVICE COVERAGE,**" "**OPERATION OF THE NTTA SYSTEM — Operations — General**" and "**— Toll Collection Variance**" in APPENDIX A and "**OTHER FINANCIAL INFORMATION — Historical Traffic and Net Revenues**" and "**— Historical Debt Service Coverage**" in APPENDIX A, and updates to the NTTA System toll rate schedules in APPENDIX C "**NTTA SYSTEM TOLL RATE SCHEDULES,**" (ii) a copy of the progress reports required under the Trust Agreement, and (iii) the annual financial statements in APPENDIX B-1 "**COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE NORTH TEXAS TOLLWAY AUTHORITY SYSTEM, AN ENTERPRISE FUND OF THE NORTH TEXAS TOLLWAY AUTHORITY, FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018.**" NTTA will update and provide this information within six months after the end of each Fiscal Year for the NTTA System.

NTTA may provide updated information in full text or may incorporate by reference certain other publicly available documents, as permitted by SEC Rule 15c2-12 (the "*Rule*"). Any financial statements to be provided will be audited, if NTTA commissions an audit and it is complete by the required time. If audited financial statements are not available by the required time, NTTA will provide unaudited financial information by the required time and will provide audited financial statements when and if the audited financial statements become available. Any such financial statements will be prepared in accordance with generally accepted accounting principles or such other accounting principles as NTTA may be required to employ from time to time pursuant to state law or regulation.

The current Fiscal Year end for the NTTA System is December 31. Accordingly, NTTA must provide updated information by June 30 of each year, unless NTTA changes the Fiscal Year for the NTTA System. If NTTA changes the Fiscal Year for the NTTA System, it will notify the MSRB of the change (and of the date of the new Fiscal Year end) prior to the next date by which NTTA would otherwise be required to provide financial information and operating data as described above.

## Event Notices

NTTA will also provide timely notices of certain events to the MSRB. NTTA will provide notice of any of the following events with respect to the Bonds in a timely manner (but not in excess of ten business days after the occurrence of the event): (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax-exempt status of the Bonds, or other material events affecting the tax-exempt status of the Bonds; (7) modifications to rights of holders of the Bonds, if material; (8) Bond calls, if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Bonds, if material; (11) ratings changes; (12) bankruptcy, insolvency, receivership or similar event of NTTA; (13) the consummation of a merger, consolidation, or acquisition involving NTTA or the sale of all or substantially all of the assets of NTTA, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; (14) the appointment of a successor or additional trustee or the change of the name of a trustee, if material; (15) incurrence of a Financial Obligation (as defined below) of NTTA, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of NTTA, any of which affect security holders, if material; and (16) default, event of acceleration, termination event, modification of terms or similar events under the terms of a Financial Obligation of NTTA, any of which reflect financial difficulties. In addition, NTTA will provide timely notice of any failure by NTTA to provide information, data or financial statements in accordance with its agreement described above under "*— Annual Reports.*"

For these purposes, (A) any event described in (12) in the immediately preceding paragraph is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for NTTA in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of NTTA, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of NTTA; and (B) the term "Financial Obligation" means a: (1) debt obligation; (2) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (3) guarantee of (1) or (2). Additionally, the term "Financial Obligation" shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

### **Availability of Information from the MSRB**

NTTA has agreed to provide the foregoing information only to the MSRB. The information will be provided to the MSRB, in an electronic format as prescribed by the MSRB, and will be available to Bondholders through the MSRB's internet website at [www.emma.msrb.org](http://www.emma.msrb.org).

### **Limitations and Amendments**

NTTA has agreed to update information and to provide notices of certain events only as described above. NTTA has not agreed to provide other information that may be relevant or material to a complete presentation of its financial results of operations, condition or prospects or agreed to update any information that is provided, except as described above. NTTA makes no representation or warranty concerning such information or concerning its usefulness to a decision to invest in or sell the Bonds at any future date. NTTA disclaims any contractual or tort liability for damages resulting in whole or in part from any breach of its continuing disclosure agreement or from any statement made pursuant to its agreement, although holders of Bonds may seek a writ of mandamus to compel NTTA to comply with its agreement.

NTTA may amend, supplement or repeal its continuing disclosure agreement to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status or type of operations of NTTA, but only if (i) the agreement, as amended, would have permitted an underwriter to purchase or sell Bonds in the primary offering of the Bonds in compliance with the Rule, taking into account any amendments or interpretations of the Rule to the date of such amendment, as well as such changed circumstances and (ii) either (a) the holders of a majority in aggregate principal amount of the outstanding Bonds consent to the amendment, or (b) any person unaffiliated with NTTA (such as nationally recognized bond counsel) determines that the amendment will not materially impair the interest of the holders and beneficial owners of the Bonds. NTTA may also amend or repeal its continuing disclosure agreement if the SEC amends or repeals the applicable provisions of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, but only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling the Bonds in the primary offering of the Bonds. If NTTA so amends its continuing disclosure agreement, it will include with any amended financial information or operating data next provided in accordance with such agreement an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of financial information or operating data so provided.

### **Compliance with Prior Undertakings**

During the last five years, NTTA has to its knowledge and belief complied materially with all continuing disclosure agreements made by it in accordance with the Rule. However, NTTA has had several instances of noncompliance under certain continuing disclosure agreements during the last five years. Bonds associated with certain CUSIPs were inadvertently omitted from particular continuing disclosure filings made by NTTA. NTTA corrected this clerical error. NTTA did not file notices of certain rating changes occurring during the last five years for various credit enhancement providers supporting previously issued obligations.

Most of the operating data required to be disclosed under NTTA's continuing disclosure undertakings may be found in NTTA's comprehensive annual financial reports filed on an annual basis. Operating data disclosures

comprised of (i) forward-looking information for the Special Projects System for estimated toll revenues, expenses, other income and estimated debt service coverage, was not included in NTTA's annual filings for the Special Project System for fiscal year ending in 2014, and (ii) information regarding the "maximum available amount" and "aggregate amount of eligible costs" relating to the Special Projects System was not included in NTTA's annual filings for the Special Project System for fiscal years ending in 2014 and 2016, in all cases because the information remained unchanged for the relevant reporting period from previously filed information.

#### **OTHER MATTERS**

The financial data and other information contained herein have been obtained from NTTA's records, financial statements, and other sources that are believed to be reliable. There is no guarantee that any of the assumptions or estimates contained herein will be realized. All of the summaries do not purport to be complete statements of such provisions and reference is made to such documents for further information. Reference is made to original documents in all respects. Copies may be obtained from NTTA.

## SCHEDULE I

### SCHEDULE OF REFUNDED BONDS

Dallas North  
Tollway System Variable Rate  
Revenue Bonds,  
Series 2005C

Final Stated Maturity	Interest Rate	Principal Amount Outstanding (\$)	Principal Amount Refunded (\$)	Redemption Price (%)	Redemption Date	CUSIP <sup>(1)</sup>
1/1/2020	5.250%	2,325,000	2,325,000	100%	8/16/2019	662858GB9
1/1/2021	5.375%	4,975,000	4,975,000	100%	8/16/2019	662858GC7
1/1/2022	6.250%	5,310,000	5,310,000	100%	8/16/2019	662858GD5
1/1/2023	6.000%	5,670,000	5,670,000	100%	8/16/2019	662858GE3
1/1/2025	6.000%	12,870,000	12,870,000	100%	8/16/2019	662858GF0

First Tier Tax-Exempt Current Interest  
Revenue Bonds,  
Series 2009A

Final Stated Maturity	Interest Rate	Principal Amount Outstanding (\$)	Principal Amount Refunded (\$)	Redemption Price (%)	Redemption Date	CUSIP <sup>(1)</sup>
1/1/2024	6.250%	10,290,000	10,290,000	100%	8/16/2019	66285WTN6
1/1/2028	6.100%	5,785,000	5,785,000	100%	8/16/2019	66285WTH9
1/1/2028	6.000%	23,085,000	23,085,000	100%	8/16/2019	66285WTJ5
1/1/2039	6.250%	30,705,000	30,705,000	100%	8/16/2019	66285WTG1

First Tier Current Interest  
Revenue Refunding Bonds,  
Series 2009C

Final Stated Maturity	Interest Rate	Principal Amount Outstanding (\$)	Principal Amount Refunded (\$)	Redemption Price (%)	Redemption Date	CUSIP <sup>(1)</sup>
1/1/2044	5.250%	170,730,000	170,730,000	100%	8/16/2019	66285WFL5

First Tier Variable Rate  
Revenue Refunding Bonds,  
Series 2014C

Final Stated Maturity	Interest Rate	Principal Amount Outstanding (\$)	Principal Amount Refunded (\$)	Redemption Price (%)	Redemption Date	CUSIP <sup>(1)</sup>
1/1/2038	Variable	223,895,000	223,895,000	100%	8/15/2019	66285WLV6

Subordinate Lien  
Taxable Revenue Bonds, Subseries  
2010B-2 (Build America Bonds – Direct Payment)

Final Stated Maturity	Interest Rate	Principal Amount Outstanding (\$)	Principal Amount Refunded (\$)	Redemption Price (%)	Redemption Date	CUSIP <sup>(1)</sup>
2/1/2030	8.910%	260,000,000	260,000,000	100%	2/1/2020	66285WFS0

<sup>(1)</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein are provided by CUSIP Global Services managed by S&P Global Market Intelligence on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Global Services. CUSIP numbers have been assigned by an independent company not affiliated with NTTA or the Underwriters and are included solely for the convenience of the owners of the Bonds. None of NTTA, the Co-Financial Advisors or the Underwriters is responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Bonds or as indicated above. The CUSIP number for a specific maturity is subject to being changed after the execution and delivery of the Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of the Bonds.

[THIS PAGE INTENTIONALLY LEFT BLANK]

**APPENDIX A**

**THE NORTH TEXAS TOLLWAY AUTHORITY**

## TABLE OF CONTENTS

THE NORTH TEXAS TOLLWAY AUTHORITY .....	1
INTRODUCTION AND OVERSIGHT .....	1
Introduction .....	1
Oversight by Member Counties .....	1
GOVERNANCE AND MANAGEMENT .....	1
The Board of Directors .....	1
Key Staff Members .....	2
THE NTTA SYSTEM .....	4
General .....	4
Dallas North Tollway .....	4
President George Bush Turnpike .....	4
President George Bush Turnpike Eastern Extension .....	5
Sam Rayburn Tollway .....	5
President George Bush Turnpike Western Extension .....	6
Chisholm Trail Parkway .....	7
Mountain Creek Lake Bridge .....	7
Addison Airport Toll Tunnel .....	8
Lewisville Lake Toll Bridge .....	8
Multi-Year NTTA System Capital Plan .....	8
OPERATION OF THE NTTA SYSTEM .....	9
Introduction .....	9
Electronic Tolling .....	9
Operations .....	9
OTHER POTENTIAL PROJECTS (ON-SYSTEM AND OFF-SYSTEM) .....	14
General .....	14
Local Primacy .....	14
TOLLING SERVICES AGREEMENTS .....	15
General .....	15
IH 635 Tolling Services Agreement .....	15
NTE Segment 1/2W Tolling Services Agreement .....	16
NTE Segment 3A/3B/3C Tolling Services Agreement .....	16
Regional Tolling Services Agreement .....	16
THE 360 TOLLWAY .....	16
General .....	16
Project Agreement .....	16
Financial Backstop Agreement .....	17
Reverter and Nonrecourse .....	17
360 Tollway Revenues Do Not Secure Bonds .....	17
MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS .....	18
General .....	18
Highlights of the NTTA System as of and for the Four-Month Period Ending April 30, 2019 .....	18
Net Position .....	19
Summary of Operations .....	20
Investments .....	21
Revenues by Type .....	21
Revenues Compared to Estimates .....	21
Capital Assets .....	21
Long-Term Debt .....	21
CURRENT AND HISTORICAL INFORMATION .....	21
NTTA System Toll Rate Schedule .....	21
OTHER FINANCIAL INFORMATION .....	22
Historical Traffic and Net Revenues .....	22
Historical Debt Service Coverage .....	22
Pension Plans and Other Post-Employment Benefits .....	22
TRAFFIC AND REVENUE STUDY .....	23
INCORPORATION BY REFERENCE .....	28
ENGINEERING REPORTS AND PROGRESS REPORTS .....	28
INVESTMENTS .....	28



# THE NORTH TEXAS TOLLWAY AUTHORITY

## INTRODUCTION AND OVERSIGHT

### Introduction

The North Texas Tollway Authority ("*NTTA*") is a regional tollway authority governed by Chapter 366 of the Texas Transportation Code (the "*NTTA Act*") and a political subdivision of the State of Texas (the "*State*"). The *NTTA Act* authorizes *NTTA* to acquire, construct, maintain, repair and operate turnpike projects at locations within its jurisdiction and to issue bonds and other obligations for the purpose of paying all or any part of the cost of a turnpike project. *NTTA* serves Collin, Dallas, Denton and Tarrant Counties (the "*Member Counties*") and Ellis and Johnson Counties (together with the Member Counties, the "*Project Counties*").

*NTTA*'s Board of Directors (the "*Board*") adopted a mission statement for *NTTA* "to provide a safe and reliable toll road system, increase value and mobility options for our customers, operate *NTTA* in a businesslike manner, protect our bondholders and partner to meet our region's growing need for transportation infrastructure."

*NTTA* came into existence on September 1, 1997, as the successor to the Texas Turnpike Authority (the "*TTA*"), an agency of the State that was created in 1953. At the time of *NTTA*'s creation, *NTTA* assumed all obligations of the *TTA* related to the system of toll roads then owned and operated by the *TTA* and *NTTA* took ownership of such system of toll roads. *NTTA* currently owns and operates the Dallas North Tollway (the "*DNT*"), the Addison Airport Toll Tunnel (the "*AATT*"), the President George Bush Turnpike (the "*PGBT*"), the President George Bush Turnpike Eastern Extension (the "*PGBT EE*"), the Mountain Creek Lake Bridge (the "*MCLB*"), the Lewisville Lake Toll Bridge (the "*LLTB*"), the President George Bush Turnpike Western Extension (the "*PGBT WE*"), the Chisolm Trail Parkway (the "*CTP*") and the Sam Rayburn Tollway, which will revert to TxDOT on September 1, 2058 (the "*SRT*" and, collectively with the foregoing toll roads, the "*NTTA System*").

*NTTA* also owns and operates a portion of State Highway 360 (the "*360 Tollway*") as a stand-alone toll project that is not a part of the *NTTA System*. **The Bonds are not secured by the revenues of the 360 Tollway or any agreements relating to the 360 Tollway.**

### Oversight by Member Counties

Under the *NTTA Act*, *NTTA* is required to issue, in each even-numbered year, a strategic plan for its operations covering the next five fiscal years. The strategic plan must contain information specified by the commissioners courts of the Member Counties.

By June 30 of each year, *NTTA* must file with the commissioners courts of the Member Counties a report describing all turnpike revenue bond issuances anticipated by *NTTA* during the coming year, the financial condition of *NTTA*, project schedules for all *NTTA* projects and the status of *NTTA*'s performance under its most recent strategic plan. If requested by the commissioners court of a Member County, *NTTA* is required to present the report to the commissioners, answer questions and take comments from the commissioners.

*NTTA* is required to notify each Member County's commissioners court by the 90th day before the date of issuance of revenue bonds.

*NTTA* is in compliance with the foregoing requirements.

## GOVERNANCE AND MANAGEMENT

### The Board of Directors

*NTTA* is governed by a nine-member Board of Directors. One of the directors is appointed by the Governor of Texas. Such director must be from a county outside of, but adjacent to, one of the Member Counties. The commissioners court of each Member County appoints two directors to the Board. See "**NTTA BOARD, ADMINISTRATION, CONSULTANTS AND ADVISORS**" in the forepart to this Official Statement for information regarding the current Board membership. Directors serve staggered two-year terms, may be reappointed to the Board and remain in office until a successor has been appointed and assumes the office.

If the Board approves a petition by a county adjacent to a Member County to join *NTTA*, the Board will be enlarged by one seat. Such seat is to be filled by appointment of the county commissioners of the new county.

If a non-Member County has an *NTTA* turnpike project within its borders, that county automatically joins *NTTA* on the date that (i) electronic toll collections within that county account for at least 4% of all of *NTTA*'s

electronic toll collections and (ii) the population of that county is at least 4% of the aggregate population of the Member Counties. If such a county joins NTTA, the Board will be enlarged by one seat, to be filled by appointment of the county commissioners of such county.

The Board appoints an Executive Director who is responsible for day-to-day operations of NTTA, including general management, hiring and termination of employees and other duties described in NTTA's bylaws.

## Key Staff Members

Name	Position	Current Position Since	At NTTA Since
James Hofmann	CEO/Executive Director	March 2019	May 2013
Horatio Porter	Chief Financial Officer/Assistant Executive Director of Finance	May 2013	May 2013
Dena DeNooyer Stroh	General Counsel/Assistant Executive Director of Legal Services	March 2015	March 2015
Elizabeth Mow	Assistant Executive Director of Infrastructure	June 2012	May 2008
Sabu Stephen	Interim Assistant Executive Director of Operations	January 2019	September 2014
Magdalena M. Brady	Director of Internal Audit	March 2008	March 2008
Lorelei Griffith	Secretary of the Board	June 2013	November 2001

Set forth below are biographies of certain key staff members of NTTA:

*JAMES HOFMANN, CEO/Executive Director.* Effective March 20, 2019, Mr. Hofmann became CEO/Executive Director, where he oversees the operations of the NTTA. He previously served as the Assistant Executive Director of Operations for NTTA from May 2013 until December 2018, overseeing NTTA's customer service, information technology and human resources departments. In July 2018, Mr. Hofmann was appointed Deputy Executive Director and, in January 2019, he became interim CEO/Executive Director.

Mr. Hofmann first joined NTTA in 2005 as director of information technology. In October 2006, he was named NTTA's director of business solutions. Mr. Hofmann also worked with NTTA in consulting and interim roles, including as interim assistant director of information technology and as a software project manager.

Mr. Hofmann left NTTA in August 2007 to return to the private sector, serving as a consultant and project manager for HNTB on various ventures related to the tolling and highway industry. His experience includes work with public-private partnerships, intergovernmental negotiations and business process improvements. Mr. Hofmann served as associate vice president for HNTB, overseeing programs and projects for many of the firm's largest clients. Mr. Hofmann returned to NTTA in 2013.

Mr. Hofmann earned a Bachelor of Science degree in science from Texas A&M University and a Master of Science Degree from the University of Utah.

*HORATIO PORTER, Chief Financial Officer/Assistant Executive Director of Finance.* Mr. Porter joined NTTA as Chief Financial Officer/Assistant Executive Director of Finance in May 2013. He oversees NTTA's finance, procurement, business diversity and treasury management departments. His responsibilities include assessing and mitigating financial risks to NTTA, planning financial strategies and ensuring compliance with federal, state and local regulatory laws. Mr. Porter also serves as NTTA's Treasurer.

Prior to joining NTTA, Mr. Porter oversaw an annual operating budget of more than \$1.4 billion as the City of Fort Worth's Chief Financial Officer. He also managed Fort Worth's \$1.8 billion debt portfolio. He previously served as Fort Worth's budget officer and developed the city's five-year financial forecast.

Before moving into governmental finance, Mr. Porter spent almost 15 years in various financial and accounting roles in the private sector, including serving as assistant vice president/officer for AmeriCredit (now GM Financial), as a manager of financial planning and analysis for FedEx and as an auditor for Coopers & Lybrand.

Mr. Porter is a licensed Certified Public Accountant and holds a bachelor's degree in accounting and a Master of Business Administration degree in finance, each from Texas Christian University.

*DENA DENOYER STROH, General Counsel/Assistant Executive Director of Legal Services.* As General Counsel, Ms. Stroh is responsible for a wide variety of legal work related to NTTA, including reviewing and negotiating contracts, litigation management, real estate matters, data security, procurement, intellectual property, collections and employment law issues. Additionally, Ms. Stroh provides legal advice to the Board, creates and reviews internal NTTA policies and procedures, and reviews NTTA's legal financing documents. She also serves as NTTA's Ethics Officer.

Ms. Stroh has almost 20 years of legal experience. Prior to joining NTTA, she served as General Counsel and Corporate Secretary of Murchison Oil and Gas, Inc. for three years and was responsible for all legal issues affecting the company including contracts, regulatory, land, structuring, corporate governance, human resources, compliance, insurance and other matters. Previously, Ms. Stroh was a partner at Gruber Hurst Johansen Hail Shank, LLP where she handled a wide range of commercial litigation matters and appeals. Ms. Stroh also worked at Carrington, Coleman, Sloman, & Blumenthal, LLP, where she became a partner and handled complex civil litigation in both state and federal court.

Ms. Stroh earned a Bachelor of Arts degree in psychology from Yale University and a Juris Doctor degree from Southern Methodist University, Dedman School of Law, where she graduated cum laude.

*ELIZABETH MOW, P.E., Assistant Executive Director of Infrastructure.* Ms. Mow leads the project delivery, maintenance and system and incident management departments, all in support of the planning, design, construction, maintenance and operation of NTTA's approximately 1,073 lane miles of toll roads and non-tolled service roads.

Ms. Mow joined NTTA in 2008 as the director of project delivery. In this role, she was responsible for directing the day-to-day activities of the \$4 billion Corridor Expansion and Capital Improvement Program from the planning stage through construction on all new turnpike and capital improvement projects.

Ms. Mow has more than 20 years of professional experience in the field of engineering and management. She is experienced in all phases of program delivery, including the development of long- and short-range planning, project development and the National Environmental Policy Act approval process, project management, design, right-of-way acquisition, environmental permitting, utility coordination, construction contract administration and construction inspection.

Ms. Mow graduated from the University of Toledo with a Bachelor of Science degree in civil engineering and is a licensed Professional Engineer in the State.

*SABU STEPHEN, Interim Assistant Executive Director of Operations.* Mr. Stephen is the interim Assistant Executive Director of Operations overseeing customer service, information technology ("IT") and human resources departments. Mr. Stephen joined NTTA in 2014 as the Director of Information Technology. His responsibilities in that role included management of NTTA's transition to a new back-office system and the organization's business applications, roadway system operations and support. During his time as the Director of Information Technology, Mr. Stephen created a formal division to manage IT projects and developed and launched a five-year strategic IT roadmap that aligned the department's objectives with NTTA's strategic plan and goals.

Mr. Stephen has expertise in budgeting, management and strategic planning as well as more than 25 years of IT experience. He is also an active member of OmniAir Consortium, the leading industry association promoting tolling interoperability and certification for connected vehicles, intelligent transportation systems and transportation payment systems. Mr. Stephen was recently named a board member of the consortium.

Before joining the NTTA team, Mr. Stephen served as the Director of Information Technology operation and services at Overhead Door Corporation in Lewisville, Texas.

He earned a Bachelor's degree in economics from Bangalore University in Bangalore, India, and is a graduate of the National Institute of Information Technology where he studied computer systems.

*MAGDALENA M. BRADY, CPA, CIA, Internal Audit Director.* Ms. Brady serves as the Internal Audit Director for NTTA and has over 25 years of audit experience. Ms. Brady is responsible for planning and performing audits and business process reviews to improve the relevance, reliability, control and timeliness of information being reported to executive management of NTTA. Ms. Brady manages the external auditor's audit process and interacts with all levels of management. In addition, Ms. Brady is responsible for operational, compliance, special projects and internal control reviews and recommendations for best practices. Ms. Brady reports to the Finance, Audit and Administration Committee of the Board.

Prior to joining NTTA, Ms. Brady worked for public companies and professional services firms in similar internal audit capacities, including the director of internal audit for Friedman's Inc. where she established the company's internal audit department. Ms. Brady has been a subject matter expert on internal audit issues such as Sarbanes-Oxley and has provided extensive training both internally and externally.

Ms. Brady graduated from the University of North Texas ("UNT") with a Bachelor of Science degree and Master of Science degree in accounting. She is a committee member of the Dallas Chapter of the Institute of Internal Auditors and chair of the UNT Internal Audit Advisory Board.

*LORELEI GRIFFITH, Secretary to the Board.* Ms. Griffith previously served as Assistant Secretary to the Board from September 2007 to May 2013 after initially serving as Executive Assistant to the Executive Director for six years.

## THE NTTA SYSTEM

### General

NTTA operates and maintains the NTTA System, which consists of the DNT, the PGBT, the PGBT EE, the SRT (which will revert to TxDOT on September 1, 2058), the PGBT WE, the CTP, the MCLB, the AATT and the LLTB. The NTTA System also includes such other additional extensions, expansions, improvements and enlargements to the NTTA System as may be designated by the Board in the future.

The PGBT WE and CTP were incorporated into the NTTA System on November 1, 2017. Prior to the incorporation, the PGBT WE and the CTP comprised a separate system of tollways of NTTA's designated the Special Projects System (the "*Special Projects System*").

The aggregate average daily revenue vehicle transactions on the NTTA System were approximately 2,200,691 in Fiscal Year 2017 and 2,267,426 in Fiscal Year 2018. The NTTA System has approximately 994.5 lane miles of roads. Presented below are descriptions of the nine components of the NTTA System including Fiscal Year 2017 and Fiscal Year 2018 average revenue vehicle transactions per day for each component of the NTTA System.

### Dallas North Tollway

The DNT is a limited access tollway providing a connection for motorists between downtown Dallas and cities in northern Dallas and southern Collin and Denton Counties. It is a six- to eight-lane limited access expressway passing through or along the cities of Dallas, Highland Park, University Park, Addison, Farmers Branch, Plano and Frisco and is approximately 31 miles in length with approximately 195 lane miles of toll roads. The first section of the DNT opened to traffic in June 1968. The DNT connects with major traffic arteries in the areas it serves: IH 35E (Stemmons Freeway), Loop 12, IH 635, Belt Line Road, Frankford Road, the PGBT, Park Boulevard, Legacy Drive, the SRT, FM 2934 (Eldorado Parkway) and US 380. The DNT's average revenue vehicle transactions per day were approximately 705,255 in Fiscal Year 2017 and 730,867 in Fiscal Year 2018.

In September 2008, the Board approved the schematic and environmental assessment for the 6-mile, six main lane extension of the DNT from US 380 in Collin County north to FM 428 (the "*DNT Extension Phase 4A*"). Collin County's existing two-lane road opened to traffic in October 2008 and will serve as the northbound service road for the DNT Extension Phase 4A. Collin County began construction in 2018 on the southbound service road. The construction of the main lanes by NTTA is expected to start in 2022. Also part of DNT Extension Phase 4A are main lane overpasses over US 380. Design is underway on the overpasses and construction is planned to start by 2020.

An 8-mile extension of the DNT northward from FM 428 to the Collin/Grayson county line (the "*DNT Extension Phase 4B*") has also been approved by the Board. The DNT Extension Phase 4B is for a limited access toll road with six main lanes and four service road lanes. NTTA has completed the environmental documentation and schematic development stage for DNT Extension Phase 4B. Denton County has committed \$32 million to fund the southbound frontage road for DNT Extension Phase 4B. NTTA began design of the project in December 2014 and anticipates construction to start in early 2020.

NTTA intends to add a fourth lane in each direction to the DNT between the SRT and US 380, with environmental and design work through 2021 and construction beginning in 2022.

### President George Bush Turnpike

The PGBT is the northern portion of an outer loop around the Dallas Metropolitan Area and was opened in its entirety to traffic in September 2005. The PGBT runs from West Belt Line Road in Irving to SH 78 in Garland, a distance of approximately 30 miles, with approximately 209 lane miles of toll roads and 4 lane miles of non-tolled service roads. It passes through seven cities and three counties and connects with US 75 (Central Expressway), the DNT, IH 35E and IH 635. It also provides an alternative route to the Dallas-Fort Worth International Airport. Average revenue vehicle transactions per day on the PGBT were approximately 666,611 in Fiscal Year 2017 and 669,145 in Fiscal Year 2018.

NTTA is adding a fourth lane to the main lanes in each direction along the entire length of the PGBT to increase capacity and improve the flow of traffic. Construction on the first phases of the project between DNT and Renner Road was complete in November 2016 and from Renner Road to Highway 78 in late 2018. Construction on all remaining phases is expected to be completed in late 2021.

NTTA has included in its long-range plan an 11.2 mile extension from PGBT EE at I-30 to I-20 (the "*PGBT East Branch*"). TxDOT is advancing the environmental and planning and NTTA anticipates beginning right-of-way acquisition and design in 2021. No construction dates have been determined.

NTTA intends to connect the south terminus of PGBT WE with the north terminus of the 360 Tollway (the "*PGBT/360 Tollway Connector*"), and will begin planning in 2019 with estimated design anticipated to begin in 2023.

## **President George Bush Turnpike Eastern Extension**

### *General Information*

The PGBT EE is an extension of the PGBT from SH 78 east and south to IH 30 and is approximately 10 miles in length with approximately 59 lane miles of toll roads. The PGBT EE passes through the cities of Dallas, Garland, Sachse and Rowlett in eastern Dallas County and includes a one-mile bridge over Dallas' Lake Ray Hubbard. The PGBT EE opened to traffic in its entirety in December 2011. The PGBT EE's average revenue vehicle transactions per day were approximately 100,286 in Fiscal Year 2017 and 100,819 in Fiscal Year 2018. The PGBT EE was developed, financed and constructed and is operated by NTTA under a Construction, Operation and Maintenance Agreement (the "*PGBT EE Project Agreement*") dated December 5, 2007, as amended, between NTTA and TxDOT.

### *PGBT EE Project Agreement*

**General.** The PGBT EE Project Agreement contains the representations, commitments and obligations of NTTA and TxDOT related to the development, financing, design, construction, operation and maintenance of the PGBT EE. TxDOT acknowledges its approval of and support for the financing, design, construction, operation and maintenance by NTTA of the PGBT EE in perpetuity as a turnpike project pursuant to the NTTA Act.

**Operations and Maintenance.** NTTA operates and maintains the main lanes on the PGBT EE and associated right-of-way in accordance with prescribed standards. TxDOT is responsible, at NTTA's expense, for operating and maintaining the 29 lane miles of non-tolled service roads on the PGBT EE.

**Revenue Sharing.** NTTA shares revenue with TxDOT as set forth in the PGBT EE Project Agreement through a supplemental toll collected by NTTA and held in trust for TxDOT. The supplemental toll is equal to 20% of the publicly announced toll at the TollTag transaction rate. **Revenues from the supplemental toll are not Pledged Revenues of the NTTA System and are not pledged to the payment of the Bonds.** See "**NTTA SYSTEM TOLL RATE SCHEDULES**" in **APPENDIX C**.

**Toll Rates.** The PGBT EE Project Agreement sets forth projected toll rates for the PGBT EE for the years 2009 through 2061. The toll rate schedule for the PGBT EE set forth in **APPENDIX C** hereto complies with the PGBT EE Project Agreement.

## **Sam Rayburn Tollway**

### *General Information*

The SRT is a toll road in Collin, Dallas and Denton Counties extending northeasterly from SH 121 Business in Denton County to US 75 in Collin County, and is approximately 26 miles in length with approximately 154 lane miles of toll roads and 154 lane miles of non-tolled service roads. The SRT serves as a northeast-southwest traffic artery between IH 35E and US 75 and is an artery to the Dallas-Fort Worth International Airport. The SRT opened in its entirety to traffic in November 2011. The SRT's average vehicle transactions per day were approximately 435,489 in Fiscal Year 2017 and 458,258 in Fiscal Year 2018. The SRT was developed, financed and constructed and is operated by NTTA under a Project Agreement (the "*SRT Project Agreement*") dated October 18, 2007, as amended, between NTTA and TxDOT.

On September 1, 2058, NTTA's interests in the SRT will revert to TxDOT.

### *SRT Project Agreement*

**General.** The SRT Project Agreement contains the representations, commitments and obligations of NTTA and TxDOT related to the development, financing, design, construction, operation, maintenance and reversion to

TxDOT of the SRT. TxDOT acknowledges its approval of and support for the financing, design, construction, operation and maintenance by NTTA of the SRT as a turnpike project pursuant to the NTTA Act.

Capacity Improvements. NTTA is required to make capacity improvements to the SRT if certain minimum required levels of traffic flow are not maintained. NTTA is currently adding a fourth main lane in each direction. Construction began in late 2018 and completion is expected in late 2021.

Operations and Maintenance. NTTA operates and maintains the SRT main lanes, service roads and associated right-of-way in accordance with prescribed standards. Notwithstanding the foregoing, TxDOT is responsible for handling requests and permitting for adjacent property access to the service roads and utility placement within the service roads, and for the repair, maintenance and operation of the traffic signal systems on the service roads.

Term and Handback. The SRT Project Agreement has a term ending on September 1, 2058. On the scheduled termination date, all of NTTA's rights under the SRT Project Agreement will automatically terminate and title to the SRT, including all improvements, will revert and transfer to TxDOT, at no charge to TxDOT.

Banded Revenue Sharing. NTTA is required to pay TxDOT a specified portion of toll revenues on the SRT that exceed a minimum threshold (the "*Revenue Share Amount*"). The minimum threshold revenues and the specified portion of revenues to be paid to TxDOT are set forth in the SRT Project Agreement. The Revenue Share Amount is determined on a calendar-year basis and is required to be paid within fifteen days after the end of each calendar year. To date there has been no Revenue Share Amount. **The Revenue Share Amount is not Pledged Revenues of the NTTA System and is not pledged to the payment of the Bonds.**

Toll Rates. NTTA has covenanted to charge toll rates on the SRT that do not exceed the maximum rates for each user classification as set forth in the SRT Project Agreement, unless NTTA determines that it is necessary to (a) preserve the financial condition of the NTTA System, (b) comply with the provisions of any bonds, notes, trust agreements or other financial instruments or agreements secured by the revenues of the NTTA System or (c) comply with law. Prior to establishing rates in excess of those set forth in the SRT Project Agreement, NTTA must increase the toll rate schedule for the remainder of the NTTA System (other than those portions for which a lower toll rate is projected to produce higher revenues) to a level substantially equivalent to the toll rate schedule for the SRT. The toll rate schedule for the SRT set forth in **APPENDIX C** hereto complies with these requirements. The SRT Project Agreement provides that maximum rates on the SRT will escalate at a rate of 2.75% per annum, adjusted every two years on July 1 of odd-numbered years.

## **President George Bush Turnpike Western Extension**

The PGBT WE extends the TxDOT section of SH 161 south of the current terminus by approximately 11.5 miles, from SH 183 south to IH 20 in Dallas County, with approximately 54 lane miles of toll roads and 53 lane miles of non-tolled service roads. The PGBT WE opened in its entirety to traffic in October 2012. The PGBT WE's average revenue vehicle transactions per day were approximately 169,056 for Fiscal Year 2017 and 172,913 for Fiscal Year 2018. The PGBT WE was developed, financed and constructed and is operated by NTTA under a Project Agreement (the "*PGBT WE Project Agreement*") dated July 30, 2009, as amended, between NTTA and TxDOT.

### *PGBT WE Project Agreement*

General. The PGBT WE Project Agreement contains the representations, commitments and obligations of NTTA and TxDOT related to the development, financing, design, construction, operation and maintenance of the PGBT WE and provides that NTTA will own the PGBT WE in perpetuity. TxDOT acknowledges its approval of and support for the financing, design, construction, operation and maintenance by NTTA of the PGBT WE as a turnpike project pursuant to the NTTA Act.

Capacity Improvements. NTTA is required to make capacity improvements to the PGBT WE by January 1, 2020 and January 1, 2031 if certain minimum required levels of service are not maintained or if certain minimum required levels of traffic flow are not maintained. NTTA currently plans to have four main lanes in each direction between IH 20 and SH 183, with construction planned to begin in 2019.

Operations and Maintenance. NTTA operates and maintains the PGBT WE main lanes, service roads and associated right-of-way in accordance with prescribed standards. Notwithstanding the foregoing, TxDOT is responsible for handling requests and permitting for adjacent property access to the service roads and utility placement within the service roads, and for the repair, maintenance and operation of the traffic signal systems on the service roads.

Net Revenue and Capital Improvement Sharing. Commencing on July 30, 2061, NTTA is required to pay to TxDOT 50% of the net revenue from PGBT WE (the "*Net Revenue Share Amount*"), and TxDOT and NTTA will equally share (50%/50%) all capital improvement costs pertaining to PGBT WE. Net revenue means all toll revenue received from PGBT WE, less all operating expenses for PGBT WE. The Net Revenue Share Amount and capital improvement costs will be determined on a calendar-year basis and any required payments must be paid within fifteen (15) days after the end of each calendar year. **The Net Revenue Share Amount is not Pledged Revenues of the NTTA System and is not pledged to the payment of the Bonds.**

Toll Rates. NTTA has covenanted to charge toll rates on the PGBT WE that do not exceed the maximum rates for each user classification as set forth in the PGBT WE Project Agreement, unless NTTA determines that it is necessary to (a) preserve the financial condition of the NTTA System, (b) comply with the provisions of any bonds, notes, trust agreements or other financial instruments or agreements secured by the revenues of the NTTA System or (c) comply with law. The toll rate schedule for the PGBT WE set forth in **APPENDIX C** hereto complies with these requirements. The PGBT WE Project Agreement provides that maximum rates on the PGBT WE will escalate at a rate of 2.75% per annum, adjusted every two years on July 1 of odd-numbered years.

## **Chisholm Trail Parkway**

The CTP is a 27.6-mile extension of SH 121 from IH 30 near the central business district of Fort Worth to FM 1187 in Tarrant County, and continuing south to US 67 in Johnson County, with approximately 99 lane miles of toll roads. It traverses a large portion of the City of Fort Worth with major interchanges at IH 30 and IH 20 at SH 183, and continuing into Johnson County to the City of Cleburne, Texas. The CTP consists of two to six controlled-access main lanes with discontinuous two-to three-lane service roads in limited segments. The CTP was opened to traffic on May 11, 2014. The CTP's average revenue vehicle transactions per day were approximately 93,493 for Fiscal Year 2017 and 103,223 for Fiscal Year 2018. The CTP was developed, financed and constructed and is operated by NTTA under a Project Agreement (the "*CTP Project Agreement*") dated October 27, 2010, between NTTA and TxDOT.

A planned expansion of the CTP will add two additional lanes along the southern 13 miles of the CTP in Johnson County (the "*CTP Super 2 Buildout*"). Planning of the CTP Super 2 Buildout is expected to start in 2020 and design is expected to begin in 2022. No construction dates have been determined.

### *CTP Project Agreement*

General. The CTP Project Agreement contains the representations, commitments and obligations of NTTA and TxDOT related to the development, financing, design, construction, operation and maintenance of the CTP and provides that NTTA will own the CTP in perpetuity. TxDOT acknowledges its approval of and support for the financing, design, construction, operation and maintenance by NTTA of the CTP as a turnpike project pursuant to the NTTA Act.

Operations and Maintenance. NTTA operates and maintains the CTP main lanes and associated rights-of-way in accordance with prescribed standards. The City of Fort Worth will operate, maintain, police and regulate all of the service roads within its corporate limits.

Toll Rates. Until October 27, 2062, NTTA has covenanted to charge toll rates on the CTP that do not exceed the maximum rates for each user classification as set forth in the CTP Project Agreement, unless NTTA determines that it is necessary to (a) preserve the financial condition of the NTTA System, (b) comply with the provisions of any bonds, notes, trust agreements or other financial instruments or agreements secured by the revenues of the NTTA System or (c) comply with law. The toll rate schedule for the CTP set forth in **APPENDIX C** hereto complies with these requirements. The CTP Project Agreement provides that maximum rates on the CTP will escalate at a rate of 2.75% per annum, adjusted every two years on July 1 of odd-numbered years.

## **Mountain Creek Lake Bridge**

The MCLB, located in southwestern Dallas County, opened in April 1979. The MCLB provides a direct east-west crossing of Mountain Creek Lake between the Oak Cliff section of Dallas and the City of Grand Prairie as well as convenient access to attractions like Six Flags Over Texas, AT&T Stadium and Globe Life Park in Arlington. The MCLB extends eastward from the intersection of Spur 303 and Southeast 14th Street in Grand Prairie, across the lake, to the intersection of Spur 303 and Mountain Creek Parkway in Dallas. The MCLB is approximately 2 miles in length, with approximately 4 lane miles of toll roads with a two-lane bridge structure that is 7,425 feet long. The MCLB's average revenue vehicle transactions per day were approximately 7,267 in Fiscal Year 2017 and 7,426 in Fiscal Year 2018. NTTA has designed pavement improvements to the east and west approaches of the MCLB and a new toll gantry. Construction is anticipated to be complete in mid-2019.

## **Addison Airport Toll Tunnel**

The AATT opened to traffic in February 1999 and was the first toll tunnel in Texas. The AATT is approximately 3,700 feet in length, with approximately 1.5 lane miles of toll roads with a two-lane tunnel crossing under the Addison Airport that is 1,600 feet long.

The AATT expands traffic capacity and eases congestion in the northern sector of Dallas and Addison by providing an alternate east-west route between the DNT and IH 35E. The tunnel allows motorists to continue on Keller Springs Road, which once ended on either side of Addison Airport, paralleling Belt Line Road and Trinity Mills Road, both congested city streets. The AATT's average revenue vehicle transactions per day were approximately 5,845 in Fiscal Year 2017 and 5,504 in Fiscal Year 2018.

## **Lewisville Lake Toll Bridge**

The LLTB, a 2-mile four-lane bridge with approximately 8 lane miles of toll roads, opened to traffic in August 2009 and provides an east-west route over Lewisville Lake in southern Denton County and is part of a 13.8-mile corridor. The LLTB's average revenue vehicle transactions per day were approximately 17,390 in Fiscal Year 2017 and 19,271 in Fiscal Year 2018.

## **Multi-Year NTTA System Capital Plan**

NTTA's Capital Improvement Program for the NTTA System for Fiscal Years 2019-2023 (the "CIP") includes all major maintenance, rehabilitation, corridor expansion, corridor extension and new projects. Current corridor expansion and extension projects include:

(i) PGBT WE widening with the addition of one main lane in each direction from SH 183 to I-30 and two additional lanes from I-30 to I-20 is currently in the design stage and anticipated to be completed in 2022,

(ii) SRT fourth lane additions in each direction are under construction with planned completion in late 2021,

(iii) DNT main lane bridges over US 380 with construction to begin in 2019,

(iv) DNT widening from SRT to US 380 by adding an additional lane in each direction with environmental and design work expected through 2021 and construction anticipated to begin in 2022,

(v) DNT Extension Phase 4A southbound service road to be completed by Collin County in 2020. The construction of the main lanes by NTTA is expected to start in 2022,

(vi) DNT Extension Phase 4B southbound service road is anticipated to begin construction in early 2020,

(vii) PGBT East Branch right-of-way acquisition and design is expected to begin in 2021. TxDOT is advancing the environmental and planning. No construction dates have been determined,

(viii) PGBT/360 Tollway Connector planning is anticipated to begin in 2019 and design is estimated to begin in 2023. No construction dates have been determined, and

(ix) CTP Super 2 Buildout's planning is anticipated to start in 2020 and design is estimated to begin in 2022. No construction dates have been determined.

The CIP also includes planned expenditures for replacement of equipment, implementation of a new toll collection (back office) system, roadway resurfacing, roadway safety improvements, repair and reconstruction of retaining walls and office facility improvements. The estimated costs for the NTTA System in the CIP over the period 2019-2023 are \$1.6 billion. Funding for the CIP is expected to come from the following funds and sources: \$251 million from the Reserve Maintenance Fund, \$1.2 billion from the Capital Improvement Fund, \$77 million from the Construction Fund, \$250 thousand from the Feasibility Study Fund and \$59 million from reimbursement agreements. As of April 30, 2019, NTTA had on deposit approximately \$54,629,084 in the Reserve Maintenance Fund, \$346,406,568 of unrestricted funds in the Capital Improvement Fund and \$86,341,845 in the Construction Fund for the CIP. NTTA anticipates funding the CIP from the amounts in and future anticipated deposits to the above-mentioned funds. Although not anticipated nor currently planned, NTTA may utilize its commercial paper note program or issue bonds, as needed, to finance the CIP or any new project it deems necessary if cash flow from the NTTA System is not sufficient to fully fund the CIP or any new project.



## OPERATION OF THE NTTA SYSTEM

### Introduction

Set forth below is certain information relating to the operation of the NTTA System, including information relating to NTTA's electronic tolling system and toll collections process.

### Electronic Tolling

NTTA uses the Regional Integrated Toll Enhancements ("*RITE*") System, an integrated software, hardware and management system for toll collection that enables NTTA to manage its roadways and operations through automated revenue audit and reconciliation processes, consolidated reporting, transaction processing, customer account management, and system and operation management and maintenance.

NTTA intends to replace the RITE System by the end of 2020. The new system will handle all the functions currently provided by the RITE System and is being designed to provide (i) enhanced and more efficient tools for customer service representatives, (ii) more robust self-service tools and payment options for customers and (iii) a technology platform built on best practices in software and architecture, which will allow NTTA to more quickly implement new features and reduce overall system lifecycle costs. To mitigate the inherent risks of replacing the RITE System, NTTA has augmented its internal staff with outside vendors with large-scale, IT system implementation experience, with a focus on independent quality reviews and testing, project management and data migration. The anticipated cost for the new system is \$77.8 million, which will be paid from the Capital Improvement Fund and is part of the CIP.

All of the roadways use an all-electronic toll collection system ("*All-ETC*"), including automatic vehicle identification ("*AVI*") and video tolling ("*ZipCash*"), to maximize traffic flow.

The primary electronic toll collection method is AVI, where vehicles are recognized through communications with transponders issued by NTTA ("*TollTags*") or other transponders that are interoperable with NTTA's AVI system, and tolls are collected from the customers' accounts with NTTA or the issuers of such other transponders.

The ZipCash toll collection method is used for vehicles without a TollTag or interoperable transponder (or with a transponder that is inoperative or malfunctioning), where an image of the vehicle's license plate is captured in the lane and used to identify the vehicle's owner for invoicing. See "**OPERATION OF THE NTTA SYSTEM — Operations — Toll Collection**" below for information regarding collection of TollTag and ZipCash transactions.

### Operations

#### *General*

NTTA and its predecessor, TTA, have operated toll roads in the North Texas region for more than 60 years. The number of active TollTags was approximately 5.4 million as of December 31, 2018. The NTTA System currently utilizes main lane gantries ("*MLGs*") for toll collection, at which vehicle information is captured in both directions, along with ramp toll gantries to prohibit toll-free entrance or exit. Under the current toll schedule, the weighted average two-axle TollTag toll rate for the NTTA System (excluding AATT, MCLB, LLTB and CTP) is approximately \$0.1901 per mile.

The DNT has four MLGs with three or four lanes in each direction and 18 pairs of ramp toll gantries. The PGBT has five MLGs with three or four lanes in each direction and 15 pairs of ramp toll gantries. The SRT has three MLGs with three lanes in each direction and 20 pairs of ramp toll gantries. The PGBT EE has one MLG with three lanes in each direction and six pairs of ramp toll gantries. The PGBT WE has two MLGs with two or three lanes in each direction and 9 pairs of ramp toll gantries. The CTP has three MLGs with one, two or three lanes in each direction and 12 pairs of ramp toll gantries. There is one MLG at each of the AATT, the LLTB and the MCLB.

The use of All-ETC at highway speeds allows NTTA to maximize vehicle throughput, improve safety and realize environmental benefits.

## *Employees*

To administer the NTTA System, the 360 Tollway and Tolling Services (as defined below) for non-NTTA toll projects in NTTA's service area, NTTA has budgeted for 853 full-time employees in Fiscal Year 2019 for maintenance, customer service, collections and toll enforcement, administration, project delivery, finance, human resources, government affairs, information technology, legal, communications and marketing, traffic and incident management, internal audit and business diversity.

## *Toll Collection*

The entire NTTA System has operated on an All-ETC basis since January 2011. With All-ETC, NTTA collects tolls in two ways - through its AVI system or through its ZipCash video tolling system. With the AVI system, a transaction is classified as a TollTag transaction if the AVI system detects a TollTag or other transponder in the vehicle as it passes through the toll gantry and the TollTag or other transponder account contains funds adequate to pay the toll. All other toll transactions are initially recorded as ZipCash transactions. A transaction initially recorded as a ZipCash transaction may be reclassified as a TollTag transaction ("*VToll*" transaction) for a number of reasons, including if an insufficient balance existed in the TollTag account at the time of the transaction, AVI equipment fails to identify the TollTag or the TollTag is defective or not properly installed.

A normal TollTag transaction is collected by debiting the TollTag account of the user or through an interoperability agreement with the issuer of a non-TollTag transponder. A VToll transaction is collected upon identification of the transaction as a VToll by debiting the TollTag account of the user. ZipCash transactions are collected through invoices generated by NTTA and mailed or emailed to the owner of the vehicle using the tollway.

To pursue collection of a ZipCash transaction through the invoicing process, there are two requirements: (i) the video system must capture a readable license plate image and (ii) the license plate information must be matched to the vehicle owner information, including the owner's mailing address. If these two requirements are not met for a ZipCash transaction, NTTA is unable to pursue collection of that transaction. Through agreements directly with the State, other direct state-to-state agreements and contracts with various third parties, NTTA is able to obtain vehicle ownership information from 43 states and the District of Columbia within the United States.

NTTA, all other Texas tolling agencies, the Kansas Turnpike Authority and the Oklahoma Turnpike Authority are parties to an Interlocal Agreement (the "*Interoperability Agreement*"). The Interoperability Agreement provides for the use of any tolling entity's transponder on any other tolling entity's toll roads and the processing by each agency of tolls for the transactions involving their own transponders on toll roads operated by other agencies. In order to reimburse the costs to process interoperability transactions and manage customer accounts, under the Interoperability Agreement, the processing agency is paid by the owner of the toll road a fee, which is currently set at \$0.05 plus 3% of the revenue for each interoperable transaction. Fee revenue generated by NTTA under the Interoperability Agreement does not secure the Bonds. Unaudited net toll revenue for interoperability transactions on the NTTA System represented approximately 6.05% and 7.10% of toll revenue in calendar years 2017 and 2018, respectively.

If a ZipCash transaction is pursuable, NTTA will determine if the transaction meets its business rules regarding the invoicing of transactions. The business rules establish the minimum value of tolls that need to be included in an invoice in order to make delivery and collection of the invoice cost effective. Once an invoice is mailed to the vehicle owner, NTTA has processes and procedures in place to collect the invoice, such as delivery of notices of non-payment, the charging of administrative fees, use of third-party collection agencies and referral to justice of the peace court for proceedings. In addition, NTTA may take advantage of certain statutory remedies, including publishing a user's name and amount of unpaid tolls, placing a block on a user's vehicle registration, banning a user from further use of NTTA's roadways and impounding a user's vehicle. See "*— Enforcement.*"

NTTA focuses on three key areas relating to the development and maintenance of a successful All-ETC program: (i) TollTag penetration (*i.e.*, the percentage of total transactions constituting TollTag transactions), (ii) pursuable ZipCash transactions and (iii) revenue collection processes.

The most effective and efficient way to collect a toll is through the AVI system, so increasing the TollTag penetration has a direct, positive effect on net revenues. Having better quality license plate images and current license plate and owner address information increases the number of pursuable ZipCash transactions, which also has a direct, positive effect on net revenues. The revenue collection process includes collection of payment from TollTag users, the use of business rules for creation and delivery of invoices to ZipCash users and the subsequent processes and procedures for collection of those invoices. The revenue collection process has a direct impact on revenues and expenses. The Board is advised by staff each month on key metrics that describe NTTA's TollTag penetration, pursuable ZipCash transactions and revenue collection. NTTA's staff provides the Board with a biannual review and

tracking of projects and initiatives that impact these key areas and identifies needed improvements to these key areas in order to optimize toll operations and net revenues.

NTTA continually monitors the TollTag penetration rates and trends on its roadways. TollTag penetration percentages are adjusted upward for VToll transactions (*i.e.*, ZipCash transactions reclassified to TollTag transactions). Most adjustments for VToll transactions occur within six months of the transaction. VToll transactions are 100% collectible because they become associated with a TollTag account with a sufficient balance to pay the toll. NTTA does, however, incur additional costs in connection with certain types of VToll transactions as compared to normal TollTag transactions because NTTA has to match the license plate of the vehicle to a valid TollTag account.

The TollTag penetration rates as of January 2015, 2016, 2017, 2018 and 2019 are set out in the table below. These calculations use aggregate transaction information from the NTTA System. The calculations are based on unaudited financial information. The percentage of transactions initially recorded as TollTag transactions and the percentage of VToll transactions shown in the table reflect all transactions on a rolling twelve-month basis as of the reporting month with a two-month lag.

	January 2015	January 2016	January 2017	January 2018	January 2019
Percent of transactions initially recorded as TollTag transactions as of reporting month:	65.5%	64.4%	65.6%	67.0%	67.3%
Percentage of ZipCash transactions reclassified to VToll transactions as of reporting month <sup>(1)</sup> :	<u>12.8%</u>	<u>13.8%</u>	<u>14.0%</u>	<u>14.3%</u>	<u>14.7%</u>
Total TollTag penetration rate:	78.3%	78.2%	79.6%	81.3%	82.0%

<sup>(1)</sup> As a percentage of total transactions for the month.

NTTA continues to seek to improve TollTag penetration, the number of pursuable ZipCash transactions and the revenue collection process. Over the last several years, NTTA has added an entry-level, lower balance TollTag account type and targeted corridor campaigns to increase TollTag penetration. NTTA has also implemented improvements to the image review quality of its video system used for ZipCash transactions to improve billing accuracy, standardized payment plans for ZipCash customers, restructured its administrative fees for nonpayment of ZipCash invoices to encourage early payment, reducing the emphasis on escalating fees and discouraging late payment, and instituted monthly and consolidated ZipCash invoices to provide predictability to customers and eliminate confusion of multiple invoices in varying amounts and dates.

#### *Enforcement*

NTTA has certain statutory remedies available to enforce the collection of tolls. NTTA may publish the names of registered owners (or lessees) of nonpaying vehicles who are liable for past due and unpaid tolls and administrative fees. NTTA may also enter into agreements providing for toll violation payment plans and file suit in district court to enforce these agreements. NTTA may block the vehicle registration of toll scofflaws who are "habitual violators" and ban certain "habitual violators" from operating their motor vehicles on NTTA tollways.

Repeat violations of a vehicle ban allow law enforcement on the tollways to impound the habitual violator's vehicle after the habitual violator has been notified in person of such intent if found on the tollway. NTTA has negotiated agreements with the Tax Collector/Assessors from each of the Member Counties, five other adjacent counties and the Texas Department of Motor Vehicles to implement the vehicle registration block remedy. NTTA also requires habitual violators entering into a payment plan to obtain a TollTag.

*Toll Collection Variance*

NTTA evaluates the correlation between traffic on the tollways and actual tolls collected by calculating the uncollected and uninvoiced amounts as compared to the total value of tollway transactions. The toll collection variance calculation (the "*All-ETC Methodology*") is as follows:

$$\frac{\text{(value of invoiced ZipCash transactions for the reporting period uncollected as of end of reporting period + value of uninvoiced ZipCash transactions for the reporting period as of end of reporting period)}}{\text{value of all AVI and ZipCash transactions that have occurred during the reporting period as adjusted for VToll transactions}}$$

An AVI transaction is valued at the TollTag toll rate. A ZipCash transaction is valued at the ZipCash toll rate, which includes the premium above the TollTag rate but not any administrative fees or fines. See "**APPENDIX C — NTTA SYSTEM TOLL RATE SCHEDULES**" for TollTag and ZipCash toll rates for each portion of the NTTA System. Upon identification, the value of a VToll transaction may be adjusted downward from the ZipCash rate to the TollTag rate.

The toll collection variance for the NTTA System based on the All-ETC methodology for calendar years 2014 through 2018 is set out in the table below. The calculations are based on unaudited financial information.

	Calendar Year 2014	Calendar Year 2015	Calendar Year 2016	Calendar Year 2017	Calendar Year 2018
Value of invoiced ZipCash transactions uncollected as of period-end:	\$81,508,283	\$102,767,093	\$113,455,688	\$112,820,414	\$115,432,293
Value of uninvoiced ZipCash transactions as of period-end:	<u>80,989,673</u>	<u>81,035,240</u>	<u>71,002,940</u>	<u>67,811,698</u>	<u>70,619,752</u>
TOTAL:	\$162,497,956	\$183,802,333	\$184,458,628	\$180,632,111	\$186,052,045
Value of all AVI and ZipCash transactions during the reporting period as adjusted for VToll transactions:	÷ <u>\$795,784,407</u>	÷ <u>\$894,514,347</u>	÷ <u>\$967,410,315</u>	÷ <u>\$1,003,853,246</u>	÷ <u>\$1,067,934,551</u>
Toll collection variance:	20.42%	20.55%	19.07%	17.99%	17.42%

The table below sets out the following information for calendar years 2014 through 2018 (i) the percentage, by value, of ZipCash transactions out of all the NTTA System transactions for the reporting period, (ii) the percentage, by value, of all ZipCash transactions that occurred during the reporting period that were invoiced prior to the end of the reporting period and (iii) the percentage, by value, of the ZipCash transactions that were invoiced during the reporting period and were collected by the end of the reporting period. The calculations are based on unaudited financial information.

	Calendar Year 2014	Calendar Year 2015	Calendar Year 2016	Calendar Year 2017	Calendar Year 2018
Percentage of ZipCash transactions (by value) out of all NTTA transactions during period:	30.40%	30.42%	28.90%	26.79%	25.28%
Percentage of ZipCash transactions (by value) that were invoiced during period:	64.61%	68.26%	72.68%	72.93%	71.94%
Percentage of invoiced ZipCash transactions (by value) that were collected as of period end:	45.03%	41.40%	41.30%	39.64%	36.57%

Uninvoiced ZipCash transactions that are paid in the reporting period are deemed to be invoiced and are reflected in the percentages in the preceding table. ZipCash transactions that are invoiced in a reporting period subsequent to their occurrence are not reflected in the percentages of ZipCash transactions that were invoiced or invoiced ZipCash transactions that were collected in the preceding table. Invoiced ZipCash transactions that are collected in a reporting period subsequent to their invoicing, are not reflected in the percentages of invoiced ZipCash transactions that were collected in the preceding table. Furthermore, the percentages in the table do not take into account adjustments for VToll transactions and unassigned ZipCash invoices occurring after such reporting period. ZipCash transactions are not invoiced if the transaction (i) does not meet NTTA's business rules regarding invoicing or (ii) is not pursuable because a readable license plate image was not captured or because the license plate information could not be matched to the vehicle owner information.

The All-ETC methodology does not include ZipCash transactions collected after the end of the calendar year in which the transaction occurred, therefore NTTA also reports total ZipCash collections, including invoiced and uninvoiced payments, for the calendar year. This amount includes all ZipCash transactions collected regardless of the date the transactions occurred. Total unaudited ZipCash collections were approximately \$87.5 million for 2014, \$97.0 million for 2015, \$110.5 million for 2016, \$103.2 million for 2017 and \$92.3 million for 2018 for the NTTA System.

#### *Revenue Recovery Assumptions in Traffic and Revenue Study*

The current traffic and toll revenue analysis for the NTTA System (defined below under "**TRAFFIC AND REVENUE STUDY**" as the "*2018 T&R Study*" as amended and/or affirmed by the "*2019 Bringdown Letter*") reflects the most current ZipCash revenue recovery assumptions and distribution of TollTag/ZipCash transactions. For all transactions within the forecast period, the 2018 T&R Study uses a revenue recovery rate of 39.0% for all ZipCash transactions (includes invoiced and uninvoiced transactions and excludes all VToll transactions) at one year after the transaction, with the rate increasing to 43.0% at two years after the transaction. The 2018 T&R Study assumes the average NTTA System TollTag penetration rate (including all VToll transactions with a three-month lag) to be 80.6% in 2019 with a ramp up based on a logistic function to an average of 80.8% for all NTTA System roadways in 2020, 82.8% in 2030, 83.8% in 2040, 84.3% in 2050 and 84.6% in 2060. The 2019 Bringdown Letter noted that the average TollTag penetration rate had increased to 81.9%, while the average ZipCash revenue recovery at one year after the transaction had decreased to 36.5%. The 2019 Bringdown Letter concluded that the changes in TollTag penetration rate and ZipCash revenue recovery, when considered in concert with recent transaction trends and changes to other underlying assumptions, would not result in lower NTTA System T&R forecasts than those developed as part of the 2018 T&R Study. See "**TRAFFIC AND REVENUE STUDY**." Projected annual toll revenues in the 2018 T&R Study and 2019 Bringdown Letter are revenues projected to be collected in each year (*i.e.*, cash basis) after applying the above-described assumptions to the projected toll transactions for the year. Historical toll revenues and historical debt service coverage are based on revenues determined on an accrual basis in accordance with generally accepted accounting principles ("*GAAP*"). See "*Reporting of Toll Accounts Receivable*" below and "**OTHER FINANCIAL INFORMATION**." Inevitably, some underlying assumptions and projections used to develop these financial forecasts will not be realized, and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the forecast periods will vary from the forecasts, and such differences may be material.

#### *Reporting of Toll Accounts Receivable*

In its annual audited and monthly unaudited financial statements, NTTA reports revenues in its statement of net assets and statement of revenues, expenses and changes in net assets on an accrual basis in accordance with GAAP. ZipCash transactions are recorded as receivables in accordance with GAAP. NTTA's unaudited net billed toll receivables for the NTTA System as of December 31, 2014, 2015, 2016, 2017 and 2018 are as follows:

	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018
Toll accounts receivables:	\$156,663,304	\$199,659,650	\$206,067,488	\$224,393,707	\$225,054,946
Allowance for uncollectible receivables:	\$(110,517,972)	\$(148,321,186)	\$(156,126,620)	\$(176,167,844)	\$(177,447,473)
Net toll receivables:	<u>\$46,145,332</u>	<u>\$51,338,464</u>	<u>\$49,940,868</u>	<u>\$48,225,863</u>	<u>\$47,607,473</u>

See "APPENDIX B-1 COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE NORTH TEXAS TOLLWAY AUTHORITY SYSTEM, AN ENTERPRISE FUND OF THE NORTH TEXAS TOLLWAY AUTHORITY, FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018" — [Note 9, Page 53] for additional information regarding NTTA's accounts receivables including information regarding recorded unbilled toll receivables and unrecorded unbilled toll receivables.

Currently, NTTA maintains an allowance for uncollectible receivables in its financial statements with respect to a toll receivable, with the amount of the allowance based upon historical monthly collections patterns from 2011 to present. Based upon the payment history for each 30-day bucket of aged toll receivables, an allowance is calculated for the expected percentage that will remain unpaid based upon these historical trends. The allowance for uncollectible receivables currently ranges from a minimum of 20% on invoices that are current (age of 0-30 days) to a maximum of 100% for invoices that have met the business rules for write-off with an overall weighted average of 78.85% reserved for all invoices. See "APPENDIX B-1 COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE NORTH TEXAS TOLLWAY AUTHORITY SYSTEM, AN ENTERPRISE FUND OF THE NORTH TEXAS TOLLWAY AUTHORITY, FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018" — [Note 9, Page 53] for more information on toll receivables.

#### *Toll Receivables Write-Off*

NTTA has a toll receivable write-off policy. The policy states in part that, on a monthly basis, all receivables that have aged through the collections process will be written off. Toll receivables are written-off from an accounting and financial reporting perspective only. They will continue to be legal obligations of the customers and collection efforts will continue.

For the NTTA System, NTTA wrote off toll receivables of \$19,504,034 in 2014, \$41,254,040 in 2015, \$64,272,410 in 2016, \$64,730,740 in 2017 and \$89,402,219 in 2018. All of the above figures are unaudited.

## **OTHER POTENTIAL PROJECTS (ON-SYSTEM AND OFF-SYSTEM)**

### **General**

Future turnpike projects of NTTA may be financed as part of the NTTA System or independently of the NTTA System. See "RISK FACTORS – Additional Obligations" in the forepart of this Official Statement. NTTA is in the preliminary review stage for a number of projects and has begun the multi-staged review process for some of these projects. The review process entails performing various environmental studies, which may need to be approved by State and federal agencies, feasibility studies, the development of traffic and revenue studies, an analysis of financing structures (such as stand-alone or system) and development options (*e.g.*, Comprehensive Development Agreement ("*CDA*"), design-build and construction manager at risk).

**A key factor in determining whether to undertake a project is the impact on NTTA's credit profile (including expected revenue contribution and ability to service the related debt). NTTA's objective in determining whether to undertake projects is to maintain or enhance the overall NTTA credit profile and preserve or enhance debt capacity for future projects. If NTTA determines to pursue any of these projects, NTTA anticipates this process to be gradual. Funding agreements and cost estimates are preliminary and therefore subject to change, which changes may be material.**

### **Local Primacy**

Chapter 373 of the Texas Transportation Code ("*Chapter 373*") establishes the framework for giving each local toll entity the primary responsibility for toll road development within its boundaries. Under Chapter 373, NTTA

has the first option to develop, finance, construct and operate a toll project within its boundaries, but must exercise its option not later than:

(a) 180 days after NTTA or TxDOT notifies the other of its intent to initiate the primacy process; or

(b) 120 days after the U.S. Department of Transportation Federal Highway Administration (the "*FHWA*") issues a decision ("*Decision*") on an environmental impact statement for the project, if the FHWA issued its Decision more than 60 days after TxDOT issued its notice of intent to initiate the primacy process to NTTA.

The option period may be extended for 90 days if agreed upon by NTTA and TxDOT. NTTA and TxDOT may enter into an agreement waiving the primacy terms in Chapter 373 and providing instead for alternative terms that are mutually agreeable to the parties.

## TOLLING SERVICES AGREEMENTS

### General

The NTTA Act provides that NTTA shall provide, for reasonable compensation, tolling services normally provided through its customer service center, including customer service, customer account maintenance, transponder supply and toll collection and enforcement (collectively, "*Tolling Services*") for toll projects in NTTA's service area of Collin, Dallas, Denton and Tarrant counties. NTTA provides these Tolling Services for third parties, along with its services under the 2017 Interoperability Agreement, under its Non-Major Enterprise Fund, which is separate and apart from the NTTA System.

Pursuant to the requirements of the NTTA Act, NTTA has entered into (i) a Tolling Services Agreement dated September 4, 2009 (as amended, the "*IH 635 TSA*") with LBJ Infrastructure Group LLC (the "*IH 635 Developer*") for the IH 635 Managed Lanes Project in Dallas County, Texas, (ii) a Tolling Services Agreement dated June 23, 2009 (as amended, the "*NTE Segment 1/2W TSA*") with NTE Mobility Partners LLC (the "*NTE Segment 1/2W Developer*") for Segments 1 and 2W of the North Tarrant Express Project in Tarrant County, Texas, (iii) a Tolling Services Agreement dated September 19, 2013 (as amended, the "*NTE Segment 3A/3B/3C TSA*") with TxDOT, as TxDOT's subcontractor, to provide Tolling Services to NTE Mobility Partners Segments 3 LLC (the "*NTE Segment 3A/3B/3C Developer*") for Segments 3A, 3B and 3C of the North Tarrant Express Project in Tarrant County, Texas (the "*NTE Segment 3A/3B/3C Project*"), and (iv) a Tolling Services Agreement dated September 1, 2014 (as amended, the "*Regional TSA*") with TxDOT for certain existing and planned TxDOT managed toll lane projects in the NTTA's service area (the "*Regional Projects*"), under which NTTA currently performs Tolling Services for the DFW Connector, IH 35E, IH-30 and Midtown Express projects in Dallas, Denton and Tarrant Counties, Texas. There is no assurance that any other Regional Projects will go forward. NTTA does not anticipate entering into any other tolling services agreements ("*TSAs*") in the near future. **Revenues generated by NTTA under these or future TSAs will not secure the Bonds.**

**As described below, the IH 635 TSA and the NTE Segment 1/2W TSA place most of the toll collection risk on NTTA.** Both the IH 635 TSA and the NTE Segment 1/2W TSA require NTTA to pay to the developer a portion of the toll for each transaction, subject to certain exceptions, regardless of whether NTTA actually collects the toll. See the discussion regarding collection of ZipCash video transactions under "**OPERATION OF THE NTTA SYSTEM — Operations — Toll Collection.**" NTTA expects to have sufficient funds in the Non-Major Enterprise Fund to cover required payments under the TSAs. To the extent funds in the Non-Major Enterprise Fund are insufficient to cover such required payments, NTTA may use funds in the Capital Improvement Fund for the NTTA System to cover such payments.

### IH 635 Tolling Services Agreement

The IH 635 TSA expires on September 4, 2061.

