

NC56

CORRIDOR STUDY

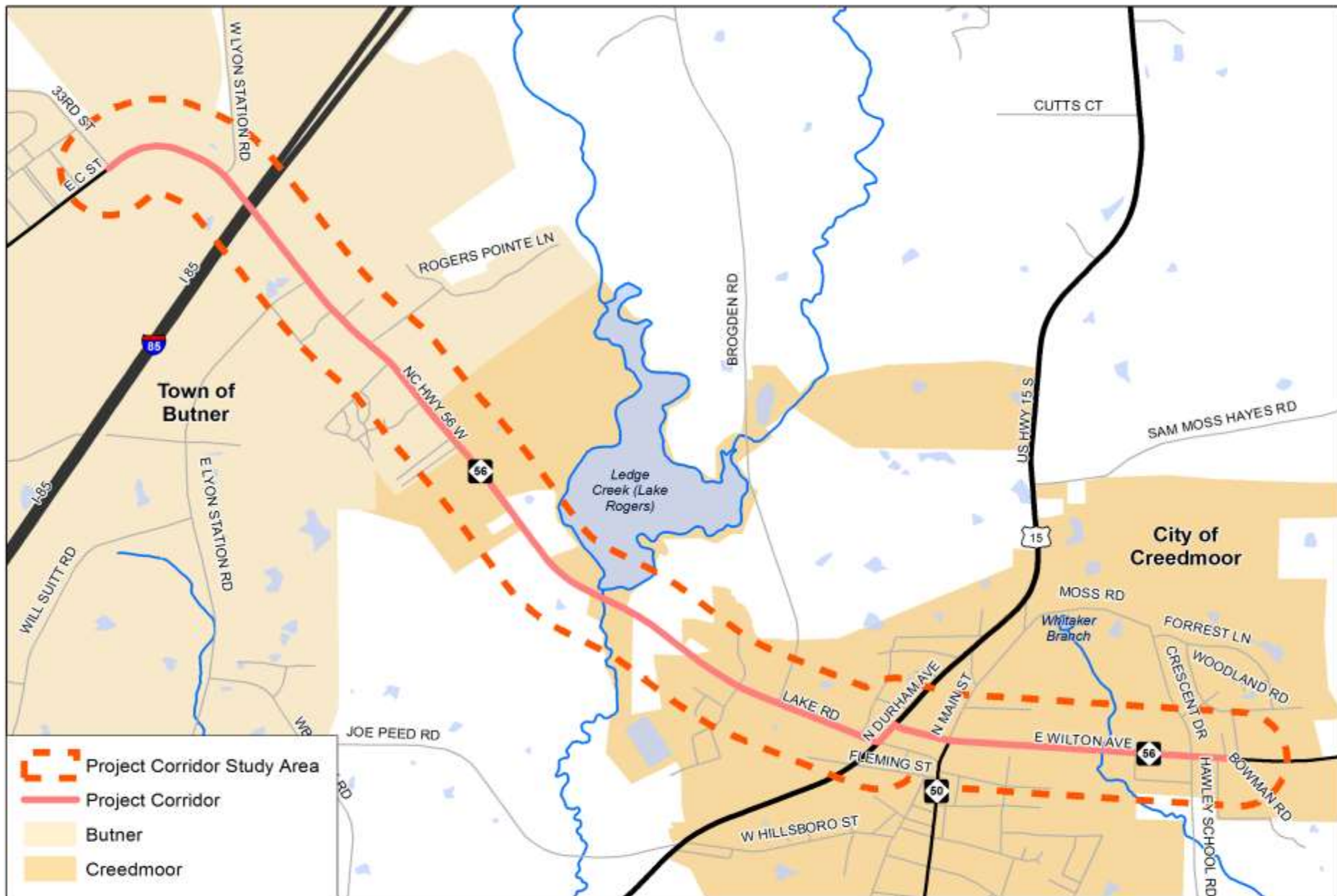
Public Meeting #2

May 12, 2015



Meeting Agenda

- Welcome and Introductions
- Public Workshop #1 Review
- Future Conditions
- Draft Recommendations
- Next Steps



NC 56 Corridor Study

0 0.25 0.5 1 Miles



Project Website

www.nc56corridorstudy.com



TEAM COLLABORATION SITE ->




- ABOUT THE STUDY
- STUDY NEWS
- EVENTS CALENDAR
- GET INVOLVED
- FAQ
- STUDY TEAM/CONTACTS
- STUDY DOCUMENTS

UPCOMING EVENTS

Public Meeting #1
January 26, 2015
3:30-6:30 pm

[View more info](#) 

[View all events](#) 

Welcome to the NC 56 Corridor Study Website!

Have you ever experienced long backups along NC 56? Or had trouble making left-hand turns in or out of businesses?

The Town of Butner, the City of Creedmoor, Granville County, NCDOT, and the Capital Area MPD are collaborating to address these issues by studying potential improvements to NC 56 between the Town of Butner and the City of Creedmoor. The project will review the long-term vision for the corridor and incremental, short-term improvements to realize that long-term vision. The goal is to create an attractive, well-functioning road connecting these two municipalities that accommodates the needs of all the residents in the area, adds value to the communities, and enhances economic vitality for the region.

