



# **US 70 Multimodal Corridor Plan**

Hillsborough

# US 70 Study Overview

- In-depth review of US 70 Corridor
  - NC 119 in Mebane to Orange/Durham County line (NC 751)
  - US 70 Business from NC 86 (Churton Street) to US 70
- Develop long-term vision for:
  - US 70 roadway itself
  - Surrounding communities and natural areas
- Focus is on preserving/enhancing:
  - Safety
  - Multi-modal options (access & connectivity)
  - Environmental features
  - Economic opportunities
- Project Study Team
  - City of Mebane & Town of Hillsborough
  - BGMPO & DCHC MPO
  - Alamance and Orange Counties
  - NCDOT
  - Consultant Team (VHB and Rose & Associates)





# US 70 Study Background

- US 70 Corridor
  - ~19 miles: US 70 (minor arterial)
    - 3 miles: US 70 Bus (major collector/other arterial)
  - Links Durham, Hillsborough & Mebane
    - I-85 and I-40 handle bulk of traffic
    - Alternate route during I-85 incidents
  - Crucial northern access via NC 86 & NC 57
- Land Use Context
  - Significant natural & cultural constraints
  - Rural/Suburban/Urban: Varies by segment
  - Economic potential



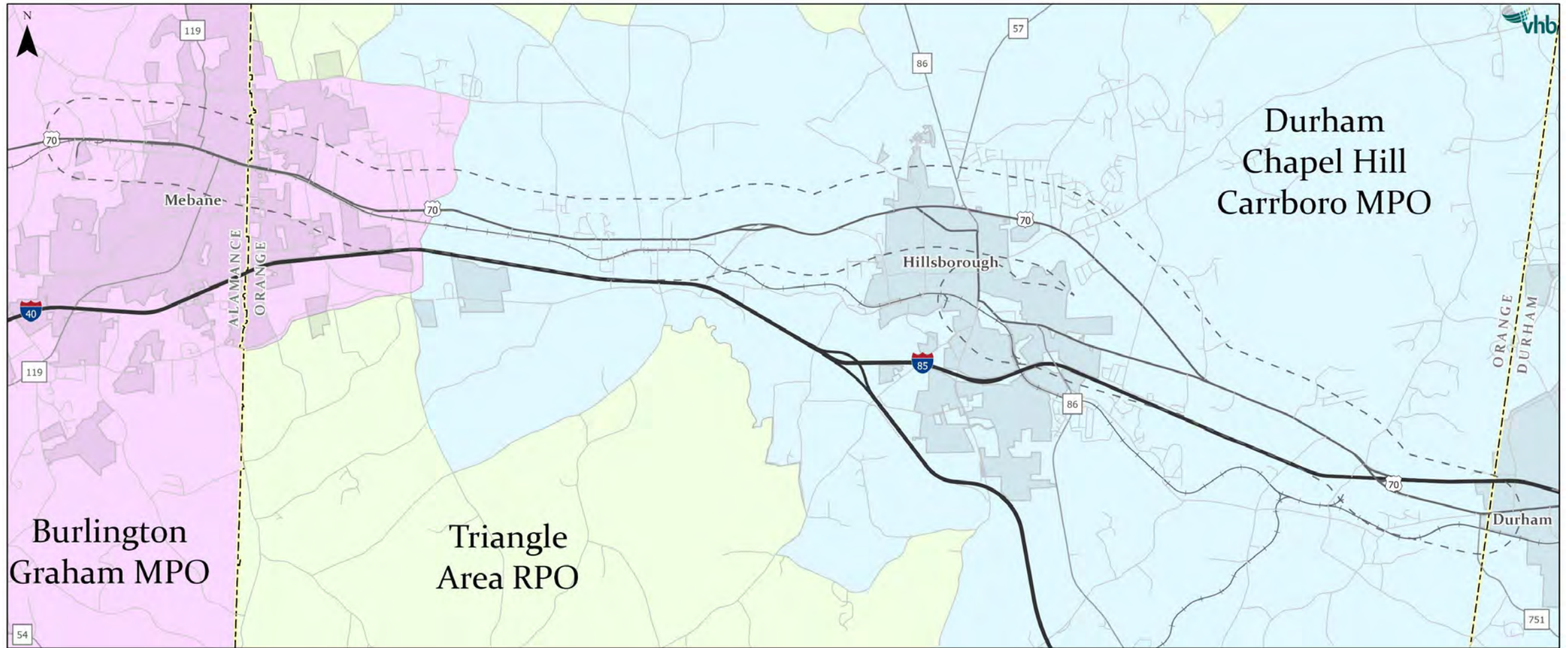
# US 70 Study Background

- Roadway Characteristics
  - Primarily 2-lane with 4' paved shoulders
  - 120' ROW (RR constraints in Mebane)
  - 13 traffic signals
  - Primarily 45-mph speed limit
  - Rolling terrain & curvature in segments; limited passing
  - No bicycle facilities; limited pedestrian facilities
- Need better multi-modal access & functionality
  - **Safety!**
  - Transit options and access
  - Preserve & enhance environment
  - Provide economic opportunities
  - Balance desired improvements with long-term maintenance
    - Municipal/County/State



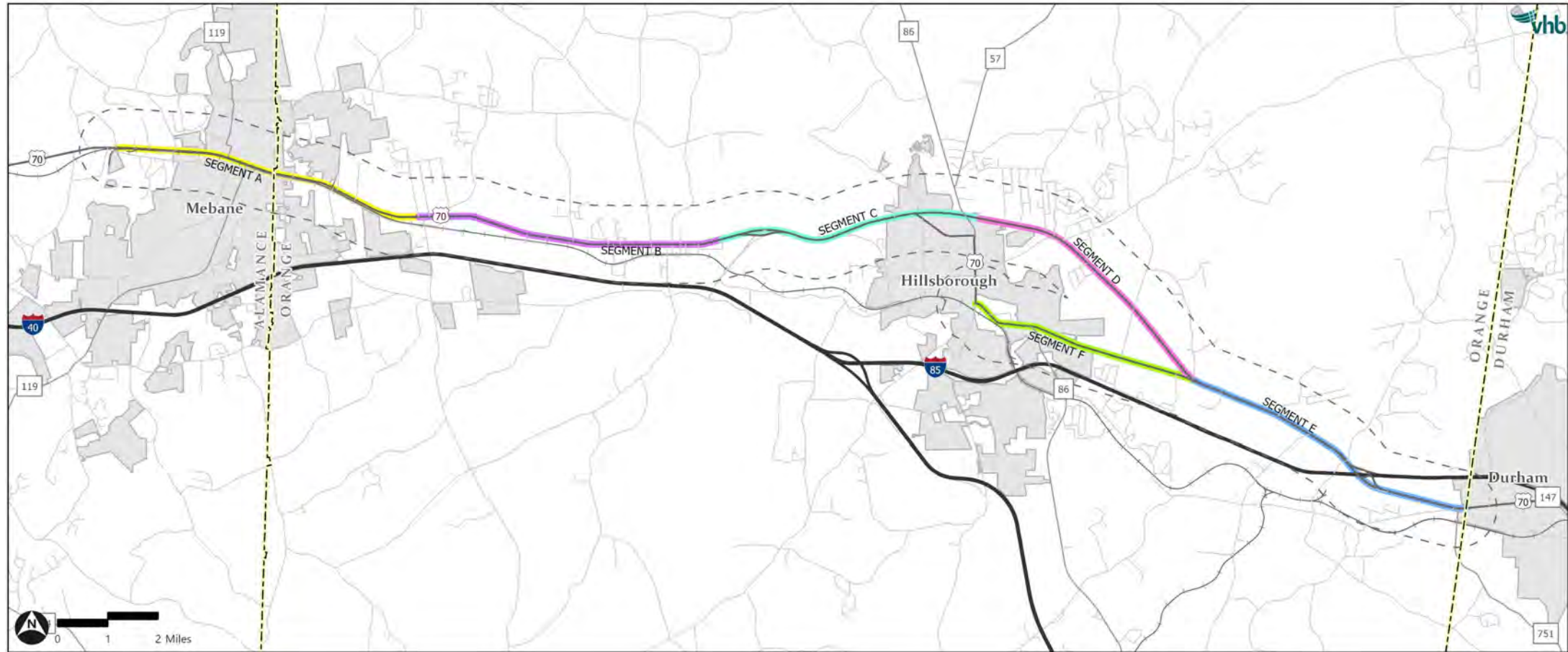


# Corridor Location & Planning Jurisdictions



- Legend
- [ - - ] US 70 Corridor Study Buffer
  - [ - - - ] County Boundary
  - [ ] Municipal Boundary
  - [ - + - ] Railroad Track
  - [ Pink ] Burlington Graham MPO
  - [ Light Blue ] Durham Chapel Hill Carrboro MPO
  - [ Yellow ] Triangle Area RPO

# Corridor Segments



## Legend

- |                                                                                               |                                                                                               |                                                                                                                 |                                                                                                      |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|  Segment A |  Segment D |  US 70 Corridor Study Buffer |  Railroad Track |
|  Segment B |  Segment E |  County Boundary             |                                                                                                      |
|  Segment C |  Segment F |  Municipal Boundary          |                                                                                                      |

Segment A - US 70 from NC 119 to Mace Road

Segment B - US 70 from Mace Road to Lloyds Dairy Road

Segment C - US 70 from Lloyds Dairy Road to east of NC 86 (Churton Street)

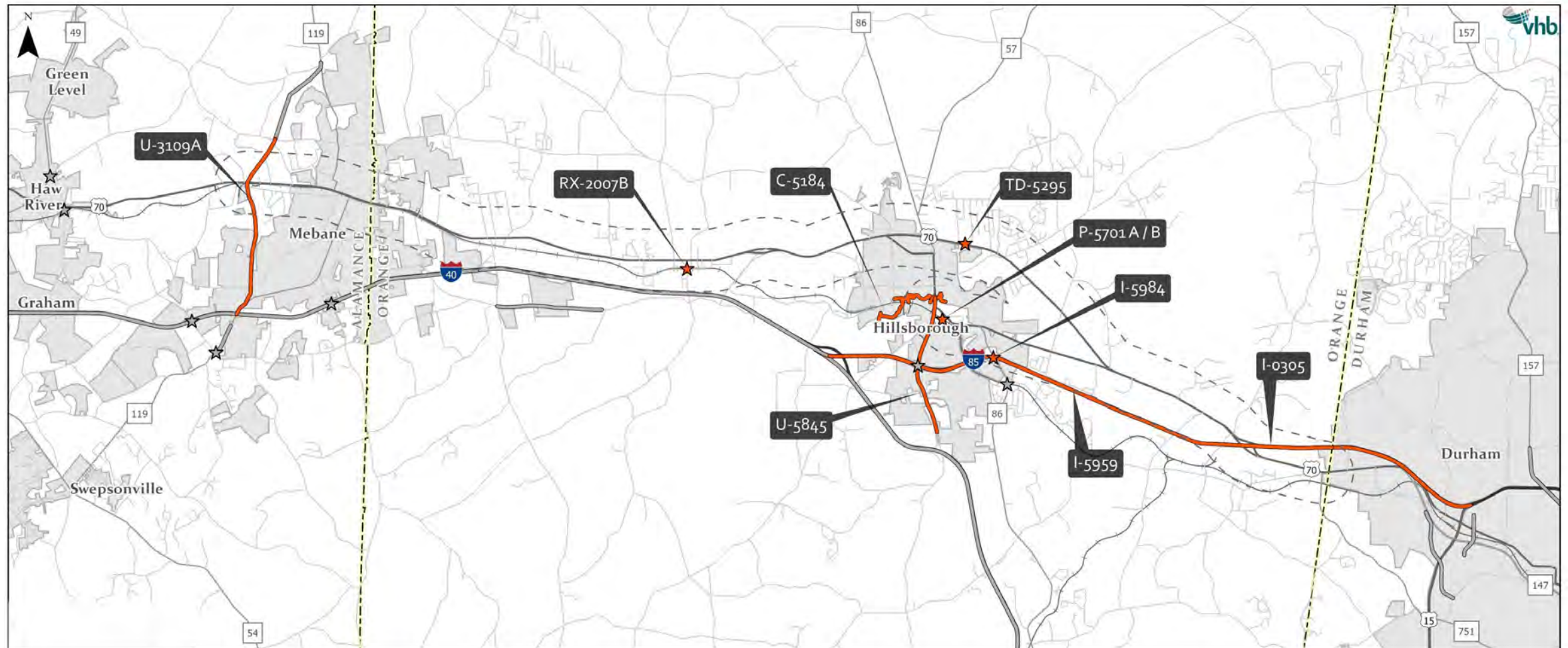
Segment D - US 70 from east of NC 86 (Churton Street) to US 70 Business

Segment E - US 70 from US 70 Business to the Orange / Durham County Line

Segment F - US 70 Business from NC 86 (Churton Street) to US 70



# Current 2020-2029 NCDOT STIP Projects



## Legend

- |                             |                    |                                 |                                |
|-----------------------------|--------------------|---------------------------------|--------------------------------|
| US 70 Corridor Study Buffer | Municipal Boundary | STIP Points within Project Area | STIP Lines within Project Area |
| County Boundary             | Railroad Track     | Other STIP Projects             | Other STIP Projects            |



# Project Website

- General project information
- [www.us70west.com](http://www.us70west.com)
- Interactive map/comment opportunity
- Public Meeting details

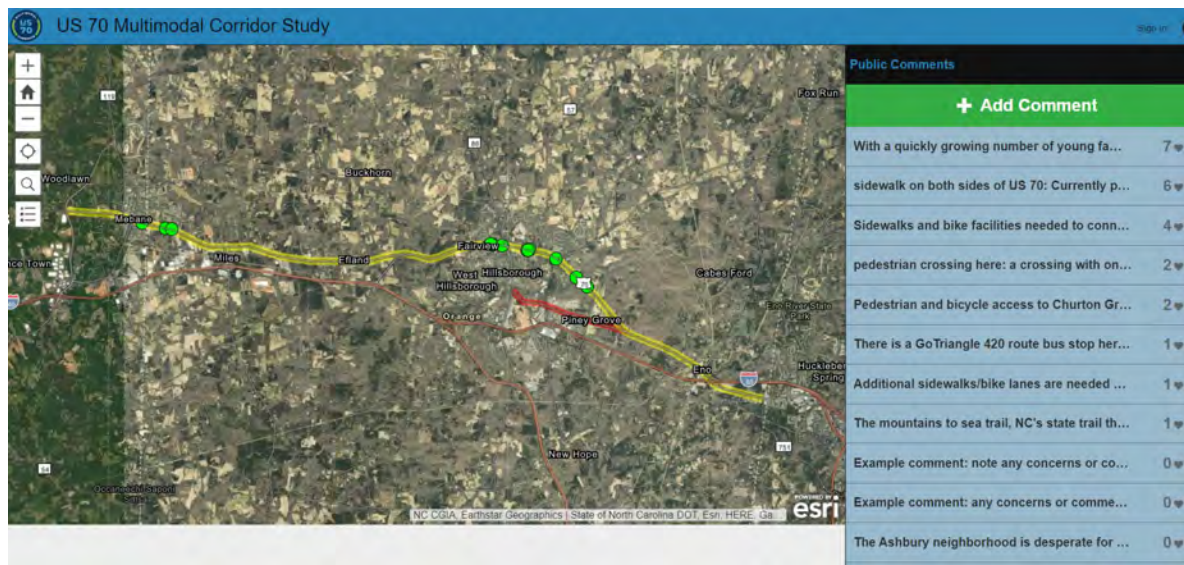


## Welcome to the US 70 Multimodal Corridor Study

The Durham Chapel Hill Carrboro Metropolitan Planning Organization (DCHC-MPO) is conducting a study of **U.S. 70 West, from NC 119 in Mebane to U.S. 751 in Orange County**. The Corridor Study ("the Study") will provide recommendations for future development of the transportation corridor.

