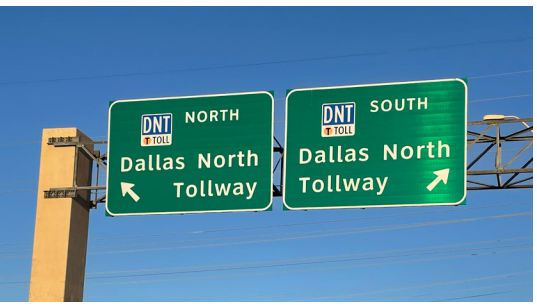
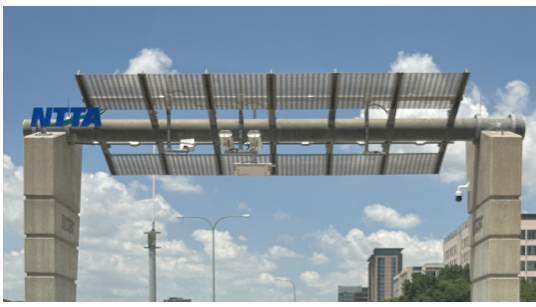
NORTH TEXAS TOLLWAY AUTHORITY

SYSTEM ANNUAL INSPECTION REPORT

Fiscal Year 2025

Chisholm Trail Parkway





VRX

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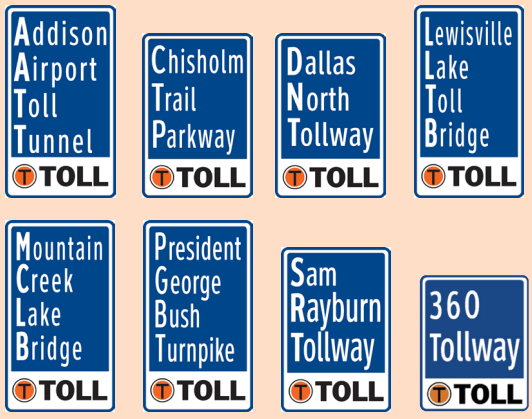
NTTA Mission Statement

"We are committed to providing a safe and reliable toll road system, increase value and mobility options for our customers, operate the Authority in a businesslike manner, protect our bondholders, and partner to meet our region's growing need for transportation infrastructure."

NTTA Toll System



September 26, 2025

James Hofmann
Executive Director
North Texas Tollway Authority
5900 W. Plano Parkway
Plano, Texas 75093

Subject: FY 2025 GEC System Annual Inspection

Dear Mr. Hofmann:

As General Engineering Consultant to the North Texas Tollway Authority and in accordance with the requirements set forth in the NTTA System Amended and Restated Trust Agreement Section 504, VRX, Inc. (VRX) is pleased to submit the Fiscal Year 2025 (FY25) System Annual Inspection Report.

VRX completed the System inspections in July 2025 and reports that the system's tollways, bridges, tunnel, and associated facilities have been maintained in generally good repair, working order and condition. This determination is based on a general visual observation of the roadway, walls, bridges, tunnel, and facilities. Results of the observations are presented in greater detail within this report. A complete list of observations has been transmitted to the Maintenance Department under a separate cover.

VRX recommends that NTTA continue to implement the routine maintenance as budgeted and scoped, and to also implement the major maintenance projects planned for the ensuing fiscal year. Through coordination with NTTA staff and review of the anticipated Reserve Maintenance Funded (RMF) projects scheduled for FY26, the following budgets, which will be presented at the October 8, 2025, Board of Directors' meeting and subject to Board approval at the December 2025 Board Meeting, are recommended:

Operation and Maintenance Fund (OMF):	$273.1M
Reserve Maintenance Fund (RMF):	$94.3M

The overall condition of the tollways, toll bridges, toll tunnel, and associated facilities, along with the appropriate funding levels for the System operating budgets, demonstrates NTTA's commitment to maintain and operate a safe and reliable toll road system in the North Texas region.

Respectfully submitted,

Scott A. Brush, P.E.

Scott A. Brush, PE
General Engineering Consultant
Project Director

cc: Elizabeth Mow, PE, NTTA (w/1 copy)
Amitis Meshkani, PE, NTTA (w/1 copy)
Dee Runnels, NTTA (w/1 copy and electronic pdf)
Kevin Howlett, PE, Tetra Tech Architects & Engineers (w/1 copy)
Tammy Sims, PE, AtkinsRealis (w/1 copy)
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ACRONYMS AND ABBREVIATIONS

360T	360 Tollway
AATT	Addison Airport Toll Tunnel
BRINSAP	Bridge Inventory Inspection and Appraisal Program
CIP	Cast-in-Place
CMU	Concrete Masonry Unit
COMA	Comprehensive Maintenance Agreement
COSS	Cantilever Overhead Sign Support
CR	County Road
CTP	Chisholm Trail Parkway
DNT	Dallas North Tollway
FY	Fiscal Year
FOC	Frisco Operations Center
GASB	Governmental Accounting Standards Board
GEC	General Engineering Consultant
HMAC	Hot Mix Asphalt Concrete
HMIP	High-Mast Illumination Pole
IH	Interstate Highway
LLTB	Lewisville Lake Toll Bridge
MCLB	Mountain Creek Lake Bridge
MLG	Mainlane Gantry
MLP	Mainlane Plaza
MMC	Maintenance Management Consultant
MRP	Maintenance Rating Program
NTTA	North Texas Tollway Authority
OMF	Operation and Maintenance Fund
OSB	Overhead Sign Bridge
OSS	Overhead Sign Structure
POC	Plano Operations Center
PGBT	President George Bush Turnpike
QMS	Quality Management System
RMF	Reserve Maintenance Fund
SH	State Highway
SRT	Sam Rayburn Tollway
TRM	Total Routine Maintenance
TxDOT	Texas Department of Transportation
US	U. S. Highway

SYSTEM MAP

NTTA System

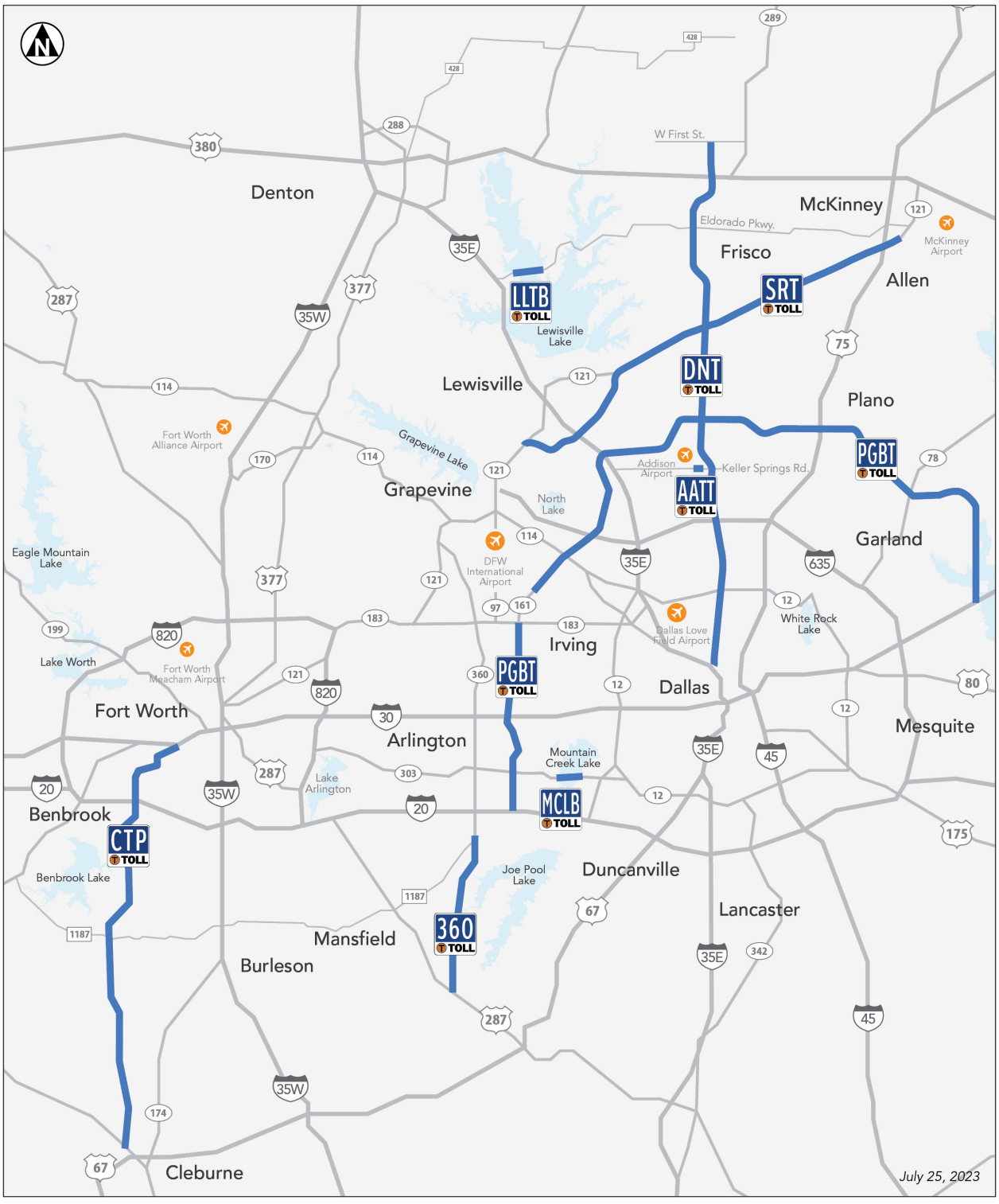

Figure 1: System Map

EXECUTIVE SUMMARY

As described in the requirements set forth in the North Texas Tollway Authority System Amended and Restated Trust Agreement Section 504, the Consulting Engineers make an inspection of the Tollway on or before the 90th day prior to the end of the fiscal year and submit a report setting forth (a) their findings whether the Tollway has been maintained in good repair, working order, and condition and (b) their advice and recommendation 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.

The Tollway (or System) consists of the Dallas North Tollway, President George Bush Turnpike, Sam Rayburn Tollway, Chisholm Trail Parkway, Mountain Creek Lake Bridge, Lewisville Lake Toll Bridge, Addison Airport Toll Tunnel, 360 Tollway, and associated facilities. The System encompasses much of the North Texas region and spans Dallas, Collin, Tarrant, Johnson, Denton, and Ellis Counties.

VRX, Inc. (VRX), as General Engineering Consultant, completed the inspections in July 2025 and is pleased to report that the system as a whole has been maintained in good repair, working order, and condition. This observation was based on a general visual inspection of the roadway, walls, bridges, tunnel, and facilities.

VRX recommends that NTTA continue to implement the routine maintenance as budgeted and scoped, and to also implement the Reserve Maintenance Projects planned for the ensuing fiscal year and beyond.

Working with NTTA staff, VRX has reviewed the 2026 NTTA System preliminary budget which includes the Operation and Maintenance Fund and Reserve Maintenance Fund and concurs that they are in line with major items for administrative and roadway costs. The following budgets are recommended and will be presented at the Board of Director's meeting on October 8, 2025, and subject to Board approval in December 2025:

Table 1: Budget Recommendations

FUNDS	BUDGET
Operation and Maintenance Fund (OMF)	$273.1M
Reserve Maintenance Fund (RMF)	$94.3M

The overall condition of the System, and funding levels for the System operating budgets, demonstrates the North Texas Tollway Authority's commitment to maintain and operate a safe and reliable toll road system for the North Texas region.