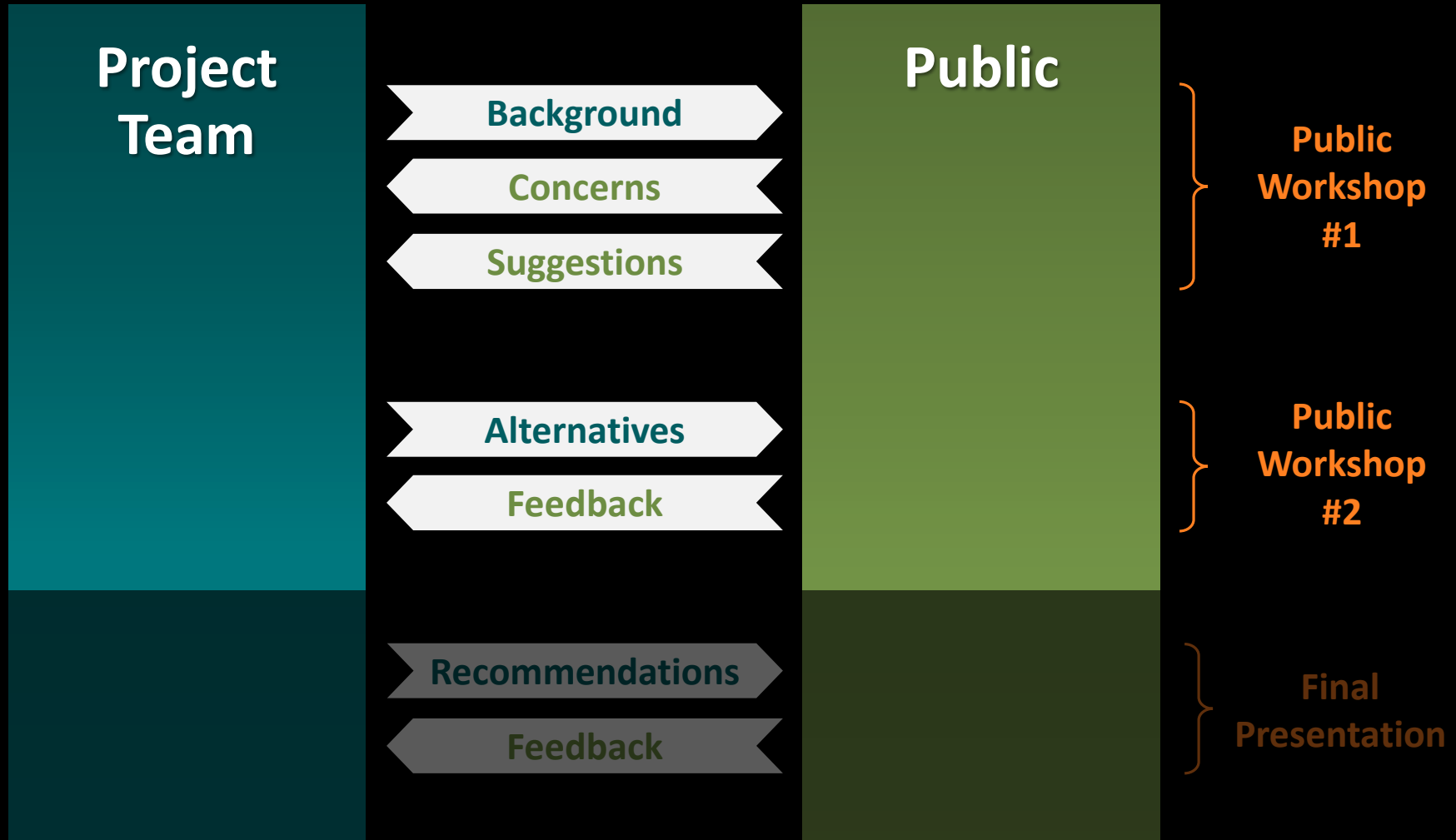
Study Overview

The NC 56 Corridor Study is looking at a 4.5-mile stretch of NC 56 that runs between 33rd Street in Butner and Darden Drive in Creedmoor. The two-lane roadway is regionally significant as it is one of the few east-west corridors in the area and carries an average of 9,000 to 15,000 vehicles per day. Congestion on the corridor, which is higher than would be expected from the daily level of traffic, is amplified by inadequate access management, heavy turning conflicts, and substantial truck volumes. The roadway also traverses a number of different land uses throughout this stretch which makes designing a roadway that accommodates the needs of all users an important challenge.



The NC 56 Corridor Study Area [\(click to enlarge\)](#)

Public Participation



Public Workshop #1

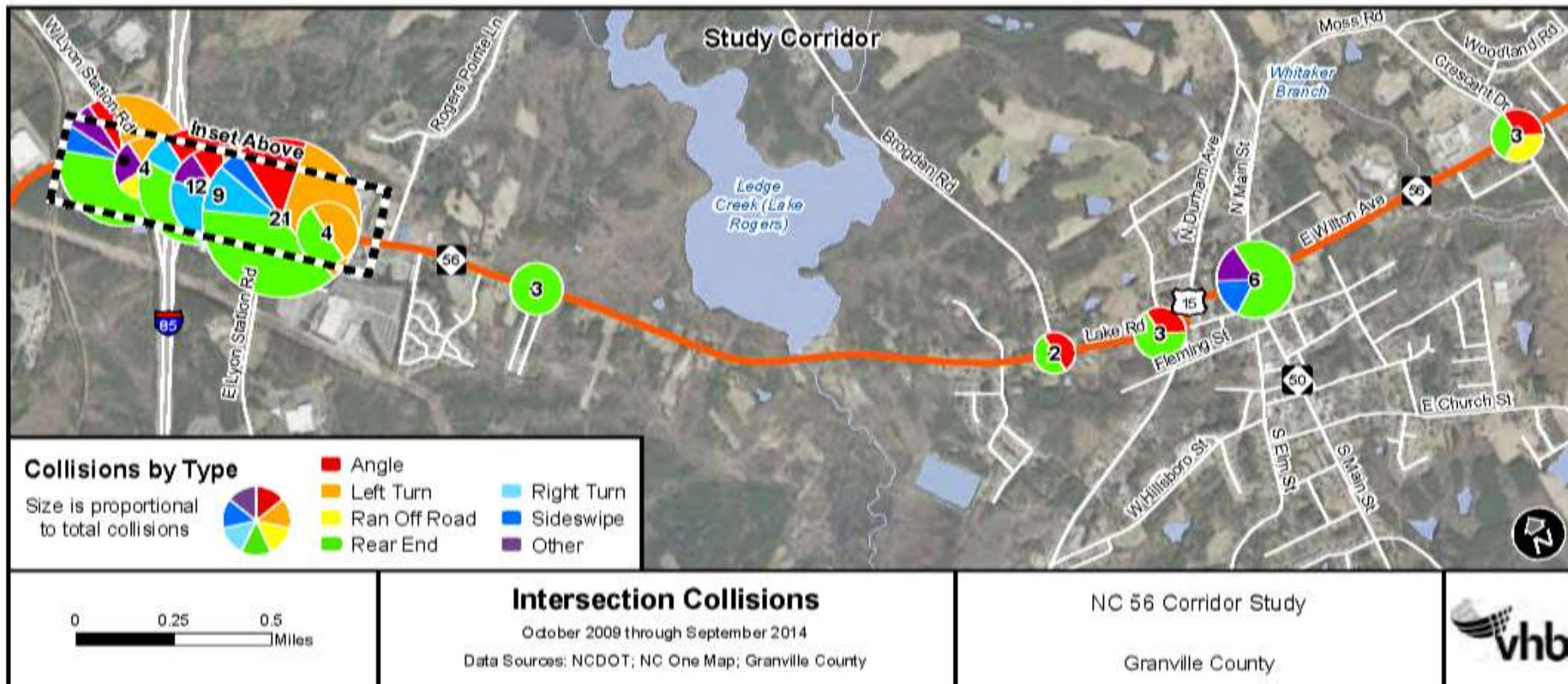
Summary of Themes

Public Meeting #1

- 46 attendees signed in, 15 surveys collected
- 63 online survey responses
- Top priorities were:
 - Safety
 - Congestion
 - Access to businesses
 - Pedestrian safety/access
- Debate over widening
- US 15/NC 50/NC 56 intersection issues
- Schools and restaurant row have safety concerns

