



E-470 Public Highway Authority

# 2025 Annual Certification

FINAL



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# 2025 E-470 Annual Certification Report

Prepared for the E-470 Public Highway Authority by Short Elliott Hendrickson Inc. (SEH)

## 1 Introduction

### 1.1 Purpose of Report

The E-470 Public Highway Authority's (the Authority) bond covenants require an Annual Certification, which consists of an independent consultant inspecting the Authority's assets and providing a written report summarizing the inspection results. The completion of this process keeps the Authority in compliance with the applicable requirements of the bond documents and allows for a "fresh" set of eyes to look at the Authority's assets and identify areas of concern or items needing specific attention.

Each asset evaluated receives a numerical score from 0-100 as defined in the Authority's Numerical Scoring System (NSS). This scoring system provides a repeatable method to measure asset conditions and provides a scientific method for measurement of quality and the Authority's performance of maintenance of their assets. With such a system, results can be compared to previous years and over time the scores can be tracked. The breakdown of this scoring system can be found in section 2.1 on page 8.

The report, as outlined by the Authority, will include the following:

- 1) Inspection results which identify whether completed portions of the tollway are maintained appropriately as outlined in the NSS.
- 2) Review of the Authority's annual budget to assess the estimated cost of maintenance and improvements needed for the upcoming fiscal year.
- 3) Discussion of upcoming safety initiatives for improvement of the tollway.

### 1.2 Budget

The Authority's annual budget addresses road maintenance and improvements in both the Operating and Capital portions of the budget. Furthermore, the Authority maintains a Capital Improvement Fund as a sub-account within the General Surplus Fund. The Capital Improvement Fund had a balance of \$305,540,146 to fully fund the 2025 capital budget of \$193,352,960. See Section 3: Roadway and Maintenance Budget for details.

### 1.3 Overview

The E-470 Public Highway, described further in Section 1.4, has been, and continues to be, maintained in good working order and safe operating condition. The Authority has an established Asset Management System, which in part is used to monitor assets by conducting specific scheduled inspections to identify deficiencies before potential failure of the asset occurs or the deficiencies increase in severity. This proactive approach has aided the Authority in correcting

minor problems and performing preventative maintenance, thus preventing larger problems in the future, and prolonging the life of their assets. This approach proves to be cost-effective as well, since preventative measures mitigate the chance of failure of an asset, which could pose a danger to the public with potential liability issues.

Capital Improvement Projects have been completed or are scheduled, which address both current and future maintenance and operation issues. The improvement projects are finished before traffic increases impact the level of service to the tollway customers. This approach enables The Authority to maintain levels of service above industry standards. In turn, customers are provided a safe and reliable method of travel.

The findings noted in this report are based on the Authority's NSS to assess and identify the level of maintenance being achieved. The corridor continues to receive ongoing, outstanding maintenance. The capacity, safety upgrades, and operational enhancements exceed those of other highways in Colorado. The safety features on the corridor are continually upgraded to provide customers with a safer and quicker option for a travel route than either the Interstate or State Highway System.

The Authority continues to reinvest in their corridor with several improvements that were completed in recent years or are ongoing, as well as setting the stage for future projects.

## 1.4 E-470 Public Highway Description

E-470 was originally constructed as a 47-mile long 4-lane toll road, designed and constructed to Interstate Highway standards. Property rights were acquired to accommodate the ultimate 8-lane highway and future planned interchanges that would be built when development increased and traffic demands were met. The first portion of the toll road opened in 1991, and the final portion opened in 2003 traversing the eastern limits of the Denver metro area as shown in Figure 1-1. Since the tollway's original construction, an additional through lane was added in each direction to create a 6-lane highway between the south I-25 interchange and the I-70 interchange. Further construction began in September of 2022 to extend the widened section from I-70 up to 104<sup>th</sup> Avenue was recently opened to traffic.

**Lane Miles:** The tollway consists of ~299 lane miles of roadway which includes through lanes, climbing lanes, ramps, interchanges, and auxiliary lanes. The Authority completed an additional 16 centerline miles through roadway widening between Quincy Ave and I-70 in 2020, widening this length to three lanes in each travel direction. The Authority oversaw a mainline widening project for the 11 mile stretch of I-70 to 104<sup>th</sup> Ave, including new interchanges at 38<sup>th</sup> and 48<sup>th</sup> Avenues which was completed this summer.

**Interchanges:** There are a total of 24 interchanges, including five freeway-to-freeway interchanges located at: northern terminus I-25, I-76, Peña Boulevard, I-70, and southern terminus I-25. The remainder of the interchanges are with arterial streets, predominantly standard interstate diamond interchanges. Six of the system interchanges are non-tolled: northern terminus I-25, I-76, Peña Boulevard, I-70, Parker Road, and southern terminus I-25.

**Tolling:** The tollway was designed and constructed as a "closed" system where every vehicle using the tollway pays a toll, either at an entry point, an exit point, or through one of the five mainline toll plazas. On July 4th, 2009, the tollway was converted to an all-electronic tolling facility. Tolls are now collected using ExpressToll accounts with transponders or through license plate tolling.

In November 2021, the Board of Directors unanimously approved yearly toll reductions starting on January 1, 2022. These discounts held steady into 2023, via approval from the Board of Directors in December of 2022. On December 14, 2023, the E-470 Board of Directors approved once again to freeze current 2023 toll rates into 2025 to reduce burden on commuters. Deeper time of day discounts remain in place to help commercial drivers deliver items and goods to customers on time. Vehicles with three or more axles and an ExpressToll account receive the normal 35% to 40% discount toll rate, as well as an additional 20% discount between 9 a.m. and 12 p.m. (during non-peak travel times) and an additional 5% discount at all other times on E-470. The Authority partnered with the Colorado Motor Carriers Association originally to create this discount in 2020.

**Facilities:** There are five mainline toll plazas along the tollway located at the following mile points: 2.5 (Plaza A), 15.5 (Plaza B), 22.5 (Plaza C), 30.0 (Plaza D), and 40.0 (Plaza E). These plazas consist of an overhead canopy structure to house the license plate cameras and electronic toll collection system hardware, along with administrative buildings.

The Authority Headquarters Facility (AHF), located near the midpoint of the corridor at the Stephen D. Hogan/6<sup>th</sup> Parkway Interchange, provides office space for Authority and toll operations contractor staff. This facility houses the heart of all electronic Toll Collection System hardware and software. The AHF includes a Traffic Management Center with 24-hour surveillance of all activities on the tollway, including traffic flow, road conditions, toll collection system monitoring, and accident/incident response. A newly completed Central Maintenance Facility (CMF), located directly adjacent, provides garage space, wash bays, and additional garage storage space for plow truck maintenance and repair. In addition, near Plazas A, C, D, and E, the Authority manages maintenance support sites (MSS). These provide areas for storage and distribution of snow removal chemicals, granular materials, and plow truck deployment for winter weather.

Toll Plaza C and the original CMF were sold in 2020 to accommodate private development and the new 38th Avenue interchange which opened in 2024. The administrative buildings at Toll Plazas A, B and D have been unused since the tollway became all-electronic in 2009. The Authority entered a long term lease with a company to redevelop the properties into travel plazas with food and gas service. Construction is underway and these new facilities will open in late 2026.