A corridor study for a transportation corridor defines policies and actions that will guide how a corridor should be maintained or changed. This is a process that is community-led and relies on significant community involvement. This website will serve as the announcement board for events pertaining to the study and various activities the study will be undertaking.

The US 70 West Corridor has experienced and will continue to experience an explosion of residential and employment growth. Planning transportation use of the corridor moving forward will be integral to maintaining the community vision and character of the area, while celebrating growth and development.







# Project Newsletter

Learn more at [www.us70west.com](http://www.us70west.com)

NEWSLETTER | FEBRUARY 2023 1



## US 70 Multimodal Corridor Study

The Durham Chapel Hill Carrboro Metropolitan Planning Organization (DCHC-MPO) is conducting a study of **U.S. 70 West, from NC 119 in Mebane to U.S. 751 in Orange County**. The Study will provide recommendations for future development of the transportation corridor with specific focus on multimodal facilities.

A corridor study for a transportation corridor defines policies and actions that will guide how a corridor should be maintained or changed. This is a process that is community-led and relies on significant community involvement. The project website ([www.us70west.com](http://www.us70west.com)) is a convenient resource for tracking the progress of the study, providing feedback, and checking the schedule and location of outreach activities.

Planning for the transportation use of the corridor moving forward is integral to maintaining the community vision and character of the area, while supporting growth and development.


### Corridor Study Status

The study is expected to take approximately fifteen months, culminating with a published report in Fall 2023. The study team has analyzed the existing corridor with respect to traffic speeds and volumes, crashes, pedestrian and bicycle travel, transit service, and the character and condition of the roadway itself. Initial findings related to existing conditions will be available at the first round of community meetings. The team understands that the corridor is made up of many unique segments that will require tailored recommendations, and we need your input to help identify and prioritize both problems and potential solutions.

Learn more at [www.us70west.com](http://www.us70west.com)

NEWSLETTER | FEBRUARY 2023 2

## Project Schedule



### Community Meetings Round #1

- ★ **MARCH 7 | 5:00 - 7:00 PM**  
Passmore Center  
103 Meadowlands Dr  
Hillsborough, NC 27278
- ★ **MARCH 9 | 5:00 - 7:00 PM**  
Mebane Arts and Community Center  
633 Corregidor Street  
Mebane, NC 27302
- ★ **MARCH 14 | 5:00 - 7:00 PM**  
Town Hall Annex  
105 E Corbin Street  
Hillsborough, NC 27278

### Your Input is Needed!

Please visit the project website ([www.us70west.com](http://www.us70west.com)) to sign up for project updates. The website includes an online map to virtually provide your comments and concerns regarding the U.S. 70 West Corridor. We would like to hear where you might also like to see improvements including bicycle and pedestrian connections, and enhancements to local and regional bus service and facilities.

The meeting will be an open house informational meeting with a short presentation at 5:00 and 6:00 PM. There will also be an opportunity for interactive activities to express your thoughts as well as speak directly with study team members.

### Other Ways to Get Involved

Visit the project website to sign-up for email updates ([www.us70west.com](http://www.us70west.com)), provide more comments, and review project materials.

### PROJECT CONTACT

**Nishith Trivedi**  
Project Manager, Orange County Public Transportation  
(919) 245-2007  
[ntrivedi@orangecountync.gov](mailto:ntrivedi@orangecountync.gov)

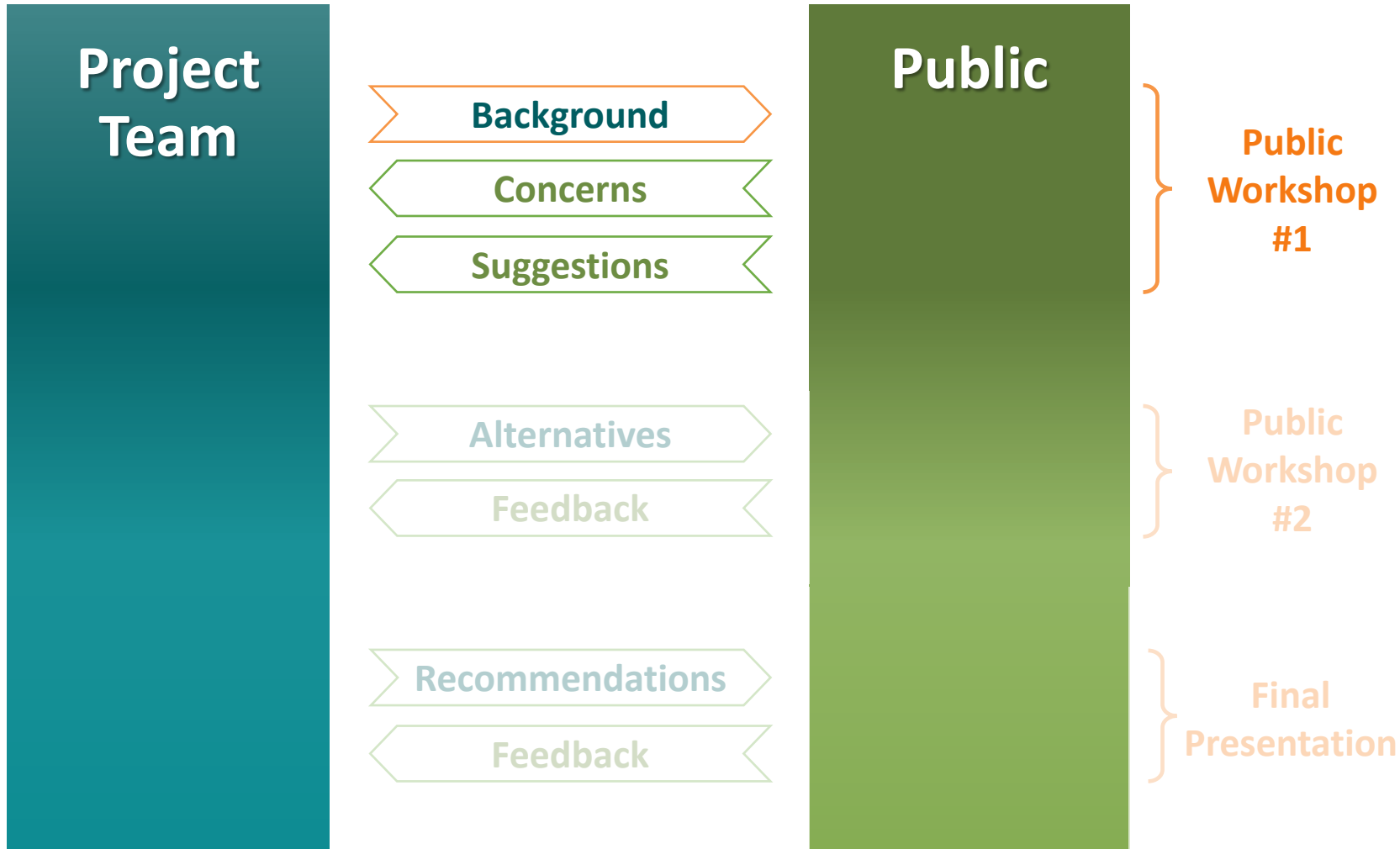


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# Public Participation – Round 1



# Workshop Format

- Technical presentation at 5pm and 6pm
- Information boards with team members to have 1:1 discussions
- Interactive Activities
  - Sticker activity for problem identification
  - Bead voting activity to identify local priorities for improvements