Access Management

Opportunities for access management and safety enhancements near I-85



Collisions along Corridor

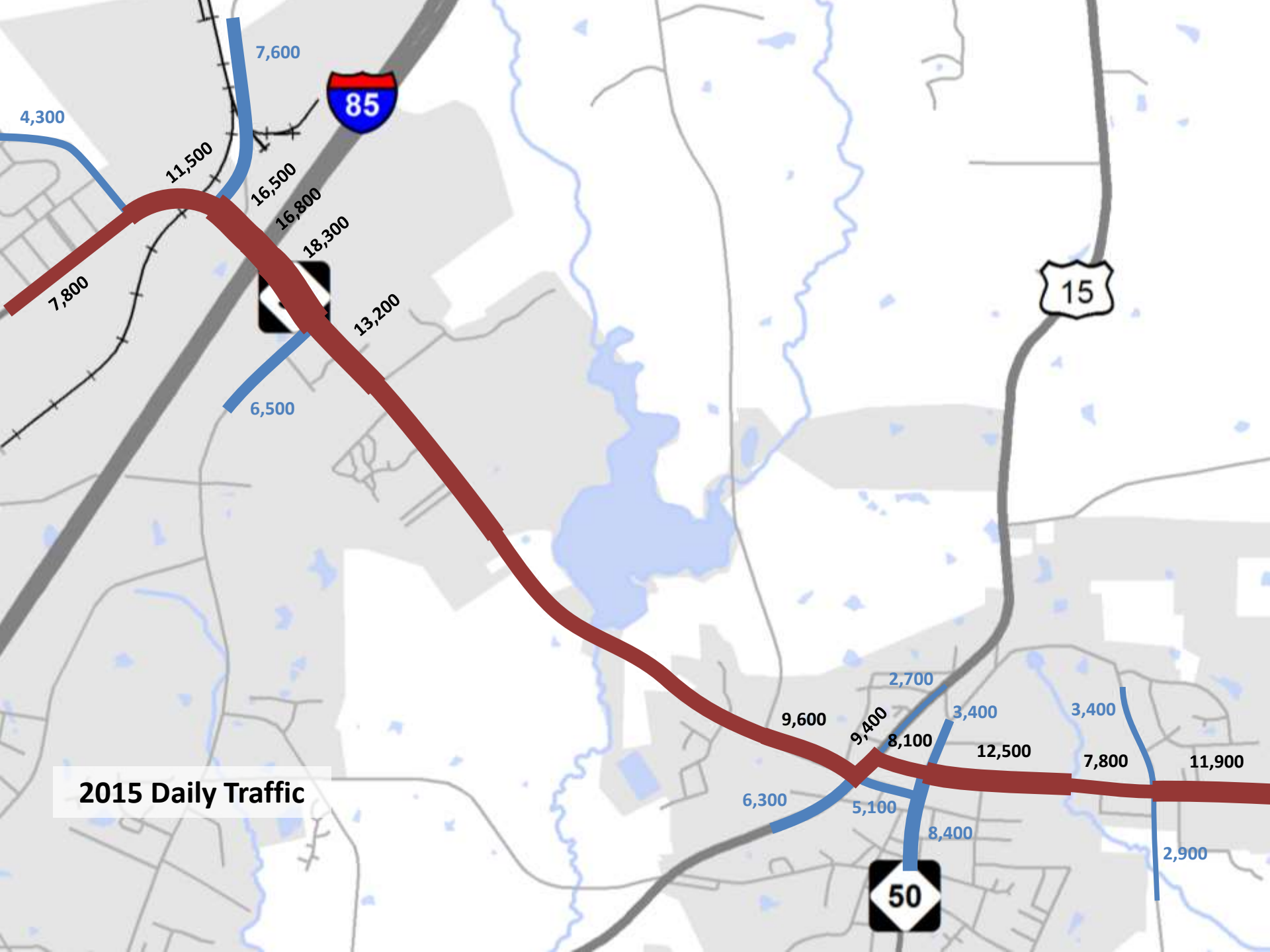


Legend Crash Type

- ★ Rear End
- ★ Angle
- ★ Left-Turn
- ★ Right-Turn
- ★ Other

