NORTH CAROLINA
Turnpike Authority

Maintenance Rating Program

Triangle Expressway

August 2025

2025 Second Quarter Report

CONSULTANT CERTIFICATION OF COMPLETION

August 15, 2025

Alan Shapiro, P.E.
Deputy Chief Engineer
North Carolina Turnpike Authority
2501 Aerial Center Parkway, Suite 200
Morrisville, NC 27699

NCTA Triangle Expressway Roadway Maintenance Performance Rating Program; Q2, 2025 Rating

This is to certify that I, Adam Gosselin, PE, am an authorized official representative of the company Mott MacDonald I&E, LLC, a subconsultant to HNTB North Carolina, P.C. Collaboratively; we are working as the NCTA Roadway and Facility Maintenance Performance Rating Program Consultants.

I know of my own personal knowledge, and do hereby certify, that the work of the contract described above has been independently performed in accordance with, and in conformity to, the *NCTA Roadway and Facility Maintenance Performance Standards v.7.1*.

Sincerely,

Mott MacDonald I&E, LLC

Adam Gosselin, PE
Principal for Mott MacDonald
PE #038213

930 Main Campus drive, Suite 200
Raleigh, NC 27606

Table of Contents

Figures & Tables

Appendices

1.0 Executive Summary

The North Carolina Turnpike Authority (NCTA) Maintenance Rating Program (MRP) is a maintenance evaluation program for roadway features and toll facilities on the NCTA system. This report presents results from the 2025 Second Quarter Assessment of the Triangle Expressway.

The overall 2025 second quarter maintenance rating of the Triangle Expressway was **94.9,** above the NCTA target rating of 90. As shown in ***Table 1***, all five elements assessed achieved a rating greater than the target rating of 85.

Table 1: MRP Element Results for the 2025 Second Quarter Assessment

Element	MRP Rating	Target Rating
Road Surface	96.0	85.0
Unpaved Shoulders and Ditches	100.0	85.0
Drainage	96.9	85.0
Roadside	97.7	85.0
Traffic Control Devices	89.3	85.0
Overall MRP Performance Rating	**94.9**	**90.0**

This report also provides a rolling rating of the latest four quarterly inspections of the Triangle Expressway. As presented in ***Table 2***, the rolling maintenance rating of the Triangle Expressway was **95.4**.

Table 2: MRP Rolling Element Results

Element	Q3 2024 Rating	Q4 2024 Rating	Q1 2025 Rating	Q2 2025 Rating	Rolling Rating
Road Surface	100.0	98.0	100.0	96.0	98.6
Unpaved Shoulders and Ditches	100.0	100.0	100.0	100.0	100.0
Drainage	92.5	97.0	95.6	96.9	95.4
Roadside	96.7	96.9	99.1	97.7	97.6
Traffic Control Devices	87.8	92.2	89.5	89.3	89.6
Overall MRP Performance Rating	**94.6**	**96.2**	**96.0**	**94.9**	**95.4**

In addition, the report provides findings of the Green Level Historic District signs inspection. This quarter, two signs were inspected. One of the signs was in good physical condition, while the other has been removed after being struck and down for some time. The landscaped area around the erected sign was maintained in accordance with NCTA MRP standards.

2.0 Introduction

The NCTA MRP is a comprehensive planning, measuring, and managing process that provides a means for communicating to managers, stakeholders, and customers the impacts of policy and budget decisions on program service delivery.

Using outcome-based performance measures and the service level scale (0 through 100), the inspection results are rated against established threshold criteria. The program analysis is accomplished using sampling procedures that capture the level of service being provided for individual assets. The evaluation procedure is based on the establishment of threshold conditions that quantify the maximum defect allowed on assets. Over time, the results can be charted to identify work needs and subsequent necessary actions.

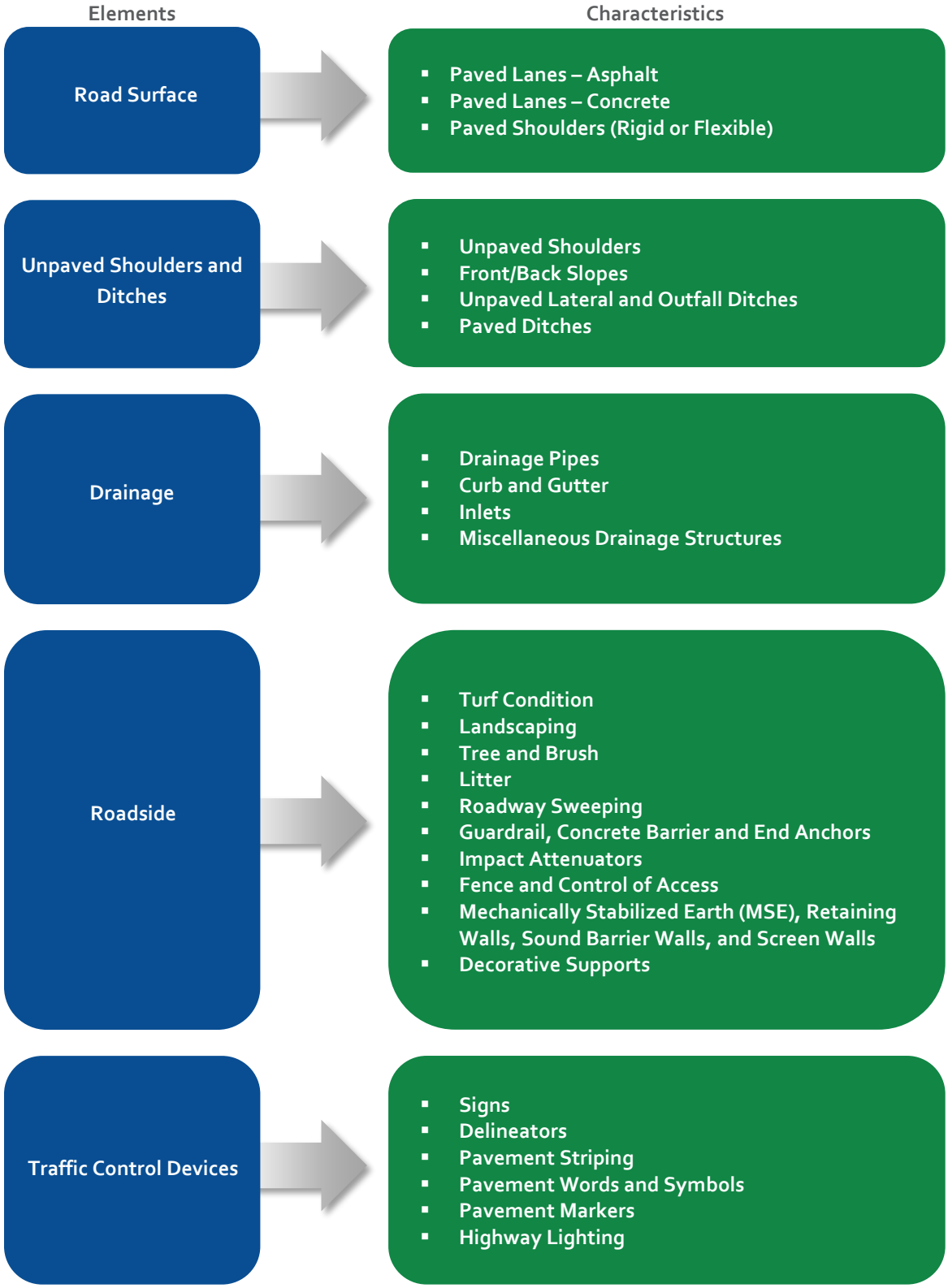
The NCTA performance standards, threshold criteria, and maintenance rating program were developed through a collaborative effort by NCTA managers, NCDOT maintenance staff, and consultants.

Using field survey information, a maintenance matrix can be developed to show the ties between maintenance activities and the characteristics of various roadway features. The purpose of this evaluation is to provide information that can be used to schedule and prioritize routine maintenance activities and provide uniform maintenance conditions that meet established objectives.

3.0 MRP Procedure

Per the *NCTA Roadway and Facility Maintenance Performance Standards V7*, roadway assets or characteristics on NCTA facilities have been grouped into elements. These elements and corresponding characteristics are shown in ***Figure 1:***

Figure 1: Maintenance Elements and Characteristics



A weighting system has been established to identify the importance of each element and characteristic. This system consists of two weighting factors: one that accounts for the importance of individual characteristics within a given maintenance element (1-9), and one that accounts for the importance of the maintenance elements to the total rating (by % of score). This two-factor system reveals deficiencies among characteristics and elements.

The program analysis is accomplished using statistically valid, random sampling procedures that capture the level of service for individual characteristics, with a 95% confidence level in sampling. The sample characteristics selected are evaluated during quarterly inspections, which are performed during the months of February, May, August, and November to account for dynamic changes in assets during the various seasons. The evaluation process is completed using electronic data collection tablets and is based on established threshold conditions described in the NCTA Roadway and Facility Maintenance Standards V7. Those characteristics that meet or exceed the threshold are coded as PASSING; those that do not meet the threshold are coded as NOT PASSING.

When the evaluation process is completed, the number of PASSING samples and total sample are multiplied by the weighted values (1-9) to determine the actual and possible rating points for characteristics and elements. MRP ratings for elements and characteristics are then calculated as the ratio of the actual rating points to possible rating points. The MRP ratings represent the maintenance level of service currently being provided, as they define the percent of characteristics and elements that meet the maintenance condition standard. For instance, an MRP rating of 83 signifies that 83 percent of the inspected elements/characteristics met the standard.