1.0 INTRODUCTION

1.1 Background

As the General Engineering Consultant (GEC) to the North Texas Tollway Authority (NTTA) and in compliance with the requirements set forth in the NTTA System Amended and Restated Trust Agreement Section 504, VRX, Inc. (VRX) conducted the annual visual inspection of the NTTA System (System). The assets inspected included roadways (mainlanes and frontage roads), bridges, retaining walls, tunnel, roadway appurtenances, and associated facilities. The GEC also conducts specialized inspections consisting of detailed pavement assessments, structural inspections of overhead signs and high mast illumination poles and retroreflectivity of pavement markings, which are performed to complement the annual inspection. The observations and findings noted should be monitored or addressed by NTTA, as necessary, to ensure the assets meet their intended life expectancy. These observations and inspections provide a basis to plan funding levels needed to maintain assets for the maintenance portion of the Operation and Maintenance (O&M) and the Reserve Maintenance Fund (RMF) for the ensuing fiscal year.

1.2 Annual Inspection Process

The GEC Annual Inspection assessed four main System elements: roadway, walls, bridges and facilities. The roadway portion of the inspection focused on the pavement, drainage structures, erosion, pavement markings, illumination, and barriers (Table 2). The wall inspection focused on panels, joints, coping, flumes, mow strips, inlets, rails, riprap, visible underdrain cleanouts, sound walls, and adjacent elements (Table 3). The bridge inspection focused on the deck, superstructure, substructure, and drainage components (Table 4). The facility inspection focused on the interior and exterior components of plaza operations, Fiber Huts, Winter Weather Operation Facilities, maintenance operation and administrative office buildings and sites. (Table 5)

Table 2: Roadway Inspection Elements

CATEGORY	ELEMENT	DESCRIPTION OF POTENTIAL OBSERVATIONS
Pavement	Travel Lanes & Shoulders	Identify distresses (spalls, joint damage, faulting or potholes) that affect the performance and ride quality
	Curb & Gutter	Identify damage such as cracks, spalls or settlement
	Concrete Barrier	Identify damage such as cracks or spalls, or alignment issues
Roadside	Inlets & Drainage Structures	Identify damage such as cracks, spalls, or settlement
	Culverts	Identify erosion at apron, spalls and cracks
	Embankment/Slopes	Identify erosion
	Landscape Beds	Identify erosion, damaged or exposed irrigation lines and damage to landscape boarders
	Pavement Markings	Identify damaged, missing or non-reflective markings and markers
	Signage	Identify damaged, faded or non-reflective signage
	Illumination	Identify lighting not properly functioning; foundation issues or damaged/ missing access panel
	Metal Beam Guard Fence	Identify damage by impact, settlement, misaligned, or erosion around posts
	Impact Attenuators	Identify damage by impact

To ensure the condition of the System, retaining walls and their associated appurtenances are inspected. The inspection covers structural and drainage elements, as shown in Table 3 below.

Table 3: Wall Inspection Elements

CATEGORY	ELEMENT	DESCRIPTION OF POTENTIAL OBSERVATIONS
Retaining Walls	Structure	Identify racked panels, cracks, spalls, backfill migration, or coping displacement
	Drainage	Identify cracks or settlement in flumes, erosion adjacent to drainage structures or issues with visible cleanouts

Bridge inspections are conducted by the Texas Department of Transportation's (TxDOT) Bridge Inventory, Inspection and Appraisal Program (BRINSAP). The findings from the most recent bridge inspections are reviewed by the GEC prior to performing the supplemental inspection consisting of categories and specific features as shown in Table 4 below.

Table 4: Bridge Inspection Elements

CATEGORY	ELEMENT	DESCRIPTION OF POTENTIAL OBSERVATIONS
Bridge	Deck	Identify surface deterioration, damaged joints, drainage issues, rail cracks or spall
	Superstructure	Identify concrete beams with cracks, spalls, damaged connections, damaged or deteriorated bearings associated with concrete and steel beams
	Substructure	Identify cracks or spalls in abutment and bent caps
	Channel	Identify erosion around columns and banks
	Culverts	Identify cracks, spalls erosion on or around footings, headwalls and wingwalls
	Approaches	Identify cracks, spalls, or damaged joints
	Miscellaneous	Vertical clearance signs, illumination, warning devices or utility lines

NTTA-owned office buildings, operation centers, plazas, IT buildings, and the AATT facilities that support the System were inspected. The condition inspections were broken into seven categories: (1) Architectural, (2) Mechanical, (3) Electrical, (4) Safety, (5) Gantry Building, (6) Fiber/MLG/IT Building and (7) Unique Items. Each category consists of specific features that were inspected as shown in Table 5 below.

Table 5: Facility Inspection Elements

CATEGORY	ELEMENT	DESCRIPTION OF POTENTIAL OBSERVATIONS
Architectural	Exterior/General	Identify any tripping hazards or ADA non-compliance, erosion or landscape failures, exterior sealant and joint conditions, masonry damage, rust, or corrosion, railing, fencing or signage damage
	Interior/General	Identify any issues with ADA non-compliance, evidence of leaks, damaged interior finishes, functionality of doors and hardware, fire extinguisher expiration and structural stability
	Roofing	Identify any issues with roofing membrane, fasteners, penetration treatments and general drainage
Mechanical	Plumbing	Identify functionality of all fixtures, observed leaks piping conditions, and proper drainage
	HVAC System	Identify issues of functionality, equipment and refrigerant piping conditions, and age-related obsolescence
Electrical	Electrical System	Identify issues of functionality and code compliance with lighting and power systems, panelboards, transformers, transfer switches and generators
Safety	Egress	Identify issues with egress routes, exit signage improper materials storage, guard rails and ladders
	Fire Protection & Alarms	Identify any issues with fire alarm and fire protection systems
Gantry Building	Structural Elements	Identify issues with concrete or masonry damage, corrosion, rails and attenuators
	IT Support Elements	Identify issues with power, equipment mounting, and HVAC
Fiber/MLG/IT Building	IT Support Elements	Identify issues with lighting and power supply, and HVAC
	Building Structure	Identify issues with vandalism, insect infestation, rust, water infiltration, door and hardware
Unique Items	Fuel Stations, Geothermal Wells, etc.	Identify functionality of facility specific items such as geothermal wells

Inspections were conducted in accordance with NTTA's Project Deliver Department's Quality Management System (QMS) Manual Procedure GEC-01 (Appendix B) and involve general visual observations and assessment of asset element features.

No detailed analysis, in-place or destructive testing was performed. The opinions, statements, and recommendations made in this report are based solely on conditions revealed by these visual observations. No representations or warranty is made that all defects have been discovered or that a defect will not appear at a later time. Nothing contained herein shall be deemed to give any third party a claim or right of action against the NTTA, its employees, the GEC, or the Maintenance Management Consultant (MMC), nor create a duty on behalf of the NTTA, its employees, the GEC or the MMC to such third party.

Items observed were recorded and rated using a five-point scale (Table 6).

Table 6: GEC Annual Inspection Rating Scale

GRADE	RATING	DESCRIPTION
M	Monitor	Asset exhibits an existing condition which warrant periodic follow-up inspection activities. Maintenance is optional at this time.
4	Good	Asset exhibits minor levels of distress or deterioration. Routine maintenance recommended.
3	Fair	Asset exhibits moderate (frequent) distress or deterioration. Maintenance required to prevent further damage to system.
2	Poor	Asset exhibits advanced deterioration or is a safety concern. Maintenance or repair required to protect public or system.
1	Critical	Asset functionality is severely impaired or threatened. Immediate repair required to protect public or system.

1.3 Description of System

The System is a vital component of the North Texas transportation infrastructure (Figure 1), encompassing more than 153 centerline miles (1,194 lane miles) of limited-access toll roads, 624 bridges and one tunnel. It includes the Dallas North Tollway (DNT), President George Bush Turnpike (PGBT), Sam Rayburn Tollway (SRT), Chisholm Trail Parkway (CTP), Mountain Creek Lake Bridge (MCLB), Lewisville Lake Toll Bridge (LLTB), Addison Airport Toll Tunnel (AATT), 360 Tollway (360T) and associated facilities. Toll collection throughout the System is accomplished electronically.

1.3.1 Dallas North Tollway

DNT extends from Interstate 35E (IH-35E) in downtown Dallas north approximately 33 miles to W. First Street, just north of U.S. Route 380 (US 380), in Prosper. It is a convenient north-south connection for motorists traveling between Dallas, Highland Park, University Park, Addison, Farmers Branch, Plano, Frisco, and Prosper.

The high growth rate in both Collin and Denton Counties, along with input from both counties, encouraged the NTTA to widen the existing facility and also extend further north. The current widening project which extends from the Sam Rayburn Tollway to US 380 is under construction and is expected to be opened to traffic in late 2025. Extending DNT to the north will be accomplished by two projects: Phase 4A will be a 6-mile section from US 380 to FM 428 and Phase 4B will be an 8-mile section from FM 428 to Grayson County. These two projects are in the FY 2024-2028 Capital Plan for design and construction and planning and design respectively.

1.3.2 President George Bush Turnpike

PGBT extends from IH-20 in Grand Prairie to SH 183 in Irving and is approximately 11 miles. A non-tolled segment runs from SH 183 to Belt Line Road and is maintained by the Texas Department of Transportation (TxDOT). PGBT picks up at Belt Line Road in Irving and extends clockwise approximately 40 miles to Interstate 30 (IH-30) in Garland. PGBT provides a vital route through the DFW Metroplex and offers access to Grand Prairie, Irving, Carrollton, Dallas, Plano, Richardson, Sachse, Rowlett, and Garland.

1.3.3 Sam Rayburn Tollway

SRT extends for approximately 26 miles from Business SH 121 near the Denton/Dallas County line to east of US 75 in Collin County. The SRT offers access to Coppell, Lewisville, Carrollton, The Colony, Plano, Frisco, McKinney, and Allen.

1.3.4 Chisholm Trail Parkway

CTP is an approximate 28-mile corridor, extending from IH-30 in downtown Fort Worth in Tarrant County to US 67 in Cleburne which is in Johnson County. CTP offers access to Fort Worth, Burleson, and Cleburne. This limited access toll road has major interchanges located at IH-30 and IH-20.

1.3.5 Mountain Creak Lake Bridge

MCLB is an approximate two mile facility that provides an east-west crossing of Mountain Creek Lake from the Spur 303/SE 14th Street intersection in Grand Prairie to the Spur 303/Mountain Creek Parkway intersection in the Oak Cliff section of Dallas. This facility links communities in Tarrant County with those in the southern part of Dallas County and provides convenient access to businesses, recreational facilities, and other destinations in the Mid Cities area.

1.3.6 Lewisville Lake Toll Bridge

LLTB is an approximately two mile long facility that provides an east-west crossing of the northwestern arm of Lewisville Lake in Denton County. It serves as a unique landmark with a 360-foot steel truss that rises 60 feet above the roadway.

1.3.7 Addison Airport Toll Tunnel

AATT provides an approximate 3,600 foot, east-west route under Addison Airport in northern Dallas County which includes a 1,650 foot tunnel. This facility relieves congestion in the far North Dallas and Addison areas and provides an alternate route to the heavily traveled Trinity Mills and Belt Line Roads and opened to traffic in 1999.

1.3.8 360 Tollway

360T is an approximate 10-mile toll road located in Tarrant, Ellis, and Johnson Counties, extending from Green Oaks Boulevard in Tarrant County south to US 287 in Ellis County.

Table 7: Corridor Facts				
Corridor	Mainlane Miles	Frontage Road Miles	Bridges	Gantries/Plazas
DNT	200	0	110	43
PGBT	387	56	239	71
SRT	206	154	140	44
CTP	99	0	84	30
MCLB	4	0	1	2
LLTB	8	0	2	2
AATT	1	0	0	1
360T	37	41	48	10

Note: Individual corridor construction history available in Appendix C.

1.3.9 Facilities

NTTA facilities provide support for the safe and reliable operation of the System. These facilities include the Gleneagles Office Complex, the Plano Operations Center, the Frisco Operations Center, winter weather operation facilities, fiber huts, as well as roadway plaza facilities that provide various operational support functions.