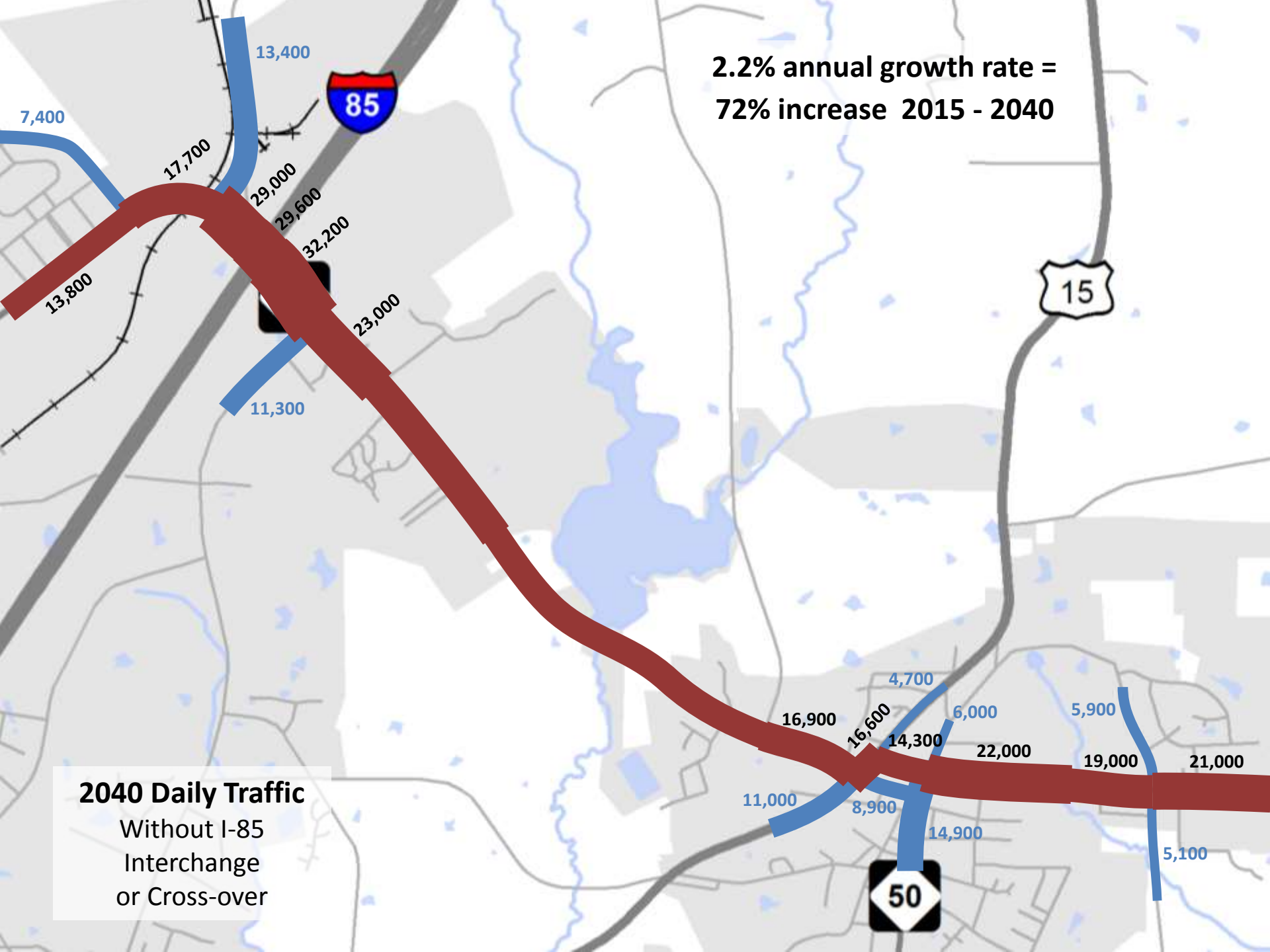


Traffic Forecasts



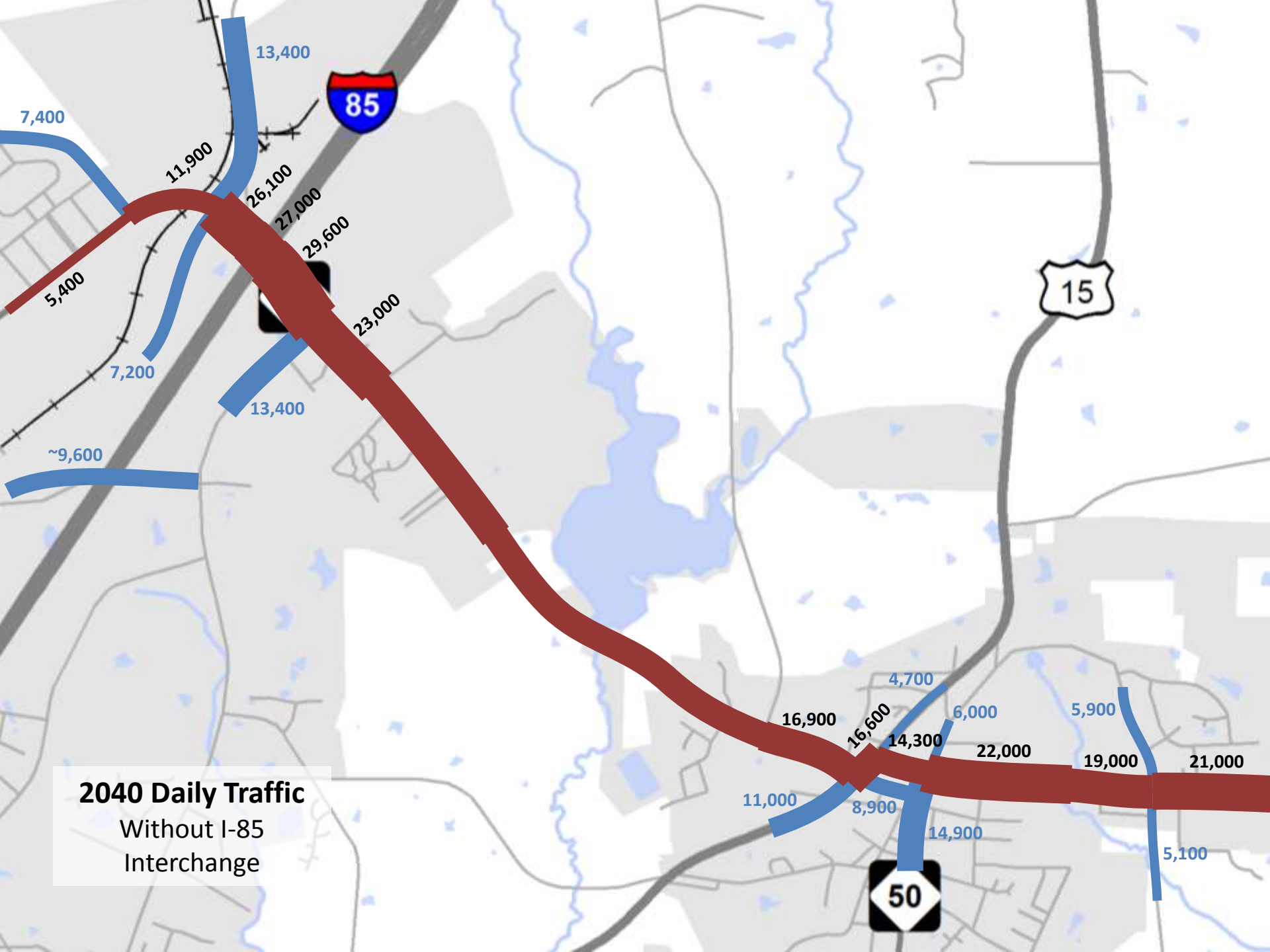
2015 Daily Traffic

**2.2% annual growth rate =
72% increase 2015 - 2040**



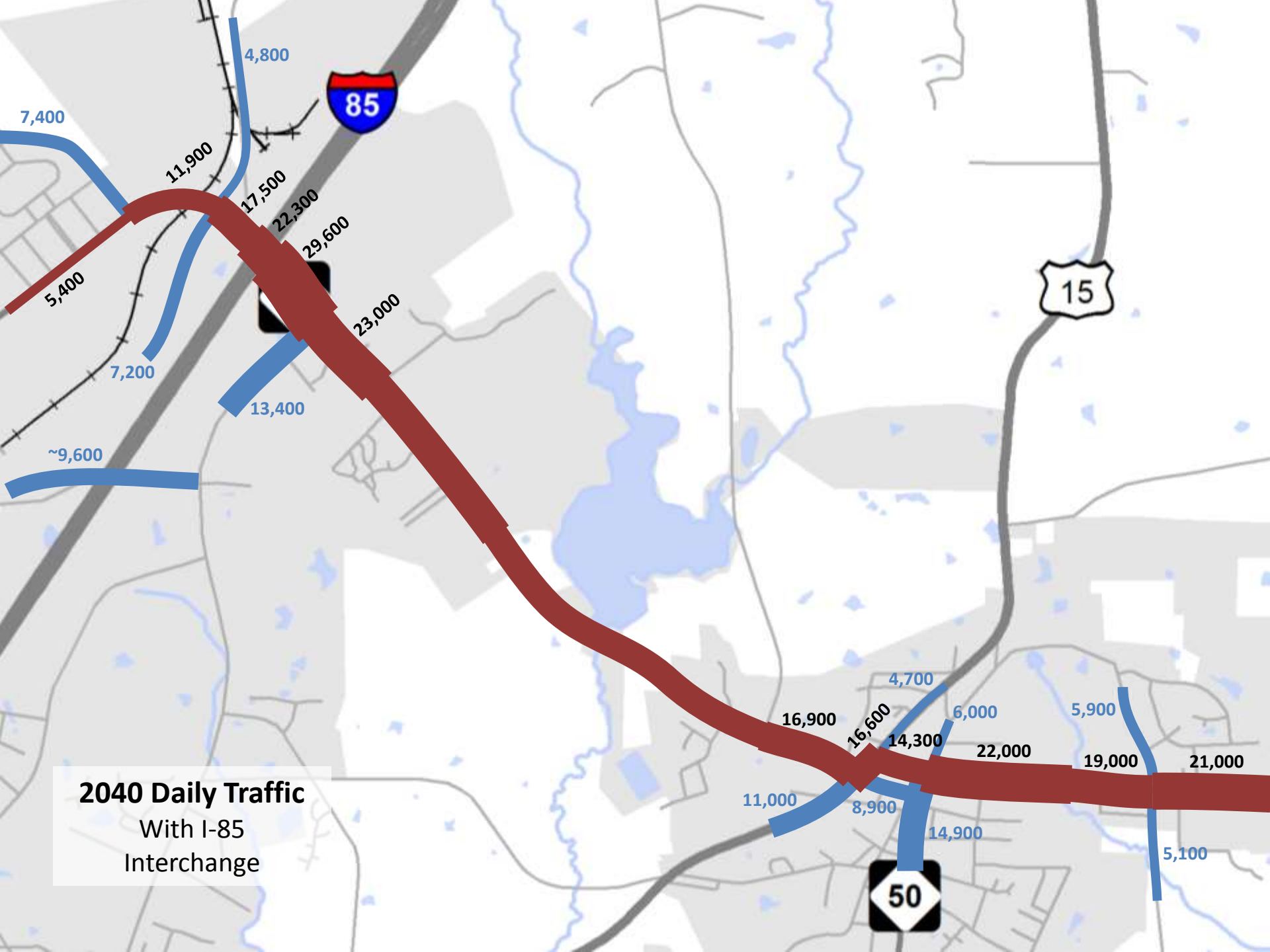
2040 Daily Traffic

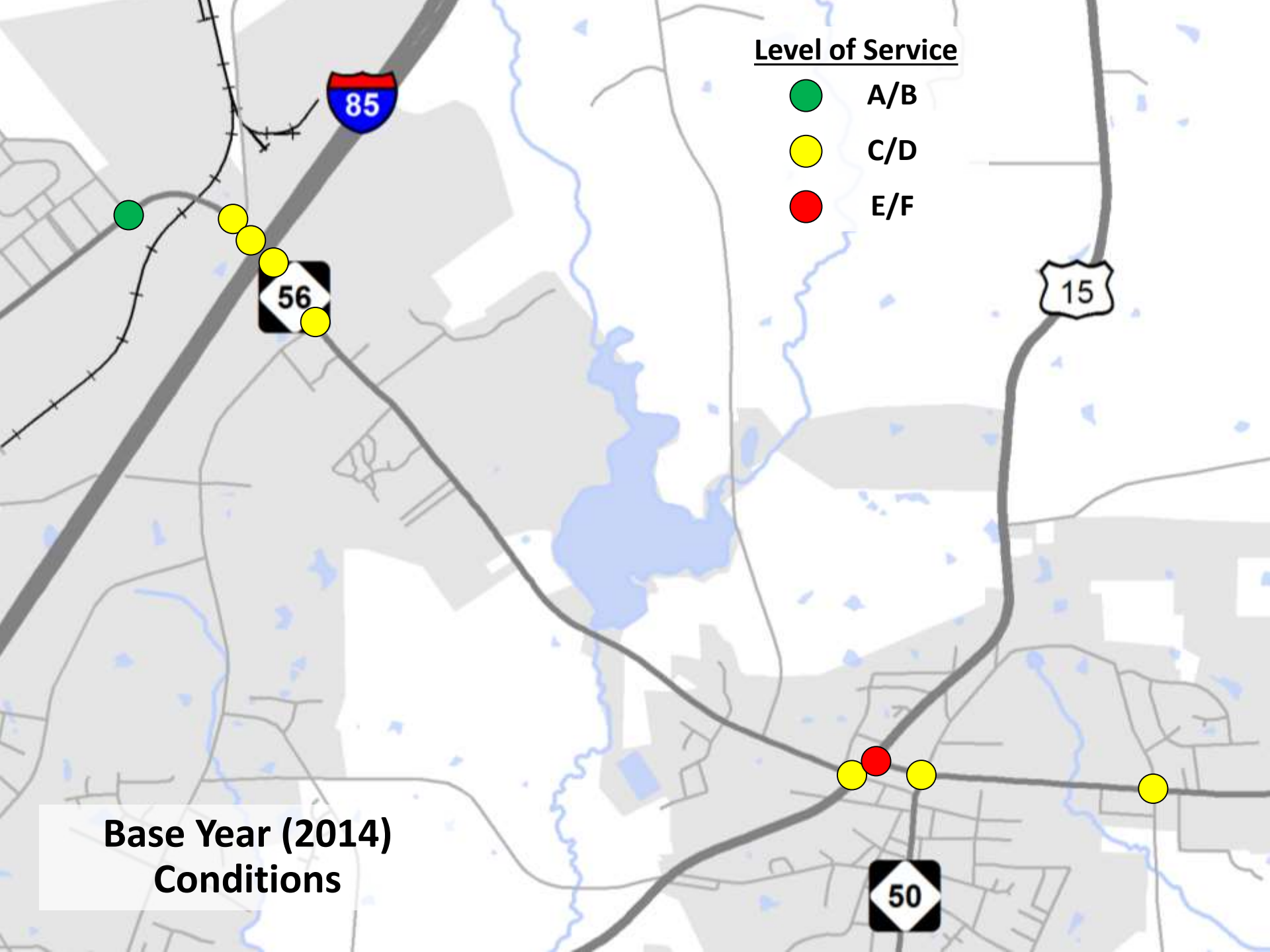