The overall MRP rating is determined by calculating the sum of the elements' ratings multiplied by the following weighted factors:

Road Surface =	**25%**
Unpaved Shoulders =	**13%**
Drainage =	**15%**
Roadside =	**17%**
Traffic Control Devices =	**30%**
Total	**100%**

The NCTA's overall target rating is 90, with elements scoring 85 or higher, and characteristics 80 or higher. In addition to quarterly ratings, the cumulative rolling annual rating is calculated each quarter. This rating is obtained by adding the ratings of the latest four quarterly inspections to compensate for the likelihood of uneven sample sizes.

4.0 Triangle Expressway Description

The Triangle Expressway extends for approximately 37 miles from the interchange of I-40 and Toll NC-885 in Durham to an easterly connection with I-40 / I-42 near Garner. It includes a one-mile segment on Toll NC-540 extending north from the Toll NC-540 / Toll NC-885 interchange to the NC-54 interchange. The Triangle Expressway consists of eighteen interchanges and thirty-four all-electronic toll collection zones. The newest section from N.C. 55 Bypass to I-40/I-42 near Garner opened to traffic and started toll collection on September 25, 2024. This section includes interchanges at Holly Springs Road, Bells Lake Road, U.S. 401, Old Stage Road, and N.C. 50 before connecting with I-40 and I-42. While the newly opened extension is now open to traffic, this report will only summarize the data for the pre-existing roadway segment from Exit 54 north/west. (***Figure 2***).

Figure 2: Triangle Expressway Map

5.0 Triangle Expressway Asset Inventory Update

Through normal day-to-day maintenance activities and the construction of special projects, roadside assets are continuously being added or modified on the roadway. NCTA coordinates closely with NCDOT Division 5 Maintenance and conducts routine field visits to maintain an accurate asset inventory and ensure the validity of the MRP survey.

Prior to this quarter assets on Toll NC 540 exit ramps to and from NC-55 Bypass were removed from the inventory due to the Complete 540 construction project. ***Table 3*** presents the updated number of assets that are currently available for inspections.

Table 3: Asset Inventory

Assets	Total Inventory	2025 Eligible Inventory
Barriers	801	616
Curb and Gutter	428	391
Decorative Supports	305	298
Drainage	1179	1127
Misc. Drainage	218	202
Fences	508	483
Highway Lighting	435	430
Impact Attenuators	48	46
Inlets	1129	1075
Linear Segments	795	755
Plant Beds	266	257
Paved Ditches	2	2
Pavement Symbols	652	591
Signs	1224	1168
Tree and Brush	603	567
Turf	1074	1011
Walls	88	84

6.0 MRP Second Quarter Assessment

6.1 Quarterly Results

The overall 2025 second quarter maintenance rating of the Triangle Expressway was 94.9, above NCTA's target overall rating of 90. All elements assessed achieved quarter ratings above the target rating of 85 established for element groups.

It is important to note that these results are only representative of the second quarter sample, one of the four surveys to provide an intermediate snapshot of seasonal conditions. Therefore, they are not a statistically valid representation of the assets; only the total of all four quarterly inspections, reported as the rolling rating, provides a 95% confidence level in statistical sampling. The second quarter MRP performance ratings for elements and characteristics are presented in ***Table 4*** and ***Table 5***, respectively.

Table 4: MRP Element Results for Q2 2025

Element	MRP Rating
Road Surface	96.0
Unpaved Shoulders and Ditches	100.0
Drainage	96.9
Roadside	97.7
Traffic Control Devices	89.3
Overall MRP Performance Rating	**94.9**

Table 5: MRP Characteristics Results for Q2 2025

Road Surface	Sample Passed	Sample Total	Weighted Values	Actual Pts	Available Pts	Q2 Rating
Paved Lanes Asphalt	12	14	9	108	126	86
Paved Lanes Concrete	18	18	9	162	162	100
Paved Shoulder	32	32	5	160	160	100
Element Total				**430**	**448**	**96.0**
Unpaved Shoulders and Ditches	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q2 Rating**
Unpaved Shoulder	32	32	9	288	288	100
Front/Back Slopes	32	32	6	192	192	100
Lateral and Outfall Ditches, Unpaved	32	32	6	192	192	100
Ditches, Paved	0	0	5	10	10	100
Element Total				**682**	**682**	**100.0**
Drainage	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q2 Rating**
Drainage Pipes	34	34	7	238	238	100
Curb and Gutter	28	28	6	168	168	100
Inlets	33	34	7	231	238	97
Misc. Drainage Structure	19	23	4	76	92	83
Element Total				**713**	**736**	**96.9**
Roadside	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q2 Rating**
Turf Condition	29	33	7	203	231	88
Landscaping	25	25	4	100	100	100
Trees and Brush	30	31	4	120	124	97
Litter	32	32	4	128	128	100
Roadway Sweeping	32	32	5	160	160	100
Guardrail, Concrete Barrier, and End Anchors	31	31	9	279	279	100
Impact Attenuators	9	9	9	81	81	100
Fence, Control Access	29	30	7	203	210	97
Retaining Walls and Sound Barrier Walls	14	14	5	70	70	100
Decorative Supports	26	26	5	130	130	100
Graffiti and Stain Removal	44	44	4	176	176	100
Element Total				**1650**	**1689**	**97.7**
Traffic Control Devices	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q2 Rating**
Signs	34	34	7	238	238	100
Delineators	31	32	3	93	96	97
Pavement Striping/Marking	29	32	8	232	256	91
Words and Symbols	38	46	7	266	322	83
Pavement Markers	31	32	9	279	288	97
Highway Lighting	35	46	6	210	276	76
Element Total				**1318**	**1476**	**89.3**

Additionally, ***Appendix A*** includes maps that present the location of all assets assessed during the second quarter. ***Appendix B*** includes a list of the individual assets that did not achieve their target ratings.

6.2 Quarterly Analysis and Recommendations

Elements

During the second quarter, all elements exceeded NCTA's quarter score threshold criteria of 85.

Road Surface (96.0) decreased 4.0 points from the previous quarter's rating. Paved Lanes Asphalt (86.0) quarter rating decreased by 14 points from the previous quarter rating.

Unpaved Shoulders and Ditches (100.0) elemental rating was on par with the previous quarter's rating. All characteristics within this element continued scoring above 90.

Drainage (96.9) rating increased by 1.3 points from the previous quarter rating. Misc. Drainage Structures (83) rating declined with an decrease of 8 points from last quarter.

Roadside (97.7) rating decreased by 1.4 points from the previous quarter rating. While most characteristics continued to score strongly, Turf Condition (88) was the most impacted characteristic with a score decrease of 9.0 points from the previous quarter's rating.

Traffic Control Devices (89.3) experienced a decrease in rating of 0.2 points from the previous quarter. Highway Lighting (76) decreased by 1 point in rating and will require attention with an element characteristic score below target of 80. Word and Symbols (83) continued to improve with an increase in rating of 2 points.

Recommendations to improve specific critical characteristic ratings are provided in the following sections.

Characteristics

This quarter, all but one element characteristic, Highway Lighting (76), exceeded NCTA's quarter score threshold criteria of 80. A description of the characteristic's conditions and future work planning recommendations are provided below. Pictures of applicable characteristic failures are included in ***Appendix B***.

Highway Lighting (76 rating – 35 of the 46 assets passed): Each of the highway lights that did not pass inspection were not functioning properly (out at night).

To maintain/improve the condition ratings, it is recommended that highway lighting be regularly inspected for functionality after dark, and maintenance completed as planned in the capital budget. Solar and battery powered backup may help cover temporary down time between repairs.

Maintenance Program:

1) Perform night patrol once a month and identify any outages. A monthly "Lighting Outage Report" shall be submitted by the maintenance provider to the NCTA by the 30th of each month. All bulb outages must be replaced within 48 hours.
2) Perform cleaning of glassware at the same time as any routine maintenance function or diagnostic action is performed.
3) Replace any light poles damaged by traffic within 5 days or within 14 days if any foundations needed pouring.

Maintenance and Evaluation Standards: Highway Lighting does not meet the maintenance standards when any of the following criteria is observed:

1) Any electrical inspection plate, access panel cover, exposed electrical wire or pull box cover are not properly secured in place.
2) The luminaries are not functioning during nighttime observation. (N)
3) Any pole is damaged, leaning or missing.
4) Rodent screen protection is not in place, where applicable.

7.0 Annual Results

The 2025 annual rolling maintenance rating of the Triangle Expressway was **95.4**, exceeding NCTA's target overall rating of 90. All elements exceeded NCTA's rolling rating threshold criteria of 85. Twenty-seven of the twenty-eight characteristic ratings met or exceeded the target rating of 80.

The 2025 results are presented in ***Exhibit 1*** and ***Table 6***. These results are a collection of the four quarterly inspections conducted in the last year.