1.4 Maintenance Program Overview

The goal of NTTA's Maintenance Program is to maintain a safe and reliable toll road system by proactively performing functions to preserve the useful life of the assets while delivering a high level of service to their customers.

1.4.1 Organization

The Maintenance Department is responsible for the normal day-to-day routine maintenance of the System and associated facilities. Utilizing both in-house and outsourced resources to perform routine maintenance activities, NTTA has created a check and balance in providing these services to improve efficiency and to be cost effective. The overall goal is to have approximately 50% of these services outsourced to TRM contractors.

Table 8: Maintenance Responsibilities	
CORRIDOR	MAINTAINED BY
DNT, AATT, SRT and LLTB	NTTA Staff
PGBT, MCLB and CTP	TRM Contractors
360 Tollway	COMA/TRM Contractor

Note: Tolling & ITS Equipment is maintained by NTTA Staff

TRM contracts are outlined below.

- **President George Bush Turnpike (West)** extends from IH-20 in Grand Prairie to Dickerson Parkway in Carrollton and includes Mountain Creek Lake Bridge. This 6-year contract, executed in October 2019, is outsourced to Roy Jorgensen Associates, Inc.
- **President George Bush Turnpike (East)** extends from Dickerson Parkway in Carrollton to IH-30 in Garland. This 6-year contract, executed in May 2023, is outsourced to Webber Infrastructure Management, Inc.
- **Chisholm Trail Parkway** extends from IH-30 in Fort Worth to US 67 in Cleburne. This 6-year contract, executed in October 2022, is outsourced to Roy Jorgenson Associates, Inc.
- **360Tollway** extends form Camp Wisdom Rd./E. Sublett Rd. in Arlington to US 287 in Mansfield. This corridor is maintained under a Comprehensive Maintenance Agreement (COMA) with Lane-Abrams Joint Venture. The COMA has been in effect since May 2018 when 360T was opened to traffic. NTTA will take over the maintenance responsibilities at a future date to be determined.

The Project Delivery Department, along with their engineering consultants, the GEC and MMC, supports Maintenance by providing inspection findings and delivering major maintenance projects along the System. Atkins North America, Inc. (AtkinsRealis), is the current MMC and provides professional engineering services in support of maintenance responsibilities such as:

- Oversight/direction of roadway repairs by NTTA in-house forces
- Plans, specifications, and estimates of maintenance projects
- Update of capital improvement plan as necessary to preserve NTTA assets
- Identification of appropriate maintenance and repair actions and cycles to minimize deteriorating conditions of the NTTA assets

1.4.2 Maintenance Rating Program

System conditions are monitored by means of a Maintenance Rating Program (MRP) which evaluates the performance of both in-house and outsourced resources. As part of the MRP, the NTTA established acceptable levels of maintenance regardless of road type, construction history, or traffic patterns. The MRP monitors current operations and is used to identify recurring problems. This program allows for early identification of maintenance issues, increases accountability, and provides assurance that assets are being maintained adequately. Under the MRP, sample units for different asset groups (roads, bridges, and facilities) are randomly selected for the entire year. Inspections are conducted monthly on a portion of the sample units for each corridor. Individual characteristics are evaluated on Pass/Fail criteria. The resulting scores are weighted and combined for the asset groups. This total composite score is used to evaluate maintenance effectiveness monthly.

1.5 Specialized Inspections

NTTA, through the GEC, conducts specialized inspections of the pavement, overhead sign structures, and high-mast illumination poles on the System. These inspections allow for the early detection of maintenance needs and provide insight for budget projections, all of which is intended to maximize the useful life of the assets. Final observations are discussed with NTTA and incorporated into their maintenance plans.

1.5.1 Pavement Management Program

As the GEC, VRX maintains a Computerized Pavement Management System (CPMS) for the NTTA. The CPMS is a tool utilized to determine current pavement condition levels and monitor trends in the performance of the pavement during its life cycle. This annual assessment allows NTTA the ability to optimize the effectiveness of roadway maintenance and it is vital to developing budgetary funding levels by predicting future pavement rehabilitation needs.

1.5.2 Overhead Sign Structure Inspection Program

The Overhead Sign Structure Inspection Program is performed in accordance with standard procedures that are consistent with previous inspection cycles at NTTA as well as with other transportation agencies. These procedures are based on the 2005 FHWA publication NHI 05-036, "Guidelines for the Installation, Inspection, Maintenance and Repair of Structural Supports for Highway Signs, Luminaires, and Traffic Signals." The Program inspects cantilever overhead sign supports (COSS), overhead sign bridges (OSB), and dynamic message signs (DMS) in addition to the structural elements of the mainlane and ramp toll gantries. The System contains 868 sign structures. The structures are inspected on a 5-year cycle, with a portion of the overall number of structures being inspected each year. The 2025 inspection consisted of 193 structures.

1.5.3 High Mast Illumination Pole Inspection Program

The High Mast Illumination Pole (HMIP) Inspection Program is primarily a visual inspection but does include Ultrasonic Testing of base weld locations, as necessary and if determined by the inspection team. NTTA owns and maintains 266 high mast illumination poles throughout the System. TxDOT guidelines for inspection of the HMIP's are followed. The program requires each pole to be inspected once every 5 years. The inspections are broken into two groups: 148 on PGBT that were inspected in 2021 and 118 on DNT, SRT and CTP inspected in 2022. All inspections are up to date with the next inspection scheduled for 2026.

1.5.4 Bridge Management Program

All bridges owned and maintained by NTTA are inspected as part of TxDOT's BRINSAP in accordance with the National Bridge Inspection Standards (NBIS). These standards are issued by the Federal Highway Administration (FHWA) and discussed in detail in the Code of Federal Regulations (CFR), 23 CFR 650C. These standards require all bridges on the Texas Transportation Commission (TTC) designated State Highway System to be inventoried, inspected, and appraised at regular intervals in accordance with the Manual of Maintenance Inspection of Bridges published by the American Association of State Highway and Transportation Officials (AASHTO). In addition, TxDOT performs fracture critical and underwater inspections for structures which require such.

The BRINSAP reports rate various categories of bridge elements including, Deck, Superstructure, Substructure, Channel, Culvert, and Approaches. The condition of the bridge elements is rated on a scale from 0 to 9 with 9 being excellent and a rating of 0 denotes that the element has failed.

The GEC maintains a database of all NTTA bridge structures on the System. Once BRINSAP reports are received, they are reviewed and all bridge element ratings are tracked, and Follow-up Action (FUA) worksheets are addressed. The database assists in tracking statistics to monitor the overall health of NTTA's bridges.

The bridge condition score (BCS) is another performance measure used by TxDOT to assess and communicate the overall health of Texas' bridge inventory. The BCS is calculated based on each bridge's minimum component rating and weighted by the deck area. The overall BCS for bridges in Texas is 88. 91. NTTA's bridges have an overall BCS of 91.22.

Fast Facts

1.5.5 Tunnel Management Program

NTTA's System includes one tunnel, AATT, which traverses below the Addison Airport. AATT is inspected as part of TxDOT's implementation of the National Tunnel Inspection Standards (NTIS). This Federal requirement is similar to the NBIS for bridges. NTIS established regulations for the uniformity of tunnel inspections. The Tunnel Operation, Maintenance, Inspection and Evaluation (TOMIE) Manual establishes procedures and practices for tunnel inspection and documentation of deficiencies. The NTIS inspection focuses on structural, electrical, and mechanical elements including ventilation fans, the fire protection system, drainage sump pumps, and the HVAC components which service the electrical room.

Tunnel inspections are performed on a 2-year cycle; the most recent AATT inspection was performed in August 2025. Since the 2025 analysis is not yet complete, the 2023 data, along with the visual observations from the GEC's 2025 assessment will serve as the basis for the comments and recommendations in the tunnel portion of this report.

1.6 Governmental Accounting Standards Board Requirements

Governmental Accounting Standards Board (GASB) Statement 34 establishes financial reporting requirements for state and local governments throughout the United States. NTTA elected to adopt the Modified Approach in 2007 to asset depreciation in accordance with GASB 34 which requires a reporting of asset conditions every 3 years. NTTA has elected to develop the GASB 34 rating annually to ensure the System maintains their Board-adopted minimum level-of-service at 8.0. The MMC maintains an inventory of NTTA's infrastructure assets, and the GEC gathers and calculates condition ratings and replacement costs for pavement and bridge structure assets. The annual inspection by the GEC provides the foundation for complying with GASB 34. The 2025 GASB 34 rating for the System is 8.8 out of 10.

2.0 INSPECTION FINDINGS

2.1 Overview

Based on the 2025 visual annual inspection, the System continues to be in good repair, proper working order, and sound condition. According to the GEC Annual Inspection Rating Scale (Table 6), none of the observations for the four primary elements—roadway, walls, bridges, and facilities—were rated below a 2. These findings are consistent with what is expected for a system of this age and demonstrate the effectiveness of ongoing, proactive routine maintenance and rehabilitation efforts aimed at preserving and extending the lifespan of each asset.

The following sections provide detailed observations for each corridor, organized by the four main elements. Section 3 lists all the projects completed since the last GEC inspection and Section 4 outlines upcoming projects and offers additional recommendations to address the noted observations.

2.2 Dallas North Tollway Observations

2.2.1 Dallas North Tollway – Roadways

Our observations included several locations of concrete spall and joint deterioration on mainlane and ramp pavement (Figure 2). Also noted were multiple locations where reflective pavement cracking and delamination has migrated through the asphalt overlay (Figure 3). Common erosion issues included turf erosion at backslopes (Figure 4) and erosion at landscape beds resulting in exposed irrigation lines (Figure 5). There were multiple locations south of IH 635 where curb inlet tops have been damaged and have exposed reinforcement (Figure 6). Additionally, there were isolated instances of deteriorated pavement markings (Figure 7).

DNT – Roadways

Figure 2: DNT NB Concrete Pavement Spalling North of Eldorado Pkwy.

Figure 3: DNT SB Pavement Reflective Cracking and Spalling South of IH 635.

Figure 4: DNT NB Turf Erosion South of SRT.

Figure 5: DNT NB Landscape Bed Erosion North of Main St.

Figure 6: DNT NB Inlet Damage Near Oak Lawn Ave.

Figure 7: DNT NB Faded Pavement Markings North of PGBT.

2.2.2 Dallas North Tollway – Walls

General visual retaining wall observations included instances where walls had racked panels (Figure 8), exhibited concrete cracking and/or spalling (Figure 9), and showed wall staining (Figure 10). These observations alone can not confirm nor negate current wall movement. NTTA, the MMC and the GEC conduct regular coordination meetings where NTTA has confirmed that further evaluation of these walls is being conducted.

DNT – Walls

Figure 8: DNT MSE Wall Racked Panels at IH 635.

Figure 9: DNT MSE Wall Spalling at Headquarters Dr.

Figure 10: DNT SB Wall Staining at University Blvd.

2.2.3 Dallas North Tollway – Bridges

Common observations along the DNT corridor include bridge decks which are exhibiting multiple types of deficiencies including concrete spalling, deterioration of joints, and cracking (Figure 11). Substructure deficiencies include spalling, cracking in the caps with exposed reinforcement in isolated areas (Figures 12,13,14).

DNT – Bridges

Figure 11: DNT Deck Deterioration at Wycliff Ave.

Figure 12: DNT Bent Cap Spalling at IH 635.

Figure 13: DNT Abutment Spalling at Lomo Alto Dr.

Figure 14: DNT Bent Cap Spalling North of IH 35E.