Subject to certain exceptions, NTTA is required to pay the IH 635 Developer an amount equal to the transponder toll for each transaction, less its fee, within two business days after the date the transaction has been properly transmitted to NTTA.

NTTA is entitled to a fee for each transaction and may impose, collect and retain as additional compensation, incidental charges consistent with NTTA's practices concerning customers of its own facilities, including, with respect to video transactions, a video toll premium.

### **NTE Segment 1/2W Tolling Services Agreement**

The NTE Segment 1/2W TSA expires on June 23, 2061.

Subject to certain exceptions, NTTA is required to pay the NTE Segment 1/2W Developer an amount equal to the transponder toll for each transaction, less its fee, within two business days after the date the transaction has been properly transmitted to NTTA.

NTTA is entitled to a fee for each transaction and may impose, collect and retain as additional compensation, incidental charges consistent with NTTA's practices concerning customers of its own facilities, including, with respect to video transactions, a video toll premium.

### **NTE Segment 3A/3B/3C Tolling Services Agreement**

The NTE Segment 3A/3B/3C TSA expires on July 21, 2027, but will renew automatically for successive five-year periods until June 23, 2061.

Subject to certain exceptions, NTTA is required to pay the NTE Segment 3A/3B/3C Developer and/or TxDOT an amount equal to the toll for each transaction, including any video transaction toll premium, less NTTA's fee, within two business days after the date NTTA collects such toll. NTTA does not bear any collection risk under the NTE Segment 3A/3B/3C TSA.

NTTA is entitled to a fee for each transaction and may impose, collect, and retain as additional compensation, incidental charges consistent with NTTA's practices concerning customers of its own facilities. Incidental charges do not include any video transaction toll premiums.

### **Regional Tolling Services Agreement**

The Regional TSA expires on September 1, 2024, but will automatically renew for additional five-year periods, unless NTTA or TxDOT elects not to extend.

NTTA must pay TxDOT an amount equal to the payment received for each transaction within two business days after receipt. NTTA does not bear any collection risk under the Regional TSA.

TxDOT must reimburse NTTA for its costs and expenses to perform tolling services under the Regional TSA, including an allocated portion of NTTA's overhead and shared services under generally accepted government accounting principles. The Regional TSA is intended to be cost neutral to NTTA.

## **THE 360 TOLLWAY**

### **General**

The 360 Tollway is a 9.7-mile toll road project located in Ellis, Johnson and Tarrant Counties, Texas, extending generally from Green Oaks Boulevard in Tarrant County south to US 287 in Ellis County with approximately 78 lane miles of toll roads and service roads. The 360 Tollway is an All-ETC facility initially consisting of four limited access main lanes, with continuous service roads along the entire corridor. The 360 Tollway is a stand-alone toll project that is not part of the NTTA System. Revenues of the 360 Tollway may only be used to pay costs, including debt service, that are related to the 360 Tollway. **Revenues from the 360 Tollway do not secure and are not be available to pay debt service on the Bonds or other obligations entitled to the benefit of the Trust Agreement.**

### **Project Agreement**

NTTA entered into the Project Agreement State Highway 360 dated February 28, 2014 (the "*360 Tollway Project Agreement*") with TxDOT for the 360 Tollway, which contains the representations, commitments and obligations of NTTA and TxDOT related to the development, financing, design, construction, operation and maintenance of the 360 Tollway. Under the 360 Tollway Project Agreement, TxDOT designed and constructed the 360 Tollway and, upon its substantial completion on August 1, 2018, TxDOT transferred ownership to NTTA. In exchange, NTTA agreed to reimburse TxDOT for its costs to design and construct the 360 Tollway in the amount of \$294 million (the "*Project Loan*") payable, except as set forth below, solely from net revenues of the 360 Tollway.



The Project Loan has a term of 35 years, commencing on the date of substantial completion of the 360 Tollway, and bears interest at a fixed rate of 4.25% per annum. The Project Loan is not secured by the revenues of the NTTA System. The 360 Tollway opened to traffic in May 2018.

### **Financial Backstop Agreement**

To provide support for TxDOT's efforts to develop, finance and construct the 360 Tollway and NTTA's efforts to operate and maintain the 360 Tollway, the Regional Transportation Council (the "*RTC*") of the North Central Texas Council of Governments, TxDOT and NTTA entered into a Financial Backstop Agreement State Highway 360 dated February 28, 2014 (the "*Financial Backstop Agreement*"). Under the Financial Backstop Agreement, if 360 Tollway revenues are insufficient to make a scheduled payment on the Project Loan or a scheduled transfer for payment of operating and maintenance costs, NTTA is required to submit to TxDOT and the RTC an expense draw request for the amount of such shortfall, and TxDOT, on behalf of the RTC, is required to make a draw under the Financial Backstop Agreement in the amount of such shortfall (i) to the extent the payment is owing to TxDOT, through the Texas Transportation Commission's reduction of allocation of funds allocated to the Dallas-Fort Worth Region in the Unified Transportation Program developed by TxDOT and approved by the Texas Transportation Commission (the "*UTP Funds*") after the scheduled payment date or (ii) to the extent the payment is owing to NTTA, by transferring UTP Funds or other funds the RTC is authorized to allocate to projects to NTTA by the fifteenth business day after receipt of such draw request. NTTA is required to repay the RTC, but only from available 360 Tollway revenues, any amounts drawn under the Financial Backstop Agreement, together with interest on such amount at the fixed rate of 4.25% per annum. The Financial Backstop Agreement is not secured by the revenues of the NTTA System.

### **Reverter and Nonrecourse**

If the obligations of the RTC under the Financial Backstop Agreement are determined to be inoperative or if the RTC otherwise fails to perform its obligations under the Financial Backstop Agreement, and TxDOT's rights under the Financial Backstop Agreement to self-effectuate a cure are unenforceable or otherwise unavailable, then (i) if 360 Tollway revenues are insufficient to make at least 50% of any scheduled Project Loan payment, NTTA will be required to transfer to TxDOT, from other sources available to NTTA, the difference between 50% of the scheduled Project Loan payment and the amount of 360 Tollway revenues available to make such payment, and (ii) any shortfall in a scheduled Project Loan payment will be added to the Project Loan balance and NTTA will be required to pay such shortfall to TxDOT, together with interest thereon, on before the earlier of the fifth anniversary of the applicable payment date or the maturity date of the Project Loan. If NTTA fails to make a payment described in this paragraph, NTTA will have 90 days after written notice from TxDOT to make such payment. If NTTA does not make such payment within the 90-day period, the 360 Tollway Project Agreement and all of NTTA's rights thereunder will automatically terminate and title to the 360 Tollway will revert to TxDOT. NTTA's failure to make any such payment to TxDOT will not constitute a default under the 360 Tollway Project Agreement, and the obligations of NTTA under the 360 Tollway Project Agreement are subject to the availability of 360 Tollway revenues to perform such obligations. NTTA may use funds in the Capital Improvement Fund for the NTTA System to make any payment described in this paragraph, but is not obligated to do so.

### **360 Tollway Revenues Do Not Secure Bonds**

Although not currently contemplated, NTTA may refinance the 360 Tollway with NTTA System revenue debt and make the 360 Tollway a part of the NTTA System pursuant to the terms of the Trust Agreement. **The Bonds will be secured only by the NTTA System revenues and not by the 360 Tollway revenues or any other assets of NTTA.**

## **MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS**

### **General**

The entire audited financial statements of NTTA's North Texas Tollway Authority System Enterprise Fund as of and for the Fiscal Year ended December 31, 2018 are attached hereto as **APPENDIX B-1** and include a narrative discussion and analysis by management of the results of operations of the NTTA System. The audited financial statements of NTTA's North Texas Tollway Authority System Enterprise Fund reflect the financial condition of the NTTA System, but do not include information regarding the 360 Tollway. The unaudited financial statements of the NTTA's North Texas Tollway Authority System Enterprise Fund as of and for the four months ending April 30, 2019 are attached hereto as **APPENDIX B-2**. All 2018 and 2019 financial information presented below is unaudited.

### **Highlights of the NTTA System as of and for the Four-Month Period Ending April 30, 2019.**

- Revenue Vehicle Transactions for the four-month period ending April 30, 2019 were 274,725,778, an increase of 9,140,575 or 3.44% over the four-month period ending April 30, 2018.
- Approximately 5.9 million and 5.2 million TollTags were active as of April 30, 2019 and 2018, respectively.
- As of April 30, 2019, the NTTA System's total net position increased by \$135,492,498 from the total net position as of April 30, 2018. The change was primarily due to a decrease in the amount of revenue bonds payable.
- For the four-month period ending April 30, 2019, toll revenues, net of bad debt expense, were \$281,967,502, an increase of \$12,407,871 or 4.60% over the four-month period ending April 30, 2018. The increase was primarily a result of additional revenue vehicle transactions.
- The operating and administration expenses for the Operations and Maintenance Fund for the four-month period ending April 30, 2019 were \$50,609,561, an increase of 7.41% compared to the operating and administration expenses for the Operations and Maintenance Fund for the four-month period ending April 30, 2018.

*[Remainder of page intentionally left blank]*

## Net Position

Set forth below is an analysis of the NTTA System's financial position as of April 30, 2019 and April 30, 2018.

	Unaudited As of April 30, 2019	Unaudited As of April 30, 2018
Current unrestricted assets	\$ 495,770,625	\$ 581,488,138
Current restricted assets	395,551,774	367,545,086
Noncurrent assets		
Restricted investments	641,187,878	468,965,164
Other assets	7,522,520	15,558,235
Intangible assets	2,538,012,424	2,602,468,624
Capital assets		
Nondepreciable	5,688,956,634	5,639,227,169
Depreciable (net)	55,311,075	44,200,561
Total assets	<u>9,822,312,929</u>	<u>9,719,452,978</u>
Deferred outflow of resources	<u>653,428,242</u>	<u>721,611,131</u>
Current unrestricted liabilities	104,358,102	91,252,024
Current liabilities payable from restricted assets	276,008,966	267,750,028
Noncurrent liabilities	42,592,327	40,781,571
Long-term debt	<u>9,910,523,608</u>	<u>10,067,617,391</u>
Total liabilities	<u>10,333,483,004</u>	<u>10,467,401,014</u>
Deferred inflow of resources	<u>6,281,351</u>	<u>2,739,764</u>
Net position:		
Investment in capital assets	(3,600,090,373)	(3,694,366,752)
Restricted for debt service	1,203,384,008	1,073,663,218
Restricted for SCA Intangible	2,538,012,424	2,602,468,625
Unrestricted	<u>(34,890,230)</u>	<u>(10,841,760)</u>
Total net position	<u>\$ 106,415,829</u>	<u>\$ (29,076,668)</u>

The NTTA System net position indicates an unrestricted current ratio of 4.75 and 6.37 as of April 30, 2019, and April 30, 2018, respectively. Working capital was \$391,412,523 and \$490,236,114 as of April 30, 2019, and April 30, 2018, respectively. Total unrestricted current assets were \$495,770,625 as of April 30, 2019, compared to \$581,488,138 as of April 30, 2018 (see Table A-1). Total unrestricted and restricted current assets were \$891,322,399 and \$949,033,224 as of April 30, 2019, and April 30, 2018, respectively. Cash and investments of \$808,908,104 represent the largest component of current assets as of April 30, 2019. The remaining \$82,414,295 is comprised of accrued interest receivables of \$4,144,211, accounts receivable of \$66,790,499, and interproject/interagency receivables of \$11,479,584.

Total unrestricted current liabilities for the NTTA System were \$104,358,102 as of April 30, 2019, including \$1,501,200 for accounts payable, \$78,713,620 of deferred revenue, \$12,759,329 for accrued liabilities, mainly accrued salaries and vacation liability, and interfund payables of \$11,383,954.

## Summary of Operations

Set forth below is a summary of the NTTA System's operations for the four-month periods ending April 30, 2019 and 2018.

**Table A-2**  
Change in Net Position

	Four Months Ending	
	Unaudited April 30, 2019	Unaudited April 30, 2018
Revenues		
Tolls	\$ 281,967,502	\$ 269,559,631
Other revenues	26,391,924	24,808,905
Operating revenues	308,359,426	294,368,535
Operating expenses	83,415,079	58,050,617
Income from operations before amortization and depreciation	224,944,347	236,317,918
Amortization of intangible (Sam Rayburn Tollway)	21,596,171	21,596,171
Depreciation	3,366,875	3,277,654
Operating income	199,981,301	211,444,093
Nonoperating revenue (expenses):		
Net increase (decrease) in fair value of investments	3,206,008	(5,701,657)
Interest expense	(165,325,021)	(164,267,579)
Other	1,274,465	97,368
Net nonoperating revenue (expenses):	(160,844,548)	(169,871,868)
Income before capital contributions and subsidies	39,136,753	41,572,225
Capital contributions		
Payments from (to) other governments	-	(2,000,000)
Build America Bond's interest subsidy	9,097,768	9,058,971
Change in net position	48,234,520	48,631,196
Net position- beginning	58,181,309	(77,707,865)
Net position - ending	\$ 106,415,829	\$ (29,076,669)

Total operating revenues for the NTTA System were \$308,359,426 for the four-month period ending April 30, 2019 and \$294,368,535 for the four-month period ending April 30, 2018 (see Table A-2). Toll revenues for the four-month period ending April 30, 2019 were \$281,967,502 (net of bad debt expense of \$22,623,521), a 4.60% increase over the toll revenues of \$269,559,631 (net of bad debt expense of \$25,672,643) for the four-month period ending April 30, 2018. Traffic on the NTTA System continues to grow, with average daily revenue transactions of 2,289,382 and 2,213,210 for the four-month periods ending April 30, 2019 and 2018, respectively.

Total operating expenses for the NTTA System before depreciation for the four-month period ending April 30, 2019 were \$83,415,079 compared to the four-month period ending April 30, 2018, of \$58,050,617, a 43.69% increase (see Table A-2). Of these amounts, \$50,609,561 and \$47,119,887 for the respective four-month periods were attributable to expenses for the Operations and Maintenance Fund as provided in the Trust Agreement. Interest expense, inclusive of capitalized interest, for the four-month period ending April 30, 2019, was \$165,325,021, a 0.64% increase from the interest expense of \$164,267,579 for the four-month period ending April 30, 2018. Debt service coverage for the four-month period ending April 30, 2019 and April 30, 2018 for First Tier Bonds and Second Tier Bonds was 1.53 and 1.47 times, respectively. The Trust Agreement and NTTA's Debt Policy both require bond

principal and interest coverage of at least 1.20 times (calculated on an annual basis) for First Tier Bonds and Second Tier Bonds.

## **Investments**

The NTTA System's total investments as of April 30, 2019, and April 30, 2018, were \$1,394,050,528 and \$1,296,094,641, respectively.

## **Revenues by Type**

Total gross operating revenues for the NTTA System were \$330,982,947 for the four-month period ending April 30, 2019. Toll revenues of \$281,967,502 (net of bad debt expense of \$22,623,521) account for 91.4% of total net operating revenues. Interest income (excluding Construction Fund interest) was \$9,105,824 or 3% of total net operating revenues and included in other revenue. The balance of other revenue, mostly administrative and statement fees for collection of tolls from violators, was \$17,286,100, representing 5.6% of total net operating revenues.

## **Revenues Compared to Estimates**

The NTTA System actual toll revenue for the four-month period ending April 30, 2019 was 1.7% over the toll revenue estimated for such period by NTTA's Traffic Engineers. It should be noted that the projected toll revenues were revenues projected to be collected in each year (*i.e.*, cash basis) after applying the appropriate ZipCash revenue recovery rates. Actual toll revenue reported by NTTA in its financial statements is based on revenues determined on an accrual basis in accordance with GAAP.

## **Capital Assets**

The NTTA System's investment in capital assets includes land, buildings, rights-of-way, roadways, bridges, equipment and computer systems. Capital assets (excluding NTTA's investments and capital lease for SRT of \$2,538,012,424 as of April 30, 2019, were \$5,744,267,709, increasing from April 30, 2018, by \$60,839,979.

NTTA utilizes GASB No. 34, Modified Approach of reporting infrastructure assets. Each year a comprehensive assessment is conducted on all NTTA infrastructure assets which affect the following year's maintenance budget. For the four-month period ending April 30, 2018, NTTA estimated it would spend \$16,042,856 for infrastructure maintenance and preservation but actually spent \$2,638,220. For the four-month period ending April 30, 2019, NTTA estimated it would spend \$19,375,381 for infrastructure maintenance and preservation but actually spent \$4,556,046. Fluctuations between the amount spent to preserve and maintain NTTA's infrastructure assets and the estimated amount result primarily from the timing of work activities. The NTTA System's Condition Index for 2017 was 8.9 on a ten point scale with a score of ten meaning "like new" and for 2018 was 8.8, which was above the 8.0 goal established by NTTA.

The SRT will revert to TxDOT after the expiration of the 50-year period commencing on the date NTTA began collecting tolls on the project on its own behalf (September 2008). NTTA is amortizing the cost of the acquisition and the construction costs of the SRT over the 50-year period utilizing the straight-line basis. The effect of amortizing the cost of the acquisition and the construction costs of the SRT reduces NTTA's net revenues as reported on a GAAP basis. Since the amortization is a non-cash item, it does not impact NTTA's calculation of net revenues available per the Trust Agreement.

## **Long-Term Debt**

As of April 30, 2019, NTTA had long-term debt outstanding of approximately \$9.91 billion (including accrued and accreted interest on capital appreciation bonds and convertible capital appreciation bonds) compared to approximately \$10.06 billion (including accrued and accreted interest on capital appreciation bonds and convertible capital appreciation bonds) as of April 30, 2018. The bonded debt is secured solely by toll revenue of the NTTA System.

## **CURRENT AND HISTORICAL INFORMATION**

### **NTTA System Toll Rate Schedule**

Set forth in **APPENDIX C** is the toll rate schedule currently in effect for the NTTA System. Under this toll rate schedule, rates on the NTTA System increase by approximately 2.75% per annum, and are adjusted on July 1 of every odd-numbered year. Under NTTA's toll rate structure, there is a differential in tolls, with those not using TollTags or other transponders being charged a higher toll than those using TollTags or other transponders. While the Board may at any time in the future adopt a different toll rate schedule or alter any of the scheduled increases, absent

Board action the scheduled rate increases will automatically go into effect. Before any change in the current NTTA System toll rate schedule can become effective, the Trust Agreement requires that an opinion of the Traffic Engineers be delivered to the Trustee and NTTA stating either (a) that if such proposed toll rate schedule had been in effect during the preceding Fiscal Year, it would not have caused a decrease in the Net Revenues for said preceding Fiscal Year, or (b) the adoption of such proposed toll rate schedule will not adversely affect the ability of NTTA to comply with its rate covenant under the Trust Agreement. See "**TRAFFIC AND REVENUE STUDY**" herein and the 2018 T&R Report (hereinafter defined) and 2019 Bringdown Letter (hereafter defined) incorporated by reference herein for assumptions relating to toll rates for the NTTA System. See "**INCORPORATION BY REFERENCE.**"

## OTHER FINANCIAL INFORMATION

### Historical Traffic and Net Revenues

The table set forth below shows the net revenues available for debt service of the NTTA System for the calendar years 2015 through 2018.

<u>Year</u>	<u>Revenue Vehicle Transactions<sup>(1)</sup></u>	<u>Toll Revenue<sup>(1)(2)</sup></u>	<u>Investment and Other Earnings<sup>(1)</sup></u>	<u>Current Expenses<sup>(1)</sup></u>	<u>Net Revenues</u>	<u>Change in Net Revenues</u>
2015 <sup>(3)</sup>	755,052,546	693,279,968	37,625,288	150,573,807	580,331,449	N/A
2016	793,502,055	758,799,316	52,132,804	153,516,250	657,415,870	13%
2017 <sup>(4)</sup>	803,252,051	797,192,510	57,972,309	166,858,808	688,306,011	5%
2018	827,610,415	841,491,016	67,692,654	165,549,909	743,633,761	8%

<sup>(1)</sup> Source for the NTTA System for 2015-2018 is unaudited financial information of NTTA.

<sup>(2)</sup> Toll Revenue is net of allowance for uncollectible receivables.

<sup>(3)</sup> A system-wide increase of toll rates was implemented on July 1, 2015.

<sup>(4)</sup> A system-wide increase of toll rates was implemented on July 1, 2017.

### Historical Debt Service Coverage

The table below sets forth the debt service coverage for all outstanding debt (including First Tier Bonds, Second Tier Bonds, Third Tier Bonds, the ISTEAL Loan and the Subordinate Lien Bonds) of NTTA secured by revenues of the NTTA System for Fiscal Years 2014 through 2018 as calculated pursuant to the Trust Agreement and in accordance with GAAP. The debt service coverage for Fiscal Years 2014 through 2016 did not include the revenue, expenses or debt associated with the PGBT WE or the CTP, as they were operated as a stand-alone system, separate from the NTTA System. Beginning in November 2017, the debt service coverage includes the PGBT WE and CTP.

Fiscal Year	Actual Coverage
2014	1.41x
2015	1.48x
2016	1.48x
2017	1.47x
2018	1.37x

### Pension Plans and Other Post-Employment Benefits

Upon its creation, NTTA became a participant in the Texas County and District Retirement System (the "TCDRS"), a non-profit public trust fund that provides pension, disability and death benefits to eligible employees of its participants. NTTA's employees are required to become members at the time of their employment, unless the individual is ineligible for one of the reasons specified by the TCDRS such as part-time or temporary employees. TCDRS covers eligible employees of Texas counties, districts and political subdivisions who elect to participate and are approved by the TCDRS Board.

NTTA has also adopted the North Texas Tollway Authority 401(k) Plan (the "NTTA Plan") as a successor qualified cash or deferred arrangement to the TexaSaver 401(k) Plan in which the TTA was a participant. A favorable determination letter has been issued by the Internal Revenue Service with respect to the NTTA Plan. Each NTTA employee is eligible to participate in the NTTA Plan.

NTTA requires mandatory participation in both the TCDRS and the NTTA Plan by all eligible employees. For more detailed information concerning the TCDRS and the NTTA Plan, see Note (6) of the financial statements in **APPENDIX B-1**.

NTTA's annual other post-employment benefit ("*OPEB*") liability and annual expense are calculated in accordance with the parameters of GASB Statement 75. NTTA has recorded a net OPEB liability ("*NOL*") related to Public Employees Benefits Cooperative ("*PEBC*") of \$27,310,086 and a NOL related to Employees Retirement System of Texas ("*ERS*") of \$14,248,908 for Fiscal Year 2018. The annual OPEB expense for Fiscal Year 2018 as actuarially determined by GASB Statement 75 was \$3,414,282 and \$762,546 for PEBC and ERS, respectively. See Note (8) of the financial statements in **APPENDIX B-1** for additional information on OPEB.

## **TRAFFIC AND REVENUE STUDY**

In September 2017, CDM Smith, the traffic engineers for the NTTA System, prepared the Comprehensive Traffic and Toll Revenue Study (the "*September 2017 T&R Study*") to estimate traffic and toll revenues for the NTTA System. The September 2017 T&R Study involved a detailed evaluation of a new metropolitan transportation plan adopted by the North Central Texas Council of Governments ("*NCTCOG*") in March 2016 called Mobility 2040. The updated travel demand networks of Mobility 2040 were incorporated into the September 2017 T&R Study. This study included an assessment of current economic conditions and other key factors influencing forecasted traffic and revenue on all NTTA System toll facilities. This effort included an independent economic review of the Mobility 2040 demographics along the NTTA System corridors as well as comprehensive traffic count and travel time data collection. In August 2018, CDM Smith prepared the August 30, 2018 NTTA System Traffic and Revenue Letter Update (the "*August 2018 T&R Letter Update*") to revise the September 2017 T&R Study, including updates to the traffic and revenue forecast based on the most recent available data. The September 2017 T&R Study and the August 2018 T&R Letter Update are collectively referred to herein as the "*2018 T&R Study*". CDM Smith has produced and submitted the April 15, 2019 NTTA System Traffic and Revenue Bringdown Letter (the "*2019 Bringdown Letter*"), which reaffirms the traffic and revenue forecasts included in the August 2018 T&R Letter Update. As part of the development of the 2019 Bringdown Letter, CDM Smith evaluated the most recent traffic, transaction, TollTag penetration and ZipCash revenue recovery trends. In addition, CDM Smith reviewed each of the assumptions used in the August 2018 T&R Letter Update traffic and revenue forecasts. This review included the valuation of potential traffic and revenue impacts associated with changes to any of the underlying assumptions.

The September 2017 T&R Study involved the following key elements:

- **Traffic Trends and Characteristics** – CDM Smith evaluated historical and recent traffic and toll revenue trends on all NTTA System toll facilities, as detailed in Section 2 of the September 2017 T&R Study. This included an analysis of annual and monthly transaction trends on NTTA System toll facilities, and AVI and ZipCash transaction shares. In addition, the then latest traffic counts and travel time data were analyzed and incorporated into the traffic and revenue forecasting models.
- **NTTA System Corridor Growth Considerations** – Beginning with the NCTCOG's official regional demographics included in Mobility 2040, CDM Smith evaluated the socioeconomic conditions along NTTA System corridors as described in Section 4 of the September 2017 T&R Study. This included a review of the historical population and employment growth trends, as well as the future growth projections of these two major socioeconomic characteristics along the NTTA System corridors. A demographic consultant performed an independent economic review of the official demographic datasets and identified necessary modifications to the regional growth projections along and near NTTA System corridors. A summary of the independent economic review performed for the study area is also presented in Section 4 of the September 2017 T&R Study.
- **NTTA System Traffic and Toll Revenue Forecasts** – CDM Smith developed traffic and toll revenue forecasts for the NTTA System, including PGBT WE and CTP, as detailed in Section 6 of the September 2017 T&R Study. The traffic and toll revenue forecasts were made using trip tables developed based on findings of the NTTA System independent economic review, with additional adjustments that were done as part of the model validation process.

The results of toll sensitivity analyses for the NTTA System, as described in Section 6 of the September 2017 T&R Study, indicate that the planned toll rates are below the revenue maximization points, demonstrating that, if needed, there is potential for revenue enhancement through toll increases above those assumed for traffic and revenue forecasting purposes.

Since the completion of the September 2017 T&R Study, the following new information has become available, which has warranted changes to the NTTA System traffic and revenue forecasts: (i) the anticipated completion dates for several NTTA capital improvement projects and other regional projects have changed, (ii) refinements to the traffic and revenue forecasting models were made by CDM Smith to reflect recent growth trends on the NTTA System and (iii) TollTag penetration and ZipCash revenue recovery assumptions have been updated to reflect the most recently available data. The August 2018 T&R Letter Update incorporates this information.

Based on the traffic forecast at each toll gantry location, annual forecasts for each toll facility of the NTTA System were prepared through 2066. The projections extend from 2018 through 2066 and include the revenue forecasts for DNT, PGBT, SRT, PGBT EE, PGBT WE, CTP, AATT, MCLB and LLTB. In each case, forecasts for each of the facilities are based on modeled traffic estimates at each toll collection location through the year 2040. Estimates beyond year 2040 are based on nominal assumptions regarding future traffic growth. These modeled estimates were refined using post-model adjustments and validation factors used to match observed August 2017 traffic data at each toll gantry location.

The average toll at each location was based on the current mix of passenger car and commercial vehicle traffic, and the current average tolls, modified in future years to reflect changing assumptions in the proportion of AVI and ZipCash transaction shares. Toll rates for ZipCash transactions are 50 percent higher than the rates for AVI transactions (with a minimum differential of \$0.25 in 2017 dollars for passenger cars) at each toll gantry location.

As shown in the August 2018 T&R Letter Update, the estimated annual revenue on the DNT is expected to increase from \$275.1 million in 2019 to \$355.3 million by 2025 and \$543.7 million by 2035. Revenue on the PGBT is expected to be \$237.4 million in 2019, increasing to \$311.6 million by 2025 and \$481.4 million by 2035. PGBT WE is anticipated to generate \$59.7 million in toll revenue in 2019, increasing to \$95.8 million and \$153.3 million by 2025 and 2035, respectively. The PGBT EE toll revenue included in the August 2018 T&R Letter Update is the NTTA's share of the toll revenue. Under the PGBT EE project agreement with TxDOT, NTTA retains 80 percent of the AVI transaction revenue generated by the PGBT EE, and the remaining 20 percent of the AVI transaction revenue is paid to TxDOT. NTTA retains 80 percent of the revenue collected from the ZipCash transactions at the AVI rate, but NTTA retains 100 percent of the toll surcharge collected on ZipCash transactions. NTTA's share of the revenue on the PGBT EE is expected to be \$41.8 million in 2019, increasing to \$55.9 million by 2025 and \$93.0 million by 2035. Revenue on the SRT is expected to be \$202.7 million in 2019, increasing to \$266.9 million by 2025 and \$423.0 million by 2035. As fiscal year 2058 is the end of the fifty-year operational agreement of the SRT between NTTA and TxDOT, revenue from SRT is estimated through August 31, 2058, while the other facilities are assumed to generate revenue for NTTA in perpetuity. CTP is anticipated to generate \$58.1 million in toll revenue in 2019, increasing to \$83.7 million and \$155.7 million by 2025 and 2035, respectively. Revenue from the AATT, MCLB and LLTB combined is expected to be about \$12.0 million in 2018. By 2025, this is estimated to reach a combined \$15.7 million and increase in 2035 to \$24.0 million, still a very small share of total NTTA System revenue.

As shown in the following table captioned "NTTA System – Annual Transactions and Revenue," total revenue on the existing NTTA System is expected to increase from about \$886.8 million in 2019 to \$1.18 billion in 2025 and \$1.87 billion in 2035. Driven by nominal traffic growth and continued assumed modest inflationary adjustments in toll rates, annual revenue on the NTTA System is expected to reach more than \$2 billion per year by 2037.

Future traffic growth on the NTTA System toll facilities is constrained to reflect available capacity, although the widening of PGBT from six to eight lanes between Belt Line Road and SH 78 and the widening of the main lanes of SRT from six to eight lanes are assumed.

Several sensitivity test results were included as part of the September 2017 T&R Study to provide the traffic and revenue impacts of changes to some key variables. While the state of the North Texas economy, population and employment growth, specifically along NTTA System corridors, are critical to the transactions and revenue on the NTTA System, the following are other critical parameters that will continue to have a material impact on the NTTA System traffic and revenue:

- AVI transaction shares and ZipCash revenue recovery rates
- Growth in the NTTA System toll rates and toll rates on the several non-NTTA managed lane facilities, including those that will open in the next few years
- Growth in the perceived NTTA customers' values of time
- Gasoline prices
- Truck traffic shares on the NTTA System facilities



- Regional air quality requirements and the regional metropolitan transportation plan
- Future growth and performance of the regional economy
- The timing of capacity improvements along sections of DNT, PGBT and SRT; impacts that the associated construction activities will have on the flow of NTTA System traffic during construction
- Improvements or openings of complementary and competing transportation facilities along the NTTA System corridors; impacts the associated construction activities will have on the NTTA System's traffic and revenue. The critical non-NTTA roadway facilities/improvements that could materially impact the NTTA System's traffic and toll revenue include the expansion of SH 161 between SH 183 and Belt Line Road (which is currently under construction), DNT Extension Phase 4A/4B/5, IH 635 Project, DFW Connector Project, US 75 Project, IH 35E Project, SH 183 Project and SH 190/East Branch. Of these changes included in NCTCOG Mobility 2045, the only change that is expected to result in lower revenue on the NTTA System is the delayed completion of SH 190 East Branch from 2027 to 2028. However, because the delay is only one year, the impacts to long-term revenue forecast would be seen primarily in 2027, with very little impact in later years.

The September 2017 T&R Study, the August 2018 T&R Letter Update and the 2019 Bringdown Letter are incorporated by reference herein. See "**INCORPORATION BY REFERENCE.**"

*[Remainder of page intentionally left blank]*

<b>NTTA System – Annual Transactions and Revenue</b>						
<b>Year</b>	<b>Annual Transactions</b>			<b>Annual Toll Revenue</b>		
	<b>Total</b>	<b>AVI</b>	<b>ZipCash</b>	<b>Total</b>	<b>AVI</b>	<b>ZipCash</b>
2019	847,833,600	683,227,900	164,605,700	\$886,775,000	\$767,361,000	\$119,414,000
2020	859,469,500	694,603,900	164,865,600	\$925,052,800	\$800,179,200	\$124,873,600
2021	877,664,400	711,538,200	166,126,200	\$971,161,200	\$843,193,800	\$127,967,400
2022	906,594,100	737,161,800	169,432,300	\$1,027,216,300	\$893,165,400	\$134,050,900
2023	926,066,900	755,214,100	170,852,800	\$1,078,521,700	\$939,973,100	\$138,548,600
2024	944,365,700	772,229,600	172,136,100	\$1,130,572,800	\$986,201,400	\$144,371,400
2025	958,331,900	785,647,200	172,684,700	\$1,184,828,000	\$1,036,295,200	\$148,532,800
2026	977,943,200	803,595,100	174,348,100	\$1,243,694,600	\$1,088,667,500	\$155,027,100
2027	994,910,500	819,336,100	175,574,400	\$1,299,687,500	\$1,140,038,600	\$159,648,900
2028	1,015,506,100	837,957,400	177,548,700	\$1,363,044,000	\$1,196,346,500	\$166,697,500
2029	1,036,553,100	856,897,800	179,655,300	\$1,429,968,700	\$1,258,018,900	\$171,949,800
2030	1,057,802,300	875,957,200	181,845,100	\$1,500,651,200	\$1,320,416,800	\$180,234,400
2031	1,079,668,200	895,481,800	184,186,400	\$1,575,053,100	\$1,388,593,000	\$186,460,100
2032	1,096,045,800	910,408,100	185,637,700	\$1,645,209,100	\$1,450,220,300	\$194,988,800
2033	1,113,019,600	925,775,600	187,244,000	\$1,717,916,700	\$1,517,134,600	\$200,782,100
2034	1,130,146,700	941,221,200	188,925,500	\$1,794,102,200	\$1,584,451,200	\$209,651,000
2035	1,147,326,000	956,832,500	190,693,500	\$1,874,192,100	\$1,658,027,400	\$216,164,700
2036	1,165,116,500	972,578,000	192,538,500	\$1,958,415,900	\$1,732,166,800	\$226,249,100
2037	1,182,191,100	987,857,600	194,333,500	\$2,044,559,100	\$1,811,259,000	\$233,300,100
2038	1,197,114,100	1,001,284,200	195,829,900	\$2,128,226,800	\$1,884,531,000	\$243,695,800
2039	1,212,340,100	1,014,928,300	197,411,800	\$2,215,402,400	\$1,964,403,100	\$250,999,300
2040	1,227,591,400	1,028,559,600	199,031,800	\$2,305,985,600	\$2,044,154,800	\$261,830,800
2041	1,242,889,100	1,042,198,800	200,690,300	\$2,398,908,700	\$2,129,317,800	\$269,590,900
2042	1,258,225,300	1,055,841,400	202,383,900	\$2,495,772,000	\$2,214,515,900	\$281,256,100
2043	1,273,776,500	1,069,637,100	204,139,400	\$2,598,695,200	\$2,308,922,500	\$289,772,700
2044	1,289,617,500	1,083,649,600	205,967,900	\$2,706,563,600	\$2,403,507,200	\$303,056,400
2045	1,305,673,200	1,097,819,900	207,853,300	\$2,816,551,900	\$2,504,468,800	\$312,083,100
2046	1,318,427,200	1,109,171,900	209,255,300	\$2,924,696,100	\$2,599,052,300	\$325,643,800
2047	1,331,324,600	1,120,620,600	210,704,000	\$3,037,191,800	\$2,702,055,700	\$335,136,100
2048	1,344,313,800	1,132,124,900	212,188,900	\$3,153,992,700	\$2,804,481,400	\$349,511,300
2049	1,357,842,200	1,144,062,100	213,780,100	\$3,274,336,100	\$2,915,009,800	\$359,326,300
2050	1,371,411,200	1,156,014,100	215,397,100	\$3,399,774,900	\$3,024,801,200	\$374,973,700
2051	1,383,300,200	1,166,527,300	216,772,900	\$3,524,072,000	\$3,138,711,600	\$385,360,400
2052	1,394,487,100	1,176,428,600	218,058,500	\$3,650,579,500	\$3,249,510,100	\$401,069,400
2053	1,406,181,100	1,186,740,500	219,440,600	\$3,783,326,300	\$3,371,483,900	\$411,842,400
2054	1,417,961,800	1,197,109,400	220,852,400	\$3,921,353,100	\$3,492,315,800	\$429,037,300
2055	1,429,760,000	1,207,476,700	222,283,300	\$4,062,297,700	\$3,621,405,800	\$440,891,900
2056	1,441,734,900	1,217,979,000	223,755,900	\$4,208,760,000	\$3,749,462,800	\$459,297,200
2057	1,453,634,500	1,228,404,600	225,229,900	\$4,360,082,100	\$3,888,776,900	\$471,305,200
2058	1,356,538,700	1,146,634,300	209,904,400	\$4,144,981,000	\$3,695,896,100	\$449,084,900
2059	1,149,628,500	971,901,800	177,726,700	\$3,532,702,000	\$3,153,250,100	\$379,451,900
2060	1,157,668,000	978,959,900	178,708,100	\$3,655,947,100	\$3,261,344,700	\$394,602,400
2061	1,166,029,100	986,280,200	179,748,900	\$3,782,719,600	\$3,377,415,100	\$405,304,500
2062	1,174,266,000	993,486,500	180,779,500	\$3,913,538,900	\$3,492,341,300	\$421,197,600
2063	1,182,453,200	1,000,642,100	181,811,100	\$4,049,007,500	\$3,616,450,300	\$432,557,200
2064	1,190,562,400	1,007,723,300	182,839,100	\$4,189,797,800	\$3,739,587,700	\$450,210,100
2065	1,199,007,900	1,015,081,000	183,926,900	\$4,335,352,700	\$3,872,991,300	\$462,361,400
2066	1,207,443,100	1,022,422,500	185,020,600	\$4,486,234,700	\$4,005,279,700	\$480,955,000
<b>Total</b>	<b>56,757,957,900</b>	<b>47,483,231,300</b>	<b>9,274,726,600</b>	<b>\$125,707,471,800</b>	<b>\$111,637,154,400</b>	<b>\$14,070,317,400</b>

**Key assumptions for the foregoing table are as follows:**

- 1) NTTA systemwide toll rate increases on July 1 of every odd year by applying an annual toll increase of 2.75% in accordance with NTTA's adopted toll rate policy.
- 2) The SRT Project Agreement permits NTTA to implement congestion pricing if certain capacity improvement triggers are met. However, NTTA anticipates amending the SRT Project Agreement with the approval of TxDOT to remove the congestion pricing provisions. The August 2018 T&R Letter Update assumes that congestion pricing will not be put in place on the SRT at any time.
- 3) Under the PGBT EE Project Agreement, NTTA retains 80% of the AVI transaction revenue generated from the PGBT EE, and the remaining 20% of the AVI transaction revenue is paid to TxDOT. NTTA retains 80% of the revenue collected from the ZipCash transactions at the AVI toll rate, but NTTA retains 100% of the toll premium collected on ZipCash transactions.

- 4) Revenue forecasts for PGBT WE represent gross toll revenues and do not account for net revenue sharing with TxDOT commencing in 2061 as prescribed in the PGBT WE Project Agreement.
- 5) The extension of the DNT main lanes over US 380 and the first pair of ramps north of US 380 (ramps to/from First Street) are assumed to open by March 31, 2022.
- 6) DNT's Panther Creek Parkway ramps – toll gantries added to accommodate the City of Frisco building Panther Creek Parkway – are assumed to be complete by March 31, 2022.
- 7) The DNT Extension Phase 4A between US 380 and FM 428 will open by January 1, 2025.
- 8) The DNT Extension Phase 4B service road between FM 428 and the Grayson County line is assumed to open by May 31, 2021.
- 9) The expansion of PGBT from three lanes to four lanes per direction from US 75 to SH 78 is assumed to be completed by December 31, 2018. Expansion of PGBT from three lanes to four lanes per direction between IH 35E and DNT is assumed to be completed by December 31, 2019. Expansion of PGBT from three lanes to four lanes per direction from Belt Line to IH 35E is assumed to be completed by July 31, 2021.
- 10) Capacity improvements on SRT from Denton Creek to US 75 from three lanes to four lanes in each direction are assumed to be completed on December 31, 2021 with construction assumed to begin on January 1, 2019.
- 11) SH 161 between SH 183 and Belt Line Road is assumed to operate with an additional lane in each direction during weekday peak periods (6:00-10:00 a.m. and 2:00-7:00 p.m.). This section is assumed to be expanded to eight lanes by July 1, 2021.
- 12) SH 190/East Branch from IH 30/PGBT EE to IH 20/Loop 9 opens by January 1, 2027.
- 13) AVI/ZipCash toll transactions splits are applied on a plaza-by-plaza basis. AVI (TollTag) shares assumed for traffic and revenue forecasting purposes include AVI shares at the lane and all types of VToll transaction shares with a three-month lag. Based on the actual data and recent trends, the average NTTA System AVI shares are assumed to be 80.6% in 2018. The average AVI transaction shares on all NTTA facilities are assumed to ramp up based on a logistic function from 80.6% in 2018 to an average of 80.8% in 2020, 82.8% in 2030, 83.8% in 2040, 84.3% in 2050 and 84.6% in 2060.
- 14) The average NTTA System ZipCash effective revenue recovery rate is assumed to be 39.0% at one year after the transaction occurred (includes invoiced and un-invoiced transactions and excludes all VToll transactions) and 43.0% at two years after the transaction occurred. The effective revenue recovery from TollTag transactions is assumed to be 99.5% in all forecast years, based on historical observations.
- 15) Projected annual toll revenues are revenues projected to be collected in each year (*i.e.*, cash basis) after applying the above-described revenue recovery assumptions to the projected toll transactions for the year.
- 16) 2058 is the fiftieth year of operation of SRT as part of the NTTA System. SRT is expected to be returned to TxDOT at the end of August 2058.
- 17) Background network for travel demand modeling is based on Mobility 2040.
- 18) Trip tables used to generate traffic and revenues projections are based on the Mobility 2040 demographics, updated to reflect independent economic review by Research and Demographic Solutions in 2017 for the September 2017 T&R Study.
- 19) Truck transaction shares are applied on a plaza-by-plaza basis, at an NTTA System average of 3.0% (based on 2018 data), and are assumed to remain constant throughout the forecast period.
- 20) NTTA will employ business rules to encourage increases in AVI shares on its facilities and to increase the ZipCash toll revenue recovery.
- 21) In accordance with the existing practice of NTTA, all NTTA System facilities will be well-maintained, efficiently operated and effectively signed to encourage maximum usage.
- 22) Growth in vehicle operating costs (which include fuel, maintenance and tires) will not significantly deviate from the assumed inflation rate in the September 2017 T&R Study.

- 23) Growth in traveler values of time will not significantly deviate from the assumed annual escalation rates in the September 2017 T&R Study.
- 24) No local, regional or national emergency will arise which would abnormally restrict the use of motor vehicles.

## **INCORPORATION BY REFERENCE**

For additional information, the September 2017 T&R Study, the August 2018 T&R Letter Update and the 2019 Bringdown Letter have been filed with the Electronic Municipal Market Access System ("EMMA") maintained by the Municipal Securities Rulemaking Board (the "MSRB") and are incorporated by reference herein. In addition, NTTA's monthly financial statements filed with EMMA are incorporated by reference herein. The documents incorporated by reference are also available upon request made to NTTA or (other than NTTA's monthly financial statements) may be accessed on NTTA's website by accessing the following respective links:

[https://www.ntta.org/whatwedo/fin\\_invest\\_info/NTTAsystem/Documents/2018/NTTA\\_System\\_TandR\\_Letter\\_Update.pdf](https://www.ntta.org/whatwedo/fin_invest_info/NTTAsystem/Documents/2018/NTTA_System_TandR_Letter_Update.pdf)

[https://www.ntta.org/whatwedo/fin\\_invest\\_info/financial\\_Info/Documents/2017/NTTA\\_System\\_TandR\\_Report\\_091517.pdf](https://www.ntta.org/whatwedo/fin_invest_info/financial_Info/Documents/2017/NTTA_System_TandR_Report_091517.pdf)

[https://www.ntta.org/whatwedo/fin\\_invest\\_info/NTTAsystem/Documents/2019/NTTA%20Bringdown%20Letter-April%202019.pdf](https://www.ntta.org/whatwedo/fin_invest_info/NTTAsystem/Documents/2019/NTTA%20Bringdown%20Letter-April%202019.pdf)

THE FOREGOING LINKS ARE NOT INCLUDED TO INCORPORATE BY REFERENCE, EITHER EXPRESSLY OR BY IMPLICATION, INTO THIS OFFICIAL STATEMENT ANY OTHER INFORMATION OR MATERIALS ON NTTA'S WEBSITE. THE INFORMATION CONTAINED AT THE LINK LOCATIONS IS DATED AS OF THE DATE OF THE RESPECTIVE DOCUMENTS, AND THERE CAN BE NO ASSURANCE THAT SUCH INFORMATION WILL BE UPDATED IN THE FUTURE. NTTA, ITS FINANCIAL ADVISORS AND THE UNDERWRITERS DISCLAIM ANY RESPONSIBILITY TO UPDATE SUCH INFORMATION. NTTA, ITS FINANCIAL ADVISORS AND THE UNDERWRITERS DISCLAIM ANY RESPONSIBILITY AS TO THE ACCURACY OR COMPLETENESS OF THE CONTENT OF ANY MATERIAL CONTAINED ON ANY LINK TO OR CONTENT OR MATERIAL ON OTHER INTERNET SITES OR HYPERLINKS/URL REFERENCES ACCESSED THROUGH NTTA'S WEBSITE.

## **ENGINEERING REPORTS AND PROGRESS REPORTS**

NTTA has received multiple engineering reports and semi-annual construction progress reports with respect to various components of the NTTA System. Copies of all engineering and semi-annual progress reports are available upon request at the offices of NTTA. Such reports reflect the facts, conditions and estimates existing or made at the time of the report. Each such report speaks only as of its date and no effort has been made to update such reports.

## **INVESTMENTS**

Investment of NTTA's money is governed by State law (including the Texas Public Funds Investment Act), and the comprehensive investment policy and strategy statement adopted by the Board (the "*Investment Policy*").

NTTA is required by the Public Funds Investment Act to invest its money under written investment policies that (i) primarily emphasize safety of principal and liquidity, (ii) address investment diversification, yield, maturity and the quality and capability of investment management and (iii) include a list of authorized investments, maximum allowable stated maturity of any individual investment for pooled funds, the maximum dollar-weighted average maturity, methods to monitor the market price of investments and a requirement for settlement of all transactions, except investment pool funds and mutual funds, on a delivery versus payment basis. For a discussion of the investments of NTTA, see "**APPENDIX B.**"

The Chief Financial Officer has been appointed by the Board as the "Investment Officer" as required by the Public Funds Investment Act. No person may invest NTTA funds without express written authority from the Board. NTTA's investments must be made "with judgment and care under circumstances then prevailing that persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived." At least quarterly, the Investment Officer of NTTA must submit an investment report detailing: (i) the book value and market value of each investment at the beginning and end of the reporting period, (ii) if funds are pooled for investment

purposes, the beginning market value of the pool portfolio, changes in the market value during the reporting period, the ending market value of the portfolio and fully accrued interest for the reporting period and (iii) compliance with the investment portfolio as it relates to the adopted investment strategy.

Additionally, the Board must (i) review annually its adopted policies and strategies, (ii) adopt a rule, order, ordinance or resolution stating that it has reviewed its investment policy and investment strategies and records, and include any changes made to either its investment policy or investment strategy in the respective rule, order, ordinance or resolution, (iii) require any investment officers with personal business relationships or relatives with firms seeking to sell securities to NTTA to disclose the relationship and file a statement with the Texas Ethics Commission and NTTA, (iv) require the qualified representative of firms offering to engage in an investment transaction with NTTA to: (a) receive and review NTTA's investment policy, (b) acknowledge that reasonable controls and procedures have been implemented to preclude investment transactions conducted between NTTA and the business organization that are not authorized by the Board's investment policy (except to the extent that this authorization is dependent on an analysis of the makeup of NTTA's entire portfolio or requires an interpretation of subjective investment standards) and (c) deliver a written statement in a form acceptable to NTTA and the business organization attesting to these requirements, (v) perform an annual audit of the management controls on investments and adherence to NTTA's investment policy, (vi) provide specific investment training for the treasurer, chief financial officer and investment officers, (vii) restrict reverse repurchase agreements to not more than 90 days and restrict the investment of reverse repurchase agreement funds to no greater than the term of the reverse purchase agreement, (viii) restrict the investment in no-load mutual funds in the aggregate to no more than 15% of NTTA's monthly average fund balance, excluding bond proceeds and reserves and other funds held for debt service, (ix) require local government investment pools to conform to certain disclosure, rating, net asset value, yield calculation and advisory board requirements and (x) at least annually review, revise and adopt a list of qualified brokers that are authorized to engage in investment transactions with NTTA.

NTTA generally invests in direct obligations of the United States or its agencies and instrumentalities or repurchase agreements fully collateralized by obligations of the United States or its agencies or instrumentalities.

*[Remainder of page intentionally left blank]*

[THIS PAGE INTENTIONALLY LEFT BLANK]

**APPENDIX B-1**

**COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE NORTH TEXAS TOLLWAY  
AUTHORITY SYSTEM, AN ENTERPRISE FUND OF THE NORTH TEXAS TOLLWAY  
AUTHORITY, FOR FISCAL YEAR ENDED DECEMBER 31, 2018**

[THIS PAGE INTENTIONALLY LEFT BLANK]





NORTH TEXAS TOLLWAY SYSTEM  
An Enterprise Fund of the  
North Texas Tollway Authority  
Fiscal Year Ended Dec. 31, 2018

# ONWARD and UPWARD

2018 COMPREHENSIVE ANNUAL FINANCIAL REPORT



[THIS PAGE INTENTIONALLY LEFT BLANK]

## ONWARD NORTH TEXAS!

### WE CONTINUE TO ADVANCE AND SERVE

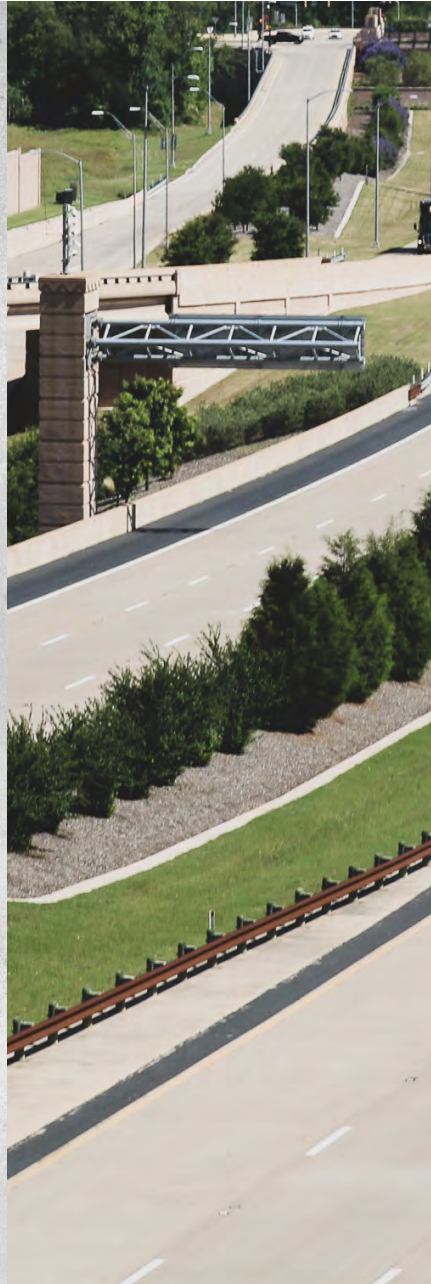
Our region continues to advance rapidly, attracting big business, increasing the workforce and building a superb quality of life. It's a bright future for North Texas.

NTTA is in step with the region, adapting and advancing to meet the growing demand for high-performance mobility. Whether it's helping the commute to work, home or play, we're consistently delivering reliable, convenient and smoother roads for our customers.

And we're reinvesting toll dollars back into the roads our customers rely on, maintaining and improving our high-quality roads. We're increasing driver safety measures and providing roadside rescue and relief. We're delivering financial transparency and making sound investments in North Texas mobility. And we're engaging the communities we serve, driving diversity within our workforce and the businesses we work with every day.

### SO UPWARD WE WILL GO!

We do all of this to serve our customers and move closer to excellence. We pledge to carry on serving this great region.





NORTH TEXAS TOLLWAY AUTHORITY | COMPREHENSIVE ANNUAL FINANCIAL REPORT | 2018



NORTH TEXAS TOLLWAY AUTHORITY | COMPREHENSIVE ANNUAL FINANCIAL REPORT | 2018

**INTRODUCTION**

- i CFO's Assessment: Horatio Porter
- v GFOA Certificate of Achievement

**FINANCIAL SECTION**

- 1 Independent Auditors' Report
- 4 Management's Discussion and Analysis (MD&A)

**Basic Financial Statements**

- 14 Statement of Net Position
- 16 Statement of Revenues, Expenses and Changes in Net Position
- 17 Statement of Cash Flows
- 19 Notes to Basic Financial Statements

**Required Supplementary Information**

- 54 Modified Approach - Infrastructure
- 56 Schedule of Changes in Net Pension Liability
- 57 Schedule of Employer Contributions
- 58 Schedule of Changes in PEBC Total OPEB Liability and Ratios
- 59 Schedule of Authority's Share of ERS Net OPEB Liability
- 59 Schedule of Authority's Contributions to ERS OPEB
- 60 Schedule 1 - Schedule of Net Position by Trust Account

**STATISTICAL SECTION (Unaudited)**

- 63 Introduction to Statistical Section
- 64 Net Position by Component
- 65 Statement of Revenues, Expenses and Changes in Net Position by Net Component
- 66 Traffic and Toll Revenue
- 67 Toll Rates (by Toll Plaza and Class of Vehicle)
- 72 Ratio of Outstanding Debt - by Type
- 73 Ratio of Revenue - backed Debt Outstanding
- 74 Schedule of Pro Forma Debt Service Requirements
- 75 Schedule of Estimated Toll Revenues, Expenses, Other Income and Estimated Debt Service Coverage Ratio
- 76 Demographic and Economical Statistical Data
- 79 North Texas Four-County Region's Top Ten Employers
- 80 Contribution to Infrastructure Assets
- 81 Toll Collection Variance
- 82 Total Lane Miles Operating and NTA Employee Data

**CONTINUING FINANCIAL DISCLOSURE SCHEDULES SECTION (Unaudited)**

- 83 Schedule 2 - Consolidating Schedule for Capital Improvement Fund
- 84 Schedule 3 - Schedule of Budget and Actual Revenues and Expenses on Trust Agreement Basis
- 85 Schedule 4 - Schedule of Changes in Net Position by Trust Account
- 87 Schedule 5 - Schedule of Toll Revenue and Traffic Analysis
- 88 Schedule 6 - Schedule of Toll Rates
- 89 Schedule 7 - Schedule of Historic Traffic, Toll Revenues and Net Revenues
- 90 Schedule 8 - Schedule of Capitalized Costs by Project
- 92 Schedule 9 - Schedule of Deferred Study Costs - Feasibility Study Fund



## CFO's ASSESSMENT

**Horatio Porter,**  
Chief Financial Officer

*Letter to Chairman John Mahalik and the Board of Directors*

The Finance Department of the North Texas Tollway Authority (the Authority or NTTA) is pleased to submit the Comprehensive Annual Financial Report (CAFR) for the year ended December 31, 2018, in compliance with Section 711 of the Amended and Restated Trust Agreement. The CAFR is intended to provide detailed information on the financial condition of the North Texas Tollway System (the System), an enterprise fund of the Authority, at December 31, 2018, including the System and the Non-Major Enterprise Fund.

The System consists of the Dallas North Tollway (DNT), President George Bush Turnpike (PGBT), President George Bush Turnpike Eastern Extension (PGBT EE), President George Bush Turnpike Western Extension (PGBT WE), Sam Rayburn Tollway (SRT), previously known as State Highway 121, Mountain Creek Lake Bridge (MCLB), Addison Airport Toll Tunnel (AAT), Lewisville Lake Toll Bridge (LLTB) and the Chisholm Trail Parkway (CTP).

The Non-Major Enterprise Fund is a Tolling Services Agreements (TSAs) fund. The following represents the three types of TSAs: (1) Developer TSAs, where NTTA has collection exposure and is paid a fee to process each transaction (2) Developer TSAs where NTTA remits only amounts

collected and is paid a fee to process each transaction and (3) Regional TSAs facilities where NTTA remits only amounts collected and is reimbursed for operating expenses from the Texas Department of Transportation (TxDOT). Developer TSA (type1) facilities presently consist of Interstate Highway 635 (LBJ) and North Tarrant Express 1&2 (NTE 1&2). Developer TSA (type 2) facilities presently consist of North Tarrant Express 3B (NTE 3B). Regional TSA (type 3) facilities presently consist of DFW Connector (DFWC), I-30, I-35E, SH-114, I-635 (LBJ East), Loop 12 and SH-183.

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that it has established for this purpose. Because the cost of internal controls should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. Crowe LLP, an independent audit firm, has issued an unmodified ("clean") opinion on the North Texas Tollway System's financial statements for the year ended December 31, 2018. This independent auditors' report is located at the front of the financial section of this report.

Management's discussion and analysis

(MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

**Profile of the North Texas Tollway Authority**  
The Turnpike Act of 1953 was passed by the legislature and signed into law by Governor Allan Shivers on June 9, 1953, creating the Texas Turnpike Authority for the purpose of building and managing an expressway between Dallas and Fort Worth.

After the initial design was completed in December 1954, \$58,000,000 in bonds were sold to construct the expressway called the Dallas-Fort Worth Turnpike.

The turnpike was dedicated on September 5, 1957, and by November 8, 1957 it had already served 1 million patrons.

In 1962, the Dallas Central Business District Association petitioned the Turnpike Authority to investigate the feasibility of a turnpike linking the central business district with north central Dallas. In June 1965, bonds were sold, and the Dallas North Tollway was in business.

The Dallas metropolitan area is headquarters for many Fortune 500 companies, representing a diversified economy, which includes technology, retail, manufacturing and services. The ongoing industry in Texas is growing faster than the national average. Public transit options continue to expand significantly, though in several outlying suburbs, it remains limited. The area also reflects art, fashion and entertainment. It is the site of a district Federal Reserve Bank and Dallas/Fort Worth International Airport. Together, with the Fort Worth Metropolitan area, DFW comprises the nation's fourth largest urban economy with per capita effective buying income (PCEBI) 90.8% of national average (StandardandPoors.com/ratings direct).

The first segment of the tollway from downtown to Mockingbird Lane opened to traffic on February 11, 1968, and the next segment to Royal Lane was opened to traffic on June 30, 1968.

In 1997, the Texas Legislature created regional tollway authorities, and the current North Texas Tollway Authority was born.

The Authority is committed to being a careful steward of all resources placed in its care – financial, physical and environmental. Because the Authority is a public organization chartered by the state of Texas, every toll collected is reinvested in the region.

Toll revenues in 2018, net of bad debt expense, were \$850,437,774, representing an increase of 17.7% over 2017 toll revenues of \$722,357,187, net of bad debt expense. This increased revenue will allow the Authority to preserve current assets, fund capital improvement projects, satisfy debt-service obligations and invest in safety and technology to provide our patrons world-class service.

The operations of the System are accounted for as an enterprise fund in accordance with United States Generally Accepted Accounting Principles (GAAP). Management takes responsibility for the accuracy of the data and the completeness and fairness of the presentation, including all disclosures. In keeping with that responsibility, these statements are presented on a consolidated basis and include the NTTA System and the Non-Major Enterprise Fund for Tolling Services Agreements (TSAs). Management confirms that the financial statements are presented fairly and, in all material respects, represent the financial position of the System as of December 31, 2018. Please refer to the MD&A on Pages 4-13 of this report for a detailed discussion of NTTA's financial performance.

**Economic Development**  
Dallas-Fort Worth (DFW) is one of the

top regions in the nation for business, thanks to low cost of living, a business-friendly environment, a strong base of well-educated and skilled employees and direct access to both U.S. and world markets through its transportation network. Year after year, the region's selling points are lauded by prestigious business experts at publications, including Bloomberg Businessweek, Forbes, Fortune and Site Selection. Key metrics tracked by the Federal Reserve Bank of Dallas, which measures economic indicators throughout Texas, show the region to be among the strongest in the country. This region is an innovation hub with a wealth of resources that make an ideal business location. The DFW region's attractive quality of life, strong regional and state economy, and absence of corporate and personal income taxes all contribute to the thriving Dallas-Fort Worth location. DFW is consistently ranked among the top places to work, the best places to live and the best places for investment.

The Dallas metropolitan area is headquarters for many Fortune 500 companies, representing a diversified economy which includes technology, retail, manufacturing and services. The ongoing industry in Texas is growing faster than the national average. Public transit options continue to expand significantly, though in several outlying suburbs, it remains limited. The area also reflects art, fashion and entertainment. It is the site of a district Federal Reserve Bank and Dallas/Fort Worth International Airport. Together, with the Fort Worth metropolitan area, DFW comprises the nation's fourth largest urban economy with per capita effective buying income (PCEBI) 90.8% of national average (StandardandPoors.com/ratings direct). The local unemployment rate is 3.6%, which is lower than the national rate of 3.7%.

**Relevant Financial Policies**  
Section 501 of the Amended and Restated Trust Agreement mandates the Authority will keep in effect a Toll Rate Schedule which will raise and produce

Net Revenues (Gross Revenues less Operating and Maintenance Expenses) sufficient to satisfy the greater of (1), (2) or (3) below:

- (1) 1.35 times the scheduled debt service requirements on all outstanding First Tier Bonds for the fiscal year; or
- (2) 1.20 times the scheduled debt service requirements on all outstanding First Tier Bonds and all outstanding Second Tier Bonds for the fiscal year; or
- (3) 1.00 times the scheduled debt service requirements on all outstanding First Tier Bonds, all outstanding Second Tier Bonds, all outstanding Third Tier Bonds and all other outstanding obligations of the Authority secured by net revenues for the fiscal year.

Coverage for all debt for 2018 was 1.37 times, well above the required level of 1.00.

**Awards and Acknowledgments**  
The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the North Texas Tollway Authority for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 2017.

We appreciate our Board of Directors for providing leadership as NTTA delivers transportation solutions for customers in the region. We also wish to thank NTTA staff and members of the Finance Department for their contributions to the production of this report.

Respectfully submitted,  
*Horatio Porter*  
Horatio Porter  
Chief Financial Officer



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

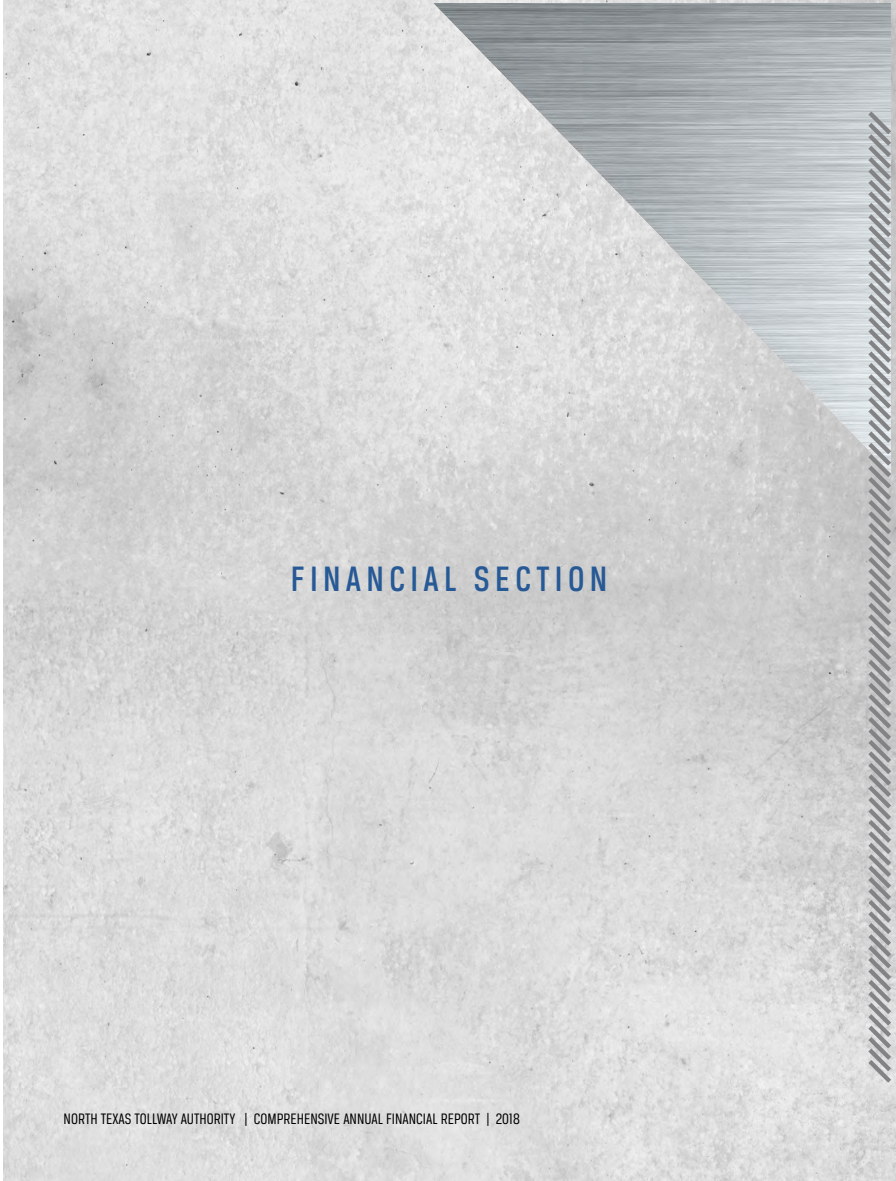
**North Texas Tollway Authority**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**December 31, 2017**

*Christopher P. Morill*

Executive Director/CEO



B-1-7



Crowe LLP  
Independent Member Crowe Global

## INDEPENDENT AUDITOR'S REPORT

To the Board of Directors  
North Texas Tollway Authority

### Report on the Financial Statements

We have audited the accompanying financial statements of the major fund and the aggregate remaining fund information of the North Texas Tollway System (the System), an enterprise fund of the North Texas Tollway Authority (the Authority), as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

**Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the major fund and the aggregate remaining fund information of the System as of December 31, 2018, and the respective changes in financial position, and, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Emphasis of Matters**

As discussed in note 1(a), the financial statements present only the System, an enterprise fund of the Authority and do not purport to, and do not, present fairly the financial position of the Authority as of December 31, 2018, and the changes in its financial position and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America. Our opinions are not modified with respect to this matter.

As discussed in note 1(n) to the financial statements, in June 2015 the GASB issued GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions." As discussed in note 1(n), GASB Statement No. 75 was effective for the System's fiscal year ended December 31, 2018. This Statement replaces the requirements of Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions." GASB Statement No. 75 establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense as well as identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosures and required supplementary information requirements about postemployment benefits other than pensions are also addressed. As a result of implementation of this standard, the System net position was restated by (\$11,805,279), as of January 1, 2018. Our opinion was not modified with respect to this matter.

**Other Matters**

*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4-13, Modified Approach – Infrastructure on pages 54-55, Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios on page 56, Schedule of Employer Contributions, on page 57, Schedule of Changes in PEBC Total OPEB Liability and Related Ratios on page 58, Schedule of Authority's Share in ERS Net OPEB Liability, on page 59, and Schedule of Authority's Contributions to ERS OPEB on page 59, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*Supplementary Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The items listed in the introductory section, and the supplementary schedules 1 through 9, and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Schedule 1 is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule 1 is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The items listed in the introductory section, schedules 2 through 9, and the statistical section have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

**Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated June 7, 2019 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

  
Crowe LLP

Dallas, Texas  
June 7, 2019



**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
Management's Discussion and Analysis  
December 31, 2018

As Management of North Texas Tollway Authority (Authority), we offer readers the financial statements for the System, which consists of DNT, PGBT, PGBT EE, PGBT WE, CTP, SRT, MCLB, AATT and the LLTB. These toll roads make up the major enterprise fund of the System. The Non-Major Enterprise Fund is a fund for TSAs. The following represent the three type of TSAs: (1) Developer TSAs where NTTA has collection exposure and is paid a fee to process each transaction (2) Developer TSAs where NTTA remits only amounts collected and is paid a fee to process each transaction and (3) Regional TSAs facilities where NTTA remits only amounts collected and is reimbursed for operating expenses from TxDOT. Developer TSA (type 1) facilities presently consist of LBJ and NTE 1&2. Developer TSA (type 2) facilities presently consist of NTE 3B. Regional TSA (type 3) facilities presently consist of DFWC, I-30, I-35E, SH-114, LBJ East, Loop 12 and SH-183.