Exhibit 1: MRP Element Results for 2025

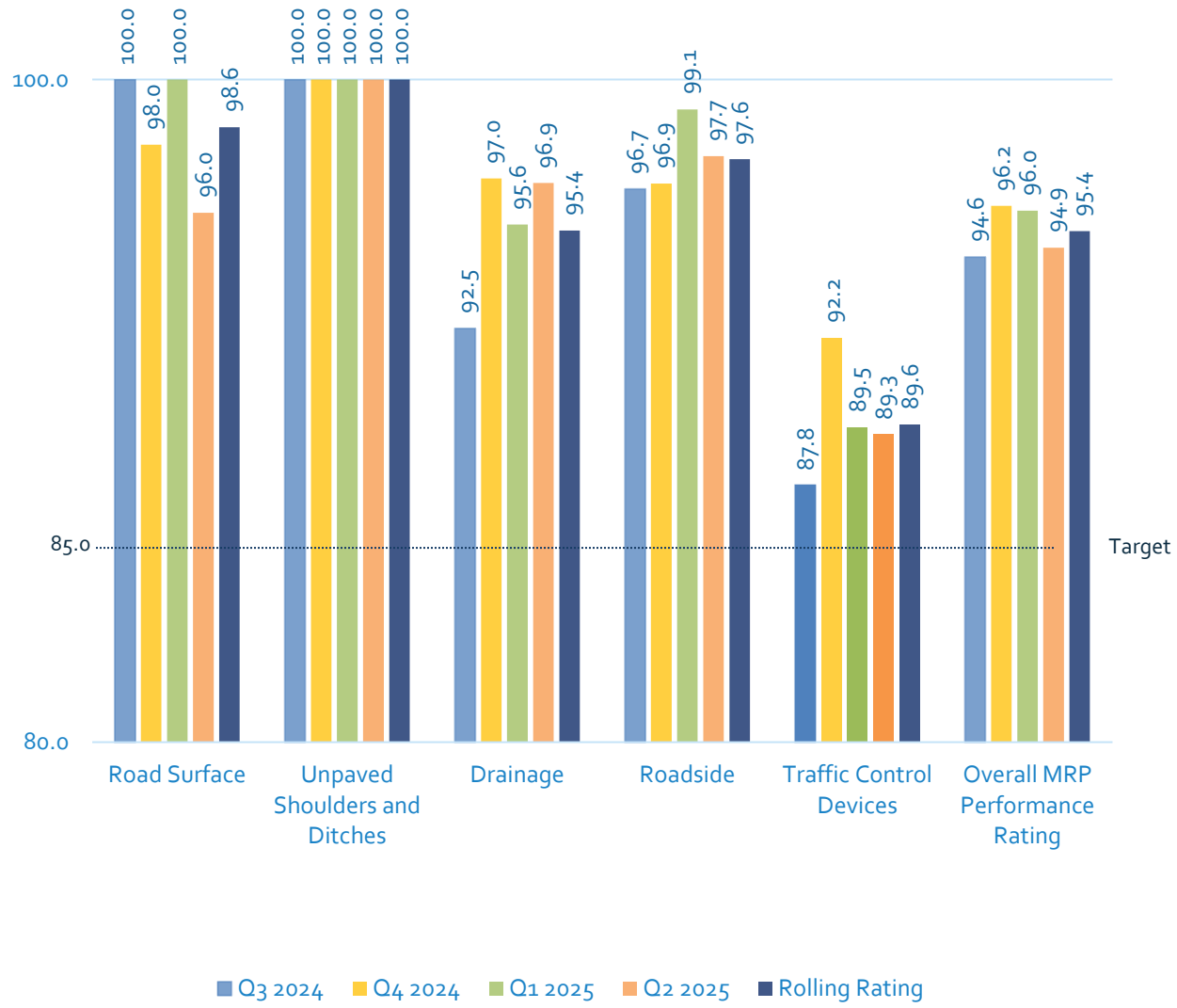


Table 6: MRP Rolling Element Results

Road Surface	Q3 2024 Rating	Q4 2024 Rating	Q1 2025 Rating	Q2 2025 Rating	Rolling Rating
Paved Lanes Asphalt	100	100	100	86	95
Paved Lanes Concrete	100	96	100	100	99
Paved Shoulder	100	100	100	100	100
Element Total	**100.0**	**98.0**	**100.0**	**96.0**	**98.6**
Unpaved Shoulders and Ditches	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Q2 2025 Rating**	**Rolling Rating**
Unpaved Shoulder	100	100	100	100	100
Front/Back Slopes	100	100	100	100	100
Lateral and Outfall Ditches, Unpaved	100	100	100	100	100
Ditches, Paved	100	100	100	100	100
Element Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Drainage	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Q2 2025 Rating**	**Rolling Rating**
Drainage Pipes	98	100	97	100	99
Curb and Gutter	97	100	90	100	97
Inlets	85	94	100	97	94
Misc. Drainage Structure	88	91	91	83	88
Element Total	**92.5**	**97.0**	**95.6**	**96.9**	**95.4**
Roadside	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Q2 2025 Rating**	**Rolling Rating**
Turf Condition	91	97	97	88	93
Landscaping	100	92	100	100	98
Trees and Brush	100	94	100	97	98
Litter	100	100	100	100	100
Roadway Sweeping	100	100	100	100	100
Guardrail, Concrete Barrier, and End Anchors	100	100	100	100	100
Impact Attenuators	90	89	90	100	92
Fence, Control Access	88	90	100	97	93
Retaining Walls and Sound Barrier Walls	100	100	100	100	100
Decorative Supports	100	100	100	100	100
Graffiti and Stain Removal	100	100	100	100	100
Element Total	**96.7**	**96.9**	**99.1**	**97.7**	**97.6**
Traffic Control Devices	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Q2 2025 Rating**	**Rolling Rating**
Signs	89	97	97	100	95
Delineators	100	100	100	97	99
Pavement Striping/Marking	97	100	97	91	96
Words and Symbols	89	74	81	83	82
Pavement Markers	97	100	92	97	96
Highway Lighting	65	79	77	76	74
Element Total	**87.8**	**92.2**	**89.5**	**89.3**	**89.6**

7.1 Green Level Historic District Signs

Green Level Historic District signs and surrounding landscaped areas were installed as part of the Triangle Expressway construction project. Currently, NCDOT is maintaining the Green Level Historic District Signs and the Town of Cary is providing maintenance to the landscaped areas surrounding these signs.

As part of each quarterly inspection, an assessment team visits the two remaining Green Level Historic District signs to conduct a visual inspection of each sign and ensure they are in good standing. One of the two signs included in the inspection inventory was found to be in good condition, while the other appears to have been removed after being stuck and down for some time. ***Figure 4*** shows the two areas assessed.

Figure 4: Green Level West Historic District Signs, Landscape Areas

8.0 Conclusion

This report presents the 2025 second quarter assessment of the Triangle Expressway. The NCTA's target ratings are 90 for the rolling rating, 90 for the overall quarter rating, 85 for elements, and 80 for characteristics. The second quarter 2025 overall rating was **94.9** and the rolling rating was **95.4** , both ratings met the target rating of 90.

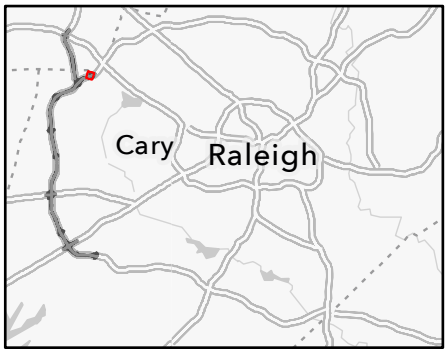
All element ratings were above the target ratings for the quarter and rolling assessment. During the second quarter assessment, all but one characteristic met or exceeded the target rating of 80. The characteristic that received a quarter score less than 80 was Highway Lighting (76). To maintain/improve the condition ratings, it is recommended that highway lighting be routinely inspected for functionality after dark along with routine maintenance being completed as planned in the capital budget.

This quarter, one of the two Green Level Historic District signs inspected was found to be in good condition, and the other has been removed. The landscaped area surrounding the erected sign was found to be well maintained.