2.2.4 Dallas North Tollway – Facilities

At MLG1, water infiltration, insect/rodent infestation, and window frame corrosion (Figure 15) were noted. At the MLG3 IT building, spalling at the foundation was observed. At the MLP3 Operations Building, damaged pipe insulation (at the yard), foundation spall, joint sealant failure, and ceiling issues were again observed; in addition, a CO2 sensor issue was noted. At MLP4, there is a new roof, but the railing still isn't fully reattached (Figure 16). In addition, the gantry structure coatings failure were again observed, and a basement ventilation opening still wasn't sealed (external ventilation not needed, as the space is now conditioned) (Figure 17). At the Fiber Hut near MLP2, the gate lock still could not be closed for locking (Figure 18), with water infiltration, insect infestation, and GFCI receptacles issues also observed. At the Meaders Lane and DNT Winter Weather Operation Facilities, there was widespread corrosion (Figure 19), while at the US-380 Winter Weather Operation Facility, there was ponding on the roof (Figure 20).

DNT – Facilities

Figure 15: DNT MLG1 Window Frame Corrosion.

Figure 16: MLP4 Roof Railing Post Partially Reattached.

Figure 17: MLP4 Exterior Wall Open Louver.

Figure 18: DNT Fiber Hut 1 Uncloseable Gate Lock.

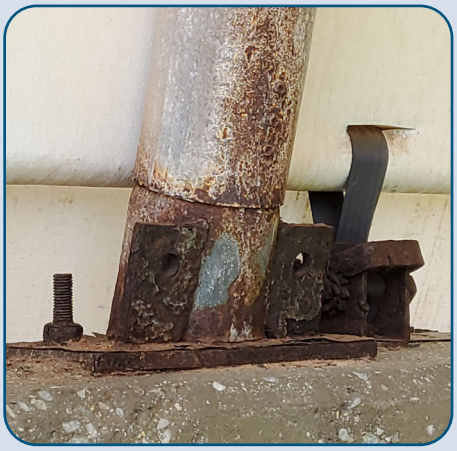

Figure 19: DNT Meaders Lane Winter Weather Operation Facility Corroded Roof Member.

Figure 20: DNT US-380 Winter Weather Operation Facility Roof with Ponding.

2.3 President George Bush Turnpike Observations

2.3.1 President George Bush Turnpike – Roadway

Common roadway deficiencies included cracking and spalling at joints and deterioration of previous pavement repairs (Figures 21,22). There were several locations that included concrete spalling, cracking, and damage to concrete barriers (Figure 23). General erosion observations included erosion of roadway slopes, areas under bridges, and erosion/rutting of landscape beds exposing irrigation lines (Figures 24,25).

PGBT – Roadways

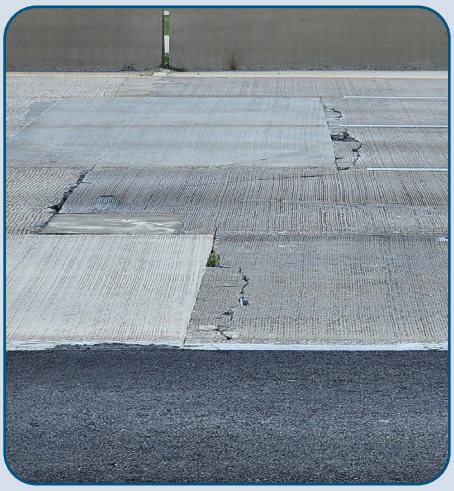

Figure 21: PGBT WB Pavement Cracking and Spalling West of Alma Rd.

Figure 22: PGBT NB Pavement Joint Deterioration and Spalling North of Merritt Rd.

Figure 23: PGBT NB Concrete Rail Cracking and Spalling North of Miller Rd.

Figure 24: PGBT SB Slope Erosion North of IH 30 in Garland.

Figure 25: PGBT WB Landscape Bed Erosion at Coit Rd.

2.3.2 President George Bush Turnpike – Walls

General visual observations included instances of panels that were racked at some locations (Figure 26) and a sound wall alignment issue (Figure 27). These observations alone can not confirm nor negate current wall movement. NTTA, the MMC and the GEC conduct regular coordination meetings where NTTA has confirmed that further evaluation of these walls is being conducted.

PGBT – Walls

Figure 26: PGBT MSE Wall Racked Panels at IH 635.

Figure 27: PGBT Soundwall Movement West of Frankford Rd.

2.3.3 President George Bush Turnpike – Bridges

Common observations along the PBGT corridor included bridge deck locations with concrete spalls with some exhibiting exposed reinforcement (Figure 28). Substructure deficiencies include spalling and cracking of the backwalls (Figure 29) and exposed column footings from channel scour and erosion (Figure 30).

PGBT – Bridges

Figure 28: PGBT Deck Deterioration on Bridge Over Lake Ray Hubbard.

Figure 29: PGBT Backwall Cracking and Spalling West of Hillcrest Rd.

Figure 30: PGBT Channel Erosion at White Rock Creek.

2.3.4 President George Bush Turnpike – Facilities

Observations at these facilities included: continued exterior and sealant deterioration, continued tunnel water infiltration, and continued gantry roof/structure deterioration. At MLP6, there was an HVAC upgrade project in progress. In MLP8, multiple rooms had inadequate HVAC cooling. Main lane and ramp gantry roofs continued deteriorating (Figure 31), and lightning protection failures were again observed. At the Midway Road Eastbound On-Ramp gantry, one side panel still has a large crack (Figure 32), while another side panel has continued separating from the structure (Figure 33). MLP6 building's new roof had an issue (Figure 34).

PGBT – Facilities

Figure 31: MLP10 Gantry Roof Deterioration.

Figure 32: PGBT Midway Road On-Ramp Gantry Panel Crack.

Figure 33: PGBT Midway Road On-Ramp Gantry Panel Separation.

Figure 34: MLP6 Roof Coping Degradation.

President George Bush Turnpike – Facilities cont'd

At the Fiber Huts, water infiltration, seal failure, minor ceiling issues, erosion (Figure 35), insect infestation, and GFCI receptacles issues were again observed. At the Winter Weather Operation Facilities, there was corrosion (Figure 36), damage to walls (Figure 37) and damaged fences/gates (Figure 38). GEC understands there are upcoming projects to replace the MLP7 roof, and the MLP8 HVAC system.

PGBT – Facilities

Figure 35: PGBT Fiber Hut 5 Erosion.

Figure 36: PGBT Brand Road Winter Weather Operation Facility Corrosion.

Figure 37: PGBT Oakdale Road Winter Weather Operation Facility Damaged Wall.

Figure 38: PGBT Brand Road Winter Weather Operation Facility Damaged Fence.

2.4 Sam Rayburn Tollway Observations

2.4.1 Sam Rayburn Tollway – Roadway

Our observations included several locations of concrete spalls at joints (Figure 39), and joint deterioration and spalls at previous repairs (Figure 40). There were several locations where the longitudinal joint between the pavement and the concrete mow strip for the Metal Beam Guard Fence (MBGF) is unsealed which has led to undermining of the mow strip due to erosion (Figure 41). Additionally, there were several instances of missing, damaged, or faded pavement markings (Figure 42). General erosion issues included erosion at landscape beds resulting in exposed irrigation lines and in some instances undermined landscaping mow strips (Figure 43) and turf erosion (Figure 44).

SRT – Roadways

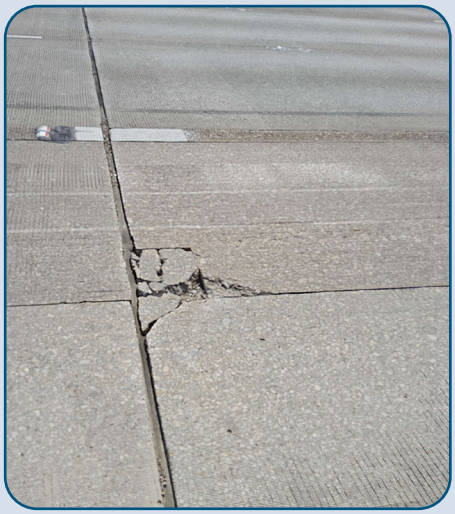

Figure 39: SRT WBML Pavement Spalling West of Hillcrest Rd.

Figure 40: SRT EBML Pavement Joint Deterioration West of Standridge Dr.

Figure 41: SRT WBML Mow Strip Undermining and Turf Erosion West of Hebron Pkwy.

Figure 42: SRT EBML Faded Pavement Markings West of Stacy Rd.

Figure 43: SRT SB Landscape Bed Erosion and Concrete Boarder Undermining West of S. Lake Forest Dr.

Figure 44: SRT SB Turf Erosion East of Marchant Blvd.

2.4.2 Sam Rayburn Tollway – Walls

General visual observations included instances of spalling and racked panels in addition to coping that exhibited cracking and/or spalling (Figures 45,46). These observations alone can not confirm nor negate current wall movement. NTTA, the MMC and the GEC conduct regular coordination meetings where NTTA has confirmed that further evaluation of these walls is being conducted.

SRT – Walls

Figure 45: SRT NB MSE Wall Panel and Coping Cracking and Spalling at Spring Creek Pkwy.

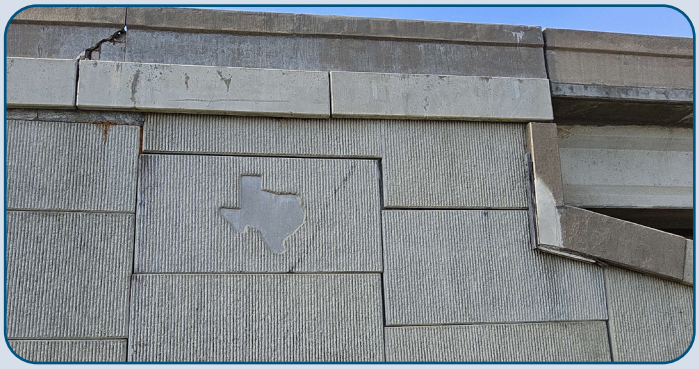

Figure 46: SRT NB MSE Wall Panel Racking at Paige/Plano Pkwy.

2.4.3 Sam Rayburn Tollway – Bridges

Common observations along the SRT corridor included bridge decks with multiple types of deficiencies including concrete spalling with exposed reinforcement, spalling under the deck (Figures 47,48). Observations also included cracking and spalling of the concrete barrier at the approach slab allowing water to erode the concrete flume (Figure 49). Superstructure observations included spalling of concrete beams with exposed reinforcement due to impact with the backwall (Figure 50).

SRT – Bridges

Figure 47: SRT NB Bridge Deck Deterioration at Coit Rd.

Figure 48: SRT NB Under Deck Spalling West of Spring Creek Pkwy.

Figure 49: SRT NB Cracked Approach Rail Allowing Water to Erode the Backside at Standridge Dr.

Figure 50: SRT SB Beam Hitting Backwall at West Rowlett Creek.

2.4.4 Sam Rayburn Tollway – Facilities

SRT Facilities were generally in good condition. Sealant failure, insect infiltration and roof deterioration/damage were observed at the main lane gantry buildings (Figure 51) and restrooms (Figure 52). At MLG1, window degradation was also noted (Figure 53).

SRT – Facilities

Figure 51: SRT MLG1 Damaged Roof.

Figure 52: SRT Restroom Corroded Roof.

Figure 53: SRT MLG1 Window Degradation.

2.5 Chisholm Trail Parkway Observations

2.5.1 Chisholm Trail Parkway – Roadway

Common roadway deficiencies included concrete cracking and spalling of concrete pavement joints (Figure 54) and minor concrete spalling (Figure 55). There are several locations exhibiting separation between the concrete shoulder and the concrete mow strip for the MBGF (Figure 56). The are also areas where erosion is undermining the concrete mow strip for the MBGF (Figure 57). Other common erosion issues included erosion and rutting at landscape beds resulting in exposed irrigation lines and turf erosion and rutting at backslopes (Figures 58,59).

CTP – Roadway

Figure 54: CTP SB Pavement Joint Deterioration North of Arborlawn Dr.

Figure 55: CTP SB Pavement Spalling North of FM 1187.

Figure 56: CTP SB Unsealed Joint Undermining Mow Strip South of Dutch Branch Rd.