## 1.5 Improving the Tollway

The Authority continues to be proactive in responding to traffic and revenue studies by planning and adding capacity to avoid predicted substandard future Level of Service (LOS) ratings. The Authority has set a standard of LOS C or better for its facility. This high LOS standard is set and maintained to ensure customers are always provided reliable service with minimal delays throughout the year. The 2020 E-470 Master Plan contains a table that summarizes the proposed timeline of mainline segments that will need to be widened to maintain the desired LOS throughout the corridor through 2040. The Master Plan is updated every 3-5 years to maintain the proactive approach the Authority maintains to achieve the high level of function.

On May 21<sup>st</sup>, 2020, the Authority signed a multi-million-dollar long term contract with Electronic Transaction Consultants (ETC), one of the United States' leading intelligent transportation system and service providers. Within this contract, ETC delivered and is operating its next generation roadside tolling system, RiteSuite™. Some features of this advanced software include enhanced vehicle detection, separation, and classification; redundant toll collection equipment; and upgraded digital video audit system. Implementing this state-of-the-art system will help E-470 continue to grow and expand services to their customers; and efficiently monitor the health and performance of toll collecting equipment. The toll collection system is now being operated by Quarterhill (formerly ETC).

In March of 2021, the Authority completed a roadway widening project, adding a third travel lane between Quincy Avenue and I-70. These eight miles now feature expanded bridge structures, upgraded interchange traffic signals, improved drainage assets, fresh pavement, and expansion to the High Plains Trail. Signalization of the southbound Quincy ramp terminals was completed as part of this widening project.

The 2020 Master Plan has been updated with current development and traffic forecasts, and the new 2025 Master Plan was adopted by the Authority's Board of Directors in September 2025. The Master Plan forecasts year of need for additional main line lanes to maintain Level Of Service C and predicts when interchange improvements are needed.

The Authority partnered with Commerce City in 2020 to fund and install new traffic signals at the E-470/120th Ave. interchange. Similar agreements with Aurora resulted in new traffic signals at the Gartrell interchange in 2023 and the Jewell Avenue interchange in 2025. The Authority is now working with Aurora to fund and install signals at the SD Hogan Parkway interchange in 2026 to meet increased traffic demands and improve safety. In addition, the Authority is working with member jurisdictions to expand the Gartrell Road and Quebec Street interchanges.

A recently completed Structure Selection Report identified future need for a new Aurora Parkway bridge over the E-470 corridor. This bridge will carry the proposed extension of Aurora Parkway over E-470 in Douglas and Arapahoe Counties.

The recently completed widening project from I-70 to 104<sup>th</sup> Avenue includes new interchanges at 38<sup>th</sup> Avenue and 48<sup>th</sup> Avenue. The Authority executed an agreement with the Aerotropolis Regional Transportation Authority to jointly fund the construction of the new diamond interchange at 38<sup>th</sup> Avenue mentioned above. The new interchange provides access to and from Aurora Highlands, a 3,150-acre master planned development that will add a projected 32,000 residents.

In addition to roadway facility improvements, E-470 strives to improve transit through promoting electric vehicles. The Authority offers two Chargepoint “DC Fast Charge” electric vehicle (EV) charging units (4 vehicle spaces) free of charge to the public. These fast-charging stations offer two types of plug-ins: CHAdeMO and SAE combo cords. These EV charging units are located at the E-470 headquarters building at 22470 E. Stephen D. Hogan Parkway.

## 1.6 Public Communications

The Authority uses social media as a tool to educate and communicate with its customers. Videos are created quarterly to provide updated and timely information to the public. In addition, the Authority uses this communication channel to inform the traveling public of current and future construction projects on or near E-470 that may impact the customer’s travel. The following is the E-470 Facebook link which shows many of the videos created by the E-470 Communications Team aimed at keeping the customers informed: <https://www.facebook.com/E470PHA>.

The E-470 website (<https://www.e-470.com>) provides the public with general information about the tollway, a toll calculator, area maps, a log of current widening projects updates, a history of the tollway, road advisories, safety tips, contests and promotions, as well as customer feedback. The Authority sends out a Quarterly Newsletter via email to its customers and is active on social media platforms such as X (formally known as Twitter).

Road advisories are posted on social media platforms such as Facebook and X ([@e470RoadUpdates](https://twitter.com/e470RoadUpdates)) to notify customers of current road conditions. The Authority also provides access to view all live cameras along E-470 through their website for the same purpose.

## 1.7 Safety Initiatives

The Authority continues to prioritize driver safety, addressing known and potential problem areas throughout the corridor. Ongoing safety improvement initiatives include:

- Replacing faded road signs every year with ones that have high retro-reflectivity sheeting, which improves their visibility at night.
- Upgrading facility W-beam guardrail to meet the latest CDOT standards. As large portions of the existing guardrail are damaged, it is replaced with the newest CDOT-compliant W-beam guardrail. New construction projects upgrade the guardrail to the newest standard within the project limits as well.
- Repairing and upgrading Cable Rail annually. Prioritized locations include various on and off ramps of interchanges along the system, as well as in the median to protect large overhead sign monotube foundations.
- Installing speed radar signs, such as the one located just north of 64<sup>th</sup> Avenue. These are installed to help address and mitigate areas where higher-than-average accident numbers are observed.
- The Authority has installed high visibility “WRONG WAY” flashing signs at all E-470 off ramps. These illuminated signs are solar-powered and backlit. These signs, along with accompanying pavement arrows, alert drivers of the direction of travel on these ramps.

- To protect drivers and wildlife, E-470 utilizes deer fencing on long stretches of the corridor. Between Parker Road and Smoky Hill Road, deer vs. vehicle incidents were reduced from 15 to 5 per year after installation of deer fence. As future road widening projects occur, deer fence continues to be installed to reduce vehicle-wildlife accidents.
- The Authority is in the process of upgrading its traffic management center and road camera systems to facilitate automatic detection of traffic incidents and initiation of electronic message signs to alert drivers.

## 1.8 Customer & Community Initiatives

Beyond safety, The Authority also places a focus on optimizing the customer experience and supporting the rider community. Ongoing initiatives in both of these areas include:

- The Authority has been striping all facilities with 6" wide lane markings for all new construction and restriping projects since 2020. This replaces any existing 4" striping in an effort to increase visibility and driver comfort. All mainline striping is now 6" wide.
- The Authority Board of Directors is working with the Colorado State Patrol (CSP) to extend the current existing agreement (initially enacted in 2019) for continued safety and enforcement related assistance. The Authority has been contracting law enforcement services with the Colorado State Patrol for the past 28 years.
- The Authority provides free 24/7 roadside assistance to motorists on E-470. Services include, but are not limited to, aid with flat tires, gas, oil and radiator refills, and battery jumps. E-470's Communications Center has full camera coverage and continually monitors the tollway for incidents or distressed vehicles to coordinate Roadside Assistance vehicles toward locations of need.
- The program "Alive at 25", sponsored by The Authority, provides drivers ages 15 to 24 a half-day driver education course to prevent traffic violations, collisions, and fatalities.
- The E-470 Transportation Safety Foundation is an affiliated non-profit organization that raises its own funds, awarding transportation safety grants up to \$10,000 to nonprofit organizations and tax-exempt government entities supporting transportation safety, public safety, driver education and related educational programs in Colorado. to support teen driving education, seat belt safety, transportation services, safety for seniors and youth, and car seat safety programs.