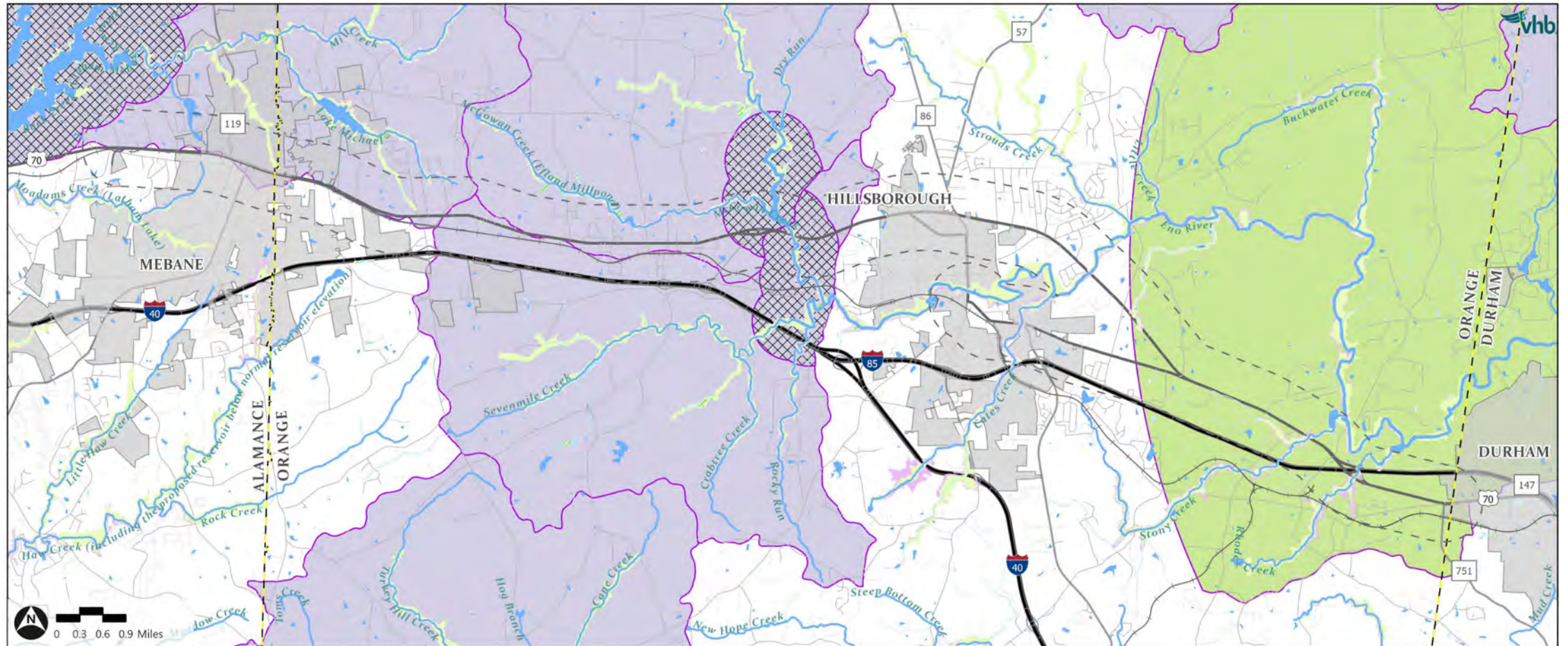




# Environmental Context

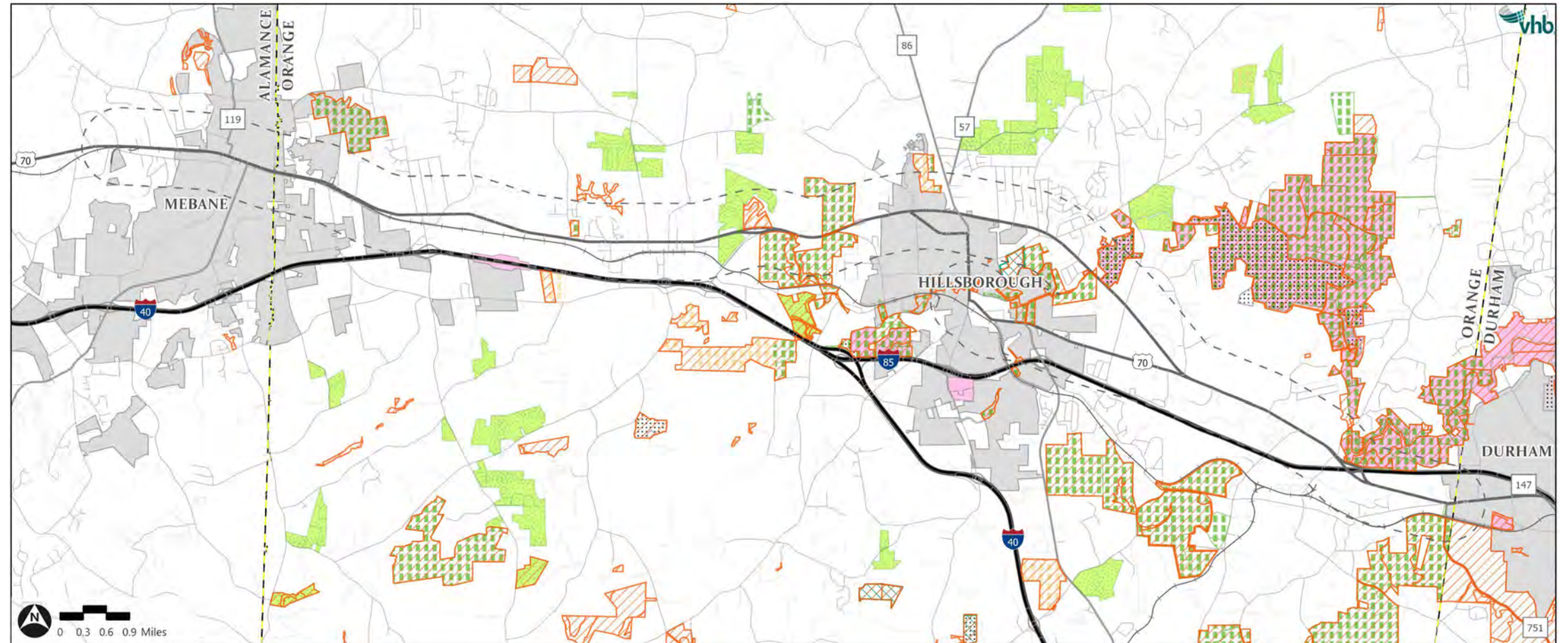


# Water Quality, Sources, & Watersheds



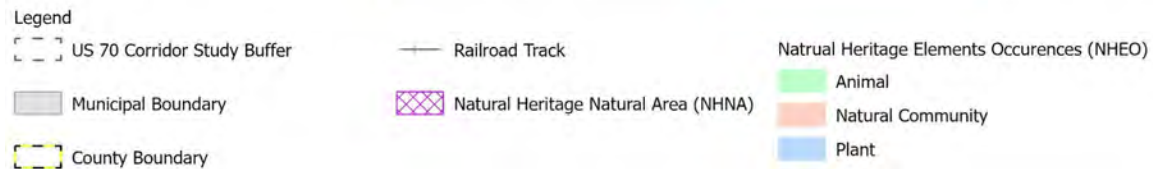
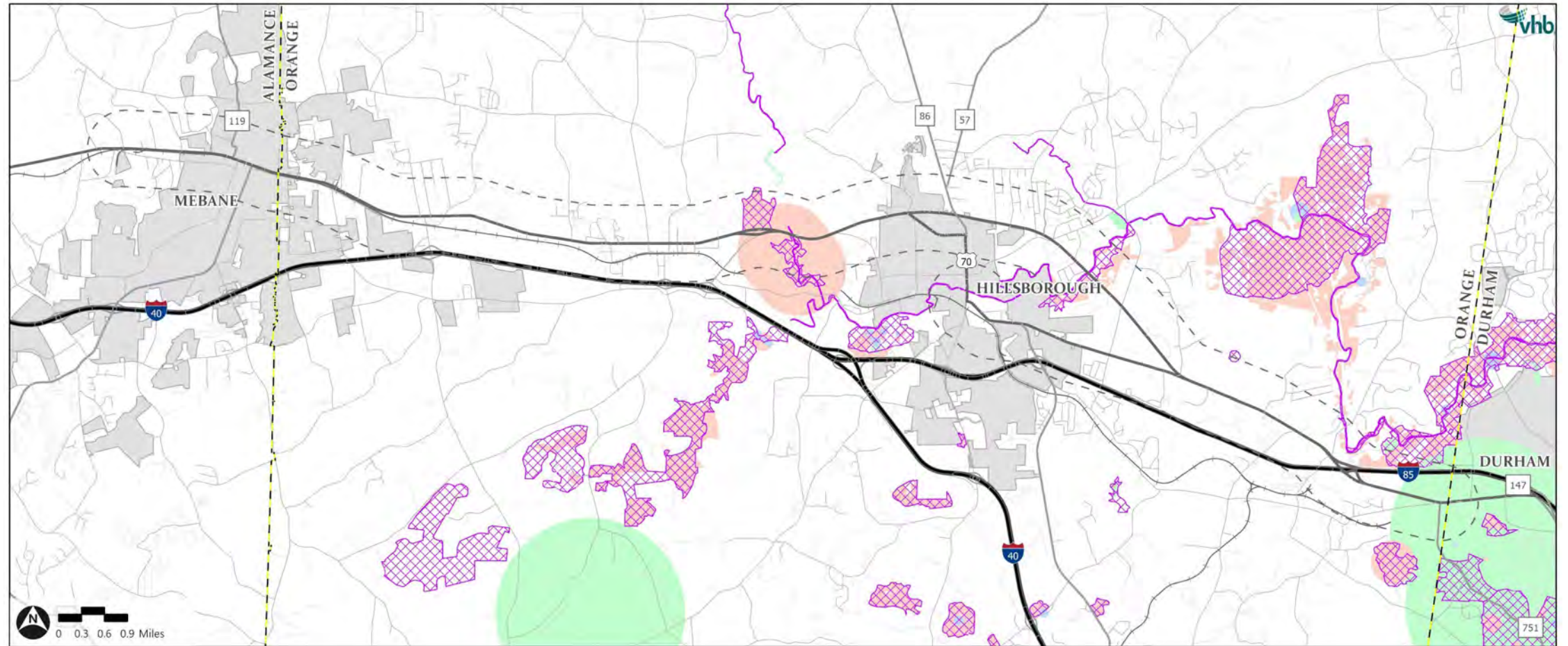


# Natural Features



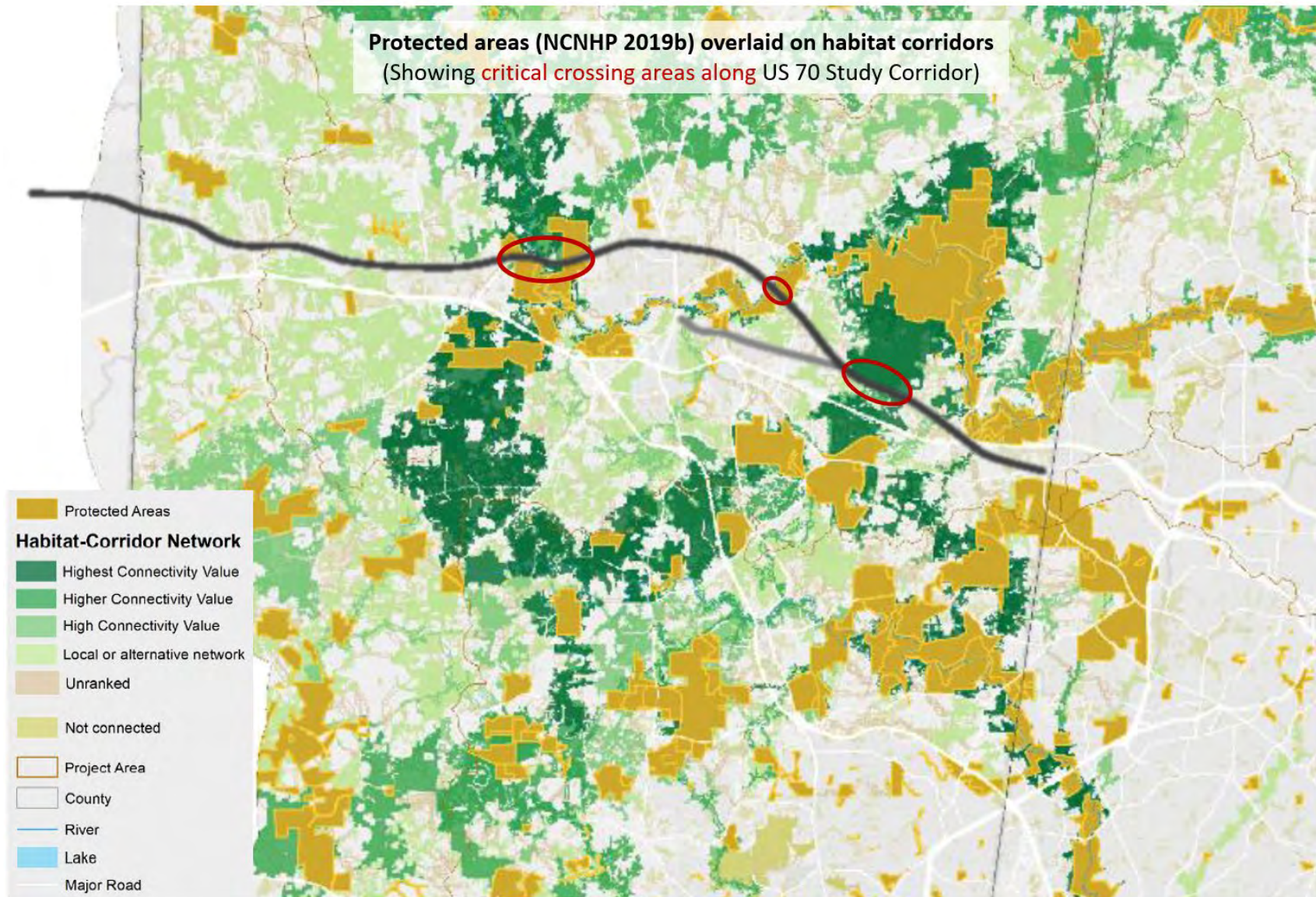


# Wildlife Resources





# Major Wildlife Corridors & Critical US 70 Crossing Areas



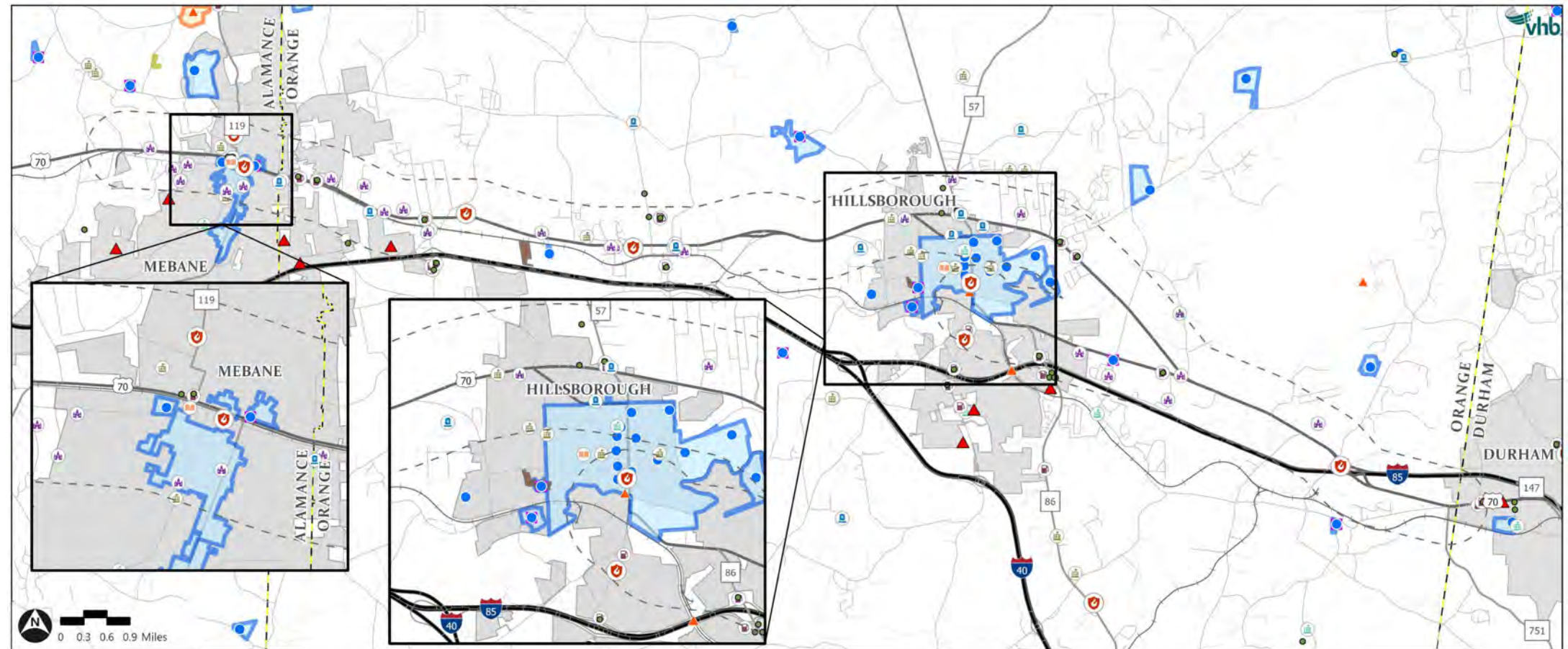
Adapted from *A Landscape Plan for Wildlife Habitat Connectivity*, 2019



**US 70 Multimodal Corridor Study**



# Places of Interest



## Legend

US 70 Corridor Study Buffer	Airport	Fire Station	Hazardous Waste Site	Brownfield Boundary	<b>Historic District</b>
County Boundary	Cemetery	Gas Station	Places of Worship	<b>Historic Points</b>	NR
Municipal Boundary	Public Library	Underground Storage Tank	Public School	National Register individual listing	SLDOE
Railroad Track		Private School	Determined Eligible - DOE	NR and Local Landmark	DOE