Figure 57: CTP SB Unsealed Longitudinal Joint North of Old Grandbury Rd.

Figure 58: CTP NB Landscape Bed Erosion with Exposed Irrigation South of IH 20.

Figure 59: CTP SB Turf Erosion South of CR 913.

2.5.2 Chisholm Trail Parkway – Walls

General visual retaining wall observations included instances where panels were racked and exhibited backfill material migration at several locations (Figure 60). Observations also included cracked and spalled retaining wall copings and barriers (Figure 61). These observations alone can not confirm nor negate current wall movement. NTTA, the MMC and the GEC conduct regular coordination meetings where NTTA has confirmed that further evaluation of these walls is being conducted.

CTP – Walls

Figure 60: CTP MSE Wall Backfill Migration North of Overton Ridge Blvd.

Figure 61: CTP MSE Wall Coping and Concrete Rail Spalling South of Overton Ridge Blvd.

2.5.3 Chisholm Trail Parkway – Bridges

Common bridge observations along the Chisholm Trail Parkway corridor included locations with damaged concrete mow strip at the MBGF between the concrete shoulder and the concrete flume (Figure 62). Other observations included overgrown vegetation and small trees within the channel and adjacent to a bridge class culvert (Figure 63) and erosion to an unlined channel under a bridge (Figure 64).

CTP – Bridges

Figure 62: CTP SB Erosion and Undermining of MBGF Mow Strip and Adjacent Concrete Riprap South of McPherson Blvd.

Figure 63: CTP NB Obstructions at Bridge Class Culvert Headwall North of Dutch Branch Rd.

Figure 64: CTP NB Channel Erosion South of CR 913.

2.5.4 Chisholm Trail Parkway – Facilities

Facilities along the CTP corridor were in good condition, with only minor sealant deterioration (Figure 65) water infiltration (Figure 66), landing deterioration (Figure 67) all again noted. Light fixtures' insect infestation was also noted (Figure 68). At restrooms, door lock and water heater issues were again observed.

CTP – Facilities

Figure 65: CTP MLG1 Deteriorated Seal.

Figure 66: CTP MLG2 Water Infiltration.

Figure 67: CTP MLG1 Deteriorated Landing.

Figure 68: CTP Restroom Light Fixture Insect Infestation.

2.6 Mountain Creek Lake Bridge Observations

2.6.1 Mountain Creek Lake Bridge – Roadway

Common roadway deficiencies included concrete spalling at joints (Figure 69). Other observations included erosion and undermining of concrete riprap at a drainage outfall structure (Figure 70).

MCLB – Roadway

Figure 69: MCLB Pavement Spalling on the East End.

Figure 70: MCLB Storm Sewer Outfall Structure Erosion West End.

2.6.2 Mountain Creek Lake Bridge – Walls

Mountain Creek Lake Bridge has one retaining wall that is in good condition with no notable observations.

2.6.3 Mountain Creek Lake Bridge – Bridge

Common observations along the MCLB corridor included concrete spalling on the bridge deck (Figure 71), concrete spalling on the column collars (Figure 72), concrete spalling with exposed reinforcement on the bent caps (Figures 73, 74), and concrete spalling with exposed reinforcement on backwalls (Figure 75).

MCLB – Bridge

Figure 71: MCLB Deck Spalling.

Figure 72: MCLB Column Collars Spalling.

Figure 73: MCLB Bent Cap Spalling with Exposed Reinforcement.

Figure 74: MCLB Bent Cap Spalling with Exposed Reinforcement.

Figure 75: MCLB Backwall Cracking and Spalling.

2.6.4 Mountain Creek Lake Bridge – Facilities

MCLB facilities are in generally good condition. The Fiber Hut had exterior wear/cracking (Figure 76), exterior joint failures (Figure 77), and water infiltration.

MCLB – Facilities

Figure 76: MCLB Fiber Hut Exterior Wear.

Figure 77: MCLB Fiber Hut Joint Failure.

2.7 Lewisville Lake Toll Bridge Observations

2.7.1 Lewisville Lake Toll Bridge – Roadway

Our observations included a pavement spall adjacent to a concrete flume (Figure 78).

LLTB – Roadway

Figure 78: LLTB Concrete Pavement Spalling.

2.7.2 Lewisville Lake Toll Bridge – Walls

General visual retaining wall observations included instances where panels were racked with some damage to the coping (Figure 79). These observations alone can not confirm nor negate current wall movement. NTTA, the MMC and the GEC conduct regular coordination meetings where NTTA has confirmed that further evaluation of these walls is being conducted.

LLTB – Walls

Figure 79: LLTB MSE Wall Coping Damage.

2.7.3 Lewisville Lake Toll Bridge – Bridge

Common observations along the LLTB corridor included minor concrete spalling at joints (Figure 80). There were several locations that included concrete spalling, cracking, and damage to concrete rail (Figure 81) and bent caps exhibited staining from a corroded junction boxes (Figure 82).

LLTB – Bridge

Figure 80: LLTB Deck Spalling.

Figure 81: LLTB Concrete Rail Spalling.

Figure 82: LLTB Corroded Junction Box/Bent Cap Staining.

2.7.4 Lewisville Lake Toll Bridge – Facilities

In the electrical rooms, corroded electrical conduit/enclosures, a separated drain pipe, and insect infestation (Figure 83) were all again noted. At the Fiber Hut, roof degradation (Figure 84), water infiltration, and insect infestation (Figure 85) were noted.

LLTB – Facilities

Figure 83: LLTB Insect Infestation.

Figure 84: LLTB Fiber Hut Roof Degradation.

Figure 85: LLTB Fiber Hut Insect Infestation.

2.8 Addison Airport Toll Tunnel Observations

2.8.1 Addison Airport Toll Tunnel – Roadway

Common roadway deficiencies included concrete cracking and spalling at joints (Figure 86). Common erosion issues included erosion and rutting at landscape beds (Figure 87). Other observations included a chain link fence that was damaged and misaligned (Figure 88).

AATT – Roadway

Figure 86: AATT Pavement Spalling.

Figure 87: AATT Landscape Bed Erosion.

Figure 88: AATT Fence Damage.

2.8.2 Addison Airport Toll Tunnel – Walls

General visual retaining wall observations included instances where walls exhibited concrete cracking and/or spalling (Figure 89) and missing joint seal material (Figure 90). These observations alone can not confirm nor negate current wall movement. NTTA, the MMC and the GEC conduct regular coordination meetings where NTTA has confirmed that further evaluation of these walls is being conducted.

2.8.3 Addison Airport Toll Tunnel – Bridge

There is no bridge on the AATT.

AATT – Walls

Figure 89: AATT Panel Wall Spalling.

Figure 90: AATT Panel Wall Cracking and Missing Joint Seal.

2.8.4 Addison Airport Toll Tunnel – Facilities

The tunnel fan replacement project was still in progress at the time of inspection. One toll plaza HVAC RTU condensate pipe was still clogged. The gantry roof condition worsened since the previous inspection (Figure 91), while the toll plaza electrical room roof has failed (Figure 92), allowing water to enter the Electrical Room (Figure 93). In the main electrical room, a surge suppression device failure was noted (Figure 94).

AATT – Facilities

Figure 91: AATT Gantry Roof Damage.

Figure 92: AATT Toll Plaza Electrical Room Roof Damage.

Figure 93: AATT Toll Plaza Electrical Room Water Leak.

Figure 94: AATT Main Electrical Room Failed Surge Suppressor.

2.9 360 Tollway Observations

2.9.1 360 Tollway – Roadway

Common roadway deficiencies included cracking and spalling at joints (Figure 95). Other observations included damaged curb inlet tops with exposed reinforcement (Figure 96). Common erosion issues included outfall drainage structures being undermined (Figure 97) and eroded backslopes contributing to silted end treatments (Figure 98). There were several locations that included concrete spalls, cracking, and damage to concrete barriers (Figure 99).

360T – Roadway

Figure 95: 360T NB Concrete Pavement Cracking and Spalling North of Doryn Dr.

Figure 96: 360T NB Curb Inlet Damage at SE Green Oaks Blvd.

Figure 97: 360T SB Drainage Structure Undermined at N Holland Rd.

Figure 98: 360T SB Slope Erosion and Sediment Buildup North of Sawmill Way.

Figure 99: 360T SB Concrete Rail Cracking and Spalling South of SE Green Oaks Blvd.

2.9.2 360 Tollway – Walls

General visual retaining wall observations included instances where panels were racked or exhibited concrete cracking and/or spalling (Figures 100, 101). These observations alone can not confirm nor negate current wall movement. NTTA, the MMC and the GEC conduct regular coordination meetings where NTTA has confirmed that further evaluation of these walls is being conducted.

360T – Walls

Figure 100: 360T NB MSE Wall Panel Cracking North of N. Holland Rd.

Figure 101: 360T SB MSE Wall Panel Damage North of Debbie Ln.

2.9.3 360 Tollway – Bridges

Common observations along the 360T corridor included damage concrete riprap mow strip for the MBGF at the bridge approach (Figure 102), silted in and obstructed headwalls of bridge class culverts (Figure 103), and concrete cracking and/or spalling with exposed reinforcement at the backwalls (Figures 104, 105).

360T – Bridges

Figure 102: 360T SB MBGF Mow Strip Undermining at SE Green Oaks Blvd.

Figure 103: 360T SB Bridge Class Culvert with Sediment Buildup and Obstructions South of Lone Star Rd.

Figure 104: 360T SB Backwall Cracking and Spalling North of N. Holland Rd.

Figure 105: 360T NB Backwall Cracking and Spalling at NE Green Oaks Blvd.

2.9.4 360 Tollway – Facilities

These facilities were in overall good condition, with water infiltration (Figure 106), electrical GFCI receptacle issues (Figure 107), minor code issues, insect infestation (Figure 108), and sealant failures at the HVAC units (Figure 109) all again noted.

360T – Facilities

Figure 106: 360T MLG15 Water Infiltration.

Figure 107: 360T MLG15 Electrical Receptacle Failure.

Figure 108: 360T MLG15 Insect Infestation.

Figure 109: 360T MLG15 Failed Sealant.

2.10 Office and Facility Observations (Plano, Frisco, Gleneagles)

2.10.1 Facilities

Other inspected facilities include the Plano Operations Center, the Frisco Operations Center, and the Gleneagles Office Complex. At the inspection time, the Plano Operations Center was under construction for a major renovation/expansion project, and the Gleneagles Office Complex 5910 data center upgrade was also in progress (though only in the equipment procurement stage).

Observations at the Plano Operations Center again included: fire riser pipe corrosion (Figure 110), roof fasteners loose (Figure 111), Bulk Storage Building roof drain separations/damage (Figure 112), pipe penetration boots damaged/improperly installed (Figure 113), gutters damaged (Figure 114), joint sealant failures, and minor rust/paint failure at the outbuildings (Figure 115). GEC knows there are planned projects to upgrade the Truck Wash Building and the Bulk Storage Building.

Plano Operations Center – Observations

Figure 110: POC Fire Riser Corrosion.

Figure 111: POC Roof Fasteners Loose.

Figure 112: POC Bulk Storage Building Roof Drain Degradation.

Figure 113: POC Damaged Roof Penetration.

Figure 114: POC Damaged Gutter.

Figure 115: POC Storage Building Corrosion.

Facilities cont'd

Observations at the Frisco Operations Center included: minor safety violations, exterior areas of rust formation, window deterioration (Figure 116) and joint sealant failures. GEC knows there are planned projects to upgrade the Truck Wash Building and address exterior issues.

Observations at the Gleneagles 5900 West Plano Parkway Office Center again included: damaged/bent RTU condensate drain pipes (Figure 117), non-functioning exhaust fans, non-functioning RTU GFCI receptacles, ceiling issues, roof deterioration (Figure 118), and general interior wear/tear.