## 1.9 Independent Engineer Statement

This report was prepared by Short Elliott Hendrickson Inc., which is an independently owned professional engineering firm licensed to provide engineering services in Colorado.

# 2 Annual Maintenance Inspection

## 2.1 Overview of Annual Maintenance Inspection

The consultant responsible for preparing this report is also responsible for the inspection of most of the assets listed in Section 2.1.1, unless the asset is inspected by a third party to ensure compliance with industry standards. The inspections consist primarily of visual inspection, with others utilizing non-destructive testing techniques. The Authority has provided a Numerical Scoring System (NSS) to standardize the results, which can be used in future years to provide a trend analysis. Using the NSS, the inspections for each major and minor asset are categorized as follows:

- 90 to 100 – Excellent Condition
- 80 to 89.9 – Good Condition
- 70 to 79.9 – Average Condition
- 60 to 69.9 – Below Average Condition
- 0 to 59.9 – Poor Condition

### 2.1.1 Inspection Categories

- Major Assets
  - Roadway Pavement
  - Bridges
  - Lighting
  - Drainage
  - Guardrail, Cable Rail and Barrier
  - Buildings
- Secondary Assets
  - Signing
  - Striping
  - Delineators
  - Native Seeded Areas
  - Fencing
  - Embankment Protectors
- Additional Assets
  - Variable Message Signs
  - Overhead Sign Structures
  - Irrigation and Plant Maintenance
- Traffic Services
  - Safety
  - Litter Control
  - Snow and Ice Removal

## 2.1.2 Evaluation Criteria

Each inspection category was scored according to the Authority's NSS. Any areas of concern were classified under three levels of evaluation. The criteria for the levels of evaluation are:

### Level One – Immediate Requirements

Level One items require immediate attention and should be addressed as quickly as possible. Immediate notification of Level One findings is provided to the Authority. Items in this category include creating potential safety hazards, excessive maintenance, or have the potential to be a liability. They also include items with a NSS value below the minimum requirements established for each major and secondary asset.

### Level Two – Short-Term Requirements

Level Two items are not in need of immediate attention but are not up to standards and should be included in the upcoming maintenance program to be addressed within a year of discovery.

### Level Three – Long-Term Requirements

Level Three items are items in current good condition and do not require any major maintenance within the next year but should be monitored for deterioration in the next two to four years.

## 2.2 Major Assets

### 2.2.1 Roadway Pavement

The Authority contracts with a third-party to conduct a pavement condition assessment in accordance with ASTM 6433-99 for smoothness and pavement distress. Two types of pavements are used on E-470, Hot Mix Asphalt (HMA) on the mainline and ramp gore areas and Portland Cement Concrete Pavement (PCCP) on ramps and approaches to the toll plazas. Projected traffic, revenue studies, and data from the International Roughness Index (IRI) and Pavement Condition Index (PCI) are used to plan five to eight years of renewal and replacement projects on E-470.

#### Hot Mix Asphalt

The latest available third-party pavement analysis was conducted in the summer of 2021. This test yielded an **overall IRI of 66 in/mi**. Based on a 2019 Federal Highway Administration (FHWA) report, roughly 60% of Colorado's interstate miles had an IRI rating below 95 in/mi (a lower number constitutes a smoother ride). The PCI assesses visible signs of deterioration in the roadway and provides a number from 0 to 100, with 100 representing pavement in excellent condition. **The 2021 pavement analysis resulted in a PCI of 83.7, which is considered good condition.**

No further pavement testing was performed from 2022-2025. The Authority acknowledges this gap in testing; this report defaults scoring to the value identified at the time of the last test performed. From extensively driving the corridor and visually assessing the pavement during the 2025 Annual Certification process, SEH agrees that pavement remains in excellent condition in non-construction areas, and good within construction areas. No field observations during inspections indicate that the pavement condition has deteriorated below what it was at the time of this latest analysis.

## Portland Cement Concrete Pavement

The Portland Cement Concrete Pavement (PCCP) is located on ramps and at toll plazas. Therefore, it does not get assessed in the pavement analysis report. The Authority strives to repair or replace portions of PCCP before it fails; however, any PCCP that does fail is quickly replaced. For repairs, such as longitudinal cracks, the Authority uses cross-stitching as an effective repair method. No substantial deterioration or damage was observed during the latest provided inspections.

## 2.2.2 Bridges

Each year, the Authority contracts with an independent consultant for the bridge inspections in accordance with the Federal Highway Administration’s National Bridge Inspection Standards (NBIS). The Authority maintains 102 bridges, approximately half of which are inspected one year, and the remaining bridges are inspected the following year, providing the required two-year cycle for bridge inspections per the NBIS. Some culverts are part of the inspections and are inspected on a 4-year cycle. The NBIS defines a bridge as any structure that has a clear span or opening of at least 20 feet along the centerline of the roadway, including culverts that meet these criteria. Thus, some concrete box culverts are considered “bridges” per this definition.

Forty-five (45) bridges and culverts located in Segments IV were inspected in July and August 2025. Only minor preventative repair or maintenance items were recommended. No major structural or safety concerns were identified. Numerous bridges were found to have minor repairs made, including re-coating of bridge rails, and sealing of asphalt cracks.

Sufficiency Rating was calculated for each bridge, which rates the overall structural and functional adequacy of the bridge on a 0-100 scale. **Overall, inspected bridges were found to be in excellent condition, with ratings at an average of 94.57.** Table 2-1 summarizes this data. Note that non-vehicular bridges do not receive a rating, thus are shown as “N/A”. CDOT no longer recognizes sufficiency ratings and instead has updated to utilizing a “health index” score. SEH recommends that future Annual Certification reports utilize this new health index scoring criteria as well.

**Table 2-1 – 2025 Structures Inspected and Sufficiency Rating**

Structure Number	Facility Carried	Feature Intersected	Sufficiency Rating
E-470-34.08A	E-470 NB	120th Avenue	90.4
E-470-34.08B	E-470 SB	120th Avenue	91.6
E-470-120TH2CBC	120th Avenue	Third Creek	80.6
E-470-34.42A	E-470 NB	Obrian Canal	96.0
E-470-34.42B	E-470 SB	Obrian Canal	94.9
E-470-34.42D	E-470 RAMP D	Obrian Canal	99.4
E-470-34.63A	E-470 NB	Buckley Road	97.3
E-470-34.63B	E-470 SB	Buckley Road	97.3
E-470-34.79A	E-470 NB	Burlington Ditch	98.4
E-470-34.79B	E-470 SB	Burlington Ditch	97.3
E-470-35.28D	E-470 RAMP C	Relocated Third Creek	99.8