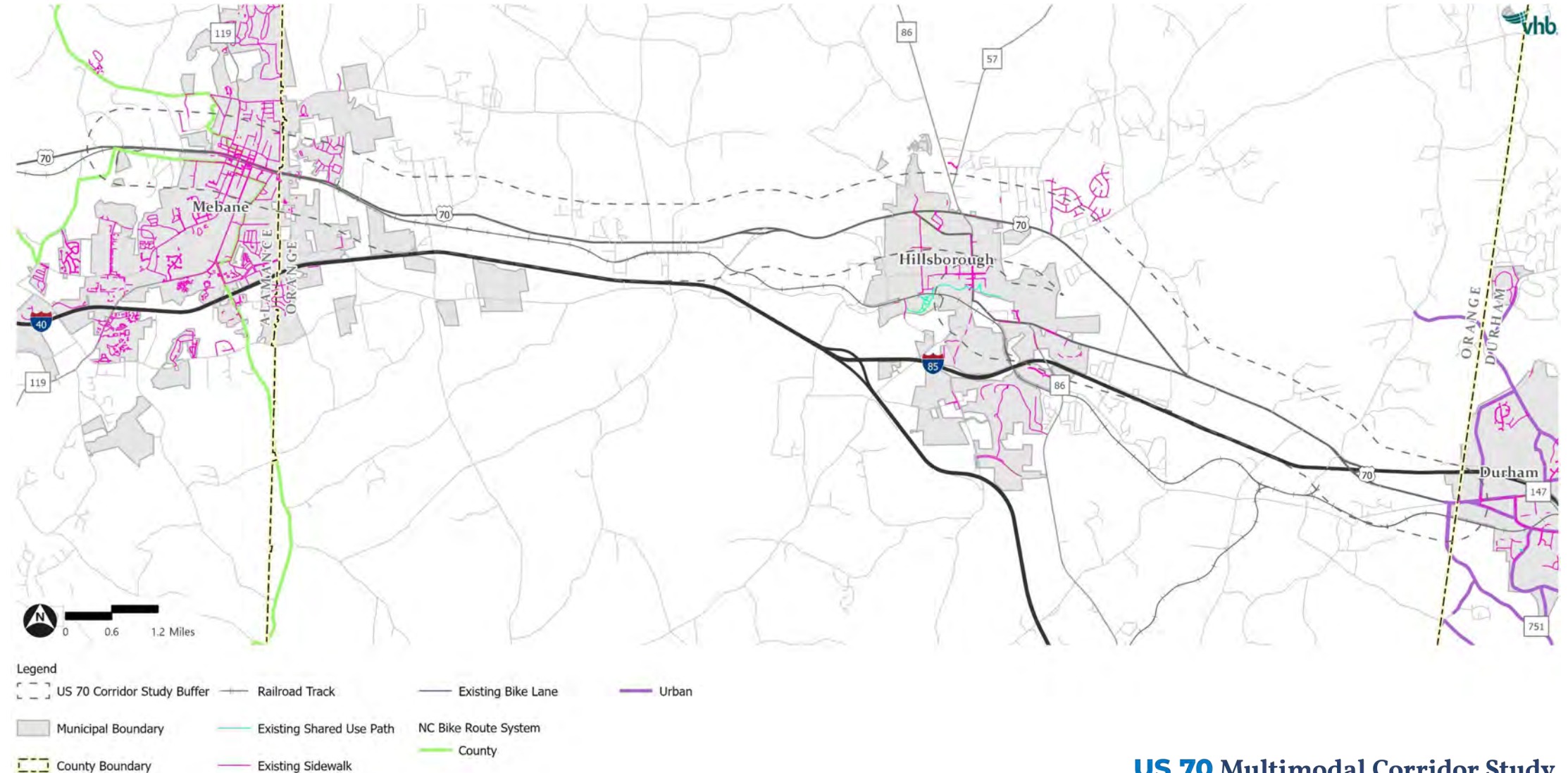




# Transportation

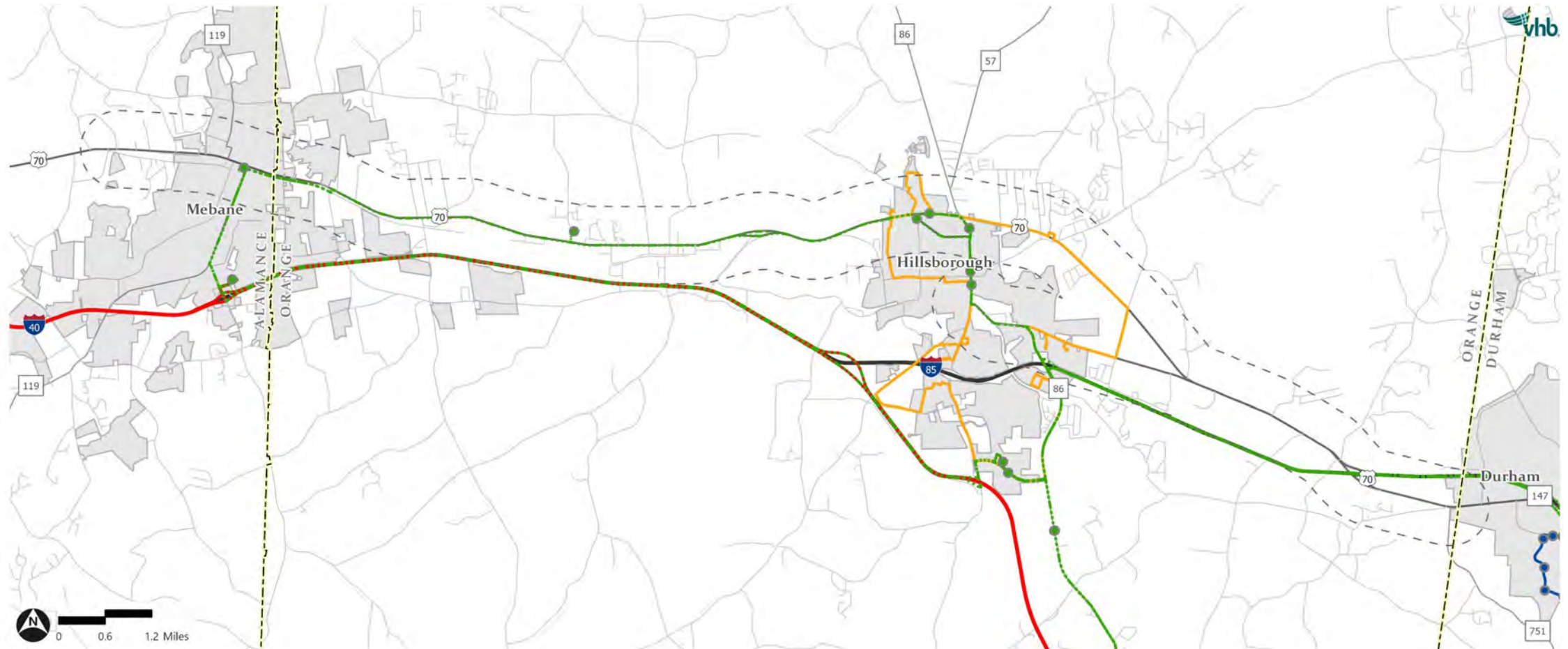


# Existing Pedestrian & Bicycle Networks





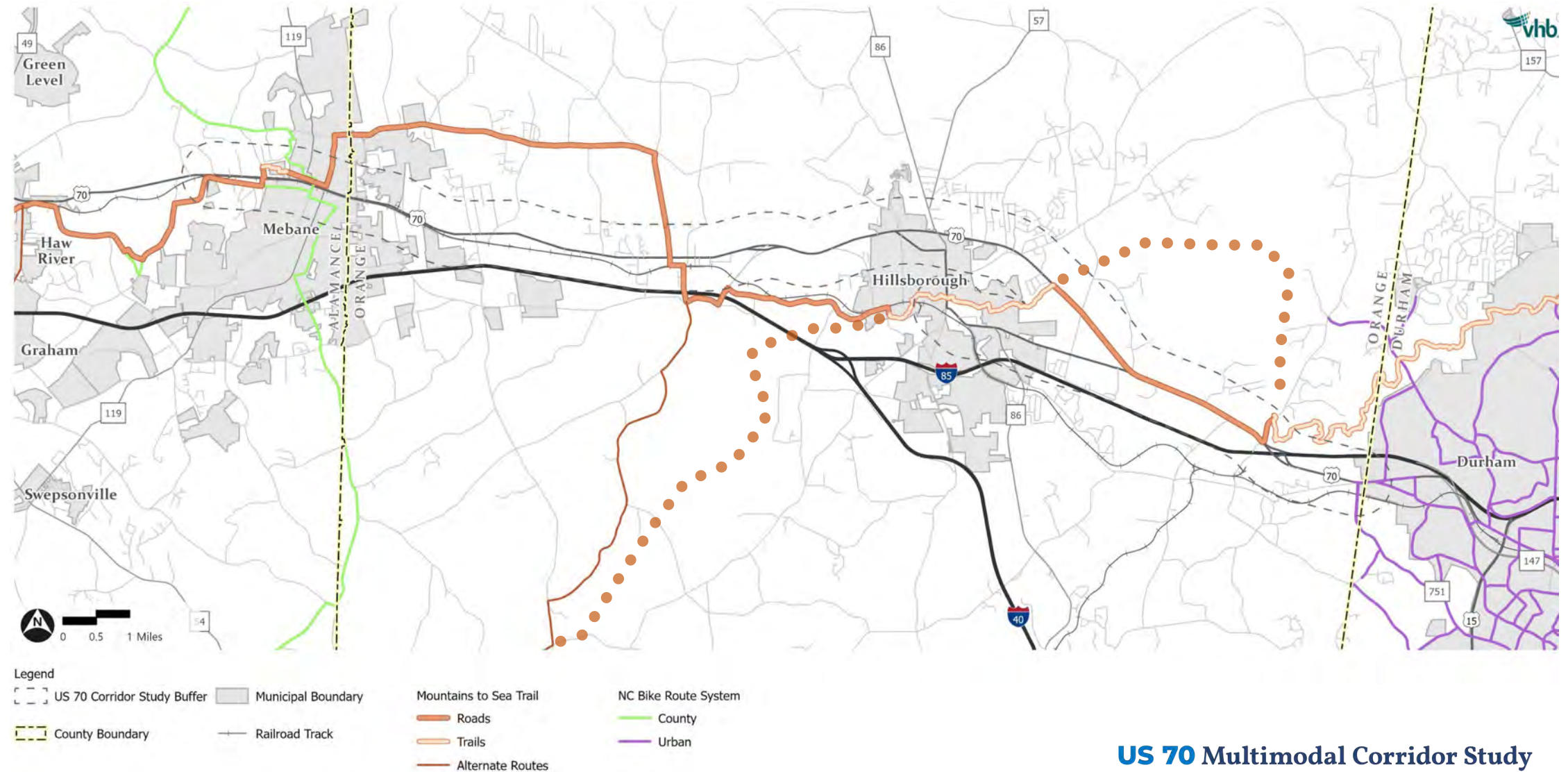
# Existing Transit Routes



## Legend

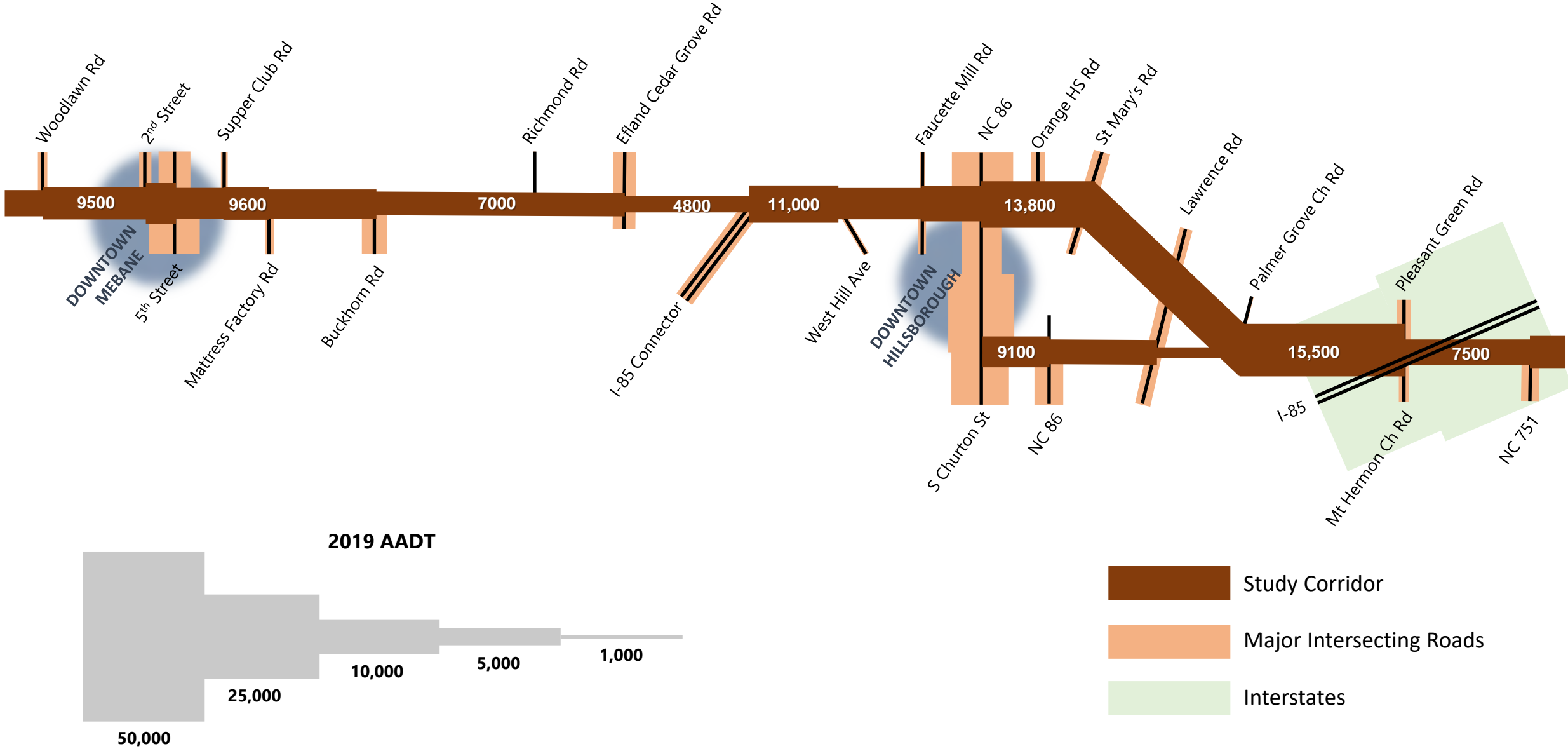
- |                                     |                                  |                           |                            |
|-------------------------------------|----------------------------------|---------------------------|----------------------------|
| [ - - ] US 70 Corridor Study Buffer | ● Go Triangle Transit Stops      | ● PART Transit Stops      | — Go Durham Transit Routes |
| [ - - - ] County Boundary           | - - - Go Triangle Transit Routes | — PART Transit Routes     |                            |
| ■ Municipal Boundary                | — Hillsborough Circulator        | ● Go Durham Transit Stops |                            |