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

- Failing Asset
- Passing Asset



NORTH CAROLINA Turnpike Authority

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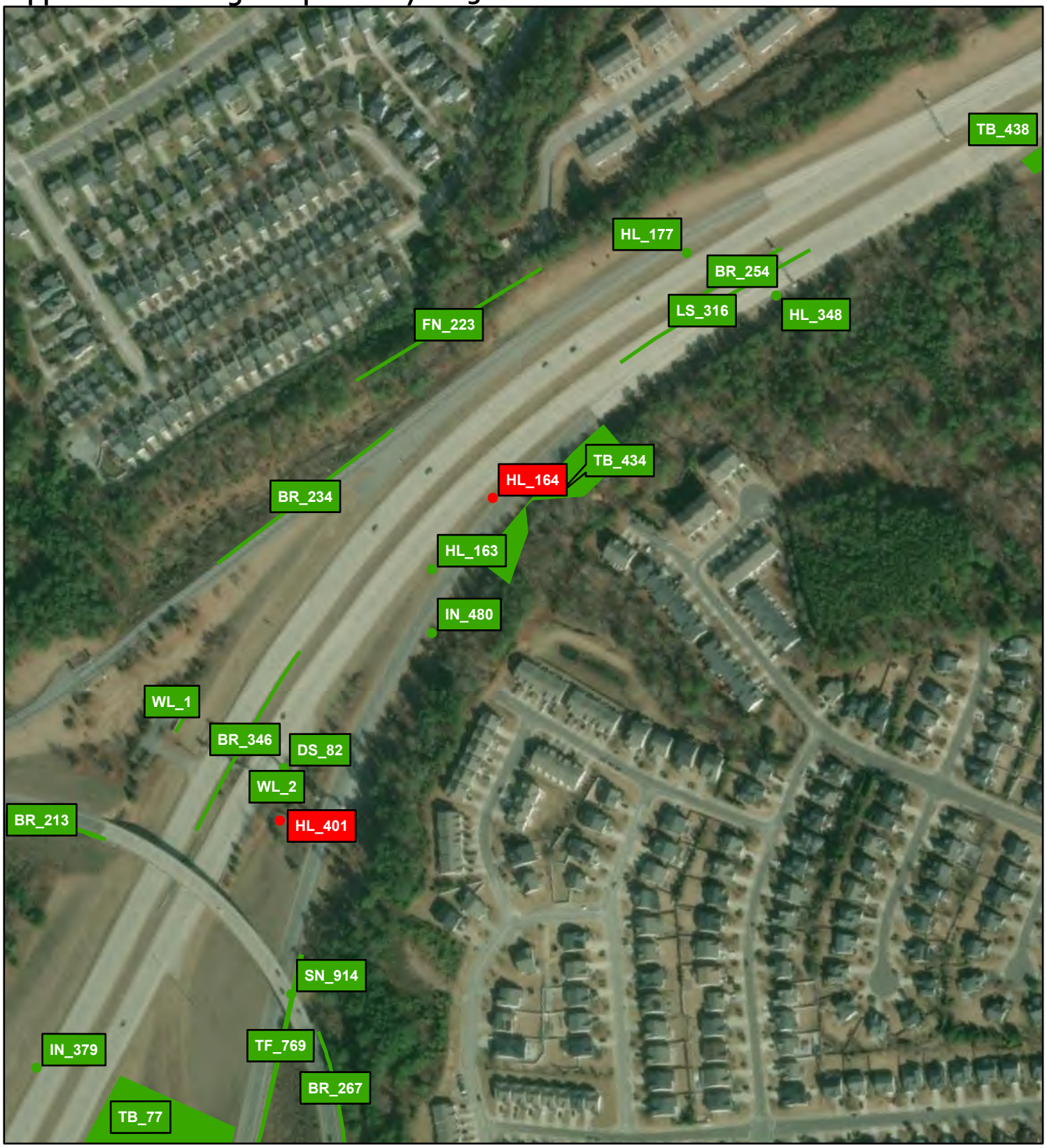

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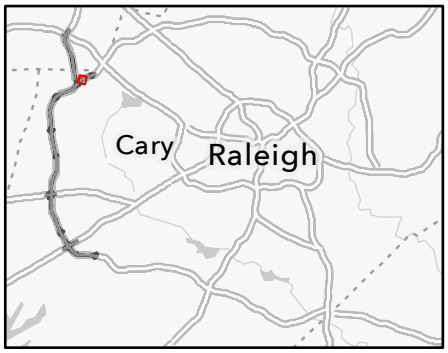

NORTH CAROLINA Turnpike Authority

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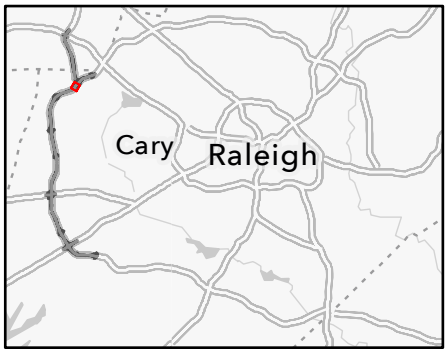

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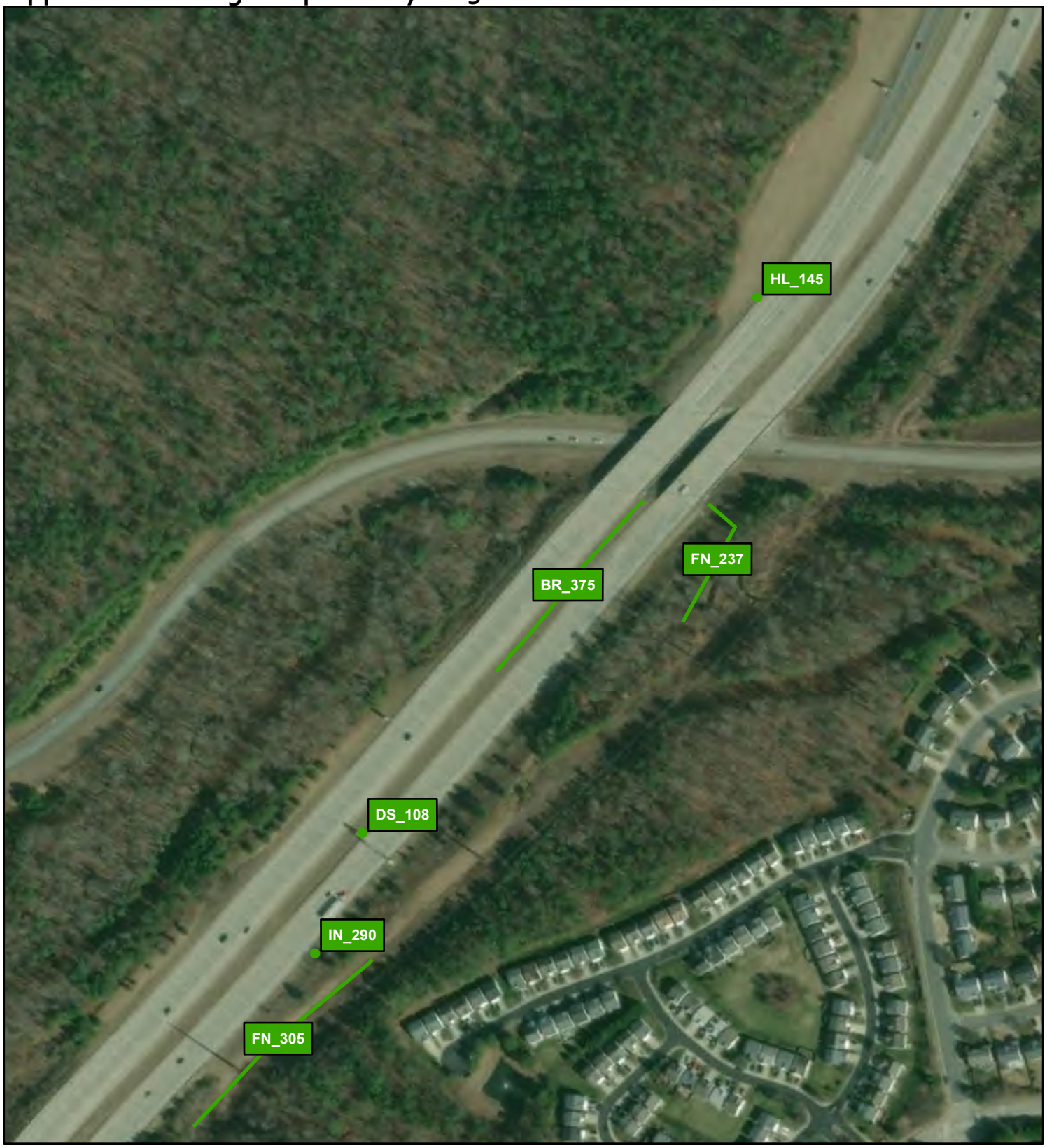

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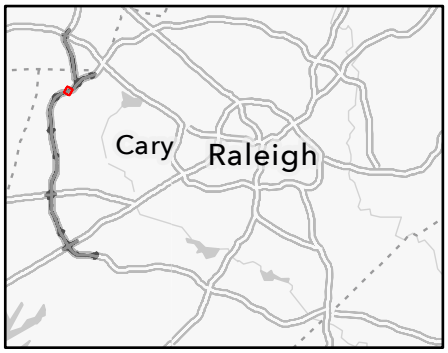

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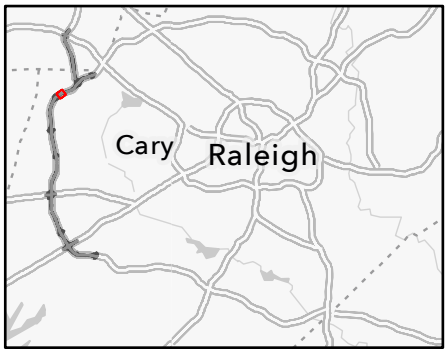

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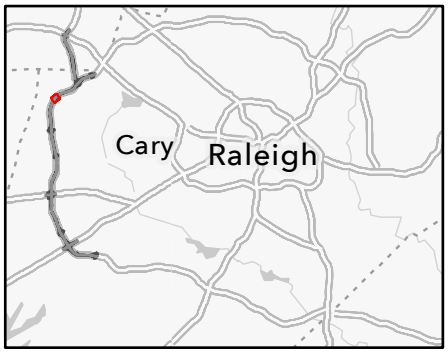