Structure Number	Facility Carried	Feature Intersected	Sufficiency Rating
E-470-35.34D	E-470 RAMP C	BNSFRR, Cameron Drive	98.8
E-470-35.44A	E-470 NB	I76, BNSFRR	96.8
E-470-35.44B	E-470 SB	I76, BNSFRR	96.0
E-470-35.46D	E-470 RAMP G	Relocated Third Creek	99.8
E-470-36.27C	SABLE ROAD/SH 2	E-470	78.1
E-470-37.07A	E-470 NB	Second Creek	94.7
E-470-37.07B	E-470 SB	Second Creek	94.9
E-470-37.30CBC	E-470 ML	Local Drainage	81.3
E-470-37.72C	E-470 CONNECTOR	US 85	99.9
E-470-37.83A	E-470 NB	US85, UPRR, FULTON DITCH	94.1
E-470-37.83B	E-470 SB	US85, UPRR, FULTON DITCH	91.3
E-470-38.38C	US 85 CONNECTOR	E-470	95.9
E-470-38.47C	BRIGHTON BLVD	E-470	95.8
E-470-38.97A	E-470 NB	South Platte River	91.5
E-470-38.97B	E-470 SB	South Platte River	91.5
E-470-39.51A	E-470 NB	Riverdale RD and Ditch	97.6
E-470-39.51B	E-470 SB	Riverdale RD and Ditch	97.6
E-470-41.57C	QUEBEC STREET	E-470	98.9
E-470-42.45CBC	E-470 ML	Local Drainage	81.6
E-470-42.61A	E-470 NB	Holly Street	96.6
E-470-42.61B	E-470 SB	Holly Street	85.5
E-470-43.04C	SIGNAL DITCH	E-470	N/A
E-470-43.66C	COLORADO BLVD	E-470	96.7
E-470-44.11C	UNION PACIFIC RR	E-470	N/A
E-470-44.62CBC	E-470 ML	Local Drainage	81.6
E-470-44.83A	E-470 NB	York Street	97.6
E-470-44.83B	E-470 SB	York Street	97.6
E-470-44.98A	E-470 NB	Big Dry Creek	97.6
E-470-44.98B	E-470 SB	Big Dry Creek	97.6
E-470-44.98C	E-470 ON RAMP B	Big Dry Creek	100.0
E-470-44.98E	E-470 OFF RAMP D	Big Dry Creek	100.0
E-470-45.87C	WASHINGTON STREET	E-470	97.1

Structure Number	Facility Carried	Feature Intersected	Sufficiency Rating
E-470-46.36D	I25 RAMP D	I25, E470 ML, RAMPS	99.9
E-470-46.39D	E-470 RAMP F	I25, NWP	99.5

### 2.2.3 Lighting

The Authority maintains approximately 1,450 lights and strives to keep 95% of the lights working at any given time. The Authority conducts a lighting inspection no less than once a month with its own personnel and keeps records as to how many high mast lights are operational or not; this does not assess the structural components of the lights. A complete structural verification of fifty-nine (59) high mast lights was completed in the northern areas of E-470, such as around the I-25 interchange and ramps for Washington Street.

A random selection of 149 lights (~10%) were inspected for bolt tightness, weld conditions, rust, cracks, flaking paint, and erosion around the poles. **The detailed light inspection confirmed the lights are in excellent operating condition with the average individual light achieving a score of 98.59.** We found no loose anchor bolts during inspection. Rust, weld, or paint issues were present on 26 light poles at the time of inspection, these figures included open hatch panels. An example of this are depicted in **Figure 2-1** below. 45 poles were noted to be missing bolt caps. One pole was found to have an open air gap between the pole foundation and the base; this is shown in **Figure 2-2** below.

A night-time driving inspection was conducted to inspect the working conditions of all 1,450 lights. One point, out of 100, was deducted from the NSS score for every 14, or portion thereof, lights not working. Most of the observed outages were on the E Stephen D. Hogan Parkway exit, which the Authority was already aware of. **This inspection found 16 lights with at least one bulb burnt out, resulting in a score of 98.90.** Based on the NSS, a total numerical score from 0-100 is calculated for the average score of working lights and the average score of the randomly inspected poles and bases. **The overall condition of the lights was found to be in excellent condition with an average score of 98.74.**



**Figure 2-1 – Open access panel with wires exposed, SB Chambers Off Ramp**

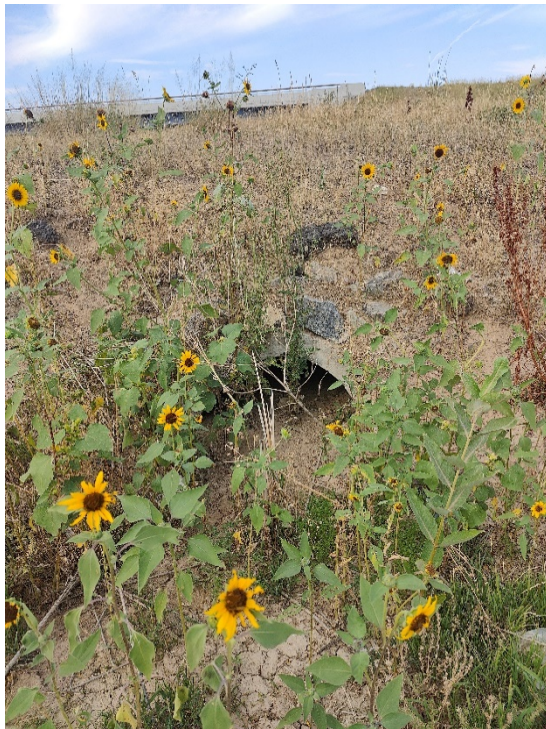


**Figure 2-2 – Pole with observed gap between foundation and base**

## 2.2.4 Drainage

The Authority maintains 59 box culverts (CBCs), which are inspected every two to four years depending on their structural condition. The frequency is determined by the culvert's clear opening as described in Section 2.2.2. The Authority also maintains approximately 160 reinforced concrete pipe culverts (RCPs). For Annual Certification, 10 concrete box culverts and 15 reinforced concrete pipe culverts were randomly inspected for sediment, trash, tumbleweeds, and capacity.

One RCP (**Figure 2-3 and 2-4** below) was observed with sediment and trash blocking more than 50% of the pipe capacity. **Figure 2-5** shows early warning signs of tumbleweed piling up at the outlet of a CBC just south of 112<sup>th</sup> Ave. **Figure 2-6** shows foliage and undergrowth taking place at the inlet of CBC around mile marker 7.5. **Figure 2-7** showcased extensive tumbleweed blocks at the inlet of a culvert in the NB shoulder just south of SH 30. **Overall, the box culverts are in excellent condition with an average score of 99.60. The reinforced concrete pipes were also in the excellent condition range with an average of 95.27. Both drainage assets combined averaged a 97.43.**



**Figure 2-3 – Culvert with significant dirt build-up clogging the inlet just north of E Quincy Ave**



**Figure 2-4 – Outlet of the culvert in Figure 2-3, displaying sediment and trash blockage**



**Figure 2-5 – Start of tumbleweed collection at outlet of CBC north of Tower Road**



**Figure 2-6 – CBC at MP 7.25 with significant foliage and overgrowth at the inlet**



**Figure 2-7 – Culvert south of SH 30 with significant tumbleweed blockage at inlet**

## 2.2.5 Guardrail, Cable Rail, and Barrier

The Authority maintains three types of barriers, ~217,500 feet of median cable rail, ~108,500 feet of W-beam guardrail, and ~4,000 feet of concrete Jersey barrier.