The Gleneagles 5910 West Plano Parkway Office Center observations included: a red-tagged Fire Alarm Control Panel (Figure 119), ceiling issues, minor plumbing items and insect infestation (Figure 120). GEC knows the data center project will address ceiling observation issues in the data center.

Frisco Operations Center – Observations

Figure 116: FOC Deteriorated Windows.

Gleneagles Office Complex – Observations

Figure 117: Gleneagles 5900 Bent HVAC Drain Pipe.

Figure 118: Gleneagles 5900 Deteriorated Roof.

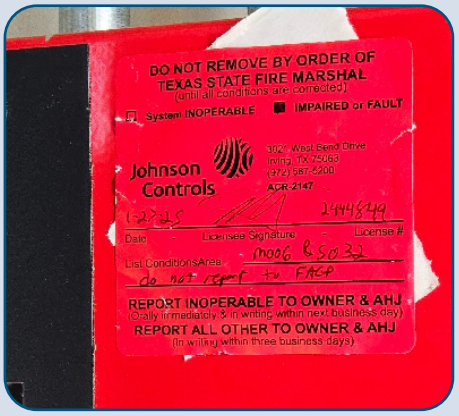

Figure 119: Gleneagles 5910 Tagged Fire Alarm Control Panel.

Figure 120: Gleneagles 5910 Insect Infestation.

3.0 PROJECTS COMPLETED SINCE FY24 INSPECTIONS

3.1 Overview

Since the GEC's 2024 annual and specialized inspections, many maintenance and rehabilitation projects have been completed. These projects are representative of the typical maintenance activities anticipated for a transportation facility the size and age of NTTA's System. The approved 2024 RMF budget provided the necessary funding to not only repair or rehabilitate but to extend the intended useful life expectancy of the individual assets. NTTA's pro-active asset management approach (inspect / plan / budget / design / construct) allows the System to operate at a desired Level-of-Service that its customers have come to expect.

3.2 Dallas North Tollway

- Mainlane Deck Surface Replacement: NB DNT from IH-35E, Lomo Alto, Mockingbird Ln., Park, Walnut Hill and Northwest Hwy. (Figure 121, 122)
- MSE Retaining Wall Stabilization: Stonebrook Pkwy. to Eldorado Pkwy. (Figure 123)
- Concrete Pavement Repairs and Joint/Crack Sealing: South end to IH-635 (Figure 124)
- Construction of new Winter Weather Operations Facility: At US-380
- Restriping: IH-635 to PGBT (Figure 125)
- Raised Pavement Marker Replacement: Entire corridor
- Fracture Critical Bridge Repairs (DNT @ Maple Ave / Knight St; DNT @ Harry Hines Blvd; SB DNT DC to IH 35E and IH 35E to NB DNT DC)
- DNT at Belt Line Rd. and at Keller Springs High Friction Surface Treatment
- DNT Concrete Pavement Joint Sealing from south of PGBT to south of SRT

3.3 President George Bush Turnpike

- Large and Small Sign Replacement: Midway Rd. to IH-30 (Figure 126)
- PGBT at Forum Dr. Erosion Mitigation
- Drainage Improvements: At Custer Rd.

3.4 Sam Rayburn Tollway

- Concrete Pavement and Curb Repairs: Various locations (Figure 127)
- Concrete Pavement Joint Sealing: Stacy Rd. to Medical Center Dr.
- Raised Pavement Marker Replacement: Entire corridor

3.5 Chisholm Trail Parkway

- Routine Maintenance Performed by Outsourced Contractor

3.6 Mountain Creek Lake Bridge

- Routine Maintenance Performed by Outsourced Contractor

3.7 Lewisville Lake Toll Bridge

- Erosion Mitigation: East end of bridge (Figure 128)
- Fracture Critical Bridge Repairs
- Raised Pavement Marker Replacement: Entire corridor

3.8 Addison Airport Toll Tunnel

- No projects were completed since the last inspection.

3.9 360 Tollway

- Routine Maintenance Performed by Outsourced Contractor

3.10 Facility/Building

- **Dallas North Tollway**
  - Building Improvements: MLP 4 (Figure 129)
- **President George Bush Turnpike**
  - Re-Roofing: MLP 6
  - HVAC Replacement: MLP 6; project on-going
  - HVAC Upgrades: MLP 8; project on-going
  - Roof Hatch and Utility Repairs: MLP 10
  - MLP 7 Roof Replacement and Building Envelope Repairs; construction not started
- **Addison Airport Toll Tunnel**
  - Exhaust Fan Replacement: Project on-going
  - Fire Protection: Project on-going
- **Office Facilities**
  - Re-Roofing: Gleneagles 5910
  - IT Restroom Renovation: Gleneagles 5910
  - Data Center Fire Support System, HVAC and UPS Upgrade: Gleneagles 5910; project on-going
  - Retaining Wall and Erosion Control Improvements: Gleneagles 5900
  - Parking Lot Repairs and Restriping: Gleneagles 5900 & 5910
  - Campus Repairs: Gleneagles 5900 & 5910 (Figures 130, 131)
  - Exterior Building Finishes: Gleneagles 5900 & 5910; project on-going (Figures 132, 133)
  - Window Seal Replacement: Gleneagles 5900 & 5910 (Figure 134)
  - Fleet Wash Bay Lifecycle Repairs: Frisco Operations Center & Plano Operations Center; project on-going

Below are a few examples of some of the completed projects related to roadway, bridges and facilities.

Completed Project Examples

Figure 121: DNT at Lomo Alto Dr. – Joint, Curb and MBGF Repairs.

Figure 122: DNT at Mockingbird Ln. – Partial Deck Replacement.

Figure 123: DNT near PGA Parkway – MSE Wall Stabilization.

Completed Project Examples

Figure 124: DNT NB from IH 35E – Partial Deck Replacement.

Figure 125: DNT at Frankford Rd. – Restriping.

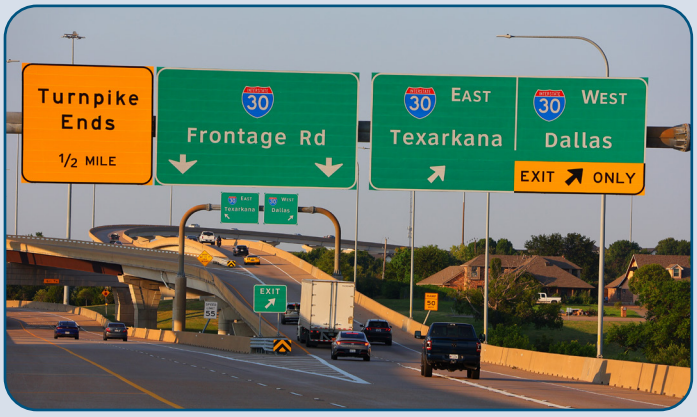

Figure 126: PGBT at IH 30 in Garland — Large and Small Sign Replacement.

Figure 127: SRT at Independence Pkwy. – Concrete Pavement and Curb Repairs.

Figure 128: LLTB – Erosion Mitigation East Approach.

Figure 129: DNT MLP 4 — Interior Improvements.

Completed Project Examples

Figure 130: Gleneagles 5900 — Retaining Wall Repairs.

Figure 131: Gleneagles 5900 — Window Sealant Repairs.

Figure 132: Gleneagles 5910 — Fence Repairs.

Figure 133: Gleneagles 5910 — Wall Repairs.

Figure 134: Gleneagles 5910 — Wall Sealant Repairs.

4.0 FUTURE PROJECTS AND RECOMMENDATIONS

4.1 Overview

Through continuous coordination with Project Delivery and Maintenance Departments, as well as the MMC, a plan will be developed to address the observations noted during the 2024 annual inspection. This section summarizes future projects and maintenance needs, which are supported by the GEC's observations.

It should be noted that many of the observations on CTP and PGBT fall under the responsibility of the total routine maintenance contractor. These include various locations of pavement cracking and spalls, unsealed pavement joints, pavement edge drop-offs, and erosion on turf embankments, ditches and under bridges which should be addressed to prevent further deterioration of the asset.

4.2 Dallas North Tollway

Several projects have been developed or are in the process of being developed to address the needs of the DNT. These future projects include the following with general project limits:

- Mainlane and Shoulder Pavement Rehabilitation (southbound; IH-635 to south end)
- Mainlane Ramp Pavement Repairs (IH-635 to PGBT; SRT to US-380)
- Bridge Deck Repairs (Inwood Rd., Wycliff Ave., and Lemmon Ave.)
- Bridge Deck Joint Repairs (PGBT to SRT; Main St. and PGA Pkwy.)
- Bridge Super and Substructure Repairs (various locations)
- Bridge Bearing Pad Replacement (various locations)
- Retaining Wall Repairs (at IH-635)
- Illumination Upgrades (south end to US-380)
- Mainlane Restriping (IH-635 to PGBT) – Design
- Pavement Friction Enhancement (at Beltline Rd., Keller Springs Rd., and from PGBT to SRT) – Design
- Retaining Wall Preservation (south end to IH-635)

4.3 President George Bush Turnpike

Several projects have been developed or are in the process of being developed to address the needs of the PGBT. These future projects include the following with general project limits:

- Mainlane Shoulder Rehabilitation (Arkansas Ln., Gateway Dr., and Midway Rd. to Alma Rd.)
- Mainlane Edgeline Restriping (IH-35E to Alma Rd.)
- Mainlane Restriping (Alma Rd. to SH-78)
- Erosion Mitigation at Arbor Creek and White Rock Creek
- Trailblazer Sign Replacement (Midway Rd. to SH-78; IH-20 to IH-183)
- Mainlane Restriping (Beltline Rd. to West of IH-35E) – Design
- Mainlane Restrping (SH-78 to IH-30) – Design
- Mainlane and Frontage Road Restriping (IH-20 to IH-183) – Design
- Erosion Mitigation (at US-75; Rowlett Creek) – Design

- Bridge Deck Joint Repairs (various locations between IH-35E to SH-78) – Design
- Bridge Beam Repairs (various locations) – Design
- Retaining Wall Preservation (IH-635 to SH 78) – Design
- Retaining Wall Repairs (Frankford Rd.) – Design

4.4 Sam Rayburn Tollway

Several projects have been developed or are in the process of being developed to address the needs of the SRT. These future projects include the following with general project limits:

- Drainage Improvements of Landscape Beds (Alma Rd., Custer Rd. and Lake Forest Blvd.)
- Bridge Deck Joint Repairs (N. Denton Tap Rd. to Old Denton Ln./FM 2281)
- Bridge Deck Rehabilitation (at Coit Rd.) – Design
- Retaining Wall Repairs (at Plano Pkwy./Paige Rd.)
- Channel Erosion Repair (at Elm Fork Trinity River and IH35E) – Design
- Drainage Improvements of Landscape Beds (at MacArthur Blvd., Hebron Pkwy., Carrollton Pkwy., and Old Denton Rd.) – Design
- Pavement Joints Repairs (Huffines and Carrollton Pkwy.) – Design

4.5 Chisholm Trail Parkway

A project has been developed or is in the process of being developed to address the needs of CTP. This future project includes the following with general project limits:

- Large and Small Sign Replacement (IH-30 to FM 1187)

4.6 Mountain Creek Lake Bridge

A project is being studied to address illumination needs along the corridor. This future project includes the following with general project limits:

- Mainlane Restriping (entire corridor) – Design

4.7 Lewisville Lake Toll Bridge

A project has been developed or is in the process of being developed to address the needs of LLTB. This future project includes the following with general project limits:

- Mainlane Restriping (entire corridor) – Design

4.8 Addison Airport Toll Tunnel

A project has been developed or is in the process of being developed to address the needs of AATT. This future project includes the following with general project limits:

- Retaining Wall Preservation and Drainage Improvements – Design

4.9 360 Tollway

No projects identified.