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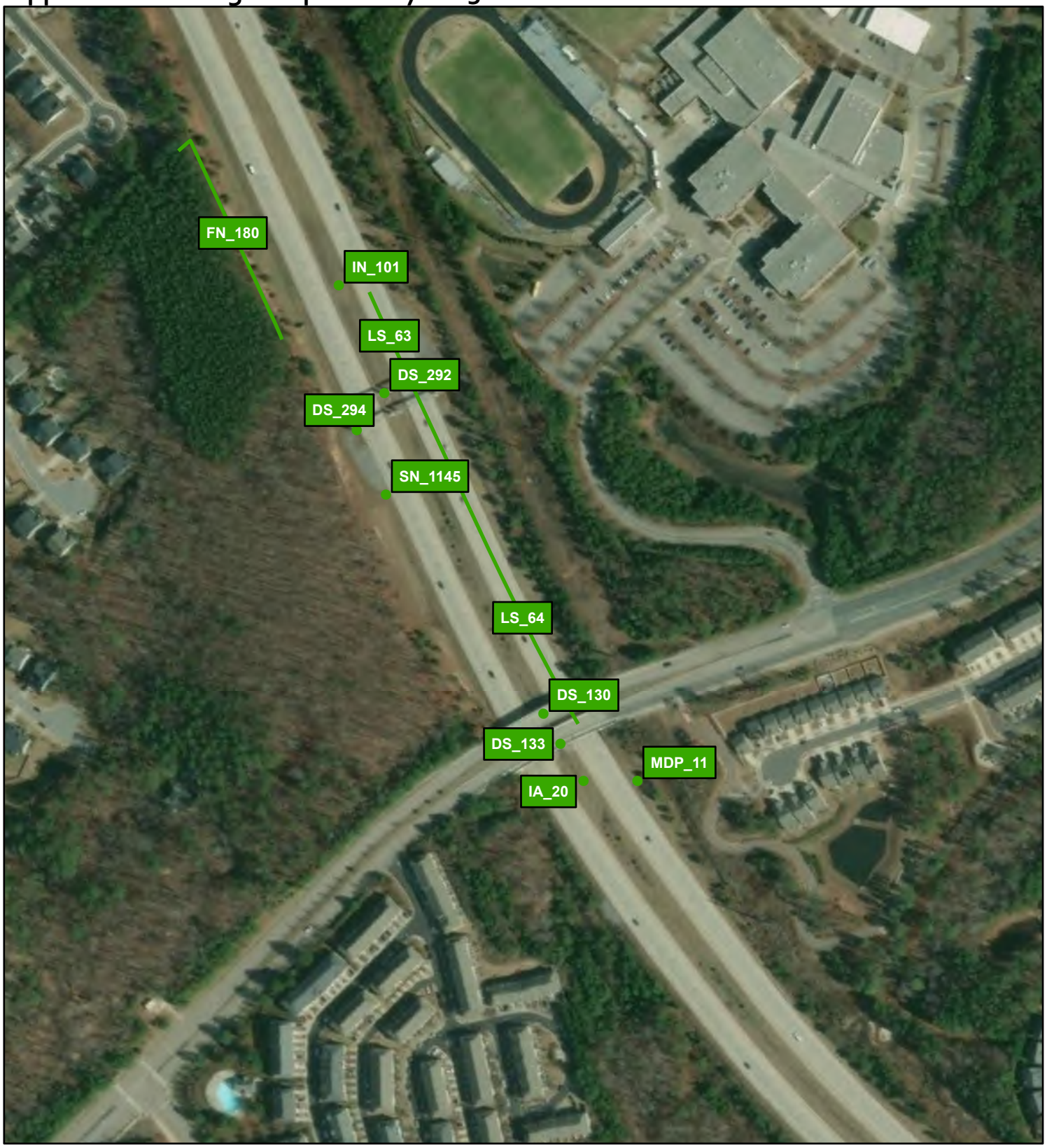

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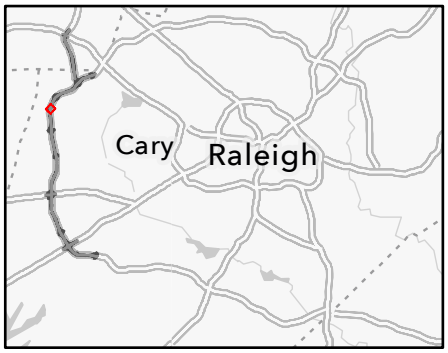

NORTH CAROLINA Turnpike Authority

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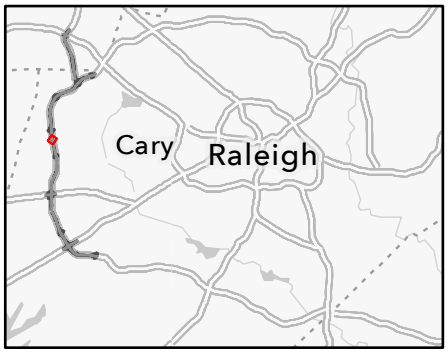

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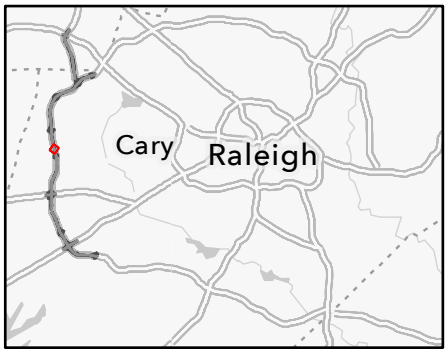

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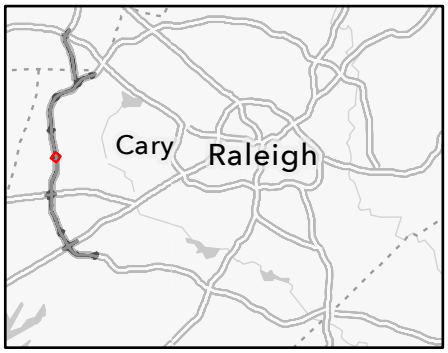

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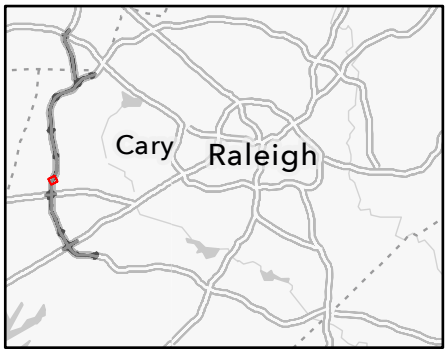

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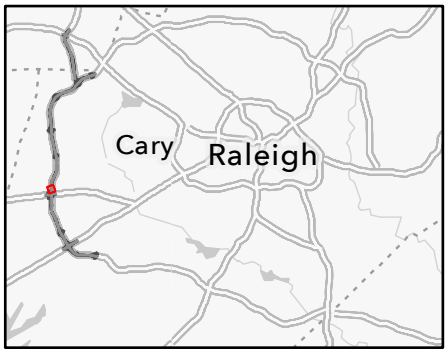
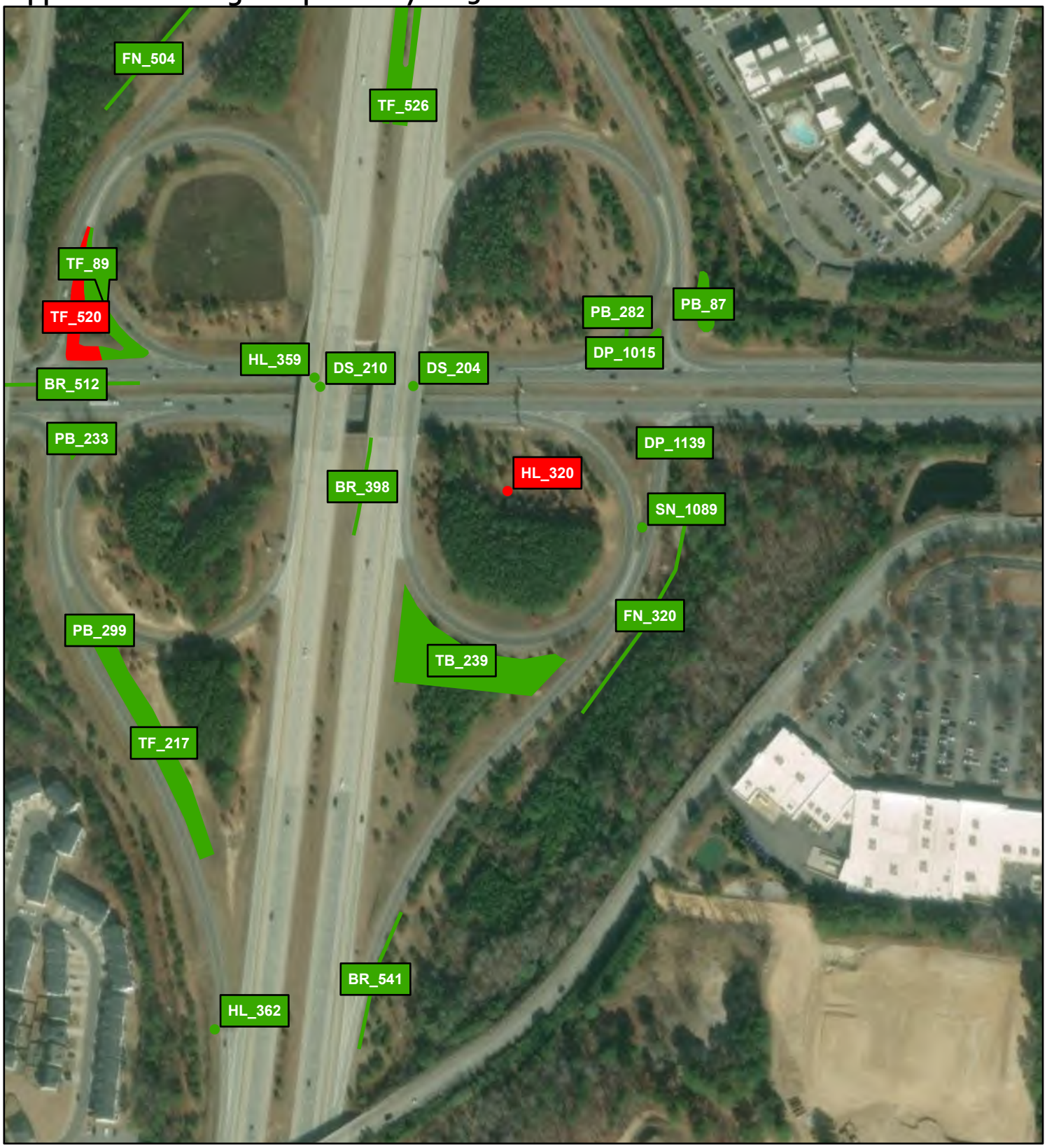