Without I-85
Interchange
or Cross-over



2040 Daily Traffic

Without I-85
Interchange

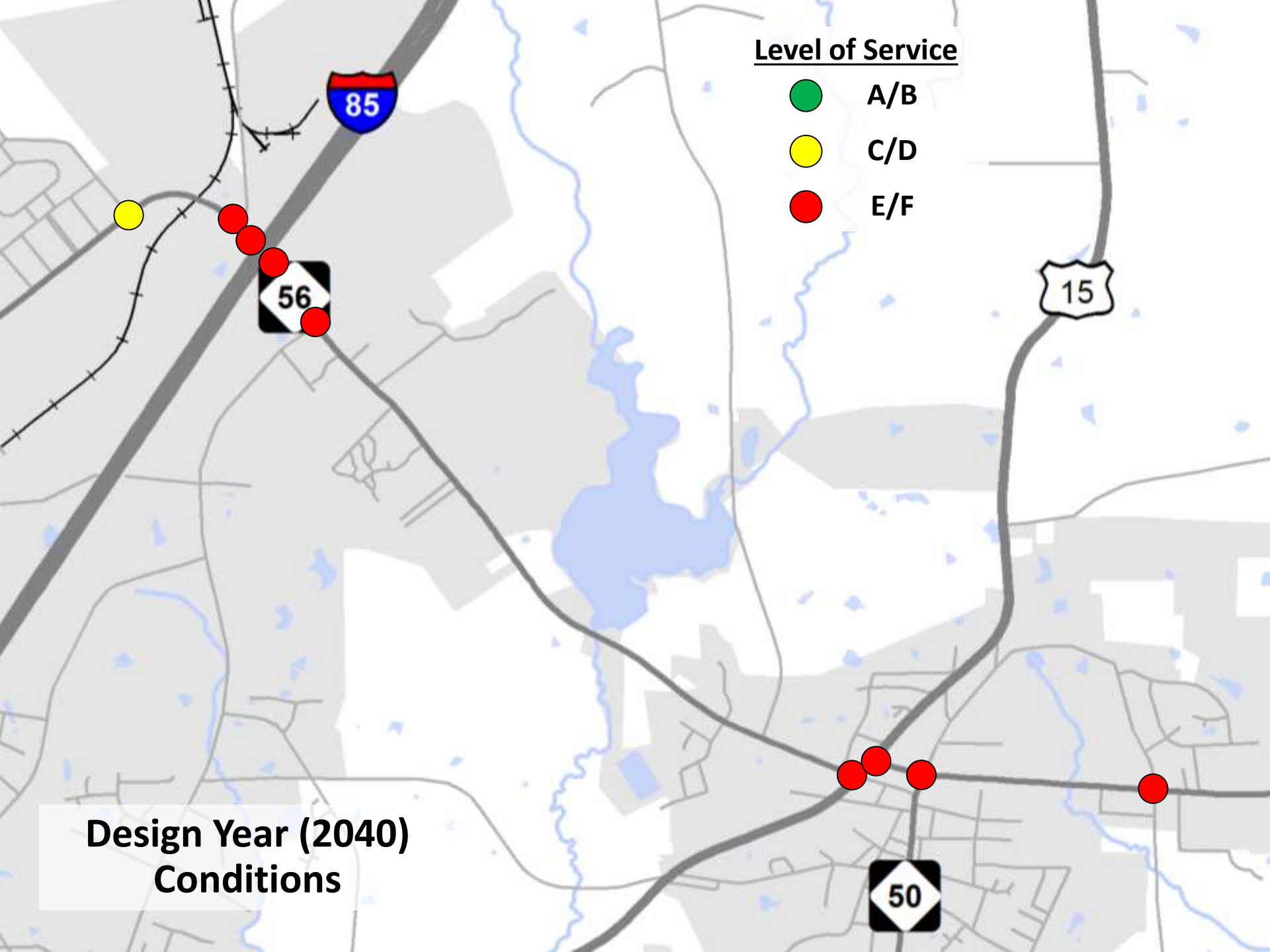




Level of Service

- A/B
- C/D
- E/F

**Design Year (2040)
Conditions**



Traffic Capacity Improvements