# Regional Hiking & Biking Routes

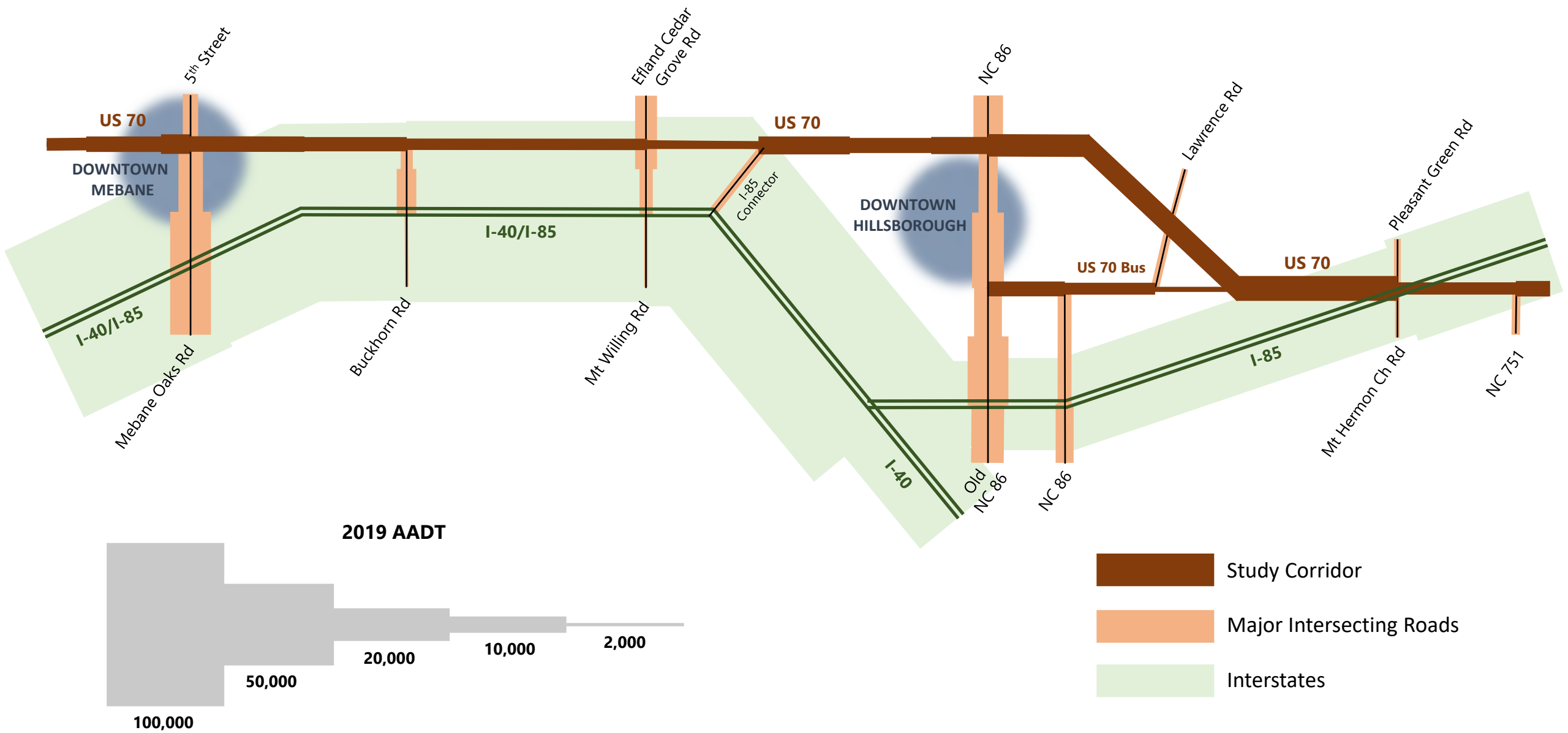




# Relative 2019 Traffic Volumes in Study Area



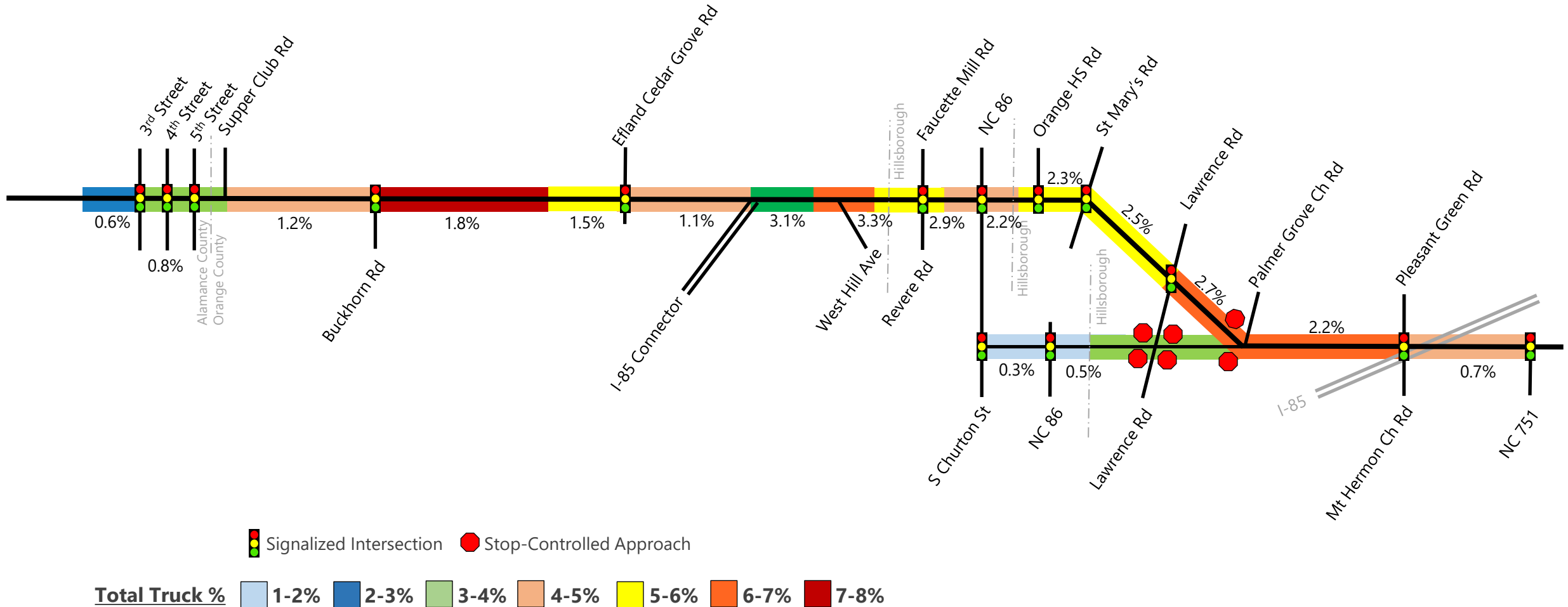
# Relative 2019 Traffic Volumes in Study Area