We offer readers of these financial statements a narrative overview and analysis of the financial activities of the System for the year ended December 31, 2018. This discussion and analysis is designed to assist the reader in focusing on the financial issues and activities and to identify any significant changes in financial position. Please read it in conjunction with the financial statements, which immediately follows this section.

**Using This Annual Report**

**Overview of the Financial Statements**

This discussion and analysis is intended to serve as an introduction to the System financial statements, notes to the financial statements, and required supplementary information. The financial statements of the System report information using accounting methods consistent with reporting for an enterprise activity similar to those used by private sector companies.

**Statement of Net Position:** This statement presents information on the System and the Non-Major Enterprise fund assets and liabilities. The difference between the two is reported as net position. Over time, increases or decreases in the net position are useful indicators of whether the System's financial position is improving or deteriorating.

**Statement of Revenues, Expenses and Changes in Net Position:** This statement presents information showing the System and the Non-Major Enterprise fund revenues, expenses, and how the net position changed during the year.

**Statement of Cash Flows:** This statement presents information about the System and the Non-Major Enterprise fund cash receipts and cash payments, or, the sources and uses of the System and the Non-Major Enterprise fund cash. It also presents the change in cash balance during the fiscal year.

**Notes to the Financial Statements:** The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements.

**Other:** Certain required supplementary information is presented to disclose trend data on the System infrastructure condition. Additionally, certain financial schedules are presented by Trust Account and in accordance with the Authority's Trust Agreement.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
Management's Discussion and Analysis  
December 31, 2018

**Financial Results and Analysis**

**2018 Highlights**

- The total net position increased by \$139,103,365 over fiscal year 2017, mainly due to a 18.1% increase in toll revenues in the System.
- The System's total traffic transactions (excluding non-revenue transactions) for fiscal year 2018 were 827,610,415, an increase of 104,362,824 or 14.4% over fiscal year 2017 transactions.
- The Non-Major Enterprise Fund total traffic transactions for fiscal year 2018 were 145,124,325, an increase of 44,472,939 or 44.2% over fiscal year 2017 transactions. This is primarily due to the ramp-up of existing facilities, as well as the opening of the new SH 183 and Loop 12 facilities.
- Approximately 5,683,840 toll tags were active at the end of fiscal year 2018, an increase of 683,943 or 13.7% over fiscal year 2017 active toll tags.
- The System received a toll equity grant in the amount of \$160,270,000 from TxDOT for Right of Way acquisition and other costs related to the PGBT Eastern Extension (PGBT EE) in 2007. In return for the grant, the Authority agreed to share 20% of the tolls received on the PGBT EE with TxDOT over the life of PGBT EE. The extension opened in late December 2011. In fiscal year 2018, TxDOT received \$8,945,628 on 36,798,901 transactions in comparison to \$8,480,194 on 36,495,357 transactions in 2017.
- The System's toll revenues of \$841,491,016, net of bad debt expense, increased \$128,939,560 or 18.1% over fiscal year 2017, due to a 14.4% increase in traffic transactions
- The Non-Major Enterprise Fund total operating revenues of \$40,770,589 increased \$4,868,338 or 13.6% over fiscal year 2017 due to the increase in developer TSA transactions.
- The System's Administration and Operations expenses of \$165,549,909 increase by \$20,033,100 or 13.8% over fiscal year 2017. (See Budget to Actual Schedule – page 84)
- The Non-Major Enterprise Fund administration and operations expenses of \$37,556,397, increased by \$11,386,002 or 43.5% over fiscal year 2017, due to the increase of developer TSA transactions.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
Management's Discussion and Analysis  
December 31, 2018

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
Management's Discussion and Analysis  
December 31, 2018

**Summary of Operations**

**Table A-1**  
Net Position

	2018	2017
Current unrestricted assets	\$ 636,070,354	\$ 631,111,968
Current restricted assets	544,920,855	417,309,472
Noncurrent assets		
Investments	46,759,740	29,568,620
Restricted investments	481,330,226	425,906,016
Other assets	14,913,127	15,558,235
Intangible assets	2,559,497,824	2,623,954,024
Capital assets:		
Nondepreciable	5,671,997,459	5,625,808,671
Depreciable (net)	49,685,570	47,156,058
Total assets	<u>10,005,175,155</u>	<u>9,816,373,064</u>
Deferred outflow of resources	<u>671,048,987</u>	<u>782,642,783</u>
Current unrestricted liabilities	110,253,903	114,689,691
Current liabilities payable from restricted assets	339,940,058	239,190,067
Noncurrent liabilities	41,558,994	45,718,047
Long-term debt	<u>10,041,513,249</u>	<u>10,198,001,557</u>
Total liabilities	<u>10,533,266,204</u>	<u>10,597,599,362</u>
Deferred inflow of resources	<u>36,483,096</u>	<u>34,045,008</u>
Net position:		
Investment in capital assets	(3,710,464,076)	(3,737,708,369)
Restricted for debt service	1,230,664,711	1,050,516,053
Restricted for SCA intangible	2,559,497,824	2,623,954,024
Unrestricted	<u>26,776,383</u>	<u>30,609,769</u>
Total net position	<u>\$ 106,474,842</u>	<u>\$ (32,628,523)</u>

The net position indicates an unrestricted current ratio of 5.77 and 5.50 for fiscal year 2018 and fiscal year 2017, respectively. Working capital was \$525,816,450 and \$516,422,276 in fiscal year 2018 and fiscal year 2017, respectively. Total unrestricted current assets were \$636,070,354 in fiscal year 2018, compared to \$631,111,968 in fiscal year 2017. Total unrestricted and restricted current assets were \$1,180,991,209 at the end of fiscal year 2018. Cash and investments of \$1,068,370,714 represent the largest component of current assets. The remaining \$112,620,495 is comprised of accrued interest receivable of \$4,021,565, accounts receivable of \$83,064,046, inter-project/interagency receivables of \$14,033,862 and prepaid expenses of \$11,501,022.

Total unrestricted current liabilities were \$110,253,903 at the end of fiscal year 2018, consisting of \$261,007 of accounts payable, \$70,594,176 of deferred revenue, \$31,010,906 of accrued liabilities (mainly accrued salaries and vacation liability), and interagency payable of \$8,387,814.

**Table A-2**  
Change in Net Position

	2018	2017
Revenues		
Tolls	\$ 850,437,774	\$ 722,357,187
Other revenues	99,516,486	75,709,488
Operating revenues	949,954,260	798,066,675
Operating expenses before depreciation	<u>245,436,223</u>	<u>241,174,278</u>
Income from operations before depreciation	704,518,037	556,892,397
Amortization of intangible (Sam Rayburn Tollway)	(64,788,513)	(64,841,672)
Depreciation	<u>(10,059,970)</u>	<u>(10,412,946)</u>
Operating income	629,669,554	481,637,779
Nonoperating revenue (expenses):		
Decrease in fair value of investments	(1,061,515)	(732,342)
Interest expense	(493,048,030)	(426,510,859)
Other	<u>(9,774,843)</u>	<u>(47,181,797)</u>
Net nonoperating revenue (expenses):	(503,884,388)	(474,424,998)
Capital contributions		
Payments (to) from other governments	(2,000,000)	83,912
BAB's subsidy	27,123,478	27,022,055
Capital contribution	<u>-</u>	<u>512,742,812</u>
Change in net position	150,908,644	547,061,560
Net position, January 1, 2018	(32,628,523)	(579,690,083)
Restatement	<u>(11,805,279)</u>	<u>-</u>
Net position, January 1, 2018, As Restated (Note 1 (n))	<u>(44,433,802)</u>	<u>(579,690,083)</u>
Net position - ending	<u>\$ 106,474,842</u>	<u>\$ (32,628,523)</u>

Total operating revenues were \$949,954,260 for fiscal year 2018 and \$798,066,675 for fiscal year 2017. Toll revenues in fiscal year 2018 were \$850,437,774 (net of bad debt expense of \$92,519,568), a 17.7% increase over fiscal year 2017 toll revenues of \$722,357,187 (net of bad debt expense of \$80,065,277). Traffic on the System and the Non-Major Enterprise Fund continues to grow, with average daily transactions of 2,267,426 and 397,601 in fiscal year 2018 as compared to 1,981,500 and 275,757 in fiscal year 2017, respectively.

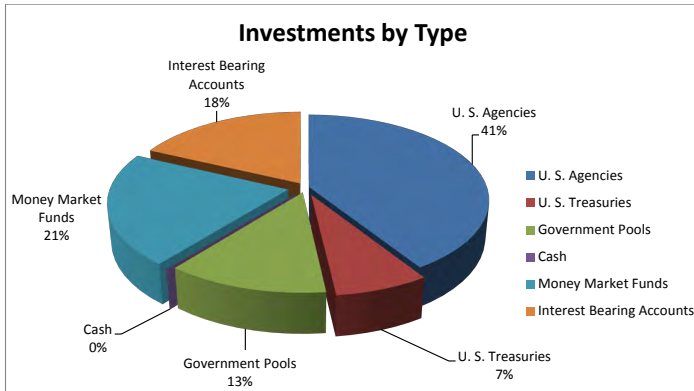
Total operating expenses, including the Reserve Maintenance Fund and the Capital Improvement Fund, before depreciation for fiscal year 2018 were \$245,436,223 representing a 1.8% increase from fiscal year 2017 operating expenses of \$241,174,278. Interest expense, inclusive of capitalized interest, for fiscal year 2018 was \$493,048,030, an 15.6% increase from fiscal year 2017 interest expense of \$426,510,859. The System's debt service coverage for all debt for fiscal year 2018 and fiscal year 2017 were 1.37 and 1.49 times, respectively. The Trust Agreement and the Authority's Debt Policy both require bond principal and interest coverage of 1.35 for first tier debt. For fiscal year 2018, the debt service coverage for first tier debt was 1.73.

The overall financial position in fiscal year 2018 increased by \$139,103,365 from fiscal year 2017.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Management's Discussion and Analysis  
 December 31, 2018

**Investments:** Investments at December 31, 2018 and 2017 were approximately \$1,531,590,111 and \$1,334,446,090 respectively. Chart A-3 below shows the types of authorized investments in the December 31, 2018 portfolio.

**Chart A-3**

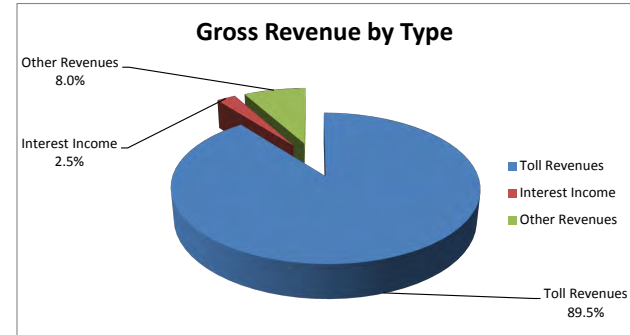


B-1-11

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Management's Discussion and Analysis  
 December 31, 2018

Chart A-4 below shows revenue in fiscal year 2018 by revenue source type.

**Chart A-4**

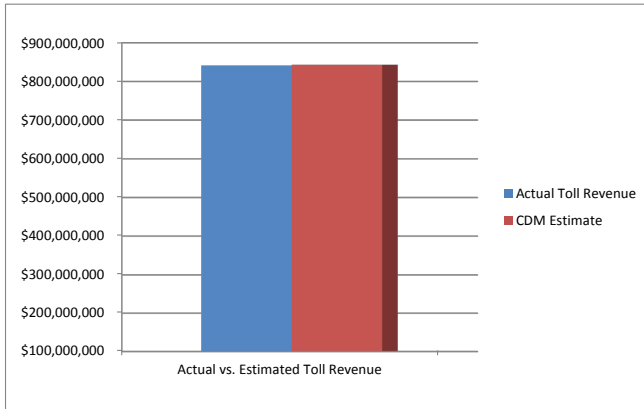


Net revenues for fiscal year 2018 were \$949,954,260, a 19.0% increase over fiscal year 2017 net revenues of \$798,066,675. Toll revenues of \$850,437,774 (net of bad debt expenses of \$92,519,568) account for 89.5% of total revenue. The remaining 10.5% of total revenue consisted of: Interest income (excluding Construction Fund interest) of \$23,312,689 or 2.5% and Other Revenue of \$76,203,797 or 8.0% (which was mostly administrative and statement fees for collection of tolls from violators and interoperability fees).

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Management's Discussion and Analysis  
 December 31, 2018

Chart A-5 below shows the System's actual toll revenue for fiscal year 2018 compared to the estimated toll revenue of the Authority's traffic and toll revenue engineer, CDM Smith Inc. (CDM). Toll revenue fell short of CDM's estimates by 0.2%.

**Chart A-5**



Traffic on the System continues to grow with approximately 2,267,426 average daily transactions in fiscal year 2018, up 14.4% from the 1,981,500 daily averages in fiscal year 2017.

The decrease in actual toll revenue as compared to CDM's estimate (budget) was largely attributed to:

- Construction related closures on the DNT and PGBT (4<sup>th</sup> lane) facilities reduced trips on the facility slightly more than anticipated in the budget.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Management's Discussion and Analysis  
 December 31, 2018

**Engineering Estimates**

The annual estimates by CDM for the System are displayed in comparison to the actual revenue of the System for the year of 2009 through 2018 in Table A-6 below:

**Table A-6**  
 Actual vs Estimated Revenue  
 (in millions of dollars)

Year	Actual	Estimate	Variance
2018	\$ 841,491,016	\$ 843,189,300	\$ (1,698,284)
2017	712,551,456	721,068,400	(8,516,945)
2016	665,212,316	636,987,300	28,225,016
2015	617,488,044	588,534,400	28,953,644
2014	580,045,215	520,318,600	59,726,615
2013	525,458,723	483,799,800	41,658,923
2012	485,463,608	442,688,000	42,775,608
2011	402,569,354	410,749,700	(8,180,346)
2010	366,597,323	377,132,800	(10,535,477)
2009	290,404,547	265,051,729	25,352,818

The System's fiscal year 2018 toll revenues of \$841,491,016 (net of bad debt expense of \$78,717,754) increased by 18.1% over fiscal year 2017 toll revenue of \$712,551,456 (net of bad debt expense of \$70,343,032). The System's total revenues produced a debt coverage ratio of 1.37 for all debt. Please see the Historical Debt Coverage Table (A-8) on page 13.

**Capital Assets** – The System's investment in capital assets includes land, buildings, right-of-way, roadway, bridges, equipment, and computer systems. Capital assets at December 31, 2018 were \$5,721,683,029, increasing from December 31, 2017 by \$48,718,300. For additional information on capital assets see Note (1) (f) and Note (4).

The Authority utilizes GASB No. 34, Modified Approach of reporting infrastructure assets. Each year a comprehensive assessment is conducted on all the Authority's infrastructure assets which affect the following fiscal year's maintenance budget. For fiscal year 2018, the Authority estimated it would need to spend \$48,128,568 for infrastructure maintenance and preservation, but actually expended \$22,311,736. Fluctuations from year to year between the amount spent to preserve and maintain the Authority's infrastructure assets and the estimated amount result from the timing of work activities. For additional information and results of the 2018 assessment, please see the Required Supplementary Information on pages 54 and 55 of this report. The Authority's Condition Index for 2017 is 8.8 versus the 8.0 goal.

The Sam Rayburn Tollway (SRT) will revert to Texas Department of Transportation after the expiration of the 50 year period commencing when the Authority began collecting tolls (September 2008) on the project on its own behalf.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Management's Discussion and Analysis  
 December 31, 2018

The Authority will amortize the cost of the acquisition and the construction costs of the SRT over the term of the project agreement pursuant to which the Authority acquired the project utilizing the straight-line basis. The effect of amortizing the cost of the acquisition and the construction costs of the SRT will reduce the Authority's net revenues as reported on the Generally Accepted Accounting Principles (GAAP) basis. Since the amortization will be a non-cash item, it will not impact the Authority's calculation of net revenues available per the Trust Agreement.

**Long-Term Debt** – At the end of fiscal year 2018, the Authority's total bonded debt outstanding was \$9,375,266,341 compared to \$9,407,717,891 in fiscal year 2017 (See Table A-7). This debt represents bonds secured solely by toll revenue. For detailed information see Note (5) and the schedule of revenue bonds outstanding as of December 31, 2018, on page 37.

**Table A-7**  
 Revenue Bonds Outstanding

Series	2018	2017
Series 2005C	\$ 42,955,000	\$ 42,955,000
Series 2008A	-	25,125,000
Series 2008B	-	400,000
Series 2008D	750,421,341	707,737,891
Series 2008I	295,165,000	295,165,000
Series 2009A	69,865,000	69,865,000
Series 2009B	825,000,000	825,000,000
Series 2009C	170,730,000	170,730,000
Series 2009D	-	178,400,000
Series 2010A *	90,000,000	90,000,000
Series 2010B *	310,000,000	310,000,000
Series 2011A	-	100,000,000
Series 2011B	268,625,000	268,625,000
Series 2012A	25,930,000	25,930,000
Series 2012B	383,625,000	383,625,000
Series 2012C	-	101,775,000
Series 2012D	32,815,000	32,815,000
Series 2014A	310,415,000	310,415,000
Series 2014B	146,420,000	146,420,000
Series 2014C	223,895,000	223,895,000
Series 2015A	844,060,000	851,230,000
Series 2015B	753,095,000	758,080,000
Series '16A	966,850,000	980,215,000
Series '17A	1,743,320,000	1,743,320,000
Series '17B	765,995,000	765,995,000
Series 2018A	356,085,000	-
Revenue Bonds Outstanding	<u>\$ 9,375,266,341</u>	<u>\$ 9,407,717,891</u>

\* Issued out of the Capital Improvement Fund (CIF). This debt is supported solely out of excess revenues flowing into the CIF.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Management's Discussion and Analysis  
 December 31, 2018

Table A-8 sets forth debt service coverage for all debt outstanding for the years 2009 through 2018.

**Table A-8**  
 Historical Debt Coverage

Year	Coverage
2018	1.37x
2017	1.49x
2016	1.48x
2015	1.48x
2014	1.41x
2013	1.26x
2012	1.47x
2011	1.77x
2010	1.83x
2009	1.56x

Additionally, the Authority funded, in part, costs of the construction of the PGBT with proceeds from a loan, which totaled \$135,000,000, made by TxDOT in 1995 pursuant to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Interest at the rate of 4.2% began to accrue on October 1, 2000, compounding annually on January 1, with the first payment made in October 2004, and annual payments on January 1 thereafter until final payment in 2029, which resulted in a new loan amount at October 1, 2004 of \$154,338,133. Repayment of the loan to TxDOT is to be made from amounts on deposit in the Capital Improvement Fund with payments subordinate to bonds or other obligations of the Authority issued or entered into and secured by the tolls and revenues of the Authority. The ISTEA loan payment of \$10,500,000 was made on December 28, 2018 for the fiscal year of 2019. The amortization schedule for this loan can be found in Note (5) page 39.

**Short-Term Debt** - The Authority maintains a \$200,000,000 commercial paper program. During fiscal year 2018, no commercial paper was issued and there are no outstanding notes under the commercial paper program. See also Note (5) page 39.

**Contacting the NTTA's Financial Management**

This financial report is designed to provide overview information to our bondholders, patrons, and other interested parties. Should you have questions about this report, please contact the North Texas Tollway Authority's Chief Financial Officer, 5900 W. Plano Parkway, Suite 100, Plano, Texas 75093.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
Statement of Net Position  
December 31, 2018

Assets	North Texas Tollway System	Non-Major Enterprise Fund	Total
Current assets:			
Cash and cash equivalents (note 3)	\$ 59,133,319	\$ 5,737,250	\$ 64,870,569
Investments (note 3)	444,128,395	21,088,958	465,217,353
Accounts receivable (net of allowance for uncollectibles) (note 9)	60,025,913	18,545,183	78,571,096
Other assets	23,261,134	4,150,202	27,411,336
Total current unrestricted assets	<u>586,548,761</u>	<u>49,521,593</u>	<u>636,070,354</u>
Current restricted assets:			
Restricted for construction:			
Investments (notes 3 and 10)	97,935,116	-	97,935,116
Accrued interest receivable	191,796	-	191,796
Restricted for debt service:			
Investments (notes 3 and 5)	436,923,529	-	436,923,529
Accrued interest receivable	1,953,317	-	1,953,317
Accounts receivable	4,492,950	-	4,492,950
Restricted for NTE 3A/3B:			
Investments (notes 3 and 10)	-	3,424,147	3,424,147
Total current restricted assets	<u>541,496,708</u>	<u>3,424,147</u>	<u>544,920,855</u>
Total current assets	<u>1,128,045,469</u>	<u>52,945,740</u>	<u>1,180,991,209</u>
Noncurrent assets:			
Investments (notes 3 )	46,759,740	-	46,759,740
Investments restricted for debt service (notes 3 and 5)	481,330,226	-	481,330,226
Unavailable feasibility study costs	7,522,520	-	7,522,520
Net pension asset	7,390,607	-	7,390,607
Service Concession Arrangement - Intangible asset (note 1(m) (net of accumulated amortization))	2,559,497,824	-	2,559,497,824
Capital assets:			
Nondepreciable (note 4)	5,671,997,459	-	5,671,997,459
Depreciable (net) (note 4)	49,685,570	-	49,685,570
Total noncurrent assets	<u>8,824,183,946</u>	<u>-</u>	<u>8,824,183,946</u>
<b>Total assets</b>	<b><u>9,952,229,415</u></b>	<b><u>52,945,740</u></b>	<b><u>10,005,175,155</u></b>
<b>Deferred outflow of resources</b>			
Loss on refunding	664,421,967	-	664,421,967
ERS OPEB contributions after measurement date	369,614	-	369,614
PEBC OPEB contributions after measurement date	145,996	-	145,996
PEBC OPEB assumptions change	1,764,964	-	1,764,964
Difference in projected and actual earnings on ERS OPEB liability	4,218	-	4,218
Pension contributions after measurement date	3,576,502	-	3,576,502
Changes in actuarial assumptions used to determine pension liability	765,726	-	765,726
<b>Total deferred outflow of resources</b>	<b><u>671,048,987</u></b>	<b><u>-</u></b>	<b><u>671,048,987</u></b>

See accompanying notes to basic financial statements

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
Statement of Net Position  
December 31, 2018

Liabilities	North Texas Tollway System	Non-Major Enterprise Fund	Total
Current liabilities:			
Accounts payable	\$ 261,007	\$ -	\$ 261,007
Accrued liabilities	30,228,943	781,963	31,010,906
Unearned revenue	70,594,176	-	70,594,176
Other liabilities	7,941,718	446,096	8,387,814
Total current unrestricted liabilities	<u>109,025,844</u>	<u>1,228,059</u>	<u>110,253,903</u>
Payable from restricted assets:			
Construction-related payables:			
Retainage payable	6,201,180	-	6,201,180
Debt service-related payables:			
Accrued interest payable	215,054,731	-	215,054,731
Revenue bonds payable, current portion (note 5)	115,260,000	-	115,260,000
Other liabilities-NTE 3A/3B	-	3,424,147	3,424,147
Total current liabilities payable from restricted assets	<u>336,515,911</u>	<u>3,424,147</u>	<u>339,940,058</u>
Total current liabilities	<u>445,541,755</u>	<u>4,652,206</u>	<u>450,193,961</u>
Noncurrent liabilities:			
Total other post-employment benefits liability - PEBC plan (note 8)	27,310,086	-	27,310,086
Net other post-employment benefit liability - ERS plan (note 8)	14,248,908	-	14,248,908
Loans payable	120,101,628	-	120,101,628
Dallas North Tollway System revenue bonds payable, net of bond discount (premium) costs of \$661,405,281 (note 5)	9,921,411,621	-	9,921,411,621
Total noncurrent liabilities	<u>10,083,072,243</u>	<u>-</u>	<u>10,083,072,243</u>
<b>Total liabilities</b>	<b><u>10,628,613,398</u></b>	<b><u>4,652,206</u></b>	<b><u>10,533,266,204</u></b>
<b>Deferred inflow of resources</b>			
Gain on refunding	30,201,745	-	30,201,745
Difference in expected and actual ERS OPEB experience	171,226	-	171,226
Change in actuarial assumptions used to determine ERS OPEB liability	2,979,276	-	2,979,276
Difference in projected and actual earnings on pension assets	617,688	-	617,688
Difference in expected and actual pension experience	2,513,161	-	2,513,161
<b>Total deferred inflow of resources</b>	<b><u>36,483,096</u></b>	<b><u>-</u></b>	<b><u>36,483,096</u></b>
<b>Net Position</b>			
Net investment in capital assets	(3,710,464,076)	-	(3,710,464,076)
Restricted for:			
Debt service	1,230,664,711	-	1,230,664,711
SCA Intangible	2,559,497,824	-	2,559,497,824
Unrestricted	(21,517,151)	48,293,534	26,776,383
<b>Total net position</b>	<b><u>\$ 58,181,308</u></b>	<b><u>\$ 48,293,534</u></b>	<b><u>\$ 106,474,842</u></b>

See accompanying notes to basic financial statements

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Statement of Revenues, Expenses and Changes in Net Position  
 Year ended December 31, 2018

	North Texas Tollway System	Non-Major Enterprise Fund	Total
Operating revenues:			
Tolls	\$ 841,491,016	\$ 8,946,758	\$ 850,437,774
Other	67,692,655	31,823,831	99,516,486
<b>Total operating revenues</b>	<b>909,183,671</b>	<b>40,770,589</b>	<b>949,954,260</b>
Operating expenses:			
General			
Administration	28,503,675	2,198,729	30,702,404
Operations	137,046,234	35,357,668	172,403,902
Preservation			
Reserve maintenance	22,311,612	-	22,311,612
Capital improvement	19,948,515	-	19,948,515
Construction improvement	69,790	-	69,790
Amortization of intangibles	64,788,513	-	64,788,513
Depreciation	10,059,970	-	10,059,970
Operating expenses	282,728,309	37,556,397	320,284,706
<b>Operating income</b>	<b>626,455,362</b>	<b>3,214,192</b>	<b>629,669,554</b>
Nonoperating revenues (expenses):			
Net decrease in fair value of investments	(1,061,515)	-	(1,061,515)
Interest expense	(493,048,030)	-	(493,048,030)
Other	(9,774,843)	-	(9,774,843)
Net nonoperating revenues (expenses)	(503,884,388)	-	(503,884,388)
Income (loss) before capital contributions, subsidies, and transfers	122,570,974	3,214,192	125,785,166
Payments to other governments	(2,000,000)	-	(2,000,000)
Build America Bonds Subsidy (BAB's)	27,123,478	-	27,123,478
Change in net position	147,694,452	3,214,192	150,908,644
Net Position, January 1, 2018	(77,707,865)	45,079,342	(32,628,523)
Restatement	(11,805,279)	-	(11,805,279)
Net Position, January 1, 2018, As Restated (Note 1 (n))	(89,513,144)	45,079,342	(44,433,802)
<b>Net Position, December 31, 2018</b>	<b>\$ 58,181,308</b>	<b>\$ 48,293,534</b>	<b>\$ 106,474,842</b>

See accompanying notes to basic financial statements

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Statement of Cash Flows  
 Year ended December 31, 2018

	North Texas Tollway System	Non-Major Enterprise Fund	Total
<b>Cash flows from operating activities:</b>			
Receipts from customers and users	\$ 918,804,303	\$ 38,646,039	\$ 957,450,342
Receipts from other sources	31,075,832	-	31,075,832
Payments to contractors and suppliers	(174,636,712)	(30,706,513)	(205,343,226)
Payments to employees	(55,910,933)	(3,954,300)	(59,865,233)
<b>Net cash provided by operating activities</b>	<b>719,332,491</b>	<b>3,985,225</b>	<b>723,317,716</b>
<b>Cash flows from capital and related financing activities:</b>			
Acquisition and construction of capital assets	(64,671,052)	-	(64,671,052)
Principal paid on revenue bonds	(51,045,000)	-	(51,045,000)
Principal paid on ISTEVA loan - current	(5,235,827)	-	(5,235,827)
Capital contributions - BAB's Subsidy	27,123,478	-	27,123,478
Refunding of revenue bonds	(24,090,000)	-	(24,090,000)
Deferred financing costs	17,285,456	-	17,285,456
Swap interest payment	(4,593,170)	-	(4,593,170)
Interest paid on ISTEVA loan	(5,264,173)	-	(5,264,173)
Interest paid on revenue bonds	(416,882,447)	-	(416,882,447)
Payments to other governments	(2,000,000)	-	(2,000,000)
<b>Net cash used by capital and related financing activities</b>	<b>(629,372,735)</b>	<b>-</b>	<b>(629,372,735)</b>
<b>Cash flows from investing activities:</b>			
Purchase of investments	(7,130,631,286)	(50,014,422)	(7,180,645,708)
Proceeds from sales and maturities of investments	6,946,073,282	38,601,964	6,984,675,246
Interest received	334,885	-	334,885
<b>Net cash used by investing activities</b>	<b>(184,223,119)</b>	<b>(11,412,458)</b>	<b>(195,635,578)</b>
Net increase in cash and cash equivalents	5,736,639	(7,427,235)	(1,690,596)
Cash and cash equivalents, beginning of year	53,396,680	13,164,486	66,561,167
<b>Cash and cash equivalents, end of year</b>	<b>59,133,319</b>	<b>5,737,250</b>	<b>64,870,569</b>
Classified as:			
Current assets	59,133,319	5,737,250	64,870,569
<b>Total</b>	<b>59,133,319</b>	<b>5,737,250</b>	<b>64,870,569</b>
Reconciliation of operating income to net cash provided by operating activities:			
Operating income	626,455,362	3,214,192	629,669,554
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation	10,059,970	-	10,059,970
Amortization of intangible assets	64,788,513	-	64,788,513
Bad debt expense	78,717,754	13,801,814	92,519,568
Miscellaneous nonoperating income	31,075,832	-	31,075,832
Changes in assets and liabilities:			
Increase in accounts receivable	(75,823,272)	(15,926,366)	(91,749,637)
Increase (decrease) in accounts and retainage payable	(11,448,790)	2,895,584	(8,553,206)
Increase in net pension asset	(6,436,254)	-	(6,436,254)
Increase in OPEB related deferred outflows	(2,284,792)	-	(2,284,792)
Increase in OPEB related deferred inflows	3,150,502	-	3,150,502
Decrease in pension related deferred outflows	6,556,405	-	6,556,405
Increase in pension related deferred inflows	391,085	-	391,085
Increase in accrued liabilities	(6,398,972)	-	(6,398,972)
Increase in prepaid expenses	(8,902,514)	-	(8,902,514)
Increase in other post-employment benefits liability	2,795,508	-	2,795,508
Increase in unearned revenue	6,726,154	-	6,726,154
Total adjustments	92,877,129	771,032	93,648,162
<b>Net cash provided by operating activities</b>	<b>\$ 719,332,491</b>	<b>\$ 3,985,225</b>	<b>\$ 723,317,716</b>
<b>Noncash financing activities:</b>			
Decrease in the fair value of investments	(1,061,515)	-	(1,061,515)
Interest accretion on 2008D bonds	(42,683,450)	-	(42,683,450)

On November 13, 2018, the Authority issued \$356,085,000 of North Texas Tollway Authority Second Tier Revenue Refunding Bonds, Series 2018, for the purpose of refunding \$178,400,000 of Series 2009D Bonds, \$100,000,000 of Series 2011A Bonds, and \$101,775,000 of Series 2012C Bonds.

See accompanying notes to basic financial statements



**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
 December 31, 2018

**NOTE CONTENTS**

Note 1. Nature of the Organization and Summary of Significant Accounting Policies	
(a) Reporting Entity .....	20
(b) Basis of Accounting.....	20
(c) Budget.....	21
(d) Restricted Assets.....	21
(e) Cash, Cash Equivalents and Investments .....	22
(f) Capital Assets.....	22
(g) Compensated Absences.....	23
(h) Retainage Payable.....	23
(i) Deferred Outflows/Inflows of Resources.....	23
(j) Bond Discounts and Premiums.....	23
(k) Arbitrage Rebate Payable.....	24
(l) Estimates .....	24
(m) Service Concession Arrangement .....	24
(n) New Accounting Pronouncements .....	24
Note 2. Legal Compliance - Budgets .....	26
Note 3. Deposits and Investments .....	27
Note 4. Capital Assets.....	30
Note 5. Revenue Bonds, Commercial Paper, and Loans Payable	
Revenue Bonds.....	31
Commercial Paper.....	39
Loans Payable.....	39
Note 6. Employees' Retirement Plan	
Defined Benefit Pension Plan.....	40
401(k) Plan .....	43
Note 7. Risk Management .....	44
Note 8. Other Post Employment Benefits.....	44
Note 9. Disaggregation of Receivable Balances.....	52
Note 10. Commitments and Contingencies.....	52
Note 11. Subsequent Events .....	53



NORTH TEXAS TOLLWAY SYSTEM  
(An Enterprise Fund of the North Texas Tollway Authority)  
NOTES TO BASIC FINANCIAL STATEMENTS  
December 31, 2018

NORTH TEXAS TOLLWAY SYSTEM  
(An Enterprise Fund of the North Texas Tollway Authority)  
NOTES TO BASIC FINANCIAL STATEMENTS  
December 31, 2018

(1) **Nature of the Organization and Summary of Significant Accounting Policies**

(a) **Reporting Entity**

In June 1997, the Texas Legislature approved a bill to create the North Texas Tollway Authority (the Authority), a regional tollway authority under Chapter 366, Transportation Code. Effective September 1, 1997, the Authority became the successor agency to the Texas Turnpike Authority (TTA) and assumed ownership of the system of toll roads then owned and operated by the TTA and all obligations of the TTA related to such system of toll roads.

The Authority is a political subdivision of the State of Texas, authorized and empowered by the Regional Tollway Authority Act (the Act) to construct, maintain, repair, and operate turnpike projects at such locations within Collin, Dallas, Denton, and Tarrant Counties (the "Member Counties") and Johnson County (together with the Member Counties, the "Project Counties"), as may be determined by the Authority. The Authority is further authorized to issue turnpike revenue bonds, payable solely from tolls and other revenue of the Authority, for the purpose of paying all or any part of the cost of a turnpike project. Under the provisions of the Act, these revenue bonds shall not be deemed to constitute a debt or a pledge of the faith and credit of the State of Texas or of any other political subdivision thereof.

The North Texas Tollway System is an enterprise fund and does not purport to be the entire activities of the Authority. The DNT, AATT, PGBT, PGBT EE, PGBT WE, MCLB, SRT, LLTB and the CTP currently constitute and are collectively referred to as the System. The Non-Major Enterprise Fund is a fund for TSAs. The following represent the three type of TSAs: (1) Developer TSAs, where NTTA has collection exposure and is paid a fee to process each transaction (2) Developer TSAs where NTTA remits only amounts collected and is paid a fee to process each transaction and (3) Regional TSAs facilities where NTTA remits only amounts collected and is reimbursed for operating expenses from TxDOT. Developer TSA (type 1) facilities presently consist of LBJ and NTE 1&2. Developer TSA (type 2) facilities presently consist of NTE 3B. Regional TSA (type 3) facilities presently consist of DFWC, I-30, I-35E, SH-114, LBJ East, Loop 12 and SH-183.

(b) **Basis of Accounting**

The operations of the System are accounted for as enterprise funds on an accrual basis in order to recognize the flow of economic resources.

Under this basis, revenues are recognized in the period in which they are earned, expenses are recognized in the period in which they are incurred, and all assets and liabilities associated with the operation of the System are included in the Statement of Net Position. The assets of the System are stated at cost with the exception of certain investments and interest rate swap derivatives, which are stated at fair value.

The principal revenues of the System are toll revenues received from patrons. Operating expenses for the System include the costs of operating and maintaining the Authority and administrative expenses. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

The principal revenues of the Non-Major Enterprise Fund are fees from processing of interoperability payments, and fees charged for billing services on managed lanes for the Tolling Services Agreements. Operating expenses for the Non-Major Enterprise Fund include the costs of billing and collections of managed lane transactions.

The Trust Agreement also requires that certain funds and accounts be established and maintained. The System consolidates these funds and accounts for the purpose of enterprise fund presentation in its external financial statements.

In accordance with House Bill 749, an act of the 72nd Legislature of Texas, the Authority may transfer an amount from a surplus fund (currently Capital Improvement Fund) established for a turnpike project to the North Texas Tollway Feasibility Study Fund (Feasibility Study Fund) each a sub-fund included in the System. However, the Authority may not transfer an amount that results in a balance in the surplus fund that is less than the minimum balance required in the trust agreement for that project, if any.

When the feasibility of a project is determined, pursued project costs are capitalized, and the related project study costs are reimbursed to the sub-fund Feasibility Study Fund from the proceeds of the project's bond issue. Unfeasible projects are written off to expense when approved by the Executive Director.

(c) **Budget**

Operating budgets are established in accordance with the practices set forth in the provisions of the Trust Agreement for the Dallas North Tollway Authority Revenue Bonds, as interpreted by the Authority. These practices follow the Generally Accepted Accounting Principles (GAAP) for an enterprise fund on an accrual basis. Exceptions are:

- Depreciation and amortization of certain non-infrastructure capital assets and related acquisition and revenue bond issuance costs are not included as an operating expense or otherwise provided
- Capitalized interest accrued on certain bond issues as allowed by the Trust Agreement and bond resolutions.

Revenues are recognized when they are earned, expenses are recognized in the period in which they are incurred, and all assets and liabilities associated with the operation of the System are included in the Statement of Net Position in accordance with the Trust Agreement as described above.

Each year the Authority completes a review of its financial condition for the purpose of estimating whether the net revenues of the System for the year will meet its debt covenants. See additional information regarding health compliance for budgets in Note (2).

(d) **Restricted Assets**

Certain proceeds of the Revenue Bonds are restricted by applicable bond covenants for construction or restricted as reserves to ensure repayment of the bonds. Also, certain other assets are accumulated and restricted on a monthly basis in accordance with the Trust Agreement for the purpose of paying interest and principal payments that are due on a semiannual and annual basis, respectively, and for the purpose of maintaining the reserve funds at the required levels. Payments from these restricted accounts are strictly governed by the Trust Agreement and can only be made in compliance with the Trust Agreement. When both restricted and unrestricted amounts are available for use, the Authority's policy is to use restricted amounts first, with unrestricted resources utilized as needed.

Limited types of expenses may be funded from these accounts. Expenses that do not meet these requirements are funded from unrestricted accounts. The sub-funds and accounts that have been established in accordance with the Trust Agreement are as follows:

- **Construction and Property Fund** – The Construction and Property Fund was created to account for that portion of the proceeds from the sale of the Authority Revenue Bonds, which were required to be deposited with the trustee in order to pay all costs of construction. There also may be deposited in the Construction and Property Fund any monies received from any other source for paying the cost of the Authority.
- **Revenue Fund** – The Revenue Fund was created to account for all revenues (all tolls, other revenues, and income) arising or derived by the Authority from the operation and ownership of the Authority. All revenues of this fund are distributed to other funds in accordance with the Trust Agreement.
- **Non-Major Enterprise Fund** – The Non-Major Enterprise Fund was created to account for Tolling Services Agreements (TSA) revenues separately from revenues that are devoted to the repayment of bonds.
- **Operation and Maintenance Fund** – The Operation and Maintenance Fund was created to account for and pay current operating expenses of the Authority.
- **Reserve Maintenance Fund** – The Reserve Maintenance Fund was created to account for those expenses of maintaining the Authority that do not recur on an annual or shorter basis. As defined in the Trust Agreement, such items include repairs, painting, renewals, and replacements necessary for safe or efficient operation of the Authority or to prevent loss of revenues, engineering expenses relating to the functions of the Authority, equipment, maintenance expenses, and operating expenses not occurring at annual or shorter periods.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

- **Capital Improvement Fund** – The Capital Improvement Fund (CIF) was created to account for the cost of repairs, enlargements, extensions, resurfacing, additions, renewals, improvements, reconstruction and replacements, capital expenditures, engineering, and other expenses relating to the powers or functions of the Authority in connection with the Authority, or for any other purpose now or hereafter authorized by law. This CIF fund will also be combined with a revolving fund, called the Feasibility Study Fund to use only for the expenses of studying the cost and feasibility and any other expenses relating to; (1) the preparation and issuance of bonds for the acquisition and construction of a proposed turnpike project for the Authority; (2) the financing of the improvement, extension or expansion of an existing turnpike or Authority; (3) private participation, as authorized by law, in the financing of a proposed turnpike project or Authority, the refinancing of an existing turnpike project or Authority or the improvement, extension or expansion of a turnpike project or Authority.
- **Bond Interest Account** – The Bond Interest Account was created to account for the payment of the semiannual interest requirements of the revenue bonds.
- **Reserve Account** – The Reserve Account was created for the purpose of paying interest and principal of the bonds whenever and to the extent that the monies held for the credit of the Bond Interest Account and the Redemption Account shall be insufficient for such purpose. The required reserve is an amount equal to the average annual debt service requirements of all bonds outstanding. At December 31, 2018, according to staff calculations the Authority was in compliance with this requirement.
- **Redemption Account** – The Redemption Account was created to account for the payment of the annual principal requirements of the revenue bonds.

**(e) Cash, Cash Equivalents and Investments**

Cash includes amounts in demand deposits. Cash equivalents are amounts included in any overnight sweep from the demand deposit accounts. These deposits are fully collateralized or covered by federal deposit insurance.

The Authority considers other money market funds along with State & Local Government Investment Pools ("Pool") to be investments. The carrying amount of the investments is fair value. The carrying amount of the Pool is amortized cost. The net change in fair value of investments is recorded on the Statement of Revenues, Expenses, and Changes in Net Position and includes the unrealized and realized gains and losses on investments.

**(f) Capital Assets**

All capital assets are stated at historical cost, except for donated assets, which are valued at the estimated acquisition cost of the item at the date of its donation. This includes costs for infrastructure assets (right-of-way, highways, bridges, and highways and bridges substructures), toll equipment, buildings, land, toll facilities; other related costs, including property and equipment with a value greater than \$5,000 and software with a value greater than \$1,000,000. Highways and bridges substructure includes road sub-base, grading, land clearing, embankments, and other related costs. Also included in capital assets are the costs of certain real estate for right-of-way requirements and administrative and legal expenses incurred during the construction period.

The costs to acquire additional capital assets, which replace existing assets or improve the efficiency of the Authority, are capitalized. Under the Authority's policy of accounting for infrastructure assets pursuant to the "preservation method of accounting" or "modified approach," property costs represent an historical accumulation of costs expended to acquire rights-of-way and to construct, improve, and place in operation the various projects and related facilities. These infrastructure assets are considered to be "indefinite lived assets" that is, the assets themselves will last indefinitely and are, therefore, not depreciated.

Costs related to renewing and maintaining these assets are not capitalized, but instead are considered to be period costs and are included in preservation expense classified as part of reserve maintenance and capital improvement expenses. Additional charges to preservation expense occur whenever the condition of the infrastructure assets is determined to be at a level that is below the standards adopted by the Board of Directors of the Authority.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

Depreciation is computed using a straight-line method over the following estimated useful lives:

Machinery and Equipment	3-10 years
Buildings	20-50 years
Roadways	50-60 years
Infrastructure	25-50 years
Intangibles	5-15 years

**(g) Compensated Absences**

Vested or accumulated vacation leave is recorded as an expense and liability as the benefits accrue to employees. No liability is recorded for non-vesting accumulating rights to receive sick pay benefits.

**(h) Retainage Payable**

Retainage payable represents amounts billed to the Authority by contractors for which payment is not due pursuant to retained percentage provision in construction contracts until substantial completion of performance by contractor and acceptance by the Authority.

**(i) Deferred Outflows/Inflows of Resources**

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expenses) until then. The Authority has the following four items that qualify for reporting in this category in the statement of net position.

- Loss on refunding - The loss on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.
- Pension/OPEB contributions after measurement date – These contributions are deferred and recognized in the following fiscal year.
- Difference in projected and actual earnings on pension or OPEB assets – This difference is deferred and amortized over a closed five year period.
- Changes in actuarial assumptions used to determine pension or OPEB liability – This difference is deferred and amortized over the estimated average remaining lives of all members determined as of the measurement date.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The Authority has the following four items that qualify for reporting in this category.

- Difference in expected and actual pension or OPEB experience – This difference is deferred and recognized over the estimated average remaining lives of all members determined as of the measurement date.
- Difference in projected and actual earnings on pension assets – This difference is deferred and amortized over a closed five year period.
- Gain on refunding - A gain on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.
- Changes in actuarial assumptions used to determine OPEB liability – This difference is deferred and amortized over the estimated average remaining lives of all members determined as of the measurement date.

**(j) Bond Discounts and Premiums**

Revenue bonds payable are reported net of unamortized bond discount or premium.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**(k) Arbitrage Rebate Payable**

The Tax Reform Act of 1986 imposed additional restrictive regulations, reporting requirements, and arbitrage rebate liability on issuers of tax-exempt debt. This represents interest earnings on bond proceeds in excess of amounts allowed under the Act. This Act requires the remittance to the Internal Revenue Service (IRS) of 90% of the cumulative arbitrage rebate within 60 days of the end of each five-year reporting period following the issuance of governmental bonds. The System's cumulative arbitrage rebate liabilities for the year ended December 31, 2018 is \$0.00.

**(l) Estimates**

The preparation of financial statements in accordance with United States Generally Accepted Accounting Principles (GAAP) requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

**(m) Service Concession Arrangement for Sam Rayburn Tollway (SRT)**

In October 2007, the Authority entered into an agreement with Texas Department of Transportation ("TxDOT") to construct a continuous express lane within the State Highway 121 corridor extending between Business SH 121 in Denton County to US 75 in Collin County consisting of 26 miles in five designated segments. Under the agreement, the Authority provided an upfront payment to TxDOT in the amount of \$3.2 billion. An intangible asset has been recorded and is being amortized over 50 years. At the end of the intangible asset's life, the roadway will be returned to TxDOT subject to the Handback Requirements in the agreement.

The revenue generated from the operation of the toll road will be shared between TxDOT and the Authority in accordance with the limits and calculations in the agreement. In the current year the amount of revenue given to TxDOT was \$0.

	January 1, 2018	Additions	Disposal	Amortization	December 31, 2018
Roadway	\$ 3,222,810,215	-	-	-	\$ 3,222,810,215
Less accumulated amortization	(598,856,191)	-	-	(64,456,200)	(663,312,391)
<b>Total</b>	<b>\$ 2,623,954,024</b>	<b>-</b>	<b>-</b>	<b>(64,456,200)</b>	<b>\$ 2,559,497,824</b>

**(n) New Accounting Pronouncements**

In fiscal 2018, the System adopted the following new Governmental Accounting Standards Board (GASB) pronouncements:

GASB Statement 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This Statement replaces the requirements of Statement 45 and requires governments to report a liability on the face of the financial statements for the OPEB that they provide. Statement 75 requires governments in all types of OPEB plans to present more extensive note disclosures and required supplementary information (RSI) about their OPEB liabilities. As a result of implementation, the beginning net position as related to the net OPEB liability and related deferred outflows of resources was restated by a net value of \$(11,805,279).

	North Texas Tollway System
<b>Net Position as of 1/1/2018</b>	(77,707,865)
<b>Change in reporting - OPEB Liability</b>	(11,805,279)
<b>Net Position as restated 1/1/2018</b>	<b>(89,513,144)</b>

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

GASB Statement No. 85, *Omnibus 2017*. The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]).

GASB Statement No. 86, *Certain Debt Extinguishment Issues*. This Statement establishes accounting and financial reporting requirements for when a government places cash and other monetary assets from existing resources (as opposed to debt proceeds) in an irrevocable trust to extinguish the debt. This statement had no effect on the financial statements.

The GASB has issued the following statements which will be effective in future years as described below. The impact on the System's financial statements of implementation has not yet been determined for the following:

GASB Statement No. 83, *Certain Asset Retirement Obligations*. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. The requirements of this Statement are effective for periods beginning after June 15, 2018.

GASB Statement No. 84, *Fiduciary Activities* is effective for periods beginning after December 15, 2018. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported.

GASB Statement No. 87, *Leases* is effective for periods beginning after December 15, 2019. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities.

GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* is effective for periods beginning after June 15, 2018. The objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt.

GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period* is effective for reporting periods beginning after December 15, 2019. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period.

GASB Statement No. 90, *Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61* is effective for periods beginning after December 15, 2018. The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units.

GASB Statement No. 91, *Conduit Debt Obligation* is effective for periods beginning after December 15, 2020. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**(2) Legal Compliance – Budgets**

The Authority is required to prepare a preliminary budget of current expenses, deposits to the Reserve Maintenance Fund, and the purposes for which the monies held in the Reserve Maintenance Fund will be expended for the ensuing year.

Copies of the preliminary budget must be filed with the bond trustee, and mailed to the consulting engineers, traffic engineers, principal underwriters, and all bondholders who have filed their names and addresses with the secretary and treasurer of the Authority 60 days prior to year-end. The Authority is required by the Trust Agreement to adopt a final budget for the Authority on or before December 31 prior to the beginning of the year. The budget is prepared at the Department level and is based upon the Trust Agreement. The Authority may not expend any amount or incur any obligations for maintenance, repairs, and operations in excess of the total amount of the budgeted expenses in the Annual Budget unless the funding source is other than revenues received from the Authority.

The Authority may expend additional monies from the Reserve Maintenance Fund in excess of the annual deposits. Budget amendments must be approved by the Board Members of the Authority in a manner similar to the adoption of the annual budget. There were no occurrences of budget noncompliance in 2018.

Pursuant to the Trust Agreement, the Authority has agreed that it will at all times keep in effect a plan for toll collecting facilities and a schedule of rates of tolls, which will raise and produce net revenues during each fiscal year sufficient to satisfy the greatest of (1), (2), or (3) below:

- 1) 1.35 times the scheduled debt service requirements on all outstanding First Tier Bonds for the fiscal year; or
- 2) 1.20 times the scheduled debt service requirements on all outstanding First Tier Bonds and Second Tier Bonds for the fiscal year; or
- 3) 1.00 times the scheduled debt service requirements on all outstanding First Tier Bonds, Second Tier Bonds, Third Tier Bonds and all other obligations secured by net revenues for the fiscal year.

The Authority was in compliance in 2018.

	<b>2018</b>
	<b>(unaudited)</b>
GAAP basis operating income	<u>\$ 626,455,362</u>
Gross Income	626,455,362
Add:	
Depreciation	10,059,970
Amortization of intangible	64,788,513
Capital improvement fund expenses	20,018,305
Reserve maintenance fund expenses	<u>22,311,612</u>
Net revenues available for debt service	743,633,762
Bond interest expense, net of capitalized interest	423,253,370
Scheduled principal amount due	<u>120,495,827</u>
Calculated debt service requirement	<u>\$ 543,749,197 (*)</u>
Coverage ratio (for 1st tier debt)	<u>1.73</u>
Coverage ratio (for 1st and 2nd tier debt)	<u>1.46</u>
Coverage ratio (for all debt)	<u>1.37</u>

(\*) Debt service requirement for 1st tier-\$429,100,005, 2nd tier-\$80,107,550 and other-\$34,541,642

**(3) Deposits and Investments**

The Authority's investment policy is in accordance with the laws of the State of Texas. The Authority may purchase investments as authorized by the Trust Agreement and as further authorized by the revised investment policy and strategy approved by the Board of Directors in February 2018. These investments include:

- Government Obligations - shall mean (i) direct obligations of the United States of America, including obligations that are unconditionally guaranteed by the United States of America, (ii) obligations of an agency or instrumentality of the United States of America, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date of the purchase thereof are rated as to investment quality by two nationally recognized credit rating agencies not less than "A" or its equivalent, and (iii) obligations of a state or an agency of a county, municipality, or other political subdivision of a state that have been refunded and that, on the date purchased are rated as to investment quality by two nationally recognized credit rating agencies not less than "A" or its equivalent, with a stated maturity not to exceed 5 years.
- Certificates of deposit, including certificates of deposit of the Trustee, where the certificates are collateralized by Government Obligations and held by a third party as escrow agent or custodian, of a market value not less than the amount of the certificates of deposit so secured, including interest, but this collateral is not required to the extent the certificates of deposit are insured by an agency of the United States of America with a stated maturity not to exceed one year.
- Direct and reverse repurchase agreements as defined by the Public Funds Investment Act ("PFIA") under the terms of a Securities Industry and Financial Markets Association Master Repurchase Agreement and collateralized in accordance with this investment policy.
- Banker's acceptances with a stated maturity of 180 days or less and whose endorsing banks are constantly monitored as to financial solvency by the Investment Officers.
- Commercial paper rated not less than "A1"/"P1" (or an equivalent rating) by at least two nationally recognized credit rating agencies with a stated maturity of 180 days or less.
- Money market funds, including money market funds affiliated with the Trustee, that invest solely in obligations of the United States of America, its agencies and instrumentalities, and having a rating by S&P of AAAM-G or AAA-m if rated by Moody's, having a rating of Aaa.
- AAA-rated, SEC registered, no-load mutual funds with an average weighted maturity of less than two years and invested exclusively in obligations authorized in the Authority's Investment Policy, continuously rated as to investment quality by at least one nationally recognized credit rating agency. Such no-load mutual funds are not authorized for bond proceeds, reserves, and funds held for debt service in accordance with the PFIA.
- Investments may be made in Permitted Investments through an eligible investment pool as permitted by Texas Government Code, Chapter 2256, as amended. Constant dollar, Texas local government investment pools as described by the PFIA and authorized by the Board.
- Collateralized guaranteed investment contracts ("GICs"), with a defined termination date and secured by direct obligations of the U.S. or its agencies and instrumentalities and pledged to the Authority. GICs are restricted to use for investment of bond proceeds.
- Interest bearing bank savings deposits issued by state and national banks or a savings bank or a state or federal credit union (having their main or branch office in Texas) that are guaranteed or insured by the Federal Deposit Insurance Corporation or the National Credit Union Share Insurance Fund (or their successor organizations). Also included are collateralized interest bearing savings deposits that have secured the uninsured portion of deposits with obligations of the U.S. Treasury and/or Federal agencies and instrumentalities.

The Authority does not invest in financial instruments other than those authorized by the Authority's Trust Agreement and the investment policy. The Authority reports all securities and debt instruments with readily determinable market values to be carried at fair value, with changes in fair value reflected in the Statements of Revenues, Expenses, and Changes in Net Position.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**(a) Deposits**

The Authority's deposits were fully insured or collateralized at December 31, 2018. The carrying amount of the Authority's deposits was \$64,859,269 (which does not include \$11,300 of petty cash) and the respective bank balances totaled \$68,662,438. As of December 31, 2018, Federal Depository Insurance Corporation (FDIC) provided \$250,000 of coverage for deposits. All balances in excess of the \$250,000 were fully collateralized in accordance with the Authority's investment policy and the Public Funds Investment Act.

**(b) Investments**

As of December 31, 2018 the maturity values are as follows:

Description	2018			WAM(*)
	Maturity Value (in Yrs)			
	Fair Value	Less Than 1 Yr	1 Yr or More	
<b>Government Sponsored Entities (GSE):</b>				
Federal Home Loan Bank	\$ 177,346,643	\$ 43,811,300	133,535,343	
Federal National Mortgage Association	131,447,709	75,361,795	56,085,914	
Federal Farm Credit Bank	188,236,798	6,809,373	181,427,425	
Federal Home Loan Mortgage Corporation	129,362,759	9,169,063	120,193,696	
<b>Total GSE</b>	<b>626,393,909</b>	<b>135,151,531</b>	<b>491,242,378</b>	<b>326</b>
	<u>Reported Value</u>	<u>Less Than 1 Yr</u>	<u>1 Yr or More</u>	
Money Market Funds	325,591,760	325,591,760	-	-
U.S. Treasuries	111,603,677	74,756,089	36,847,588	25
Government Pool	191,968,000	191,968,000	-	1
Interest Bearing Account	275,847,789	275,847,789	-	-
Cash(**)	184,976	184,976	-	-
<b>Total Investments</b>	<b>\$ 1,531,590,111</b>	<b>\$ 1,003,500,145</b>	<b>\$ 528,089,966</b>	<b>352</b>

\*WAM = Weighted Average Maturity (in days)

\*\*Cash held in Trust Accounts for next business day transfers.

Investments either restricted in accordance with bond provisions or accounted for per the Trust Agreements budget requirements are as follows:

Construction and Property Account	\$ 97,935,116
Revenue Account	106,491,980
Operations and Maintenance Account	3,149
Reserve Maintenance Account	49,025,853
Consolidated Capital Improvement Account	491,703,648
Bond Interest Account	201,324,973
Bond Reserve Account	445,332,287
Bond Redemption Account	115,260,000
Enterprise Account	21,088,958
NTE 3A/3B Agency Fund	3,424,147
<b>Total Investments</b>	<b>\$ 1,531,590,111</b>

**(c) Interest Rate Risk**

Investment portfolios are designed with the objective of attaining the best possible rate of return commensurate with the Authority's investment risk constraints and the cash flow characteristics of the portfolio. Return on investments, although important, is subordinate to the safety and liquidity objectives. The weighted average yield-to-maturity of the portfolio for December 31, 2018 was 2.16% in comparison to 1.28% in 2017. The weighted average maturity in days was 352 days for 2018, compared to 427 days for 2017. Approximately 66% of the investments are maturing within one year and 34% are maturing one year or greater. The Authority does not have a formal policy on Interest Rate Risk.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**(d) Credit Risk**

Per the Investment Policy, on the date of the purchase of any Government Obligation purchased by the Authority, the obligation must have a rating as to investment quality by a nationally recognized investment firm of not less than "AAA" or its equivalent.

As of December 31, 2018, the Authority invested 21% in AAA rated money market funds, 18% in Interest Bearing Accounts, 13% in AAAM rated State and Local Government Pools, 41% in Government Sponsored Entities (GSE) and 7% in U.S. Treasuries backed by the full faith and credit of the U.S. Government. U.S. Treasuries and GSE are Aaa rated by Moody's.

The Authority participates in two local government investment pools, both of which carry investments at amortized cost.: TexPool and TexStar. The State Comptroller oversees TexPool, with Federated Investors managing the daily operations of the pool under a contract with the State Comptroller. JPMorgan Investment Management, Inc. and First Southwest Asset Management, Inc serve as co-administrators for TexStar under an agreement with the TexStar board of directors.

The local government investment pools in which the Authority invests are structured similarly to money market mutual funds, to provide its liquidity needs. TexPool and TexStar were established in conformity with the interlocal Cooperation Act, Chapter 791 of the Texas Government Code and the Public Funds Investment Act, Chapter 2256 of the Code. These funds allow shareholders the ability to deposit or withdraw funds on a daily basis. Interest rates are also adjusted on a daily basis. These funds seek to maintain a constant net asset value of \$1.00, although this cannot be fully guaranteed. TexPool and TexStar are rated AAAM and must maintain a dollar weighted average maturity not to exceed a 60 day limit.

**(e) Concentration of Credit Risk**

It is the policy of the Authority to diversify its investment portfolios. Assets held in the particular funds shall be diversified to minimize the risk of loss resulting from over concentration of assets in a specific maturity, a specific issuer or a specific class of securities. As of December 31, 2018 investments in Wells Fargo Bank Government Money Market Fund, and BB&T Bank, exceeded 5% of the total portfolio. More than 5% of the Authority's investments are invested in U.S. Treasuries, Federal Home Loan Bank (FHLB), Federal Farm Credit Bank (FFCB), Federal National Mortgage Association (FNMA), and Federal Home Loan Mortgage Corporation (FHLMC).

The Authority categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The Authority has the following recurring fair value measurements as of December 31, 2018 using a matrix pricing model:

Investments by fair value level:	Fair Value Measurements Using			
	December 31, 2018	Level 1	Level 2	Level 3
<b>Debt securities</b>				
Federal Home Loan Bank	\$ 177,346,643	\$ -	\$ 177,346,643	\$ -
Federal National Mortgage Assn.	131,447,709	-	131,447,709	-
Federal Farm Credit Bank	188,236,798	-	188,236,798	-
Federal Home Loan Mortgage Corp.	129,362,759	-	129,362,759	-
US Treasury Note	111,603,677	-	111,603,677	-
<b>Total debt securities</b>	<b>737,997,586</b>	<b>-</b>	<b>737,997,586</b>	<b>-</b>
<b>Total investments measured at fair value level:</b>	<b>\$ 737,997,586</b>	<b>\$ -</b>	<b>\$ 737,997,586</b>	<b>\$ -</b>

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**(4) Capital Assets**

Capital assets are summarized as follows:

	January 1, 2018	Additions	Disposal	Depreciation	Adjustments (transfers, etc.)	December 31, 2018
<b>Non-depreciable</b>						
Land	\$ 7,293,755	\$ -	\$ -	\$ -	\$ -	\$ 7,293,755
Right-of-way	304,880,328	-	-	-	-	304,880,328
CIP	198,023,994	39,903,684	-	-	-	237,927,678
Roadway	4,567,097,371	-	-	-	(32,410)	4,567,064,961
Infrastructure - Other *	548,513,223	6,317,514	-	-	-	554,830,737
<b>Total non-depreciable assets</b>	<b>5,625,808,671</b>	<b>46,221,198</b>	<b>-</b>	<b>-</b>	<b>(32,410)</b>	<b>5,671,997,489</b>
<b>Depreciable</b>						
Buildings	29,596,959	-	-	-	-	29,596,959
Machinery and equipment	70,685,367	12,530,729	(10,005,422)	-	887,237	74,097,911
Intangibles	4,581,922	6,431,587	-	-	-	11,013,509
Less accumulated depreciation:						
Buildings	(9,299,541)	-	-	(986,560)	-	(10,286,101)
Equipment	(45,155,977)	-	3,312,854	(9,308,600)	-	(51,151,723)
Less amortization:						
Intangibles	(3,252,672)	-	-	(332,313)	-	(3,584,985)
<b>Total depreciable assets (net)</b>	<b>47,156,058</b>	<b>18,962,316</b>	<b>(6,692,568)</b>	<b>(10,627,473)</b>	<b>887,237</b>	<b>49,685,570</b>
<b>Total capital assets</b>	<b>\$5,672,964,729</b>	<b>\$ 65,183,514</b>	<b>\$ (6,692,568)</b>	<b>\$ (10,627,473)</b>	<b>\$ 854,827</b>	<b>\$ 5,721,683,029</b>

\* Includes capitalized interest net of interest earnings. Total bond interest costs incurred amounted to \$445,100,407 during the year ended December 31, 2018.

**(5) Revenue Bonds, Commercial Paper, and Loans Payable**

**Revenue Bonds**

The Authority has issued and refunded various Revenue Bond Series to construct the North Texas Tollway System and to fund reserves and expenses associated with the bond issues. The Authority follows the provisions of GASB No. 23, Accounting and Financial Reporting for Refunding of Debt Reported by Proprietary Activities (Statement No. 23). Under the provisions of Statement No. 23, the difference between the reacquisition price and the net carrying amount of the old debt is recorded as a deferred outflow and amortized over the life of the new debt or the life of the old debt (had it not been refunded), whichever is shorter, as an adjustment to the bond interest expense.

The following are descriptions of Revenue Bond Series currently outstanding as of December 31, 2018.

**Series 2005C:**

The \$341,670,000 North Texas Tollway Authority Dallas North Tollway Authority Variable Rate Revenue Bonds, Series 2005C, insured by FGIC, were issued December 15, 2005 for the purpose of refunding \$332,425,000 Series 1995 Bonds. Interest initially accrues from the date of delivery at a Weekly Rate, but may be subsequently converted to bear interest at a Daily Rate, Flexible Rate, Monthly Rate, Quarterly Rate, Semi-Annual Rate, Multi-Annual Rate, or Fixed Rate. While bearing interest at a Weekly Rate, interest is payable on the first business day of each calendar month, and is calculated on the basis of actual days elapsed in a 365-day or 366-day year, as applicable. Upon a change to any of the other interest modes, the bonds will be subject to mandatory tender for purchase and remarketing with a maximum rate of twelve (12%) per annum. The bonds consisted of \$341,670,000 term bonds due January 1, 2025. The bonds are subject to mandatory sinking fund redemption prior to maturity on January 1 of the years 2008-2025. In 2008, FGIC was downgraded below investment grade and remarketing of the bonds was not completely successful.

The Series 2005C Bonds were remarketed on September 1, 2009 to a fixed rate series of bonds. \$161,110,000 of Series 2005C Bonds were refunded by Series 2009A Bonds. The remaining amount of Series 2005C Bonds is \$178,310,000 which consists of \$109,515,000 serial bonds maturing on January 1, 2019 through January 1, 2023 that bear interest rates ranging from 5% to 6.25% and \$68,795,000 term bonds due January 1, 2025 with an interest rate of 6%.

The refunding resulted in a decrease of \$85,851,214 in the aggregate debt service between the refunding debt and the refunded debt. The difference between the reacquisition price and the net carrying amount of the Series 1995 Bonds (\$14,207,535) was deferred and is being amortized over the stated term of the Series 2005C Refunding Bonds. This amount was adjusted due to the remarketing. The Authority obtained a present value loss of \$13,637,745 in conjunction with the remarketing. The new difference between the reacquisition price and the net carrying amount on the 2005C bonds that were remarketed is (\$8,025,086). This amount was deferred and is being amortized over the stated term of the Series 2005C Bonds. Amortization of the deferred outflow in resources on the refunding was \$581,259 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2017 was (\$2,600,002).

**Series 2008D:**

The \$399,999,394 North Texas Tollway Authority Revenue Refunding Bonds, Series 2008D were issued on April 3, 2008 for the purpose of refunding \$353,730,000 of the Bond Anticipation Notes that were issued in November 2007. These bonds were issued as Capital Appreciation Bonds, and the sum of the principal and accreted/compounded interest is payable only at maturity. The approximate Yield to Maturity is 5.90% to 5.97%. The maturity dates of the 2008D bonds are January 1, 2028 through January 1, 2038. These bonds are insured by the Assured Guaranty Corp.

The aggregate difference in debt service between the refunding bonds and the refunded Bond Anticipation Notes is not measurable due to the fact that the Bond Anticipation Notes were issued as temporary financing (1 year) and the refunding bonds were issued as long term financing (30 years).

**Series 2008I:**

The Authority issued \$199,998,366 of North Texas Tollway Authority Convertible Capital Appreciation Bonds Series 2008I on September 24, 2008 for the purpose of refunding \$175,975,000 of the Bond Anticipation Notes that were issued in November 2007. The Approximate Yield to Maturity Date is 6.2% and 6.5%. Interest will accrete from the date of delivery and will compound semiannually on January 1 and July 1, commencing January 1, 2009.

B-1-22

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

The Conversion Date is January 1, 2015; after this date, interest will accrue at a rate of 6.2% and 6.5% on the total amount of principal and the accreted/compounded interest thereon payable semiannually on January 1 and July 1, commencing July 1, 2015. Principal and accreted/compounded interest accreted prior to January 1, 2015 will come due on January 1, 2042 and January 1, 2043, or upon optional redemption. These bonds are insured by the Assured Guaranty Corp.

The aggregate difference in debt service between the refunding bonds and the refunded Bond Anticipation Notes is not measurable due to the fact that the Bond Anticipation Notes were issued as temporary financing (1 year) and the refunding bonds were issued as long term financing (35 years).

**Series 2009A:**

The \$418,165,000 North Texas Tollway Authority System Revenue Bonds, Series 2009A were issued on August 12, 2009 for the purpose of refunding \$48,655,000 of Series 1997 bonds; refunding \$59,105,000 of Series 1997A Bonds; refunding \$21,210,000 of Series 1998 Bonds; refunding \$161,110,000 of Series 2005C Bonds; and refunding \$90,950,000 of Commercial Paper notes. Additionally, a deposit of \$18,500,000 was made for Capital Improvement Projects from the Series 2009A proceeds. Interest is payable on January 1 and July 1, commencing January 1, 2010.

The total consists of \$44,740,000 Serial Bonds with maturities of January 1, 2011 through January 1, 2013 with interest rates ranging from 3% to 5%, and \$373,425,000 Term Bonds with maturities on January 1, 2024, January 1, 2028 and January 1, 2039 and interest rates ranging from 6% to 6.25%.