Since a small percentage of the barrier total is concrete Jersey barrier, which can be partially damaged and still perform, no score is associated with inspected locations. A visual inspection of the concrete barrier was conducted and no substantial damage requiring replacement was noted.

### Guardrail

Guardrail inspections began with an initial driving inspection of all W-beam guardrail sections along the system, hunting for areas of clearly visible damage to the beam stretches. Notable findings were reported to The Authority, who strive to repair any significant damage to W-beam within one week. One area of significant damage was noted during the first driving inspection, which is displayed in **Figure 2-8**. A second visual inspection was then conducted three weeks later to confirm repair. This area was repaired, resulting in a score of 100 for this aspect of guardrail inspections.



**Figure 2-8 – Collision damage to guardrail at 96<sup>th</sup> Ave NB ramp**

Twenty random locations of W-beam guardrail were then selected for a closer detailed visual inspection in accordance with the NSS, where thorough inspection of the posts and W-beam for missing or broken bolts, posts out of plumb, and areas exhibiting significant distress was performed. **Figure 2-9** on the following page showcases wooden post damage observed along multiple stretches. **Figure 2-10** on the following page displays chipped and fading object marking paint on an end treatment for the guardrail section along the SB Smoky Hill on ramp. **The results of the detailed inspection found the guardrail to be in excellent condition; an average score of 99.00. The overall score of the guardrail driving and field inspections is excellent: 99.50.**



**Figure 2-9 – Broken wooden posts (typ.)**



**Figure 2-10 – Scraped and fading marker paint on guardrail along SB Smoky Hill On Ramp**

### Cable Rail

Although cable rail may still be functional if damaged, the Authority strives to repair cable rail as soon as possible after any significant damage occurs to minimize accident severity of a potential secondary accident at the same location. There were three areas of post damage observed, all of which were already marked for repair. With prior flagging accounted for, a score of 100 was given for the driving portion of the cable rail inspection.

Twenty 200-foot sections of cable rail were randomly selected for a detailed visual inspection deducting points for any significant damage, posts out-of-plumb by more than two inches, and rust. **Figure 2-11** and **Figure 2-12** display typical findings for cable rail faults this year. No major issues were discovered, and the tension testing performed by Valtir in July found that all cables were taut within the acceptable range. **The overall Cable Rail condition found in the walking inspection was excellent with an average score of 99.95. The overall average score of the cable rail driving and field inspections is excellent with a score of 99.98.**



**Figure 2-11 – Bent post (typ.)**



**Figure 2-12 – Broken steel rings (typ.)**

## 2.2.6 Buildings

Two types of buildings are maintained by the Authority according to the NSS – large buildings and ramp buildings. There are nine large buildings including four Toll Plazas (TP A, TP B, TP D, and TP E), three Maintenance Support Sites (MSS A, MSS D, and MSS E), the Authority Headquarters Facility (AHF), and the adjacent Central Maintenance Facility (CMF). All large buildings are inspected annually along with 10 of the 32 ramp buildings, selected at random, for the Annual Certification Report. Toll Plaza C (TPC) was sold in 2020. These properties are no longer under the Authority’s control and therefore no longer inspected as part of the Annual Certification process.

To quantify the overall state of the buildings, a balanced score card is used that summarizes the score for each building’s major components. Each component of the building was scored on a 100-point scale and the average of the applicable components were used for the overall building health score. The average building scores are shown in **Table 2-2**.

**Table 2-2 – Buildings Balanced Scorecard – Buildings Summary**

Component	TPA	TPB	TPD	TPE
Exterior	92	97	100	99
Interiors	89	92	95	98
Tunnels	92	99	98	98
Mechanical Equipment	N/A	N/A	N/A	N/A
<b>Average</b>	<b>91.00</b>	<b>96.00</b>	<b>97.67</b>	<b>98.33</b>

Component	MSSA	MSSD	MSSE
Exterior	100	96	98
Interiors	93	100	99
Barns	97	98	95
Mechanical Equipment	_*	_*	_*
<b>Average</b>	<b>96.67</b>	<b>98.00</b>	<b>97.33</b>

Component	AHF		Ramps
Exterior	97		97.40
Interiors	82		
Mechanical Equipment	_*		-
<b>Average</b>	<b>89.50</b>		<b>97.40</b>

## Large Buildings

The major components of the large buildings include building exterior, building interior, HVAC systems, mechanical components within the buildings, and the underground tunnels at the Toll Plazas. Buildings were inspected for, but not limited to, cracks larger than ¼", visible leaks, water damage, voids larger than ½" in masonry walls, structural damage, vandalism, and mold/mildew. Inspections of the HVAC equipment are supplied by a specialized independent HVAC contractor to generate a condition assessment to be used in the Annual Certification.

The following summarizes the findings and scoring of the large buildings:

- **No emergency Level 1 concerns were identified for any of the buildings.**
- **MSS A:** The building is in excellent condition with an **overall rating of 96.67**. Water damage to one window frame was deemed a Level Two concern. Minor internal and exterior door damage was noted as a Level Three concern, along with additional exterior damage. The siding at this facility was replaced this year.
- **Toll Plaza A:** The building is in excellent condition with an **overall rating of 91.00**. Widespread water damage and present water were observed in both the main building and in the tunnel system, which are Level Two concerns. Inspected damage and cracking on ceiling panels, inner and outer walls, as well as drywall damage were deemed Level Three findings.
- **Toll Plaza B:** The building is in excellent condition with an **overall rating of 96.00**. Water damage on the ceiling was a Level Two concern. Level Three findings included holes and other damage to the interior walls and ceiling, as well as brick/grout damage outside.
- **Authority Headquarters Facility (AHF):** The AHF is in good condition with an **overall rating of 89.50**. Level Two findings consisted of water damage found on areas of the ceiling and on window frames. Level Three findings included multiple wall, foundation, and window seal cracks.
- **Central Maintenance Facility (CMF):** The CMF is in excellent condition with an **overall rating of 99.33**. The two total findings were both Level Three: one minor crack on both the exterior and interior of the facility.
- **Toll Plaza D:** The building is in excellent condition with an **overall rating of 97.67**. Level Two findings were water damage along the ceiling and walls and standing water in the basement and tunnel area. Wall cracks and chipped floor tiles comprised the Level Three issues. The siding of this facility is anticipated to be replaced this fall.
- **MSS D:** The building is in excellent condition with an **overall rating of 98.00** with only Level Three findings noted: minor damage and discoloration of the exterior plywood sheeting and roof.
- **Toll Plaza E:** The building is in excellent condition with an **overall rating of 98.33**. Level Two findings were water damage to ceiling panels and the basement area. Cracking drywall and a missing brick on the exterior summarized the Level Three observations.
- **MSS E:** The building is in excellent condition with an **overall rating of 97.33**. There were no Two findings. The Level Three findings were minor water damage to interior panels and damage to plywood paneling.