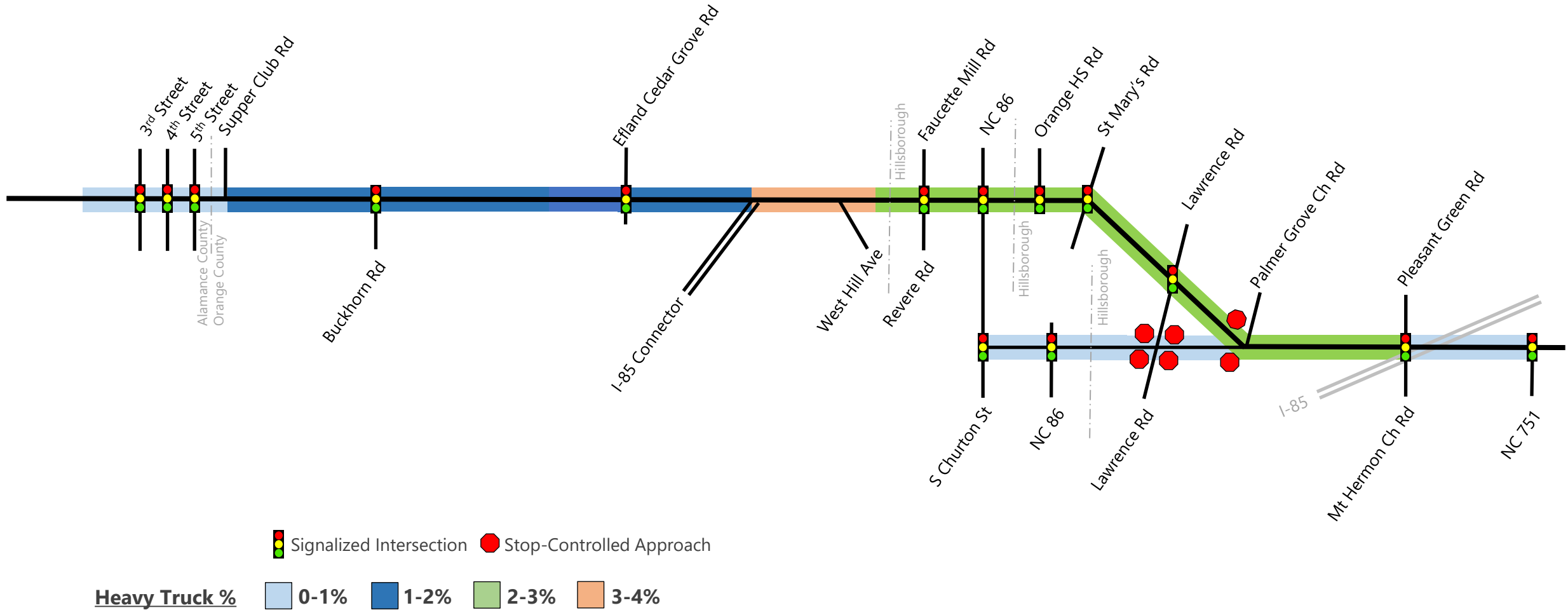
# Total Truck Percentages

Estimated from 2019 Location-Based Services



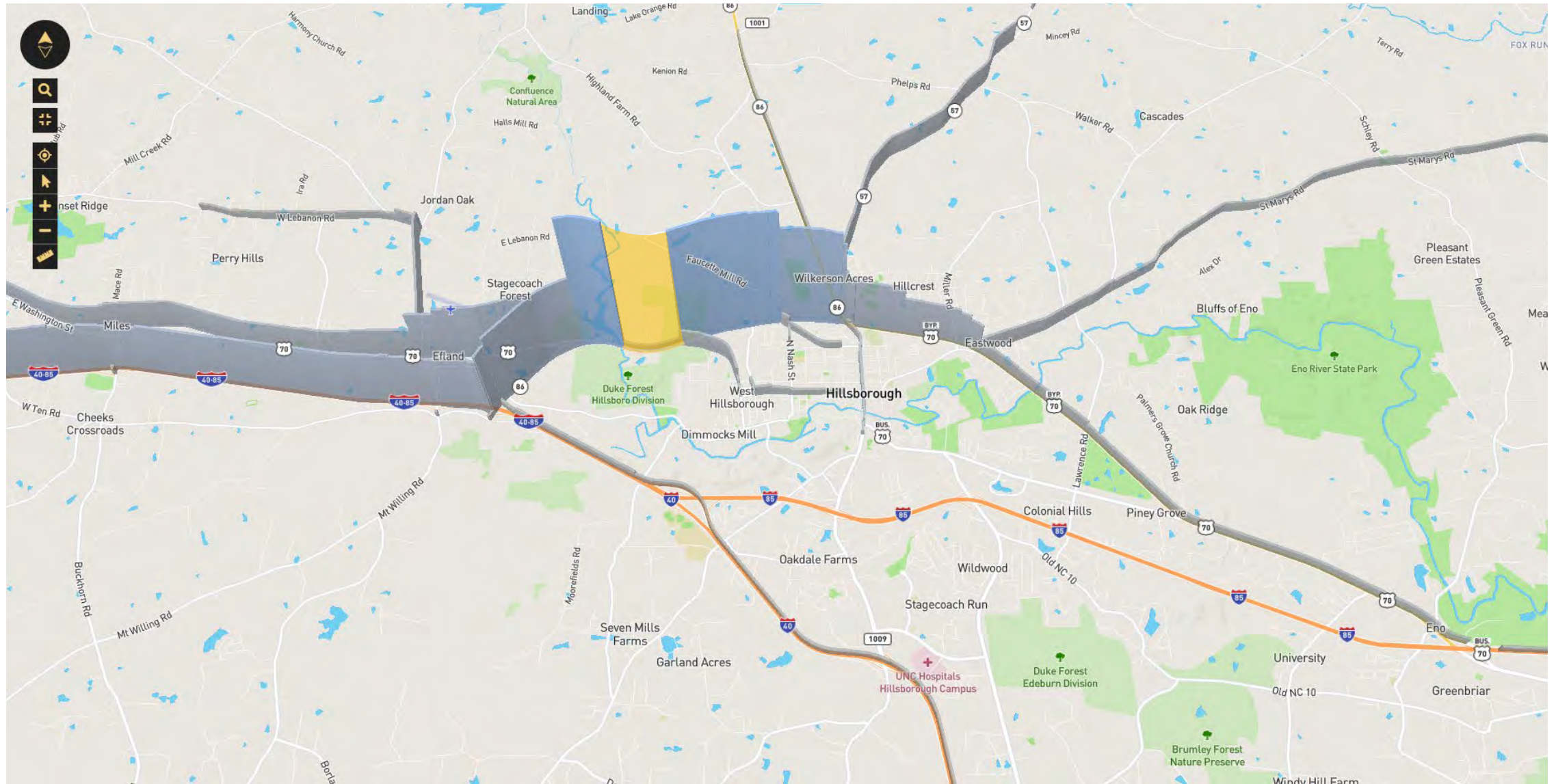
# Heavy Truck Percentages

Estimated from 2019 Location-Based Services





# Distribution of US 70 trips for point west of West Hill St (2019 StreetLight LBS Data)

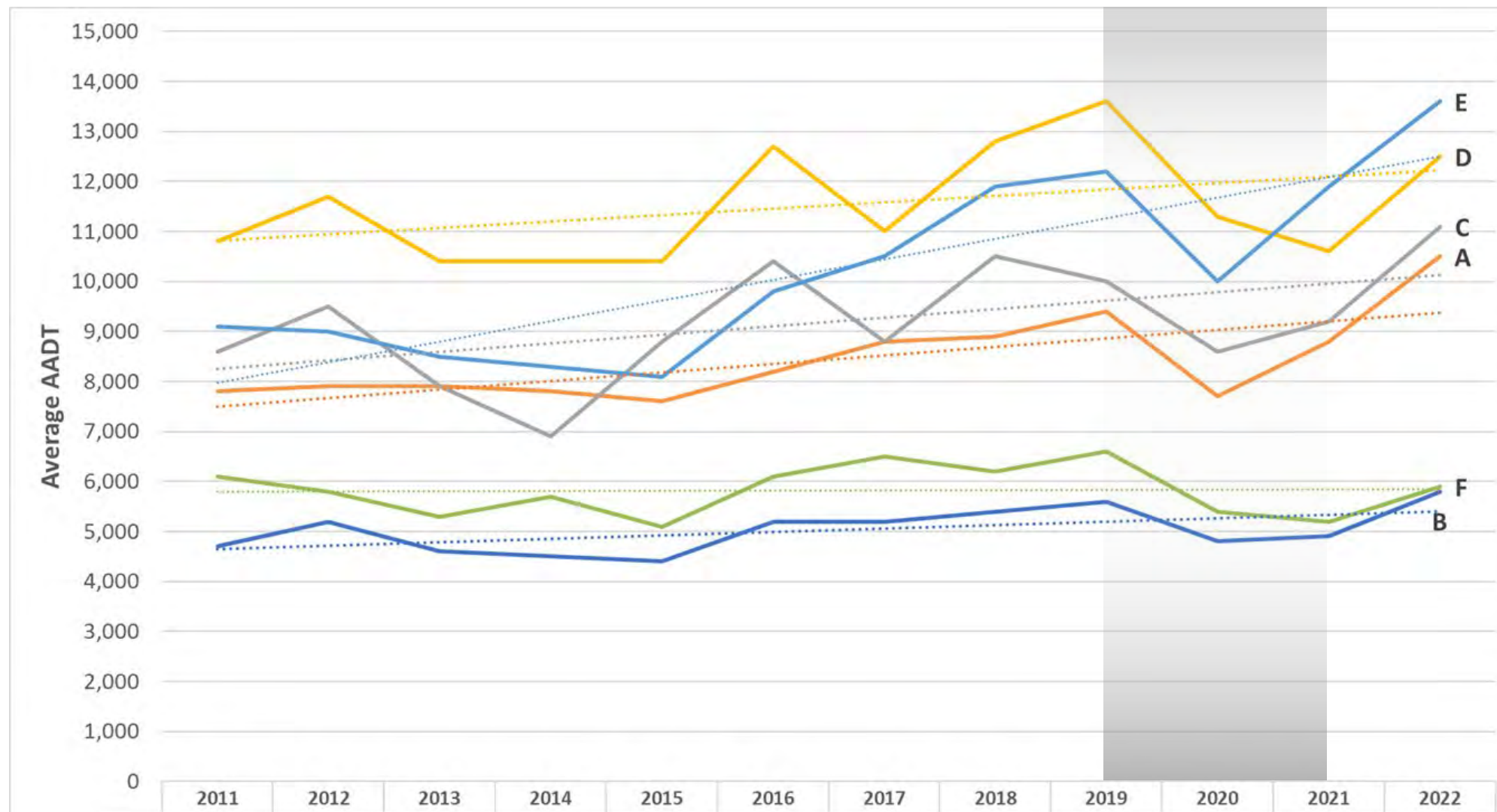




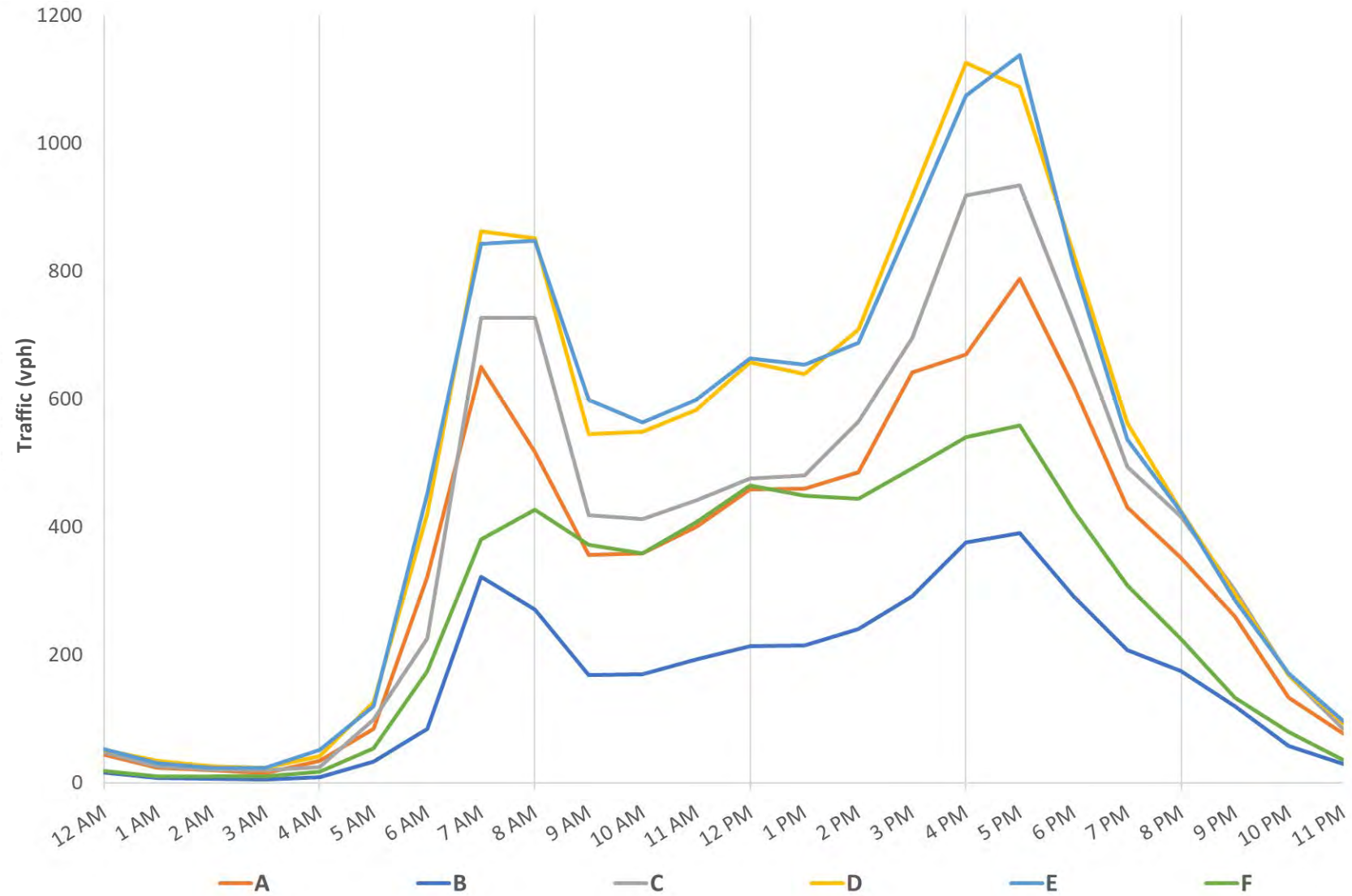




# Historic Traffic Volume Trends by Study Segment

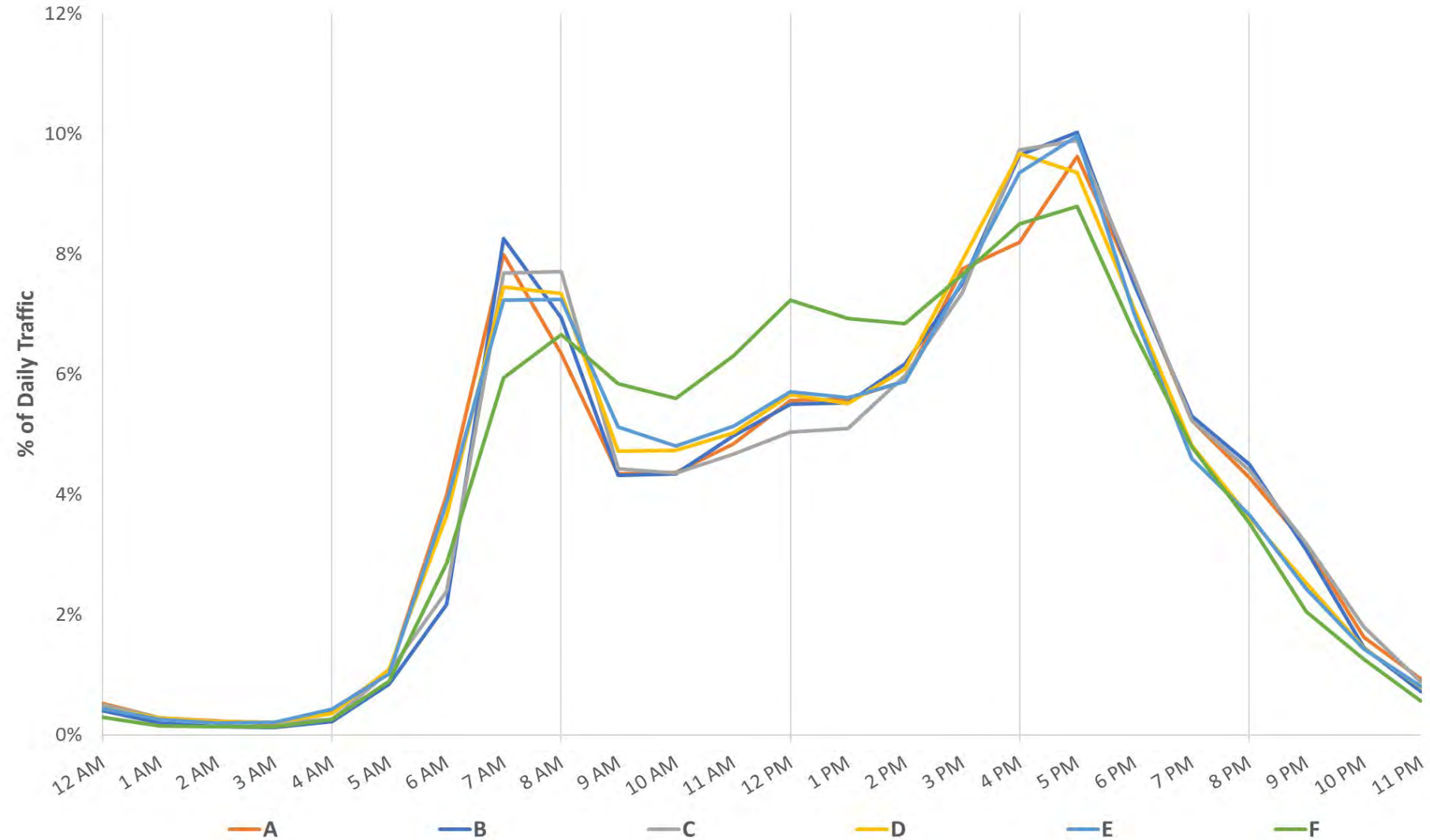


# Hourly Traffic Volume by Time-of-Day (by Segment)

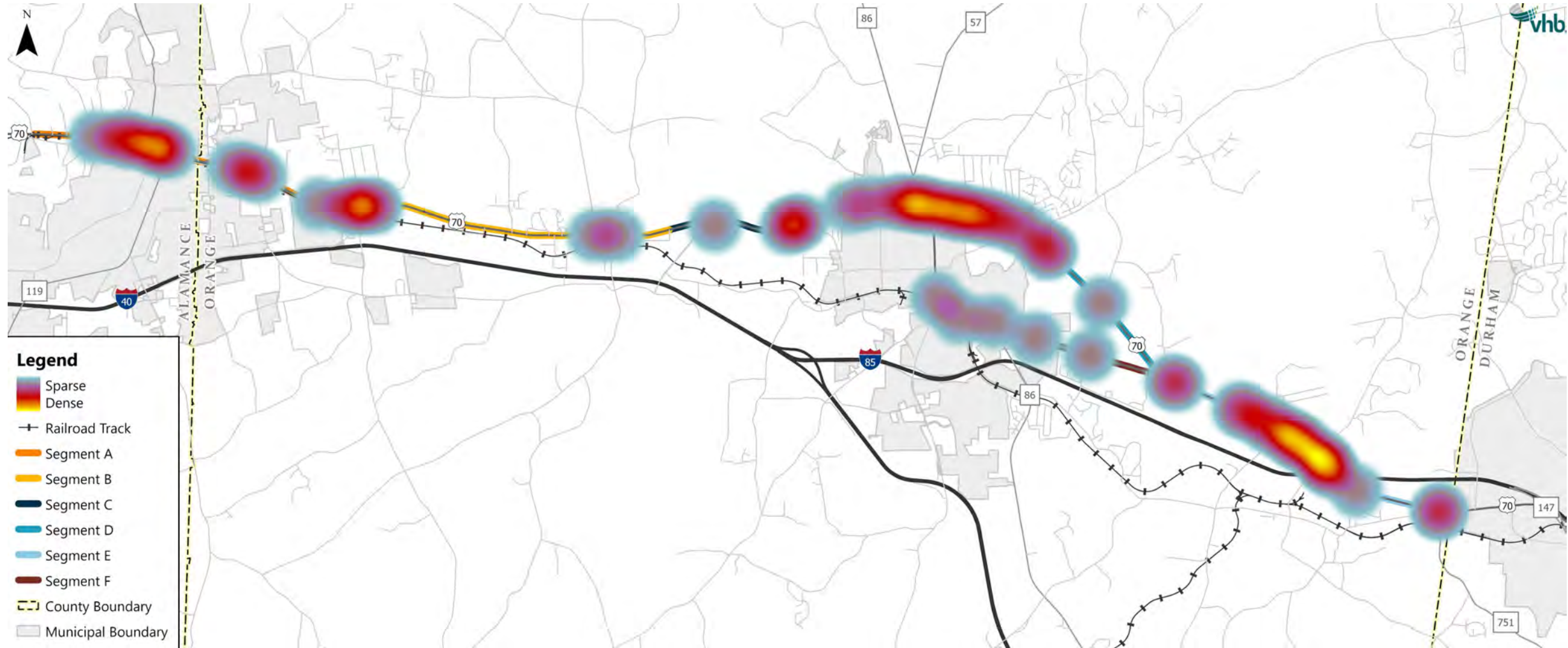




## % of Daily Traffic by Time-of-Day (by Segment)

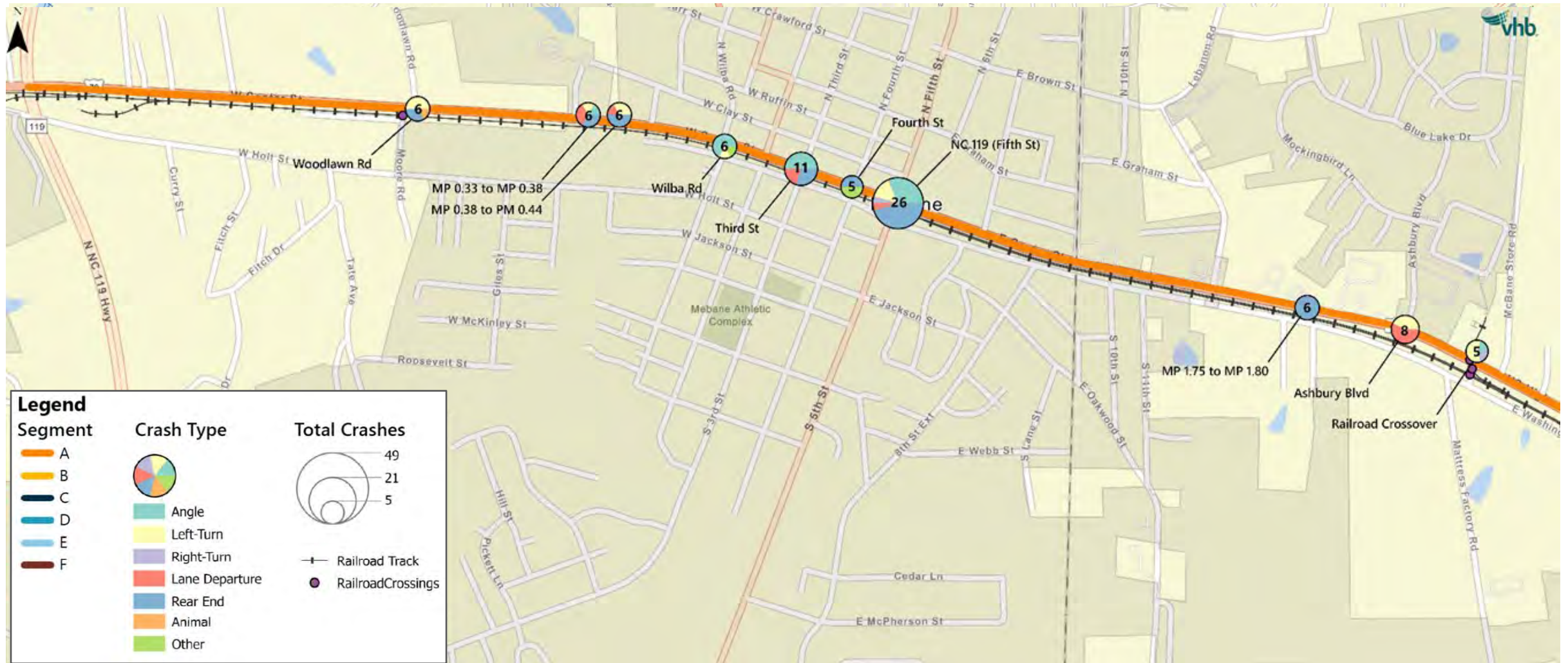


# Crash Density

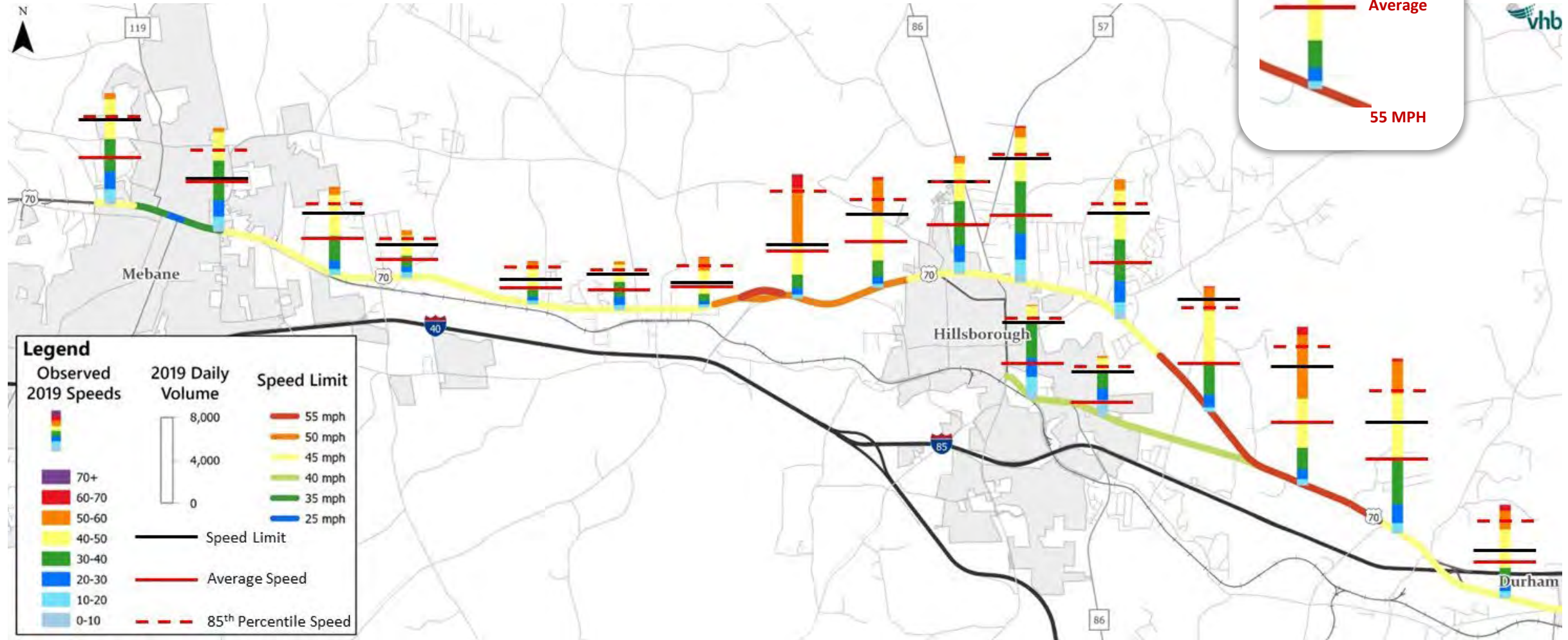




# Detailed Crash Totals by Type & Location

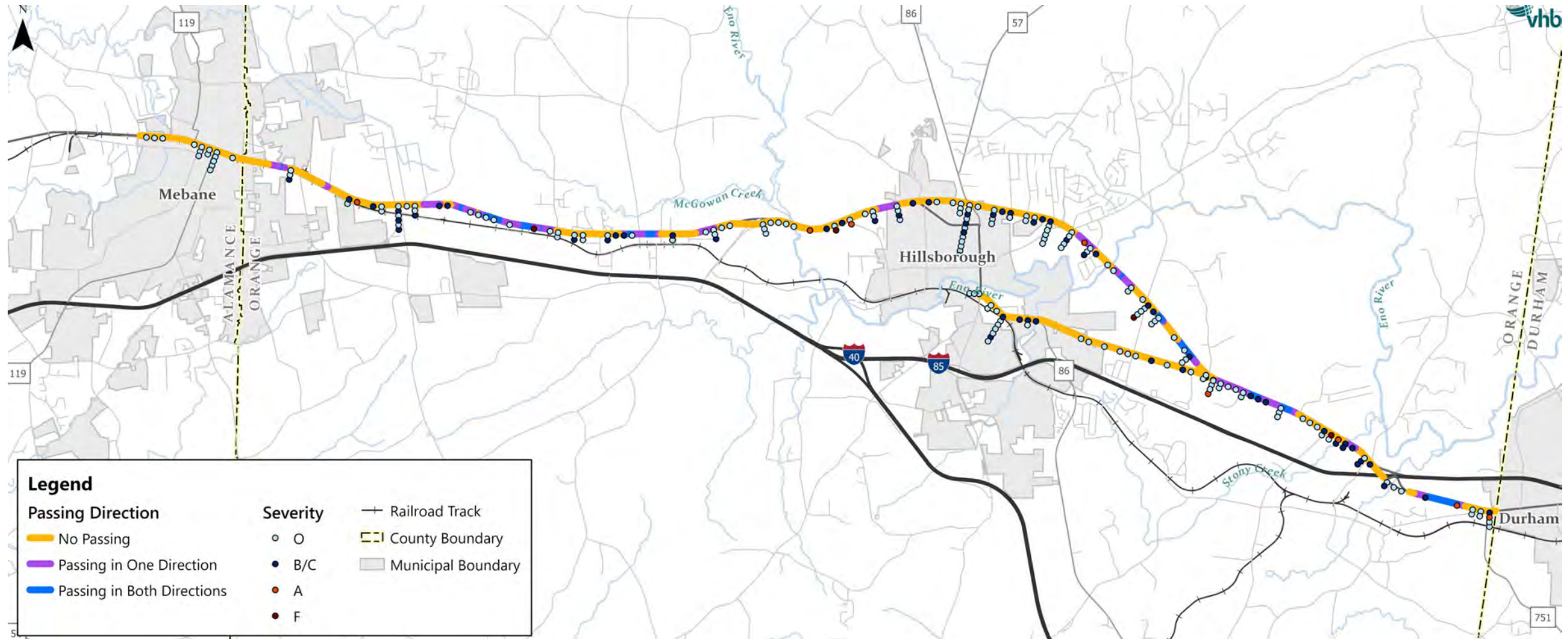


# Speed Data with Statutory Limits

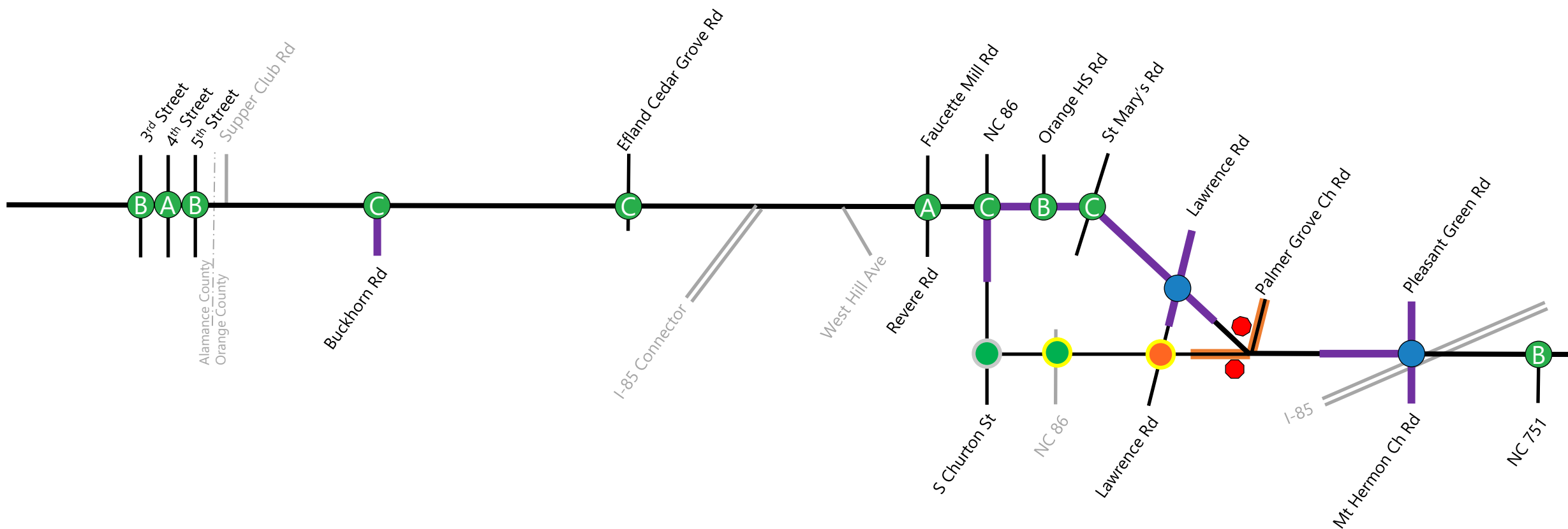




# Run-Off Road Crashes with Severities & Passing Zones



# Intersection Level-of-Service (LOS)



○ Signalized Intersection    ● Stop-Controlled Approach