Net proceeds of \$292,507,177 were deposited into an irrevocable trust with an escrow agent to provide for future debt service payment on the refunded Series 1997 bonds, Series 1997A bonds, Series 1998 Bonds and Commercial Paper Notes. As a result, the Series 1997 bonds, a portion of the Series 1997A bonds, a portion of the Series 1998 Bonds, a portion of the Series 2005C bonds and the Commercial Paper notes then outstanding are considered to be defeased and the liability has been removed from the Statement of Net Position. The Authority obtained a present value loss of \$16,920,933. The refunding resulted in an increase of \$132,339,031 in the aggregate debt service between the refunding debt and the refunded debt. This was not an economic refunding but rather a restructuring refunding.

The difference between the reacquisition price and the net carrying amount of the Bonds refunded by 2009A of (\$12,613,456) was deferred and is being amortized over the stated term of the Series 1997 Bonds.

**Series 2009B:**

The \$825,000,000 North Texas Tollway Authority System Revenue Bonds, Series 2009B were issued on August 12, 2009 as Taxable Build America Bonds, ("BAB's") for the purpose of funding construction for the Sam Rayburn Tollway project, the Lewisville Lake Toll Bridge project and the President George Bush Turnpike Eastern Extension project. Interest is payable on January 1 and July 1, commencing January 1, 2010. These bonds are entitled to a direct payment subsidy from the United States Treasury in an amount equal to 35% of the interest due on each payment date. The Authority must request this subsidy prior to each interest payment date. The Series 2009B Bonds were issued as one term bond with a maturity of January 1, 2049 and an interest rate of 6.718%. *(Federal Subsidy Payments processed between January 1 and September 30, 2018 were reduced by 6.6% and those processed between October 1 and December 31, 2018 were reduced by 6.2%. This was due to automatic federal deficit reduction spending cuts known as "sequestration" which took effect on March 1, 2013. Sequestration affects certain federally funded programs, including the Federal Subsidy Payments payable to the Authority with respect to the Series 2009B.)*

**Series 2009C:**

On November 5, 2009, the Authority issued \$170,730,000 of North Texas Tollway Authority Revenue Refunding Bonds, Series 2009C, for the purpose of refunding a portion of Series 2008E-1 and Series 2008G Bonds. Interest is payable on January 1 and July 1, commencing July 1, 2010. The bonds were issued as one Term Bond due January 1, 2044 at an interest rate of 5.25%.

Net proceeds of \$166,408,750 were deposited into an irrevocable trust with an escrow agent to provide for future debt service payment on the refunded Series 2008E-1 bonds and the Series 2008G bonds. As a result, a portion of the Series 2008E-1 bonds and the Series 2008G bonds are considered to be defeased and the liability has been removed from the Statement of Net Position. The Authority obtained a present value gain of \$11,969,757.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

The refunding resulted in an increase of \$37,268,508 in aggregate debt service between the refunding debt and the refunded debt. This was not an economic refunding but rather a restructuring refunding. The difference between the reacquisition price and the net carrying amount of the Bonds refunded by 2009C of \$3,984,364 was deferred and is being amortized over the stated term of the Series 2008E-1 and Series 2008G Bonds. Amortization of the deferred inflow in resources on the refunding was (\$163,281) for the year ended December 31, 2018. The deferred inflow in resources ending balance for the year ended December 31, 2018 was \$2,487,624.

**Series 2010A:**

On May 13, 2010, the Authority issued \$90,000,000 of North Texas Tollway Authority System Revenue Bonds, Series 2010A, for the purpose of being a contribution to the Special Project System for construction of the PGBT WE (SH 161) project and other projects deemed necessary by the Authority. The bonds were issued as Subordinate Lien Obligations and are to be repaid from net revenues available after the payment of First Tier Bonds, Second Tier Bonds and Third Tier Bonds, the deposit of funds in all reserve funds, to the extent necessary, the deposit of funds into the Reserve Maintenance Fund of the Authority, and the payment of the ISTEAL Loan. Interest is payable on February 1 and August 1, commencing Feb 1, 2010. The bonds were issued as one Term Bond due February 1, 2023 at an interest rate of 6.25%.

**Series 2010B:**

On May 13, 2010, the Authority issued \$310,000,000 of North Texas Tollway Authority System Revenue Bonds as Taxable Build America Bonds, ("BAB's"), Series 2010B, for the purpose of being a contribution to the Special Project System for construction of the PGBT WE (SH161) project and other projects deemed necessary by the Authority. The bonds were issued as Subordinated Lien Obligations and are to be repaid from net revenues available after the payment of First Tier Bonds, Second Tier Bonds and Third Tier Bonds, the deposit of funds in all reserve funds, to the extent necessary, the deposit of funds into the Reserve Maintenance Fund of the Authority, and the payment of the ISTEAL Loan. Interest is payable on February 1 and August 1, commencing Feb 1, 2010.

These bonds were issued as Taxable Build America Bonds, ("BAB's") and were issued in two Subseries, 2010B-1 and 2010B-2. These bonds are entitled to a direct payment subsidy from the United States Treasury in an amount equal to 35% of the interest due on each payment date. The Authority must request this subsidy prior to each interest payment date. The 2010B-1 Subseries consist of one Term Bond due February 1, 2030 at an interest rate of 8.41%. The 2010B-2 Subseries consist of one Term Bond due February 1, 2030 at an interest rate of 8.91%. *(Federal Subsidy Payments processed between January 1 and September 30, 2018 were reduced by 6.6% and those processed between October 1 and December 31, 2018 were reduced by 6.2%. This was due to automatic federal deficit reduction spending cuts known as "sequestration" which took effect on March 1, 2013. Sequestration affects certain federally funded programs, including the Federal Subsidy Payments payable to the Authority with respect to the Series 2010B.)*

**Series 2011B:**

On November 29, 2011, the Authority issued \$268,625,000 of North Texas Tollway Authority Revenue Refunding Bonds, Series 2011B for the purpose of refunding \$43,345,000 of Series 1997A Bonds; refunding \$51,290,000 of Series 1998 Bonds; and refunding \$175,000,000 of Series 2008E-2 Bonds. The 1997A and 1998 Bonds were refunded for economic savings. The 2008E-2 Bonds had a mandatory tender date of January 1, 2012. Interest is payable January 1 and July 1, commencing January 1, 2012. These bonds were issued as serial bonds maturing January 1, 2019 through January 1, 2026 and one Term Bond due January 1, 2038. The bonds have an interest rate of 5.00%.

The refunding resulted in a decrease of \$45,413,311 in the aggregate debt service between the refunding debt and the refunded debt. The difference between the reacquisition price and the net carrying amount of the Bonds refunded by 2011B Revenue Refunding Bonds of \$400,780 was deferred and is being amortized over the stated term of the Series 1997A Bonds. Amortization of the deferred inflow in resources on the refunding was (\$50,911) for the year ended December 31, 2018. The deferred inflow in resources ending balance for the year ended December 31, 2018 was \$39,881.

The 1997A Bonds previously refunded the 1989 and 1994 Bonds and the difference between the reacquisition price and the net carrying amount of the Bonds refunded by the 1997A Bonds was deferred and was being amortized over the term of the 1997A Bonds. The remaining deferred amount from the 1989 and 1994 Bonds refunding will be combined with the amounts deferred from the 2011B Revenue Refunding and amortized over the original life of the 1997A Bonds, which had the shortest remaining term.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

Amortization of the deferred outflow in resources on the prior refunding was \$94,853 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$36,740).

**Series 2012A:**

On June 6, 2012, the Authority issued \$25,930,000 of North Texas Tollway Authority Revenue Refunding Bonds, Series 2012A, for the purpose of refunding \$26,855,000 of the Series 1998 Bonds for economic savings. Interest is payable January 1 and July 1 of each year, commencing January 1, 2014. These bonds were issued as serial bonds maturing January 1, 2027 through January 1, 2029. The bonds have interest rates between 3.75% and 5.00%.

The refunding resulted in a decrease of \$2,859,265 in the aggregate debt service between the refunding debt and the refunded debt. The difference between the reacquisition price and the net carrying amount of the Bonds refunded by 2012A Revenue Refunding Bonds of (\$501,766) was deferred and is being amortized over the stated term of the Series 1998 Bonds. Amortization of the deferred outflow in resources on the refunding was \$32,190 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$290,836).

**Series 2012B:**

On October 4, 2012, the Authority issued \$383,625,000 of North Texas Tollway Authority Revenue Refunding Bonds, Series 2012B, for the purpose of refunding \$189,210,000 of Series 2003A Bonds and refunding \$209,040,000 of Series 2008H-2 Bonds. The 2003A Bonds were refunded for economic savings. The 2008H-2 Bonds had a mandatory tender date of January 1, 2013. Interest is payable January 1 and July 1 of each year, commencing January 1, 2013.

These bonds were issued as serial bonds maturing January 1, 2021 through January 1, 2034 and three Term Bonds due January 1, 2036, January 1, 2042 and January 1, 2052. The bonds have an interest rate between 5.00% and 5.25%.

The refunding of this portion of the Series 2003A resulted in a decrease of \$19,163,860 in the aggregate debt service between the refunding debt and the refunded debt. The difference between the reacquisition price and the net carrying amount of the 2003A Bonds refunded by 2012B Revenue Refunding Bonds of \$150,689 was deferred and is being amortized over the stated term of the Series 2003A Bonds. Amortization of the deferred inflow in resources on the refunding was (\$8,354) for the year ended December 31, 2018. The deferred inflow in resources ending balance for the year ended December 31, 2018 was \$98,546.

The refunding of the Series 2008H-2 resulted in a decrease of \$71,672,879 in the aggregate debt service between the refunding debt and the refunded debt. The difference between the reacquisition price and the net carrying amount of the 2008H-2 Bonds refunded by 2012B Revenue Refunding Bonds of \$1,272,414 was deferred and is being amortized over the stated term of the Series 2008H-2 Bonds. Amortization of the deferred inflow in resources on the refunding was (\$70,541) for the year ended December 31, 2018. The deferred inflow in resources ending balance for the year ended December 31, 2018 was \$832,123.

**Series 2012D:**

On November 1, 2012, the Authority issued \$32,815,000 of North Texas Tollway Authority Revenue Refunding Bonds, Series 2012D, for the purpose of refunding \$35,790,000 of Series 2003A Bonds. These bonds were issued as a Term Bond due January 1, 2038. The bonds have an interest rate of 5.00% payable January 1 and July 1 of each year, commencing January 1, 2013.

The refunding of this portion of the Series 2003A resulted in a decrease of \$6,646,042 in the aggregate debt service between the refunding debt and the refunded debt. The difference between the reacquisition price and the net carrying amount of the 2003A Bonds refunded by 2012D Revenue Refunding Bonds of (\$122,121) was deferred and is being amortized over the stated term of the Series 2003A Bonds. Amortization of the deferred outflow in resources on the refunding was \$4,948 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$91,606).

**Series 2014A:**

On November 20, 2014, the Authority issued \$310,415,000 of North Texas Tollway Authority First Tier Revenue Refunding Bonds, Series 2014A, for the purpose of refunding \$313,880,000 of Series 2008A Bonds. The Series 2014A Bonds were issued as serial bonds maturing on January 1, 2020 through January 1, 2025. The bonds have an interest rate of 5.00%.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

The refunding of this portion of the Series 2008A resulted in a decrease in the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net carrying amount of the 2008A Bonds refunded by 2014A Revenue Refunding Bonds of (\$40,871,959) was deferred and is being amortized over the stated term of the Series 2008A Bonds.

Amortization of the deferred outflow in resources on the refunding was \$5,147,209 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$19,696,913).

**Series 2014B:**

On November 20, 2014, the Authority issued \$146,420,000 of North Texas Tollway Authority Second Tier Revenue Refunding Bonds, Series 2014B, for the purpose of refunding \$143,540,000 of Series 2008F Bonds. The Series 2014B Bonds were issued as serial bonds maturing on January 1, 2029 through January 1, 2031. The bonds have an interest rate of 5.00%.

The refunding of this portion of the Series 2008F resulted in a decrease in the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net carrying amount of the 2008A Bonds refunded by 2014A Revenue Refunding Bonds of (\$7,426,971) was deferred and is being amortized over the stated term of the Series 2008F Bonds. Amortization of the deferred outflow in resources on the refunding was \$295,732 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$6,210,364).

**Series 2014C:**

On December 18 2014, the Authority issued \$223,895,000 of North Texas Tollway Authority First Tier Variable Rate Revenue Refunding Bonds, Series 2014C, for the purpose of refunding \$210,255,000 of the Series 2008E-3 Bonds.

The Series 2014C Bonds were issued as a term bond due January 1, 2038. The bonds are SIFMA Index Floating Rate bonds. The interest rate is reset weekly at SIFMA plus 67 basis points. The initial placement agents were Morgan Stanley and Loop Capital Markets.

The refunding of this portion of the Series 2008E-3 resulted in a decrease in the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net carrying amount of the 2008E-3 Bonds refunded by 2014C Revenue Refunding Bonds of (\$5,331,965) was deferred and is being amortized over the stated term of the Series 2008F Bonds. Amortization of the deferred outflow in resources on the refunding was \$242,694 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$4,352,427).

**Series 2015A:**

On April 23, 2015, the Authority issued \$862,920,000 of North Texas Tollway Authority Second Tier Revenue Refunding Bonds, Series 2015A, for the purpose of refunding \$856,460,000 of the Series 2008F Bonds. The Series 2015A Bonds were issued as serial bonds maturing January 1, 2016 through January 1, 2035 and a term bond due January 1, 2038. The bonds have an interest rate of 2.00% - 5.00%.

The refunding of the remaining portion of the Series 2008F resulted in a decrease in the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net carrying amount of the 2008F Bonds refunded by 2015A Revenue Refunding Bonds of (\$130,397,974) was deferred and is being amortized over the stated term of the Series 2008F Bonds. Amortization of the deferred outflow in resources on the refunding was \$5,504,605 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$110,092,098).

**Series 2015B:**

On September 24, 2015, the Authority issued \$764,090,000 of North Texas Tollway Authority First Tier Revenue Refunding Bonds, Series 2015B, for the purpose of refunding \$561,155,000 of Series 2008A Bonds and \$184,470,000 Series 2008B. The Series 2015B Bonds were issued as serial bonds maturing on January 1, 2016 through January 1, 2035 and two terms bonds due January 2040 and January 2045. The bonds have an interest rate of 5.00%.

The refunding of this portion of the Series 2008A and the 2008B resulted in a decrease in the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net



**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

carrying amount of the 2008A and 2008B Bonds refunded by 2015B Revenue Refunding Bonds of (\$104,903,027) was deferred and is being amortized over the stated term of the Series 2008A and 2008B Bonds. Amortization of the deferred outflow in resources on the refunding was \$3,465,641 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$93,572,306).

**Series 2016A:**

On June 1, 2016, the Authority issued \$987,790,000 of North Texas Tollway Authority First Tier revenue refunding Bonds, Series 2016A, for the purpose of refunding \$568,170,000 of Series 2008A Bonds, \$12,375,000 of Series 2008B Bonds, \$125,000,000 of Series 2008K-1 Bonds, \$80,000,000 of Series 2008K-2 Bonds and \$303,560,000 of Series 2009A Bonds. The Series 2016A Bonds were issued as serial bonds maturing January 1, 2017 through January 1, 2039 and a term bond due January 1, 2039. The bonds have an interest rate of 4%-5%.

The refunding results for 2008A, 2008B, 2008K and 2009A resulted in a decrease the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net carrying amount of the 2008A, 2008B, 2008K and the 2009A Bonds refunded by 2016A Revenue Refunding Bonds of (\$122,981,961) was deferred and is being amortized over the stated term of the Series 2008K Bonds. Amortization of the deferred outflow in resources on the refunding was \$5,698,006 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$108,262,112).

**Series 2017A:**

On November 1, 2017, the Authority issued \$1,743,320,000 of North Texas Tollway Authority First Tier Revenue Refunding Bonds, Series 2017A, for the purpose of refunding \$135,355,000 of Series 2005C Bonds, \$242,100,000 of Series 2008A Bonds, \$28,940,000 of Series 2008B Bonds, \$332,225,000 of Series 2010 Bonds, \$442,145,000 of Series 2011A SPS Bonds, \$89,347,301 of Series 2011B SPS Bonds, \$200,931,726 of 2011C SPS Bonds and \$160,555,000 of Series 2011D SPS Bonds.

The Series 2017A Bonds were issued as serial bonds maturing January 1, 2019 through January 1, 2039 and term bonds due January 1, 2043 and January 1, 2048. The bonds have an interest rate of 2%-5%.

The refunding results for 2005C, 2008A, 2008B, 2008, 2010, 2011A, 2011B, 2011C and 2011D resulted in a decrease the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net carrying amount of the 2005C, 2008A, 2008B, 2008, 2010, 2011A, 2011B, 2011C and 2011D Bonds refunded by 2017A Revenue Refunding Bonds of (\$381,286,452) was deferred and is being amortized over the stated term of the Series 2005C Bonds. Amortization of the deferred outflow in resources on the refunding was \$53,202,761 for the year ended December 31, 2018. The deferred outflow in resources ending balance for the year ended December 31, 2018 was (\$319,216,564).

**Series 2017B:**

On November 1, 2017, the Authority issued \$765,995,000 of North Texas Tollway Authority Second Tier Revenue Refunding Bonds, Series 2017B, for the purpose of refunding \$406,315,000 of Series 2011D SPS Bonds, \$73,665,000 of Series 2011E SPS Bonds and \$478,026,323 of Transportation Infrastructure Finance and Innovation Act (TIFIA) SPS Loan. The Series 2017B Bonds were issued as serial bonds maturing January 1, 2019 through January 1, 2039 and term bonds due January 1, 2043 and January 1, 2048. The bonds have an interest rate of 2%-5%.

The refunding results for 2011D and 2011E resulted in a decrease the aggregate debt service between the refunding debt and refunded debt. The difference between the reacquisition price and the net carrying amount of the 2011D and 2011E Bonds refunded by 2017B Revenue Refunding Bonds of \$27,689,052 was deferred and is being amortized over the stated term of the Series 2005C Bonds. Amortization of the deferred outflow in resources on the refunding was (\$810,412) for the year ended December 31, 2018. The deferred inflow in resources ending balance for the year ended December 31, 2018 was \$26,743,571.

**Series 2018:**

On November 13, 2018, the Authority issued \$356,085,000 of North Texas Tollway Authority Second Tier Revenue Refunding Bonds, Series 2018, for the purpose of refunding all of \$178,400,000 of Series 2009D Bonds, all of \$100,000,000 of Series 2011A Bonds and all of \$101,775,000 of Series 2012C Bonds. The Series 2018 Bonds were issued as serial bonds maturing January 1, 2030 through January 1, 2050 and term bonds due January 1, 2048. The bonds have an interest rate of 4%-5%. The refunding results for 2009D, 2011A and 2012C resulted in a decrease the aggregate debt service between the refunding debt and refunded debt.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

The difference between the reacquisition price and the net carrying amount of the 2009D, 2011A and 2012C Bonds refunded by Series 2018 Revenue Refunding Bonds of \$31,149 was fully amortized in 2018.

The following schedule summarizes the revenue bonds outstanding as of December 31, 2018:

Description of Issue	Beginning Balance	Additions	Matured or Retired	Ending Balance	Due within one year
Series '05C	\$ 42,955,000	\$ -	\$ -	\$ 42,955,000	\$ 11,805,000
Series '08A	25,125,000	-	(25,125,000)	-	-
Series '08B	400,000	-	(400,000)	-	-
Series '08D	707,737,891	42,683,450	-	750,421,341	-
Series '08I	295,165,000	-	-	295,165,000	-
Series '09A	69,865,000	-	-	69,865,000	-
Series '09B	825,000,000	-	-	825,000,000	-
Series '09C	170,730,000	-	-	170,730,000	-
Series '09D	178,400,000	-	(178,400,000)	-	-
Series '10A	90,000,000	-	-	90,000,000	-
Series '10B	310,000,000	-	-	310,000,000	-
Series '11A	100,000,000	-	(100,000,000)	-	-
Series '11B	268,625,000	-	-	268,625,000	22,920,000
Series '12A	25,930,000	-	-	25,930,000	-
Series '12B	383,625,000	-	-	383,625,000	-
Series '12C	101,775,000	-	(101,775,000)	-	-
Series '12D	32,815,000	-	-	32,815,000	-
Series '14A	310,415,000	-	-	310,415,000	-
Series '14B	146,420,000	-	-	146,420,000	-
Series '14C	223,895,000	-	-	223,895,000	-
Series '15A	851,230,000	-	(7,170,000)	844,060,000	7,455,000
Series '15B	758,080,000	-	(4,985,000)	753,095,000	5,235,000
Series '16A	980,215,000	-	(13,365,000)	966,850,000	14,030,000
Series '17A	1,743,320,000	-	-	1,743,320,000	48,835,000
Series '17B	765,995,000	-	-	765,995,000	4,980,000
Series '18	-	356,085,000	-	356,085,000	-
	9,407,717,891	398,768,450	(431,220,000)	9,375,266,341	115,260,000
Less:					
Bond discount/premium	(715,991,211)	(17,254,307)	71,840,237	(661,405,281)	-
<b>Totals</b>	<b>\$ 10,123,709,102</b>	<b>\$ 416,022,757</b>	<b>\$ (503,060,237)</b>	<b>\$ 10,036,671,622</b>	<b>\$ 115,260,000</b>

**Amortization of Premium/Discounts**

Premiums and discounts related to the issuance of the bonds and other loans are being amortized using the bonds outstanding method, which is materially consistent with the effective interest method. The unamortized discount (premium) cost for the year ended on December 31, 2018 was \$(661,405,281).

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

The revenue bond debt service requirements below are prepared as of December 31, 2018:

Year	Total Revenue Bonds		BAB Subsidy *	Total
	Principal amount	Interest amount		
Due January 1				
2019	115,260,000	446,772,625	(27,181,434)	534,851,191
2020	115,595,000	443,846,309	(27,181,434)	532,259,875
2021	176,200,000	437,679,500	(27,181,434)	586,698,066
2022	212,215,000	427,531,709	(27,181,434)	612,565,275
2023	243,200,000	415,556,601	(27,078,531)	631,678,070
2024- 2028	1,489,456,277	1,942,137,413	(120,736,427)	3,310,857,263
2029 - 2033	1,577,937,975	1,972,326,109	(93,880,048)	3,456,384,036
2034- 2038	1,742,645,144	1,794,041,788	(90,977,675)	3,445,709,257
2039 - 2043	2,036,358,365	747,295,085	(78,591,037)	2,705,062,413
2044- 2048	1,017,820,000	206,110,483	(35,874,868)	1,188,055,615
2049 - 2052	202,990,000	6,552,581	(1,094,158)	208,448,423
Interest Accretion	445,588,580	(445,588,580)	-	-
	<u>\$ 9,375,266,341</u>	<u>\$ 8,394,261,623</u>	<u>\$ (556,958,480)</u>	<u>\$ 17,212,569,484</u>

\* Note: Due to sequestration, BAB's Subsidy is reduced by 6.2%.

The Interest and Sinking and Reserve Accounts required by the Trust Agreement have been established with the Trustee. The balances as of December 31, 2018 were:

	Cash and Investment Balance	Trust Requirement
Bond Interest account	\$ 201,324,973	\$ 201,320,997
Debt service reserve account(*)	445,332,287	449,935,067
Redemption account	115,260,000	115,260,000
Total	<u>\$ 761,917,260</u>	<u>\$ 766,516,064</u>

(\*) The Debt Service Reserve account per the trust agreement is not valued at market price but amortized value. The amortized value at 12/31/2018 was \$451,371,217.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**Commercial Paper**

On April 18, 2001, the Authority's Board of Directors authorized the \$200,000,000 Dallas North Tollway Authority Tax-Exempt Commercial Paper program. On August 19, 2015, the Authority amended the commercial paper resolution providing for the ability to have commercial paper notes (Notes) purchased directly by a bank under the revolving note purchase agreement, or have public sales of Notes supported by a direct pay letter of credit.

Commercial paper notes were supported by a letter of credit agreement with Bank of America Merrill Lynch in excess of \$200,000,000 and constituted a Second Tier obligation under the Amended and Restated Trust Agreement which expired on December 16, 2016.

On December 21, 2016, the Authority approved JPMorgan as provider of a note purchase facility of \$200,000,000 plus required interest coverage with a term of three years.

Any advances for payments of Notes under the Note Purchase Agreement are secured by a Second Tier lien on Authority revenues and constituted a Second Tier obligation under the Amended and Restated Trust Agreement. No such advances have occurred.

The notes may be issued to provide interim financing for new projects and other capital improvements and to finance equipment purchases for projects of the Authority. As of December 31, 2018, there were no notes outstanding.

**Loans Payable**

Additionally, the Authority funded, in part, costs of the construction of the PGBT with proceeds from a loan, which totaled \$135,000,000, made by TxDOT in 1995 pursuant to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Interest at the rate of 4.2% began to accrue on October 1, 2000, compounding annually on January 1, with the first payment made in October 2004, and annual payments on January 1 thereafter until final payment in 2029, which resulted in a new loan amount at October 1, 2004 of \$154,338,133. Repayment of the loan to TxDOT is to be made from amounts on deposit in the Capital Improvement Fund with payments subordinate to bonds or other obligations of the Authority issued or entered into and secured by the tolls and revenues of the Authority. The loan's principal payable is \$120,101,628 as of December 31, 2018.

The following schedule summarizes the debt service requirements of the TxDOT ISTEA loan payable subsequent to December 31, 2018:

Fiscal years	TxDOT ISTEA Loan payable		
	Principal	Interest	Total
2019 (*)	-	-	-
2020	7,205,732	5,044,268	12,250,000
2021	10,580,768	4,741,628	15,322,396
2022	11,025,161	4,297,235	15,322,396
2023	11,488,218	3,834,179	15,322,397
2024 - 2028	65,096,954	11,515,028	76,611,982
2029	14,704,795	617,601	15,322,396
Total principal and interest	<u>\$ 120,101,628</u>	<u>\$ 30,049,939</u>	<u>\$ 150,151,567</u>

(\*) ISTEA payment for 1/1/2019 of \$10,500,000 (principal=\$5,235,827 and interest = \$5,264,173) was made on 12/28/2018.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**(6) Employees' Retirement Plan**

**Defined Benefit Pension Plan**

As discussed in Note 1, effective September 1, 1997, the Authority, a regional tollway authority under Chapter 366, Transportation Code, became the successor agency to the Texas Turnpike Authority. In connection with this transition, the Authority changed from being a participant in the plans administered by the Employees Retirement System of Texas (ERS), which are considered single employer defined benefit pension plans, to being a participant in the Texas County and District Retirement System (TCDRS), which is a nonprofit public trust fund that provides pension, disability, and death benefits to eligible employees of the counties and districts that participate in TCDRS. Information related to the TCDRS, the Authority's 401(k) plan, and its refrain from participation in Social Security is included herein. A separate audited GAAP-basis pension plan report for ERS is available at [www.ers.state.tx.us/Publications/FinancialReports](http://www.ers.state.tx.us/Publications/FinancialReports).

**Plan Description**

The Authority participates as one of more than 760 plans in the joint contributory, defined benefit plan administered by TCDRS. TCDRS acts as an agent multiple-employer retirement system for county and district employees in the State of Texas. The TCDRS Act is the basis for administration of the pension system. The pension system is governed by a nine-member Board of Trustees and is managed by an administrative staff in Austin. Although the Governor, with the advice and consent of the senate, appoints the Board, TCDRS is not fiscally dependent on the State of Texas. TCDRS's defined benefit pension plan is a tax-qualified plan under Section 401(a) of the Internal Revenue Code. TCDRS issues a publicly available comprehensive annual financial report (CAFR) that can be obtained at [www.tcdrs.org](http://www.tcdrs.org).

All eligible employees of the Authority are required to participate in TCDRS.

**Benefits Provided**

TCDRS provides retirement, disability, and death benefits. Benefit provisions are adopted by the governing body of the Authority, within the options available in the state statutes governing TCDRS.

At retirement, the benefit is calculated as if the sum of the employee's contributions, with interest, and the Authority-financed monetary credits with interest were used to purchase an annuity. Members may choose to receive their retirement benefit in one of three actuarially equivalent payments options. A summary of plan provisions for the Authority are as follows:

Employee deposit rate	6% of Earnings
Authority matching rate	250%
Vesting period	10 Years
Retirement years (age/years of service)	60/10, Any/30, Rule of 75, age+service
Prior Service Credit	0%
Annuity Increase to retirees:	0%

**Employees covered by benefit terms**

At the December 31, 2017 valuation and measurement date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	186
Inactive employees entitled to but not yet receiving benefits	797
Active employees	<u>774</u>
Total	<u>1,757</u>

**Contributions**

Under the state law governing TCDRS, the contribution rate is determined annually by the consulting actuary, using the Replacement Life Entry Age (RLEA) cost method, a conservative cost method and an industry standard.

Employees for the Authority were required to contribute 6% of their annual gross earnings during the fiscal year. The contribution rates for the Authority were 8.09% and 8.30% in fiscal years 2017 and 2018, respectively. The Authority's contributions to TCDRS for the year ended December 31, 2018, were \$3,576,502 and were equal to the required contributions.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**Net Pension Asset**

The Authority's Net Pension Asset (NPA) was measured as of December 31, 2017, and the Total Pension Liability (TPL) used to calculate the Net Pension Asset was determined by an actuarial valuation as of that date.

**Actuarial assumptions**

The Total Pension Liability in the December 31, 2017 actuarial valuation was determined using the following assumptions:

Inflation	2.75%
Overall Payroll Growth	2.00%
Investment Rate of Return	8.10%, net of pension plan investment expense

Salary increases were based on a service-related table. Mortality rates for active members were based on 90% of the RP-2014 Active Employee Mortality Table for males and 90% of the RP-2014 Active Employee Mortality Table for females, projected with 110% of the MP-2014 Ultimate scale after 2014.

Mortality rates for retirees, beneficiaries and non-depositing members were based on 130% of the RP-2014 Healthy Annuitant Mortality Table for males and 110% of the RP-2014 Healthy Annuitant Mortality Table for females, both projected with 110% of the MP-2014 Ultimate scale after 2014.

Mortality rates for disabled retirees were based on 130% of the RP-2014 Disabled Annuitant Mortality Table for males and 115% of the RP-2014 Disabled Annuitant Mortality Table for females, both projected with 110% of the MP-2014 Ultimate scale after 2014.

The long-term expected rate of return on TCDRS assets is determined by adding expected inflation to expected long-term real returns, and reflecting expected volatility and correlation. The capital market assumptions and information shown below are provided by TCDRS' investment consultant, Cliffwater LLC. The numbers shown are based on January 2018 information for a 10 year time horizon.

Note that the valuation assumption for long-term expected return is re-assessed at a minimum of every four years, and is set based on a 30-year time horizon; the most recent analysis was performed in 2017. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Geometric Real Rate of Return (Expected minus Inflation)
US Equities	11.50%	4.55%
Private Equity	16.00%	7.55%
Global Equities	1.50%	4.85%
International Equities - Developed Markets	11.00%	4.55%
International Equities - Emerging Markets	8.00%	5.55%
Investment-Grade Bonds	3.00%	0.75%
Strategic Credit	8.00%	4.12%
Direct Lending	10.00%	8.06%
Distressed Debt	2.00%	6.30%
REIT Equities	2.00%	4.05%
Master Limited Partnerships (MLPs)	3.00%	6.00%
Private Real Estate Partnerships	6.00%	6.25%
Hedge Funds	<u>18.00%</u>	4.10%
Total	<u>100.00%</u>	

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**Discount Rate**

The discount rate used to measure the Total Pension Liability was 8.10%. The projection of cash flows used to determine the discount rate assumed that employee contributions will remain at the current 6% and employer contributions will be made at the rates specified in statute. Based on that assumption, the pension plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**Changes in the Net Pension Liability / (Asset)**

	Increase (Decrease)		
	Total Pension Liability	Fiduciary Net Position	Net Pension Liability / (Asset)
	(a)	(b)	(a)-(b)
Balances as of January 01, 2017	\$99,742,592	\$100,696,945	(\$954,353)
Changes for the year:			
Service cost	6,013,434	-	6,013,434
Interest	8,456,928	-	8,456,928
Effect of plan changes	-	-	-
Effect of economic/demographic gains or losses	(633,015)	-	(633,015)
Effect of assumptions changes or inputs	390,009	-	390,009
Refund of contributions	(680,429)	(680,429)	-
Benefit payments	(2,072,176)	(2,072,176)	-
Administrative expenses	-	(78,878)	78,878
Member contributions	-	2,534,007	(2,534,007)
Net investment income	-	14,749,679	(14,749,679)
Employer contributions	-	3,416,686	(3,416,686)
Other changes	-	42,116	(42,116)
Balances as of December 31, 2017	<u>\$111,217,343</u>	<u>\$118,607,949</u>	<u>(\$7,390,607)</u>

**Sensitivity Analysis**

The following presents the net pension liability of the Authority, calculated using the discount rate of 8.10%, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (7.10%) or 1 percentage point higher (9.10%) than the current rate.

	1% Decrease 7.10%	Current Discount Rate 8.10%	1% Increase 9.10%
Total pension liability	\$127,696,715	\$111,217,343	\$97,544,507
Fiduciary net position	118,607,949	118,607,949	118,607,949
Net pension liability / (asset)	\$9,088,766	(\$7,390,607)	(\$21,063,442)

**Pension Plan Fiduciary Net Position**

Detailed information about the pension plan's Fiduciary Net Position is available in a separately issued TCDRS financial report. That report may be obtained on the Internet at [www.tcdrs.org](http://www.tcdrs.org).

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources:**

For the year ended December 31, 2017, the Authority recognized pension expense of \$4,108,622.

At December 31, 2017, the Authority reported deferred inflows and outflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions made subsequent to the measurement date	\$ 3,576,502	\$ -
Net difference between projected and actual earnings	-	617,688
Differences between expected and actual experience	-	2,513,161
Changes of assumptions	765,726	-
Total	<u>\$ 4,342,228</u>	<u>\$ 3,130,849</u>

\$3,576,502 reported as deferred outflows of resources related to pensions resulting from Authority contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2019. The remainder of the total deferred outflows/inflows, \$2,365,123, related to pensions will be recognized in pension expense as follows:

2019	417,499
2020	140,671
2021	(1,581,155)
2022	(1,342,138)
Thereafter <sup>(1)</sup>	-

<sup>(1)</sup> Total remaining balance to be recognized in future years, if any. Note that additional future deferred inflows and outflows of resources may impact these numbers.

**401(k) Plan**

As a state agency of the State of Texas, the Texas Turnpike Authority was a participating employer in the State of Texas TexaSaver 401(k) Profit Sharing Plan sponsored by the Employees Retirement System of Texas. The Texas Turnpike Authority, as a state agency, was permitted to participate in the Employees Retirement System of Texas under Section 812.003 of the Texas Government Code.

Because the Act established the Authority as a political subdivision of the State of Texas instead of a state agency, it is no longer eligible to participate in the TexaSaver 401(k) Plan maintained by the Employees Retirement System of Texas. As a successor of the Texas Turnpike Authority, however, the Authority is eligible under current IRS rules and regulations to adopt the North Texas Tollway Authority 401(k) Plan as a successor qualified cash or deferred arrangement to the TexaSaver 401(k) Plan.

Prior to 1986, the IRC of 1986 permitted state or local governments and tax-exempt organizations to maintain qualified cash or deferred arrangement. The Tax Reform Act (TRA) of 1986 amended IRC to provide that a cash or deferred arrangement shall not be treated as a "qualified cash or deferred arrangement" if it is part of a retirement plan maintained by a governmental unit. However, TRA 1986 provides specific exception for cash or deferred arrangements adopted by a governmental unit prior to 1986 "Grandfather Employer". The Authority, a government entity is eligible to adopt the 401(k) plan because it is a successor entity to the Texas Turnpike Authority, a Grandfathered Employer, and is adopting a cash or deferred arrangement substantially similar to the Authority, a Grandfathered Employer, and is adopting a cash or deferred arrangement substantially similar to the Texas Turnpike Authority's cash or deferred arrangement.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

Effective September 1, 1997, each Authority employee became eligible to participate in the North Texas Tollway Authority 401(k) plan, a defined contribution plan. The plan requires that each employee be required to make a mandatory employee contribution, deposited by the Authority towards the cost of the 401(k) plan, in an amount equal to 4% of total wages. All mandatory employee contributions to the 401(k) plan for payroll periods following September 1, 1997 shall be made on a pretax basis, provided they are subject to the Hospital Insurance portion of the Federal Insurance Contributions Act and the Federal Unemployment Tax Act and the withholding of those Acts. Employee contributions and plan earnings are vested at all times and a terminating employee shall be paid all mandatory contributions and plan earnings pursuant to the plan's terms. The Authority is authorized to make discretionary employer matching contributions in such amounts as may be determined by the board, and Authority employees are vested in employer contributions at 100% after five years services. Former Texas Turnpike Authority employees employed by the Authority on or before October 31, 1997 shall receive past service credit for service with the Texas Turnpike Authority for purposes of determining the vested percentage and the Authority's Board of Directors is allowed to further amend or terminate the plan at any time.

Total 401(k) contributions allocated to the System by the Authority for the year ended December 31, 2018 were \$1,442,442 based on a covered payroll of \$41,427,939.

**Social Security**

Effective September 1, 1997, the Authority elected to refrain from participation in Social Security and instead participated in both the TCDRS and the Authority 401(k) plan. The Authority requires mandatory employee participation in both of these plans.

**(7) Risk Management**

The Texas Municipal League (TML) Intergovernmental Risk Pool insures the Authority for workers' compensation. The Authority purchases insurance policies for all major areas of operation including buildings and contents, bridges, general liability, commercial umbrella, crime, directors and officers liability, and boiler and machinery coverage. There have not been any settlements exceeding insurance coverage in the years 2009-2018. There has not been any significant reduction of coverage.

The Authority self-insures health benefits utilizing a third-party benefit administrator. The Authority pays claims based on actual claims reported. Funds are available to pay claims and administrative costs associated with the program. Reserves for these liabilities are included in current liabilities in the Statement of Net Position.

Fiscal Year	Beginning Balance	Current year claims and changes in estimates	Claim Payments	Ending Balance
2015	\$ 876,665	10,903,339	11,780,004	\$ -
2016	\$ -	12,393,455	11,354,397	\$ 1,039,058
2017	\$ 1,039,058	12,294,775	10,587,347	\$ 2,746,486
2018	\$ 2,746,486	11,331,252	10,937,466	\$ 3,140,272

**(8) Post-Employment Benefits Other Than Pensions (OPEB)**

**General Information PEBC OPEB Plan**

**Plan description.** The Authority's group medical plans ("Plan") are administered through the Public Employees Benefits Cooperative (PEBC). The plan is a single-employer defined healthcare plan funded on a pay-as-you-go basis. Other post-employment benefits (OPEB) include health insurance and Medicare supplements.

**Benefits provided.** The Authority annually adopts a premium structure for retirees and their eligible dependents who participate in the various plans offered. An employee must be eligible for retirement with the Authority for insurance eligibility. The Authority currently supplements premiums between 60% to 71% for employees eligible for retirement with the Authority with 10 years or more service credit with the Authority. Those eligible for retirement with less than 10 years service credit with the Authority contribute 100% of the total premium.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

The Authority does not maintain a trust to pay for future OPEB expenses. The Authority is not required by Texas law or by contractual agreement to provide funding for OPEB other than the pay-as-you-go amount necessary to provide current budget year benefits to retirees and their eligible dependents. Contributions, adjustment or elimination of the contributions, and adjustments to eligibility are subject to the Board of Directors annual budgetary discretion.

**Employees covered by benefit terms.** At December 31, 2017, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	28
Inactive employees entitled to but not yet receiving benefit payments	0
Active employees	<u>713</u>
Total	<u>741</u>

**Total OPEB Liability**

The Authority's total OPEB liability of \$27,310,086 was measured as of December 31, 2017, and was determined by an actuarial valuation as of that date.

**Actuarial assumptions and other inputs.** The total OPEB liability in the December 31, 2017 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods including the measurement, unless otherwise indicated

Salary increases	3.50%
Discount Rate	3.44%
Healthcare cost trend rates	7.00% for 2018 decreasing 0.25% per year to an ultimate rate of 5% for 2026 and later years
Medicare cost trend rates	6.00% for 2018 decreasing 0.25% per year to an ultimate rate of 5% for 2022 and later years
Retirees' share of benefit related costs	36.89% of projected health insurance premiums for pre-65 retirees 39.92% of projected health insurance premiums for post-65 retirees

The discount rate for postretirement welfare cost purposes is a single rate reflecting the yield or index rate for 20-year, tax exempt general obligation bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). This rate was obtained based on the Bond Buyer Index as reported in the Bond Buyer.

Mortality rates were based on the RP-2014 Healthy Annuitant Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on Scale MP-2014.

The actuarial assumptions employed in the development of the other postretirement benefit cost and other financial reporting have been selected by NTTA and in accordance with the Actuarial Standards of Practice. The Actuarial Standards of Practice require that each significant assumption is appropriate for the purpose of the measurement; takes into account historical and current economic data that is relevant as of the measurement date; reflects expected future experience and has no significant bias (i.e., it is not significantly optimistic or pessimistic).

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**Changes in the Total OPEB Liability**

	<b>Total OPEB Liability</b>
<b>Balance at December 31, 2016</b>	<b>\$ 22,215,020</b>
<b>Changes for the year:</b>	
Service cost	2,342,914
Interest	926,699
Change of assumptions	1,909,633
Employer contributions	-
Benefit payments	(84,180)
<b>Net changes</b>	<b>5,095,066</b>
<b>Balance at December 31, 2017</b>	<b>\$ 27,310,086</b>
Covered employee payroll	<b>\$ 38,100,336</b>
Total OPEB liability as a percentage of covered-employee payroll	<b>71.68%</b>

*Changes of assumptions:* Changes of assumptions and other inputs reflect the effects of changes in the discount rate each period:

The following are the discount rate used in each period:

2017	3.44%
2016	3.78%

Note 1 – The discount rate for post retirement welfare cost purposes is a single rate reflecting the yield or Index rate for 20-year, tax-exempt general obligation bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale), to the extent that plan investments are not expected to finance the payment of benefits. Since there are no plan assets, the discount rate is determined based on the aforementioned basis as of the applicable Measurement Date. The discount rates are 3.44% as of December 31, 2017 and 3.78% as of December 31, 2016 based on the Bond Buyer Index, as reported in the Bond Buyer.

Note 2 – GASB Statement No. 75 was implemented in FY18 and prior years are not available.

The discount rate was based on a 20 year, tax exempt general obligation bonds with an average rating of AA/Aa or higher or equivalent quality on another rating scale. This rate was obtained on the Bond Buyer Index as reported in the Bond Buyer.

*Sensitivity of the total OPEB liability to changes in the discount rate.* The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.44%) or 1-percentage-point higher (4.44%) than the current rate:

1% Decrease	Current Discount Rate	1% Increase
2.44%	3.44%	4.44%
<b>\$ 34,087,874</b>	<b>\$ 27,310,086</b>	<b>\$ 22,157,061</b>

Total OPEB liability

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

*Sensitivity of the total OPEB liability to changes in the healthcare cost trend rate.* The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using the healthcare cost trend rates that are 1-percentage-point lower (6.0 percent decreasing to 4.0 percent) or 1-percentage-point higher (8.0 percent decreasing to 6.0 percent) than the current healthcare cost trend rates:

	Healthcare Cost Trend Rates		
	1% Decrease (6.0% decreasing to 4.0%)	Rates (7.0% decreasing to 5.0%)	1% Increase (8.0% decreasing to 6.0%)
Total OPEB liability	<b>\$ 19,888,587</b>	<b>\$ 27,310,086</b>	<b>\$ 37,538,604</b>

**OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB**

For the year ended December 31, 2018, the Authority recognized OPEB expense of \$3,414,282.

**OPEB Expense**

Service cost	\$ 2,342,914
Interest cost	926,699
Changes of assumptions <sup>1</sup>	144,669
<b>OPEB expense</b>	<b>\$ 3,414,282</b>

<sup>1</sup> Changes of assumptions and other inputs reflect a change in the discount rate of 3.78% in 2016 to 3.44% in 2017.

At December 31, 2018, the Authority recognized deferred outflows and inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions after measurement date	\$ 145,996	\$ -
Changes of assumptions	1,764,964	-
<b>Total</b>	<b>\$ 1,910,960</b>	<b>\$ -</b>

Amounts reported as deferred outflows of resources related to OPEB will be recognized in OPEB expense as follows:

**Fiscal year ended December 31,**

2019	\$ 144,669
2020	144,669
2021	144,669
2022	144,669
2023	144,669
Thereafter	1,041,619
<b>Total</b>	<b>\$ 1,764,964</b>

Deferred outflows of resources totaling \$145,996 related to OPEB contributions after the measurement date will be recognized as a reduction of the total OPEB liability in the year ended December 31, 2019.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

**Authority's ERS OPEB Plan**

*Plan description.* The Authority's Other Post-Employment Benefits under the Texas Employees Group Benefits Program (GBP) are administered by the Employees Retirement System of Texas (ERS). This plan is a cost sharing multiple-employer plan with a special funding situation (which applies to certain other employers, but does not apply to the Authority). The Authority reports its allocated proportional share of the GBP in the Authority's annual financial report. The GBP plan covers retired employees of the state, and other entities (including the prior Texas Turnpike Authority, now the North Texas Tollway Authority) as specified by the State Legislature. The benefit and contribution provisions of the GBP are authorized by state law and may be amended by the Legislature.

*Benefits provided.* The GBP provides self-funded group health (medical and prescription drug) benefits for eligible retirees under HealthSelect. The GBP also provides a fully insured medical benefit option for Medicare-primary participants under the HealthSelect Medicare Advantage Plan. An eligible retiree who has retired from full-time employment does not contribute toward the cost of coverage for himself/herself, but he/she pays a portion of the cost if he/she covers an eligible spouse or dependent child. An eligible retiree who has retired from part-time employment contributes toward the cost of coverage for himself/herself, as well as paying a portion of the cost if he/she covers an eligible spouse or dependent child. The GBP also provides life insurance benefits to eligible retirees via a premium funding arrangement. The authority under which the obligations of the Plan Members and Employer are established and/or may be amended is Chapter 1551, Texas Insurance Code. The Authority's GBP plan is closed to new entrants. The plan does not provide automatic cost of living adjustments (COLAs).

*The Employer and member contribution rates* are determined annually by the ERS Board Trustees based on the recommendations of the ERS staff and consulting actuary. The contribution rates are determined based on (i) the benefit and administrative costs expected to be incurred, (ii) the funds appropriated and (iii) the funding policy established by the Texas Legislature in connection with benefits provided through the GBP. The Trustees revise benefits when necessary to match expected benefit and administrative costs with the revenue expected to be generated by the appropriated funds.

During the measurement period of 2017 for fiscal year 2018 reporting, the amount of the Authority's contributions recognized by the ERS OPEB plan was \$391,770. The following table summarizes the monthly employer and plan member contributions toward eligible retiree's health and basic life premium.

	Employer	Plan Member
Retiree Only	\$ 617.30	\$ -
Retiree and Spouse	\$ 970.98	\$ 353.68
Retiree and Children	\$ 854.10	\$ 236.80
Retiree and Family	\$ 1,207.78	\$ 590.48

*Employees covered by benefit terms.* At December 31, 2017, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	45
Inactive employees entitled but not yet receiving benefits	2
Active employees	0
<b>Total members</b>	<b>47</b>

*Detailed information about the GBP's fiduciary net position* is available in a separately issues ERS Comprehensive Annual Financial Report (CAFR) that includes financial statements, notes to the financial statements, and required supplementary information. That report may be obtained on the internet at <https://ers.texas.gov/About-ERS/Reports-and-Studies/Reports-on-Overall-ERS-Operations-and-Financial-Management>; or by writing to ERS at: 200 East 18<sup>th</sup> Street, Austin Texas 78701.

**Net ERS OPEB Liability**

The Authority's Net ERS OPEB Liability of \$14,248,908 was measured as of August 31, 2017, and was determined by an actuarial valuation as of August 31, 2017 as of that date. No actuarial valuation is available for December 31, 2017 and the Authority's management deems any difference in the net ERS OPEB liability between these two dates are too immaterial to be consider.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
December 31, 2018

*Actuarial assumptions and other inputs.* The total OPEB liability in the August 31, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.5%
Salary increases	2.5% to 9.5% (including inflation)
Discount Rate	3.51%
Healthcare cost trend rates	8.50% for FY19, decreasing 0.50% per year to an ultimate rate of 4.50% for FY27 and later years

The discount rate used to measure the total ERS OPEB liability was the municipal bond rate of 3.51%. The source of the municipal bond rate is the Bond Buyer Index of general obligation bonds with 20 years to maturity and mixed credit quality. In describing their index, the Bond Buyer notes that the bonds' average credit quality is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA.

Mortality rates for service retirees, survivors and other inactive members were based on the 2017 State Retirees of Texas mortality table with a 1 year set forward for male CPO/CO members and Ultimate MP Projection Scale projected from year 2017.

Mortality rates for disabled retirees were based on the RP-2014 Disabled Retiree Mortality with Ultimate MP Projection Scale projected from year 2014.

Mortality rates for active members were based on the RP-2014 Active Member Mortality tables with Ultimate MP Projection Scale from the year 2014.

The actuarial assumptions used in this valuation were based on the results of actuarial experience studies performed by the ERS and TRS retirement plan actuaries for the period September 1, 2011 to August 31, 2016.

At December 31 2018, the Authority reported a liability of \$14,248,908 for its proportionate share of the collective ERS net OPEB liability. The collective OPEB liability was measured as of Aug. 31, 2017, and the total OPEB liability used to calculate the net liability was determined by an actuarial valuation as of that date. The Authority's proportional percentage at Aug. 31, 2017 was 0.04181875%. The Authority's proportion of the collective ERS net OPEB liability was based on its contributions to the OPEB plan relative to the contributions of all the employers and non-employer contributing entities to the plan for the period Sept. 1, 2016 through Aug. 31, 2017.

*Change of Assumptions.* Changes of assumptions and other inputs reflect the effects of changes in the discount rate each period. The following are the discount rates used in each period.

2016	2.84%
2017	3.51%

*Sensitivity of the Authority's Proportionate Share of the ERS Net OPEB Liability to Changes in the Discount Rate.* The following presents the ERS Net OPEB liability of the Authority, as well as what the Authority's ERS Net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.51%) or 1-percentage-point higher (4.51%) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
ERS Net OPEB Liability	\$ 17,009,032	\$ 14,248,908	\$ 12,110,945

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
 December 31, 2018

*Sensitivity of the Authority's Proportionate Share of the ERS Net OPEB Liability to Changes in the Healthcare Cost Trend Rates.* The following presents the ERS Net OPEB liability of the Authority, as well as what the Authority's ERS Net OPEB liability would be if it were calculated using the healthcare cost trend rates that are 1-percentage-point lower (7.50 percent decreasing to 3.50 percent) or 1-percentage-point higher (9.50 percent decreasing to 5.50 percent) than the current healthcare cost trend rates:

	1% Decrease (7.50% decreasing to 3.50%)	Current Healthcare Cost Trend Rates (8.50% decreasing to 4.50%)	1% Increase (9.50% decreasing to 5.50%)
ERS Net OPEB Liability	<u>\$ 11,978,628</u>	<u>\$ 14,248,908</u>	<u>\$ 17,194,725</u>

**OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB**

For the year ended December 31, 2018, the Authority recognized ERS OPEB expense of \$762,546.

**ERS OPEB Expense**

Service cost	\$ 963,495
Interest cost	512,526
Amortization of differences between expected and actual experience	(38,564)
Amortization of changes of assumptions	(671,008)
Employee contributions	(81,884)
Other	(30,033)
Benefit payments	111,768
Projected earnings	(7,162)
Amortization of differences between projected and actual earnings	1,055
Administrative expense	2,354
ERS OPEB expense	<u>\$ 762,546</u>

At December 31, 2018, the Authority reported deferred outflows and inflows of resources related to ERS OPEB from the following sources:

<b>Outstanding Deferred Outflows and Deferred Inflows Related to ERS OPEB at December 31, 2018</b>		
	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ -	\$ 171,226
Changes in assumptions	-	2,979,276
Net difference between projected and actual earnings on ERS OPEB plan investments	4,219	-
Contributions subsequent to the measurement date	369,614	-
Total	<u>\$ 373,833</u>	<u>\$ 3,150,502</u>

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
 December 31, 2018

The \$369,614 reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction in the net OPEB liability for the year ending December 31, 2019.

Amounts reported as deferred outflows of resources related to ERS OPEB will be recognized in OPEB expense as follows:

<b>Fiscal Year ending:</b>	
2019	(708,518)
2020	(708,518)
2021	(708,518)
2022	(708,518)
2023	(312,212)
Thereafter	-



**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
 December 31, 2018

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
 December 31, 2018

**(9) Disaggregation of Receivable Balances**

The unrestricted accounts receivable balance is \$78,571,096, and the restricted accounts receivable balance is \$4,492,950. The unrestricted balance consists of \$62,637,402 for billed video tolls (net of the allowance for doubtful accounts of \$219,630,678); \$13,350,986 for unbilled video tolls (net of the allowance for doubtful accounts of \$25,268,630), and \$2,582,708 for miscellaneous other receivables. The restricted balance consists of BAB's subsidy receivable of \$4,492,950.

Based upon the payment history for each 30 day bucket of aged billed toll receivables, an allowance is calculated for the expected percentage that will remain unpaid based upon these historical trends. The allowance for uncollectible receivables currently ranges from a minimum of 20% on invoices that are current (age of 0-30 days) to a maximum of 100% for invoices that have met the business rules for write-off with an overall average of 77.8% reserved for all invoices.

NTTA books as an account receivable the value of uninvoiced Zip Cash transactions that are categorized as "matched, current address," with an allowance for uncollectible receivables of 20%. These transactions will be invoiced on the customer's next monthly invoice as all business rules have been met. NTTA also books as an accounts receivable the value of invoiced transactions that are categorized as "matched, current address, not meeting business rules" with an allowance for uncollectible receivables of 85%. Unmatched transactions are not recorded by the System, while they are recorded with a 100% allowance by the Non-Major Enterprise Fund.

Video Toll Transactions	Allowance Method	North Texas Tollway System	Non-Major Enterprise Fund	Total
<u>Recorded Billed Video Tolls:</u>				
Gross Billed Video Tolls		\$ 225,054,946	\$ 57,213,134	\$ 282,268,080
Allowance for Uncollectible	age based	(177,447,473)	(42,183,205)	(219,630,678)
Net Billed Video Tolls		\$ 47,607,473	\$ 15,029,929	\$ 62,637,402
<u>Recorded Unbilled Video Tolls:</u>				
Matched with DMV, Meeting Business Rules	20%	\$ 10,075,544	\$ 3,742,652	\$ 13,818,196
Matched with DMV, Not Meeting Business Rules	85%	11,835,310	3,474,215	15,309,525
Unmatched with DMV	100%	-	9,626,867	9,626,867
Total Gross Unbilled Video Tolls		\$ 21,910,854	\$ 16,843,734	\$ 38,754,588
Allowance for Uncollectible		(12,075,122)	(13,328,480)	(25,403,602)
Net Recorded Unbilled Video Tolls		\$ 9,835,732	\$ 3,515,254	\$ 13,350,986
<u>Unrecorded Unbilled Video Tolls:</u>				
Unmatched with DMV		\$ 26,017,650	-	\$ 26,017,650

**(10) Commitments and Contingencies**

At the end of fiscal year 2018, there was \$1,596,460,680 in cash and investments with \$918,253,755 restricted for debt service, \$97,935,116 restricted for construction, \$3,424,147 restricted for NTE 3A/3B and \$576,847,662 available for operation. The System has \$6,462,187 in account and retainage payable that are comprised primarily of construction-related payables at December 31, 2018. Additionally, the System has contract and purchase order commitments at December 31, 2018 aggregating \$631,108.

**(11) Subsequent Event**

The North Texas Tollway Authority ("NTTA") System Revenue and Refunding Bonds, Series 2019, consisting of First Tier Revenue and Refunding Bonds, Series 2019A (the "Series 2019A Bonds") and Second Tier Revenue and Refunding Bonds Series 2019B (the "Series 2019B Bonds" and, together with the Series 2019A Bonds, the "Bonds"), will be issued as fully registered obligations of NTTA, a body politic and corporate and a political subdivision of the State of Texas. The Bonds will be issued for the purpose of [(i) refunding all of the North Texas Tollway Authority Dallas North Tollway System Revenue Bonds, Series 2005C, (ii) refunding all of the North Texas Tollway Authority System First Tier Tax-Exempt Current Interest Revenue Refunding Bonds, Series 2009C, (iii) refunding all of the North Texas Tollway Authority System First Tier Variable Rate Revenue Refunding Bonds, Series 2014C (v) refunding all of the North Texas Tollway Authority System Subordinate Lien Taxable Revenue Bonds, Subseries 2010B-2 (Build America Bonds – Direct Payment), (vi) making a deposit to the Second Tier Shared Reserve Account to satisfy the Second Tier Shared Required Reserve] and (vii) paying costs of issuance of the Bonds.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)

**Required Supplementary Information**  
December 31, 2018

**Modified Approach - Infrastructure**

The Authority has elected to use the Modified Approach to account for maintenance of the Authority's infrastructure assets. As required by the Trust Agreement, an annual inspection of the Authority's roadways has occurred, conducted by the Authority's General Engineering Consultant, Atkins North America, Inc. This inspection was supplemented with specialized inspections by the Authority's Maintenance Management Consultant, VRX, Inc., and the Texas Department of Transportation. The results of the various inspections are utilized to calculate an overall rating, indicating the average condition of the Authority's infrastructure assets (roadways and bridges). The assessment of conditions is made by visual and mechanical tests designed to reveal any condition that would reduce user benefits below the maximum level of service. The Authority's goal is to maintain the Authority's infrastructure assets at a rating of 8 or better (1 to 10 scale), and has established a minimum level for GASB No. 34 purposes of a condition level of 6 or greater. These condition levels were adopted by the Board of Directors for the North Texas Tollway Authority (NTTA) by Resolution No. 02-31 on June 19, 2002 and further clarified by Resolution No. 07-169 on December 19, 2008. In accordance with GASB 34, the Capital Assessment and Inspection Report is due every three years. The last Capital Assessment and Inspection Report for the North Texas Tollway Authority was completed in 2018.

The infrastructure assets include PGBT, PGBT-EE, PGBT-WE, DNT, AATT, MCLB, SRT, LLTB, and CTP Main Lane Plazas, Ramp Plazas, maintenance shops, administration buildings, and IT lane equipment. The roadways are a major transportation network consisting of 139 centerline miles of high-speed roadways, 15 major interchanges, 42 main lane toll plazas/gantries, 156 ramp toll plazas/gantries, 603 bridges, one tunnel, and other structures and appurtenances. All assets combined totaled approximately \$5.12 billion in current replacement value for FYE 2018.

**Condition Index**

A Condition Index is a measure of the "intrinsic value" of the asset as opposed to the book value. A Condition Index with a value of 10.0 is considered "like new"; conversely, a Condition Index with a value of 0.0 is considered "unusable." Evaluations were performed on all of the infrastructure assets under Authority jurisdiction. The evaluation resulted in an average Condition Index of 8.8 for all of the assets combined. The following table shows the Condition Index for the years 2009 through 2018.

Condition Index Table		
Condition Index		
Fiscal Year	Current	Goal
2018	8.8	8.0
2017	8.9	8.0
2016	8.7	8.0
2015	8.8	8.0
2014	8.9	8.0
2013	8.9	8.0
2012	8.9	8.0
2011	8.9	8.0
2010	8.9	8.0
2009	9.0	8.0

**Condition Assessment and Inventory**

A comprehensive condition assessment on all the Authority's infrastructure assets was conducted in September 2018. The Authority's Maintenance Management Consultant performed condition assessments of the Authority's roadway pavement and the Texas Department of Transportation provided condition assessments for bridges as part of the National Bridge Inspection Program. Assessment procedures and representative work samples were reviewed by NTTA's General Engineering Consultants, Atkins North America, Inc.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)

**Required Supplementary Information**  
December 31, 2018

**BRIDGES**

A condition assessment was performed on the Authority's bridges using the *Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges*, published by the Federal Highway Administration (FHWA). A Sufficiency Rating was determined using the Sufficiency Rating Formula, a method of evaluating highway bridge data by calculating the four factors to obtain a numeric value, which is indicative of bridge sufficiency.

The four factors are structural adequacy and safety (55% of the total rating), serviceability and functional obsolescence (30% of the total rating), essentiality for public use (15% of the total rating), and special reductions (total can be reduced by up to 13%).

**Roadways**

The Authority's Maintenance Management Consultant assessed pavement conditions on all of the Authority's roadways using the Condition Rating System (CRS) developed by Applied Research Associates (ARA). The CRS methodology assessed conditions based on both surface distress (e.g., cracking) and ride quality. The CRS data was utilized to update models that project future pavement conditions and repair needs based on roadway type, age, current condition, and level of traffic.

Additionally, a monthly condition assessment, consisting of visual inspection of the Authority's roadways, appurtenances, and edge conditions, was performed on sections of the Authority's roadways. This assessment is based on methodology from the Highway Maintenance Condition Assessment Program (HMCAP), as developed by Roy Jorgensen Associates, Inc. A Maintenance Rating Program (MRP) Index was determined from the monthly assessment. It would have been impractical to perform a MRP evaluation over the entire length; therefore, 10% of the Authority's total roadways were randomly selected for MRP evaluation. These values were then weighted and totaled to determine an overall MRP Index. Of this total MRP Index, travel lanes and shoulders account for 70%, roadside components accounted for 15%, and other items account for 15%.

Currently, the 139 centerline miles (approximately 995 main lane miles) of main lane roadways have a Roadway Index of 8.8.

The budget-to-actual expenditures for preservation and other infrastructure maintenance costs were as follows for the years 2009 through 2018.

Fiscal Year	Budget	Actual
2018	\$ 48,128,568	\$ 22,311,736
2017	52,299,280	23,308,416
2016	38,511,676	19,890,127
2015	22,572,948	12,041,778
2014	27,394,112	11,144,585
2013	21,231,300	15,568,942
2012	23,464,926	10,240,825
2011	59,503,102	37,557,688
2010	36,316,377	28,475,554
2009	40,239,320	30,745,545

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
**Required Supplementary Information**  
December 31, 2018

**Schedule of Changes in Net Pension Liability / (Asset) and Related Ratios**  
Last Ten Fiscal Years  
(Unaudited)

	Year Ended December 31			
	2018	2017	2016	2015
<b>Total Pension Liability:</b>				
Service cost	\$ 6,013,434	\$ 6,194,580	\$ 5,982,873	\$ 5,624,416
Interest on total pension liability	8,456,928	7,402,223	6,720,140	6,043,983
Effect of plan changes	-	-	(1,136,084)	-
Effect of assumption changes or inputs	390,009	-	907,438	-
Effect of economic/demographic (gains) or losses	(633,015)	(1,073,578)	(1,956,006)	(1,153,799)
Benefit payments/refunds of contributions	(2,752,605)	(2,215,107)	(2,408,086)	(2,059,927)
Net change in total pension liability	11,474,751	10,308,118	8,110,275	8,454,673
Total pension liability, beginning	99,742,592	89,434,474	81,324,199	72,869,526
Total pension liability, ending (a)	\$ 111,217,343	\$ 99,742,592	\$ 89,434,474	\$ 81,324,199
<b>Fiduciary Net Position:</b>				
Employer contributions	\$ 3,416,686	\$ 3,148,616	\$ 3,304,846	\$ 3,197,933
Member contributions	2,534,007	2,475,976	2,491,090	2,320,145
Investment income net of investment expenses	14,749,679	6,711,695	(2,151,146)	5,330,438
Benefit payments/refunds of contributions	(2,752,605)	(2,215,107)	(2,408,086)	(2,059,927)
Administrative expenses	(78,878)	(72,943)	(64,794)	(65,461)
Other	42,116	267,541	78,087	(32,293)
Net change in fiduciary net position	\$ 17,911,005	\$ 10,315,778	\$ 1,249,997	\$ 8,690,835
Fiduciary net position, beginning	100,696,945	90,381,167	89,131,170	80,440,335
Fiduciary net position, ending (b)	\$ 118,607,949	\$ 100,696,945	\$ 90,381,167	\$ 89,131,170
Net pension liability / (asset), ending = (a) - (b)	\$ (7,390,607)	\$ (954,353)	\$ (946,693)	\$ (7,806,971)
Fiduciary net position as a % of total pension liability	106.65%	100.96%	101.06%	109.60%
Pensionable covered payroll	\$ 42,233,445	\$ 41,266,268	\$ 41,518,172	\$ 38,669,085
Net pension liability / (asset) as % of covered payroll	-17.50%	-2.31%	-2.28%	-20.19%

\*FNP may be off a dollar due to rounding

Note: This schedule is presented to illustrate the requirement to show information for 10 years. However, recalculations of prior years are not required, and if prior years are not reported in accordance with the standards of GASB 68, they should not be shown here. The Authority implemented GASB 68 in fiscal year 2015, therefore the required information for this schedule will be built over the next six years. The amounts presented for each fiscal year were determined as of the year-end that occurred one year prior.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
**Required Supplementary Information**  
December 31, 2018

**Schedule of Employer Contributions**  
Last Ten Fiscal Years  
(Unaudited)

Year Ending December 31	Actuarially Determined Contribution <sup>(1)</sup>	Actual Employer Contribution <sup>(1)</sup>	Contribution Deficiency (Excess)	Pensionable Covered Payroll <sup>(2)</sup>	Actual Contribution as a % of Covered Payroll
2009	3,108,139	3,108,139	-	36,609,412	8.5%
2010	3,242,294	3,242,294	-	36,065,565	9.0%
2011	2,890,652	2,890,652	-	31,976,241	9.0%
2012	3,174,859	3,174,859	-	34,888,560	9.1%
2013	3,060,429	3,060,429	-	36,917,119	8.3%
2014	3,197,933	3,197,933	-	38,669,085	8.3%
2015	3,304,846	3,304,846	-	41,518,172	8.0%
2016	3,148,616	3,148,616	-	41,266,265	7.6%
2017	3,416,686	3,416,686	-	42,233,445	8.1%
2018	3,576,502	3,576,502	-	43,214,528	8.3%

<sup>(1)</sup> TCDRS calculates actuarially determined contributions on a calendar year basis. GASB Statement No. 68 indicates the employer should report employer contribution amounts on a fiscal year basis.

<sup>(2)</sup> Payroll is calculated based on contributions as reported to TCDRS

**Notes to Schedule:**

Valuation Date: Actuarially determined contribution rates are calculated each December 31, two years prior to the end of the fiscal year in which contributions are reported.

**Methods and assumptions used to determine contribution rates:**

Actuarial Cost Method	Entry Age
Asset Valuation Method	5-year smoothed market
Inflation	2.75%
Salary Increases	Varies by age and service. 4.9% avg. over career including inflation
Investment Rate of Return	8%, net of investment expenses, including inflation
Retirement Age	Members who are eligible for service retirement are assumed to commence receiving benefit payments based on age. The average age at service retirement for recent retirees is 61.
Mortality	130% of the RP-2014 Healthy Annuitant Mortality Table for males and 110% of the RP-2014 Healthy Annuitant Mortality Table for females, both projected with 110% of the MP-2014 Ultimate scale
Changes in Assumptions and Methods Reflected in the Schedule of Employer Contributions*	2015: New inflation, mortality and other assumptions were reflected. 2017: New mortality assumptions were reflected.

\* Only changes that affect the benefit amount and that are effective 2015 and later are shown in the Notes to Schedule.

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**Required Supplementary Information**  
 December 31, 2018

**Schedule of Changes in PEBC Total OPEB Liability and Related Ratios**  
 Last 10 Calendar Years  
 (Unaudited)

	<b>2018</b>
<b>Total PEBC OPEB Liability - Beginning</b>	<b>\$ 22,215,020</b>
<b>Changes for the year:</b>	
Service cost	2,342,914
Interest	926,699
Change of assumptions	1,909,633
Benefit payments	(84,180)
<b>Net changes</b>	<b>5,095,066</b>
<b>Total PEBC OPEB Liability - Ending</b>	<b>\$ 27,310,086</b>
Covered employee payroll	<b>\$ 38,100,336</b>
Total PEBC OPEB liability as a percentage of covered-employee payroll	<b>71.68%</b>

Note: This schedule is presented to illustrate the requirement to show information for ten years. However, recalculations of prior years are not required, and if prior years are not reported in accordance with the standards of GASB 75, they should not be shown here. The Authority implemented GASB 75 in fiscal year 2018, therefore the required information for this schedule will be built over the next nine years. The amounts presented for each fiscal year were determined as of the year-end that occurred one year prior.