4.10 Facility/Building

Several projects have been developed or are in the process of being developed to address the needs of NTTA's facilities. These projects include the following:

- **Gleneagles 5900 & 5910**
  - Parking Lot Canopy Replacement
  - Renovation/Lifecycle Repairs
- **Plano Operations Center**
  - Vehicle Gates
  - Site Improvements
  - Fuel Island Repairs
  - Fleet Wash Bay Lifecycle Repairs
- **Frisco Operations Center**
  - Fleet Wash Bay Lifecycle Repairs
  - Vehicle Gates
  - Site Improvements
- **Addison Airport Toll Tunnel**
  - Sump Pump Reconditioning
- **Chisholm Trail Parkway**
  - RSS/DPS/IT Fort Worth Facility Tenant Improvements
- **Winter Operation Facilities**
  - Brine Maker and Tank

4.11 Budget Recommendations

As required by the Amended and Restated Trust Agreement, the GEC also provides recommendations for the OMF as well as the RMF.

The funding levels shown in the 2025 NTTA System preliminary budget for major items associated with administrative and roadway costs for the Operation and Maintenance Fund and Reserve Maintenance Fund are recommended to maintain NTTA major assets at or above the Board-adopted GASB 34 level of 8.8 out of 10.

Table 9: Budget Recommendations

FUNDS	BUDGET
Operation and Maintenance Fund (OMF)	$273.1M
Reserve Maintenance Fund (RMF)	$94.3M

5.0 SUMMARY

Overall, the System has been maintained in good repair, working order and condition. The overall condition of the System shows NTTA's commitment to funding, maintaining, and operating a safe and reliable network of roadways.

Continued routine maintenance and the implementation of Reserve Maintenance Fund projects will ensure the System continues to provide a safe and reliable mobility option for the customers in the North Texas area.

APPENDIX A – SECTION 504 OF THE AMENDED AND RESTATED TRUST AGREEMENT

AMENDED AND RESTATED TRUST AGREEMENT

BY AND BETWEEN

NORTH TEXAS TOLLWAY AUTHORITY

AND

WELLS FARGO BANK, N.A.,
Dallas, Texas

SECURING

SYSTEM REVENUE BONDS

Dated as of April 1, 2008

Section 503. Revenue Fund. The special fund held by the Trustee and created and designated "Tollway Revenue Fund" (hereinafter sometimes called the "Revenue Fund") under the Original Agreement is hereby reaffirmed. The Authority covenants that all gross revenues (all tolls, other revenues, and income) arising or derived by the Authority from the operation and ownership of the Tollway (excepting investment income from all Funds and Accounts other than the Revenue Fund) will be collected by the Authority and deposited daily, as far as practicable, with the Trustee for the credit of the Revenue Fund. It shall be the duty of the Trustee to verify the amount of each such daily deposit separately, and to make a report to the Authority of the amount of each such daily deposit as soon as practicable. Tolls collected on behalf of TxDOT pursuant to a project agreement that provides for revenue sharing with TxDOT shall be collected by the Authority and shall be held and transferred to or upon the order of TxDOT as set forth in the project agreement.

Section 504. Duties of Consulting Engineers. The Authority covenants that it will cause the Consulting Engineers employed by it under the provisions of Section 704 of this Agreement, 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 the Authority 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 under the provisions of Article VII of this Agreement. Copies of such reports shall be filed with the Trustee and mailed by the Authority to each bondholder who shall have filed his name with the Board Representative designated for such purpose, which shall initially be the Chief Financial Officer of the Authority.

Section 505. Preliminary Budget of Current Expenses, and Payments into Reserve Maintenance Fund; Hearing on Budget; Annual Budget; Failure to Adopt Annual Budget; Amended or Supplemental Annual Budget; Payments for Maintenance, Repair, and Operations. The Authority covenants 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 of each such preliminary budget shall be filed with the Trustee and mailed to the Consulting Engineers and each bondholder who shall have filed his name and address with the Board Representative designated for such purpose, which shall initially be the Chief Financial Officer of the Authority.

If the holders of at least five percent (5%) in aggregate principal amount of the bonds then Outstanding shall so request in writing on or before the 60th day prior to the end of any Fiscal Year, the Authority shall 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 shall be mailed, at least ten (10) days before the date fixed by the Authority for the hearing, to the Trustee, the Consulting Engineers, and each bondholder who shall have filed his name and address with the Board Representative designated for such purpose, which shall initially be the Chief Financial Officer of the Authority. The Authority further covenants

APPENDIX B – QUALITY MANAGEMENT SYSTEM MANUAL PROCEDURE GEC-01 — GENERAL ENGINEERING CONSULTANT ANNUAL INSPECTION OF THE NTTA SYSTEM

NTTA Projects	Original Issue Date: 07/05/2012	GEC-01
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1.0 PURPOSE:

The purpose of this procedure is to describe the General Engineering Consultant (GEC)'s responsibilities for the general annual visual inspection and assessment of the NTTA System, Special Projects System (SPS), and related facilities as required by Section 504 of the NTTA System Amended and Restated Trust Agreement and Section 710 of the NTTA Special Projects System Trust Agreement.

2.0 RESPONSIBILITIES:

2.1 Project Director (PD) – The PD shall be a licensed civil engineer with prior experience being a program manager or project director, project manager, and field experience. The PD shall:

- Review and understand the trust agreements with the NTTA and ensure the letters to the bond holders, presentations, and all other work performed during annual inspections is in conformance with the trust agreements.
- Coordinate the NTTA staff review of the letters to the bond holders.
- Perform a quality assurance (QA) review of the final letters to the bond holders to ensure they include the inspection findings, advice and recommendations as to the proper maintenance/repair, and cost estimates thereof, per their respective trust agreements.
- Approve, sign, and deliver the final letters to the NTTA for delivery to the bond holders.
- Perform QA review of, and present to the NTTA board, a PowerPoint presentation discussing the significant aspects of the year's inspection results.

2.2 Project Manager (PM) – The PM shall be a licensed civil engineer with prior experience being a project manager as well as inspection field experience. The PM shall:

- Prepare and negotiate the inspection work authorization documents.
- Organize the pre-inspection kick-off meeting by: writing the agenda; inviting field inspectors, Maintenance Management Consultant (MMC) employees and all required NTTA staff; and facilitating the meeting.
- Be the point of contact for the GEC inspection team when communicating with the NTTA and the MMC inspection staff.

- Obtain from NTTA:
  - A list of bridges and bridge class culverts to be inspected, as well as the TxDOT Bridge Inventory Inspection and Appraisal Program (BRINSAP) reports on all bridges listed.
  - 11x17 black-and-white aerial photography plan sheets of all roadways in the systems at a scale of approximately 1 inch = 250 feet. Plan sheets should show the roadway centerline, stationing, cross street names and should encompass all collector/distributor and direct connector ramps.
  - A list of facilities required for inspection.
  - Governmental Accounting Standards Board (GASB) ratings for the System and the SPS from the most recent year available.
- Manage the inspection staff to ensure that both budget goals and schedule deadlines are met.
- Oversee the writing of the two letters to the bond holders, one for the NTTA System and one for the SPS.
- Perform a quality control (QC) review of the letters to the bond holders, observation spreadsheet and PowerPoint presentation prior to final submittal to the NTTA.
- Deliver the observation spreadsheet categorized as described in 6.1.7 to the NTTA Maintenance Department and ensure it functions properly on the NTTA computer servers.

2.3 Roadway Inspector (RI) – the RI shall be a licensed civil engineer (or if approved an Engineer in Training (E.I.T.) with P.E. supervision) with prior roadway and drainage design and/or inspection experience. The RI shall:

- Perform visual inspection and condition assessment of all roadways and appurtenances while being accompanied by an NTTA staff member.

2.4 Retaining Wall Inspector (WI) – the WI shall be a licensed civil engineer (or if approved an E.I.T. with P.E. supervision) with prior retaining wall design and/or inspection experience. The WI shall:

- Perform visual inspection and condition assessment of all retaining wall, sound wall, and tunnel elements while being accompanied by an NTTA staff member.

2.5 Bridge Inspector (BI) – the BI shall be a licensed civil engineer (or if approved an E.I.T. with P.E. supervision) with prior bridge design and/or inspection experience. The BI shall:

- Preform visual inspection and condition assessment of all bridges and bridge-class culverts on the list provided by the NTTA while being accompanied by an NTTA staff member.

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2.6 Facilities Inspector (FI) – the FI shall be a licensed architect (or if approved an Associate AIA under the supervision of a licensed architect) with prior architectural design and/or inspection experience. The FI shall:

- Preform visual inspection and condition assessment of all of the NTTA's facilities while being accompanied by an NTTA staff member. The facilities to be inspected shall be as directed by the NTTA and may include main lane plazas, operations buildings, ramp plazas, sand storage enclosures, fiber huts, the central maintenance facility and the Gleneagles administration office complex.

3.0 SCOPE/APPLICABILITY:

This procedure shall apply to the NTTA annual inspections of both the NTTA System and the SPS, as set forth by the Trust Agreements. The NTTA System shall include the Dallas North Tollway (DNT), the President George Bush Turnpike (PGBT), the Eastern Extension of the George Bush Turnpike (PGBT EE), the Sam Rayburn Tollway (SRT), the Addison Airport Toll Tunnel (AATT), the Lewisville Lake Toll Bridge (LLTB), the Mountain Creek Lake Bridge (MCLB) and associated facilities. The SPS shall include the President George Bush Turnpike Western Extension (PGBT WE) and associated facilities. The inspections, letters to the bond holders, observation spreadsheets and presentations shall be complete 90 days prior to the end of the respective NTTA System and SPS fiscal year, as specified in the trust agreements.

4.0 REFERENCES:

- NTTA System Amended and Restated Trust Agreement
- NTTA Special Projects System Trust Agreement
- Prior letters to the bond holders
- Prior observation spreadsheets
- Prior PowerPoint presentations with speaker notes
- BRINSAP reports
- NTTA personnel
- Overhead Sign Structure Inspection
- High Mast Illumination Pole Inspection
- Pavement Management Program
- Texas Accessibility Standards

5.0 DEFINITIONS & ACRONYMS:

N/A

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6.0 PROCEDURES:

6.1 General: The following procedures include tasks involving all inspectors, and where specifically mentioned, the PM and PD.

6.1.1 Prior to beginning any field inspections, the PM will schedule and facilitate the kick-off meeting with primary staff involved in the annual inspections (GEC, MMC and NTTA staff). A list of topics to be covered should include at a minimum; the scope, schedule, extent of the maintenance limits, equipment the inspectors will need to perform their tasks, safety protocol, record keeping, and the teaming of NTTA employees with the field inspectors. A contact list with all participants' names, phone numbers and email addresses should be created and distributed to all inspection staff. At the conclusion of the meeting, all participants should be aware of all submittal dates, safety protocol and the extent of the NTTA's maintenance limits.

6.1.2 Each field inspector is responsible for coordinating their respective inspection schedule with the NTTA point of contact provided by the PM. The NTTA will supply qualified staff members to team up with each GEC inspection personnel. The NTTA staff participating in the inspections should be knowledgeable of the systems they will assist in inspecting and the inspection / maintenance limits of that system.

6.1.3 Perform field inspections only between the hours set by the NTTA maintenance staff and within the limits of NTTA maintenance for the roadways. During inspections, all inspectors must wear the required safety equipment and adhere to all safety protocol set forth by the NTTA. Areas outside of NTTA maintenance responsibility are not required to be included in the inspections. When in the vicinity of ongoing construction or maintenance activities, inspections should not be performed within or near active construction areas.

6.1.4 When areas are unsafe or unreachable for pedestrian access during inspections, a rolling lane closure should be requested so that visual inspections may be performed from inside the vehicle. The vehicle shall travel at the slowest safe speed possible for each particular inspection and location, using the roadway shoulder wherever possible. Rolling lane closures should be requested at least 2 weeks in advance, and must be approved and scheduled by the respective NTTA roadway section supervisors. In areas where rolling lane closures are unsafe or where pedestrian access is not feasible, it should be documented as such.