For the mechanical HVAC components within the buildings, an Asset Condition Report is typically prepared summarizing equipment into the rating categories of Good, Fair, Critical, or Not Rated. Some of the different items rated throughout the buildings include air conditioning units, exhaust fans, pumps, rooftop units, and water heaters. The Authority contracts with independent contractors to inspect and maintain other mechanical systems. SEH received reports for some, but not all, of the Authority facilities and display the results in **Table 2-3** below:

**Table 2-3 – Mechanical Components/HVAC Certifications**

P.M. Type	Frequency	Certifying Entity	Latest Inspection Completed	2025 Certification Status
Fire Extinguishers	Annually	Aurora Water		Current
Fire Suppression (sprinklers)	Annually	Aurora Water	August 2024	Current
Smoke Detectors	Annually	Aurora Water	July 2024	Current
Fire Control Panel	Annually	Aurora Water	July 2024	Current
Backflows	Annually	Aurora Water	June 2025	Current
Boiler	Bi-Annually	State of Colorado	December 2024	Current
HVAC	Monthly*	Haynes Mechanical	July 2024	Unknown
Elevators	Annually	A to Z Elevator Inspections, Inc.	May 2025	Current

\* - Inspections take place monthly and are discussed with The Authority twice per year

## Ramp Buildings

Ten ramp buildings were randomly selected from the 32 total under Authority control. No Level One or Level Two issues were observed during the ramp building inspections **Table 2-4** summarizes the ramp buildings inspected and where deficiencies were observed. Full findings from the inspections are listed in Table 2-6 Inventory of Findings, starting on page 25. **Overall, the ramp buildings are in excellent condition with an average score of 97.40.**

**Table 2-4 – Ramp Building Inspection Results**

Ramp Building	Exterior Damage	Interior Damage	Water Damage	Other*
(NB) On-ramp - Jordan Rd - Exit 4	X	X		
(NB) On-ramp - Jewell Rd - Exit 16				
(NB) On-ramp - 6 <sup>th</sup> Parkway - Exit 19	X			
(NB) On-ramp - 64 <sup>th</sup> Ave - Exit 25	X			X
(NB) On-ramp - 120 <sup>th</sup> Ave - Exit 34	X			
(SB) Off-ramp - Colorado Blvd - Exit 43	X	X		
(SB) Off-ramp - E-470 to Quebec St - Exit 41	X	X		

(SB) Off-ramp - E-470 to 96 <sup>th</sup> Ave - Exit 31	X			X
(SB) Off-ramp - E-470 to 56 <sup>th</sup> Ave – Exit 24	X			
(SB) Off-ramp - E-470 to Chambers Rd - Exit 3	X			

\* - See Summary of Findings Table for more information

## Overall Buildings Summary

**Table 2-5** summarizes the average scores of the large buildings and ramp buildings, along with comparisons to how each building scored during last year’s Certification:

**Table 2-5 – Building Scores Summary**

Building	2025 Average Score	2024 Average Score
TP A	<b>91.00</b>	89.67
MSS A	<b>96.67</b>	98.00
TP B	<b>96.00</b>	95.67
Authority Headquarters Facility (AHF)	<b>89.50</b>	95.00
Central Maintenance Facility (CMF)	<b>99.33</b>	N/A
MSS D	<b>98.00</b>	99.33
TP D	<b>97.67</b>	92.67
TP E	<b>98.33</b>	95.67
MSS E	<b>97.33</b>	98.00
Ramps	<b>97.40</b>	98.20

## 2.3 Secondary Assets

### 2.3.1 Signing

The Authority maintains approximately 4,000 signs and aims to always keep 95% in good condition. This is defined as signs with no damage, secure, straight facing towards oncoming traffic, and good retro-reflectivity and readability during both day and night.

Forty signs were chosen randomly for inspection. Each sign was assessed for secureness to post and base. Points were deducted for signs that were bent, unclean, out-of-plumb by more than 1 inch per 4 feet of height, and/or unreadable during daytime or nighttime conditions. No signs were found to be less securely attached than desired, two signs were found to be less clean, three sign panels were bent at time of inspection, and one sign was out of plumb.

**Figure 2-13** on the following page a sun-damaged sign near Toll Plaza E. The protective coatings were cracked and the paint was chipping and faded in color. **Figure 2-14** showcases a hospital sign near Buckley Road which is bent significantly from a vehicle collision.

The majority of inspected signs were clean, plumb, secure, with sufficient retro-reflectivity readings. **All signs were readable during both day and night inspections. The overall condition of the signs is excellent with an average score of 99.63.**



**Figure 2-13 – Faded peeling sign near TPE**



**Figure 2-14 – Bent sign panel near Buckley Road**

## 2.3.2 Striping

Approximately 1,350,000 linear feet of roadway striping is maintained by the Authority. For the inspection, five separate, random, one-mile mainline sections of roadway in each direction were visually inspected for nighttime visibility. The Authority contracts with an outside consultant to measure the retro-reflectivity of all the striping using a Laserlux retroreflectometer. The recorded measurements will be compared to the visual spot check. If the retro-reflectivity is measured less than 100 cd/lx/m<sup>2</sup>, 50 points will be deducted from that mile section score. It is also recommended that striping stretches with a reading less than 100 cd/lx/m<sup>2</sup> mandate restriping. **Visually, the striping is in excellent condition with an overall score for pavement markings of 99.00.**

Retroreflectivity testing was performed in June of 2025, with an overall value of 324 cd/lx/m<sup>2</sup> for the entire tollway. This is an increase from the previous testing: 303 cd/lx/m<sup>2</sup> in September of 2024.

## 2.3.3 Delineators

The Authority maintains approximately 6,000 delineators, with approximately 20 delineators per mile section of road, and targets 80% to be in good condition. Five separate, random, one-mile mainline sections of delineators in each direction were visually inspected for straightness (measuring out-of-plumb by more than four inches), nighttime visibility of yellow and white

reflective squares, and number of delineators knocked down or missing. **Based on the random sections inspected the overall condition of the delineators is good with an overall score of 83.60.** The most consistent finding along the corridor was missing delineators, either removed or knocked over from vehicles traveling on the shoulders. This was observed along all selected mile stretches, with significant discrepancies noted around the recent widening construction area. The Authority is aware of these gaps, and newer standard delineators are being installed gradually throughout the corridor.

## 2.3.4 Native Seeded Areas

Ten randomly selected 100-foot x 100-foot areas were inspected out of the approximately 1,200 acres of native seeded area maintained by the Authority. The areas were inspected for bare spots larger than two square feet and erosion greater than two inches deep. **The overall condition is excellent with a median score of 98.60.**

**Figure 2-15** displays an example of the typical patchiness of grass coverage observed at three separate locations. No major erosion or Prairie Dog damage was observed in the areas randomly selected.