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**Required Supplementary Information**  
 December 31, 2018

**Schedule of Authority's Share of ERS Net OPEB Liability**  
 Last 10 Calendar Years  
 (Unaudited)

<b>Fiscal Year Ending December 31,</b>	<b>2018</b>
Authority's proportional share of collective net ERS OPEB liability (%)	0.04181875%
Authority's proportional share of collective net ERS OPEB liability (\$)	<b>\$ 14,248,908</b>
Covered-Employee Payroll	\$ 4,911,742
ERS Net OPEB Liability as a Percentage of Covered-Employee Payroll	290.10%
ERS Plan Fiduciary Net Position as a Percentage of Total ERS OPEB Liability	2.04%

**Schedule of Authority's Contributions to ERS OPEB**  
 Last 10 Calendar Years  
 (Unaudited)

<b>Fiscal Year Ending December 31,</b>	<b>2018</b>
Actuarially determined contributions	N/A (*)
Actual contributions	\$ 369,614
Contribution deficiency (excess)	N/A (*)
Covered-Employee Payroll	\$ 4,911,742
Ratio of actual contributions/employer covered payroll amount	7.52%

(\*) N/A – Not Available

Note: This schedule is presented to illustrate the requirement to show information for ten years. However, recalculations of prior years are not required, and if prior years are not reported in accordance with the standards of GASB 75, they should not be shown here. The Authority implemented GASB 75 in fiscal year 2018, therefore the required information for this schedule will be built over the next nine years. The amounts presented for each fiscal year in the top table were determined as of the year-end that occurred one year prior.

NORTH TEXAS TOLLWAY SYSTEM  
(An Enterprise Fund of the North Texas Tollway Authority)  
Schedule of Net Position by Trust Account  
December 31, 2018

Table with columns for Assets, Liabilities, and Net Position, categorized by Non-Major Enterprise Fund, North Texas Tollway System, and Interfund eliminations/reclassifications. Includes sub-sections for Restricted assets, Non-current assets, and Current liabilities.

See accompanying independent auditors' report.

B-1-37



## STATISTICAL SECTION

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)

INTRODUCTION TO STATISTICAL SECTION  
(Unaudited)

**INTRODUCTION**

Governmental Accounting Standards Board (GASB) Statement 44 "Economic Condition Reporting": The Statistical Section requires that certain detailed statistical information be presented in this section, typically in ten year trends, to assist users in utilizing the basic financial statements, notes to the financial statements and required supplementary information in order to assess the economic condition of the System.

**FINANCIAL TRENDS**

These tables contain information to help the reader understand how the Authority's financial performance and well being have changed over time.

**REVENUE CAPACITY**

These tables contain information to help the reader assess the Authority's most significant revenue sources.

**DEBT CAPACITY**

These tables present information to help the reader assess the affordability of the Authority's current current level of outstanding debt and the Authority's ability to issue additional debt in the future.

**DEMOGRAPHIC AND ECONOMIC INFORMATION**

These tables offer demographic and economic indicators to help the reader understand the environment within which the Authority's financial activities take place.

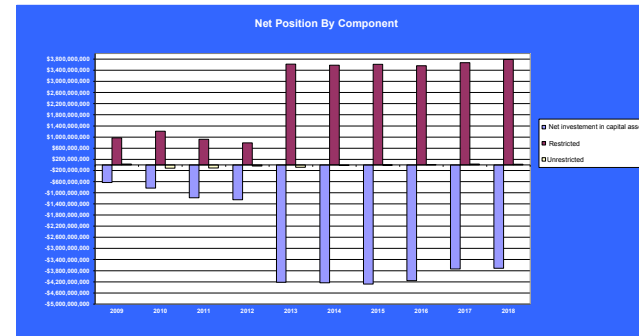
**OPERATING INFORMATION**

These tables contain service and infrastructure data to help the reader understand how the information in the Authority's financial report relates to the services the Authority provides and the activities it performs.

Sources: Unless other noted, the information in the following tables is derived from the annual financial reports for the relevant years.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
Net Position by Component  
Last Ten Fiscal Years  
(Unaudited)

Business-Type Activities										
Component	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net investment in capital assets	\$ (533,265,931)	\$ (831,801,669)	\$ (1,178,473,954)	\$ (1,254,098,836)	\$ (4,212,230,014)	\$ (4,234,262,561)	\$ (4,277,956,501)	\$ (4,154,462,248)	\$ (3,737,708,369)	\$ (3,710,464,076)
Restricted	972,154,312	1,211,161,929	917,325,283	792,586,995	3,621,400,342	3,580,531,205	3,612,159,144	3,561,843,338	3,674,470,077	3,790,162,535
Unrestricted	31,783,352	(119,834,279)	(112,356,823)	(38,289,706)	(63,847,212)	(23,192,391)	(7,176,940)	12,928,827	30,609,769	26,776,383
<b>Total net position</b>	<b>\$ 370,671,733</b>	<b>\$ 269,525,981</b>	<b>\$ (373,505,494)</b>	<b>\$ (499,771,547)</b>	<b>\$ (674,676,884)</b>	<b>\$ (678,923,747)</b>	<b>\$ (672,974,297)</b>	<b>\$ (679,696,083)</b>	<b>\$ (12,624,521)</b>	<b>\$ 106,474,942</b>













**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**Ratio of Revenue-backed Debt Outstanding**  
**Business-Type Activities**  
**Last Ten Fiscal Years**  
 (Unaudited)

Year	Revenue Bonds	Bond Anticipation Notes	Less: amounts Available in Bond Redemption Account	Commercial Paper Notes Payable	Texas Department of Transportation ISTEVA Loan	Total Debt Amount	Annual Toll Revenues(1)	Debt Per Annual Toll Revenue	Debt Per Capita(2)
2009	\$7,122,390,015	\$ -	(32,170,000)	\$5,200,000	\$146,609,022	\$7,242,029,037	\$290,404,547	\$25	\$1,277
2010	7,543,021,558	-	(29,685,000)	119,200,000	142,857,298	7,775,393,856	366,597,323	21	1,387
2011	7,555,401,914	-	(27,980,000)	56,300,000	140,607,304	7,724,329,218	402,569,534	19	1,366
2012	7,556,400,009	-	(16,605,000)	38,300,000	138,262,812	7,716,357,821	485,463,608	16	1,351
2013	7,588,629,243	-	-	-	136,069,850	7,724,699,093	525,458,723	15	1,322
2014	7,648,188,182	-	-	-	133,784,783	7,781,972,965	580,045,215	13	1,301
2015	7,708,916,451	-	-	-	131,403,745	7,840,320,196	617,488,044	13	1,286
2016	7,638,205,794	-	-	-	128,922,702	7,767,128,496	665,212,316	12	1,244
2017	9,407,717,891	-	-	-	125,337,455	9,533,055,346	712,551,456	13	1,490
2018	9,375,266,340	-	-	-	120,101,628	9,495,367,968	841,491,016	11	1,465

Note---Details on the System's outstanding debt can be found in the Notes to the Financial Statements.  
 (1) See Traffic and Toll Revenue Table on page 66.  
 (2) See Demographic Data Table on page 76.

B-1-44

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
**Schedule of Pro Forma Debt Service Requirements**  
 For the years 2018-2048  
 (Unaudited)

FYE (12/31) <sup>(1)(2)</sup>	Outstanding First Tier Net Debt Service <sup>(3)(4)(5)(6)</sup>	Outstanding Second Tier Net Debt Service <sup>(7)(8)</sup>	Outstanding ISTEVA Loan Debt Service	Outstanding Subordinate Lien Debt Service <sup>(9)(10)</sup>	Total Net Debt Service
2018	\$ 429,100,005	\$ 80,107,550	\$ 10,500,000	\$ 24,041,842	\$ 543,749,197
2019	398,654,868	117,748,967	12,250,000	46,403,449	575,057,284
2020	423,559,417	129,470,713	15,322,396	38,872,936	607,225,462
2021	448,564,667	135,177,463	15,322,396	32,922,624	631,987,150
2022	442,515,067	185,348,963	15,322,396	8,639,817	651,826,243
2023	455,271,317	189,442,313	15,322,396	8,637,656	668,673,682
2024	457,566,067	199,026,813	15,322,396	8,641,854	680,557,130
2025	488,364,067	168,223,313	15,322,396	8,645,997	680,555,773
2026	494,125,567	162,462,063	15,322,396	8,643,957	680,553,983
2027	490,335,067	166,251,063	15,322,396	8,644,885	680,553,411
2028	502,512,005	154,068,563	15,322,396	8,647,370	680,550,334
2029	477,523,755	208,475,313	-	-	685,999,068
2030	413,624,005	272,372,919	-	-	685,996,924
2031	498,778,805	276,220,063	-	-	685,998,869
2032	452,335,155	233,664,313	-	-	685,999,468
2033	467,391,305	218,604,813	-	-	685,996,118
2034	531,091,255	154,904,613	-	-	685,995,868
2035	554,713,455	131,285,563	-	-	685,999,018
2036	580,560,705	105,438,663	-	-	685,999,368
2037	630,471,855	55,525,870	-	-	685,997,725
2038	489,726,055	53,272,063	-	-	542,998,118
2039	490,663,205	52,336,313	-	-	542,999,518
2040	492,586,396	50,410,313	-	-	542,996,709
2041	494,624,129	48,372,563	-	-	542,996,692
2042	498,845,689	44,150,063	-	-	542,995,732
2043	207,891,708	32,163,813	-	-	240,055,521
2044	184,690,480	59,885,313	-	-	244,575,793
2045	142,624,790	101,958,063	-	-	244,592,853
2046	6,290,025	98,196,563	-	-	106,486,588
2047	-	99,192,063	-	-	99,192,063
2048	-	76,945,473	-	-	76,945,473
	-	-	-	-	-
	<b>\$ 12,558,000,866</b>	<b>\$ 4,060,716,503</b>	<b>\$ 160,651,564</b>	<b>\$ 202,742,188</b>	<b>\$ 16,982,111,120</b>

Note: The table above includes the series 2019 Refunding

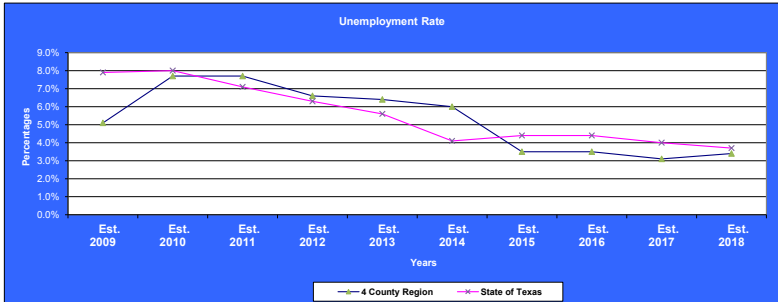
- <sup>(1)</sup>Excludes any payments to be made into the Reserve Maintenance Fund ("RMF") under the Trust Agreement. Payments made into the RMF are made after debt service on the First, Second, and Third Tier Bonds but prior to debt service on the ISTEVA Loan and the Subordinate Lien Bonds.
- <sup>(2)</sup>For all Bonds other than the Subordinate Lien Bonds, Fiscal Year debt service includes debt service on the following January 1 (i.e. Fiscal Year 2018 includes debt service on January 1, 2019). With respect to the Subordinate Lien Bonds, Fiscal Year debt service in each year includes the required deposit to the CIF Bond Payment Account on January 1 of the following year for the Subordinate Lien Bonds debt service due on August 1 of that year and February 1 of the next succeeding year (e.g. Fiscal Year 2018 includes debt service on August 1, 2019, and February 1, 2020).
- <sup>(3)</sup>Net of direct federal subsidy related to the Series 2009B Bonds issued as Build America Bonds. The federal subsidy for each year through final maturity is assumed to be reduced by 6.2% due to automatic federal deficit reduction spending cuts known as "sequestration" which took effect on March 1, 2013. Sequestration affects certain federally funded programs, including the federal subsidy payable to NTTA with respect to the Series 2009B Bonds. It is assumed that this reduction in Federal Subsidy Payments continues at the same rate through the final maturity.
- <sup>(4)</sup>Assumes the Series 2014C Bonds bear interest at 2.50% through their date of redemption.
- <sup>(5)</sup>Excludes debt service on the Series 2005C Refunded Bonds, the Series 2009A Refunded Bonds, the Series 2009C Refunded Bonds and the Series 2014C Refunded Bonds after the date of redemption.
- <sup>(6)</sup>Debt Service in Fiscal Years 2046-2051 is net of cash balance in the First Tier Debt Service Reserve Fund which is required by the terms of the Trust Agreement to be used to retire the last maturities of the outstanding bonds.
- <sup>(7)</sup>Debt service in Fiscal Year 2030 is net of cash balance in the 2014 Second Tier Debt Service Reserve Subaccount that is required by the terms of the Trust Agreement to be used to retire the last maturities of the Series 2014B Bonds. Debt service in Fiscal Year 2037 is net of cash balance in the 2015 Second Tier Debt Service Reserve Subaccount that is permitted by the terms of the Trust Agreement to be used to retire the last maturities of the Series 2015A Bonds.
- <sup>(8)</sup>Debt service in Fiscal Year 2048-2049 is net of cash balance in the Shared Second Tier Reserve Fund that is required by the terms of the Trust Agreement to be used to retire the last maturities of the outstanding Series 2017B Bonds and the Bonds.
- <sup>(9)</sup>Net of direct federal subsidy related to the Series 2010B Subordinate Lien Bonds issued as Build America Bonds. The Federal Subsidy Payment is assumed to be reduced by 6.2% due to automatic federal deficit reduction spending cuts known as "sequestration" which took effect on March 1, 2013. Sequestration affects certain federally funded programs, including the Federal Subsidy Payments payable to NTTA with respect to the Series 2010B Subordinate Lien Bonds. It is assumed that this reduction in Federal Subsidy Payments continues at the same rate through the final maturity.
- <sup>(10)</sup>Excludes debt service on the Subseries 2010B-2 Refunded Bonds



NORTH TEXAS TOLLWAY SYSTEM  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Demographic Data-Combined Four County Region and State of Texas Employment Status Estimates  
 For Years 2009-2018  
 (Unaudited)

Year	COLLIN	DALLAS	DENTON	TARRANT	Combined Four County Regional		Texas		Unemployment Rate	
					Estimated Totals	Estimated Totals	Estimated Totals	Estimated Totals	Four County	Texas
Est. 2009	285,900	1,415,000	172,600	743,500	2,617,000	10,204,500	5.1%	7.9%		
Est. 2010	390,106	1,063,304	330,122	833,527	2,617,059	10,204,500	7.7%	8.0%		
Est. 2011	397,033	1,082,185	335,984	845,263	2,660,465	10,204,500	7.7%	7.1%		
Est. 2012	413,783	1,102,322	356,467	883,503	2,756,075	11,742,600	6.6%	6.3%		
Est. 2013	330,300	1,509,000	195,500	812,600	2,947,400	11,091,900	6.4%	5.6%		
Est. 2014	346,400	1,558,500	205,800	825,600	2,936,300	11,433,600	6.0%	4.1%		
Est. 2015	366,900	1,616,800	221,400	844,900	3,050,000	11,681,000	3.5%	4.4%		
Est. 2016	381,500	1,662,300	228,800	860,400	3,133,000	11,830,700	3.5%	4.4%		
Est. 2017	398,000	1,691,100	239,600	877,800	3,206,500	12,008,941	3.1%	4.0%		
Est. 2018	416,100	1,711,900	246,500	900,500	3,275,000	12,326,967	3.4%	3.7%		
Increase Total from Year 2009 to Year 2018	130,200	296,900	73,900	157,000	658,000	2,122,467				

Source: U.S. Bureau of Labor Statistics

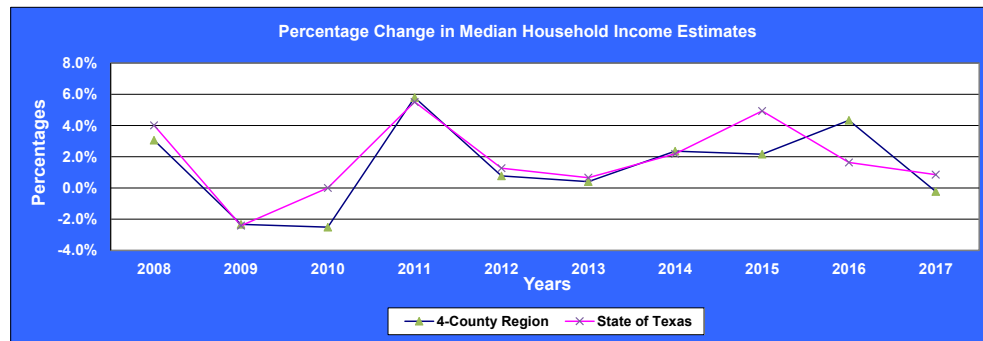


[THIS PAGE INTENTIONALLY LEFT BLANK]

NORTH TEXAS TOLLWAY SYSTEM  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Demographic Data - Combined Four County Region and State of Texas Median Household Income Estimates  
 For Years 2008 - 2017  
 (Unaudited)

Year	COLLIN	DALLAS	DENTON	TARRANT	Regional Totals	Texas	Percentage Change from Prior Years	
					Estimated Avg Median Income	Estimated Avg Median Income	Four County	Texas
2008	81,395	47,085	73,544	56,251	64,569	49,453	3.06%	4.01%
2009	80,545	47,059	70,002	54,647	63,063	48,259	-2.33%	-2.41%
2010	77,862	46,909	68,671	52,482	61,481	48,259	-2.51%	0.00%
2011	82,758	48,942	72,305	56,178	65,046	50,920	5.80%	5.51%
2012	83,238	49,159	72,939	56,859	65,549	51,563	0.77%	1.26%
2013	82,762	49,481	74,155	56,853	65,813	51,900	0.40%	0.65%
2014	86,634	50,118	74,569	58,127	67,362	53,035	2.35%	2.19%
2015	86,823	51,824	75,898	60,735	68,820	55,653	2.16%	4.94%
2016	90,382	54,429	80,841	61,553	71,801	56,565	4.33%	1.64%
2017	90,124	53,626	80,290	62,532	71,643	57,051	-0.22%	0.86%
Averaged Yearly Totals	\$84,252	\$49,863	\$74,321	\$57,622	\$66,515	\$52,266		

Source: U.S. Census Bureau



78

( c o n t i n u e )

[THIS PAGE INTENTIONALLY LEFT BLANK]

NORTH TEXAS TOLLWAY SYSTEM  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 North Texas Four County Region's Top Ten Employers  
 (Unaudited)

NORTH TEXAS TOLLWAY SYSTEM  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Contribution to Infrastructure Assets  
 Last Ten Fiscal Years  
 (Unaudited)

2018			
COLLIN COUNTY TOP TEN EMPLOYERS			
EMPLOYER	NUMBER OF EMPLOYEES	PERCENTAGE OF TOTAL COUNTY EMPLOYMENT	INDUSTRY
BANK OF AMERICA HOME LOANS	10,347	2.03%	FINANCIAL SERVICES
HP ENTERPRISE SVC LLC	10,000	1.96%	PROF/TECH
STATE FARM INSURANCE CORPORATE OFFICE	8,700	1.71%	INSURANCE
JP MORGAN & CHASE CO.	6,000	1.18%	FINANCIAL SERVICES
LIBERTY MUTUAL INSURANCE	4,100	0.80%	INSURANCE
TOYOTA OF AMERICA	4,000	0.79%	AUTOMOTIVE
JC PENNY CORPORATE OFFICE	3,800	0.75%	RETAIL
CAPITAL ONE	3,683	0.72%	FINANCIAL SERVICES
UNIVERSITY OF TEXAS AT DALLAS	3,500	0.69%	EDUCATION
RAYTHEON	3,200	0.63%	MANUFACTURING
<b>Total</b>	<b>57,330</b>	<b>11.26%</b>	
DALLAS COUNTY TOP TEN EMPLOYERS			
EMPLOYER	NUMBER OF EMPLOYEES	PERCENTAGE OF TOTAL COUNTY EMPLOYMENT	INDUSTRY
WAL-MART	34,000	1.30%	RETAIL
AMRCORP/AMERICAN AIRLINES	27,000	1.03%	AIRLINE
TEXAS HEALTH RESOURCES	22,296	0.85%	HEALTH CARE PROVIDER
DALLAS INDEPENDENT SCHOOL DISTRICT	19,740	0.75%	EDUCATION
AT&T	17,000	0.65%	TELECOMMUNICATIONS
BAYLOR SCOTT & WHITE HEALTH	16,500	0.63%	HEALTH CARE PROVIDER
THE KROGER GROUP	15,397	0.59%	RETAIL
MEDICAL CITY HEALTHCARE	14,000	0.53%	HEALTH CARE PROVIDER
BANK OF AMERICA	13,500	0.52%	FINANCIAL SERVICES
CITY OF DALLAS	13,350	0.51%	MUNICIPALITY
<b>Total</b>	<b>192,783</b>	<b>7.36%</b>	
DENTON COUNTY TOP TEN EMPLOYERS			
EMPLOYER	NUMBER OF EMPLOYEES	PERCENTAGE OF TOTAL COUNTY EMPLOYMENT	INDUSTRY
UNIVERSITY OF NORTH TEXAS	8,738	1.99%	EDUCATION
LEWISVILLE INDEPENDENT SCHOOL DISTRICT	6,325	1.44%	EDUCATION
WALMART (DISTRIBUTION CENTER & STORES)	3,900	0.89%	RETAIL
DENTON ISD	3,800	0.87%	EDUCATION
CENTEX HOME EQUITY	2,600	0.59%	FINANCIAL SERVICES
FRITO LAY CO	2,500	0.57%	MANUFACTURING
AMRCORP/AMERICAN AIRLINES	2,154	0.49%	AIRLINE
PETERBILT MOTORS	2,100	0.48%	AUTOMOTIVE
NORTHWEST ISD	2,050	0.47%	EDUCATION
DENTON STATE SCHOOL	1,700	0.39%	EDUCATION
<b>Total</b>	<b>35,867</b>	<b>8.1700%</b>	
TARRANT COUNTY TOP TEN EMPLOYERS			
EMPLOYER	NUMBER OF EMPLOYEES	PERCENTAGE OF TOTAL COUNTY EMPLOYMENT	INDUSTRY
AMRCORP/AMERICAN AIRLINES	31,000	3.04%	AIRLINE
TEXAS HEALTH RESOURCES	24,000	2.35%	HEALTH CARE PROVIDER
LOCKHEED MARTIN AERONAUTICS COMPANY	15,200	1.49%	MANUFACTURING
FORT WORTH INDEPENDENT SCHOOL DISTRICT	12,000	1.18%	EDUCATION
NAS-FORT WORTH JOINT RESERVE BASE	10,000	0.98%	MILITARY
ARLINGTON INDEPENDENT SCHOOL DISTRICT	8,500	0.83%	EDUCATION
UNIVERSITY OF TEXAS AT ARLINGTON	7,558	0.74%	EDUCATION
COOK'S CHILDREN HEALTH CARE SYSTEM	6,694	0.66%	HEALTH CARE PROVIDER
JPS HEALTH NETWORK	6,500	0.64%	HEALTH CARE PROVIDER
CITY OF FORTH WORTH	6,161	0.60%	MUNICIPALITY
<b>Total</b>	<b>127,613</b>	<b>12.51%</b>	
Source: Local Counties CAFR's (Collin, Dallas, Denton and Tarrant)			

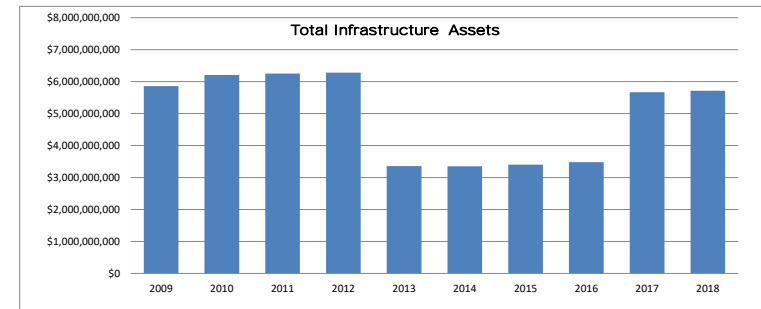
Year	Beginning Balance	Additions	Deletions/Depreciation	Adjustments	Ending Balance
2009	5,501,488,622	3,558,138,403 (1)	(3,197,211,448) (1)	-	5,862,415,577
2010	5,862,415,577	344,755,250	(234,076)	-	6,206,936,751
2011	6,206,936,751	108,559,116	(62,875,322)	-	6,252,620,545
2012	6,252,620,545	98,294,093	(69,521,816)	-	6,281,392,822
2013	6,281,392,822	25,112,483	(2,949,815,326) (2)	-	3,356,689,979
2014	3,356,689,979	11,585,674	(6,159,420)	(8,597,539)	3,353,518,694
2015	3,353,518,694	53,581,166	(6,889,660)	136,897	3,400,347,097
2016	3,400,347,097	89,901,489	(8,903,986)	(394,739)	3,480,949,861
2017	3,480,949,861	132,744,330	(20,559,186)	2,078,500,474 (3)	5,671,635,479
2018	5,671,635,479	58,751,927	(16,987,728)	854,827	5,714,254,505

\* does not include intangible assets and amortization of intangible assets

(1) Includes reclass from CIP to Roadway due to the completion of Sam Rayburn Tollway

(2) Includes reclass of Sam Rayburn Tollway to an intangible asset

(3) Includes transfer of assets from Special Projects System to NTTA System



B-1-48



NORTH TEXAS TOLLWAY SYSTEM  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Toll Collection Variance  
 Last Eight Fiscal Years  
 (Unaudited)

	Calendar Year 2011	Calendar Year 2012	Calendar Year 2013	Calendar Year 2014	Calendar Year 2015	Calendar Year 2016	Calendar Year 2017	Calendar Year 2018
Value of invoiced ZipCash transactions uncollected	\$ 44,675,438	\$ 80,413,340	\$ 81,701,089	\$ 81,508,283	\$ 102,767,093	\$ 113,455,688	\$ 112,820,414	\$ 115,432,293
Value of uninvoiced ZipCash transactions	38,069,555	52,451,196	61,518,201	80,989,673	81,035,240	71,002,940	67,811,698	70,619,752
<b>Total</b>	<b>\$ 82,744,993</b>	<b>\$ 132,864,536</b>	<b>\$ 143,219,290</b>	<b>\$ 162,497,956</b>	<b>\$ 183,802,333</b>	<b>\$ 184,458,628</b>	<b>\$ 180,632,111</b>	<b>\$ 186,052,045</b>
Value of all AVI and ZipCash transactions adjusted for Vtoll transactions	\$ 493,585,247	\$ 591,226,667	\$ 676,584,037	\$ 795,784,407	\$ 894,514,347	\$ 967,410,315	\$ 1,003,853,246	\$ 1,067,934,551
<b>Toll collection variance</b>	<b>16.75%</b>	<b>22.47%</b>	<b>21.17%</b>	<b>20.42%</b>	<b>20.55%</b>	<b>19.07%</b>	<b>17.99%</b>	<b>17.42%</b>

Notes:  
 (1) These calculations use aggregate transaction information from the NTTA System and exclude the Non-Major Enterprise Fund.

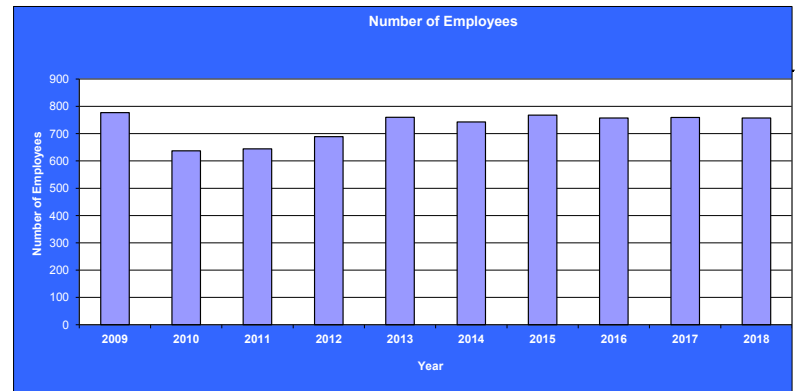
	Calendar Year 2011	Calendar Year 2012	Calendar Year 2013	Calendar Year 2014	Calendar Year 2015	Calendar Year 2016	Calendar Year 2017	Calendar Year 2018
Percentage of ZipCash transactions (by value) out of all NTTA transactions during period	29.28%	29.43%	28.83%	30.40%	30.42%	28.90%	26.79%	25.28%
Percentage of ZipCash transactions (by value) that were invoiced during period	54.70%	62.94%	61.92%	64.61%	68.26%	72.68%	72.93%	71.94%
Percentage of ZipCash transactions (by value) that were collected as of period end	41.29%	41.29%	48.75%	45.03%	41.40%	41.30%	39.64%	36.57%

Notes:  
 (1) These calculations use aggregate transaction information from the NTTA System and exclude the Non-Major Enterprise Fund.  
 (2) Uninvoiced ZipCash transactions that are paid in the reporting period are deemed to be invoiced and are reflected in the percentages in the preceding table. Uninvoiced ZipCash transactions that are invoiced in subsequent reporting periods, and uncollected invoiced ZipCash transactions that are collected in subsequent reporting periods, are not reflected in the percentages in the preceding table. Furthermore, the percentages in the table do not take into account adjustments for Vtoll transactions and unassigned ZipCash invoices occurring after such reporting period. ZipCash transactions are not invoiced if the transaction (i) does not meet NTTA's business rules regarding invoicing, or (ii) is not pursuable because a readable license plate image was not captured or because the license plate information could not be matched to the vehicle owner information.  
 (3) The calculation does not include ZipCash transactions collected after the end of the calendar year in which the transaction occurred, therefore NTTA reports total ZipCash collections, including invoiced and uninvoiced payments, for the calendar year. This amount includes all ZipCash transactions collected regardless of the date the transactions occurred. Total unaudited ZipCash collections for the NTTA System were approximately \$41.3 million for 2011, \$67.4 million for 2012, \$68.3 million for 2013, \$78.0 million for 2014, \$81.4 million for 2015, \$92.0 million for 2016, \$88.1 million for 2017 and \$92.3 million for 2018.

NORTH TEXAS TOLLWAY SYSTEM  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Total Lane Miles Operating and Number of Employees by Department  
 Last Ten Fiscal Years  
 (Unaudited)

Lane Miles										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Lane Miles	669	685	744	744	744	744	744	745	950	995

Full-time Equivalent Employees										
Function	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Administration	6	4	6	7	3	2	2	2	2	3
Board	1	1	1	2	1	1	1	1	1	1
Operations	2	3	3	1	3	5	5	6	7	5
Financial Planning and Analysis	0	0	0	0	0	0	0	6	6	0
Strategic & Innovative Solutions	0	0	0	0	9	6	3	0	0	0
Finance	10	22	24	23	25	19	23	18	18	15
Business Diversity	5	5	5	5	5	5	5	5	5	4
Communications/Public Affairs	15	15	15	14	15	14	15	15	12	12
Internal Audit	5	6	5	8	8	7	7	8	9	8
Human Resources	14	12	12	11	13	12	11	11	11	13
Legal Services	3	5	6	5	5	5	5	7	6	7
System & Incident Management	57	73	79	84	91	94	98	103	112	152
Accounting	7	0	0	0	0	0	0	0	0	0
Information Technology	47	61	64	71	77	76	78	83	84	81
Vault	19	2	0	0	0	0	0	0	0	0
Audit - Revenue Reconciliation	5	0	0	0	0	0	0	0	0	0
Procurement Services	12	11	11	11	11	9	10	10	11	10
Government Affairs	3	3	2	3	3	3	1	2	2	2
Toll Collection	162	4	0	0	0	0	0	0	0	0
Maintenance	162	163	160	181	195	167	160	165	132	127
Customer Service Center	228	232	236	248	279	298	325	295	321	312
Project Delivery	9	10	10	11	13	16	16	16	17	16
Project Evaluation	0	0	0	0	0	0	0	0	0	0
Treasury Management	5	5	5	4	4	4	3	4	3	9
<b>Total</b>	<b>777</b>	<b>637</b>	<b>644</b>	<b>689</b>	<b>760</b>	<b>743</b>	<b>768</b>	<b>757</b>	<b>759</b>	<b>757</b>





CONTINUING FINANCIAL DISCLOSURES  
SCHEDULES SECTION

*(UNAUDITED)*

## CONTINUING FINANCIAL DISCLOSURE SCHEDULES

(UNAUDITED)

The Continuing Financial Disclosures Schedules present various financial data in support of the Management's Discussion and Analysis and Financial Statements in the Financial Section of the Comprehensive Annual Financial Report for the fiscal year ended December 31, 2018.

**NORTH TEXAS TOLLWAY SYSTEM**  
(An Enterprise Fund of the North Texas Tollway Authority)  
Consolidating Schedule for Capital Improvement Fund  
December 31, 2018  
(Unaudited)

Schedule 2

Assets	Consolidated Capital Improvement Fund	Capital Improvement Fund	Feasibility Study Fund
<b>Current assets:</b>			
Cash and cash equivalents (note 3)	\$ 1,022,114	\$ 958,101	\$ 64,013
Investments (note 3)	335,367,153	335,367,153	-
Accrued interest receivable	1,261,934	1,261,934	-
Accounts receivable (note 9)	1,563,933	1,563,933	-
Prepaid expenses	8,774,232	8,774,232	-
Total current unrestricted assets	<u>347,989,366</u>	<u>347,925,353</u>	<u>64,013</u>
<b>Current restricted assets:</b>			
Restricted assets:			
Restricted for debt service:			
Investments (notes 3 and 5)	27,759,496	27,759,496	-
Total current restricted assets	<u>27,759,496</u>	<u>27,759,496</u>	<u>-</u>
Total current assets	<u>375,748,862</u>	<u>375,684,849</u>	<u>64,013</u>
<b>Noncurrent assets:</b>			
Investments restricted for debt service (note 3)	128,576,999	128,576,999	-
Unavailable feasibility study costs	7,522,520	-	7,522,520
Nondepreciable (note 4)	(862,095)	(862,095)	-
Total noncurrent assets	<u>135,237,424</u>	<u>127,714,904</u>	<u>7,522,520</u>
<b>Total assets</b>	<b><u>510,986,286</u></b>	<b><u>503,399,753</u></b>	<b><u>7,586,533</u></b>
<b>Liabilities</b>			
<b>Current liabilities:</b>			
Accounts payable	19,242	19,242	-
Accrued liabilities	7,105,589	7,105,589	-
Total current unrestricted liabilities	<u>7,124,831</u>	<u>7,124,831</u>	<u>-</u>
Payable from restricted assets:			
Construction-related payables:			
Retainage payable (note 10)	5,391,911	5,391,911	-
Debt service-related payables:			
Accrued interest payable	13,748,333	13,748,333	-
Total current liabilities payable from restricted assets	<u>19,140,244</u>	<u>19,140,244</u>	<u>-</u>
Total current liabilities	<u>26,265,075</u>	<u>26,265,075</u>	<u>-</u>
<b>Noncurrent liabilities:</b>			
Dallas North Tollway System revenue bonds payable	400,000,000	400,000,000	-
Total noncurrent liabilities	<u>400,000,000</u>	<u>400,000,000</u>	<u>-</u>
<b>Total liabilities</b>	<b><u>426,265,075</u></b>	<b><u>426,265,075</u></b>	<b><u>-</u></b>
<b>Net Position</b>			
Net investment in capital assets	7,586,533	-	7,586,533
Restricted for:			
Debt service	7,750,000	7,750,000	-
Unrestricted	69,384,678	69,384,678	-
<b>Total net position</b>	<b><u>\$ 84,721,211</u></b>	<b><u>\$ 77,134,678</u></b>	<b><u>\$ 7,586,533</u></b>

See accompanying independent auditors' report.



**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
 Schedule of Budget and Actual Revenues and Expenses on Trust Agreement Basis  
 Year ended December 31, 2018  
*(Unaudited)*

Schedule 3

	<u>Budget</u>	<u>Actual</u>	<u>Variance</u> <u>Over (Under)</u>
<b>Revenues:</b>			
Toll revenues	\$ 843,189,300	841,491,016	\$ (1,698,284)
Interest income	11,090,000	23,042,758	11,952,758
Other revenue	<u>46,254,963</u>	<u>44,649,896</u>	<u>(1,605,067)</u>
Gross revenues	<u>900,534,263</u>	<u>909,183,670</u>	<u>8,649,407</u>
<b>Operating expenses:</b>			
<b>Administration:</b>			
Accounting	1,601,822	1,560,396	(41,426)
Administration	739,081	715,899	(23,182)
Board	183,630	163,169	(20,461)
Treasury management	1,227,605	1,127,438	(100,167)
Financial planning and analysis	1,059,818	892,550	(167,268)
Human resources	1,640,270	1,262,902	(377,368)
Internal audit	1,188,011	777,918	(410,093)
Legal services	3,318,721	3,067,577	(251,144)
Procurement and business diversity	1,820,574	1,564,465	(256,109)
Public affairs	5,647,261	5,186,964	(460,297)
Shared services	<u>12,824,424</u>	<u>12,184,397</u>	<u>(640,027)</u>
Total administration	<u>31,251,217</u>	<u>28,503,675</u>	<u>(2,747,542)</u>
<b>Operations:</b>			
Contact center and collections	75,806,066	69,848,872	(5,957,194)
Information technology	23,184,957	21,032,121	(2,152,836)
Maintenance	34,536,584	27,496,673	(7,039,911)
Operations	905,029	749,587	(155,442)
Project delivery	2,669,147	2,471,974	(197,173)
System & incident management	<u>17,397,000</u>	<u>15,447,007</u>	<u>(1,949,993)</u>
Total operations	<u>154,498,783</u>	<u>137,046,234</u>	<u>(17,452,549)</u>
Total operating expenses	<u>185,750,000</u>	<u>165,549,909</u>	<u>(20,200,091)</u>
Net revenues available for debt service	<u>\$ 714,784,263</u>	<u>\$ 743,633,761</u>	<u>\$ 28,849,498</u>

See accompanying independent auditors' report.

**NORTH TEXAS TOLLWAY SYSTEM**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
Schedule of Changes in Net Position by Trust Account  
December 31, 2018  
*(Unaudited)*

Schedule 4

	Total	Non-Major Enterprise Fund	North Texas Tollway System	Construction and property account	Revenue account
<b>Net positions, beginning of year restated</b>	<b>\$ (44,433,802)</b>	<b>\$ 45,079,342</b>	<b>\$ (89,513,144)</b>	<b>\$ (923,926,526)</b>	<b>\$ (131,603,478)</b>
Gross revenues	949,954,260	40,770,589	909,183,671	-	890,567,204
Payments from other governments	(2,000,000)	-	(2,000,000)	-	-
Net increase (decrease) in the fair value of investments	(1,061,515)	-	(1,061,515)	50,724	69,790
Interest earned on investments	1,843,976	-	1,843,976	1,843,976	-
Gain (loss) on sale of investments	(161,717)	-	(161,717)	-	-
Administration and operations expenses	(203,106,306)	(37,556,397)	(165,549,909)	-	-
Depreciation on property and equipment	(10,059,970)	-	(10,059,970)	(10,059,970)	-
Bond interest expense	(487,783,857)	-	(487,783,857)	-	-
BAB's Subsidy	27,123,478	-	27,123,478	-	-
Arbitrage rebate	100,868	-	100,868	100,868	-
Other nonoperating expenses/ revenue	31,075,830	-	31,075,830	325,936	-
Bond discount/premium amortization	71,840,236	-	71,840,236	71,557,402	-
Bond issuance cost amortization	(3,192,510)	-	(3,192,510)	(3,192,510)	-
Loss on disposal of assets	(12,641,833)	-	(12,641,833)	(6,692,570)	-
Interest on loan	(5,264,173)	-	(5,264,173)	(5,264,173)	-
SWAP termination payment	(11,212,000)	-	(11,212,000)	(11,212,000)	-
Amortization of deferred amount on refunding (note 5)	(87,427,695)	-	(87,427,695)	(87,427,695)	-
Unallocated infrastructure depreciation	(64,788,513)	-	(64,788,513)	(64,788,513)	-
Construction improvement account expenses	19,310	-	19,310	19,310	-
Reserve maintenance account expenses	(22,222,511)	-	(22,222,511)	-	-
Consolidated capital improvement fund expenses	(20,126,714)	-	(20,126,714)	54,307,240	-
Net revenues	150,908,644	3,214,192	147,694,452	(60,431,975)	890,636,994
Interfund transactions:					
Distribution from revenue fund	-	-	-	-	(855,620,784)
Operating transfers (other funds)	-	-	-	244,756,438	196,964,758
Net changes during the year	150,908,644	3,214,192	147,694,452	184,324,463	231,980,966
<b>Net positions, end of year</b>	<b>\$ 106,474,842</b>	<b>\$ 48,293,534</b>	<b>\$ 58,181,308</b>	<b>\$ (739,602,063)</b>	<b>\$ 100,377,488</b>

	Operation and maintenance account	Reserve maintenance account	Consolidated Capital Improvement Fund	Debt service accounts		
				Bond interest account	Reserve account	Redemption account
<b>Net positions, beginning of year restated</b>	<b>\$ 35,172,463</b>	<b>\$ 45,336,690</b>	<b>\$ 66,484,167</b>	<b>\$ 341,889,041</b>	<b>\$ 460,683,934</b>	<b>\$ 16,450,565</b>
Gross revenues	57	968,666	6,157,467	1,693,571	8,680,603	1,116,103
Payments from other governments	-	-	(2,000,000)	-	-	-
Net increase (decrease) in the fair value of investments	-	(11,013)	163,750	-	(1,334,766)	-
Interest earned on investments	-	-	-	-	-	-
Gain (loss) on sale of investments	-	-	-	-	(161,717)	-
Administration and operations expenses	(165,549,909)	-	-	-	-	-
Depreciation on property and equipment	-	-	-	-	-	-
Bond interest expense	-	-	(32,996,000)	(454,787,857)	-	-
BAB's Subsidy	-	-	-	-	27,123,478	-
Arbitrage rebate	-	-	-	-	-	-
Other nonoperating expenses/ revenue	2,920,547	-	27,829,347	-	-	-
Bond discount/premium amortization	-	-	282,834	-	-	-
Bond issuance cost amortization	-	-	-	-	-	-
Loss on disposal of assets	-	-	(5,940,263)	-	-	-
Interest on loan	-	-	(5,264,173)	-	-	-
SWAP termination payment	-	-	-	-	-	-
Amortization of deferred amount on refunding (note 5)	-	-	-	-	-	-
Unallocated infrastructure depreciation	-	-	-	-	-	-
Construction improvement account expenses	-	-	-	-	-	-
Reserve maintenance account expenses	-	(22,222,511)	-	-	-	-
Consolidated capital improvement fund expenses	-	-	(74,433,954)	-	-	-
Net revenues	(162,629,305)	(21,294,858)	(80,945,819)	(425,970,808)	7,184,120	1,116,103
Interfund transactions:						
Distribution from revenue fund	135,193,742	22,184,046	200,221,475	383,718,636	-	114,302,885
Operating transfers (other funds)	(4,999,564)	(338,388)	(101,038,612)	(297,817,455)	(21,124,540)	(16,402,635)
Net changes during the year	(32,435,127)	(980,800)	18,237,044	(340,069,627)	(13,940,420)	98,016,353
<b>Net positions, end of year</b>	<b>\$ 2,737,336</b>	<b>\$ 45,917,490</b>	<b>\$ 84,721,211</b>	<b>\$ 1,819,414</b>	<b>\$ 446,743,514</b>	<b>\$ 115,466,918</b>

See accompanying independent auditors' report.

B-1-53



**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Schedule of Historical Traffic, Toll Revenues and Net Revenues  
 Year Ended December 31, 2018  
 (Unaudited)

Schedule 7

**Historical Traffic and Toll Revenue**

The table below sets forth the annual revenue vehicle transactions and gross toll revenue with respect to the Dallas North Tollway System for the ten calendar years 2009 through 2018:

Year	Annual revenue vehicle transactions (unaudited)	Annual toll revenue
2009 (1)	455,546,197	290,404,547
2010 (2)	481,913,338	366,597,323
2011 (3)	513,454,344	402,569,534
2012	585,051,845	485,463,608
2013	610,129,737	525,458,723
2014	644,669,523	580,045,215
2015	676,484,779	617,488,044
2016	703,094,602	665,212,316
2017	723,247,591	712,551,456
2018	827,610,415	841,491,016

- (1) Reflects the opening of Lake Lewisville August 2009.  
 (2) Four major direct connectors at SRT/US75 interchange were opened during 2010  
 (3) PGBT EE mainlanes from SH 78 to IH 30 opened in December 2011

**Historical Net Revenues**

The table set forth below shows the Net Revenues for debt service (as defined by Trust Agreement) of the Dallas North Tollway System for the ten calendar years 2009 through 2018:

Year	Toll revenue	Current expenses	Investment and other earnings	Net revenues	Coverage
2009	290,404,547	90,934,772	31,253,174	230,722,949	1.56
2010	366,597,323	95,709,839	30,086,350	300,973,835	1.61
2011	402,569,534	99,324,590	41,161,515	344,406,459	1.77
2012	485,463,608	106,236,324	28,832,506	408,059,790	1.47
2013	525,458,723	109,240,378	21,721,506	437,939,851	1.26
2014	580,045,215	115,465,976	28,170,791	492,750,030	1.41
2015	617,488,044	128,107,355	33,019,683	522,400,372	1.48
2016	665,212,316	131,310,220	43,467,901	577,369,997	1.48
2017	712,551,456	145,516,809	49,612,968	616,647,615	1.64
2018	841,491,016	157,193,010	67,692,654	751,990,660	1.84

See accompanying independent auditors' report.

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Schedule of Capitalized Costs by Project  
 As of December 31, 2018  
 (Unaudited)

Schedule 8

Cumulative Total Through  
December 31, 2018

<b>Dallas North Tollway - 3711</b>		
Preliminary costs		\$ 17,379,879
Right-of-way		49,485,647
Engineering		21,439,097
Administration		2,953,499
Buildings		5,590,003
Land		1,714,934
Roadways		203,765,224
Equipment		771,382
Accumulated depreciation - equipment		(771,382)
Total capitalized costs - Dallas North Tollway		<u>302,318,283</u>
<b>Dallas North Tollway Extension - 3712</b>		
Preliminary costs		6,619,071
Right-of-way		8,557,830
Engineering		25,116,391
Administration		1,413,506
Construction in Progress		22,775,067
Roadways		207,994,844
Equipment		-
Total capitalized costs - Dallas North Tollway Extension		<u>272,476,709</u>
<b>Addison Airport Toll Tunnel - 3741</b>		
Preliminary costs		1,244,082
Right-of-way		617,278
Engineering		4,895,697
Administration		295,203
Roadways		16,853,636
Total capitalized cost - Addison Airport Toll Tunnel		<u>23,905,896</u>
<b>President George Bush Turnpike - Segments I - IV - 3721</b>		
Preliminary costs		18,040,104
Right-of-way		76,906,305
Engineering		114,239,012
Construction in Progress		48,556,962
Administration		25,252,891
Buildings		24,016,957
Land		5,578,821
Roadways		658,090,628
Intangibles		11,013,509
Equipment		73,326,529
Accumulated amortization for intangibles		(3,594,985)
Accumulated depreciation for buildings		(10,286,101)
Accumulated depreciation - equipment		(50,380,341)
Total capitalized cost - President George Bush Turnpike - Segments I - IV		<u>990,770,291</u>
<b>President George Bush Turnpike - Segment V - 3723</b>		
Preliminary costs		1,596,208
Right-of-way		16,459
Engineering		8,981,476
Administration		235,829
Roadways		75,190,982
Total capitalized cost - President George Bush Turnpike - Segment V		<u>86,020,954</u>
<b>Dallas North Tollway Phase 3 - 3713</b>		
Preliminary costs		5,118,815
Infrastructure - Other		434
Right-of-way		569,830
Engineering		33,329,767
Administration		2,590,663
Construction in Progress		160,572,309
Roadways		200,821,609
Total capitalized cost - Dallas North Tollway Phase 3		<u>403,203,427</u>
<b>Lewisville Lake Toll Bridge - 3761</b>		
Preliminary costs		9,875
Right-of-way		13,177
Engineering		14,360,278
Administration		249,620
Roadways		99,475,304
Total capitalized cost - Lewisville Lake Toll Bridge		<u>114,108,254</u>

(continued)

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Schedule of Capitalized Costs by Project  
 As of December 31, 2018  
 (Unaudited)

Schedule 8

	Cumulative Total Through December 31, 2018
<b>Sam Rayburn Tollway (121 Tollway) - 3751</b>	
Preliminary costs	1,142,464
Right-of-way	15,103,568
Engineering	102,925,634
Administration	21,194,398
Construction in Progress	21,853
Roadways	636,958,077
<b>Total capitalized cost – Sam Rayburn Tollway (121 Tollway)</b>	<b>777,345,794</b>
<b>President George Bush Turnpike - Eastern Extension - 3722</b>	
Infrastructure (Other)	30,192
Right-of-way	104,963,159
Engineering	73,018,399
Administration	4,861,209
Construction in Progress	-
Roadways	445,503,010
Accumulated depreciation - equipment	-
<b>Total capitalized cost – President George Bush Turnpike - Eastern Extension</b>	<b>628,375,969</b>
<b>PGBT Western Ext Constr Fund - 3771</b>	
Right-of-way	69,934
Engineering	11,751,580
Administration	866,299
Roadways	1,039,039,873
<b>Total capitalized cost – PGBT Western Ext Constr Fund - 3771</b>	<b>1,051,720,676</b>
<b>CTP Construction Fund - 3781</b>	
Right-of-way	48,526,364
Engineering	30,780,331
Administration	122,357
Construction in Progress	6,001,688
Roadways	975,907,792
<b>Total capitalized cost - Chisholm Trail Parkway</b>	<b>1,061,338,532</b>
<b>MCLB 1977 Construction Fund - 3731</b>	
Preliminary costs	483,970
Right-of-way	50,778
Engineering	616,967
Administration	379,131
Roadways	7,370,431
<b>Total capitalized cost – MCLB 1977 Construction Fund</b>	<b>8,901,277</b>
<b>2009 A Revenue Bonds Fund - 3601</b>	
Roadways	2,550
Administration	14,600
<b>Total capitalized cost - 2009 A Revenue Bonds</b>	<b>17,150</b>
<b>Dallas North Tollway PH 4B/5A Fund - 3714</b>	
Engineering	1,179,818
<b>Total capitalized cost - Dallas North Tollway Ph 4B/5A</b>	<b>1,179,818</b>
<b>Total</b>	
Infrastructure	30,626
Preliminary costs	51,634,469
Right-of-way	304,880,328
Engineering	442,634,446
Construction in Progress	237,927,678
Administration	60,531,195
Buildings	29,596,959
Land	7,293,755
Roadways	4,567,064,961
Intangibles (net of amortization)	7,428,525
Equipment	74,097,911
Accumulated depreciation - equipment	(51,151,723)
Accumulated depreciation - buildings	(10,286,101)
<b>Total capitalized cost as of December 31, 2018</b>	<b>5,721,683,029</b>

(1) Total capitalized cost includes bond discount/premiums, which have been capitalized in accordance with the Trust Agreement. These costs are netted against revenue bonds within the statement of net position.

See accompanying independent auditors' report.

**NORTH TEXAS TOLLWAY SYSTEM**  
 (An Enterprise Fund of the North Texas Tollway Authority)  
 Schedule of Deferred Study Costs - Feasibility Study Fund  
 Year ended December 31, 2018  
 (Unaudited)

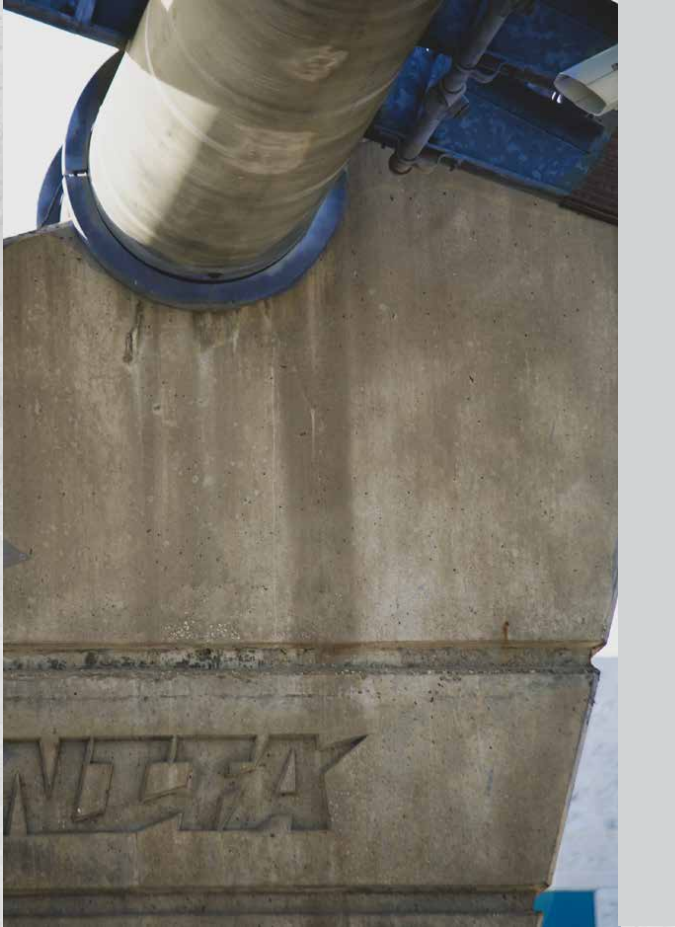
Schedule 9

The table below sets forth the accumulated unavailable feasibility study costs, by project, through December 31, 2018 that have not been transferred out of the Feasibility Study Fund into a construction project.

Projects	Accumulated December 31, 2018
Dallas North Tollway:	
Extension Phase 4	3,738,109
Extension Phase 4B/5A	3,660,658
President George Bush Turnpike - East Branch	123,753
	<b>\$ 7,522,520</b>

See accompanying independent auditor's report





## BOARD OF DIRECTORS

\*As of December 31, 2018



**WILLIAM BARR**  
*Chairman*  
Tarrant County



**BILL MOORE**  
*Vice Chairman*  
Collin County



**LYNN GRAVLEY**  
*Director*  
Gubernatorial  
Appointee



**MO'IJ HADDAD**  
*Director*  
Tarrant County



**JOHN MAHALIK**  
*Director*  
Denton County



**GEORGE "TEX"  
QUESADA**  
*Director*  
Dallas County



**JANE WILLARD**  
*Director*  
Collin County

**GERALD CARRIGAN**  
*Executive Director*

**HORATIO PORTER**  
*Chief Financial  
Officer*



Connecting North Texas with  
Reliable, Convenient and Smoother Roads

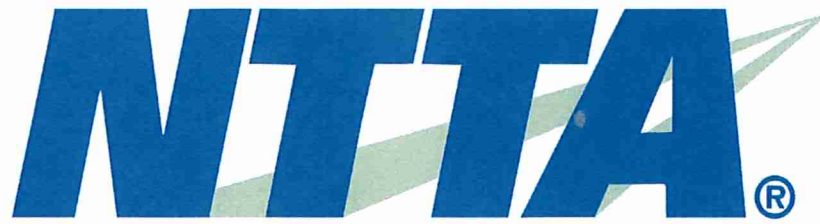
[NTTA.org](http://NTTA.org)

[THIS PAGE INTENTIONALLY LEFT BLANK]

**APPENDIX B-2**

**UNAUDITED FINANCIAL REPORT OF THE NORTH TEXAS TOLLWAY AUTHORITY  
SYSTEM, AN ENTERPRISE FUND OF THE NORTH TEXAS TOLLWAY AUTHORITY, FOR  
THE FOUR-MONTH PERIOD ENDED APRIL 30, 2019**

[THIS PAGE INTENTIONALLY LEFT BLANK]



***NORTH TEXAS TOLLWAY AUTHORITY***

**PRELIMINARY REPORT**

**(DOES NOT INCLUDE ALL YEAR-END ADJUSTMENTS)**

**MONTHLY FINANCIAL REPORT  
FOR THE MONTH ENDED  
APRIL 30, 2019**

**Prepared by  
Finance Department**

[THIS PAGE INTENTIONALLY LEFT BLANK]

**NORTH TEXAS TOLLWAY AUTHORITY**

5900 W. Plano Parkway, Suite 100, Plano, Texas 75093  
P.O. Box 260729, Plano, Texas 75026

Kenneth Barr, Chairman  
Bill Moore, Vice Chairman  
Marcus Knight, Director  
John Mahalik, Director  
Pete Kamp, Director  
George "Tex" Quesada, Director  
Lynn Gravley, Director  
Mojoy Haddad, Director  
Jane Willard, Director


---

James Hofmann, Executive Director  
Horatio Porter, Chief Financial Officer

---

**MONTHLY FINANCIAL REPORT**  
**April 30, 2019**

This report is unaudited and is furnished as general information only.



---

Horatio Porter, Chief Financial Officer



---

Brian Reich, Controller



---

Cindy Demers, Director of Treasury Management, Finance

# NORTH TEXAS TOLLWAY AUTHORITY

April 30, 2019

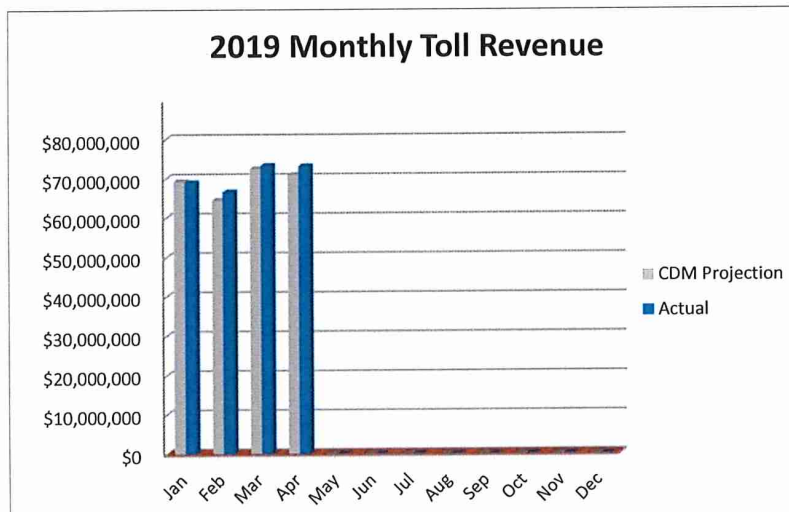
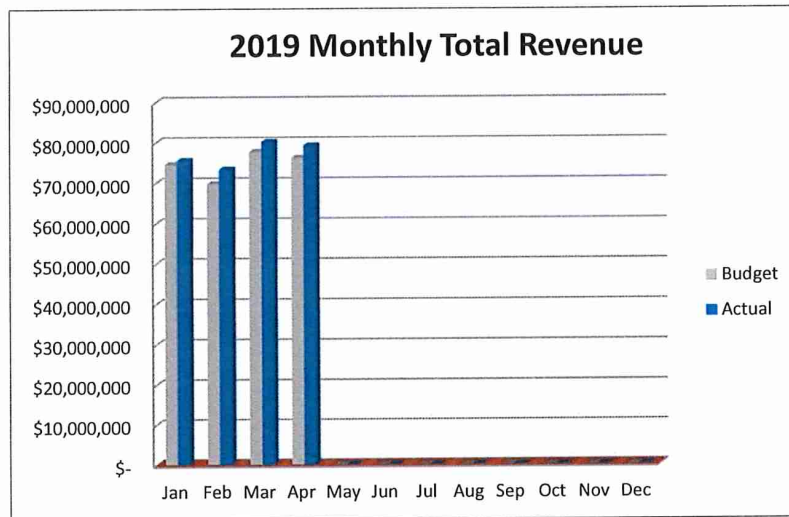
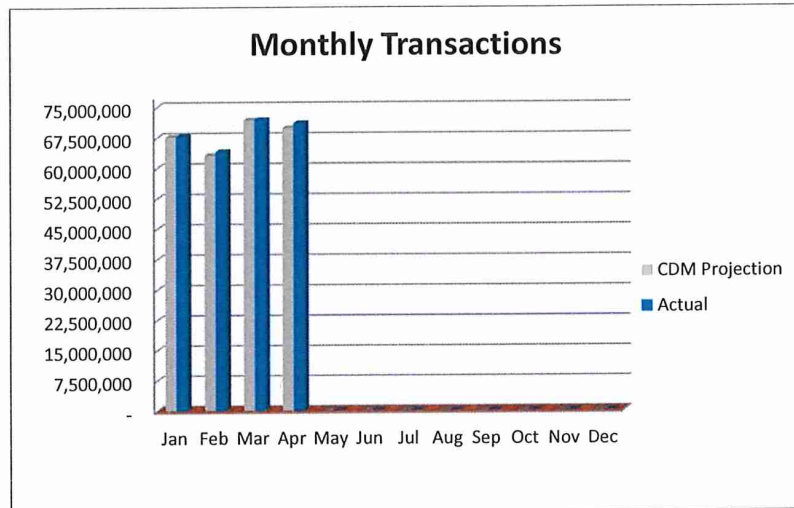
## REPORT CONTENTS

	<u>Page</u>
The Month At-A-Glance	1
Statement of Net Position	4
Consolidating Schedule for Capital Improvement Fund	6
Statement of Changes in Net Position	7
Statement of Cash Flows	9
Budget and Actual Revenues and Expenses on Trust Agreement Basis	10
Toll Revenue and Traffic Analysis	11
Toll Receivable Analysis	12
Investment Report	13
Schedule of Deferred Study Costs	14
Enterprise Fund - Statement of Net Position	15
Enterprise Fund - Budget vs Actual Revenues and Expenses	16
Enterprise Fund - Billings & Collection Analysis	17
Enterprise Fund - Management Summary	18
360 Tollway - Statement of Net Position	22
360 Tollway - Budget and Actual Revenues and Expenses	23

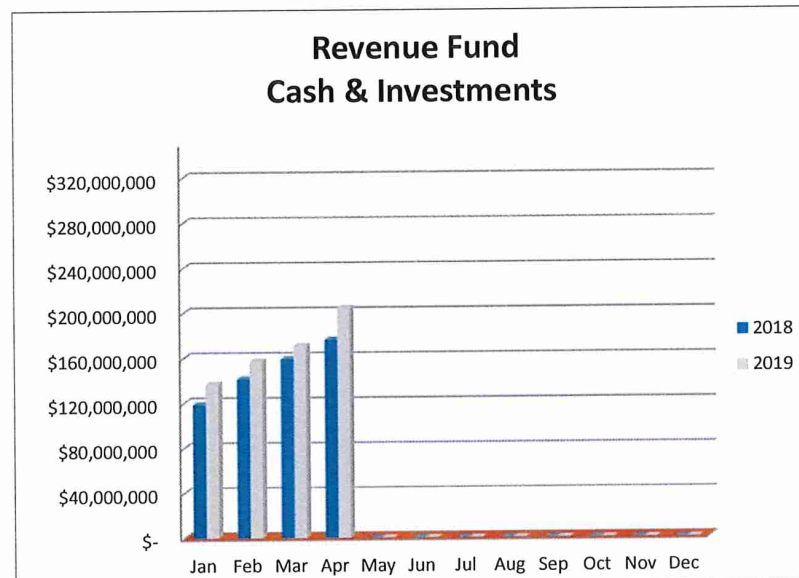
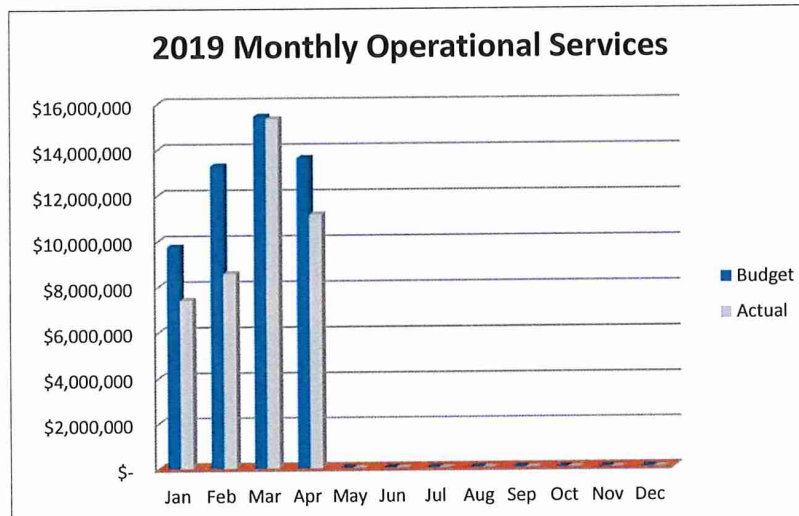
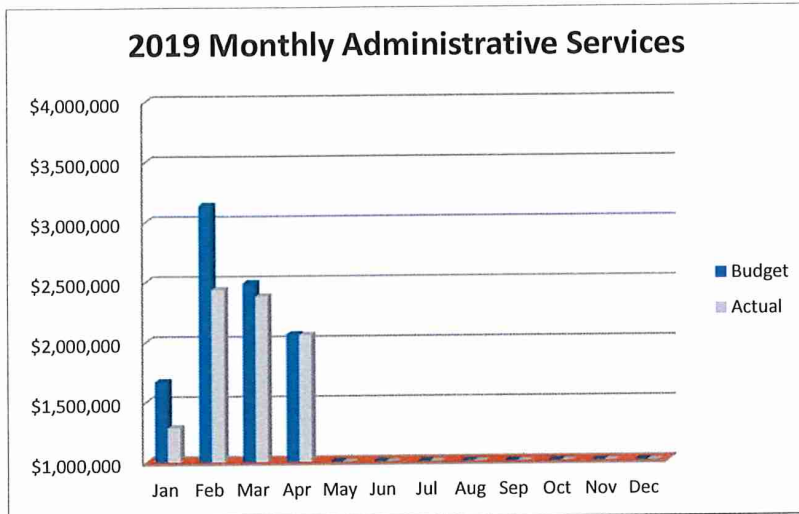
This report is unaudited and is furnished as general information only.