**LOS\***    ● A-C    ● D    ● E-F    — Potential Queuing Problems

\* Worst case from AM and PM peaks

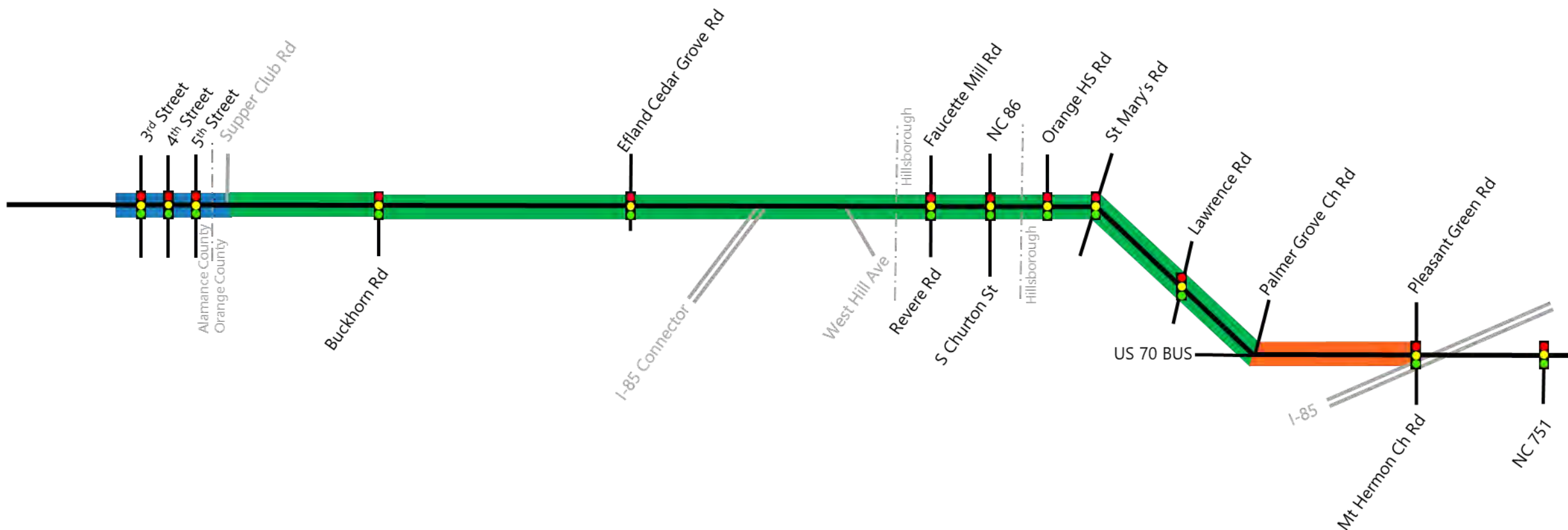
○ From Lawrence Road Development TIA    ○ From NC 86 Connector Study

QUALITY OF TRAFFIC FLOW DECREASES →

Considered an acceptable LOS				Considered an unacceptable LOS	
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F
<ul style="list-style-type: none"> <li>Light traffic</li> <li>Free flow speeds</li> </ul>	<ul style="list-style-type: none"> <li>Slightly increased traffic levels</li> <li>Still free flow speeds</li> </ul>	<ul style="list-style-type: none"> <li>Approaching moderate congestion levels</li> <li>Speeds near free flow</li> </ul>	<ul style="list-style-type: none"> <li>Speeds reduced</li> <li>Lane changes restricted due to traffic</li> </ul>	<ul style="list-style-type: none"> <li>Congestion</li> <li>Irregular traffic flow</li> </ul>	<ul style="list-style-type: none"> <li>Road at capacity</li> <li>Gridlock with frequent stops</li> </ul>