**Figure 2-15 – Bare patches amongst grass coverage (typ.)**

## 2.3.5 Fencing

Three main types of fencing are maintained by the Authority, Right of Way (ROW) fence, snow fence, and deer fence. Twenty locations of ROW fencing, ten locations of snow fencing, and twenty locations of deer fence were randomly selected for inspection. Fences were checked for structural soundness, openings or breaks in the fabric, plumbness of posts, secure attachments of fence to the posts, and fabric being intact to the required height. The Authority was alerted of one area with catastrophic deer fence damage, which was repaired within one week of notification. Following that repair, no major areas of concern were observed during the 2025 corridor inspections. One interesting condition observed at several locations was that Prairie Dog colonies encroaching into fence areas are tunneling at the bases of fence posts. **Figure 2-16 and Figure 2-17** display two such cases. **The overall condition of the fencing is excellent with an average score of 99.60.**



Figure 2-16 – Prairie Dog tunnel at snow fence post foundation



Figure 2-17 – Another Prairie Dog tunnel at snow fence post foundation

## 2.3.6 Embankment Protectors

Similar to the previously detailed culvert inspections, embankment protectors (EPs) are inspected for debris and depth of erosion at the discharge location. Fifteen (15) embankment protectors out of the seventy maintained by the Authority were randomly selected for inspection. Three out of the 15 embankment protectors inspected had openings restricted by at least 30%. **Figure 2-19** showcases one such case of this. At another location, the SE corner of the US 85 bridge, the EP was found to be ~80% clogged at the outlet.

One location of note was the EP at the NW corner of Colorado Blvd; **Figure 2-18** below showcases settling of the concrete which is creating a hole at the edge of pavement. **The overall condition of Embankment Protectors was found to be excellent, with an average score of 91.07.**



Figure 2-18 – Settling and concrete warping at EP inlet at Colorado Blvd. Exit



Figure 2-19 – Heavily blocked and overgrown EP outlet at 104 Ave.

## **2.4 Additional Assets**

### **2.4.1 Variable Message Signs**

At the time of inspection, all the 12 Variable Message Signs (VMS) signs along the E-470 corridor were operating and providing drivers with informative and necessary information for safe travel. VMS are used to warn of accidents, closed lanes, and of adverse road conditions.

### **2.4.2 Overhead Sign Structures**

The Authority has an independent consultant inspect overhead signs every five years. In addition, the Authority Roadway Maintenance staff inspects each overhead sign structure for loose or missing anchor bolt nuts and checks the welds at the base of overhead sign structure yearly as part of an Asset Management Program. The 4-year inspections are performed in accordance with the “Colorado Signs, Signals, and High-Mast Lights Inventory and Inspection Manual” published by CDOT. Overhead sign structures in Segments I, II, and III were inspected in 2021 and again in 2025. Those in Segment IV were inspected in 2022 and are due again in 2026.

### **2.4.3 Irrigation and Plant Maintenance**

The Authority has multiple water sources for irrigation and plant maintenance along the tollway. Irrigation is used at the Toll Plazas, Maintenance Support Sites and the Authority Headquarters Facility. From Mile point (MP) 0.0 to 5.0, the Authority works with Meridian Metropolitan District for its irrigation water needs. From MP 5.0 to 34.0, the Authority has agreements with public and private agencies as well as the use of an Authority-owned well near Toll Plaza D. From MP 34.0 to 46.0, water from the Todd Creek Farms Metro District is utilized.

The Authority has a dead plant removal inspection twice a year: during spring and fall. Plant maintenance is a perpetually ongoing activity.

## **2.5 Additional Traffic Services**

### **2.5.1 Safety**

A list of the safety protocols and initiatives that The Authority provides and/or engages in are given in Section 1.7 – Safety Initiatives.

### **2.5.2 Litter Control**

Road debris and litter is removed daily by the Authority’s maintenance crew and Roadside Assistance crew between calls. Cleanup of the road was witnessed regularly during the inspections for the Annual Certification. E-470 is well maintained and has an excellent appearance.

### **2.5.3 Snow and Ice Removal**

The Authority monitors E-470 for weather conditions and uses strategically placed weather stations and pavement sensors to be proactive for inclement weather. Two outside professional forecasting firms are also utilized to provide advanced notifications of storm systems. One

proactive measure includes the Authority’s use of liquid magnesium chloride prior to snow or ice conditions. When conditions warrant, the Authority will also use dry road salt as necessary. Snow plowing efforts are contracted and organized and coordinated by the Authority’s maintenance staff. Plowing is prompt and E-470 is normally cleared before the adjoining highways.

## 2.6 Inventory of Findings

Notable findings are summarized in **Table 2-6** and the overall NSS condition scores are summarized in **Table 2-7**. The definitions of the three levels of findings are repeated below for reference:

### Level One – Immediate Requirements

Level One items require immediate attention and should be addressed as quickly as possible. The Authority is immediately notified of Level One findings. Items in this category include posing potential safety hazards, creating excessive maintenance, or possessing the potential to be a liability. They also include items with a NSS value below the minimum requirements established for each major and secondary asset.

### Level Two – Short-Term Requirements

Level Two items are not in need of immediate attention, but should be included in the upcoming maintenance program to be addressed within a year of discovery.

### Level Three – Long-Term Requirements

Level Three items are items currently in good condition and do not require any major maintenance within the next year but should be monitored for deterioration in the next two to four years.

**Table 2-6 – Inventory of 2025 Findings**

Level	Asset Type	Location	Description of Finding
2&3	Buildings	Various	Level one and two findings are listed and summarized in section 2.2.6 – Buildings.
3	Cable Rail	Various	Object marker stickers are peeling and faded.
3	Cable Rail	MP 9.75	Post bent beyond 30 degrees.
3	Cable Rail	MP 33.25	Metal binder rings have become detached.
3	Delineators	Throughout Corridor	Significant percentage of delineators are missing in inspected areas. E-470 is aware and replacing with new standard delineators gradually.
2	Drainage	MP 7.25	Sediment build-up in the CBC.
2	Drainage	N of Quincy between NB E-470 and Gun Club Rd	RCP substantially clogged with sediment and trash at both ends.

Level	Asset Type	Location	Description of Finding
2	Drainage	MP 7.25	Significant sediment build-up in the CBC.
2	Drainage	N of Quincy Ave between NB E-470 and Gun Club Rd	RCP substantially clogged with sediment and trash at both ends.
2	Drainage	SB – Jewell Ave On Ramp	Inlet covered with tumbleweeds, average height of 2ft. Tumbleweed blockage extends ~10ft.
2	Drainage	NB shoulder S of State Highway 30 bridge.	Inlet covered with tumbleweeds, average height of 2ft. Tumbleweed blockage extends ~4ft.
3	Drainage	Various	Minor sediment an or tumbleweed build- up.
3	Drainage	Various	Minor undergrowth and culvert openings.
2	EPs	SW Corner of Jordan Rd Bridge	~30% trash blockage at the outlet.
2	EPs	NW Corner of State Highway 30 Bridge	Trash littering outlet area.
2	EPs	SE Corner of 112 <sup>th</sup> Ave Bridge	Outlet nearly completely covered.
2	EPs	NE Corner of Quebec Bridge	Erosion at outlet and holes forming along the pipe alignment in slope above.
2	EPs	NW Corner of Colorado Blvd Bridge	Sediment at outlet. Inlet concrete is shifting/settling.
3	EPs	Various	Minor trash and sediment build-up at other locations.
2	Fencing	NB - 120 <sup>th</sup> Ave Off Ramp	Downed fence across creek flowline crossing.
2	Fencing	SB - East of Washington St Bridge	Top wires are cut. One post is detached.
2	Fencing	SB - East of Colorado Blvd On Ramp	Top wire is loose, and the fabric is cut.
2	Fencing	SB – MP 6.5	Fence cut between 2 posts.
2	Fencing	NB - W of Jordan Rd On Ramp	Prairie Dog hole dug compromising post foundation.
2	Fencing	SB - Chambers Rd Off Ramp	Prairie Dog holes under multiple post foundations.