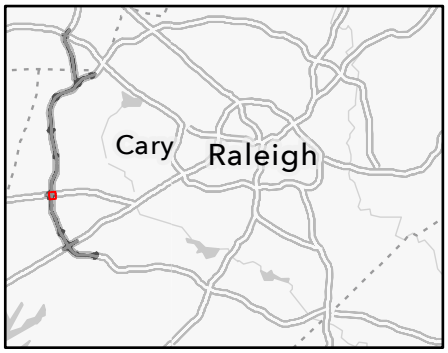
NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations



Legend

- Failing Asset
- Passing Asset

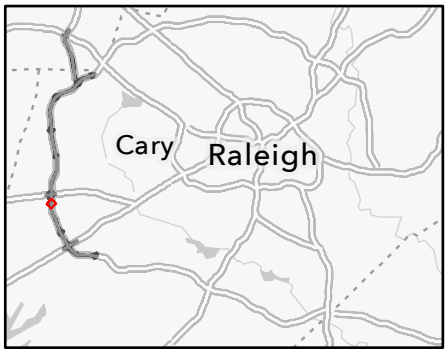


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

- Failing Asset
- Passing Asset



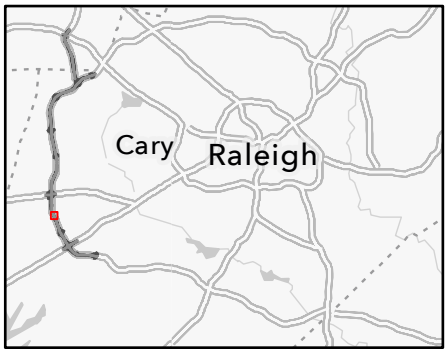
NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

Failing Asset

Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

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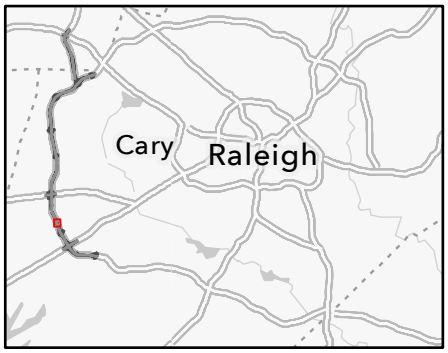
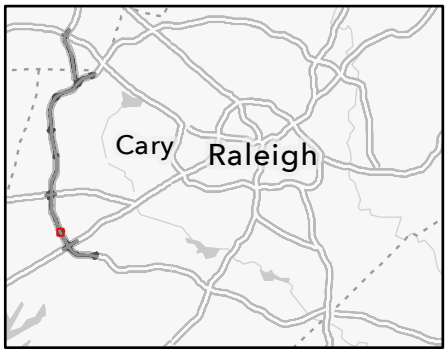


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

- Failing Asset
- Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

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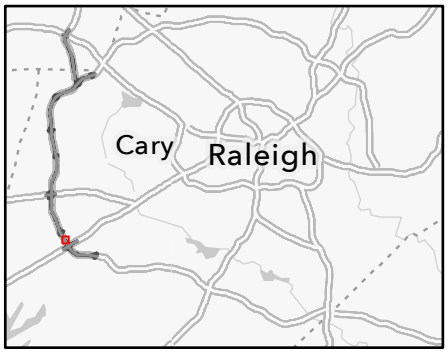
Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

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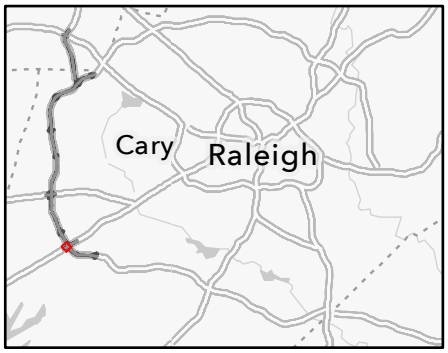

NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

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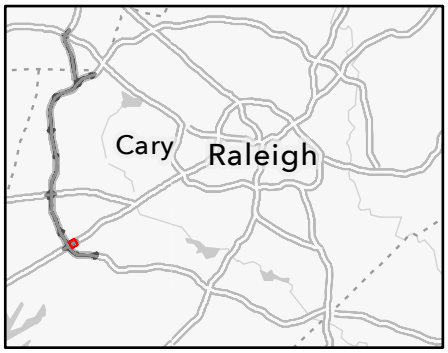

NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

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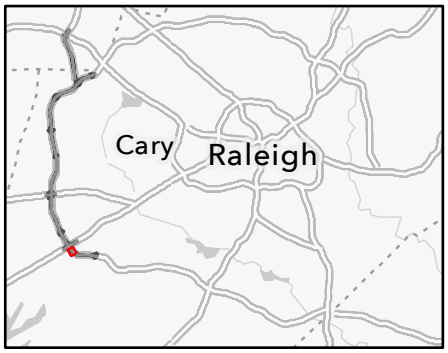
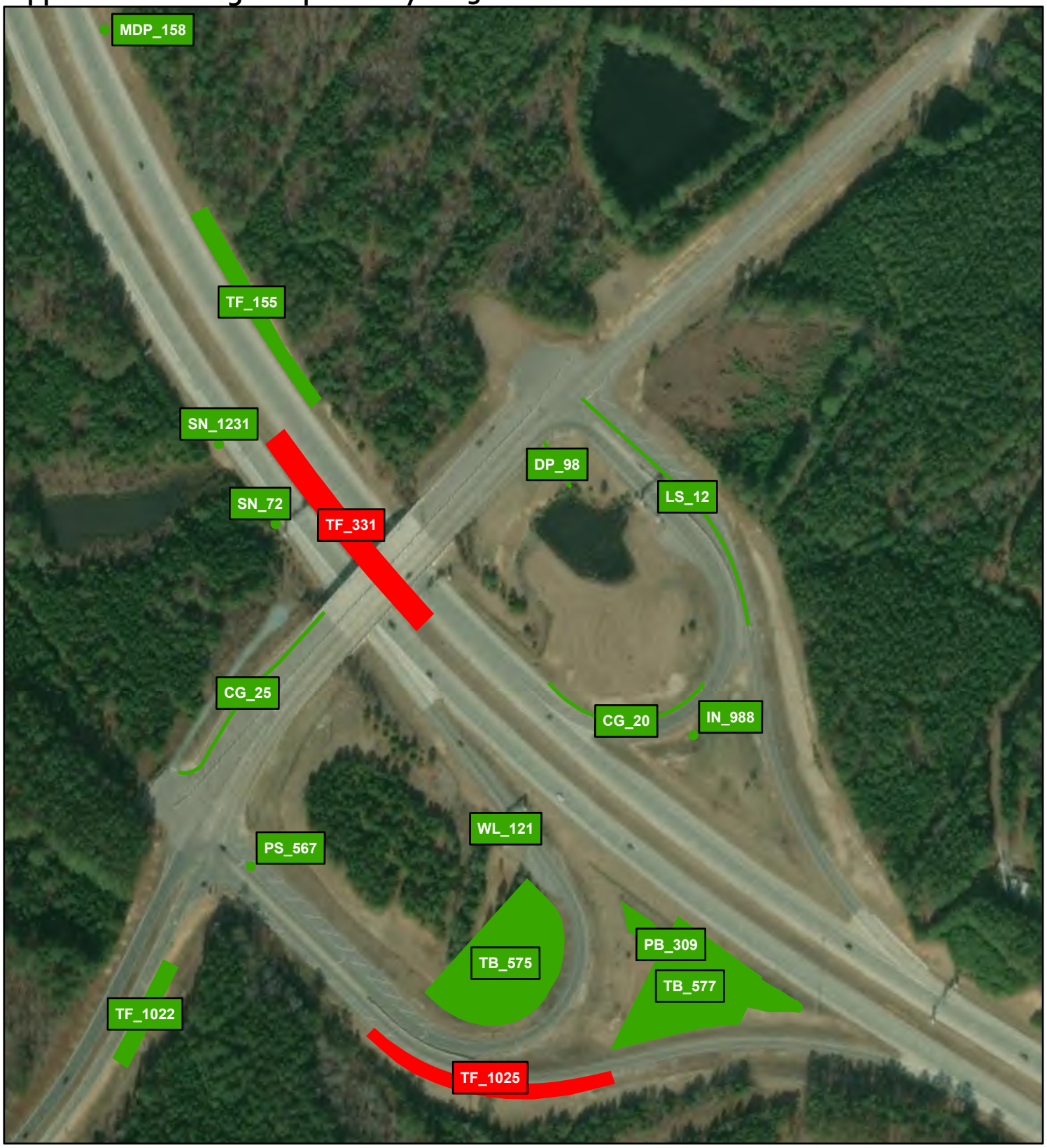