6.1.5 If a safety concern requiring immediate attention by the maintenance department is observed, the inspector shall immediately contact the PM, who must in turn inform the NTTA Maintenance Department Director or Assistant Director.

6.1.6 At the conclusion of each inspection day, store/update all pictures, notes, and spreadsheets digitally on a single drive location accessible by the entire GEC inspection staff. Files should be set up in a clear and consistent manner for all inspectors. In cases where all staff may not have daily access to this drive, work should be downloaded at least every other week to this drive. Backup files should be created regularly to prevent loss of productivity or re-work if by chance system files are lost.

6.1.7 Organize and hyperlink all pictures in an observation spreadsheet in such a manner that they may be sorted by damage description, facility/roadway, station/location, direction of travel, date inspected, priority, and any other useful categories deemed helpful by the NTTA and MMC. All field inspectors will complete the portion of the observation spreadsheet for their discipline. Upon completion of the observation spreadsheet, upload the spreadsheet and all pictures to the NTTA server, and confirm the hyperlinked pictures will work on the server properly.

6.1.8 Determine condition ratings for all locations after the completion of the field inspections, organization of notes and pictures, and the observation spreadsheet. Using this information, assess which specific locations should be mentioned in the bond letter for maintenance, monitoring, or repair, and begin writing the letters to the bond holders. Each member of the inspection team must assist with the writing of the letters to the bond holders by contributing information on the condition of each component of the system, relating general trends as well as noting specific concerns and improvements.

6.1.9 The PM should assemble findings from each inspection team members and prepare the report to submit to the bond holders. The final letters should include the inspection findings, advice and recommendations as to the proper maintenance/repair, and cost estimates thereof, and the GASB ratings provided by the NTTA for the respective systems. The PM will also perform a quality control (QC) review of the letter prior to submitting to the PD for Quality Assurance (QA). Once QC and QA are complete, the PD will submit the letter to the Maintenance Department and MMC for review. The inspection team, working with the PM and PD, should address any comments received from the Maintenance Department and MMC and submit the final version of the letters to the NTTA for final review. The final approved letters must be completed and delivered to the NTTA with sufficient time to mail them to the bond holders 90 days prior to the end of the respective NTTA System and SPS fiscal year.

6.1.10 All field inspectors will assist with the creation of two PowerPoint presentations, one for the NTTA System, and one for the SPS, each summarizing the annual inspection findings for their respective systems. The PowerPoint presentations must be completed in sufficient time to be presented by the PD at the first NTTA board meeting following the delivery of the respective letter to the bond holders.

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6.2 Roadway Inspector

6.2.1 Perform visual inspection and condition assessment on the following roadway elements: all drainage structures (storm sewer, ditches, concrete flumes and culverts), erosion issues, signing and striping, both rigid and flexible barriers, and a design safety review of the complete systems.

6.2.2 Perform visual inspections of all roadway elements while riding with the NTTA roadway section supervisors. The supervisor should drive slowly and carefully along both the inside and outside shoulders allowing the RI time to properly inspect the roadway elements. For those areas deemed unsafe to perform inspections in this manner, a rolling lane closure should be requested to accomplish the inspection.

6.2.3 Take pictures of all observed findings along each roadway. At the RI's discretion, pictures may be taken noting overall roadway conditions.

6.2.4 Note the observation, location, date, and direction of each picture on the aerial photography plan sheets provided by the PM.

6.3 Retaining Wall Inspector

6.3.1 Perform visual inspection and condition assessment on the following retaining wall, sound wall, and tunnel elements: panels, joints, coping, flumes, mow strips, inlets, rails, riprap, slope paving, visible underdrain pipes, sound wall columns; and adjacent: sidewalks, curbs, fencing, roadways, shoulders, soil slopes, and landscaping.

6.3.2 Perform visual inspections of every retaining wall on the systems by walking both top and bottom of each wall, except in areas deemed unsafe for pedestrians (i.e. cut sections along PGBT where the main lanes are within 15 feet of the walls; fill sections along DNT where the top of retaining walls coincide with the main lane barrier rail) In areas where it is unsafe to walk the top or bottom of any wall, a rolling lane closure should be requested to accomplish the inspection.

6.3.3 Perform visual inspections of every sound wall by either walking or driving (depending on accessibility) the front and back side.

6.3.4 Take pictures of all observed findings along each wall whether visible from the top or bottom of the wall. General pictures may be taken at each wall location for common types of widespread deterioration, and should be noted as such. Overall condition pictures should be taken at intervals sufficient to encompass all lengths of all walls for documentation of areas that do not exhibit deterioration or areas of concern.

6.3.5 Note the observation, location, date, direction, and number of each picture on the aerial photography plan sheets provided by the PM.

6.4 Bridge Inspector

6.4.1 Review the BRINSAP reports prior to the bridge inspections. Note any deficiency on the reports, especially ratings less than 6, to be specifically investigated during the visual inspection of each bridge.

6.4.2 Perform visual inspections and condition assessment on the following bridge elements: deck, superstructure, substructure, channel and culvert, by walking above, below and alongside the structure, except in areas that are unreachable or deemed unsafe for pedestrians. Such areas are roadways with less than 6 foot shoulders, direct connector ramps, or any other condition which the inspector deems unsafe. Rolling should be requested when inspecting these areas.

6.4.3 Visual inspections must be performed while maintaining a clear, detailed view of all bridges, including high level interchanges and bridges over waterways; binoculars may be used to achieve this level of detail.

6.4.4 Bridges that cross over large bodies of water, such as MCLB and LLTB, shall be inspected from a NTTA provided motorized boat.

6.4.5 Take pictures of all observed findings at each bridge and bridge class culvert location. At the BI's discretion, pictures may be taken noting overall bridge condition.

6.4.6 Note the observation, location, date, direction and number of each picture on the bridge inspection form.

6.5 Facilities Inspector

6.5.1 Perform visual inspection and condition assessment of the exterior and interior of all facilities, observing all readily accessible areas including enclosed but unlocked plenums, attic spaces, and storage areas. Note any evidence of leaks, insect infestation, structural movement, malfunctioning components, impact damage, and general wear and tear. Note any deterioration of elements, in particular those relevant to Texas Accessibility Standards and the Building Code for Life, Health, and Safety Standards. Record any issues reported to the inspectors by occupants. Spot check function of light fixtures, HVAC, and electrical outlets. Verify that areas and elements intended to be secured are secured.

6.5.2 Take pictures of all observed findings at each facility location. General pictures may be taken at each facility for common types of widespread deterioration, and should be noted as such. Take a representative sample of overall condition pictures at intervals sufficient to encompass all facilities for documentation of areas that do not exhibit areas of concern.

6.5.3 Note the observation, location, and date of each picture.

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7.0 REGULATORY REQUIREMENTS:

N/A

8.0 RELATED BOARD POLICY:

N/A

9.0 COMPONENT DOCUMENTS:

GEC-01-F1 NTTA Annual Inspection Observations

10.0 FLOWCHART:

N/A

11.0 REVISION HISTORY:

Revision	Revised by:	Date Issued	DRN No.	Reason for Revision
0	Stephanie Halliday	07/05/2012	10408	Original Release

APPENDIX C – NTTA SYSTEM – CORRIDOR HISTORY

NTTA SYSTEM – CORRIDOR HISTORY

The initial section from downtown Dallas to Interstate Highway 635 (IH-635) opened to traffic in June 1968. In 1987 it was extended to Briargrove Lane in far North Dallas and then to State Highway (SH) 121 in Plano in 1994. An extension to Gaylord Parkway in Frisco opened in 2004 and again to US 380 in Frisco in 2007. The DNT/SRT interchange opened in 2011. The DNT continues to expand towards the north with the extension over US 380 to W. First Street in Prosper in 2023. NTTA has continued to extend the original DNT to new destinations as communities to the north have continued to grow.

Segment 1, extending from Midway Road to Avenue K in Collin County, opened to traffic in 1999. Segment 2, extending from Avenue K to Brand Road in Garland, opened in 2000. Segment 3, from Midway Road to the IH-35E interchange in Carrollton, opened in 2001. Segment 4, from the IH-35E interchange to the IH-635 interchange in Irving, opened in 2005. Segment 5, extending from the IH-635 interchange to Belt Line Road, opened to traffic in 2001. Segment 6, extends from Brand Road to the IH-30 near Lake Ray Hubbard in Garland, opened in October 2012.

Segments 7 & 8 extend from SH 183 to IH-20 in Grand Prairie. These two segments were constructed in four phases with Phases 1-3 under the direction of TxDOT.

Phase 1, consisting of frontage roads from North Carrier Parkway to IH-20, along with the mainlane interchange at SH 183, was opened in August 2009. Phase 2, which included two mainlanes in each direction from SH 183 to Egyptian Way, also opened to traffic in August 2009. Phase 3, consisting of frontage roads and a third mainlane from Conflans Road to North Carrier Parkway, opened in April 2010. Phase 4 was administered by NTTA under a design-build contract and included two mainlanes in each direction from North Carrier Parkway to IH-20, as well as the interchanges at IH-20 and IH-30. Phase 4 was opened to traffic in October 2012.

The PGBT has been widened to four lanes in each direction to increase capacity between IH-20 in Grand Prairie and SH 183 in Irving and from Belt Line Road in Irving to SH 78 in Garland.

NTTA maintains a portion of the frontage roads along the PGBT corridor. The sections maintained on both sides of the mainlanes include Midway Road to Rosemeade Parkway and Marsh Lane to Frankford Road in Carrollton and IH-20 to IH-30 in Grand Prairie.

Segment 1, extending from Denton Tap Road to Old Denton Road, opened to traffic in 2006. Segment 2, extending from Old Denton Road to Hillcrest Road, opened in 2008. Segments 1 and 2 were constructed under the direction of TxDOT. Segment 3, extending from Hillcrest Road to Hardin Boulevard, opened in 2009. Segment 4, extending from Hardin Boulevard to east of US 75 (including the SRT/US 75 interchange) opened in 2011. Segment 5, the SRT/DNT interchange, also opened in 2011. SRT was widened to four lanes in each direction from Denton Tap Road to US 75 in 2021. The frontage roads of SRT, which retained the SH 121 designation, are maintained by NTTA.

CTP is a six lane controlled access toll road from IH-30 to Altamesa Boulevard; a four lane facility from Altamesa Boulevard to FM 1187; and a two lane facility from FM 1187 to US 67. The CTP provides motorists with an alternate route to Interstate 35W. CTP mainlanes were open to traffic in 2014.

MCLB is an approximate two mile facility that provides an east-west crossing of Mountain Creek Lake from the Spur 303/SE 14th Street intersection in Grand Prairie to the Spur 303/Mountain Creek Parkway intersection in the Oak Cliff section of Dallas. This facility links communities in Tarrant county with those in the southern part of Dallas County and provides convenient access to businesses, recreational facilities, and other destinations in the Mid Cities area MCLB opened to traffic in 1979.

LLTB is an approximately two mile long facility that provides an east-west crossing of the northwestern arm of Lewisville Lake in Denton County. It serves as a unique landmark with a 360-foot steel truss that rises 60 feet above the roadway. The LLTB opened to traffic in 2009.

AATT provides an approximate 3,600 foot, east-west route under Addison Airport in northern Dallas County which includes a 1,650 foot tunnel. This facility relieves congestion in the far North Dallas and Addison areas and provides an alternate route to the heavily traveled Trinity Mills and Belt Line Roads and opened to traffic in 1999. The AATT was opened to traffic in 1999.

360T is an approximate 10-mile toll road located in Tarrant, Ellis, and Johnson Counties, extending from Green Oaks Boulevard in Tarrant County south to US 287 in Ellis County. The 360T was built through a public-private partnership between the TxDOT and NTTA and opened to traffic in 2018.