# Level-of-Service (LOS) by Corridor Segment



 Signalized Intersection

**LOS\***  **A-C**  **D**  **E-F**

\* Worst case from AM and PM peaks

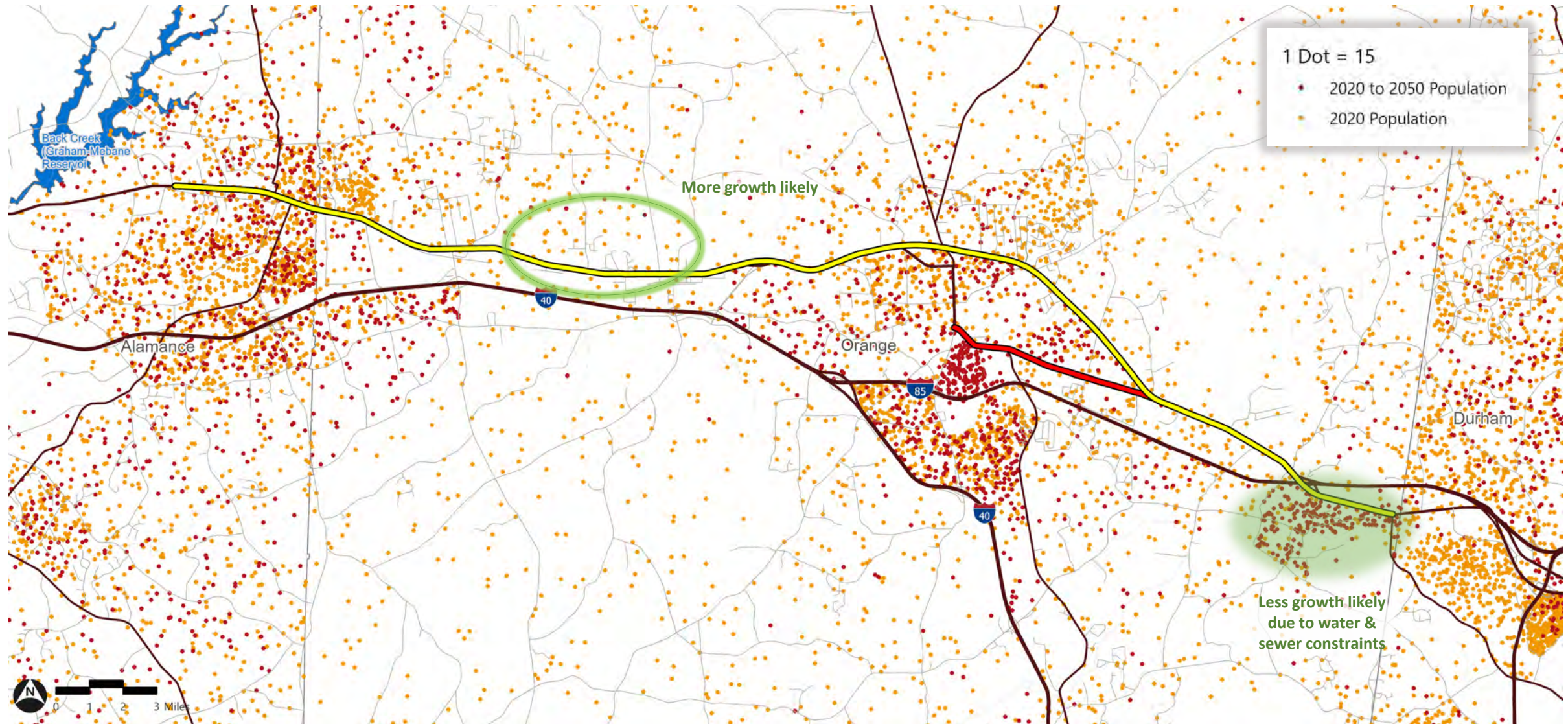
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# Growth

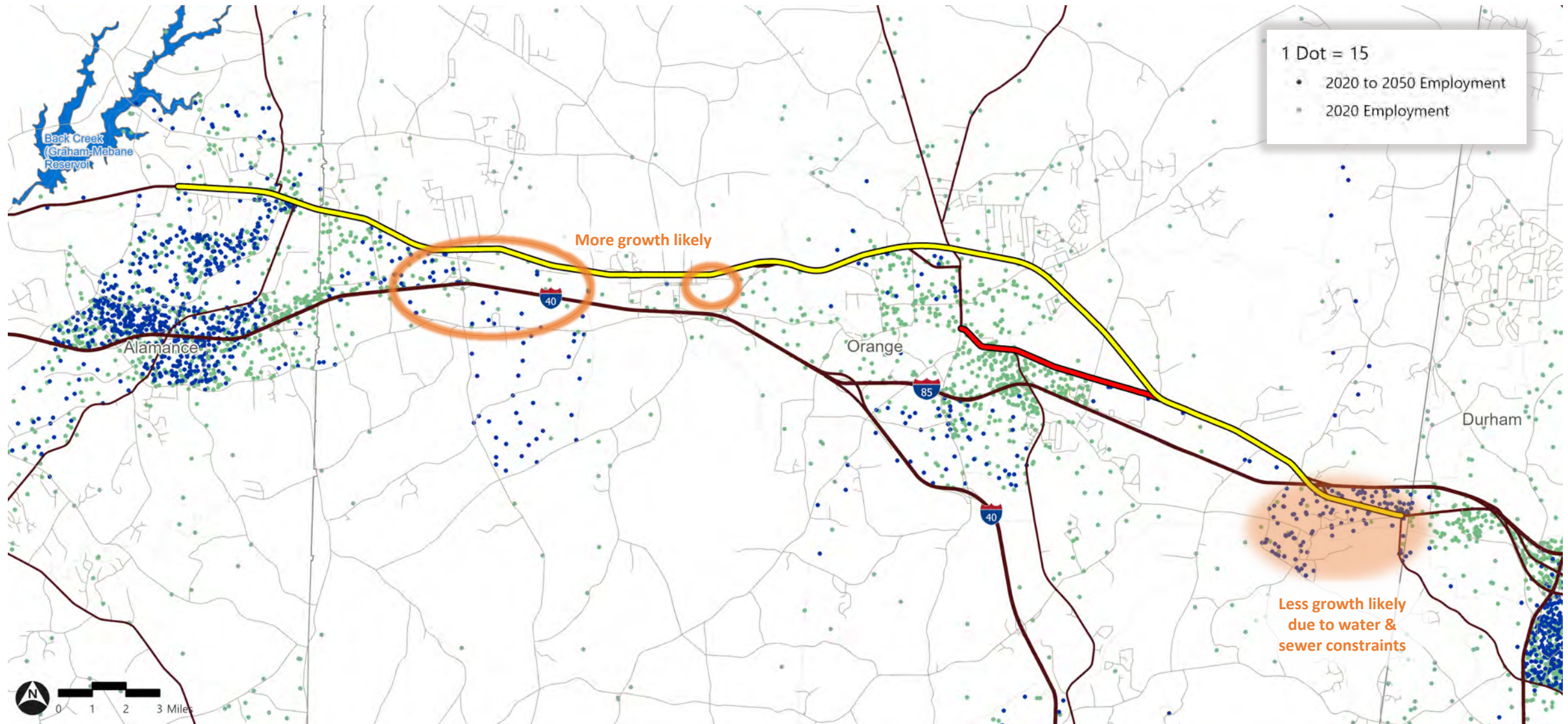


# Population Growth, 2020 to 2050





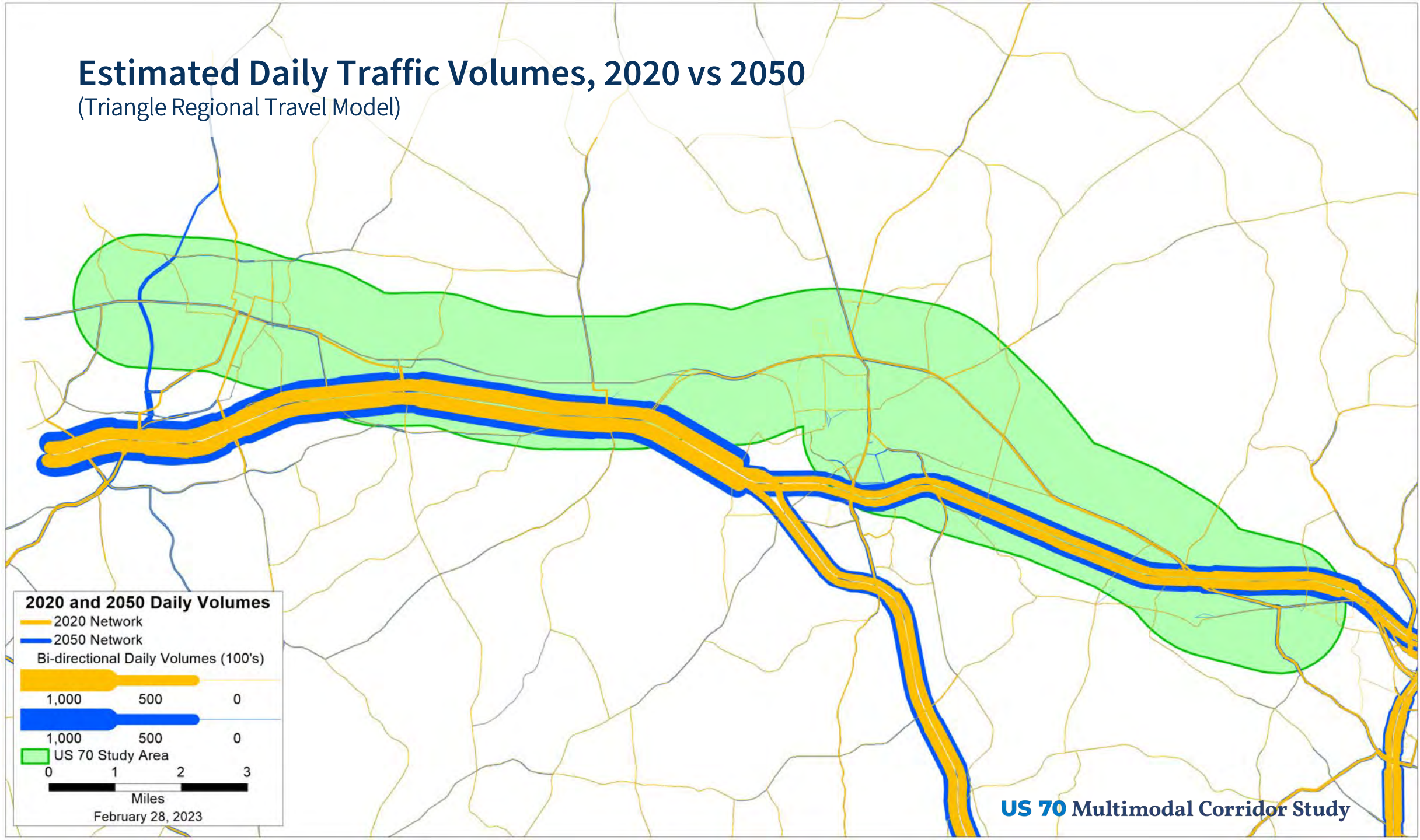
# Employment Growth, 2020 to 2050





# Estimated Daily Traffic Volumes, 2020 vs 2050

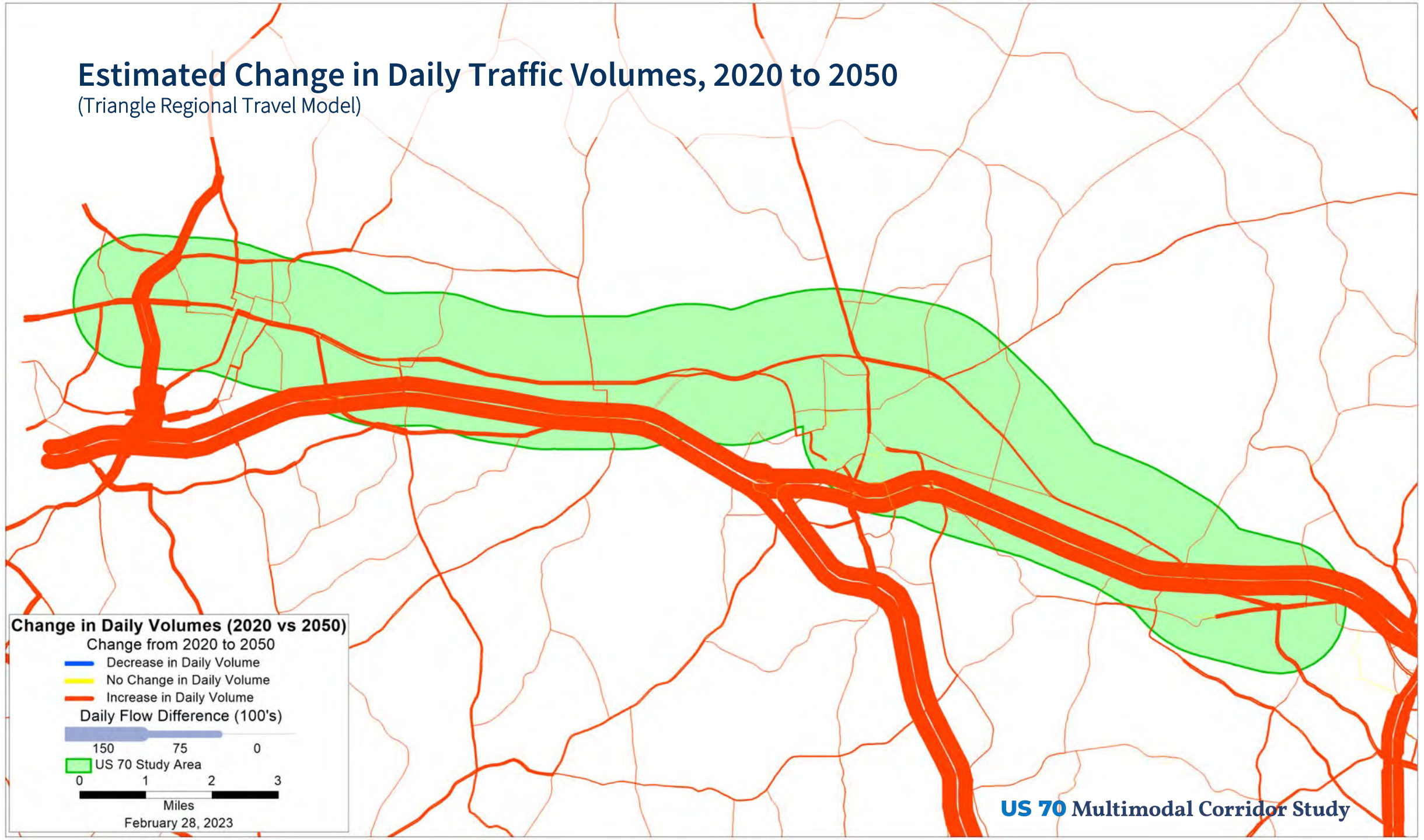
(Triangle Regional Travel Model)





# Estimated Change in Daily Traffic Volumes, 2020 to 2050

(Triangle Regional Travel Model)







# Next Steps



# Findings to Date

- ✓ Traffic has returned to pre-COVID levels
  - Higher speeds
  - More trucks
- ✓ High crash rates & speeds in some locations
- ✓ Need pedestrian & bicycle improvements
  - *Safety – Health – Economy – Transit*
- ✓ Anticipate moderate, localized traffic growth
- ✓ Rail ROW constrains parts of western corridor
- ✓ I-85 improvements critical to US 70 traffic
- ✓ Full access needed at I-85 Connector
- ✓ NC 86 & NC 57 access via US 70 is important





# Develop & Test Solutions

- ✓ Safety
- ✓ Walk & bike connections
  - Crossing/along US 70
- ✓ Intersection operations
  - RR interactions
- ✓ Transit service
- ✓ Roadway cross-sections
- ✓ Environmental protection
- ✓ Supportive land uses & policies
- ✓ Project priorities & phasing



# Public Participation – Round 2