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations



Legend

Failing Asset

Passing Asset

NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

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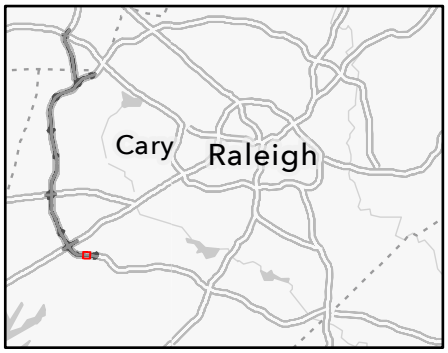
Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

- Failing Asset
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NORTH CAROLINA Turnpike Authority

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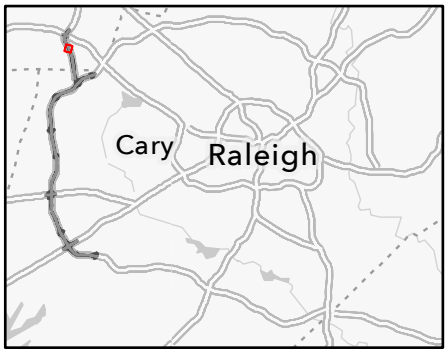
- Failing Asset
- Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

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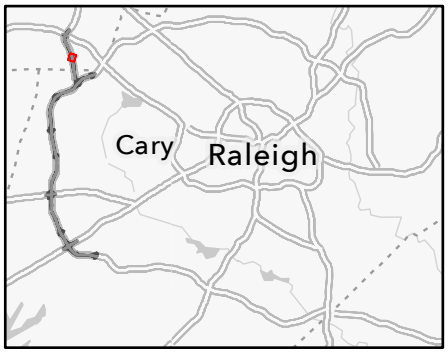
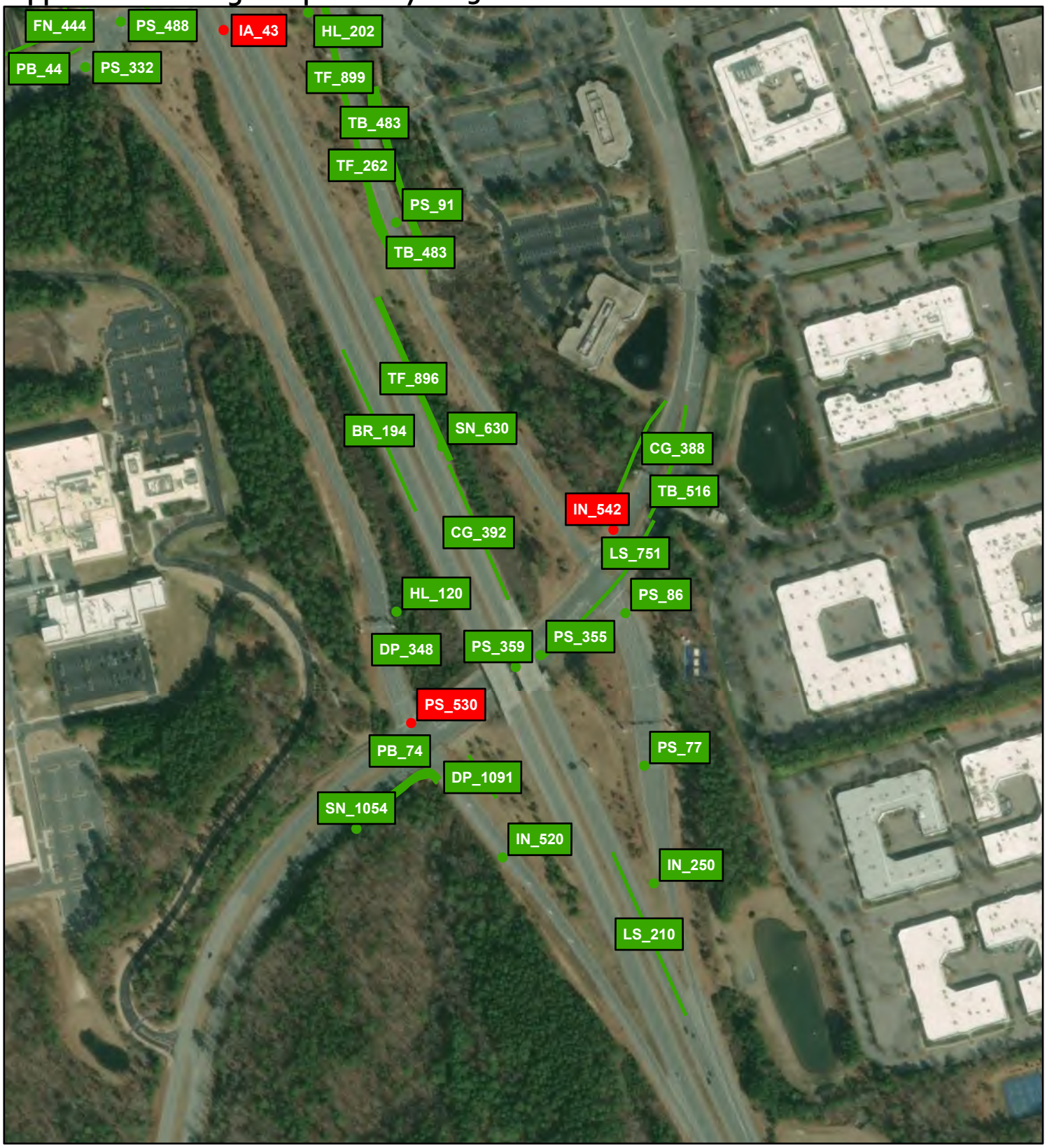


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations



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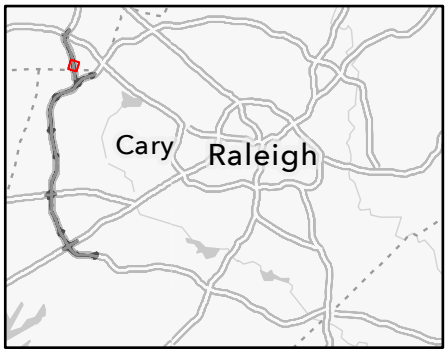
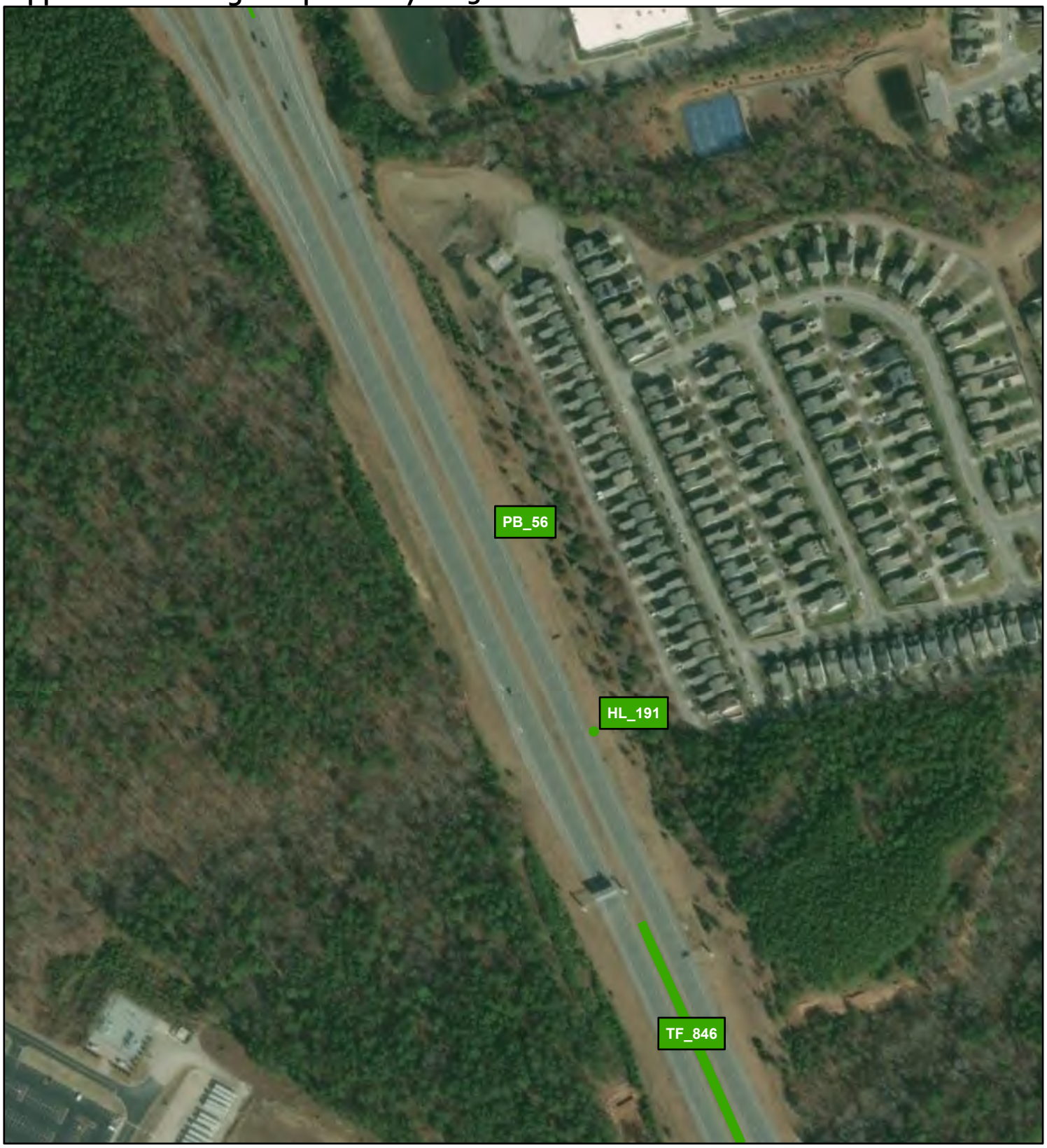
- Failing Asset
- Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations



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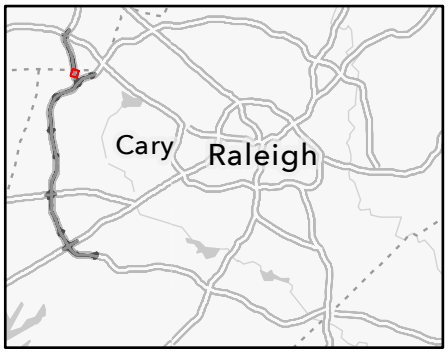
- Failing Asset
- Passing Asset

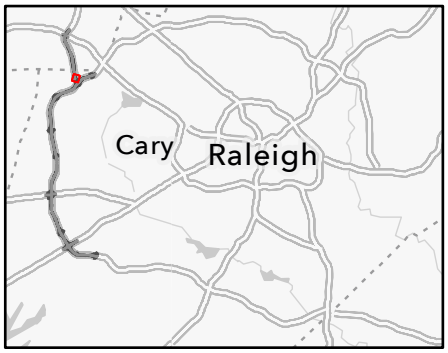


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

- Failing Asset
- Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 Second Quarter Asset Assessment Locations

Legend

Failing Asset

Passing Asset

NORTH CAROLINA Turnpike Authority

Appendix B

Triangle Expressway 2025 Second Quarter Table Results of Assets Failing MRP

Provided below are a series of tables outlining the existing failures that occurred throughout the facility. Assets are defined by an Inventory ID, which is a unique identifier given to each individual asset. The components that make up the Inventory ID are an asset specific prefix along with a number, such as LS_1. The Inventory ID and GIS Reference Page number correspond to the provided map packets and allow for quick location of particular asset failures. Photos of failures were provided when applicable.

*ORA – Outside Recorded Area

All assets and their respective prefixes are listed below:

Guardrail, Concrete Barrier, and End Anchors (BR)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Curb and Gutter (CG)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Decorative Supports (DS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Drainage Pipes (DP)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Misc. Drainage Structure (MDP)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Shoulder Drain	MDP_28	Obstruction		**A10**
2	Shoulder Drain	MDP_41	Obstruction		**A11**
3	Shoulder Drain	MDP_95	Obstruction		**A18**
4	Shoulder Drain	MDP_199	Obstruction		**A18**

Fence and Control of Access (FN)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Woven	FN_246	Hole Height		**A28**

Graffiti (GR)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Highway Lighting (HL)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	High Mast	HL_99	Functional Damage (Out at Night)	No Photo Provided	**A6**
2	Double Roadway	HL_164	Functional Damage (Out at Night)	No Photo Provided	**A2**
3	High Mast	HL_231	Functional Damage (Out at Night)	No Photo Provided	**A3**
4	Single Roadway	HL_253	Functional Damage (Out at Night)	No Photo Provided	**A22**
5	High Mast	HL_274	Functional Damage (Out at Night)	No Photo Provided	**A21**
6	Double Roadway	HL_281	Functional Damage (Out at Night)	No Photo Provided	**A23**
7	High Mast	HL_317	Functional Damage (Out at Night)	No Photo Provided	**A16**
8	High Mast	HL_320	Functional Damage (Out at Night)	No Photo Provided	**A17**
9	Underpass Lighting	HL_374	Functional Damage (Out at Night)	No Photo Provided	**A23**
10	Underpass Lighting	HL_383	Functional Damage (Out at Night)	No Photo Provided	**A23**
11	High Mast	HL_401	Functional Damage (Out at Night)	No Photo Provided	**A2**

Impact Attenuators (IA)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Inlets (IN)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Drop Inlet	IN_542	Obstruction		**A31**

Landscaping (PB)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Paved Lanes – Asphalt (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Asphalt	LS_387	Asphalt – Unsealed Cracks		**A24**
2	Asphalt	LS_532	Asphalt – Unsealed Cracks		**A23**

Paved Lanes – Concrete (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Paved Shoulders (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Unpaved Shoulders (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Front/Back Slopes (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Unpaved Lateral and Outfall Ditches (LS)

#	Material Type	Objec t ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Litter (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

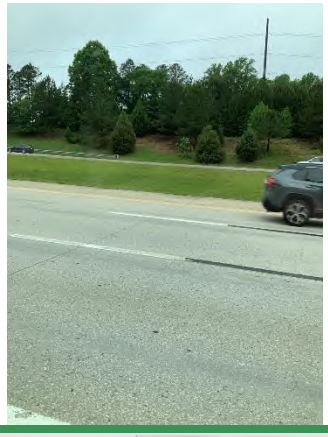
This asset did not produce any failures.

Roadway Sweeping (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Pavement Striping (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Concrete	LS_102	Concrete – Missing Striping		**A14**
2	Concrete	LS_167	Concrete – Missing Striping		**A14**
3	Asphalt	LS_532	Asphalt – Missing Striping		**A23**

Pavement Markers (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Asphalt	LS_387	Nighttime Visibility	Not available for nighttime failure	**A24**

Delineators (LS)

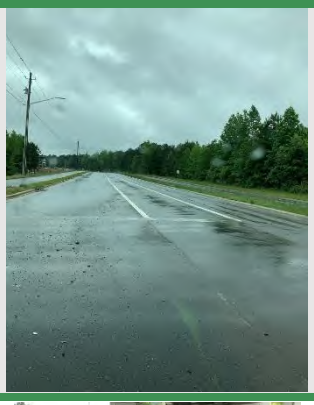
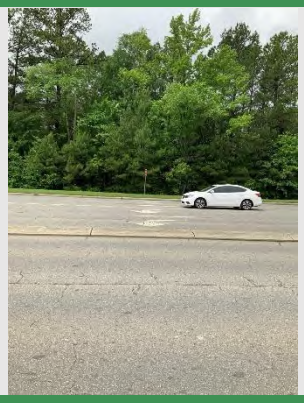
#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Asphalt	LS_387	Nighttime Reflectivity	Not available for nighttime failure	**A24**

Paved Ditches (PD)

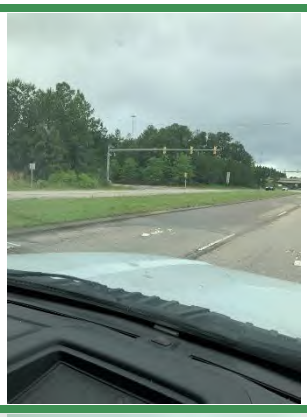
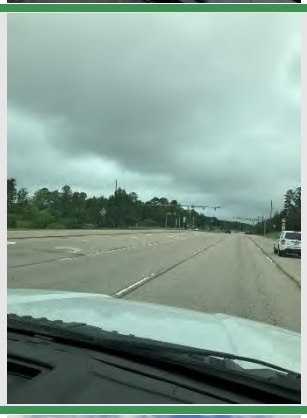
#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Pavement Words and Symbols (PS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Stop Bar	PS_17	Daytime Assessment / Nighttime Reflectivity		**A13**
2	Stop Bar	PS_259	Daytime Assessment / Nighttime Reflectivity		**A21**
3	Merge Left	PS_289	Daytime Assessment		***ORA**
4	Thru Lane	PS_404	Daytime Assessment / Nighttime Reflectivity		**A1**

Pavement Words and Symbols (PS)

5	Thru Lane	PS_442	Daytime Assessment / Nighttime Reflectivity		**A6**
6	Thru Lane	PS_460	Daytime Assessment / Nighttime Reflectivity		***ORA**
7	Ped Xing	PS_530	Daytime Assessment / Nighttime Reflectivity		**A31**
8	Thru Lane	PS_625	Daytime Assessment / Nighttime Reflectivity		**A13**

Signs (SN)

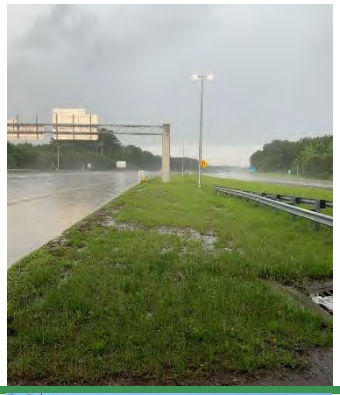
#	Sign Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Tree and Brush (TB)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Tree & Brush	TB_410	Barrier Clearance		**A3**

Turf Condition (TF)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Turf	TF_331	Bare Ground		**A26**
2	Turf	TF_520	Bare Ground		**A17**
3	Turf	TF_963	Bare Ground		**A28**
4	Turf	TF_1025	Bare Ground		**A26**

MSE/Retaining Walls, Sound Barrier Walls, and Screen Walls (WL)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.