Level	Asset Type	Location	Description of Finding
2	Fencing	NB - 96 <sup>th</sup> Ave Off Ramp	Loose fabric (top two bands).
3	Fencing	SB - S of Ireland Way Bridge	Loose bottom band.
2	Guardrail	Right Shoulder of Jordan Rd On Ramp (SB)	Broken posts at connection to concrete.
2	Guardrail	Shoulder at Piney Creek Bridge (SB)	Multiple damaged and split posts.
2	Guardrail	Median S of Arapahoe Rd Bridge	Two missing posts.
2	Guardrail	Right Shoulder of Smoky Hill Rd SB On Ramp	Object marker reflector fading and scratched. Minor collision scraps and damage. Multiple damaged posts.
2	Guardrail	Median S of Pena Blvd	Erosion pits around most of the wooden posts. Poor soil backfill at installation, perhaps?
2	Guardrail	Median at 104th Ave Bridge	Old standard posts – too short. Breaking wood connectors near ends.
2	Guardrail	Median at Second Creek Bridge	Multiple errors with safety end treatments. Sun damage.
3	Guardrail	Median at Tower Rd Bridge	Old standard posts – too short.
3	Guardrail	Median S of Sable Blvd Bridge	Old standard posts – too short. Sun baked.
3	Guardrail	Median S of Highway 30	Poor backfill at bases.
3	Guardrail	Various	Sun damaged.
2	Lights	NB – Chambers Rd Off Ramp	Exposed rebar on foundation.
2	Lights	NB – Jewell Ave On Ramp	Exposed rebar on foundation.
2	Lights	NB – York St Off Ramp	Gap formed between concrete foundation and bottom of pole.
3	Lights	Various	Open hatch doors with exposed wires.
3	Lights	Majority of inspected locations	Missing bolt caps.

Level	Asset Type	Location	Description of Finding
2	NSAs	South of Smoky Hill (before bridge retaining wall)	Erosion issues.
3	NSAs	South of Peoria (between off ramp and mainline, 300' before Peoria)	Trash littered across area.
3	NSAs	North of Gartrell (between off ramp and mainline, 100' north of bridge)	Ant hills and bare patches.
3	NSAs	North of Parker (between off ramp and mainline, 80' before "Jordan Road 1 Mile" sign)	Bare patches.
2	Signing	MP 16	Mile Marker 16 sign is bent.
2	Signing	Buckley Rd Exit	Platte Valley Medical Center sign is damaged. (Was already marked for replacement).
2	Signing	West of TPE	Wrong Way sign has been clipped and bent
2	Signing	West of Toll Plaza E	Merge Arrow sign has low reflectivity and is hardest to read than most other signs.
3	Signing	Toll Plaza E	Keep Left of Median had visual marks and scratches.
3	Signing	East of York St	Right Lane Must Exit (York) lettering is starting to peel off.

**Table 2-7 – Numerical Scoring System Summary**

	Inspection Category	2025	2024	Asset Condition
Major Assets	Roadway Pavement (PCI)	<b>83.70</b>	83.70	<b>Good</b>
	Bridges	-	94.43	<b>Excellent</b>
	Lighting	<b>98.74</b>	98.81	<b>Excellent</b>
	Drainage	<b>97.43</b>	99.77	<b>Excellent</b>
	Overall Rail			
	--Guardrail	<b>99.50</b>	99.90	<b>Excellent</b>
	--Cable Rail	<b>99.98</b>	99.98	<b>Excellent</b>
	Buildings	<b>96.12</b>	95.80	<b>Excellent</b>
Secondary Assets	Signing	<b>99.63</b>	99.20	<b>Excellent</b>
	Striping	<b>99.00</b>	98.00	<b>Excellent</b>
	Delineators	<b>82.00</b>	92.40	<b>Good</b>
	Native Seeded Areas	<b>98.60</b>	89.00	<b>Excellent</b>
	Fencing	<b>99.54</b>	99.60	<b>Excellent</b>
	Embankment Protectors	<b>91.07</b>	91.60	<b>Excellent</b>

### 3 Roadway and Maintenance Budget

#### 3.1 Roadway and Maintenance Budget

The Authority continues to allocate funds appropriately for the maintenance of the corridor. The Engineering and Roadway Maintenance Department’s 2025 Budget Summary for Roadway Specific Expenses is shown in **Table 3-1**.

**Table 3-1 – 2025 Roadway and Maintenance Expenses**

Roadway and Maintenance Expenses	2025 Budget
Electrical Repairs	\$150,000
General Landscape Maintenance	\$105,000
Mowing & Irrigation	\$275,000
Drainage Maintenance	\$165,000
Shouldering	\$100,000
Pavement Maintenance	\$155,000
Structure Maintenance	\$77,500
Roadway Maintenance	\$1,300,000
Snow Removal	\$5,138,000

Roadway & Engineering Support	\$907,500
Land Management Support	\$182,600
<b>Total Roadway Specific Expenses</b>	<b>\$8,555,600</b>

### 3.2 Fiscal Year Roadway and Maintenance Budget

The 2025 budget for the proper maintenance and repair appears to be adequate based on the required historical expenditures and the very good condition of the tollway.

When additional repairs become necessary, the Authority has a Capital Improvement Fund, which is available for unusual or immediate maintenance needs as well as future capital improvements.

The Authority also maintains a Five-Year Capital Projects Budget, as shown in **Table 3-2**. This includes interchange improvements, pavement resurfacing, and future construction projects such as widening from four to six lanes from I-70 to 104<sup>th</sup> Avenue, and 104<sup>th</sup> Avenue to I-76.

**Table 3-2 – Five-Year Capital Projects Budget Summary**

Project Category	2025 Budget	2026 Estimate	2027 Estimate	2028 Estimate	2029 Estimate
Renewal and Replacement	\$32,341,480	\$6,520,000	\$6,310,000	\$22,805,000	\$2,990,000
Capital	\$161,011,480	\$68,300,000	\$127,190,000	\$75,650,000	\$128,905,000
<b>Total Capital Expenditures</b>	<b>\$193,352,960</b>	<b>\$74,820,000</b>	<b>\$133,500,000</b>	<b>\$98,455,000</b>	<b>\$131,895,000</b>

## 4 Summary

The Authority continues to maintain and improve the tollway at a very high standard. Out of the 12 major and secondary assets, **10 are rated in Excellent condition**. The Authority continues to address any immediate concerns in a timely manner and remains responsive when concerns are brought to their attention. Our interactions suggest that The Authority appropriately allocates their resources and funding to maintain their assets in an overall excellent condition.

The Authority maintains operations during ever-changing circumstances surrounding workplace commuting and daily travelers. The Authority continues to show prudent financial management of the roadway asset while pushing forward towards rider quality and connectivity improvements.



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