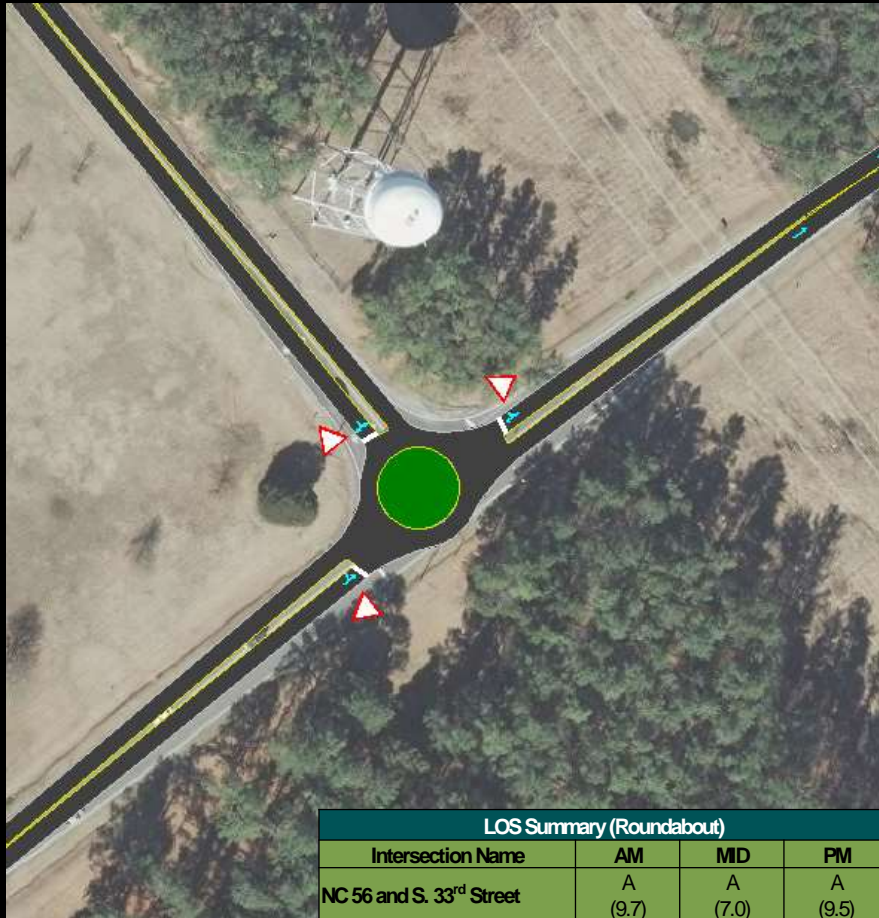


Proposed Widening

- 3-lane
- 4-lane, Priority 1
- 4-lane, Priority 2

Western Segment

S. 33rd Street Intersection



Potential Roundabout

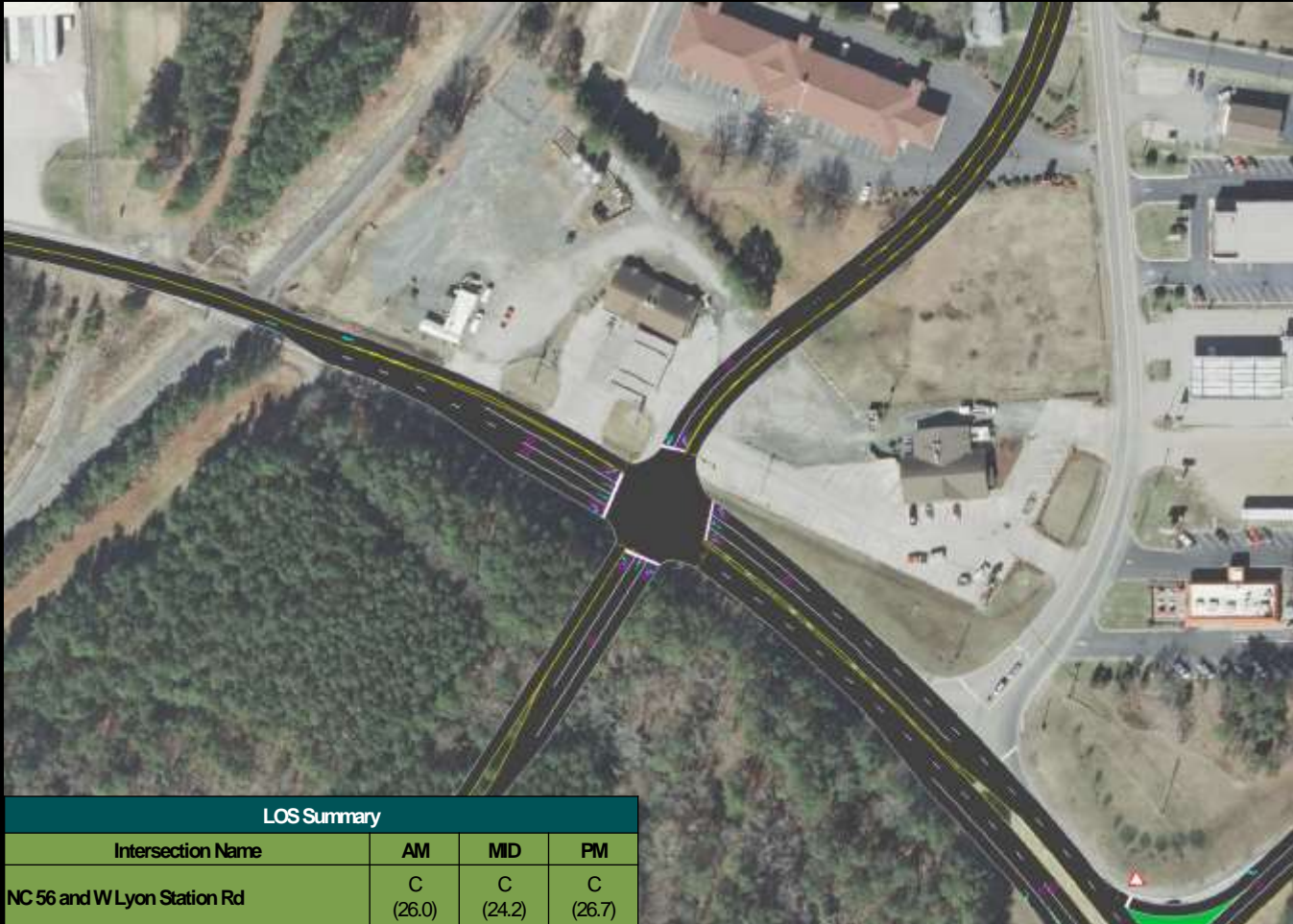
Concept illustrations; scale is approximate.