# April 2019 At A Glance

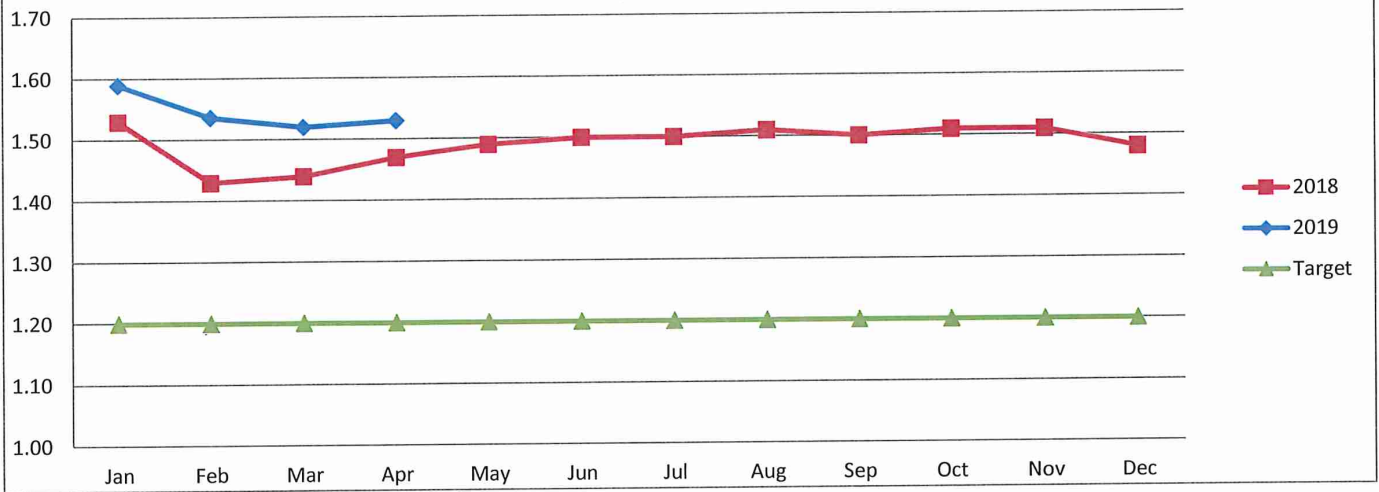


# April 2019 At A Glance

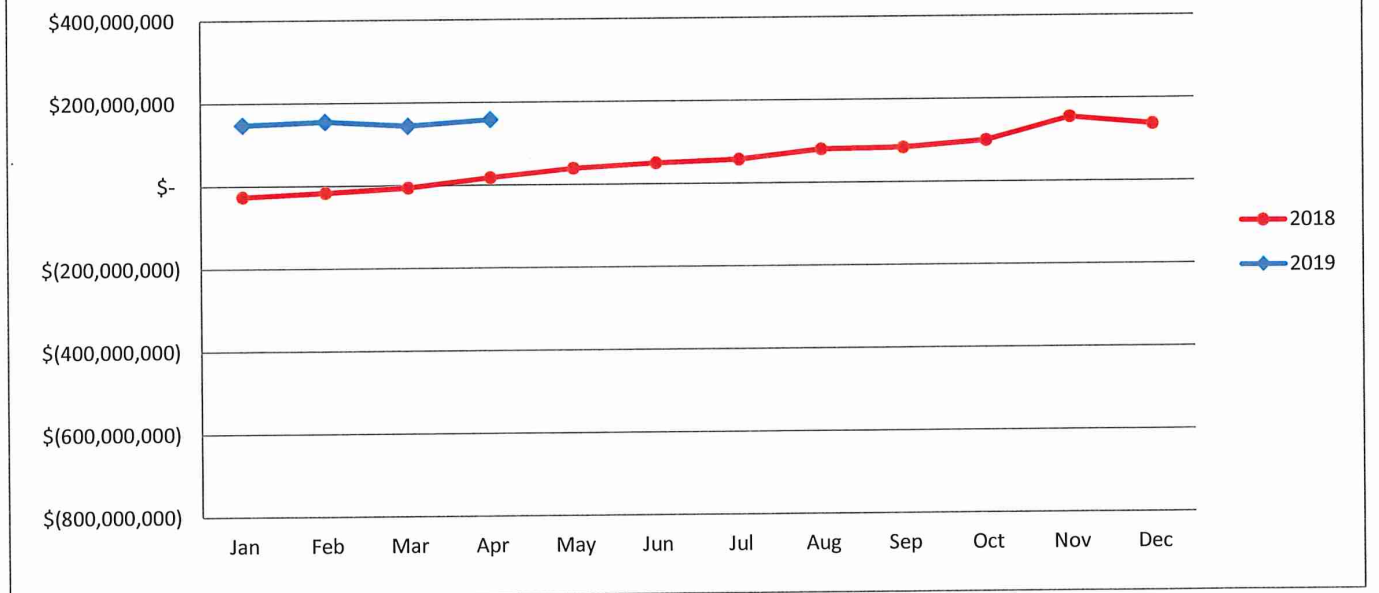


## April 2019 At A Glance

### Coverage Calculation (1st & 2nd Tier)



### Total Net Position



**NORTH TEXAS TOLLWAY AUTHORITY  
NORTH TEXAS TOLLWAY AUTHORITY SYSTEM  
STATEMENT OF NET POSITION  
April 30, 2019  
(Unaudited)**

Assets	Total	Non-Major Enterprise Fund	North Texas Tollway System Totals	Interfund eliminations/ reclassifications	Construction & Property Fund	Revenue Fund
<b>Current assets:</b>						
Cash and cash equivalents	59,819,145	3,553,501	56,265,644	-	-	17,942,797
Investments	391,226,513	22,665,939	368,560,574	-	-	136,509,997
Accrued interest receivable	1,772,091	-	1,772,091	-	-	480,797
Interproject/agency receivables	17,988,342	6,508,758	11,479,584	-	-	11,479,584
Accounts receivable	289,153,782	61,581,595	227,572,187	-	75,196	225,728,980
Allowance for uncollectible receivables	(225,345,646)	(45,630,458)	(179,715,188)	-	-	(179,715,188)
Unbilled accounts receivable	39,731,545	17,820,691	21,910,854	-	-	21,910,854
Allowance for unbilled receivables	(26,122,260)	(14,047,138)	(12,075,122)	-	-	(12,075,122)
<b>Total current unrestricted assets</b>	<b>548,223,513</b>	<b>52,452,888</b>	<b>495,770,625</b>	<b>-</b>	<b>75,196</b>	<b>222,262,700</b>
<b>Current restricted assets:</b>						
<b>Restricted for construction:</b>						
Cash	(220,190)	-	(220,190)	-	(220,190)	-
Investments	86,562,035	-	86,562,035	-	86,562,035	-
Accrued interest receivable	176,920	-	176,920	-	176,920	-
<b>Restricted for debt service:</b>						
Investments	297,740,041	-	297,740,041	-	-	-
Accrued interest receivable	2,195,200	-	2,195,200	-	-	-
Accounts receivable	9,097,768	-	9,097,768	-	-	-
<b>Restricted for NTE 3A/3B:</b>						
Investments	1,263,129	1,263,129	-	-	-	-
<b>Total current restricted assets</b>	<b>396,814,903</b>	<b>1,263,129</b>	<b>395,551,774</b>	<b>-</b>	<b>86,518,765</b>	<b>-</b>
<b>Total current assets</b>	<b>945,038,415</b>	<b>53,716,016</b>	<b>891,322,399</b>	<b>-</b>	<b>86,593,961</b>	<b>222,262,700</b>
<b>Noncurrent assets:</b>						
Investments	54,844,434	-	54,844,434	-	-	49,909,100
Investments, restricted for debt service	586,343,444	-	586,343,444	-	-	-
Unavailable feasibility study cost	7,522,520	-	7,522,520	-	-	-
Service Concession Arrangement - Intangible asset (net of accumulated amortization)	2,538,012,424	-	2,538,012,424	-	2,538,012,424	-
<b>Capital assets:</b>						
Nondepreciable	5,688,956,634	-	5,688,956,634	638,354,513	5,051,369,938	-
Depreciable (net)	55,311,075	-	55,311,075	-	55,311,075	-
<b>Total noncurrent assets</b>	<b>8,930,990,531</b>	<b>-</b>	<b>8,930,990,531</b>	<b>638,354,513</b>	<b>7,644,693,437</b>	<b>49,909,100</b>
<b>Total assets</b>	<b>9,876,028,946</b>	<b>53,716,016</b>	<b>9,822,312,929</b>	<b>638,354,513</b>	<b>7,731,287,397</b>	<b>272,171,800</b>
<b>Deferred outflow of resources</b>						
Loss on refunding	639,410,614	-	639,410,614	-	639,410,614	-
Pension contributions after measurement date	5,861,294	-	5,861,294	-	-	-
Difference in projected and actual earnings on pension assets	765,726	-	765,726	-	-	-
Changes in actuarial assumptions used to determined pension liability	7,390,607	-	7,390,607	-	-	-
<b>Total deferred outflow of resources</b>	<b>653,428,241</b>	<b>-</b>	<b>653,428,241</b>	<b>-</b>	<b>639,410,614</b>	<b>-</b>
<b>Liabilities</b>						
<b>Current liabilities:</b>						
Accounts payable	1,501,462	262	1,501,200	-	-	69,266
Accrued liabilities	12,759,329	-	12,759,329	-	-	2,003,457
Intergovernmental payables	11,867,418	483,464	11,383,954	-	-	11,382,381
Deferred income	78,713,620	-	78,713,620	-	-	78,713,620
<b>Total current unrestricted liabilities</b>	<b>104,841,829</b>	<b>483,726</b>	<b>104,358,103</b>	<b>-</b>	<b>-</b>	<b>92,168,724</b>
<b>Payable from restricted assets:</b>						
<b>Construction-related payables:</b>						
Retainage payable	6,718,923	-	6,718,923	-	555,529	-
<b>Debt service-related payables:</b>						
Accrued interest payable on ISTEAL loan - current portion	15,454,732	-	15,454,732	-	7,205,732	-
Accrued interest payable on bonded debt	138,240,312	-	138,240,312	-	1,681,423	-
Revenue bonds payable-current portion	115,595,000	-	115,595,000	-	115,595,000	-
<b>Restricted for NTE 3A/3B:</b>						
Intergovernmental payables	1,263,129	1,263,129	-	-	-	-
<b>Total current liabilities payable from restricted assets</b>	<b>277,272,096</b>	<b>1,263,129</b>	<b>276,008,967</b>	<b>-</b>	<b>125,037,684</b>	<b>-</b>
<b>Total current liabilities</b>	<b>382,113,925</b>	<b>1,746,855</b>	<b>380,367,070</b>	<b>-</b>	<b>125,037,684</b>	<b>92,168,724</b>
<b>Noncurrent liabilities:</b>						
Texas Department of Transportation - ISTEAL loan payable	112,895,896	-	112,895,896	-	112,895,896	-
Dallas North Tollway System revenue bonds payable net of bond discount (premium) costs of \$ 638,354,513	9,797,627,712	-	9,797,627,712	638,354,513	8,756,245,916	-
Other Post Employment Benefits	42,592,327	-	42,592,327	-	-	-
<b>Total non-current liabilities</b>	<b>9,953,115,935</b>	<b>-</b>	<b>9,953,115,935</b>	<b>638,354,513</b>	<b>8,869,141,812</b>	<b>-</b>
<b>Total liabilities</b>	<b>10,335,229,860</b>	<b>1,746,855</b>	<b>10,333,483,005</b>	<b>638,354,513</b>	<b>8,994,179,496</b>	<b>92,168,724</b>
<b>Deferred inflow of resources</b>						
Difference in expected and actual pension experience	6,281,351	-	6,281,351	-	-	-
Gain on refunding	29,560,988	-	29,560,988	-	29,560,988	-
<b>Total deferred inflow of resources</b>	<b>35,842,339</b>	<b>-</b>	<b>35,842,339</b>	<b>-</b>	<b>29,560,988</b>	<b>-</b>
<b>Net Position</b>						
Net investment in capital assets	(3,600,090,373)	-	(3,600,090,373)	(2,647,761,795)	(959,909,457)	-
<b>Restricted for:</b>						
Debt service	1,203,384,008	-	1,203,384,008	523,440,038	-	180,003,076
SCA Intangible	2,538,012,424	-	2,538,012,424	-	2,538,012,424	-
Unrestricted	17,078,931	51,969,161	(34,890,230)	2,124,321,757	(2,231,145,438)	-
<b>Total net position</b>	<b>158,384,990</b>	<b>51,969,161</b>	<b>106,415,829</b>	<b>-</b>	<b>(653,042,471)</b>	<b>180,003,076</b>

Operation & Maint. Fund	Reserve Maint. Fund	Consolidated Capital Improvement Fund	Debt Service Fund		
			Bond Interest	Reserve Account	Redemption Account
39,288,241	(325,631)	(639,764)	-	-	-
3,174	50,019,381	182,028,023	-	-	-
6	47,117	1,244,171	-	-	-
-	-	-	-	-	-
322,797	-	1,445,215	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
39,614,219	49,740,866	184,077,644	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	39,833,549	131,115,711	87,983,085	38,807,696
-	-	-	198,647	1,937,509	59,044
-	-	-	9,097,768	-	-
-	-	-	-	-	-
-	-	39,833,549	140,412,126	89,920,594	38,866,740
39,614,219	49,740,866	223,911,193	140,412,126	89,920,594	38,866,740
-	4,935,334.40	-	-	-	-
-	-	223,765,838	-	362,577,606	-
-	-	7,522,520	-	-	-
-	-	-	-	-	-
-	-	(767,817)	-	-	-
-	4,935,334	230,520,540	-	362,577,606	-
39,614,219	54,676,201	454,431,734	140,412,126	452,498,200	38,866,740
-	-	-	-	-	-
5,861,294	-	-	-	-	-
765,726	-	-	-	-	-
7,390,607	-	-	-	-	-
14,017,627	-	-	-	-	-
-	-	-	-	-	-
1,374,284	10,624	47,025	-	-	-
10,755,872	-	-	-	-	-
1,573	-	-	-	-	-
-	-	-	-	-	-
12,131,730	10,624	47,025	-	-	-
-	878,576	5,284,818	-	-	-
-	-	8,249,000	-	-	-
-	-	-	136,558,889	-	-
-	-	-	-	-	-
-	878,576	13,533,818	136,558,889	-	-
12,131,730	889,200	13,580,843	136,558,889	-	-
-	-	-	-	-	-
-	-	400,000,000	3,027,283	-	-
42,592,327	-	-	-	-	-
42,592,327	-	400,000,000	3,027,283	-	-
54,724,057	889,200	413,580,843	139,586,172	-	-
-	-	-	-	-	-
6,281,351	-	-	-	-	-
-	-	-	-	-	-
6,281,351	-	-	-	-	-
-	-	7,580,879	-	-	-
-	-	7,750,000	825,954	452,498,200	38,866,740
-	-	-	-	-	-
(7,373,561)	53,787,001	25,520,011	-	-	-
(7,373,561)	53,787,001	40,850,890	825,954	452,498,200	38,866,740

**NORTH TEXAS TOLLWAY AUTHORITY**  
**(An Enterprise Fund of the North Texas Tollway Authority)**  
**Consolidated Schedule of Capital Improvement Fund**  
**April 30, 2019**  
**(Unaudited)**

	<u>Consolidated Capital Improvement Fund</u>	<u>Capital Improvement Fund</u>	<u>Feasibility Study Fund</u>
<b>Assets</b>			
Current assets:			
Cash and cash equivalents	(639,764)	(698,123)	58,359
Investments	182,028,023	182,028,023	-
Accrued interest receivable	1,244,171	1,244,171	-
Accounts receivable	1,445,215	1,445,215	-
Total current unrestricted assets	<u>184,077,644</u>	<u>184,019,285</u>	<u>58,359</u>
Current restricted assets:			
Restricted for debt service:			
Investments	39,833,549	39,833,549	-
Total current restricted assets	<u>39,833,549</u>	<u>39,833,549</u>	<u>-</u>
Total current assets	<u>223,911,193</u>	<u>223,852,834</u>	<u>58,359</u>
Noncurrent assets:			
Investments, restricted for debt service	223,765,838	223,765,838	-
Unavailable feasibility study cost	7,522,520	-	7,522,520
Capital assets:			
Nondepreciable	(767,817)	(767,817)	-
Total noncurrent assets	<u>230,520,540</u>	<u>222,998,020</u>	<u>7,522,520</u>
<b>Total assets</b>	<b><u>454,431,734</u></b>	<b><u>446,850,854</u></b>	<b><u>7,580,879</u></b>
<b>Liabilities</b>			
Current liabilities:			
Accounts payable	47,025	47,025	-
Total current unrestricted liabilities	<u>47,025</u>	<u>47,025</u>	<u>-</u>
Payable from restricted assets:			
Construction-related payables:			
Retainage payable	5,284,818	5,284,818	-
Debt service-related payables:			
Accrued interest payable on ISTEAL loan - current portion	8,249,000	8,249,000	-
Total current liabilities payable from restricted assets	<u>13,533,818</u>	<u>13,533,818</u>	<u>-</u>
Total current liabilities	<u>13,580,843</u>	<u>13,580,843</u>	<u>-</u>
Noncurrent liabilities:			
Texas Department of Transportation - ISTEAL loan payable	-	-	-
Dallas North Tollway System revenue bonds payable net of bond	400,000,000	400,000,000	-
Total non-current liabilities	<u>400,000,000</u>	<u>400,000,000</u>	<u>-</u>
<b>Total liabilities</b>	<b><u>413,580,843</u></b>	<b><u>413,580,843</u></b>	<b><u>-</u></b>
<b>Net Position</b>			
Net investment in capital assets	7,580,879	-	7,580,879
Restricted for:			
Debt service	7,750,000	7,750,000	-
Unrestricted	25,520,011	25,520,011	-
<b>Total net position</b>	<b><u>40,850,890</u></b>	<b><u>33,270,011</u></b>	<b><u>7,580,879</u></b>

[THIS PAGE INTENTIONALLY LEFT BLANK]

**NORTH TEXAS TOLLWAY AUTHORITY**  
**STATEMENT OF CHANGES IN NET POSITION**  
Year to Date April 30, 2019  
(Unaudited)

	Total	Non-Major Enterprise Fund	North Texas Tollway System Totals	Construction & Property Fund	Revenue Fund
<b>BEGINNING NET POSITION January 01, 2019</b>	106,474,842	48,293,534	58,181,309	(739,602,063)	100,377,488
<b>Revenues:</b>					
Toll revenue	313,205,195	8,614,172	304,591,023	-	304,591,023
Interest revenue	9,282,805	176,981	9,105,824	-	1,341,457
Other revenue	29,474,442	12,188,342	17,286,100	-	17,286,100
Less: bad debt expense	(26,905,138)	(4,281,617)	(22,623,521)	-	(22,623,521)
<b>Total operating revenues</b>	<b>325,057,304</b>	<b>16,697,878</b>	<b>308,359,426</b>	<b>-</b>	<b>300,595,059</b>
<b>Operating Expenses:</b>					
Administration	(8,636,972)	(480,456)	(8,156,516)	-	-
Operations	(54,994,838)	(12,541,793)	(42,453,045)	-	-
	(63,631,810)	(13,022,249)	(50,609,561)	-	-
<b>Preservation of System Assets:</b>					
Reserve Maintenance Fund expenses	(4,556,046)	-	(4,556,046)	-	-
Capital Improvement Fund expenses	(28,248,927)	-	(28,248,927)	13,941,666	-
Construction Fund expenses	(546)	-	(546)	(546)	-
<b>Total operating expenses</b>	<b>(96,437,329)</b>	<b>(13,022,249)</b>	<b>(83,415,079)</b>	<b>13,941,120</b>	<b>-</b>
<b>Operating income (loss) before amortization and depreciator</b>	<b>228,619,975</b>	<b>3,675,628</b>	<b>224,944,347</b>	<b>13,941,120</b>	<b>300,595,059</b>
<b>Amortization and Depreciation</b>					
Depreciation	(3,366,875)	-	(3,366,875)	(3,366,875)	-
Amortization of intangible asset	(21,596,171)	-	(21,596,171)	(21,596,171)	-
<b>Operating income (loss)</b>	<b>203,656,929</b>	<b>3,675,628</b>	<b>199,981,301</b>	<b>(11,021,926)</b>	<b>300,595,059</b>
<b>Nonoperating Revenues (Expenses):</b>					
Interest earned on investments	744,229	-	744,229	744,229	-
Gain (Loss) on sale of investments	9,093	-	9,093	-	-
Net decrease in fair value of investments	3,206,008	-	3,206,008	-	117,283
BAB's subsidy	9,097,768	-	9,097,768	-	-
Arbitrage rebate	(45,275)	-	(45,275)	(45,275)	-
Interest expense on revenue bonds	(103,671,852)	-	(103,671,852)	-	-
Interest accretion on 2008D Bonds	(14,861,858)	-	(14,861,858)	-	-
Interest expense on 2nd Tier Bonds	(34,111,221)	-	(34,111,221)	-	-
Bond discount/premium amortization	23,050,767	-	23,050,767	22,956,489	-
Interest on loan	(1,681,423)	-	(1,681,423)	(1,681,423)	-
Interest expense on other debt-CIF fund	(10,998,667)	-	(10,998,667)	-	-
Deferred amount on refunding amortization	(24,370,596)	-	(24,370,596)	(24,370,596)	-
Loss on disposal of assets	(48,809)	-	(48,809)	(48,809)	-
Other (damage claim, etc)	1,935,057	-	1,935,057	84,817	-
<b>Total nonoperating revenues (expenses):</b>	<b>(151,746,780)</b>	<b>-</b>	<b>(151,746,780)</b>	<b>(2,360,568)</b>	<b>117,283</b>
<b>Income (loss) before transfers</b>	<b>51,910,149</b>	<b>3,675,628</b>	<b>48,234,520</b>	<b>(13,382,494)</b>	<b>300,712,342</b>
Operating transfers (other funds)	-	-	-	99,942,087	(8,044,902)
Distribution from Revenue Fund	-	-	-	-	(213,041,851)
<b>Change in net position year to date April, 2019</b>	<b>51,910,149</b>	<b>3,675,628</b>	<b>48,234,520</b>	<b>86,559,592</b>	<b>79,625,589</b>
<b>Ending Net Position April 30 2019</b>	<b>158,384,990</b>	<b>51,969,161</b>	<b>106,415,829</b>	<b>(653,042,471)</b>	<b>180,003,076</b>



Operation & Maint. Fund	Reserve Maint. Fund	Consolidated Capital Improvement Fund	Debt Service Funds		
			Bond Interest	Reserve Account	Redemption Account
2,737,336	45,917,490	84,721,211	1,819,414	446,743,514	115,466,918
-	-	-	-	-	-
25	409,831	3,798,010	420,496	3,007,851	128,155
-	-	-	-	-	-
25	409,831	3,798,010	420,496	3,007,851	128,155
(8,156,516)	-	-	-	-	-
(42,453,045)	-	-	-	-	-
(50,609,561)	-	-	-	-	-
-	(4,556,046)	-	-	-	-
-	-	(42,190,592)	-	-	-
-	-	-	-	-	-
(50,609,561)	(4,556,045)	(42,190,592)	-	-	-
(50,609,536)	(4,146,214)	(38,392,583)	420,496	3,007,851	128,155
-	-	-	-	-	-
-	-	-	-	-	-
(50,609,536)	(4,146,214)	(38,392,583)	420,496	3,007,851	128,155
-	-	-	-	-	-
-	-	(250)	-	9,343	-
-	51,352	299,880	-	2,737,493	-
-	-	-	9,097,768	-	-
-	-	-	-	-	-
-	-	-	(103,671,852)	-	-
-	-	-	(14,861,858)	-	-
-	-	-	(34,111,221)	-	-
-	-	94,278	-	-	-
-	-	-	-	-	-
-	-	(10,998,667)	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
212,672	-	1,637,568	-	-	-
212,672	51,352	(8,967,191)	(143,547,164)	2,746,835	-
(50,396,864)	(4,094,861)	(47,359,774)	(143,126,668)	5,754,686	128,155
8,501,090	(720,045)	3,489,453	12,092,317	-	(115,260,000)
31,784,876	12,684,418	-	130,040,891	-	38,531,667
(10,110,897)	7,869,511	(43,870,321)	(993,461)	5,754,686	(76,600,178)
(7,373,561)	53,787,001	40,850,890	825,954	452,498,200	38,866,740

North Texas Tollway System  
(An Enterprise Fund of the North Texas Tollway Authority)  
Statement of Cash Flows  
Year to Date April 30, 2019

	North Texas Tollway System	Non-Trust Agreement Enterprise Fund	Total
<b>Cash flows from operating activities:</b>			
Receipts from customers and users	\$ 317,216,124	13,159,816	330,375,939
Receipts from other sources	1,935,057		1,935,057
Payments to contractors and suppliers	(81,199,385)	(14,843,273)	(96,042,658)
Payments to employees	(17,474,304)	(1,084,329)	(18,558,633)
<b>Net cash provided by operating activities</b>	<b>220,477,492</b>	<b>(2,767,787)</b>	<b>217,709,705</b>
<b>Cash flows from capital and related financing activities:</b>			
Acquisition and construction of capital assets	(8,426,595)		(8,426,595)
Capital contributions - BABS subsidy	4,492,950		4,492,950
Principal paid on revenue bonds	(115,260,000)		(115,260,000)
Principal paid on ISTEAL loan	(7,205,732)		(7,205,732)
Interest paid on revenue bonds	(211,990,773)		(211,990,773)
<b>Net cash used in capital and related financing activities</b>	<b>(338,390,149)</b>	<b>-</b>	<b>(338,390,149)</b>
<b>Cash flows from investing activities:</b>			
Purchase of investments	(2,241,771,531)	(6,176,981)	(2,247,948,512)
Proceeds from sales and maturities of investments	2,355,852,095	6,761,018	2,362,613,113
Interest received	744,229		744,229
<b>Net cash provided by investing activities</b>	<b>114,824,792</b>	<b>584,037</b>	<b>115,408,829</b>
<b>Net increase in cash and cash equivalents</b>	<b>(3,087,865)</b>	<b>(2,183,750)</b>	<b>(5,271,614)</b>
Cash and cash equivalents, beginning of the year	59,133,319	5,737,250	64,870,569
<b>Cash and cash equivalents, end of the year</b>	<b>56,045,455</b>	<b>3,553,500</b>	<b>59,598,955</b>
Classified as:			
Current assets	56,265,645	3,553,500	59,819,145
Restricted assets	(220,190)	-	(220,190)
<b>Total</b>	<b>56,045,455</b>	<b>\$ 3,553,500</b>	<b>59,598,955</b>
<b>Noncash financing, capital, and investing activities:</b>			
Reconciliation of operating income to net cash provided by operating activities:			
Operating income	199,981,301	3,675,627	203,656,928
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation	3,366,875		3,366,875
Amortization of intangible assets	21,596,171		21,596,171
Bad debt expense	26,905,138	-	26,905,138
Miscellaneous nonoperating income	1,935,057		1,935,057
Changes in assets and liabilities:			
Increase in accounts receivable	(26,167,882)	(3,538,062)	(29,705,945)
Decrease in accounts and retainage payable	(17,337,637)	(2,905,352)	(20,242,989)
Decrease in accrued liabilities	(9,421,995)		(9,421,995)
Decrease in prepaid expenses	11,501,022		11,501,022
Increase in unearned revenue	8,119,445		8,119,445
<b>Total adjustments</b>	<b>20,496,194</b>	<b>(6,443,414)</b>	<b>14,052,779</b>
<b>Net cash provided by operating activities</b>	<b>\$ 220,477,492</b>	<b>(2,767,787)</b>	<b>217,709,705</b>
<b>Noncash financing activities:</b>			
Increase in fair value of investments	3,206,008		3,206,008
Interest Accretion on CABS	(14,861,858)		(14,861,858)

**NORTH TEXAS TOLLWAY AUTHORITY**  
**Budget and Actual Revenues and Expenses on Trust Agreement Basis**  
**Month Ending**  
**April 30, 2019**

	<u>Total 2019 Budget</u>	<u>Budget To Date</u>	<u>Actual To Date</u>	<u>Variance Over(Under) Budget</u>
Revenues:				
Toll Revenues				
AVI	\$ 767,011,500	239,005,700	248,537,079	9,531,379
ZIP Cash	211,031,600	65,715,400	56,053,944	(9,661,456)
Less: Bad Debt Expense	<u>(91,387,000)</u>	<u>(27,456,000)</u>	<u>(22,623,521)</u>	<u>4,832,479</u>
Net Revenues	886,656,100	277,265,100	281,967,502	4,702,402
Interest revenue	19,600,000	6,533,333	9,105,824	2,572,491
Other revenues	<u>43,982,700</u>	<u>14,660,900</u>	<u>17,286,100</u>	<u>2,625,200</u>
Gross revenues	<u>950,238,800</u>	<u>298,459,333</u>	<u>308,359,426</u>	<u>9,900,092</u>
Operating expenses:				
Administration:				
Accounting	1,400,969	428,933	436,595	7,662
Administration	756,085	248,839	368,875	120,035
Board	184,275	51,760	86,373	34,613
Human resources	1,630,670	422,471	304,149	(118,322)
Internal audit	1,197,807	244,814	223,101	(21,713)
Legal services	3,139,770	389,970	589,872	199,902
Procurement and business diversity	1,892,203	594,561	512,800	(81,762)
Public affairs	6,973,028	2,130,110	1,156,354	(973,756)
Shared services	12,468,195	4,112,964	3,811,989	(300,975)
Treasury management	<u>2,655,487</u>	<u>733,054</u>	<u>666,409</u>	<u>(66,645)</u>
Total administration	<u>32,298,489</u>	<u>9,357,476</u>	<u>8,156,516</u>	<u>(1,200,960)</u>
Operations:				
Contact center and collections	76,220,075	25,287,334	17,601,285	(7,686,049)
Information technology	28,625,877	11,908,410	9,271,268	(2,637,142)
Maintenance	33,755,172	8,394,569	7,713,391	(681,179)
Operations	957,071	297,105	245,092	(52,013)
Project delivery	2,686,502	819,250	655,182	(164,068)
System & incident management	<u>18,236,814</u>	<u>5,335,099</u>	<u>6,966,827</u>	<u>1,631,728</u>
Total operations	<u>160,481,511</u>	<u>52,041,768</u>	<u>42,453,045</u>	<u>(9,588,723)</u>
Total operating expenses	<u>192,780,000</u>	<u>61,399,244</u>	<u>50,609,561</u>	<u>(10,789,683)</u>
Inter-fund transfers	<u>10,250,478</u>	<u>3,183,240</u>	<u>3,173,514</u>	<u>(9,725)</u>
Net revenues available for debt service	<u>\$ 767,709,278</u>	<u>240,243,329</u>	<u>260,923,379</u>	<u>20,680,050</u>
Net revenues available for debt service			<u>260,923,379</u>	
1st Tier Bond Interest Expense			103,671,852	
2nd Tier Bond Interest Expense			34,111,221	
Less: BABS Subsidy			<u>(6,065,178)</u>	
Total 1st & 2nd Tier Bond Interest Expense			131,717,895	
Allocated 1st Tier Principal Amount			34,886,667	
Allocated 2nd Tier Principal Amount			<u>3,645,000</u>	
Net Debt Service			<u>170,249,562</u>	
1st Tier Calculated Debt Service Coverage			<u>1.97</u>	
1st & 2nd Tier Calculated Debt Service Coverage			<u>1.53</u>	

**NORTH TEXAS TOLLWAY AUTHORITY  
TOLL REVENUE AND TRAFFIC ANALYSIS  
April 30, 2019**

	Month To Date		Year To Date	
	2019	2018	2019	2018
<b>TOLL REVENUE</b>				
AVI	\$ 64,523,637	62,039,980	\$ 248,537,079	\$ 236,545,753
ZipCash	8,596,181 (*)	9,073,166 (*)	33,430,423 (**)	33,013,878 (**)
<b>TOTAL</b>	<b>\$ 73,119,820</b>	<b>\$ 71,113,146</b>	<b>\$ 281,967,502</b>	<b>\$ 269,559,631</b>
Percent increase ( decrease )	<u>2.8%</u>		<u>4.6%</u>	

	Month To Date		Year To Date	
	2019	2018	2019	2018
<b>VEHICLE TRANSACTIONS</b>				
Two-axle vehicles	68,834,362	66,936,580	266,557,645	257,759,093
Three or more axle vehicles	2,193,228	2,111,882	8,168,133	7,826,110
Non Revenue	297,356	286,254	1,158,417	1,128,748
<b>TOTAL</b>	<b>71,324,946</b>	<b>69,334,716</b>	<b>275,884,195</b>	<b>266,713,951</b>
Percent increase ( decrease )	<u>2.9%</u>		<u>3.4%</u>	

<b>TOLL REVENUE AVERAGE PER DAY</b>				
	2019	2018	2019	2018
Total Revenue	\$ 2,437,327	2,370,438	2,349,729	2,246,330
<b>AVERAGE</b>	<b>\$ 2,437,327</b>	<b>\$ 2,370,438</b>	<b>\$ 2,349,729</b>	<b>\$ 2,246,330</b>
Percent increase ( decrease )	<u>2.8%</u>		<u>4.6%</u>	

<b>VEHICLE TRANSACTIONS AVERAGE PER DAY</b>				
	2019	2018	2019	2018
Two-axle vehicles	2,294,479	2,231,219	2,221,314	2,147,992
Three or more axle vehicles	73,108	70,396	68,068	65,218
Non Revenue	9,912	9,542	9,653	9,406
<b>AVERAGE</b>	<b>2,377,499</b>	<b>2,311,157</b>	<b>2,299,035</b>	<b>2,222,616</b>
Percent increase ( decrease )	<u>2.9%</u>		<u>3.4%</u>	

(\*) 2019 MTD Zip Cash reported Net of Bad Debt Expense of \$ 6,045,555  
 (\*) 2018 MTD Zip Cash reported Net of Bad Debt Expense of \$ 6,326,591  
 (\*\*) 2019 YTD Zip Cash reported Net of Bad Debt Expense of \$ 22,623,521  
 (\*\*) 2018 YTD Zip Cash reported Net of Bad Debt Expense of \$ 25,672,643

**NORTH TEXAS TOLLWAY AUTHORITY  
TOLL RECEIVABLE ANALYSIS  
April 30, 2019**

	<u>A/R Balance as of January 1st,</u>	<u>Month To Date April 30, 2019</u>	<u>Year To Date April 30, 2019</u>
<b>TOLL RECEIVABLE</b>			
Beginning A/R Balance, January 1st,	\$ 225,054,946	-	\$ 225,054,946
<b>System Invoiced:</b>			
ZipCash	52,831,471	18,366,675	71,198,146
<b>System Adjustments</b>			
Unassigned/reassigned	(4,788,548)	(1,548,008)	(6,336,556)
Excusals	(10,042,430)	(3,092,889)	(13,135,319)
A/R adjustments	890,584	(7,552)	883,032
Write Offs	(18,561,859)	(6,415,690)	(24,977,549)
Total adjustments	(32,502,253)	(11,064,139)	(43,566,392)
<b>Invoice Payments:</b>			
ZipCash	(8,682,532)	(2,687,500)	(11,370,032)
Violations	(12,164,806)	(3,422,541)	(15,587,347)
Payment Shortages	(265)	(76)	(341)
<b>Ending Balance A/R, April 30, 2019</b>	<u>224,536,561</u>	<u>1,192,419</u>	<u>225,728,980</u>
Allowance for uncollectible receivables	(179,031,182)	(684,006)	(179,715,188)
<b>Net A/R balance as of April 30, 2019</b>	<u>45,505,379</u>	<u>508,413</u>	<u>46,013,792</u>
Beginning Unbilled A/R as of Jan. 1st,	21,775,882 *	134,972	21,910,854
Allowance for uncollectible receivables	(11,940,150)	(134,972)	(12,075,122)
<b>Net Unbilled A/R balance as of April 30, 2019</b>	<u>9,835,732</u>	<u>-</u>	<u>9,835,732</u>
<b>A/R - Accounts receivable</b>			
* Unbilled transactions matched with a current address.			

**North Texas Tollway Authority  
Investments as of April 30, 2019**

Fund	Market Value
<b><u>Revenue Fund</u></b>	
1101 Revenue Fund	\$76,693,322.56
1101-01 Revenue Consolidation	544,082.52
1101-02 Custody Prepaid Funds	109,181,691.43
<b>Total Revenue Fund</b>	<b><u><u>\$186,419,096.51</u></u></b>
<b><u>Operations &amp; Maintenance Fund</u></b>	
1001 - Operation & Maintenance Fund	3,174.14
<b>Total Operations &amp; Maintenance Fund</b>	<b><u><u>\$3,174.14</u></u></b>
<b><u>Reserve Maintenance Fund</u></b>	
1201 - Reserve Maintenance Fund	54,954,715.33
<b>Total Reserve Maintenance Fund</b>	<b><u><u>\$54,954,715.33</u></u></b>
<b><u>Construction Funds</u></b>	
3713 - DNT Phase 3 Construction Fund	13,384,713.43
3722-03 - PGBT EE BABs Construction Fund	1,281,628.19
3751-10 - 2009B SRT BABs Construction Fund	22,168,968.65
3761 - LLTB BABs Construction Fund	6,868,644.96
3771 - PGBT-WE Construction Fund	208,697.44
3781 - CTP Construction Fund	31,561,416.36
3771/3781 PGBT-WE/CTP Construction Fund	11,087,965.96
<b>Total Construction Funds</b>	<b><u><u>\$86,562,034.99</u></u></b>
<b><u>Consolidated Capital Improvement Fund</u></b>	
1501 - Capital Improvement Fund	347,046,332.87
1501-02 - CIF Rest. Rainy Day Fund	74,563,640.11
1501-03 - CIF Bond Payment Account	24,017,436.12
<b>Total Consolidated Capital Improvement Fund</b>	<b><u><u>\$445,627,409.10</u></u></b>
<b><u>Debt Service Reserve</u></b>	
4221 - 1st Tier Debt Service Reserve	383,040,428.29
4221-02 - NTTA 2nd Tier Debt Service Reserve Sub 2014	8,611,606.32
4221-03 - NTTA 2015 2nd Tier Debt Service Reserve	36,248,628.29
4221-04 - NTTA 2017 Share 2nd Tier Debt Service Reserve	22,660,028.82
<b>Total Debt Service Reserve</b>	<b><u><u>\$450,560,691.72</u></u></b>
<b><u>Debt Service Bond Interest</u></b>	
4211 - 1st Tier Bond Interest	96,802,296.72
4211- 01 - 2nd Tier Bond Interest	34,311,633.03
4211-02 - 2009B BABs Direct Pay Account	1,780.90
<b>Total Debt Service Bond Interest</b>	<b><u><u>\$131,115,710.65</u></u></b>
<b><u>Debt Service Bond Principal</u></b>	
4231 - 1st Tier Bond Redemption Fund	35,133,723.01
4231-01 - 2nd Tier Bond Redemption Fund	3,673,972.73
<b>Total Debt Service Bond Principal</b>	<b><u><u>\$38,807,695.74</u></u></b>
<b><u>Enterprise Funds</u></b>	
7801 - Enterprise Fund	22,665,938.76
<b>Total Enterprise Funds</b>	<b><u><u>\$22,665,938.76</u></u></b>
<b>Total Investments</b>	<b><u><u>\$1,416,716,466.94</u></u></b>
<b><u>Agency Funds</u></b>	
7805 - NTE 3A/3B Agency Fund	1,263,128.74
<b>Total Agency Funds</b>	<b><u><u>\$1,263,128.74</u></u></b>
<b>GrandTotal Investments incl. NTE 3A/3B</b>	<b><u><u>\$1,417,979,595.68</u></u></b>

**NORTH TEXAS TOLLWAY AUTHORITY**  
**Schedule of Deferred Study Costs-Feasibility Study Fund**  
**April 30 2019**  
**(Unaudited)**

The table below sets forth the accumulated deferred study costs by project that have not been transferred out of the Feasibility Study Fund into a construction project.

<b>Projects</b>	<b>Accumulated as of December 31, 2018</b>	<b>Current Year</b>	<b>Accumulated as of April 30, 2019</b>
DNT Extension Phase 4 / 4A	3,738,109	-	3,738,109
DNT Ext Phase 4B/5A	3,660,658	-	3,660,658
PGBT-East Branch (SH190)	123,753	-	123,753
<b>Grand Total</b>	<b>7,522,520</b>	<b>-</b>	<b>7,522,520</b>

NORTH TEXAS TOLLWAY AUTHORITY  
ENTERPRISE FUND  
STATEMENT OF NET POSITION  
April 30, 2019  
(Unaudited)

North Texas  
Tollway Authority  
Enterprise Fund Total

	<u>ASSETS</u>	<u>Enterprise Fund Total</u>
<b>Current Unrestricted Assets:</b>		
Cash		3,553,501
Investments		22,665,939
Accounts Receivable		61,581,595
Allowance for Uncollectible Receivables		(45,630,458)
Unbilled Accounts Receivable		17,820,691
Allowance for Unbilled Receivables		(14,047,138)
Intergovernmental Receivables		6,508,758
Total Current Unrestricted Assets		<u>52,452,888</u>
<b>Current Restricted Assets</b>		
Investments		<u>1,263,129</u>
<b>TOTAL ASSETS</b>		<u><u>53,716,016</u></u>
 <b><u>LIABILITIES</u></b>		
<b>Current Unrestricted Liabilities:</b>		
Accounts Payable		-
Accrued Liabilities		-
Intergovernmental Payable		483,726
Total Current Unrestricted Liabilities		<u>483,726</u>
<b>Current Restricted Liabilities</b>		
Intergovernmental Payable		1,263,129
<b>TOTAL LIABILITIES</b>		<u><u>1,746,855</u></u>
 <b><u>NET POSITION</u></b>		
Unrestricted:		
Unrestricted		<u>51,969,161</u>
<b>TOTAL NET POSITION</b>		<u><u>51,969,161</u></u>



**NORTH TEXAS TOLLWAY AUTHORITY**  
**Enterprise Fund - Budget and Actual Revenues and Expenses**  
**Month Ending**  
**April 30, 2019**

	<u>Total 2019 Budget</u>	<u>Budget To Date</u>	<u>Actual To Date</u>	<u>Variance Over(Under) Budget</u>
<b>Revenues:</b>				
Admin Fees	10,540,132	3,947,580	4,068,800	121,220
Interoperability Fees	8,862,000	2,954,000	2,496,963	(457,037)
TSA Fees	15,845,487	4,965,610	5,622,579	656,969
Toll Revenue	31,666,485	9,644,834	8,614,172	(1,030,663)
Interest Revenue	-	-	176,981	176,981
Other Revenue	-	-	-	0
Less: Bad Debt Expense	<u>(16,980,516)</u>	<u>(5,171,849)</u>	<u>(4,281,617)</u>	<u>890,232</u>
Gross revenues	<u>49,933,587</u>	<u>16,340,175</u>	<u>16,697,878</u>	<u>357,702</u>
<b>Operating expenses:</b>				
<b>Administration:</b>				
Administration	36,164	12,055	28,972	16,918
Accounting	123,961	41,320	45,391	4,071
Treasury Management	102,820	34,273	34,296	23
Human Resources	101,275	33,758	32,957	(801)
Internal Audit	90,174	30,058	22,325	(7,733)
Legal Services	94,115	31,372	33,108	1,737
Public Affairs	884,868	294,956	33,930	(261,026)
Shared Services	<u>798,465</u>	<u>266,155</u>	<u>249,476</u>	<u>(16,679)</u>
Total Administration	<u>2,231,842</u>	<u>743,947</u>	<u>480,457</u>	<u>(263,491)</u>
<b>Operations:</b>				
Contact Center & Collections	9,924,544	3,308,181	3,284,648	(23,533)
Information Technology	1,742,262	580,754	644,445	63,691
Operations	108,313	36,104	42,325	6,220
System & Incident Mgmt	22,117	7,372	7,141	(231)
Bad Debt	<u>33,961,033</u>	<u>10,343,698</u>	<u>8,563,234</u>	<u>(1,780,463)</u>
Total Operations	<u>45,758,269</u>	<u>14,276,110</u>	<u>12,541,793</u>	<u>(1,734,316)</u>
Total Operating Expenses	<u>47,990,111</u>	<u>15,020,057</u>	<u>13,022,250</u>	<u>(1,997,807)</u>
Operating Income	<u>1,943,476</u>	<u>1,320,118</u>	<u>3,675,627</u>	<u>2,355,509</u>

**NORTH TEXAS TOLLWAY AUTHORITY**  
**Developer TSA - Transaction Analysis**  
**April 30, 2019**  
**(Unaudited)**

	Budget	Budget YTD	Actual YTD	Variance Better (Worse) Budget	% Variance
<u>LBJ</u>					
TollTag Transactions	32,775,583	10,370,423	10,715,355	344,932	3.33%
ZipCash Transactions	11,385,456	3,602,438	3,590,037	(12,401)	-0.34%
TollTag % at Lane	74.22%	74.22%	74.90%	0.69%	0.92%
<u>NTE 1/2W</u>					
TollTag Transactions	22,528,900	6,873,176	7,859,945	986,769	14.36%
ZipCash Transactions	7,479,679	2,281,920	2,611,750	329,830	14.45%
TollTag % at Lane	75.07%	75.07%	75.06%	-0.02%	-0.02%
<u>NTE 3A/3B</u>					
TollTag Transactions	22,951,737	7,325,832	7,036,798	(289,034)	-3.95%
ZipCash Transactions	7,721,573	2,464,604	2,415,284	(49,320)	-2.00%
TollTag % at Lane	74.83%	74.83%	74.45%	-0.38%	-0.51%
<u>Total</u>					
TollTag Transactions	78,256,220	24,569,431	25,612,098	1,042,667	4.24%
ZipCash Transactions	26,586,708	8,348,962	8,617,071	268,109	3.21%
TollTag % at Lane	74.64%	74.64%	74.83%	0.19%	0.25%

**NORTH TEXAS TOLLWAY AUTHORITY**  
**Developer TSA - Billings & Collections Analysis**  
**April 30, 2019**  
**(Unaudited)**

	Budget	Budget YTD	Actual YTD	LBJ	NTE 1/2	NTE 3A/3B	Variance Better (Worse) Budget
<u>Billings &amp; Collections</u>							
ZipCash Payments to Developer	(76,425,331)	(23,277,281)	(24,829,815)	(10,345,839)	(10,662,509)	(3,821,467)	(1,552,534)
Collections - ZipCash	57,150,266	17,428,718	19,113,315	7,201,415	8,090,434	3,821,467	1,684,597
Amount Unpaid	(19,275,065)	(5,848,563)	(5,716,500)	(3,144,424)	(2,572,075)	-	132,063
% Collected of Amount Advanced to Developer	74.78%	74.87%	76.98%	69.61%	75.88%	100.00%	2.10%
<u>Compensation &amp; Other Fees</u>							
TSA Compensation	15,845,487	4,965,610	5,568,133	2,232,363	2,002,688	1,333,082	602,523
Administrative Fees	10,540,132	3,947,580	4,068,907	1,566,587	1,382,714	1,119,606	121,327
Total Compensation & Other Fees	26,385,620	8,913,190	9,637,040	3,798,950	3,385,402	2,452,688	723,850
Net (Exposure) Profit to Unpaid ZipCash	7,110,555	3,064,627	3,920,540	654,526	813,326	2,452,688	855,913
			* Billings Invoiced	17,228,344	8,519,265	8,709,079	
				82.01%	82.34%	81.68%	

**Developer TSA's Mgmt Summary**

**April 30, 2019**

ACTIVITY	Actual			Budget		
	Prior Month	Current Month	YTD	Prior Month	Current Month	YTD
TRANSACTION COUNT	8,569,471	9,320,124	34,229,169	8,042,664	9,075,587	32,918,393
NTTA COMPENSATION	1,412,747	1,548,145	5,568,133	1,213,979	1,372,167	4,965,610
TRANSPONDER % AT LANE	73.95%	75.35%	74.83%	74.64%	74.64%	74.64%

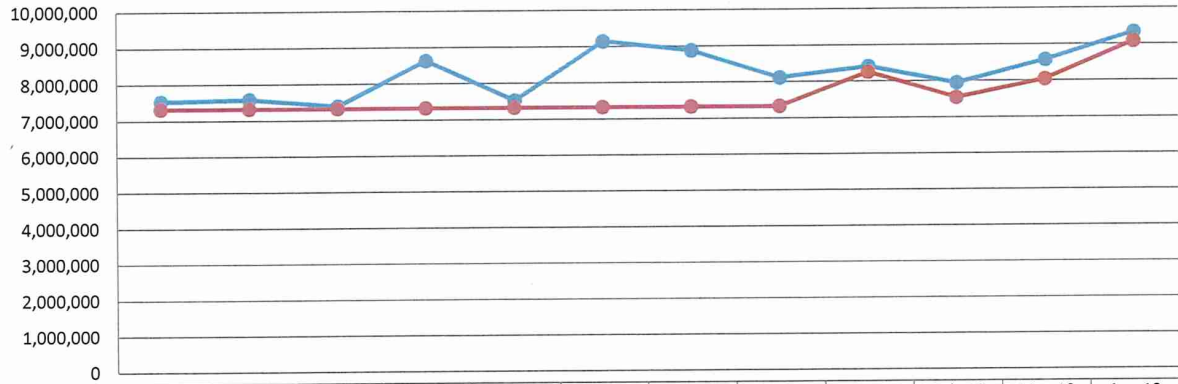
ROLLFORWARD	Uninvoiced A/R			Invoiced A/R		
	Prior Month	Current Month	YTD	Prior Month	Current Month	YTD
Beginning Balance	\$16,946,531	\$17,685,195	\$16,843,734	\$58,884,079	\$59,751,862	\$57,213,134
Video Transactions - Base	\$5,313,095	\$5,787,031	\$21,008,348	\$0	\$0	\$0
Video Transactions - Premium	\$2,664,209	\$2,944,532	\$10,632,840	\$0	\$0	\$0
Invoiced Transactions	(\$6,132,966)	(\$7,188,544)	(\$25,842,516)	\$6,132,966	\$7,188,544	\$25,842,516
Collections - Base	(\$239,969)	(\$262,335)	(\$970,044)	(\$1,775,738)	(\$1,634,601)	(\$6,870,590)
Collections - Premium	(\$119,985)	(\$131,167)	(\$485,022)	(\$887,869)	(\$817,300)	(\$3,435,295)
Collections - Adjustments	(\$436,527)	(\$406,805)	(\$1,674,784)	(\$486,166)	(\$501,654)	(\$1,856,114)
Excusals & Adjustments	(\$309,193)	(\$908,496)	(\$1,993,146)	(\$2,115,410)	(\$2,499,306)	(\$9,406,106)
Ending Balance	\$17,685,195	\$17,519,412	\$17,519,412	\$59,751,862	\$61,487,545	\$61,487,545

Administrative Fees Collected      1,077,847      1,006,936      4,068,907

MISCELLANEOUS	Enterprise Fund			Exposure Analysis - Cumulative	
	Prior Month	Current Month	YTD	Prior Month	Current Month
Cash - Beginning Balance	\$27,924,492	\$28,139,927	\$26,826,208	Video Toll-Base Toll	200,231,087    206,018,118
IOP Fees Incoming	\$791,462	\$692,183	\$2,536,728	Collections - Base Toll	(72,432,854)    (74,329,790)
Receivable from Cintra	\$10,000	(\$94,050)	(\$94,050)	Collections - Premium	(36,395,266)    (37,343,734)
Reimbursements from System	\$8,830,727	\$7,483,292	\$33,512,294	TSA Compensation	(40,510,284)    (42,058,428)
Interest Earnings	\$45,484	\$49,843	\$176,981	Administrative Fees	(30,426,539)    (31,433,475)
Payments to LBJ/NTE	(\$7,996,118)	(\$8,836,193)	(\$32,299,264)	Collections - VTOLL	(32,166,522)    (33,074,981)
Changes to Regional TSA balances	(\$0)	(\$0)	\$19,298	Cumulative Exposure	(11,700,380)    (12,222,289)
Enterprise Fund Expenses	(\$1,466,121)	(\$1,215,562)	(\$4,458,754)		
Cash - Ending Balance	\$28,139,927	\$26,219,440	\$26,219,440		

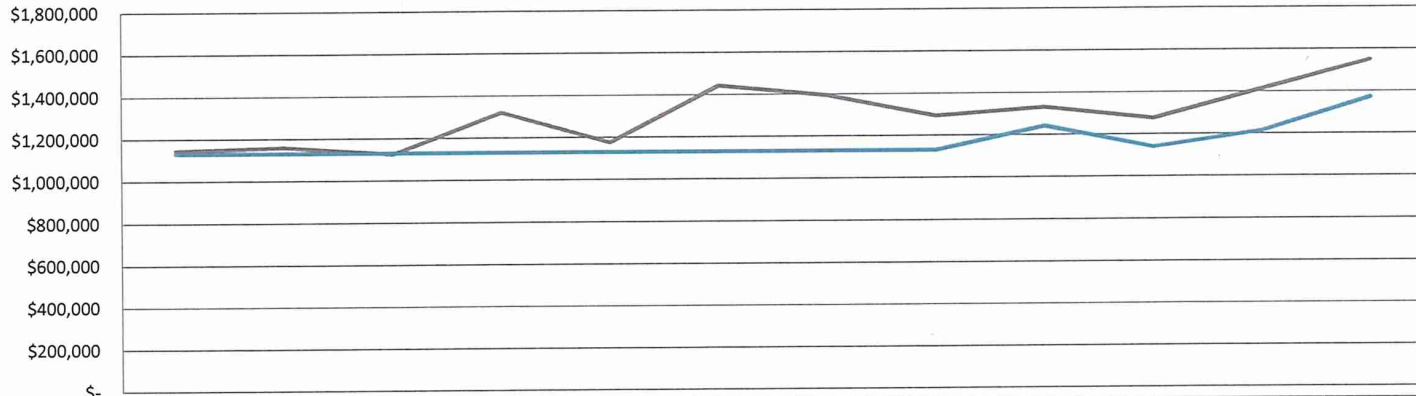
Reimbursements Due from System      **5,160,595**

### LBJ/NTE TSA's - Transaction Quantity



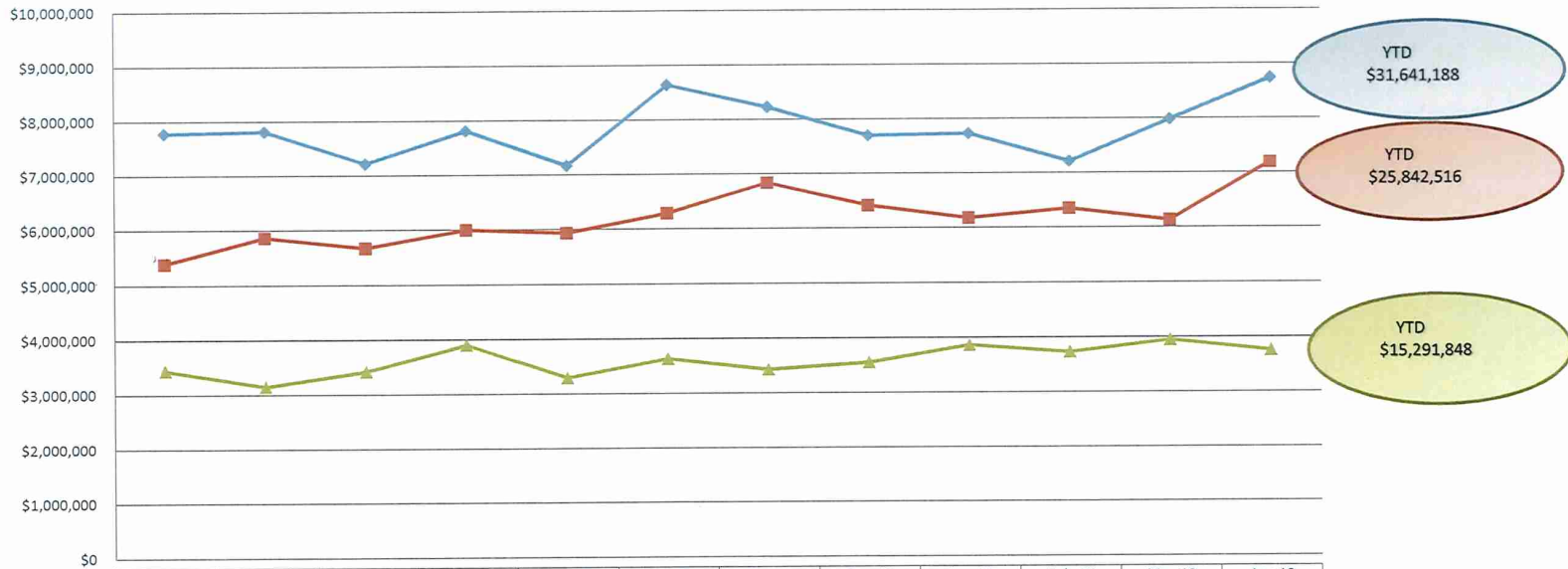
	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
Actual Qty	7,529,422	7,575,734	7,388,489	8,628,528	7,521,356	9,130,807	8,868,831	8,103,344	8,400,496	7,939,078	8,569,471	9,320,124
Projected Qty	7,333,333	7,333,333	7,333,333	7,333,333	7,333,333	7,333,333	7,333,333	7,333,333	8,252,616	7,547,527	8,042,664	9,075,587

### LBJ/NTE TSA's - Compensation



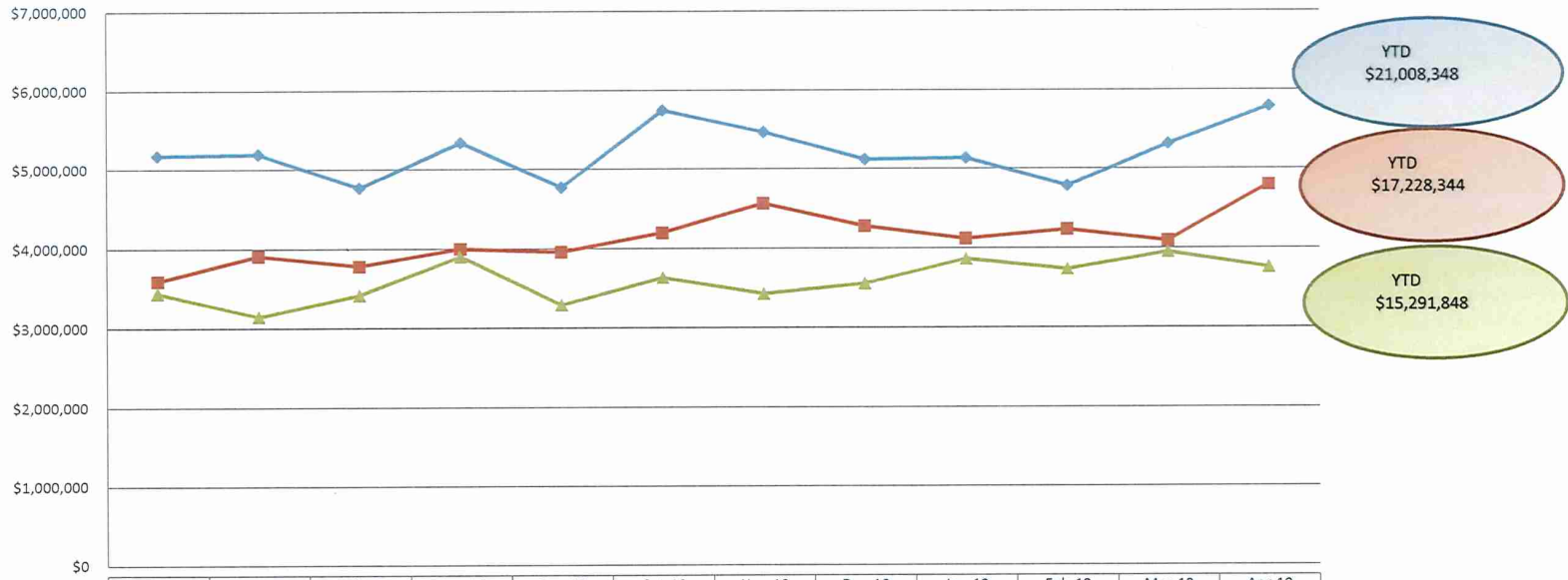
	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
Actual Comp	\$1,144,786	\$1,158,432	\$1,124,843	\$1,320,480	\$1,174,755	\$1,441,699	\$1,392,950	\$1,293,728	\$1,331,029	\$1,276,212	\$1,412,747	\$1,548,145
Projected Comp	\$1,129,652	\$1,129,652	\$1,129,652	\$1,129,652	\$1,129,652	\$1,129,652	\$1,129,652	\$1,129,652	\$1,240,705	\$1,138,758	\$1,213,979	\$1,372,167

### LBJ/NTE 1&2 TSA's - Billings & Payments ZipCash Base & Premium



	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
Billable ZipCash Revenue	\$7,776,651	\$7,811,807	\$7,211,717	\$7,809,480	\$7,163,154	\$8,640,259	\$8,220,635	\$7,696,343	\$7,724,853	\$7,207,468	\$7,977,304	\$8,731,563
Invoiced ZipCash Revenue	\$5,387,535	\$5,861,258	\$5,670,270	\$5,994,836	\$5,935,160	\$6,286,154	\$6,836,349	\$6,410,794	\$6,175,621	\$6,345,385	\$6,132,966	\$7,188,544
Collections	\$3,439,212	\$3,144,320	\$3,414,343	\$3,897,827	\$3,288,763	\$3,630,054	\$3,425,838	\$3,551,837	\$3,860,304	\$3,731,428	\$3,946,254	\$3,753,862

### LBJ/NTE 1&2 TSA's - Billings & Payments ZipCash Base



	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
Billable ZipCash Revenue - Base	\$5,172,508	\$5,191,957	\$4,760,572	\$5,338,697	\$4,763,467	\$5,741,572	\$5,464,961	\$5,115,532	\$5,131,370	\$4,776,852	\$5,313,095	\$5,787,031
Invoiced ZipCash Revenue - Base	\$3,591,690	\$3,907,506	\$3,780,180	\$3,996,558	\$3,956,774	\$4,190,769	\$4,557,566	\$4,273,862	\$4,117,080	\$4,230,257	\$4,088,644	\$4,792,363
Collections	\$3,439,212	\$3,144,320	\$3,414,343	\$3,897,827	\$3,288,763	\$3,630,054	\$3,425,838	\$3,551,837	\$3,860,304	\$3,731,428	\$3,946,254	\$3,753,862

**360 TOLLWAY  
STATEMENT OF NET POSITION  
April 30, 2019  
(Unaudited)**

	<b>360 TOLLWAY</b>
<b><u>ASSETS</u></b>	<b><u>Enterprise Fund Total</u></b>
Current Assets:	
Investments	\$ 7,282,756
Accrued Interest Receivable on Investments	14,148
Accounts Receivable	2,851,026
Allowance for Uncollectible Receivables	(1,795,703)
Receivable from North Texas Tollway Authority System	-
Total Current Assets	8,352,228
Noncurrent Assets:	
Capital Assets:	
Nondepreciable	315,808,649
<b>TOTAL ASSETS</b>	<b>324,160,877</b>
<b><u>LIABILITIES</u></b>	
Current Unrestricted Liabilities:	
Accounts Payable	-
Payable to Texas Department of Transportation	209,181
Payable to North Texas Tollway Authority System	284,879
Total Current Unrestricted Liabilities	494,060
Noncurrent Liabilities	
Texas Department of Transportation - Project Loan Payable	303,550,605
<b>TOTAL LIABILITIES</b>	<b>304,044,665</b>
<b><u>NET POSITION</u></b>	
Restricted for Debt Service	20,116,212
<b>TOTAL NET POSITION</b>	<b>\$ 20,116,212</b>

**360 TOLLWAY**  
**Budget and Actual Revenues and Expenses**  
**Month Ending**  
**April 30, 2019**  
**(Unaudited)**

	<u>Total 2019 Budget</u>	<u>Budget To Date</u>	<u>Actual To Date</u>	<u>Variance Over(Under) Budget</u>
<b>Operating Revenues:</b>				
<b>Toll Revenues</b>				
AVI	\$ 9,093,500	2,915,900	4,244,016	1,328,116
ZipCash	5,403,800	1,256,693	1,542,205	285,513
Less: Bad Debt Expense	<u>(2,973,000)</u>	<u>(691,393)</u>	<u>(656,011)</u>	<u>35,381</u>
Net Toll Revenues	11,524,300	3,481,200	5,130,209	1,649,009
Interest Revenue	-	-	48,005	48,005
Other Revenue	<u>802,164</u>	<u>267,388</u>	<u>459,938</u>	<u>192,550</u>
Total Operating Revenues	<u>12,326,464</u>	<u>3,748,588</u>	<u>5,638,153</u>	<u>1,889,565</u>
<b>Operating Expenses:</b>				
O&M Services	2,614,856	855,103	836,724	(18,380)
Tolling Services	<u>4,514,231</u>	<u>2,039,339</u>	<u>1,350,133</u>	<u>(689,206)</u>
Total Operating Expenses	<u>7,129,086</u>	<u>2,894,443</u>	<u>2,186,857</u>	<u>(707,586)</u>
Operating Income	<u>\$ 5,197,378</u>	<u>854,145</u>	<u>3,451,296</u>	<u>2,597,151</u>



**APPENDIX C**

**NTTA SYSTEM TOLL RATE SCHEDULES**

[THIS PAGE INTENTIONALLY LEFT BLANK]

## **DNT, PGBT, AATT, MCLB and LLTB Tolling**

### **Toll Rates**

- Toll rates for the DNT, PGBT, AATT, MCLB and LLTB shall be as set forth in the following schedules for the period indicated in the schedules.
- Toll rate for two-axle vehicles with TollTags is \$0.145 per mile for the DNT and PGBT (Segments I through V) starting September 1, 2009. Toll rate is increased 2.75% per year thereafter, with toll adjustments made every two years commencing July 1, 2011.
- Toll rate for two-axle vehicles with TollTags is \$0.50 for the MCLB and the AATT starting September 1, 2009 and \$1.00 for LLTB starting August 1, 2009. Toll rate is increased 2.75% per year thereafter, with toll adjustments made every two years commencing July 1, 2011.
- Video toll for two-axle vehicles is equal to the sum of (i) the TollTag toll and (ii) the greater of (a) 50% of the TollTag toll or (b) 20 cents per transaction on September 1, 2009, increased 2.75% per year with toll adjustments made every two years commencing July 1, 2011, for DNT, PGBT, MCLB, AATT and LLTB.
- Tolls for two-axle vehicles at any tolling location are rounded to the next highest penny.
- Tolls for all vehicle classifications are calculated based on "N-1" weighting, where "N" denotes the number of axles. For example, the TollTag toll charged to a five-axle vehicle will be four times the TollTag toll charged to a two-axle vehicle and the total video toll charged to a five-axle vehicle will be four times the total video toll charged to a two-axle vehicle.

**DNT, PGBT, AATT, MCLB AND LLTB TOLL RATES EFFECTIVE JULY 1, 2019 THROUGH JUNE 30, 2021**

<b>Dallas North Tollway</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Wycliff Main Lane Gantry (MLP1)	\$1.65	\$2.48	\$3.30	\$4.96	\$4.95	\$7.44	\$6.60	\$9.92	\$8.25	\$12.40
Mockingbird Lane (MOCLN)	\$1.20	\$1.80	\$2.40	\$3.60	\$3.60	\$5.40	\$4.80	\$7.20	\$6.00	\$9.00
Northwest Highway (NORHY)	\$0.82	\$1.23	\$1.64	\$2.46	\$2.46	\$3.69	\$3.28	\$4.92	\$4.10	\$6.15
Royal Lane (ROYLN)	\$0.43	\$0.70	\$0.86	\$1.40	\$1.29	\$2.10	\$1.72	\$2.80	\$2.15	\$3.50
Spring Valley Road (SPVRD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Belt Line Road (BELRD)	\$0.38	\$0.65	\$0.76	\$1.30	\$1.14	\$1.95	\$1.52	\$2.60	\$1.90	\$3.25
Keller Springs Road (KESRD)	\$0.57	\$0.86	\$1.14	\$1.72	\$1.71	\$2.58	\$2.28	\$3.44	\$2.85	\$4.30
Trinity Mills Main Lane Gantry (MLP2)	\$1.18	\$1.77	\$2.36	\$3.54	\$3.54	\$5.31	\$4.72	\$7.08	\$5.90	\$8.85
Frankford Road (FRARD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Park Boulevard (PARBD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Parker Main Lane Gantry (MLP3)	\$1.05	\$1.58	\$2.10	\$3.16	\$3.15	\$4.74	\$4.20	\$6.32	\$5.25	\$7.90
Parker Road (PARRD)	\$0.63	\$0.95	\$1.26	\$1.90	\$1.89	\$2.85	\$2.52	\$3.80	\$3.15	\$4.75
Windhaven Parkway (WINPY)	\$0.50	\$0.77	\$1.00	\$1.54	\$1.50	\$2.31	\$2.00	\$3.08	\$2.50	\$3.85
Spring Creek Parkway (SPCPY)	\$0.35	\$0.62	\$0.70	\$1.24	\$1.05	\$1.86	\$1.40	\$2.48	\$1.75	\$3.10
Legacy Drive (LEGDR)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Headquarters Drive (HEADR)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Gaylord Parkway (GAYPY)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Lebanon Road (LEBRD)	\$0.43	\$0.70	\$0.86	\$1.40	\$1.29	\$2.10	\$1.72	\$2.80	\$2.15	\$3.50
Stone Brook Parkway (STOPY)	\$0.55	\$0.83	\$1.10	\$1.66	\$1.65	\$2.49	\$2.20	\$3.32	\$2.75	\$4.15
Main Street (MAIST)	\$0.89	\$1.34	\$1.78	\$2.68	\$2.67	\$4.02	\$3.56	\$5.36	\$4.45	\$6.70
Eldorado Main Lane Gantry (MLP4)	\$1.85	\$2.78	\$3.70	\$5.56	\$5.55	\$8.34	\$7.40	\$11.12	\$9.25	\$13.90
Eldorado Parkway (ELDPY)	\$0.67	\$1.01	\$1.34	\$2.02	\$2.01	\$3.03	\$2.68	\$4.04	\$3.35	\$5.05

<b>President George Bush Turnpike</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
North Garland Avenue (GARRD)	\$0.33	\$0.60	\$0.66	\$1.20	\$0.99	\$1.80	\$1.32	\$2.40	\$1.65	\$3.00
Campbell Road (CAMRD)	\$0.54	\$0.81	\$1.08	\$1.62	\$1.62	\$2.43	\$2.16	\$3.24	\$2.70	\$4.05
East Renner Road (ERERD)	\$0.87	\$1.31	\$1.74	\$2.62	\$2.61	\$3.93	\$3.48	\$5.24	\$4.35	\$6.55
Shiloh Main Lane Gantry (MLP6)	\$1.31	\$1.97	\$2.62	\$3.94	\$3.93	\$5.91	\$5.24	\$7.88	\$6.55	\$9.85
Shiloh Road (SHIRD)	\$0.67	\$1.01	\$1.34	\$2.02	\$2.01	\$3.03	\$2.68	\$4.04	\$3.35	\$5.05
West Renner Road (WRERD)	\$0.44	\$0.71	\$0.88	\$1.42	\$1.32	\$2.13	\$1.76	\$2.84	\$2.20	\$3.55
Independence Parkway (INDPY)	\$0.45	\$0.72	\$0.90	\$1.44	\$1.35	\$2.16	\$1.80	\$2.88	\$2.25	\$3.60
Coit Road (COIRD)	\$0.68	\$1.02	\$1.36	\$2.04	\$2.04	\$3.06	\$2.72	\$4.08	\$3.40	\$5.10
Coit Main Lane Gantry (MLP7)	\$1.41	\$2.12	\$2.82	\$4.24	\$4.23	\$6.36	\$5.64	\$8.48	\$7.05	\$10.60
Preston Road (PRERD)	\$0.38	\$0.65	\$0.76	\$1.30	\$1.14	\$1.95	\$1.52	\$2.60	\$1.90	\$3.25
Midway Road (MIDRD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Marsh Lane (MARLN)	\$0.38	\$0.65	\$0.76	\$1.30	\$1.14	\$1.95	\$1.52	\$2.60	\$1.90	\$3.25
Frankford Main Lane Gantry (MLP8)	\$1.31	\$1.97	\$2.62	\$3.94	\$3.93	\$5.91	\$5.24	\$7.88	\$6.55	\$9.85
Kelly Boulevard (KELBD)	\$0.69	\$1.04	\$1.38	\$2.08	\$2.07	\$3.12	\$2.76	\$4.16	\$3.45	\$5.20
Josey Lane (JOSLN)	\$0.45	\$0.72	\$0.90	\$1.44	\$1.35	\$2.16	\$1.80	\$2.88	\$2.25	\$3.60
Sandy Lake Main Lane Gantry (MLP9)	\$1.04	\$1.56	\$2.08	\$3.12	\$3.12	\$4.68	\$4.16	\$6.24	\$5.20	\$7.80
Belt Line - Luna Road (NBERD)	\$0.62	\$0.93	\$1.24	\$1.86	\$1.86	\$2.79	\$2.48	\$3.72	\$3.10	\$4.65
Royal Lane (ROYLN)	\$0.31	\$0.58	\$0.62	\$1.16	\$0.93	\$1.74	\$1.24	\$2.32	\$1.55	\$2.90
Belt Line Road (SBERD)	\$0.60	\$0.90	\$1.20	\$1.80	\$1.80	\$2.70	\$2.40	\$3.60	\$3.00	\$4.50
Belt Line Main Lane Gantry (MLP10)	\$0.60	\$0.90	\$1.20	\$1.80	\$1.80	\$2.70	\$2.40	\$3.60	\$3.00	\$4.50

<b>Addison Airport Toll Tunnel</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Addison Airport Toll Tunnel (AATT)	\$0.66	\$0.99	\$1.32	\$1.98	\$1.98	\$2.97	\$2.64	\$3.96	\$3.30	\$4.95

<b>Mountain Creek Lake Bridge</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Mountain Creek Lake Toll Bridge (MCLB)	\$0.66	\$0.99	\$1.32	\$1.98	\$1.98	\$2.97	\$2.64	\$3.96	\$3.30	\$4.95

<b>Lewisville Lake Toll Bridge</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Lewisville Lake Toll Bridge (LLTB)	\$1.32	\$1.98	\$2.64	\$3.96	\$3.96	\$5.94	\$5.28	\$7.92	\$6.60	\$9.90

**DNT, PGBT, AATT, MCLB AND LLTB TOLL RATES EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2023**

<b>Dallas North Tollway</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Wycliff Main Lane Gantry (MLP1)	\$1.74	\$2.61	\$3.48	\$5.22	\$5.22	\$7.83	\$6.96	\$10.44	\$8.70	\$13.05
Mockingbird Lane (MOCLN)	\$1.27	\$1.91	\$2.54	\$3.82	\$3.81	\$5.73	\$5.08	\$7.64	\$6.35	\$9.55
Northwest Highway (NORHY)	\$0.86	\$1.29	\$1.72	\$2.58	\$2.58	\$3.87	\$3.44	\$5.16	\$4.30	\$6.45
Royal Lane (ROYLN)	\$0.46	\$0.74	\$0.92	\$1.48	\$1.38	\$2.22	\$1.84	\$2.96	\$2.30	\$3.70
Spring Valley Road (SPVRD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Belt Line Road (BELRD)	\$0.40	\$0.68	\$0.80	\$1.36	\$1.20	\$2.04	\$1.60	\$2.72	\$2.00	\$3.40
Keller Springs Road (KESRD)	\$0.60	\$0.90	\$1.20	\$1.80	\$1.80	\$2.70	\$2.40	\$3.60	\$3.00	\$4.50
Trinity Mills Main Lane Gantry (MLP2)	\$1.25	\$1.88	\$2.50	\$3.76	\$3.75	\$5.64	\$5.00	\$7.52	\$6.25	\$9.40
Frankford Road (FRARD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Park Boulevard (PARBD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Parker Main Lane Gantry (MLP3)	\$1.11	\$1.67	\$2.22	\$3.34	\$3.33	\$5.01	\$4.44	\$6.68	\$5.55	\$8.35
Parker Road (PARRD)	\$0.66	\$0.99	\$1.32	\$1.98	\$1.98	\$2.97	\$2.64	\$3.96	\$3.30	\$4.95
Windhaven Parkway (WINPY)	\$0.53	\$0.81	\$1.06	\$1.62	\$1.59	\$2.43	\$2.12	\$3.24	\$2.65	\$4.05
Spring Creek Parkway (SPCPY)	\$0.37	\$0.65	\$0.74	\$1.30	\$1.11	\$1.95	\$1.48	\$2.60	\$1.85	\$3.25
Legacy Drive (LEGDR)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Headquarters Drive (HEADR)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Gaylord Parkway (GAYPY)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Lebanon Road (LEBRD)	\$0.45	\$0.73	\$0.90	\$1.46	\$1.35	\$2.19	\$1.80	\$2.92	\$2.25	\$3.65
Stone Brook Parkway (STOPY)	\$0.58	\$0.87	\$1.16	\$1.74	\$1.74	\$2.61	\$2.32	\$3.48	\$2.90	\$4.35
Main Street (MAIST)	\$0.94	\$1.41	\$1.88	\$2.82	\$2.82	\$4.23	\$3.76	\$5.64	\$4.70	\$7.05
Eldorado Main Lane Gantry (MLP4)	\$1.96	\$2.94	\$3.92	\$5.88	\$5.88	\$8.82	\$7.84	\$11.76	\$9.80	\$14.70
Eldorado Parkway (ELDPY)	\$0.70	\$1.05	\$1.40	\$2.10	\$2.10	\$3.15	\$2.80	\$4.20	\$3.50	\$5.25

<b>President George Bush Turnpike</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
North Garland Avenue (GARRD)	\$0.35	\$0.63	\$0.70	\$1.26	\$1.05	\$1.89	\$1.40	\$2.52	\$1.75	\$3.15
Campbell Road (CAMRD)	\$0.57	\$0.86	\$1.14	\$1.72	\$1.71	\$2.58	\$2.28	\$3.44	\$2.85	\$4.30
East Renner Road (ERERD)	\$0.92	\$1.38	\$1.84	\$2.76	\$2.76	\$4.14	\$3.68	\$5.52	\$4.60	\$6.90
Shiloh Main Lane Gantry (MLP6)	\$1.38	\$2.07	\$2.76	\$4.14	\$4.14	\$6.21	\$5.52	\$8.28	\$6.90	\$10.35
Shiloh Road (SHIRD)	\$0.71	\$1.07	\$1.42	\$2.14	\$2.13	\$3.21	\$2.84	\$4.28	\$3.55	\$5.35
West Renner Road (WRERD)	\$0.46	\$0.74	\$0.92	\$1.48	\$1.38	\$2.22	\$1.84	\$2.96	\$2.30	\$3.70
Independence Parkway (INDPY)	\$0.47	\$0.75	\$0.94	\$1.50	\$1.41	\$2.25	\$1.88	\$3.00	\$2.35	\$3.75
Coit Road (COIRD)	\$0.71	\$1.07	\$1.42	\$2.14	\$2.13	\$3.21	\$2.84	\$4.28	\$3.55	\$5.35
Coit Main Lane Gantry (MLP7)	\$1.49	\$2.24	\$2.98	\$4.48	\$4.47	\$6.72	\$5.96	\$8.96	\$7.45	\$11.20
Preston Road (PRERD)	\$0.40	\$0.68	\$0.80	\$1.36	\$1.20	\$2.04	\$1.60	\$2.72	\$2.00	\$3.40
Midway Road (MIDRD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Marsh Lane (MARLN)	\$0.40	\$0.68	\$0.80	\$1.36	\$1.20	\$2.04	\$1.60	\$2.72	\$2.00	\$3.40
Frankford Main Lane Gantry (MLP8)	\$1.39	\$2.09	\$2.78	\$4.18	\$4.17	\$6.27	\$5.56	\$8.36	\$6.95	\$10.45
Kelly Boulevard (KELBD)	\$0.73	\$1.10	\$1.46	\$2.20	\$2.19	\$3.30	\$2.92	\$4.40	\$3.65	\$5.50
Josely Lane (JOSLN)	\$0.48	\$0.76	\$0.96	\$1.52	\$1.44	\$2.28	\$1.92	\$3.04	\$2.40	\$3.80
Sandy Lake Main Lane Gantry (MLP9)	\$1.10	\$1.65	\$2.20	\$3.30	\$3.30	\$4.95	\$4.40	\$6.60	\$5.50	\$8.25
Belt Line - Luna Road (NBERD)	\$0.66	\$0.99	\$1.32	\$1.98	\$1.98	\$2.97	\$2.64	\$3.96	\$3.30	\$4.95
Royal Lane (ROYLN)	\$0.33	\$0.61	\$0.66	\$1.22	\$0.99	\$1.83	\$1.32	\$2.44	\$1.65	\$3.05
Belt Line Road (SBERD)	\$0.64	\$0.96	\$1.28	\$1.92	\$1.92	\$2.88	\$2.56	\$3.84	\$3.20	\$4.80
Belt Line Main Lane Gantry (MLP10)	\$0.64	\$0.96	\$1.28	\$1.92	\$1.92	\$2.88	\$2.56	\$3.84	\$3.20	\$4.80

<b>Addison Airport Toll Tunnel</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Addison Airport Toll Tunnel (AATT)	\$0.70	\$1.05	\$1.40	\$2.10	\$2.10	\$3.15	\$2.80	\$4.20	\$3.50	\$5.25

<b>Mountain Creek Lake Bridge</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Mountain Creek Lake Toll Bridge (MCLB)	\$0.70	\$1.05	\$1.40	\$2.10	\$2.10	\$3.15	\$2.80	\$4.20	\$3.50	\$5.25

<b>Lewisville Lake Toll Bridge</b>										
<b>Toll Gantry</b>	<b>Two-Axle Passenger Cars and Trucks</b>		<b>Three-Axle Vehicles and Vehicle Combinations</b>		<b>Four-Axle Vehicles and Vehicle Combinations</b>		<b>Five-Axle Vehicles and Vehicle Combinations</b>		<b>Six or More Axle Vehicles and Special Permits</b>	
	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>	<b>TollTag</b>	<b>ZipCash</b>
Lewisville Lake Toll Bridge (LLTB)	\$1.39	\$2.09	\$2.78	\$4.18	\$4.17	\$6.27	\$5.56	\$8.36	\$6.95	\$10.45

## SRT Tolling

### Toll Rates

- Toll rates for the SRT shall be as set forth in the following schedules for the period indicated in the schedules.
- Toll rate for two-axle vehicles with TollTags is \$0.145 per mile starting September 1, 2009, and thereafter toll rates shall be determined in accordance with Exhibit R of the SRT Project Agreement, as amended, and shall be the maximum rates ("*Maximum Base*" or "*MBT*") allowed under the SRT Project Agreement, as amended.
- Video toll for two-axle vehicles is equal to the sum of (i) the TollTag toll and (ii) the greater of (a) 50% of TollTag toll or (b) 20 cents per transaction on September 1, 2009, increased 2.75% per year with toll adjustments made every two years commencing July 1, 2011.
- Tolls for two-axle vehicles at any tolling location are rounded to the next highest penny.
- Tolls for all vehicle classifications are calculated based on "N-1" weighting on the SRT, where "N" denotes the number of axles. For example, the TollTag toll charged to a five-axle vehicle will be four times the TollTag toll charged to a two-axle vehicle and the total video toll charged to a five-axle vehicle will be four times the total video toll charged to a two-axle vehicle.
- The SRT Project Agreement permits NTTA to implement congestion pricing if certain capacity improvement triggers are met. However, NTTA anticipates amending the SRT Project Agreement with the approval of TxDOT to remove the congestion pricing provisions. The 2019 T&R Study assumes that congestion pricing will not be put in place on the SRT at any time.

**SRT TOLL RATES EFFECTIVE JULY 1, 2019 THROUGH JUNE 30, 2021**

Toll Gantry	Sam Rayburn Tollway									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Denton Tap Main Lane Gantry (MLG1)	\$0.63	\$0.95	\$1.26	\$1.90	\$1.89	\$2.85	\$2.52	\$3.80	\$3.15	\$4.75
MacArthur Boulevard (MACBD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Carrollton Parkway (CARPY)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Parker Road (PARRD)	\$0.41	\$0.68	\$0.82	\$1.36	\$1.23	\$2.04	\$1.64	\$2.72	\$2.05	\$3.40
Old Denton Road (OLDRD)	\$0.47	\$0.74	\$0.94	\$1.48	\$1.41	\$2.22	\$1.88	\$2.96	\$2.35	\$3.70
Standridge Drive - South (SSTDR)	\$0.71	\$1.07	\$1.42	\$2.14	\$2.13	\$3.21	\$2.84	\$4.28	\$3.55	\$5.35
Josey Lane - South (SJOLN)	\$0.86	\$1.29	\$1.72	\$2.58	\$2.58	\$3.87	\$3.44	\$5.16	\$4.30	\$6.45
Josey Main Lane Gantry (MLG2)	\$1.62	\$2.43	\$3.24	\$4.86	\$4.86	\$7.29	\$6.48	\$9.72	\$8.10	\$12.15
Standridge Drive - North (NSTDR)	\$0.91	\$1.37	\$1.82	\$2.74	\$2.73	\$4.11	\$3.64	\$5.48	\$4.55	\$6.85
Josey Lane - North (NJOLN)	\$0.76	\$1.14	\$1.52	\$2.28	\$2.28	\$3.42	\$3.04	\$4.56	\$3.80	\$5.70
Plano Parkway (PLAPY)	\$0.60	\$0.90	\$1.20	\$1.80	\$1.80	\$2.70	\$2.40	\$3.60	\$3.00	\$4.50
Spring Creek Parkway (SPCPY)	\$0.30	\$0.57	\$0.60	\$1.14	\$0.90	\$1.71	\$1.20	\$2.28	\$1.50	\$2.85
Preston Road (PRERD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Hillcrest Road (HILRD)	\$0.30	\$0.57	\$0.60	\$1.14	\$0.90	\$1.71	\$1.20	\$2.28	\$1.50	\$2.85
Coit Road (COIRD)	\$0.66	\$0.99	\$1.32	\$1.98	\$1.98	\$2.97	\$2.64	\$3.96	\$3.30	\$4.95
Independence Parkway (INDPY)	\$0.87	\$1.31	\$1.74	\$2.62	\$2.61	\$3.93	\$3.48	\$5.24	\$4.35	\$6.55
Custer Road - South (CUSRD)	\$1.08	\$1.62	\$2.16	\$3.24	\$3.24	\$4.86	\$4.32	\$6.48	\$5.40	\$8.10
Custer Main Lane Gantry (MLG3)	\$2.24	\$3.36	\$4.48	\$6.72	\$6.72	\$10.08	\$8.96	\$13.44	\$11.20	\$16.80
Exchange Parkway (SALDR)	\$1.16	\$1.74	\$2.32	\$3.48	\$3.48	\$5.22	\$4.64	\$6.96	\$5.80	\$8.70
Alma Drive (NALDR)	\$0.85	\$1.28	\$1.70	\$2.56	\$2.55	\$3.84	\$3.40	\$5.12	\$4.25	\$6.40
Stacy Road (STARD)	\$0.67	\$1.01	\$1.34	\$2.02	\$2.01	\$3.03	\$2.68	\$4.04	\$3.35	\$5.05
Lake Forest Drive (LAFDR)	\$0.52	\$0.79	\$1.04	\$1.58	\$1.56	\$2.37	\$2.08	\$3.16	\$2.60	\$3.95
Hardin Boulevard (HARBD)	\$0.33	\$0.60	\$0.66	\$1.20	\$0.99	\$1.80	\$1.32	\$2.40	\$1.65	\$3.00

**SRT TOLL RATES EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2023**

Toll Gantry	Sam Rayburn Tollway									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Denton Tap Main Lane Gantry (MLG1)	\$0.66	\$0.99	\$1.32	\$1.98	\$1.98	\$2.97	\$2.64	\$3.96	\$3.30	\$4.95
MacArthur Boulevard (MACBD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Carrollton Parkway (CARPY)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Parker Road (PARRD)	\$0.43	\$0.71	\$0.86	\$1.42	\$1.29	\$2.13	\$1.72	\$2.84	\$2.15	\$3.55
Old Denton Road (OLDRD)	\$0.50	\$0.78	\$1.00	\$1.56	\$1.50	\$2.34	\$2.00	\$3.12	\$2.50	\$3.90
Standridge Drive - South (SSTDR)	\$0.75	\$1.13	\$1.50	\$2.26	\$2.25	\$3.39	\$3.00	\$4.52	\$3.75	\$5.65
Josey Lane - South (SJOLN)	\$0.91	\$1.37	\$1.82	\$2.74	\$2.73	\$4.11	\$3.64	\$5.48	\$4.55	\$6.85
Josey Main Lane Gantry (MLG2)	\$1.71	\$2.57	\$3.42	\$5.14	\$5.13	\$7.71	\$6.84	\$10.28	\$8.55	\$12.85
Standridge Drive - North (NSTDR)	\$0.97	\$1.46	\$1.94	\$2.92	\$2.91	\$4.38	\$3.88	\$5.84	\$4.85	\$7.30
Josey Lane - North (NJOLN)	\$0.80	\$1.20	\$1.60	\$2.40	\$2.40	\$3.60	\$3.20	\$4.80	\$4.00	\$6.00
Plano Parkway (PLAPY)	\$0.63	\$0.95	\$1.26	\$1.90	\$1.89	\$2.85	\$2.52	\$3.80	\$3.15	\$4.75
Spring Creek Parkway (SPCPY)	\$0.32	\$0.60	\$0.64	\$1.20	\$0.96	\$1.80	\$1.28	\$2.40	\$1.60	\$3.00
Preston Road (PRERD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Hillcrest Road (HILRD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Coit Road (COIRD)	\$0.70	\$1.05	\$1.40	\$2.10	\$2.10	\$3.15	\$2.80	\$4.20	\$3.50	\$5.25
Independence Parkway (INDPY)	\$0.92	\$1.38	\$1.84	\$2.76	\$2.76	\$4.14	\$3.68	\$5.52	\$4.60	\$6.90
Custer Road - South (CUSRD)	\$1.15	\$1.73	\$2.30	\$3.46	\$3.45	\$5.19	\$4.60	\$6.92	\$5.75	\$8.65
Custer Main Lane Gantry (MLG3)	\$2.37	\$3.56	\$4.74	\$7.12	\$7.11	\$10.68	\$9.48	\$14.24	\$11.85	\$17.80
Exchange Parkway (SALDR)	\$1.23	\$1.85	\$2.46	\$3.70	\$3.69	\$5.55	\$4.92	\$7.40	\$6.15	\$9.25
Alma Drive (NALDR)	\$0.90	\$1.35	\$1.80	\$2.70	\$2.70	\$4.05	\$3.60	\$5.40	\$4.50	\$6.75
Stacy Road (STARD)	\$0.70	\$1.05	\$1.40	\$2.10	\$2.10	\$3.15	\$2.80	\$4.20	\$3.50	\$5.25
Lake Forest Drive (LAFDR)	\$0.55	\$0.83	\$1.10	\$1.66	\$1.65	\$2.49	\$2.20	\$3.32	\$2.75	\$4.15
Hardin Boulevard (HARBD)	\$0.35	\$0.63	\$0.70	\$1.26	\$1.05	\$1.89	\$1.40	\$2.52	\$1.75	\$3.15

## PGBT EE Tolling

### Toll Rates

- Toll rates for the PGBT EE shall be as set forth in the following schedules for the period indicated in the schedules.
- The PGBT EE Project Agreement, as amended, provides for a supplemental toll on the PGBT EE (the "*Regional Toll*") to be collected by NTTA and held in trust for TxDOT for the benefit of the North Central Texas region. **The Regional Toll and the toll charged by NTTA (the "*NTTA Toll*") together constitute the publicly announced toll (the "*Unified Toll*"), but the Regional Toll does not constitute and is not considered as the property or revenues of NTTA or the NTTA System.**
- The Unified Toll rate for two-axle vehicles with TollTags is \$0.145 per mile as of July 1, 2009. The NTTA Toll is 80% of the Unified Toll. The Unified Toll rate for two-axle vehicles with TollTags is increased 2.75% per year thereafter, with toll adjustments made July 1, 2011 and every two years thereafter. Unified Tolls for two-axle vehicles with TollTags at any tolling location are rounded to the next highest penny. The ratio between the NTTA Toll and the Unified Toll remains constant at 80%. The ratio between the Regional Toll and the Unified Toll remains constant at 20%.
- Toll rates shall be subject to the assumptions, qualifications and agreements set forth in Section 21 of the EE Project Agreement.
- The video toll for two-axle vehicles is equal to the sum of (i) the Unified Toll for two-axle vehicles with TollTags and (ii) the greater of (a) 50% of such Unified Toll or (b) 20 cents per transaction on July 1, 2009, increased 2.75% per year, with toll adjustments made every two years commencing July 1, 2011. The video toll for two-axle vehicles at any tolling location is rounded to the next highest penny. The portion of the video toll described in clause (ii) above is not part of the Unified Toll and constitutes the property and revenues of NTTA only, and not of TxDOT.
- Tolls for all vehicle classifications are calculated based on "N-1" weighting on the PGBT EE, where "N" denotes the number of axles. For example, the TollTag toll charged to a five-axle vehicle will be four times the TollTag toll charged to a two-axle vehicle and the total video toll charged to a five-axle vehicle will be four times the total video toll charged to a two-axle vehicle.



**TOLL RATES EFFECTIVE JULY 1, 2019 THROUGH JUNE 30, 2021 (PGBT EE)**

Toll Gantry	PGBT EE (Unified Toll)									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Miller Road (MLRRD)	\$0.47	\$0.74	\$0.94	\$1.48	\$1.41	\$2.22	\$1.88	\$2.96	\$2.35	\$3.70
Lakeview Parkway (LAKPY)	\$0.63	\$0.95	\$1.26	\$1.90	\$1.89	\$2.85	\$2.52	\$3.80	\$3.15	\$4.75
Merritt Road (MERLG)	\$1.00	\$1.50	\$2.00	\$3.00	\$3.00	\$4.50	\$4.00	\$6.00	\$5.00	\$7.50
Merritt Main Lane Gantry (MLG5)	\$1.89	\$2.84	\$3.78	\$5.68	\$5.67	\$8.52	\$7.56	\$11.36	\$9.45	\$14.20
Miles Road (MLSRD)	\$0.40	\$0.67	\$0.80	\$1.34	\$1.20	\$2.01	\$1.60	\$2.68	\$2.00	\$3.35
Firewheel Parkway (FIRPY)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Crist Road (CRIRD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80

**TOLL RATES EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2023 (PGBT EE)**

Toll Gantry	PGBT EE (Unified Toll)									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Miller Road (MLRRD)	\$0.50	\$0.78	\$1.00	\$1.56	\$1.50	\$2.34	\$2.00	\$3.12	\$2.50	\$3.90
Lakeview Parkway (LAKPY)	\$0.66	\$0.99	\$1.32	\$1.98	\$1.98	\$2.97	\$2.64	\$3.96	\$3.30	\$4.95
Merritt Road (MERLG)	\$1.06	\$1.59	\$2.12	\$3.18	\$3.18	\$4.77	\$4.24	\$6.36	\$5.30	\$7.95
Merritt Main Lane Gantry (MLG5)	\$2.00	\$3.00	\$4.00	\$6.00	\$6.00	\$9.00	\$8.00	\$12.00	\$10.00	\$15.00
Miles Road (MLSRD)	\$0.43	\$0.71	\$0.86	\$1.42	\$1.29	\$2.13	\$1.72	\$2.84	\$2.15	\$3.55
Firewheel Parkway (FIRPY)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Crist Road (CRIRD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95

## **PGBT WE Tolling**

### **Toll Rates**

- Toll rates for the PGBT WE shall be as set forth in the following schedules for the periods indicated in the schedules.
- Toll rate for two-axle vehicles with TollTags is \$0.145 per mile starting July 1, 2009, and thereafter toll rates shall be determined in accordance with Exhibit J of the PGBT WE Project Agreement, as amended, and shall be the maximum rates allowed under the PGBT WE Project Agreement.
- ZipCash toll for two-axle vehicles is equal to the sum of (i) the TollTag toll and (ii) the greater of (a) 50 percent of TollTag toll or (b) 20 cents per transaction on July 1, 2009, increased 2.75 percent per year adjusted on July 1 of every odd year thereafter.
- Tolls charged to users at any tolling location are rounded to the next highest penny.
- Tolls for all vehicle classifications are calculated based on "N-1" weighting on the PGBT WE, where "N" denotes the number of axles. For example, the TollTag toll charged to a five-axle vehicle will be four times the TollTag toll charged to a two-axle vehicle and the total ZipCash toll charged to a five-axle vehicle will be four times the total ZipCash toll charged to a two-axle vehicle.

**PGBT WE TOLL RATES EFFECTIVE JULY 1, 2019 THROUGH JUNE 30, 2021**

Toll Gantry	President George Bush Turnpike - Western Extension									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Conflans Road (CONRD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Shady Grove Road (SHGRD)	\$0.49	\$0.76	\$0.98	\$1.52	\$1.47	\$2.28	\$1.96	\$3.04	\$2.45	\$3.80
Lower Tarrant - North (NLTRD)	\$0.51	\$0.78	\$1.02	\$1.56	\$1.53	\$2.34	\$2.04	\$3.12	\$2.55	\$3.90
Lower Tarrant Mainlane Gantry (MLG11)	\$1.10	\$1.65	\$2.20	\$3.30	\$3.30	\$4.95	\$4.40	\$6.60	\$5.50	\$8.25
Lower Tarrant - South (SLTRD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Dalworth Street (DALST)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80
Marshall Drive (MARDR)	\$0.55	\$0.83	\$1.10	\$1.66	\$1.65	\$2.49	\$2.20	\$3.32	\$2.75	\$4.15
Pioneer Parkway (PIOPY)	\$0.70	\$1.05	\$1.40	\$2.10	\$2.10	\$3.15	\$2.80	\$4.20	\$3.50	\$5.25
Arkansas Mainlane Gantry (MLG12)	\$1.16	\$1.74	\$2.32	\$3.48	\$3.48	\$5.22	\$4.64	\$6.96	\$5.80	\$8.70
Arkansas Lane (ARKLN)	\$0.41	\$0.68	\$0.82	\$1.36	\$1.23	\$2.04	\$1.64	\$2.72	\$2.05	\$3.40
Mayfield Road (MAYRD)	\$0.29	\$0.56	\$0.58	\$1.12	\$0.87	\$1.68	\$1.16	\$2.24	\$1.45	\$2.80

**PGBT WE TOLL RATES EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2023**

Toll Gantry	President George Bush Turnpike - Western Extension									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Conflans Road (CONRD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Shady Grove Road (SHGRD)	\$0.52	\$0.80	\$1.04	\$1.60	\$1.56	\$2.40	\$2.08	\$3.20	\$2.60	\$4.00
Lower Tarrant - North (NLTRD)	\$0.54	\$0.82	\$1.08	\$1.64	\$1.62	\$2.46	\$2.16	\$3.28	\$2.70	\$4.10
Lower Tarrant Mainlane Gantry (MLG11)	\$1.16	\$1.74	\$2.32	\$3.48	\$3.48	\$5.22	\$4.64	\$6.96	\$5.80	\$8.70
Lower Tarrant - South (SLTRD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Dalworth Street (DALST)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95
Marshall Drive (MARDR)	\$0.58	\$0.87	\$1.16	\$1.74	\$1.74	\$2.61	\$2.32	\$3.48	\$2.90	\$4.35
Pioneer Parkway (PIOPY)	\$0.74	\$1.11	\$1.48	\$2.22	\$2.22	\$3.33	\$2.96	\$4.44	\$3.70	\$5.55
Arkansas Mainlane Gantry (MLG12)	\$1.23	\$1.85	\$2.46	\$3.70	\$3.69	\$5.55	\$4.92	\$7.40	\$6.15	\$9.25
Arkansas Lane (ARKLN)	\$0.43	\$0.71	\$0.86	\$1.42	\$1.29	\$2.13	\$1.72	\$2.84	\$2.15	\$3.55
Mayfield Road (MAYRD)	\$0.31	\$0.59	\$0.62	\$1.18	\$0.93	\$1.77	\$1.24	\$2.36	\$1.55	\$2.95

## CTP Tolling

### Toll Rates

- Toll rates for the CTP shall be as set forth in the following schedule for the period indicated in the schedule.
- Toll rate for two-axle vehicles with TollTags is \$0.185 per mile for the section from IH 30 to Altamesa Boulevard and \$0.145 per mile for the section from Altamesa Boulevard to US 67 starting July 1, 2009, and thereafter toll rates shall be determined in accordance with Exhibit L of the Project Agreement, as amended, and shall be the maximum rates allowed under the CTP Project Agreement.
- ZipCash toll for two-axle vehicles is equal to the sum of (i) the TollTag toll and (ii) the greater of (a) 50 percent of TollTag toll or (b) 20 cents per transaction on July 1, 2009, increased 2.75 percent per year adjusted on July 1 of every odd year thereafter.
- Tolls charged to users at any tolling location are rounded to the next highest penny.
- Tolls for all vehicle classifications are calculated based on "N-1" weighting on the CTP, where "N" denotes the number of axles. For example, the TollTag toll charged to a five-axle vehicle will be four times the TollTag toll charged to a two-axle vehicle and the total ZipCash toll charged to a five-axle vehicle will be four times the total ZipCash toll charged to a two-axle vehicle.

**CTP TOLL RATES EFFECTIVE JULY 1, 2019 THROUGH JUNE 30, 2021**

Toll Gantry	Chisholm Trail Parkway									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Gantry 1 (Montgomery) (MLG1)	\$1.51	\$2.27	\$3.02	\$4.54	\$4.53	\$6.81	\$6.04	\$9.08	\$7.55	\$11.35
Edwards Ranch Rd (EDWRD)	\$0.64	\$0.96	\$1.28	\$1.92	\$1.92	\$2.88	\$2.56	\$3.84	\$3.20	\$4.80
Arborlawn Drive (ARBDR)	\$0.37	\$0.64	\$0.74	\$1.28	\$1.11	\$1.92	\$1.48	\$2.56	\$1.85	\$3.20
Oakmont Blvd (OAKBD)	\$0.53	\$0.80	\$1.06	\$1.60	\$1.59	\$2.40	\$2.12	\$3.20	\$2.65	\$4.00
Altamesa Blvd (ALTBD)	\$0.83	\$1.25	\$1.66	\$2.50	\$2.49	\$3.75	\$3.32	\$5.00	\$4.15	\$6.25
Sycamore School Rd (SYCRD)	\$0.87	\$1.31	\$1.74	\$2.62	\$2.61	\$3.93	\$3.48	\$5.24	\$4.35	\$6.55
McPherson Blvd (MCPBD)	\$1.17	\$1.76	\$2.34	\$3.52	\$3.51	\$5.28	\$4.68	\$7.04	\$5.85	\$8.80
Gantry 2 (Stewart Feltz) (MLG2)	\$2.45	\$3.68	\$4.90	\$7.36	\$7.35	\$11.04	\$9.80	\$14.72	\$12.25	\$18.40
Farm Market 1187 (F1187)	\$0.67	\$1.01	\$1.34	\$2.02	\$2.01	\$3.03	\$2.68	\$4.04	\$3.35	\$5.05
County Rd 920 (CR920)	\$0.40	\$0.67	\$0.80	\$1.34	\$1.20	\$2.01	\$1.60	\$2.68	\$2.00	\$3.35
County Rd 913 (CR913)	\$0.41	\$0.68	\$0.82	\$1.36	\$1.23	\$2.04	\$1.64	\$2.72	\$2.05	\$3.40
Farm Market 917 (FM917)	\$0.74	\$1.11	\$1.48	\$2.22	\$2.22	\$3.33	\$2.96	\$4.44	\$3.70	\$5.55
County Rd 904 (CR904)	\$1.11	\$1.67	\$2.22	\$3.34	\$3.33	\$5.01	\$4.44	\$6.68	\$5.55	\$8.35
Gantry 3 (CR 904-Sparks Rd) (MLG3)	\$1.83	\$2.75	\$3.66	\$5.50	\$5.49	\$8.25	\$7.32	\$11.00	\$9.15	\$13.75
Sparks Rd (SPARD)	\$0.32	\$0.59	\$0.64	\$1.18	\$0.96	\$1.77	\$1.28	\$2.36	\$1.60	\$2.95

**CTP TOLL RATES EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2023**

Toll Gantry	Chisholm Trail Parkway									
	Two-Axle Passenger Cars and Trucks		Three-Axle Vehicles and Vehicle Combinations		Four-Axle Vehicles and Vehicle Combinations		Five-Axle Vehicles and Vehicle Combinations		Six or More Axle Vehicles and Special Permits	
	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash	TollTag	ZipCash
Gantry 1 (Montgomery) (MLG1)	\$1.59	\$2.39	\$3.18	\$4.78	\$4.77	\$7.17	\$6.36	\$9.56	\$7.95	\$11.95
Edwards Ranch Rd (EDWRD)	\$0.67	\$1.01	\$1.34	\$2.02	\$2.01	\$3.03	\$2.68	\$4.04	\$3.35	\$5.05
Arborlawn Drive (ARBDR)	\$0.39	\$0.67	\$0.78	\$1.34	\$1.17	\$2.01	\$1.56	\$2.68	\$1.95	\$3.35
Oakmont Blvd (OAKBD)	\$0.56	\$0.84	\$1.12	\$1.68	\$1.68	\$2.52	\$2.24	\$3.36	\$2.80	\$4.20
Altamesa Blvd (ALTBD)	\$0.88	\$1.32	\$1.76	\$2.64	\$2.64	\$3.96	\$3.52	\$5.28	\$4.40	\$6.60
Sycamore School Rd (SYCRD)	\$0.91	\$1.37	\$1.82	\$2.74	\$2.73	\$4.11	\$3.64	\$5.48	\$4.55	\$6.85
McPherson Blvd (MCPBD)	\$1.23	\$1.85	\$2.46	\$3.70	\$3.69	\$5.55	\$4.92	\$7.40	\$6.15	\$9.25
Gantry 2 (Stewart Feltz) (MLG2)	\$2.58	\$3.87	\$5.16	\$7.74	\$7.74	\$11.61	\$10.32	\$15.48	\$12.90	\$19.35
Farm Market 1187 (F1187)	\$0.71	\$1.07	\$1.42	\$2.14	\$2.13	\$3.21	\$2.84	\$4.28	\$3.55	\$5.35
County Rd 920 (CR920)	\$0.42	\$0.70	\$0.84	\$1.40	\$1.26	\$2.10	\$1.68	\$2.80	\$2.10	\$3.50
County Rd 913 (CR913)	\$0.43	\$0.71	\$0.86	\$1.42	\$1.29	\$2.13	\$1.72	\$2.84	\$2.15	\$3.55
Farm Market 917 (FM917)	\$0.78	\$1.17	\$1.56	\$2.34	\$2.34	\$3.51	\$3.12	\$4.68	\$3.90	\$5.85
County Rd 904 (CR904)	\$1.17	\$1.76	\$2.34	\$3.52	\$3.51	\$5.28	\$4.68	\$7.04	\$5.85	\$8.80
Gantry 3 (CR 904-Sparks Rd) (MLG3)	\$1.93	\$2.90	\$3.86	\$5.80	\$5.79	\$8.70	\$7.72	\$11.60	\$9.65	\$14.50
Sparks Rd (SPARD)	\$0.34	\$0.62	\$0.68	\$1.24	\$1.02	\$1.86	\$1.36	\$2.48	\$1.70	\$3.10

[THIS PAGE INTENTIONALLY LEFT BLANK]

**APPENDIX D**

**SUMMARY OF CERTAIN PROVISIONS  
OF THE RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS  
TO TRUST AGREEMENT**

[THIS PAGE INTENTIONALLY LEFT BLANK]



**SUMMARY OF CERTAIN PROVISIONS OF THE  
RESOLUTION AND THE TRUST AGREEMENT, INCLUDING PROPOSED AMENDMENTS TO  
TRUST AGREEMENT**

The following constitutes a summary of certain provisions of the Resolution and the Amended and Restated Trust Agreement as amended and supplemented to date (the "*Trust Agreement*"). This summary does not purport to be comprehensive or definitive and is qualified in its entirety by reference to the Resolution and the Trust Agreement. Copies of the Resolution and the Trust Agreement are available for examination at the offices of NTTA.

**Definitions**

*"Account Receivable"* – any right to receive tolls, fees, charges or other amounts for or relating to the use or operation of the Tollway, as well as fines, penalties, interest thereon or other additional charges as a result of a failure to pay any such tolls, fees, charges or other amounts or otherwise related thereto, whether in the form of an account receivable, general intangible, contract right or other right.\*

*"Additional Bond Security"* – any credit enhancement for specified bonds and any funds received or obligations payable to NTTA, other than Net Revenues, which NTTA chooses to include as security for specified First Tier Bonds, Second Tier Bonds and/or Third Tier Bonds pursuant to a Supplemental Agreement;

*"Additional Bonds"* – Additional First Tier Bonds, Additional Second Tier Bonds and Additional Third Tier Bonds;

*"Additional First Tier Bonds"* – those obligations, including bonds and First Tier Credit Agreements, which NTTA reserves the right to issue, enter into or incur under the Trust Agreement, which are on a parity with the First Tier Bonds insofar as the lien on Net Revenues is concerned;

*"Additional Second Tier Bonds"* – those obligations, including bonds and Second Tier Credit Agreements, which NTTA reserves the right to issue, enter into or incur under the Trust Agreement, which are on a parity with the Second Tier Bonds insofar as the lien on Net Revenues is concerned;

*"Additional Third Tier Bonds"* – those obligations, including bonds and Third Tier Credit Agreements, which NTTA reserves the right to issue, enter into or incur under the Trust Agreement, which are on a parity with the Third Tier Bonds insofar as the lien on Net Revenues is concerned;

*"Annual Budget"* – the budget adopted or in effect for each Fiscal Year as provided in the Trust Agreement;

*"Assumed Variable Rate"* – in the case of:

- (a) bonds bearing interest at a Variable Rate, the greater of:
  - (1) the average interest rate on such bonds for the most recently completed sixty (60) month period or the period such bonds have been Outstanding if it is less than sixty (60) months, or
  - (2) the rate to be determined pursuant to *clause (b)* below assuming the Outstanding bonds bearing interest at a Variable Rate were being issued on the date of calculation; and
- (b) proposed Additional Bonds to be issued at a Variable Rate:
  - (1) on the basis that, in the opinion of Bond Counsel to be delivered at the time of the issuance thereof, interest on such Additional Bonds would be excluded from gross income for federal income tax purposes, the greater of (i) the average of the Security Industry and Financial Markets Association Municipal Swap Index ("*SIFMA Index*") for the twelve (12) month period ending seven (7) days preceding the date of calculation plus 100 basis points, or (ii) the average of the SIFMA Index for the sixty (60) month period ending seven (7) days preceding the date of calculation plus 100 basis points; and
  - (2) on a basis other than as described in *clause (1)*, the greater of (i) the average of the London Interbank Offered Rate ("*LIBOR*") for the time period most closely resembling the reset period for the Additional Bonds for the twelve (12) month period ending seven (7) days preceding the date of calculation plus 100 basis points, or (ii) the average of LIBOR for the time period most closely resembling the reset period for the Additional Bonds for the sixty (60) month period ending seven (7) days preceding the date of calculation plus 100 basis points; and provided that if the

---

\* The italicized definition will only be effective upon obtaining the approval of a majority in principal amount of the outstanding First Tier Bonds and Second Tier Bonds.

SIFMA Index or LIBOR ceases to be published, the index to be used in its place will be the index which NTTA, in consultation with the Financial Consultant, determines most closely replicates such index, as set forth in a certificate of the Chief Financial Officer filed with the Trustee. Notwithstanding the foregoing, in no event may the Assumed Variable Rate be in excess of the maximum interest rate allowed by law on obligations of NTTA;

"*Authorized Investments*" – (a) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are unconditionally guaranteed by, the United States of America, including Treasury Receipts evidencing ownership of future interest and principal payments due on direct obligations of the United States of America;

(b) bonds, participation certificates, or other obligations of any agency or instrumentality of the United States of America, including obligations of the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Financing Bank, the Federal Intermediate Credit Banks, Federal Farm Credit System, Federal Home Loan Banks, Federal Home Loan Mortgage Corporation, Farmers Home Administration and Federal Housing Administration;

(c) new housing authority bonds issued by public agencies of a state or of municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America;

(d) direct and general obligations of any state of the United States of America, any municipality or school district of the State of Texas, or any other political subdivision or agency of the State of Texas to the payment of the principal of and interest on which the full faith and credit of such entity, as the case may be, is pledged, provided that such obligations are rated, at the time of purchase, in either of the two highest rating categories, without regard to rating sub-categories, by a nationally recognized municipal or corporate rating agency;

(e) certificates of deposit, whether negotiable or non-negotiable, issued by any bank or trust company organized under the laws of any state of the United States of America or any national banking association, provided that such certificates of deposit are purchased directly from such bank, trust company, or national banking association and are either (1) continuously and fully insured by the Federal Deposit Insurance Corporation or (2) continuously and fully secured by such securities as are described above in **clauses (a) through (d)**, inclusive, which have a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such certificates of deposit and are lodged with or as directed by the Board, or the bank, trust company, or national banking association issuing such certificates of deposit;

(f) uncollateralized certificates of deposit of financial institutions which certificates of deposit are rated, at the time of purchase, in one of the two highest rating categories, without regard to rating sub-categories, by any nationally recognized municipal or corporate rating agency;

(g) repurchase agreements collateralized by obligations described above in **clauses (a) or (b)** with any registered broker/dealer subject to the Securities Investor Protection Corporation jurisdiction, which has an uninsured, unsecured and unguaranteed obligation rated "Prime-1" or "A3" or better by Moody's and "A-1" or "A" or better by S&P, or any commercial bank with the above ratings, provided:

(1) a master repurchase agreement or specific written repurchase agreement governs the transaction,

(2) the securities are held free and clear of any lien by the bond trustee or an independent third party acting solely as agent for the bond trustee, and such third party is (1) a Federal Reserve Bank, (2) a bank which is a member of the Federal Deposit Insurance Corporation and which has combined capital, surplus, and undivided profits of not less than \$25 million or (3) a bank approved in writing for such purpose by each Bond Insurer, and the Trustee has received written confirmation from such third party that it holds such securities, free and clear of any lien, as agent for the Trustee,

(3) a perfected first security interest under the Uniform Commercial Code, or book entry procedures prescribed at 31 CFR 306.1 et seq., in such securities is created for the benefit of the Trustee,

(4) the repurchase agreement has a term of six months or less, or NTTA will value the collateral securities no less frequently than monthly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within two Business Days of such valuation,

(5) the repurchase agreement matures on or before a debt service payment date (or other appropriate liquidation period), and

(6) the fair market value of the securities in relation to the amount of the repurchase obligation is equal to at least 100%;

(h) banker's acceptances, Eurodollar deposits and certificates of deposit (in addition to the certificates of deposit provided for by **clauses (e) and (f)** above) of the domestic branches of foreign banks having a capital and surplus of \$1,000,000 or more, or any bank or trust company organized under the laws of the United States of America or Canada, or any state or province thereof, having capital and surplus, if located in the State of Texas, in the amount of \$200,000,000, and, if located outside of the State of Texas, in the amount of \$1,000,000,000; provided that the aggregate maturity value of all such banker's acceptances and certificates of deposit held at any time as investments of funds under the Trust Agreement with respect to any particular bank, trust company, or national association located in the State of Texas may not exceed 10% of the amount of its capital and surplus and with respect to any particular bank, trust company, or national association located outside of the State of Texas may not exceed 5% of its capital and surplus; and provided further that any such bank, trust company or national association is required to be rated in one of the two highest rating categories, without regard to rating sub-categories, by any nationally recognized municipal or corporate rating agency;

(i) municipal or corporate commercial paper rated, at the time of purchase, either "A-1" or "P-1" or higher, or municipal or corporate bonds or notes rated, at the time of purchase, in one of the two highest rating categories, without regard to rating sub-categories, by any nationally recognized municipal or corporate rating agency;

(j) other unsubordinated securities or obligations issued or guaranteed (including a guarantee in the form of a bank standby letter of credit) by any domestic corporation (including a bank, national banking association, or trust company) which has outstanding, at the time of investment, debt securities rated in one of the two highest rating categories, without regard to rating sub-categories, by any nationally recognized municipal or corporate rating agency;

(k) investments of any type described and permitted by any law of the State of Texas applicable to NTTA; and

(l) money market funds which invest solely in any of the above listed obligations;

*"Balloon Indebtedness"* – a series of bonds of which 25% or more of the original principal matures in the same annual period and is not required by the documents pursuant to which such bonds were issued to be amortized by payment or redemption prior to that annual period (excluding any contingent mandatory redemptions), provided that such bonds will not constitute Balloon Indebtedness and will be assumed to amortize in accordance with its stated terms if the Trustee is provided a certificate of the Chief Financial Officer certifying that such bonds are not to be treated as Balloon Indebtedness;

*"bank"* – any bank, trust company or national banking association organized or operating under the laws of any state of the United States of America or of the United States of America;

*"Board"* – the Board of Directors of NTTA;

*"Board Representative"* – the Executive Director, the Deputy Executive Director, the Chief Financial Officer, the Treasurer and the Director of Finance or such other individuals so designated by NTTA to perform the duties of the Board Representative for the specific purpose under the Trust Agreement;

*"Board Representative's Certificate"* – the certificate of the Board Representative to be executed and delivered in connection with the initial issuance of each series of bonds and each certificate of the Board Representative to be executed and delivered in connection with the exercise of the right of NTTA to effect a conversion;

*"bond," "bonds" or "Turnpike Revenue Bond"* – unless otherwise specifically stated, all currently Outstanding First Tier Bonds, Second Tier Bonds and Third Tier Bonds, and the Additional Bonds;

*"Bondholder," "holder," or "owner," or "registered owner"* – the registered owner of any bond as shown on the Trustee's Bond Registration records and books;

*"Bond Insurance Policy"* – an insurance policy issued by a Bond Insurer insuring or guaranteeing the payment of principal of and interest on any bonds;

*"Bond Insurer"* – an entity that insures or guarantees the payment of principal of and/or interest on any of the bonds;

*"Business Day"* – any day other than a Saturday or a Sunday or a day on which banking institutions are required or authorized by law or executive order to remain closed in the State or the City of New York or in the city in which the designated office of the Trustee or the Securities Depository is located.;

"*Chief Financial Officer*" – the Chief Financial Officer, the Treasurer or such other individuals designated by the Board to perform the duties of the Chief Financial Officer under the Trust Agreement;

"*Consulting Engineers*" – the consulting civil engineer or engineering firm or corporation employed by NTTA pursuant to the Trust Agreement to carry out the duties imposed thereby;

"*Cost*" – all obligations and expenses and all items of cost authorized to be incurred or paid under the Turnpike Act and when used with respect to any facility will mean and include all costs related to such facility, and, without intending thereby to limit or restrict any such definition, including the following:

(a) obligations incurred for labor and to contractors, builders and materialmen in connection with the construction of a facility or any part thereof, and obligations incurred for machinery and equipment;

(b) payments to owners and others, for real property, or interests therein, or for options or other property or contractual rights;

(c) all expenses of every kind or character incurred in the acquisition of real property, including all costs and expenses of whatever kind in connection with the exercise of the power of condemnation, and including the cost of title searches and reports, abstracts of title, title certificates and opinions, title guarantees, title insurance policies, appraisals, negotiations and surveys;

(d) the amount of any damages or claimed damages incident to or consequent upon the construction of a facility; also the cost of any litigation and amounts paid by court order or upon settlement of any litigation or of any claim (although not litigated) of any kind during construction or of any claim arising during or out of or related to construction of a facility;

(e) as to toll collection equipment, it is recognized that some manufacturers of such equipment will not sell such equipment outright, and that some manufacturers will sell it; but that it will not be known, until bids are received by NTTA for the acquisition of such equipment, which manufacturer will offer the most advantageous terms to NTTA. The acquisition of toll collection equipment has been determined and declared to be a capital expenditure, and a proper "cost". It is specially provided, however, that if, in the discretion of NTTA, it will be to the advantage of NTTA to do so, and upon the written recommendation of the Consulting Engineers, NTTA may enter into lease-purchase or lease-rental agreements for the acquisition of such equipment with a term not to exceed three years from the date of acceptance of such equipment by NTTA. In such event NTTA is required to so advise the Trustee, and the Trustee is required to set aside and retain the amounts required for the payments under such agreements in the Construction Fund, and is required to make such payments as so required, upon requisitions from the Construction Fund. Any such payments will constitute proper items of "cost" for all purposes;

(f) the cost of any necessary indemnity and surety bonds, the cost of all fidelity bonds, the fees and expenses of the Trustee and the Paying Agent and premiums on all insurance deemed necessary and advisable by NTTA, until one year after the completion of construction thereof;

(g) the cost of borings and other preliminary investigations to determine foundation or other conditions, all fees, costs, and expenses necessary or incident to determining the feasibility and practicability of constructing a facility, and all fees, costs and expenses of engineers and others for making traffic studies, surveys, and estimates, and all fees, costs, and expenses of engineering services, plans, specifications, surveys, and estimates of cost and revenues, and all costs of supervising construction, as well as for the performance of all other duties of engineers in relation to the construction of a facility or the issuance of bonds therefor;

(h) the cost of preparing and issuing bonds, including refunding bonds, and all legal, accounting and other professional expenses and fees and financing charges in connection with any bonds and/or any facility, and expenses of administration properly chargeable to the construction of a facility, including salaries and all payments and deductions as provided by law pertaining to the State Retirement System;

(i) the cost of restoring, repairing and placing in its original condition, as nearly as practicable, all public or private property damaged or destroyed in the construction of a facility, or the amount paid by NTTA as compensation for such damage or destruction, and all costs lawfully incurred or damages lawfully payable, with respect to the restoration, relocation, removal, reconstruction or duplication of property or facilities in connection with or made necessary or caused by the construction of a facility, and the cost of building facilities to connect land severed by a facility or severance damages paid in lieu of such facilities;

(j) any obligation or expense heretofore or hereafter incurred by NTTA in connection with any of the foregoing items of cost, and the reimbursement of any obligations or expenses incurred in connection with any of the foregoing items of cost;

(k) utility relocations, buildings and other structures, fencing, landscaping, illumination, communication systems and safety devices; and

(1) all other items of cost and expense not elsewhere in this definition specified, incident to the construction and equipment of a facility, the financing thereof and the costs of placing a facility in operation, including all costs as defined under the term "Cost" in the Turnpike Act;

"Credit Agreement" – a First Tier Credit Agreement, a Second Tier Credit Agreement or a Third Tier Credit Agreement, as applicable;

"Credit Provider" – any bank, financial institution, insurance company, surety bond provider or other entity which provides, executes, issues or otherwise is a party to or provider of a Credit Agreement;

"Current Expenses" – NTTA's reasonable and necessary accrued current expenses of maintaining, repairing and operating the Tollway including, without limiting the generality of the foregoing, all ordinary and usual expenses of maintenance and repair, insurance, bridge painting, all operating, policing, administrative and engineering expenses, *all fees and expenses of third parties for the provision of tolling services or other management services (to the extent not netted from payments received from such third parties)*,\* all payments and deductions as provided in the laws pertaining to the State Retirement System, fees and expenses of the Trustee, legal and accounting expenses and any other expenses or obligations required to be paid by NTTA under the Trust Agreement or by law, excluding any deposits or transfers to the credit of the Sinking Funds, Reserve Maintenance Fund and Capital Improvement Fund;

"Debt Service Requirements" – for any annual period (any Fiscal Year, or any other consecutive twelve calendar month period), the aggregate amount of interest on and principal of Outstanding bonds specified for the purposes for which Debt Service Requirements is to be calculated, other than any Credit Agreement, and, with respect to any Credit Agreement, the Payment Obligations relating thereto due in such period, as limited and calculated in the following manner:

(a) Except as modified below, (i) for any Fiscal Year while the NTTA System's Fiscal Year is the same as the calendar year, the aggregate amount of interest on and principal of the bonds, including Payment Obligations, which was paid or redeemed or is scheduled to accrue and be paid or redeemed after January 1 of such Fiscal Year and on the next following January 1; it being understood and intended that for the NTTA System's currently established Fiscal Year each such January 1 will be in the next following Fiscal Year; and (ii) for any consecutive twelve calendar month period other than the calendar year, whether or not such period constitutes any future NTTA System Fiscal Year, the aggregate amount of interest on and principal of the bonds, including Payment Obligations, which was paid or redeemed or is scheduled to accrue and be paid or redeemed during such consecutive twelve month period;

(b) As to any annual period prior to the date of any calculation, such requirements are required to be calculated solely on the basis of bonds which were Outstanding as of the first day of such period; and as to any future year such requirements are required to be calculated solely on the basis of bonds Outstanding as of the date of calculation plus any bonds then proposed to be issued as Additional Bonds;

(c) Notwithstanding the foregoing, all amounts which are deposited to the credit of the Bond Interest Accounts from original proceeds from the sale of any First Tier Bonds, Second Tier Bonds or Third Tier Bonds, as applicable, or from any other lawfully available source (other than the Revenue Fund and the investment income from the Operation and Maintenance Fund, the Sinking Funds, and the Reserve Maintenance Fund), and which are used or scheduled to be used to pay interest on such bonds during any annual period, are required to be deemed to reduce the Debt Service Requirements for any such annual period to the extent of such deposits; and the amount of such deposits are required to be excluded from and will not constitute Debt Service Requirements for any such annual period;

(d) If any of the bonds or proposed Additional Bonds bear interest at a Variable Rate the interest rate on such bonds or Additional Bonds for all periods for which the interest rate is not known, is required to be assumed and deemed to be the Assumed Variable Rate;

(e) If any of the bonds or proposed Additional Bonds constitute Balloon Indebtedness or Short-Term Indebtedness, then such amounts thereof as constitute Balloon Indebtedness or Short-Term Indebtedness are required to be treated as if such bonds are to be amortized in substantially equal annual installments of principal and interest over the useful life of the improvements financed with the proceeds of such Balloon Indebtedness or Short-Term Indebtedness as calculated by, and set forth in, a certificate of the Chief Financial Officer. Anything to the contrary notwithstanding, during the annual period preceding the final maturity date of such Balloon Indebtedness or, in the case of Short-Term Indebtedness, in each annual period, all of the principal thereof is required to be considered to be due on the Stated Maturity or due date of such Balloon Indebtedness or Short-Term Indebtedness unless NTTA

---

\* The italicized provision will only be effective upon obtaining the approval of a majority in principal amount of the outstanding First Tier Bonds and Second Tier Bonds.

provides to the Trustee, prior to the beginning of such annual period, a certificate of a Financial Consultant certifying that, in its judgment, NTTA will be able to refund such Balloon Indebtedness or Short-Term Indebtedness through the issuance of Additional Bonds, in which event the Balloon Indebtedness or Short-Term Indebtedness is required to be amortized over the term of such proposed refunding Additional Bonds and is required to be deemed to bear the interest rate specified in the certificate of the Financial Consultant;

(f) Notwithstanding anything to the contrary in *clause (e)* above, with respect to Short-Term Indebtedness that is part of a commercial paper or similar program of NTTA, the amount of debt service of such Short-Term Indebtedness taken into account during any annual period is required to be equal to the principal component of debt service calculated using the outstanding principal amount of such Short-Term Indebtedness on the date of calculation amortized over the period ending on the date of the maximum maturity date under such program on a level debt service basis at an interest rate deemed to be the Assumed Variable Rate determined as if such Short-Term Indebtedness were Variable Rate Indebtedness; and

(g) Notwithstanding anything to the contrary contained in (a) through (e) above, the Debt Service Requirements for each annual period for a series of Additional Bonds issued (i) in conjunction with one or more Qualified Credit Agreements will be deemed to be the total net payments which the Board Representative certifies NTTA expects to pay in such annual period with respect to such series of Additional Bonds after taking into account the principal and interest payments and the Payment Obligations under such Qualified Credit Agreements made or to be made in such annual period and the amounts received or to be received from the Qualified Credit Provider under such Qualified Credit Agreement in such annual period or (ii) as a series of Variable Rate bonds, or one or more maturities within a series, of equal par amounts, issued simultaneously with inverse floating interest rates providing a composite fixed interest rate for such bonds taken as a whole, such composite fixed rate is required to be used in determining the Debt Service Requirement with respect to such bonds;

"*Event of Default*" – as defined under the caption "Events of Default and Remedies";

"*Financial Consultant*" – a nationally recognized firm of independent professional financial consultants knowledgeable in the financial operation of toll roads and having a favorable reputation for skill and experience in the field of financial consultation relating to toll roads;

"*First Tier Bonds*" – unless otherwise specifically stated, all Outstanding bonds issued under the Trust Agreement designated as First Tier Bonds, including the related Credit Agreements, and any bond, bonds, note, notes, other obligation or obligations, including any First Tier Credit Agreement, issued, incurred or entered into pursuant to the Trust Agreement as Additional First Tier Bonds, or all of the foregoing, as the case may be, authorized by law and issued under and secured by the Trust Agreement and any supplement thereto;

"*First Tier Credit Agreement*" – collectively, an obligation entered into on a parity with the Outstanding First Tier Bonds in the form of a loan agreement, revolving credit agreement, agreement establishing a line of credit, letter of credit, reimbursement agreement, insurance contract, commitments to purchase bonds, purchase or sale agreement, interest rate swap, cap and floor agreement or commitment or other contract or agreement authorized, recognized and approved by NTTA as a First Tier Credit Agreement, whether authorized or approved in anticipation of, simultaneously with, or subsequent to, the authorization of the First Tier Bonds in connection with which it is executed;

"*First Tier Payment Obligations*" – unless otherwise specifically stated, all amounts payable by NTTA under a First Tier Credit Agreement less any amounts of principal or interest payable with respect to any Additional First Tier Bonds pledged under a First Tier Credit Agreement as collateral for the amounts due thereunder; and all such First Tier Payment Obligation payments are required to be deemed to constitute principal payments of First Tier Bonds, and are required to be paid from the First Tier Redemption Account as provided in the Trust Agreement; provided, however, that, if provided in a First Tier Credit Agreement or in the proceedings approved by NTTA in connection therewith, some or all of the amounts payable under a First Tier Credit Agreement may be designated as Second Tier Payment Obligations or Third Tier Payment Obligations;

"*First Tier Required Reserve*" – as of any date an amount equal to the average annual Debt Service Requirements of all First Tier Bonds Outstanding or to be Outstanding as of such date;

"*First Tier Reserve Surety Agreement*" – any substitute for cash and Authorized Investments in the First Tier Reserve Account as provided for in the Trust Agreement;

"*Fiscal Year*" – presently, the same as the calendar year; or any other period hereafter designated by NTTA as the Fiscal Year for the NTTA System in accordance with law;

"*Net Revenues*" – with respect to any consecutive 12-month period or Fiscal Year, the aggregate revenues or estimated aggregate revenues derived or estimated to be derived from the ownership and operation of the Tollway in any such period or year, including (i) all investment income from the Revenue Fund, the Operation and Maintenance Fund, the Bond Interest

Accounts, the Redemption Accounts, the Reserve Accounts, the Reserve Maintenance Fund and the Capital Improvement Fund, and the investment income from the Construction Fund which is deposited or estimated to be deposited to the credit of the Bond Interest Accounts, and (ii) all proceeds from the sale, conveyance, pledge or other disposition of Accounts Receivable,\* less the Current Expenses for any such period or year; provided, however, any toll revenues collected by NTTA that must be paid to TxDOT as revenue sharing payments pursuant to a project agreement between NTTA and TxDOT will not constitute revenues of the Tollway for purposes of the Trust Agreement;

"*Outstanding*" – with respect to the bonds, at any date of which the amount of the Outstanding bonds is to be determined, the aggregate of all bonds secured by the Trust Agreement, except:

- (a) bonds cancelled or delivered to the Paying Agent for cancellation at or prior to such date;
- (b) bonds for the full payment of the principal of, premium, if any, and interest on which cash has been theretofore deposited with the Paying Agent and which (i) have matured by their terms, or otherwise have become payable, but have not been surrendered for payment or (ii) have been purchased by the Trustee but have not been presented for payment;
- (c) bonds deemed paid as described in *clause (b)* under the caption "*Defeasance*"; and
- (d) bonds in exchange or in lieu of which other bonds have been delivered under the Trust Agreement;

"*Paying Agent*" – the Trustee;

"*Payment Obligations*" – First Tier Payment Obligations, Second Tier Payment Obligations and Third Tier Payment Obligations;

"*Qualified Credit Agreement*" – a First Tier Credit Agreement, a Second Tier Credit Agreement or a Third Tier Credit Agreement, as applicable, entered into with a Qualified Credit Provider;

"*Qualified Credit Provider*" – a Credit Provider (or its corporate parent as guarantor of its obligations under a Credit Agreement) whose long term debt is rated or whose credit rating is, at the time the Qualified Credit Agreement is entered into, in one of the three highest rating categories by Moody's, S&P or Fitch, without regard to rating sub-categories;

"*Registered Bonds*" – bonds registered in the name of the owner;

"*Registrar*" – the Trustee;

"*Required Reserve*" – the First Tier Required Reserve, the Second Tier Required Reserve or the Third Tier Required Reserve, as applicable;

"*Reserve Surety Agreement*" – a First Tier Reserve Surety Agreement, a Second Tier Reserve Surety Agreement or a Third Tier Reserve Surety Agreement, as applicable;

"*Second Tier Bonds*" – unless otherwise specifically stated, all Outstanding bonds issued under the Trust Agreement designated as Second Tier Bonds, including the related Credit Agreements, and any bond, bonds, note, notes, other obligation or obligations, including any Second Tier Credit Agreement, issued, incurred or entered into pursuant to the Trust Agreement as Additional Second Tier Bonds, or all of the foregoing, as the case may be, authorized by law and issued under and secured by the Trust Agreement and any supplement thereto;

"*Second Tier Credit Agreement*" – collectively, an obligation entered into on a parity with the Outstanding Second Tier Bonds in the form of a loan agreement, revolving credit agreement, agreement establishing a line of credit, letter of credit, reimbursement agreement, insurance contract, commitments to purchase bonds, purchase or sale agreement, interest rate swap, cap and floor agreement or commitment or other contract or agreement authorized, recognized and approved by NTTA as a Second Tier Credit Agreement, whether authorized or approved in anticipation of, simultaneously with, or subsequent to, the authorization of the bonds in connection with which it is executed;

"*Second Tier Payment Obligations*" – unless otherwise specifically stated, all amounts payable by NTTA under a Second Tier Credit Agreement less any amounts of principal or interest payable with respect to any Additional Second Tier Bonds pledged under a Second Tier Credit Agreement as collateral for the amounts due thereunder; and all such Second Tier Payment Obligation payments will be deemed to constitute principal payments of Second Tier Bonds, and will be paid from the Second Tier Redemption Account as provided in the Trust Agreement; *provided, however*, that, if so provided in a Second Tier Credit Agreement or in the proceedings approved by NTTA in connection therewith, some or all of the amounts payable under a Second Tier Credit Agreement may be designated to be Third Tier Payment Obligations; and provided further, that, all

---

\* The italicized provision will only be effective upon obtaining a majority in principal amount of the outstanding First Tier Bonds and Second Tier Bonds.

payment obligations under a First Tier Credit Agreement which are designated to be Second Tier Payment Obligations will be treated as and constitute Second Tier Payment Obligations for all purposes under the Trust Agreement;

"*Second Tier Required Reserve*" – as of any date the amount set forth in a Supplemental Agreement authorizing Second Tier Bonds Outstanding or to be Outstanding as of such date;

"*Second Tier Reserve Surety Agreement*" – any substitute for cash and Authorized Investments in the Second Tier Reserve Account as provided for in a Supplemental Agreement;

"*Short-Term Indebtedness*" – all bonds that mature in less than 365 days and are issued as Short-Term Indebtedness pursuant to the Trust Agreement. In the event a Credit Provider has extended a line of credit or NTTA has undertaken a commercial paper or similar program, only amounts actually borrowed under such line of credit or program and repayable in less than 365 days will be considered Short-Term Indebtedness and the full amount of such commitment or program will not be treated as Short-Term Indebtedness to the extent that such facility remains available but undrawn;

"*SIFMA*" – the Securities Industry and Financial Markets Association, or any successor thereto;

"*SIFMA Municipal Swap Index*" – the "Securities Industry and Financial Markets Association Municipal Swap Index" announced weekly by Municipal Market Data and based upon the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specified criteria established by SIFMA. The SIFMA Municipal Swap Index is required to be based upon current yields of high-quality, weekly adjustable variable rate demand bonds which are subject to tender upon seven days' notice, the interest on which is tax-exempt and not subject to any personal "alternative minimum tax" or similar tax under the Internal Revenue Code of 1986, as amended, unless all tax-exempt securities are subject to such tax;

"*Stated Maturity*" – for any bond, the scheduled maturity date or final mandatory sinking fund redemption date of such bond;

"*Supplemental Agreement*" – any supplement to the Trust Agreement, now or hereafter duly authorized and entered into in accordance with the Trust Agreement;

"*Third Tier Bonds*" – unless otherwise specifically stated, any bond, bonds, note, notes, other obligation or obligations, including any Third Tier Credit Agreement, issued, incurred or entered into pursuant to the Trust Agreement as Third Tier Bonds, or all of the foregoing, as the case may be, authorized by law and issued under and secured by the Trust Agreement and any supplement thereto;

"*Third Tier Credit Agreement*" – collectively, an obligation entered into on a parity with the Outstanding Third Tier Bonds in the form of a loan agreement, revolving credit agreement, agreement establishing a line of credit, letter of credit, reimbursement agreement, insurance contract, commitments to purchase bonds, purchase or sale agreement, interest rate swap, cap and floor agreement or commitment or other contract or agreement authorized, recognized and approved by NTTA as a Third Tier Credit Agreement, whether authorized or approved in anticipation of, simultaneously with, or subsequent to, the authorization of the bonds in connection with which it is executed;

"*Third Tier Payment Obligations*" – unless otherwise specifically stated, all amounts payable by NTTA under a Third Tier Credit Agreement less any amounts of principal or interest payable with respect to any Additional Third Tier Bonds pledged under a Third Tier Credit Agreement as collateral for the amounts due thereunder; and all such Third Tier Payment Obligation payments will be deemed to constitute principal payments of Third Tier Bonds, and will be paid from the Third Tier Redemption Account or sub-account therein as provided in the Trust Agreement and specified in a Supplemental Agreement; and all payment obligations under a First Tier Credit Agreement or a Second Tier Credit Agreement which are designated to be Third Tier Payment Obligations will be treated as and constitute Third Tier Payment Obligations for all purposes under the Trust Agreement;

"*Third Tier Required Reserve*" – as of any date the amount set forth in the Supplemental Agreements authorizing Third Tier Bonds Outstanding or to be Outstanding as of such date;

"*Third Tier Reserve Surety Agreement*" – any substitute for cash and Authorized Investments in the Third Tier Reserve Account as provided for in a Supplemental Agreement;

"*Toll Rate Schedule*" – the schedule of tolls to be collected by NTTA established by the Board under the Trust Agreement, including future increases or decreases approved by the Board;

"*Tollway*" or "*NTTA System*" – the presently existing turnpike system, as defined in the Trust Agreement (including all bridges, tunnels, overpasses, underpasses, interchanges, toll plazas, and administration, storage, and other buildings, facilities and improvements which NTTA has deemed necessary for the operation of the presently existing Tollway), together with all property rights, easements and interests acquired by NTTA for the construction or the operation of the presently existing Tollway, and together with all future improvements, extensions, and enlargements or additions of the presently existing



Tollway, and together with any other turnpike project or facilities added to, grouped with, or otherwise constituted and declared to be a part of the Tollway by NTTA in accordance with law and pursuant to resolutions adopted by the Board;

"*Traffic Engineers*" – the traffic engineer or engineering firm or corporation employed by NTTA pursuant to the Trust Agreement to carry out the duties imposed thereby;

"*Turnpike Act*" – Chapter 366 of the Texas Transportation Code, as amended;

"*Value of Authorized Investments*" – the amortized value of any Authorized Investments, *provided, however*, that all United States of America, United States Treasury Obligations – State and Local Government Series will be valued at par and those obligations which are redeemable at the option of the holder will be valued at the price at which such obligations are then redeemable. Computations of such definition include accrued interest on the investment securities paid as a part of the purchase price thereof and not collected. "Amortized value," when used with respect to a security purchased at par means the purchase price of such security and when used with respect to a security purchased at a premium above or discount below par, means as of any subsequent date of valuation, the value obtained by dividing the total premium or discount by the number of interest payment dates remaining to maturity on any such security after such purchase and by multiplying the amount as calculated by the number of interest payment dates having passed since the date of purchase and (a) in the case of a security purchased at a premium, by deducting the product thus obtained from the purchase price, and (b) in the case of a security purchased at a discount, by adding the product thus obtained to the purchase price;

"*Variable Rate*" – interest on a bond which does not have a predetermined fixed rate or rates to maturity.