Extend Southbound Left-Turn Lane

Western Segment

W Lyon Station Road



LOS Summary

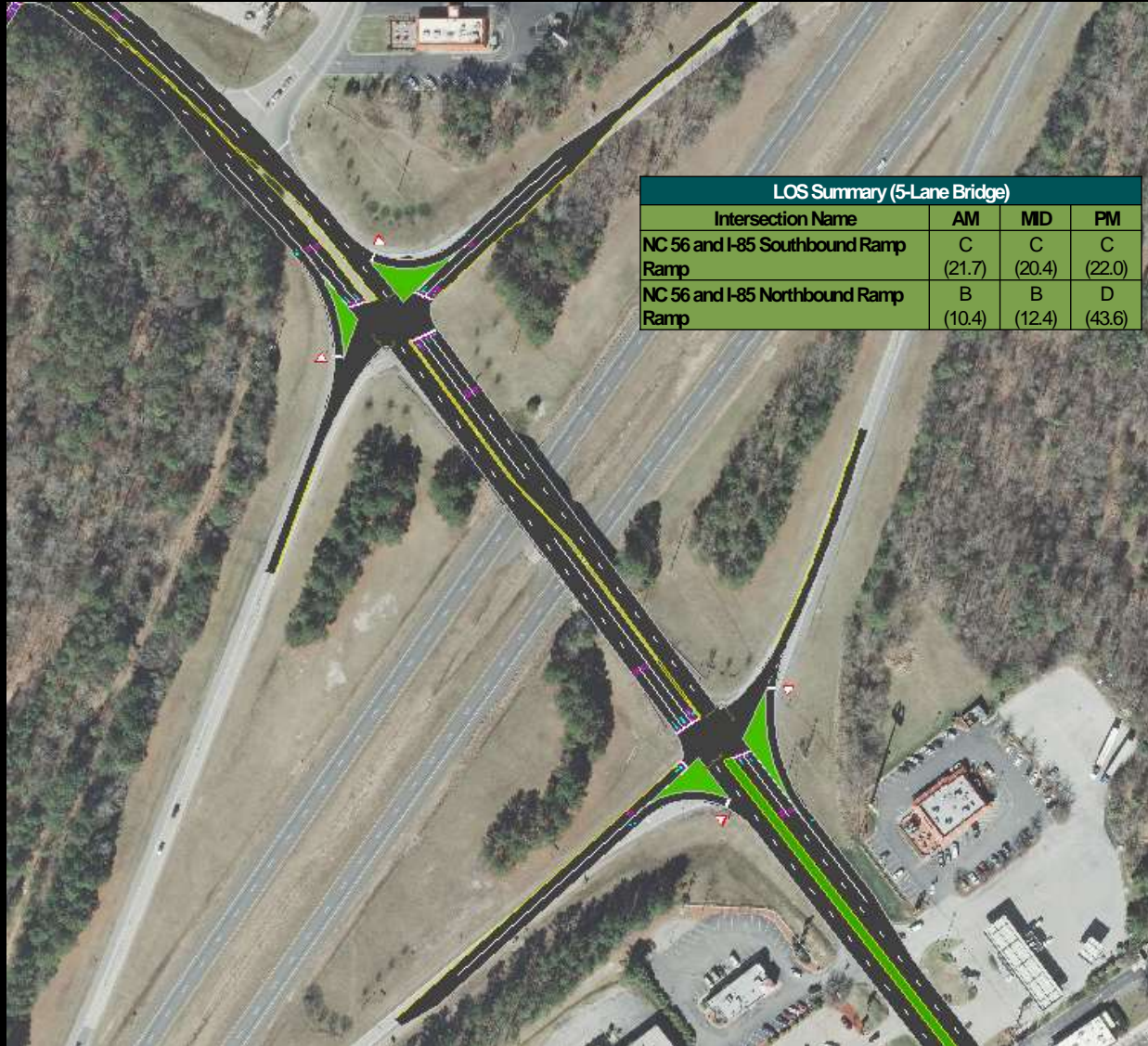
Intersection Name	AM	MID	PM
NC 56 and W Lyon Station Rd	C (26.0)	C (24.2)	C (26.7)

Concept illustration; scale is approximate.

- Realignment of W Lyon Station Road
- Extension of W Lyon Station Road to south
- Widen to multi-lane section east of railroad

Western Segment

I-85 at NC 56 Interchange (Five Lane Bridge)

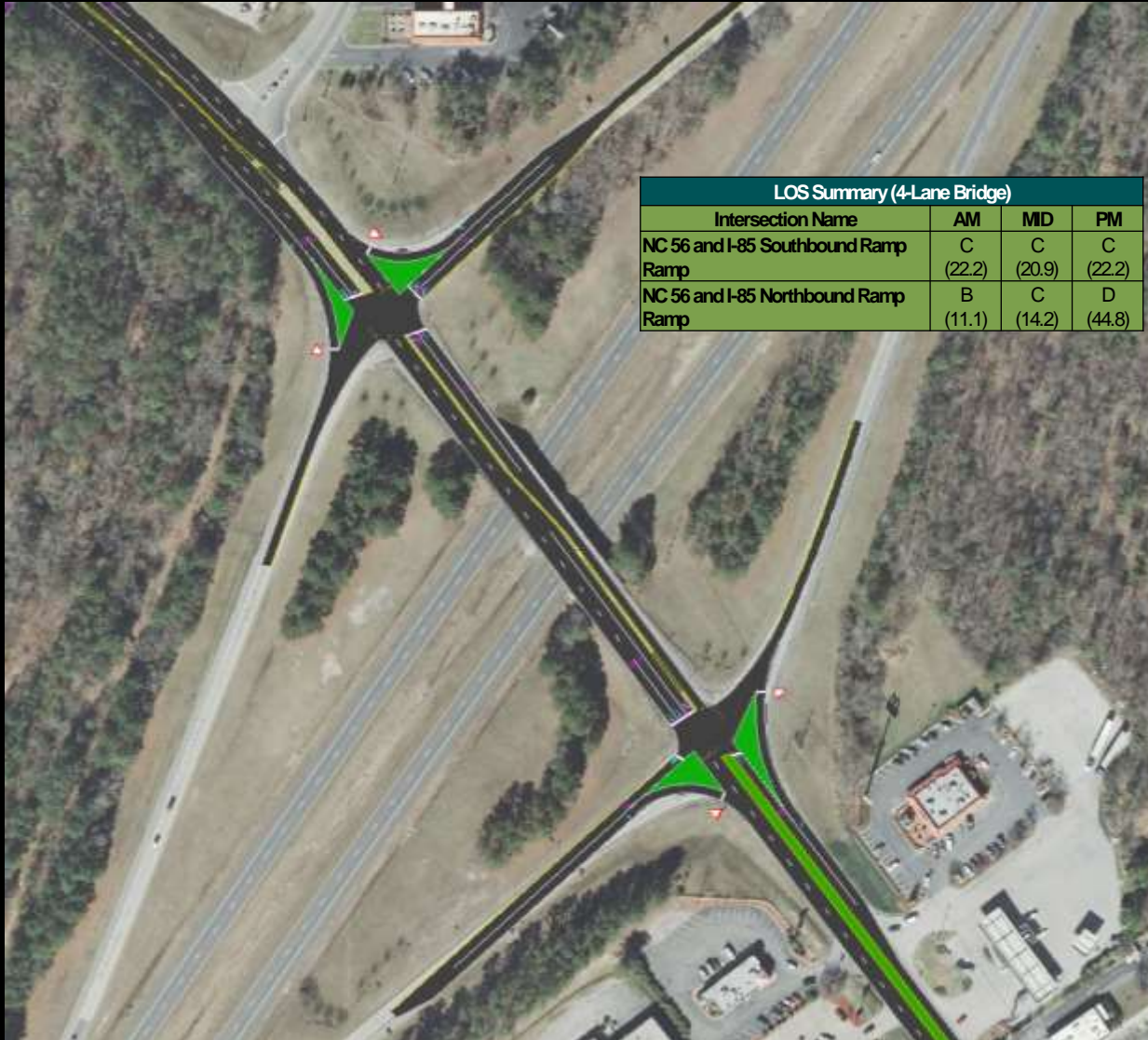


- Extend four through lanes across bridge with back-to-back left-turn lanes
- Southbound off-ramp widening

Concept illustration; scale is approximate.