### **Certain Covenants of NTTA**

*Payment of Principal, Interest, and Premium.* NTTA has covenanted that it will promptly pay the principal of and the interest on every bond, including Payment Obligations, at the places, on the dates and in the manner provided in the Trust Agreement and in said bonds, and any premium required for the retirement of said bonds by redemption, according to the true intent and meaning thereof. The principal, interest (except interest paid from proceeds of the bonds) and premiums are payable solely in the priorities and from the sources described in the Trust Agreement, including the tolls and other revenues derived from the ownership and operation of the Tollway.

*Progress Reports; Audits during Construction; Certificate as to Date of Opening for Traffic.* NTTA has covenanted that, at least once in every six-month period during the construction of any portion of the Tollway which it finances in whole or in part with bonds, it will cause the Consulting Engineers to prepare a progress report in connection with the acquisition of real property for any project, and a progress report in connection with such construction, including their then current estimates of the:

- (a) date on which such project will be opened for traffic, unless such project has been opened for traffic prior to the date of such report,
- (b) date on which the construction of such project will be completed,
- (c) cost of the project but excluding any bond discount and the interest during construction and for one year after completion of construction, and
- (d) amount of funds required each six (6) months during the remaining estimated period of construction to meet the aforesaid cost of such project exclusive of funds provided for construction contingencies, and accompanied by a progress schedule for such construction, and further including, as to construction, comparisons between the actual times elapsed and the actual costs, and the original estimates of such times and costs. Copies of such progress reports are required to be filed with the Trustee and NTTA and mailed by NTTA to each bondholder who has filed his name with the Board Representative.

At least once in every twelve-month period during the construction of such project NTTA is required to cause an audit to be made by an independent certified public accountant of recognized ability and standing covering all receipts and money of NTTA then on deposit with or in the name of the Trustee, all Depositories, and NTTA, and any security specifically pledged therefor, any investments thereof, and all disbursements made from the Construction Fund. Reports of each such audit are required to be filed with the Trustee and NTTA and mailed by NTTA to the Consulting Engineers and each bondholder who has filed his name with the Board Representative.

*Consulting Engineers.* NTTA covenants that it will cause the Consulting Engineers employed by it to make an inspection of the Tollway on or before the 90th day prior to the end of each Fiscal Year and to submit to NTTA a report setting forth (a) their findings whether the Tollway has been maintained in good repair, working order and condition, (b) their advice and recommendations as to the proper maintenance, repair, and operation of the Tollway during the ensuing Fiscal Year and an estimate of the amount of money necessary for such purposes, including their recommendations as to the total amounts and classifications of items and amounts that should be provided for Current Expenses and the Reserve Maintenance Fund in the

Annual Budget for the next ensuing Fiscal Year, and (c) their advice and recommendations as to the amounts and types of insurance which should be carried during the ensuing Fiscal Year with respect to the Tollway described below under the caption "*Insurance.*" Copies of such reports are required to be filed with the Trustee and NTTA and mailed by NTTA to each bondholder who has filed his name and address with the Board Representative.

*Budgets, Hearings Thereon, Payments into Reserve Maintenance Fund, and Payments for Maintenance, Repair, and Operation.* NTTA has covenanted that on or before the 60th day prior to the end of each Fiscal Year it will adopt a preliminary budget of Current Expenses and payments into the Reserve Maintenance Fund for the ensuing Fiscal Year. Copies are required to be filed with the Trustee and NTTA and mailed by NTTA to the Consulting Engineers and each bondholder who has filed his name and address with the Board Representative.

If the holders of at least five percent (5%) in aggregate principal amount of the bonds then Outstanding request in writing on or before the 60th day prior to the end of any Fiscal Year, NTTA is required to hold a public hearing on or before the 30th day prior to the end of such Fiscal Year at which any bondholder may appear in person or by agent or attorney and present any objections he may have to the final adoption of such budget. Notice of the time and place of such hearing is required to be mailed, at least ten (10) days before the date fixed by NTTA for the hearing by NTTA, to the Trustee, the Consulting Engineers, and each bondholder who has filed his name and address with the Board Representative. NTTA has further covenanted that on or before the first day of each Fiscal Year it will finally adopt the budget of Current Expenses and payments into the Reserve Maintenance Fund for such Fiscal Year (hereinafter sometimes called the "*Annual Budget*"). Copies of the Annual Budget are required to be filed with the Trustee and mailed by NTTA to the Consulting Engineers and each bondholder who has filed his name and address with the Board Representative.

If for any reason NTTA has not adopted the Annual Budget before the first day of any Fiscal Year, the preliminary budget for such Fiscal Year or, if there is none prepared, the budget for the preceding Fiscal Year, will, until the adoption of the Annual Budget, be deemed to be in force and will be treated as the Annual Budget as herein described.

NTTA may at any time adopt an amended or supplemental Annual Budget for the remainder of the then current Fiscal Year, and when so adopted the Annual Budget as so amended or supplemented will be treated as the Annual Budget under the Trust Agreement; *provided, however*, that before the adoption of any such amended or supplemental Annual Budget, NTTA is required to have obtained and filed with the Trustee the recommendations of the Consulting Engineers in connection therewith. Copies of any such amended or supplemental Annual Budget are required to be filed with the Trustee and mailed by NTTA to the Consulting Engineers and each bondholder who has filed his name and address with the Board Representative.

NTTA has covenanted that all payments for maintenance, repair and operation in any Fiscal Year will not exceed the reasonable and necessary amount required therefor, and that it will not expend any amount or incur any obligations for maintenance, repair, and operation in excess of the amounts provided for Current Expenses in the Annual Budget, or amended or supplemental Annual Budget, except as provided in the Trust Agreement and except amounts payable from the Reserve Maintenance Fund and Capital Improvement Fund. Nothing described herein limits the amount which NTTA may expend for Current Expenses in any Fiscal Year provided any amounts expended therefor in excess of the Annual Budget are received by NTTA from some source other than the Net Revenues of the Tollway for such Fiscal Year.

*Compliance with Requirements; No Liens or Charges upon Tollway, Tolls or Other Revenues; Payment of Charges.* NTTA has covenanted that it will duly observe and comply with all valid requirements of any governmental authority relative to the Tollway or any part thereof, that it will not create or suffer to be created any lien or charge upon the Tollway or any part thereof or upon the tolls or other revenue therefrom except the lien and charge of the bonds secured by the Trust Agreement upon such tolls and revenue, unless any such lien or charge is junior and subordinate in all respects to the lien and charge of the bonds secured by the Trust Agreement, it being understood that NTTA may issue bonds, notes or other obligations payable from, or secured by, money in the Capital Improvement Fund to the extent now or hereafter permitted by law without violating the foregoing covenant. NTTA has further covenanted that, from such revenues or other available funds, it will pay or cause to be discharged, or will make adequate provision to satisfy and discharge, within sixty (60) days after the same accrue, all lawful claims and demands for labor, materials, supplies or other objects which, if unpaid, might by law become a lien upon the Tollway or any part thereof or the tolls or other revenue therefrom; *provided, however*, that nothing will require NTTA to pay or cause to be discharged, or make provision for, any such lien or charge so long as the validity thereof is contested in good faith and by appropriate legal proceedings.

*Accurate Records; Monthly Reports; Annual Audits; Additional Reports or Audits, Annual Report.* NTTA has covenanted that it will keep an accurate record of the daily tolls and other revenues collected, of the number and class of vehicles using the Tollway and of the application of such tolls. Such record will be open to the inspection of the bondholders and their agents and representatives.

NTTA has further covenanted that once each month it will cause to be filed with the Trustee and mailed to the Consulting Engineers, the Traffic Engineers and each bondholder who has filed his name with the Board Representative, copies

of any revision of the Toll Rate Schedule during the preceding calendar month and a report setting forth in respect of the preceding calendar month:

- (a) the income and expense accounts of the Tollway,
- (b) the number of vehicles in each class using the Tollway,
- (c) all payments, deposits and credits to and any payments, transfers and withdrawals from each Fund and Account created under the Trust Agreement,
- (d) all bonds issued, paid, purchased or redeemed,
- (e) the amounts at the end of such month to the credit of each Fund and Account, showing the respective amounts to the credit of each such Fund and Account, and any security held therefor, and showing the details of any investments thereof, and
- (f) the amounts of the proceeds received from any sales of property described herein under the caption "*Covenant Against Sale or Encumbrance; Exception.*"

NTTA has further covenanted that during the month following the end of each Fiscal Year it will cause an audit to be made of its books and accounts relating to the Tollway for the previous Fiscal Year by an independent certified public accountant of recognized ability and standing. Promptly thereafter reports of each audit are required to be filed with NTTA and the Trustee, and copies of such report are required to be mailed by NTTA to the Consulting Engineers, the Traffic Engineers, and each bondholder who has filed his name with the Board Representative. Each such audit is required to set forth in respect to the preceding Fiscal Year the same matters as are hereinabove required for the monthly reports, and also the findings of such certified public accountants whether the money received by NTTA under the Trust Agreement have been applied in accordance therewith. Such monthly reports and annual audit reports are required to be open to the inspection of the bondholders and their agents and representatives.

NTTA has further covenanted to furnish to the Trustee such other information concerning the Tollway or the operation thereof as the Trustee may reasonably request.

*Covenant Against Sale or Encumbrance; Exception.* (a) NTTA has covenanted that, until the bonds and interest thereon have been paid or provision for such payment has been made, and except as otherwise permitted in the Trust Agreement, it will not sell, lease or otherwise dispose of or encumber the Tollway or any part thereof and will not create or permit to be created any charge or lien on the revenues derived therefrom unless such charge or lien is made junior and subordinate in all respects to the charge and lien of the Trust Agreement made for the benefit of the bonds; provided that NTTA may lease or contract with respect to the operation of service stations or other facilities referred to in section 12 of the Turnpike Act. NTTA may, however, from time to time, sell, exchange or otherwise dispose of any machinery, fixtures, apparatus, tools, instruments or other movable property acquired by it from the proceeds of bonds issued on account of the Tollway or from the revenues thereof or otherwise, if NTTA determines that such articles are no longer needed or are no longer useful in connection with the construction or operation and maintenance of the Tollway, and the proceeds thereof are applied to the replacement of the properties so sold or disposed of or are paid to the Trustee to be held for the credit of the Construction Fund, the Reserve Maintenance Fund, the Capital Improvement Fund or the Sinking Funds, as NTTA directs. NTTA may from time to time sell, exchange or otherwise dispose of any real property or release, relinquish or extinguish any interest therein as NTTA by resolution declares is not needed or serves no useful purpose in connection with the maintenance and operation of the Tollway, and the proceeds thereof, if any, are required to be applied as provided above for the proceeds of the sale or disposal of movable property. Notwithstanding the foregoing, it is acknowledged and agreed that nothing in the Trust Agreement will prevent NTTA from re-conveying or allowing the reversion of property leased or otherwise acquired upon the termination of the lease or agreement pursuant to which such property was originally acquired.

(b) *Notwithstanding anything to the contrary in the Trust Agreement, NTTA may sell, convey, pledge or otherwise dispose of Accounts Receivable if:*

(1) *Such sale, conveyance, pledge or disposition is, in the judgment of NTTA, on commercially reasonable terms; or*

(2) *After giving effect to such sale, conveyance, pledge or disposition either (i) NTTA would be permitted to issue at least \$1.00 of Additional First Tier Bonds pursuant to Section 208 of this Agreement, or (ii) NTTA will, in the judgment of NTTA, be able to comply with its covenants in Section 501(d) of the Trust Agreement.*

*Any amounts received by NTTA in connection with the sale, conveyance, pledge or disposition of Accounts Receivable shall constitute tolls or other revenue derived from the ownership and operation of the Tollway for purposes of the Trust Agreement. Upon the written request of a Board Representative delivered to the Trustee, the rights, title, liens, security interests, pledge and assignments herein granted in or on Accounts Receivable sold, conveyed, pledged or otherwise disposed*

*of in accordance with this subsection (b) shall cease, determine and be void as to such Accounts Receivable and the lien of the Trust Agreement shall be released by the Trustee as to such Accounts Receivable in due form. In the written request to the Trustee, the Board Representative shall confirm that such Accounts Receivable have been sold, conveyed, pledged or otherwise disposed of in accordance with this subsection (b). Proceeds of or receipts with respect to Accounts Receivable sold, conveyed, pledged or otherwise disposed of in accordance with this subsection (b) shall not, after the date of such sale, conveyance, pledge or other disposition, constitute tolls or other revenue of or derived from the ownership and operation of the Tollway for purposes of the Trust Agreement.\**

(c) Upon any disposition of property as described herein, NTTA is required to notify the Trustee thereof and the amount and disposition of the proceeds thereof.

#### *Insurance*

Recommendations. NTTA has covenanted that, during each Fiscal Year while any bonds are Outstanding, it will obtain from the Consulting Engineers, on or before the 90th day prior to the end of each Fiscal Year, the report of the Consulting Engineers containing their advice and recommendations concerning the amounts and types of insurance which should be carried with respect to the Tollway during the ensuing Fiscal Year or years. NTTA covenants that it will follow the recommendations of the Consulting Engineers with respect to insurance, and will carry with a qualified and responsible insurance company or companies such insurance with respect to the Tollway as is then required by law and otherwise as is recommended by the Consulting Engineers in accordance with the Trust Agreement.

Self Insurance. NTTA may, upon the recommendation of the Consulting Engineers, establish programs for self insurance against various risks and losses, to the extent and in the manner as may be deemed advisable.

Schedule of Insurance Policies; Settlement of Insurance Claims. Within the first three (3) months of each Fiscal Year NTTA is required to mail to the Consulting Engineers and the Trustee a schedule of all insurance policies or self insurance plans which are then in effect, stating with respect to each policy the name of the insurer, the amount, number and expiration date, and the hazards and risks covered thereby, and also stating the details of each self insurance program established by NTTA. All such insurance policies are required to be open to the inspection of the bondholders and their representatives at all reasonable times. The Trustee is authorized, but is not obligated, in its own name to demand, collect, sue and receipt for any insurance money which may become due and payable under any policies payable to it. Any appraisal or adjustment of any loss or damage under any policy payable to the Trustee and any settlement or payment of indemnity under such policy which may be agreed upon between NTTA and any insurer is required to be evidenced to the Trustee by a certificate, signed by the Chairman or Vice Chairman and a Board Representative, which certificate may be relied upon by the Trustee as conclusive. The Trustee will in no way be liable or responsible for the collection of insurance money in case of any loss or damage.

All insurance policies will be for the benefit of the Trustee and NTTA, and the insurance policies will be made payable to the Trustee, and will be held by the Trustee. The Trustee will have the sole right to receive the proceeds of such insurance. The proceeds of any insurance will be held by the Trustee as security for the bonds until the bonds are paid out in accordance with the Resolution.

NTTA agrees that, immediately after any damage to or destruction of the NTTA System or any part thereof, competent engineers will prepare plans and specifications for repairing, replacing or reconstructing the damaged or destroyed property (either in accordance with the original or a different design) and an estimate of the cost thereof. Copies of such estimate will be mailed by NTTA to the Trustee and to the Consulting Engineers unless such engineers are the Consulting Engineers.

The proceeds of all insurance will be available for, and to the extent necessary be applied to, the repair, replacement, or reconstruction of the damaged or destroyed property, and will be disbursed by the Trustee. If the proceeds are more than sufficient for such purpose, the balance remaining will be placed in the Revenue Fund. If the insurance proceeds are insufficient for such purpose, the deficiency will be supplied by NTTA from any surplus unpledged, uncommitted, and available moneys in the Capital Improvement Fund and the Reserve Maintenance Fund, in that order, to the extent required or available.

NTTA agrees that, if the cost of repairing, replacing or reconstructing the damaged or destroyed property as estimated does not exceed the proceeds of insurance and other moneys available for such purpose, it will commence with the repair, replacement, or reconstruction of the damaged or destroyed property according to plans and specifications prepared or approved by the Consulting Engineers.

The proceeds of any insurance not applied within 18 months after their receipt to repairing, replacing or reconstructing the damaged or destroyed property must be deposited to the credit of the Reserve Maintenance Fund, unless NTTA advises the Trustee that it has been prevented from so repairing, replacing, or reconstructing because of conditions beyond its control, or

---

\* The italicized provision will only be effective upon obtaining the approval of a majority in principal amount of the outstanding First Tier Bonds and Second Tier Bonds.

unless NTTA, with the consent of the holders of a majority in principal amount of all the bonds then outstanding, shall otherwise direct.

#### *Covenants Regarding Tax Exemption*

Except with respect to Bonds issued as "taxable bonds," NTTA agrees to refrain from taking any action which would adversely affect, and to take any action required to ensure, the treatment of the Bonds as obligations described in section 103 of the Code, the interest on which is not includable in the "gross income" of the holder for purposes of federal income taxation (other than with respect to the taxable Bonds).

#### **Investments**

*Investment of Money in Funds and Accounts.* All money held for the credit of the Construction Fund will, as nearly as may be practicable, be invested and reinvested by the Trustee, as directed by NTTA, in Authorized Investments which will mature, or which will be subject to redemption by the holder thereof at the option of such holder, in such amounts and at such times as will be required to provide money when needed to pay the Costs payable from the Construction Fund. Money held for the credit of the Reserve Accounts will, as nearly as may be practicable, be invested and reinvested by the Trustee, as directed by NTTA, in Authorized Investments which will mature, or will be subject to redemption by the holder thereof at the option of such holder, not later than five years after the date of such investment. Money held for the credit of the Reserve Maintenance Fund may be invested and reinvested by NTTA in Authorized Investments which will mature, or which will be subject to redemption by the holder thereof at the option of such holder, not later than five years after the date of such investment. Money held for the credit of the Capital Improvement Fund may be invested in any of the Authorized Investments or in any other manner authorized by the Board. Money held for the credit of the Operation and Maintenance Fund will be invested and reinvested by NTTA, and the Revenue Fund, the Bond Interest Accounts, and the Redemption Accounts will be invested and reinvested by the Trustee, as directed by NTTA, in Authorized Investments which will mature, or which will be subject to redemption by the holder thereof at the option of such holder, not later than the respective dates which will allow money to be available in each of said Funds and Accounts for use at the appropriate times and for the purposes for which they were created.

In lieu of the investments as provided above, and at the option of NTTA, and in any other case where NTTA deems it advisable, NTTA may make interest bearing time deposits, invest in certificates of deposit, or make other similar arrangements with the Trustee or any other depository in connection with money in any Fund or Account created by the Trust Agreement, as may be permitted by law, and which will allow money to be available in each of the Funds and Accounts created by the Trust Agreement for use at the appropriate times and for the purposes for which they were created, provided that all such time deposits, certificates of deposit, and other similar agreements will be secured in the manner provided in the Trust Agreement.

*Other Investment Matters.* Obligations purchased as an investment of money in any Fund or Account created under the Trust Agreement and all time deposits or similar arrangements made in connection therewith, will be deemed at all times to be a part of such Fund or Account, and the interest accruing thereon and any profit realized from any investment will be credited to such Fund or Account, and any loss resulting from any investment will be charged to such Fund or Account; *provided, however,* that the provisions described under the caption "*Sinking Funds; Bond Interest Accounts, Reserve Accounts, and Redemption Accounts*" will be applicable at all times to the Reserve Accounts and the excess investment earnings from the Reserve Accounts.

At the option of NTTA, during the period of construction or completion of construction of any project, NTTA may direct the Trustee to transfer from the Construction Fund and deposit to the credit of the applicable Bond Interest Account, from the investment earnings deposited in the Construction Fund and/or the Reserve Maintenance Fund all or any part of an amount, which, together with the amount then available in the applicable Bond Interest Account, will be sufficient to pay the interest coming due on the bonds on each interest payment date, respectively. The Trustee is required to account for all amounts at any time on hand in the Construction Fund attributable to all investment earnings, regardless of their source, and to make the deposits required above to the extent of such investment earnings on hand at the time each such deposit is required to be made. In the event that such investment earnings are not sufficient to supplement the applicable Bond Interest Account in an amount required to enable the Trustee to pay from the applicable Bond Interest Account the interest coming due on the bonds on any interest payment date, then the Trustee, without further authorization or requisition, is required to use the corpus of the Construction Fund (original bond proceeds) to the extent necessary to provide the required supplement to the applicable Bond Interest Account.

The Trustee, any other depositories, and NTTA, as the case may be, are required to sell at the best price obtainable in the exercise of reasonable diligence, or present for payment or redemption, any obligations so purchased, whenever and to the extent it is necessary so to do, in order to provide money required to meet any payment or transfer from any Fund or Account. The Trustee, any other depositories, and NTTA, as the case may be, are required to present for payment all such obligations when they mature or when they are called for redemption and the proceeds thereof are required to be reinvested promptly, unless needed to meet any such payment or transfer. Neither the Trustee, any other depositories, nor NTTA will be liable or

responsible for making any such investment or for any loss resulting from any such investment, but any resulting deficiency in any Fund or Account is required to be restored from the first money available therefor in accordance with the Trust Agreement. The Trustee and any other depositaries are required to advise NTTA in writing, on or before the fifth day of each month, of the details of all money and investments held by them for the credit of any such Fund or Account.

The provisions of the Trust Agreement which relate to the deposit and to the investment of money are subject to any applicable laws of the State of Texas.

All Authorized Investments purchased as an investment of any Fund or Account are required to be valued at the Value of Authorized Investments. Reserve Accounts are required to be valued by NTTA as of the last Business Day of the current Fiscal Year, and semiannually thereafter as of the last Business Day of the sixth and twelfth months, respectively, of each Fiscal Year.

Notwithstanding any other provisions of the Trust Agreement, if investment income derived from any Fund or Account maintained pursuant hereto is required to be rebated to the United States of America, as required by the tax covenants of NTTA in order to prevent any bonds from being "arbitrage bonds," such investment income will be so rebated from the appropriate Fund or Account, and the amount of such rebate will not be considered to be revenues of the Tollway. The Trustee is required, upon the request and direction of NTTA, to transmit any such rebate amounts held by it to the United States of America.

### **Events of Default and Remedies**

*Events of Default.* Each of the following events is hereby declared an "*Event of Default*," that is to say: if

(a) NTTA defaults in the payment of the principal of or premium, if any, on any of the bonds when the same become due and payable, either at maturity or by proceedings for redemption; or

(b) NTTA defaults in the payment of any installment of interest on any bond when the same becomes due and payable; or

(c) any part of the Tollway is destroyed or damaged to the extent of impairing its efficient operation and adversely affecting its gross or net revenues and is not promptly repaired, replaced or reconstructed (whether such failure to repair, replace or reconstruct the same be due to the impracticability of such repair, replacement or reconstruction or to lack of funds therefor or for any other reason); or

(d) judgment for the payment of money is rendered against NTTA if such judgment is under any circumstances payable from the revenues of the Tollway and any such judgment is not discharged within ninety (90) days from the entry thereof or an appeal is not taken therefrom or from the order, decree or process upon which or pursuant to which such judgment has been granted or entered, in such manner as to set aside or stay the execution of or levy under such judgment, decree or process or the enforcement thereof; or

(e) an order or decree is entered, with the consent or acquiescence of NTTA, appointing a receiver or receivers of the Tollway or any part thereof or of the tolls or other revenues thereof, or if such order or decree, having been entered without the consent or acquiescence of NTTA, is not vacated or discharged or stayed within ninety (90) days after the entry thereof; or

(f) any proceeding is instituted, with the consent or acquiescence of NTTA, for the purpose of effecting a composition between NTTA and its creditors or for the purpose of adjusting the claims of such creditors, pursuant to any federal or state statute now or hereafter enacted, if the claims of such creditors are under any circumstances payable from the revenues of the Tollway; or

(g) NTTA defaults in the due and punctual performance of any other of the covenants, conditions, agreements and provisions contained in the bonds or in the Trust Agreement on the part of NTTA to be performed, and such default continues for sixty (60) days after written notice specifying such default and requiring it to be remedied has been given to NTTA by the Trustee, which may give such notice in its discretion and is required to give such notice at the written request of the holders of not less than ten percent (10%) in principal amount of the bonds then Outstanding; and the Trustee is required to investigate and consider any allegation of such default or Event of Default of which any Bond Insurer of record notifies the Trustee in writing; or

(h) the occurrence and continuance of an event of default by NTTA under a Credit Agreement or Reserve Surety Agreement.

A payment default under paragraphs (a) or (b) above with respect to a Second Tier Bond or Third Tier Bond will not constitute an Event of Default with respect to First Tier Bonds. A payment default under paragraphs (a) or (b) above with respect to a Third Tier Bond will not constitute an Event of Default with respect to Second Tier Bonds.

*Enforcement of Remedies.* Upon the happening and continuance of any Event of Default specified under the caption "*Events of Default*," then and in every such case the Trustee may proceed, and upon the written request of the holders of not less than twenty percent (20%) in principal amount of the bonds then Outstanding is required to proceed (subject to receiving adequate indemnity), to protect and enforce its rights and the rights of the bondholders under the Turnpike Act and under the Trust Agreement by such suits, actions or special proceedings in equity or at law, or by proceedings in the office of any board or officer having jurisdiction, either for mandamus or the specific performance of any covenant or agreement contained in the Trust Agreement or in aid or execution of any power therein granted or for the enforcement of any proper legal or equitable remedy, as the Trustee, being advised by counsel, deems most effectual to protect and enforce such rights. Acceleration of the principal of or interest on the bonds upon the occurrence of an Event of Default is not a remedy available under the Trust Agreement and in no event may the Trustee, the owners or other parties have the ability, upon the occurrence of an Event of Default, to declare the principal of or interest on the bonds immediately due and payable.

In enforcing any remedy under the Trust Agreement the Trustee is entitled to sue for, enforce payment of and receive any and all amounts then or during any default becoming, and at any time remaining, due from NTTA for principal, interest or otherwise under the Trust Agreement or of the bonds and unpaid, with interest on overdue payments at the rate or rates of interest borne by such bonds, together with any and all costs and expenses of collection and of all proceedings under the Trust Agreement and under such bonds, without prejudice, to any other right or remedy of the Trustee or of the bondholders, and to recover and enforce judgment or decree against NTTA, but solely as provided in the Trust Agreement and in such bonds, for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect (but solely from money in the applicable Sinking Fund and any other money available for such purposes) in any manner provided by law, the money adjudged or decreed to be payable.

*Pro Rata Application of Funds.* If at any time the money in the First Tier Sinking Fund, the Second Tier Sinking Fund, the Third Tier Sinking Fund, the Reserve Maintenance Fund or any other sinking funds established under the Trust Agreement is not sufficient to pay the principal of or the interest on the bonds as the same become due and payable, such money, together with any money then available or thereafter becoming available for such purpose, whether through the exercise of the remedies set forth in the Trust Agreement or otherwise, are required to be applied (subject to the right of the Trustee to compensation and indemnification) as follows (*provided, however*, amounts on deposit in a fund or account (i) dedicated to the payment or security of the First Tier Bonds, the Second Tier Bonds or Third Tier Bonds or (ii) constituting Additional Bond Security for the benefit of one or more specific series of bonds will not be applied as provided below but will be used only for the purpose for which such deposits were made):

(a) Unless the principal of all the First Tier Bonds is then due and payable, all such money is required to be applied first: to the payment to the persons entitled thereto of all installments of interest then due on the First Tier Bonds, in the order of the maturity of the installments of such interest, and, if the amount available is not sufficient to pay in full any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in the First Tier Bonds; and second: to the payment of the principal of any First Tier Bonds which have matured, and, if the amount available is not sufficient to pay all of such matured First Tier Bonds, then to the payment thereof ratably, according to the amount due; or if no First Tier Bonds have matured, to the retirement of First Tier Bonds in accordance with the Trust Agreement.

(b) If the principal of all the First Tier Bonds is then due and payable, all such money is required to be applied to the payment of the principal and interest then due and unpaid upon the First Tier Bonds, without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any First Tier Bond over any other First Tier Bond, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or preference except as to any difference in the respective rates of interest specified in the First Tier Bonds.

(c) If there is no default existing in the payment of the principal of, premium, if any, or interest on the First Tier Bonds but the principal of, premium, if any, or interest on Second Tier Bonds has not been paid when due, unless the principal of all the Second Tier Bonds is then due and payable, all such money is required to be applied first: to the payment to the persons entitled thereto of all installments of interest then due on the Second Tier Bonds, in the order of the maturity of the installments of such interest, and, if the amount available is not sufficient to pay in full any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in the Second Tier Bonds; and second: to the payment of the principal of any Second Tier Bonds which have matured, and, if the amount available is not sufficient to pay all of such matured Second Tier Bonds, then to the payment thereof ratably, according to the amount due; or if no Second Tier Bonds have matured, to the retirement of Second Tier Bonds in accordance with the Trust Agreement.

(d) If there is no default existing in the payment of the principal of, premium, if any, or interest on the First Tier Bonds, but the principal of all the Second Tier Bonds is then due and payable, all such money is required to be applied to the payment of the principal and interest then due and unpaid upon the Second Tier Bonds, without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Second Tier Bond over any other Second Tier Bond, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or preference except as to any difference in the respective rates of interest specified in the Second Tier Bonds.

(e) If there is no default existing in the payment of the principal of, premium, if any, or interest on the First Tier Bonds and Second Tier Bonds but the principal of, premium, if any, or interest on Third Tier Bonds has not been paid when due, unless the principal of all the Third Tier Bonds is then due and payable, all such money is required to be applied first: to the payment to the persons entitled thereto of all installments of interest then due on the Third Tier Bonds, in the order of priority established in the Supplemental Agreement entered into in conjunction with the issuance of such Third Tier Bonds, and within a class of Third Tier Bonds, in the order of the maturity of the installments of such interest, and, if the amount available is not sufficient to pay in full any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference within a class of Third Tier Bonds except as to any difference in the respective rates of interest specified in the Third Tier Bonds; and second: to the payment of the principal of any Third Tier Bonds, in the order of priority established in the Supplemental Agreement entered into in conjunction with the issuance of such Third Tier Bonds, which have matured, and, if the amount available is not sufficient to pay all of such matured Third Tier Bonds within such class, then to the payment thereof ratably, according to the amount due; or if no Third Tier Bonds have matured, to the retirement of Third Tier Bonds in accordance with the Supplemental Agreement executed and delivered in conjunction with the issuance of such Third Tier Bonds.

(f) If there is no default existing in the payment of the principal of, premium, if any, or interest on the First Tier Bonds and Second Tier Bonds, but the principal of all the Third Tier Bonds is then due and payable, all such money is required to be applied to the payment of the principal and interest then due and unpaid upon the Third Tier Bonds of each class, in the order of priority established in the Supplemental Agreement entered into in conjunction with the issuance of such Third Tier Bonds, without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Third Tier Bond over any other Third Tier Bond within the same class, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or preference except as to any difference in the respective rates of interest specified in the Third Tier Bonds.

Whenever money is to be applied by the Trustee as described herein, such money is required to be applied by the Trustee at such times as the Trustee in its sole discretion determines, having due regard to the amount of such money available for application and the likelihood of additional money becoming available for such application in the future; the deposit of such money with the Paying Agent, or otherwise setting aside such money, in trust for the proper purpose will constitute proper application by the Trustee; and the Trustee will incur no liability whatsoever to NTTA, to any bondholder or to any other person for any delay in applying any such money, so long as the Trustee acts with reasonable diligence, having due regard to the circumstances, and ultimately applies the same in accordance with the Trust Agreement as may be applicable at the time of application by the Trustee. Whenever the Trustee exercises such discretion in applying such money, it is required to fix the date (which will be an interest payment date unless the Trustee deems another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal to be paid on such date will cease to accrue. The Trustee is required to give such notice as it deems appropriate of the fixing of any such date, and is not required to make payment to the holder of any unpaid bond or the interest thereon unless such bond is presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

*Effect of Discontinuance of Proceedings.* In case any action taken by the Trustee on account of any default is discontinued or abandoned for any reason, then NTTA, the Trustee, any Bond Insurer of record, and the bondholders will be restored to their former positions and rights under the Trust Agreement, and all rights, remedies, powers and duties of the Trustee will continue as if no action had been taken.

*Majority of Bondholders May Control Proceedings.* Anything in the Trust Agreement to the contrary notwithstanding, the holders of not less than a majority in principal amount of the First Tier Bonds then Outstanding hereunder (or, if no First Tier Bonds are then Outstanding, then the holders of not less than a majority in principal amount of the Second Tier Bonds then Outstanding, or, if no First Tier Bonds or Second Tier Bonds are then Outstanding, then the holders of not less than a majority in principal amount of the Third Tier Bonds then Outstanding) have the right (subject to the Trustee's right to indemnity), by an instrument or concurrent instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting all remedial actions to be taken by the Trustee, provided that such direction is not in contradiction of



law or the Trust Agreement. The Trustee has the right to decline to follow any such direction which in the opinion of the Trustee would be unjustly prejudicial to bondholders not parties to such direction.

*Restrictions upon Action by Individual Bondholder.* No holder of any of the Outstanding bonds has any right to institute any suit, action, mandamus or other proceeding in equity or at law for the execution of any trust under the Trust Agreement or the protection or enforcement of any right under the Trust Agreement or any resolution of NTTA authorizing the issuance of bonds, or any right under the Turnpike Act or the laws of Texas, excepting only an action for the recovery of overdue and unpaid principal, interest or redemption premium, unless such holder has previously given to the Trustee written notice of the Event of Default or breach of trust or duty on account of which such suit or action is to be taken, and unless the holders of not less than twenty percent (20%) in principal amount of the bonds then Outstanding have made written request of the Trustee after the right to exercise such powers or right of action, as the case may be, have accrued, and have afforded the Trustee a reasonable opportunity either to proceed to exercise the powers granted under the Trust Agreement, granted by the Turnpike Act or by the laws of Texas, or to institute such action, suit or proceeding in its or their name, and unless, also, there has been offered to the Trustee reasonable security and indemnity satisfactory to it against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee has refused or neglected to comply with such request within a reasonable time; and such notification, request and offer of indemnity are hereby declared in every such case, at the option of the Trustee, to be conditions precedent to the execution of the powers and trusts of the Trust Agreement or for any other remedy thereunder or under the Turnpike Act or the laws of Texas. It is understood and intended that no one or more holders of the bonds secured by the Trust Agreement will have any right in any manner whatsoever by his or their action to affect, disturb or prejudice the security of the Trust Agreement, or to enforce any right thereunder or under the Turnpike Act or the laws of Texas with respect to the bonds or the Trust Agreement, except in the manner therein provided, and that all proceedings at law or in equity will be instituted, had and maintained in the manner therein provided and for the benefit of all holders of the Outstanding bonds, except as otherwise permitted therein with reference to over-due and unpaid principal, interest or redemption premium.

*Actions by Trustee.* All rights of action under the Trust Agreement or under any of the bonds, enforceable by the Trustee, may be enforced by it without the possession of any of the bonds or the production thereof on the trial or other proceeding relative thereto, and any such suit, action or proceeding instituted by the Trustee is required to be brought in its name for the benefit of all the holders of such bonds, subject to the Trust Agreement.

*No Remedy Exclusive.* No remedy under the Trust Agreement conferred upon or reserved to the Trustee, any Bond Insurer, or to the holders of the bonds is intended to be exclusive of any other remedy or remedies, and each and every such remedy will be cumulative and will be in addition to every other remedy given thereunder or now or hereafter existing at law or in equity or by statute.

*Delay or Omission Not Waiver; Repeated Exercise of Powers; Waiver of Default.* No delay or omission of the Trustee or of any holder of the bonds to exercise any right or power accruing upon any default will impair any such right or power or will be construed to be a waiver of any such default or any acquiescence therein; and every power and remedy given by the Trust Agreement to the Trustee and the holders of the bonds, respectively, may be exercised from time to time and as often as may be deemed expedient.

The Trustee may, and upon written request of the holders of not less than a majority in principal amount of the bonds then Outstanding is required to, waive any default which in its opinion has been remedied before the completion of the enforcement of any remedy under the Trust Agreement, but no such waiver will extend to or affect any other existing or any subsequent default or defaults or impair any rights or remedies consequent thereon.

*Notice of Default.* The Trustee is required to mail to each Bond Insurer of record, and each bondholder of record written notice of the occurrence of any Event of Default, within thirty (30) days after the Trustee has knowledge of such Event of Default. If in any Fiscal Year the total amount of deposits to the Sinking Funds is less than the amounts required to be deposited under the Trust Agreement, the Trustee, on or before the first day of the second month of the next succeeding Fiscal Year, is required to mail to each Bond Insurer of record, and all bondholders of record written notice of the failure to make such deposits. The Trustee will not be subject to any liability to any bondholder by reason of its failure to mail any such notice.

*Bond Insurer's Rights.* Notwithstanding any other provisions described under the caption "*Events of Default and Remedies*," if there has been filed with the Trustee a Bond Insurance Policy, or a certified copy thereof, with respect to any bond, all enforcement remedies and rights to waive defaults with respect to such bond may be exercised by the registered bondholders only with the written consent of such Bond Insurer, and, in the alternative, at the option of the Bond Insurer, such Bond Insurer may enforce any such remedies or waive any default with respect to such bond without the consent of the registered bondholder, and in such event such Bond Insurer will be deemed to be the bondholder for such purpose. Any Bond Insurer under a Bond Insurance Policy, or certified copy thereof, which has been filed with the Trustee and is then in effect will, for all purposes of the Trust Agreement, constitute and may be called a Bond Insurer of record.

## **Certain Matters Regarding the Trustee**

*General.* The Trustee has accepted and agreed to execute the trusts imposed upon it by the Trust Agreement. The Trustee is entitled to the benefit of certain protections under the Trust Agreement, including the right to rely on certificates required or permitted to be filed with it, to buy, sell own, hold and deal in any of the bonds issued under and secured by the Trust Agreement, to rely on the opinion of certain experts such as attorneys, engineers or accountants, and to indemnification against any liabilities except for those liabilities resulting from the negligence or willful misconduct of the Trustee.

NTTA is required to pay the Trustee reasonable compensation for all services performed by it under the Trust Agreement and all its reasonable expenses, charges and other disbursements and those of its attorneys, agents and employees incurred in and about the administration and execution of the trusts thereby created and the performance of their powers and duties under the Trust Agreement. If NTTA fails to make any payment to the Trustee pursuant to the Trust Agreement, the Trustee may make such payments from any money in its possession under the Trust Agreement and will be entitled to a preference therefor over any of the bonds Outstanding.

The Trustee is under no obligation to institute any suit, or to take any remedial proceeding under the Trust Agreement, or to enter any appearance or in any way defend in any suit in which it may be made defendant, or to take any steps in the execution of the trusts thereby created or in the enforcement of any rights and powers thereunder, until it is indemnified to its satisfaction against any and all costs and expenses, outlays and counsel fees and other reasonable disbursements, and against all liability; the Trustee may, nevertheless, begin suit, or appear in and defend suit, or do anything else in its judgment proper to be done by it, without indemnity, and in any such case NTTA is required to reimburse the Trustee for all costs and expenses, outlays and counsel fees and other reasonable disbursements properly incurred in connection therewith. If NTTA fails to make such reimbursement, the Trustee may reimburse itself from any money in its possession under the Trust Agreement and is entitled to a preference therefor over any of the bonds Outstanding.

Except as otherwise provided in the Trust Agreement, the Trustee will not be obliged to take notice or be deemed to have notice of any Event of Default hereunder, unless specifically notified in writing of such Event of Default by the holders of not less than twenty percent (20%) in principal amount of the bonds then Outstanding or by any Bond Insurer of record.

*Resignation of Trustee.* The Trustee may resign and be discharged from the trusts created pursuant to the Trust Agreement, by notice in writing to NTTA and mailed to each bondholder of record not less than sixty (60) days before the resignation is to take effect, but such resignation will take effect immediately upon the appointment of a new Trustee, if such new Trustee is appointed before the time limited by such notice and accepts such trusts; *provided, however,* such resignation will not become effective until and unless a successor trustee is appointed and accepts such trusts. If no successor trustee has been appointed and accepted such trusts within ninety (90) days after the date the resignation is to take effect, the schedule of fees and charges of the Trustee then in effect will terminate, and the Trustee may establish such fees and charges for its services as it deems necessary to reasonably compensate it for such services under the circumstances then existing.

*Removal of Trustee.* The Trustee may be removed at any time by an instrument or instruments in writing, signed by the holders of not less than a majority in principal amount of the bonds secured under the Trust Agreement and Outstanding and filed with NTTA. No removal of a Trustee will be effective until and unless a qualified successor trustee has been appointed and accepted the trusts under the Trust Agreement. The Trustee may also be removed at any time, for any reason, in the sole discretion of NTTA, by a resolution duly adopted by NTTA; provided that such resolution names a successor Trustee as described below, and directs the successor Trustee to mail written notice of such change in Trustee to each registered bondholder on or before the next interest payment date or redemption date, whichever is first.

*Appointment of Successor Trustee.* If at any time the Trustee resigns, or is removed, dissolved or otherwise becomes incapable of acting, or the bank or trust company acting as Trustee is taken over by any governmental official, agency, department or board, the position of Trustee will thereupon become vacant. If the position of Trustee becomes vacant for any reason, NTTA is required to appoint a Trustee to fill such vacancy. NTTA is required to publish notice of any such appointment once in each week for four successive weeks in a financial journal of general circulation published in the Borough of Manhattan, City and State of New York or mail notice to each bondholder of record.

At any time within one year after any such vacancy has occurred, the owners of a majority in principal amount of the bonds then Outstanding, by an instrument or instruments in writing, signed by such bondholders or their attorneys in fact, may appoint a successor Trustee, which will supersede any Trustee theretofore appointed by NTTA. If no appointment of a successor Trustee is made, the owner of any bond Outstanding under the Trust Agreement or any retiring Trustee may apply to any court of competent jurisdiction to appoint a successor Trustee. Such court may thereupon, after such notice, if any, as such court may deem proper, appoint a successor Trustee.

Any Trustee appointed is required to be a bank or trust company duly organized and doing business under the laws of the United States of America and located in the State of Texas, authorized under such laws to exercise corporate trust powers

and subject to examination by federal or state authority, of good standing, and having, at the time of its appointment, a combined capital and surplus aggregating not less than \$100,000,000.00.

Any Trustee which is replaced by a successor Trustee is required to promptly turn over to such successor Trustee all funds, books, and records pertaining to the Trust Agreement.

### **Modification of the Trust Agreement**

*Supplemental Agreements by NTTA and Trustee.* NTTA and the Trustee may, from time to time and at any time, without the consent of the owners of the bonds, enter into such agreements supplemental to the Trust Agreement as will not be in conflict with the terms and provisions thereof (which supplemental agreements will thereafter form a part thereof),

- (a) to cure any ambiguity or formal defect or omission in the Trust Agreement or in any Supplemental Agreement, or
- (b) to grant to or confer upon the Trustee for the benefit of the bondholders any additional rights, remedies, powers, authority or security that may lawfully be granted to or conferred upon the bondholders or the Trustee, or
- (c) to close the Trust Agreement against or provide limitations and restrictions, in addition to the limitations and restrictions contained in the Trust Agreement, with respect to the future issuance of Additional Bonds, or
- (d) to set forth additional covenants and provisions with respect to any improvements, extensions, enlargements, or projects in connection with the Tollway, and any bonds issued in connection therewith, or
- (e) to set forth additional provisions, if deemed necessary or advisable, with respect to the issuance of the Additional Bonds, including provisions for the use and functioning of a Construction Fund for additional projects, and the addition of certain other funds and accounts necessary or convenient for effecting the payment of principal of or interest on such bonds or creation and maintenance of a reserve fund for such bonds, or
- (f) to comply with additional requirements to the extent necessary in the opinion of Bond Counsel to preserve the exemption from federal income taxation of interest on the bonds under Section 103 of the Code, or
- (g) to make any changes or amendments requested by S&P, Fitch or Moody's, as a condition to the issuance or maintenance of a rating, which changes or amendments do not, in the judgment of NTTA, materially adversely affect the interests of the owners of the Outstanding bonds or any Bond Insurer of record, or
- (h) to the extent permitted by law, to permit NTTA to enter into Qualified Credit Agreements or to issue Additional Bonds in foreign denominated currencies; provided, however, no such amendment may be made unless NTTA has received a letter from S&P, Fitch and Moody's to the effect that such amendment will not result in any of such rating agencies lowering the assigned rating on the then Outstanding bonds, or
- (i) upon direction of NTTA, provided that the Trustee receives a written confirmation from each rating agency then maintaining a rating on the First Tier Bonds and the Second Tier Bonds to the effect that the execution and delivery of such Supplemental Agreement will not in and of itself cause such rating agency to reduce or withdraw the then current rating on the First Tier Bonds and the Second Tier Bonds, together with the prior written consent of each Bond Insurer and other Credit Provider then providing credit support for any series of bonds, *provided, however*, that no such amendment will have the effect of amending a provision of the Trust Agreement that would otherwise require the consent of the holders of not less than 51% in aggregate principal amount of bonds Outstanding.

*Modification of Agreements with Consent of Holders of 51% of Bonds; Restrictions on Modification; Notices.* Except as set forth below and except as set forth above under the caption "Supplemental Agreements by NTTA and Trustee," the holders of not less than 51% in aggregate principal amount of the bonds then Outstanding, or if less than all of the bonds then Outstanding are affected by the modification or amendment, the holders of not less than 51% in aggregate principal amount of the bonds so affected and Outstanding, will have the right, from time to time, notwithstanding anything contained in the Trust Agreement to the contrary, to consent to and approve the execution by NTTA and the Trustee of such agreement or agreements supplemental to the Trust Agreement as is deemed necessary or desirable by NTTA for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained in the Trust Agreement or any Supplemental Agreement; provided, however, that nothing therein contained will permit (a) an extension of the principal of or the interest on any bond, or (b) a reduction in the principal amount of any bond or the redemption premium or the rate of interest thereon, or (c) the creation of a lien upon or a pledge of revenues ranking prior to or on a parity with (to the extent not permitted thereunder) the lien or pledge created by the Trust Agreement, or (d) a preference or priority of any First Tier Bonds, Second Tier Bonds or Third Tier Bonds, as the case may be, over any other First Tier Bonds, Second Tier Bonds, or Third Tier Bonds (except, in the case of Third Tier Bonds, as is set forth in the Supplemental Agreement pursuant to which a series of Third Tier

Bonds are issued) or (e) a reduction in the aggregate principal amount of the bonds required for consent to such Supplemental Agreement.

If at any time NTTA requests that the Trustee to enter into a Supplemental Agreement for the purposes described herein, the Trustee is required, at the expense of NTTA, to cause notice of the proposed execution of such Supplemental Agreement to be published once in each week for four successive weeks in a financial journal of general circulation published in the Borough of Manhattan, City and State of New York or to cause such notice to be mailed, postage prepaid, to all registered owners of bonds then Outstanding at their addresses as they appear on the registration books. Said notice is required to briefly set forth the nature of the proposed Supplemental Agreement and to state that a copy thereof is on file at the office of the Trustee for inspection by all bondholders. The Trustee will not be subject to any liability to any bondholder by reason of its failure to mail the notice described herein, and any such failure will not affect the validity of such Supplemental Agreement when consented to and approved as provided for herein.

Whenever, at any time within one year after the date of the first publication of such notice or the date of mailing of such notice, as applicable, NTTA is required to deliver to the Trustee an instrument or instruments purporting to be executed by the holders of not less than 51% in aggregate principal amount of the bonds then Outstanding (or, in the case that less than all of the bonds then Outstanding are affected by the modification or amendment, the holders of not less than 51% in aggregate principal amount of the bonds so affected and Outstanding at the time of the execution), which instrument or instruments are required to refer to the proposed Supplemental Agreement described in such notice and to specifically consent to and approve the execution thereof in substantially the form of the copy thereof referred to in such notice as on file with the Trustee, thereupon, but not otherwise, the Trustee may execute such Supplemental Agreement in substantially such form, without liability or responsibility to any holder of any bond, whether or not such holder has consented thereto.

If the holders of not less than 51% in aggregate principal amount of the bonds Outstanding at the time of the execution (or, in the case that less than all of the bonds then Outstanding are affected by the modification or amendment, the holders of not less than 51% in aggregate principal amount of the bonds so affected and Outstanding at the time of the execution) of such Supplemental Agreement have consented to and approved the execution thereof, no holder of any bond will have any right to object to the execution of such Supplemental Agreement or to object to any of the terms and provisions contained therein or the operation thereof, or in any manner to question the propriety of the execution thereof, or to enjoin or restrain the Trustee or NTTA from executing the same or from taking any action pursuant to the provisions thereof.

Upon the execution of any Supplemental Agreement as described herein, the Trust Agreement will be modified and amended in accordance therewith, and the respective rights, duties, and obligations under the Trust Agreement of NTTA and the Trustee and all holders of bonds then Outstanding will thereafter be determined, exercised and enforced thereunder, subject in all respects to such modifications and amendments.

*Modification of Trust Agreement with Consent of all Holders.* Notwithstanding anything contained in the Trust Agreement, the rights and obligations of NTTA and of the holders of the bonds and the terms and provisions of the bonds and the Trust Agreement or any Supplemental Agreement, may be modified or altered in any respect with the consent of NTTA and the consent of the holders of all of the bonds then Outstanding.

*[Remainder of page intentionally left blank]*

**APPENDIX E**

**FORMS OF CO-BOND COUNSEL OPINION**

[THIS PAGE INTENTIONALLY LEFT BLANK]

## FORMS OF CO-BOND COUNSEL OPINION

### Proposed Form of Opinion of Co-Bond Counsel for Series 2019A Bonds

*An opinion in substantially the following form will be delivered by McCall, Parkhurst & Horton L.L.P. and by Mahomes Bolden PC, co-bond counsel, upon the delivery of the Bonds, assuming no material changes in facts or law.*

\_\_\_\_\_, 2019

\$429,870,000

NORTH TEXAS TOLLWAY AUTHORITY SYSTEM FIRST TIER REVENUE REFUNDING BONDS,  
SERIES 2019A

DATED \_\_\_\_\_, 2019

AS CO-BOND COUNSEL for the North Texas Tollway Authority ("NTTA"), we have examined the legality and validity of the issue of bonds described above (the "*Bonds*"), which bear interest from the dates and mature on the dates specified on the face of the Bonds, all in accordance with the resolution (the "*Bond Resolution*") of the Board of Directors of NTTA (the "*Board*") authorizing the issuance of such Bonds. Terms used herein and not otherwise defined shall have the meaning given in the Bond Resolution or the Trust Agreement (as defined herein).

WE HAVE EXAMINED the applicable and pertinent provisions of the Constitution and laws of the State of Texas, a transcript of certified proceedings of NTTA, and other pertinent instruments relating to the authorization, issuance, and delivery of the Bonds; and we have examined various certificates and documents executed by officers and officials of NTTA upon which certificates and documents we rely as to certain matters stated below. We have also examined one executed Bond which we found to be in proper form and duly executed.

BASED ON SAID EXAMINATION, IT IS OUR OPINION that NTTA is a body corporate and politic and a political subdivision of the State of Texas, created by Senate Bill 370 enacted by the 75th Legislative Session of the Texas Legislature and functioning under Chapter 366, Texas Transportation Code, as amended (the "*Act*"); that the Bonds have been duly authorized; and that the Bonds have been duly issued and delivered, all in accordance with law, and that, except as may be limited by laws relating to bankruptcy, reorganization, and other similar matters affecting creditors' rights or by general principles of equity which permit the exercise of judicial discretion, (i) the Bonds constitute valid and legally binding obligations of NTTA which are payable as to principal and interest from the sources provided in the Bond Resolution and the Amended and Restated Trust Agreement between NTTA and Wells Fargo Bank, National Association, dated as of April 1, 2008, as supplemented through the date hereof (as supplemented, the "*Trust Agreement*"), (ii) the covenants and agreements in the Trust Agreement constitute valid and binding obligations of NTTA, (iii) the Bonds constitute valid and legally binding obligations of NTTA secured as First Tier Bonds, on a parity with other Outstanding First Tier Bonds, under the Trust Agreement, (iv) the Bonds are payable in accordance with the priorities established in the Trust Agreement from the sources provided therein, and (v) the Trust Agreement is authorized by law, has been duly executed and delivered, and is valid and legally binding upon and enforceable by the parties thereto in accordance with its terms and provisions.

NTTA has reserved the right, subject to the restrictions stated in the Trust Agreement, to issue Additional Bonds which also may be secured by the Trust Agreement on the terms and conditions described therein.

NTTA also has reserved the right to amend the Trust Agreement in the manner provided therein; and under some (but not all) circumstances amendments thereto must be approved by the registered owners of fifty-one percent of all outstanding bonds affected by such amendment and secured by the Trust Agreement.

THE REGISTERED OWNERS of the Bonds shall never have the right to demand payment of the principal thereof or interest thereon out of any funds raised or to be raised by taxation, or from any source whatsoever other than as described in the Trust Agreement.

IT IS FURTHER OUR OPINION THAT, except as discussed below, the interest on the Bonds is excludable from the gross income of the owners thereof for federal income tax purposes under the statutes, regulations, published rulings and court decisions existing on the date of this opinion. We are further of the opinion that the Bonds are not "specified private activity bonds" and that, accordingly, interest on the Bonds will not be included as an individual alternative minimum tax preference item under Section 57(a)(5) of the Internal Revenue Code of 1986 (the "*Code*"). In expressing the aforementioned opinions,

we have relied on, and assume compliance by NTTA with, certain covenants regarding the use and investment of the proceeds of the Bonds and the use of the property financed or refinanced therewith, and the verification report of Public Finance Partners LLC. We call your attention to the fact that failure by NTTA to comply with such representations and covenants may cause the interest on the Bonds to become includable in gross income retroactively to the date of issuance of the Bonds.

EXCEPT AS STATED ABOVE, we express no opinion as to any other federal, state, or local income tax consequences of acquiring, carrying, owning, or disposing of the Bonds, including the amount, accrual or receipt of interest on the Bonds. Owners of the Bonds should consult their tax advisors regarding applicability of any collateral tax consequences of owning the Bonds.

WE EXPRESS NO OPINION as to any insurance policies or credit facilities issued with respect to the payments due for the principal of and interest on the Bonds, nor as to any such insurance policies or credit facilities issued in the future.

OUR OPINIONS ARE BASED ON EXISTING LAW, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may thereafter come to our attention or to reflect any changes in any law that may thereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service (the "Service"); rather, such opinions represent our legal judgment based upon our review of existing law and in reliance upon the representations and covenants referenced above that we deem relevant to such opinions. The Service has an ongoing audit program to determine compliance with rules that relate to whether interest on state or local obligations is includable in gross income for federal income tax purposes. No assurance can be given whether or not the Service will commence an audit of the Bonds. If an audit is commenced, in accordance with its current published procedures the Service is likely to treat NTTA as the taxpayer. We observe that NTTA has covenanted not to take any action, or omit to take any action within its control, that if taken or omitted, respectively, may result in the treatment of interest on the Bonds as includable in gross income for federal income tax purposes.

WE HAVE ACTED AS CO-BOND COUNSEL for NTTA for the purpose of rendering an opinion with respect to the legality and validity of the Bonds under the Constitution and laws of the State of Texas and with respect to the exclusion from gross income of the interest on the Bonds for federal income tax purposes. We have not been requested to investigate or verify, and have not investigated or verified, any records, data, or other material relating to the financial condition or capabilities of NTTA and have not assumed any responsibility with respect thereto. We express no opinion and make no comment with respect to the marketability of the Bonds.

The foregoing opinions represent our legal judgment based upon a review of existing legal authorities that we deem relevant to render such opinions and are not a guarantee of a result.

Respectfully,



**Proposed Form of Opinion of Co-Bond Counsel for Series 2019B Bonds**

*An opinion in substantially the following form will be delivered by McCall, Parkhurst & Horton L.L.P. and by Mahomes Bolden PC, co-bond counsel, upon the delivery of the Bonds, assuming no material changes in facts or law.*

\_\_\_\_\_, 2019

\$222,510,000

NORTH TEXAS TOLLWAY AUTHORITY SYSTEM SECOND TIER REVENUE REFUNDING BONDS, SERIES 2019B

DATED \_\_\_\_\_, 2019

AS CO-BOND COUNSEL for the North Texas Tollway Authority ("NTTA"), we have examined the legality and validity of the issue of bonds described above (the "Bonds"), which bear interest from the dates and mature on the dates specified on the face of the Bonds, all in accordance with the resolution (the "Bond Resolution") of the Board of Directors of NTTA (the "Board") authorizing the issuance of such Bonds. Terms used herein and not otherwise defined shall have the meaning given in the Bond Resolution or the Trust Agreement (as defined herein).

WE HAVE EXAMINED the applicable and pertinent provisions of the Constitution and laws of the State of Texas, a transcript of certified proceedings of NTTA, and other pertinent instruments relating to the authorization, issuance, and delivery of the Bonds; and we have examined various certificates and documents executed by officers and officials of NTTA upon which certificates and documents we rely as to certain matters stated below. We have also examined one executed Bond which we found to be in proper form and duly executed.

BASED ON SAID EXAMINATION, IT IS OUR OPINION that NTTA is a body corporate and politic and a political subdivision of the State of Texas, created by Senate Bill 370 enacted by the 75th Legislative Session of the Texas Legislature and functioning under Chapter 366, Texas Transportation Code, as amended (the "Act"); that the Bonds have been duly authorized; and that the Bonds have been duly issued and delivered, all in accordance with law, and that, except as may be limited by laws relating to bankruptcy, reorganization, and other similar matters affecting creditors' rights or by general principles of equity which permit the exercise of judicial discretion, (i) the Bonds constitute valid and legally binding obligations of NTTA which are payable as to principal and interest from the sources provided in the Bond Resolution and the Amended and Restated Trust Agreement between NTTA and Wells Fargo Bank, National Association, dated as of April 1, 2008, as supplemented through the date hereof (as supplemented, the "Trust Agreement"), (ii) the covenants and agreements in the Trust Agreement constitute valid and binding obligations of NTTA, (iii) the Bonds constitute valid and legally binding obligations of NTTA secured as Second Tier Bonds, on a parity with other Outstanding Second Tier Bonds, under the Trust Agreement, (iv) the Bonds are payable in accordance with the priorities established in the Trust Agreement from the sources provided therein, and (v) the Trust Agreement is authorized by law, has been duly executed and delivered, and is valid and legally binding upon and enforceable by the parties thereto in accordance with its terms and provisions.

NTTA has reserved the right, subject to the restrictions stated in the Trust Agreement, to issue Additional Bonds which also may be secured by the Trust Agreement on the terms and conditions described therein.

NTTA also has reserved the right to amend the Trust Agreement in the manner provided therein; and under some (but not all) circumstances amendments thereto must be approved by the registered owners of fifty-one percent of all outstanding bonds affected by such amendment and secured by the Trust Agreement.

THE REGISTERED OWNERS of the Bonds shall never have the right to demand payment of the principal thereof or interest thereon out of any funds raised or to be raised by taxation, or from any source whatsoever other than as described in the Trust Agreement.

IT IS FURTHER OUR OPINION THAT, except as discussed below, the interest on the Bonds is excludable from the gross income of the owners thereof for federal income tax purposes under the statutes, regulations, published rulings and court decisions existing on the date of this opinion. We are further of the opinion that the Bonds are not "specified private activity bonds" and that, accordingly, interest on the Bonds will not be included as an individual alternative minimum tax preference item under Section 57(a)(5) of the Internal Revenue Code of 1986 (the "Code"). In expressing the aforementioned opinions, we have relied on, and assume compliance by NTTA with, certain covenants regarding the use and investment of the proceeds of the Bonds and the use of the property financed or refinanced therewith, and the verification report of Public Finance Partners LLC. We call your attention to the fact that failure by NTTA to comply with such representations and covenants may cause the interest on the Bonds to become includable in gross income retroactively to the date of issuance of the Bonds.

EXCEPT AS STATED ABOVE, we express no opinion as to any other federal, state, or local income tax consequences of acquiring, carrying, owning, or disposing of the Bonds including the amount, accrual or receipt of interest on, the Bonds. Owners of the Bonds should consult their tax advisors regarding applicability of any collateral tax consequences of owning the Bonds.

WE EXPRESS NO OPINION as to any insurance policies or credit facilities issued with respect to the payments due for the principal of and interest on the Bonds, nor as to any such insurance policies or credit facilities issued in the future.

OUR OPINIONS ARE BASED ON EXISTING LAW, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may thereafter come to our attention or to reflect any changes in any law that may thereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service (the "*Service*"); rather, such opinions represent our legal judgment based upon our review of existing law and in reliance upon the representations and covenants referenced above that we deem relevant to such opinions. The Service has an ongoing audit program to determine compliance with rules that relate to whether interest on state or local obligations is includable in gross income for federal income tax purposes. No assurance can be given whether or not the Service will commence an audit of the Bonds. If an audit is commenced, in accordance with its current published procedures the Service is likely to treat NTTA as the taxpayer. We observe that NTTA has covenanted not to take any action, or omit to take any action within its control, that if taken or omitted, respectively, may result in the treatment of interest on the Bonds as includable in gross income for federal income tax purposes.

WE HAVE ACTED AS CO-BOND COUNSEL for NTTA for the purpose of rendering an opinion with respect to the legality and validity of the Bonds under the Constitution and laws of the State of Texas and with respect to the exclusion from gross income of the interest on the Bonds for federal income tax purposes. We have not been requested to investigate or verify, and have not investigated or verified, any records, data, or other material relating to the financial condition or capabilities of NTTA and have not assumed any responsibility with respect thereto. We express no opinion and make no comment with respect to the marketability of the Bonds.

The foregoing opinions represent our legal judgment based upon a review of existing legal authorities that we deem relevant to render such opinions and are not a guarantee of a result.

Respectfully,

## **APPENDIX F**

### **DESCRIPTION OF SHARED SECOND TIER DEBT SERVICE RESERVE FUND POLICY AND PROVIDER**

**THE FOLLOWING INFORMATION HAS BEEN OBTAINED FROM ASSURED GUARANTY MUNICIPAL CORP.'S ("AGM") WEBSITE FOR USE IN THIS OFFICIAL STATEMENT. NONE OF NTTA, THE CO-FINANCIAL ADVISORS OR THE UNDERWRITERS MAKE ANY REPRESENTATION AS TO THE COMPLETENESS AND ACCURACY OF SUCH INFORMATION OR AS TO THE ABSENCE OF MATERIAL ADVERSE CHANGES IN SUCH INFORMATION SUBSEQUENT TO THE DATE OF THE OFFICIAL STATEMENT.**

[THIS PAGE INTENTIONALLY LEFT BLANK]

In connection with the issuance of the Series 2017B Bonds, NTTA obtained a municipal bond debt service reserve policy (the "Reserve Policy") from AGM for the purpose of funding a portion of the 2017 Shared Second Tier Required Reserve, which also secures the Series 2018 Bonds and the Series 2019B Bonds. Such Reserve Policy will not protect investors against changes in the market value of the Bonds, which market value may be impaired as a result of changes in prevailing interest rates, changes in applicable ratings or other causes.

### **ASSURED GUARANTY MUNICIPAL CORP.**

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. ("AGL"), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol "AGO". AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and global public finance, infrastructure and structured finance markets. Neither AGL nor any of its shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM's financial strength is rated "AA" (stable outlook) by S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC ("S&P"), "AA+" (stable outlook) by Kroll Bond Rating Agency, Inc. ("KBRA") and "A2" (stable outlook) by Moody's Investors Service, Inc. ("Moody's"). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM's long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

#### *Current Financial Strength Ratings*

On December 21, 2018, KBRA announced it had affirmed AGM's insurance financial strength rating of "AA+" (stable outlook). AGM can give no assurance as to any further ratings action that KBRA may take.

On June 26, 2018, S&P announced it had affirmed AGM's financial strength rating of "AA" (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

On May 7, 2018, Moody's announced it had affirmed AGM's insurance financial strength rating of "A2" (stable outlook). AGM can give no assurance as to any further ratings action that Moody's may take.

For more information regarding AGM's financial strength ratings and the risks relating thereto, see AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

#### *Capitalization of AGM*

At March 31, 2019:

- The policyholders' surplus of AGM was approximately \$2,523 million.
- The contingency reserves of AGM and its indirect subsidiary Municipal Assurance Corp. ("MAC") (as described below) were approximately \$1,054 million. Such amount includes 100% of AGM's contingency reserve and 60.7% of MAC's contingency reserve.
- The net unearned premium reserves and net deferred ceding commission income of AGM and its subsidiaries (as described below) were approximately \$1,848 million. Such amount includes (i) 100% of the net unearned premium reserve and deferred ceding commission income of AGM, (ii) the net unearned

premium reserves and net deferred ceding commissions of AGM's wholly owned subsidiary Assured Guaranty (Europe) plc ("AGE"), and (iii) 60.7% of the net unearned premium reserve of MAC.

The policyholders' surplus of AGM and the contingency reserves, net unearned premium reserves and deferred ceding commission income of AGM and MAC were determined in accordance with statutory accounting principles. The net unearned premium reserves and net deferred ceding commissions of AGE were determined in accordance with accounting principles generally accepted in the United States of America.

#### *Incorporation of Certain Documents by Reference*

Portions of the following documents filed by AGL with the Securities and Exchange Commission (the "SEC") that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof:

- (i) the Annual Report on Form 10-K for the fiscal year ended December 31, 2018 (filed by AGL with the SEC on March 1, 2019); and
- (ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2019 (filed by AGL with the SEC on May 10, 2019).

All consolidated financial statements of AGM and all other information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof "furnished" under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC's website at <http://www.sec.gov>, at AGL's website at <http://www.assuredguaranty.com>, or will be provided upon request to Assured Guaranty Municipal Corp.: 1633 Broadway, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included in this APPENDIX F or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies or supersedes such previously included AGM Information. Any AGM Information so modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

#### *Miscellaneous Matters*

AGM makes no representation regarding the Series 2019B Bonds or the advisability of investing in the Series 2019B Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented in this APPENDIX F.