Western Segment

I-85 at NC 56 Interchange (Four Lane Bridge)

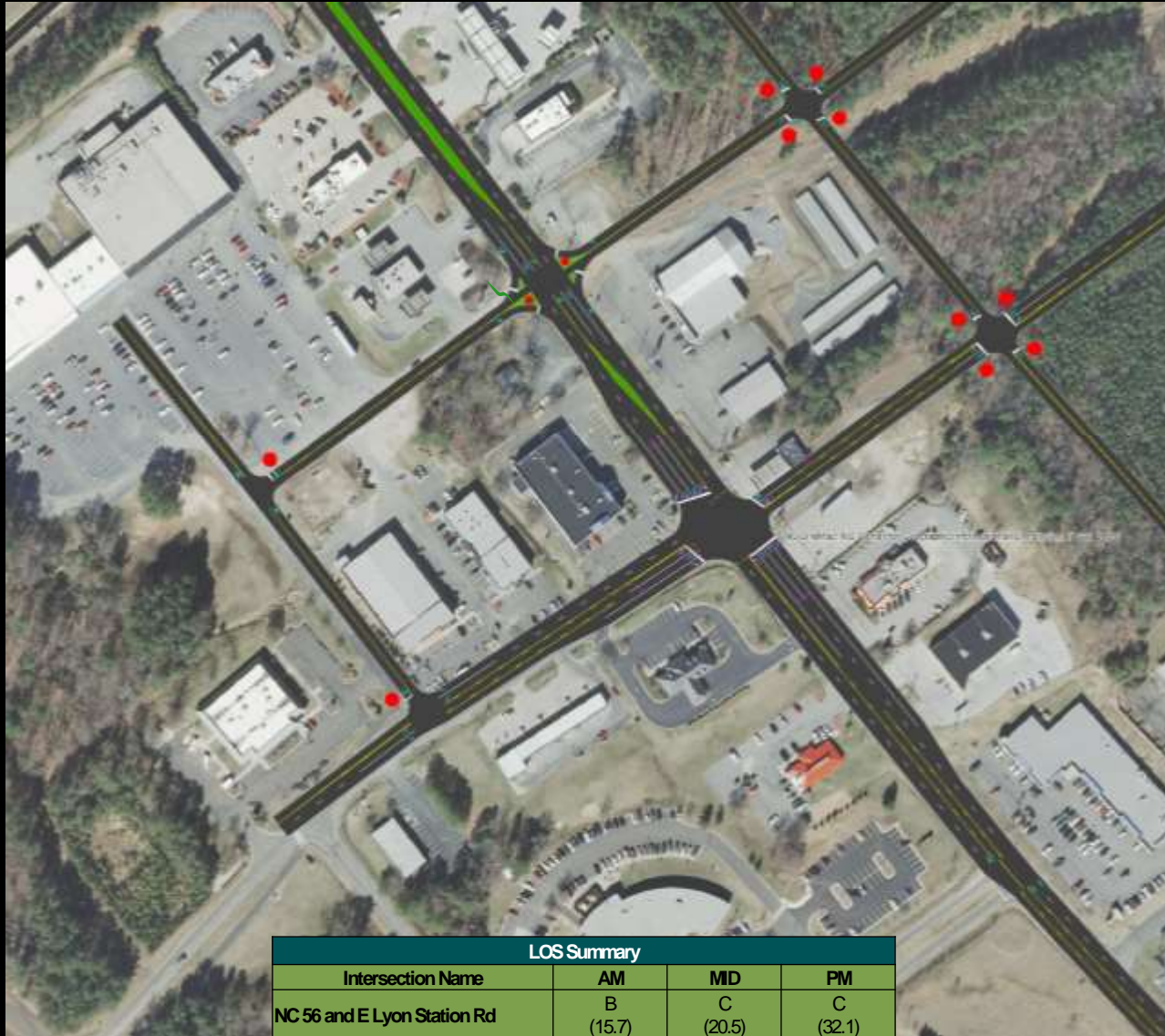


LOS Summary (4-Lane Bridge)			
Intersection Name	AM	MD	PM
NC 56 and I-85 Southbound Ramp	C (22.2)	C (20.9)	C (22.2)
NC 56 and I-85 Northbound Ramp	B (11.1)	C (14.2)	D (44.8)

- Extend three through lanes across bridge with back-to-back left-turn lanes
- Southbound off-ramp widening

Western Segment

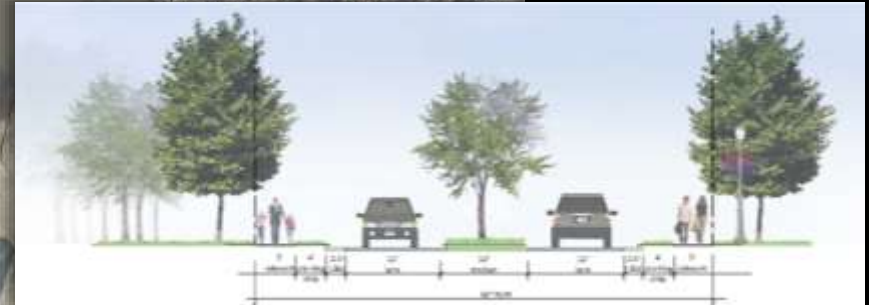
E Lyon Station Road



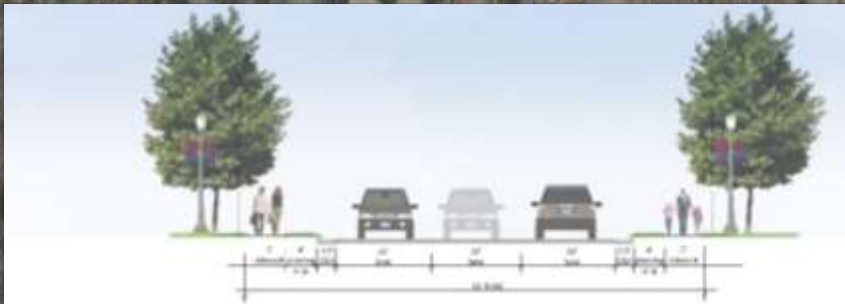
Concept illustration; scale is approximate.

Middle Segment

Lake Rogers Area



- 3-lane segment
- Landscaped median possible



Eastern Segment

US 15 Intersections



LOS Summary			
Intersection Name	AM	MD	PM
NC 56 and N Durham Ave	B (13.2)	B (15.3)	B (11.0)
NC 56 and N Durham Ave/Lake Rd	C (27)	C (21.2)	D (39)

Concept illustration; scale is approximate.

Eastern Segment

US 15 Intersections (Roundabout)



LOS Summary			
Intersection Name	AM	MD	PM
NC 56 and N Durham Ave	B (12.6)	A (5.6)	A (6.5)
NC 56 and N Durham Ave/Lake Rd	C (27)	C (21.2)	D (39)

Concept illustration; scale is approximate.

Eastern Segment

US 15 Intersections (With Extension)



LOS Summary			
Intersection Name	AM	MD	PM
NC 56 & W Lake Rd Extension	B (11.9)	A (9.8)	B (14.4)
NC 56 and N Durham Ave	C (26.3)	B (18.3)	B (17.3)
NC 56 and N Durham Ave/Lake Rd	C (23.1)	C (20.9)	C (23.3)

Concept illustration; scale is approximate.

Eastern Segment

US 15 Intersections (With Extension)

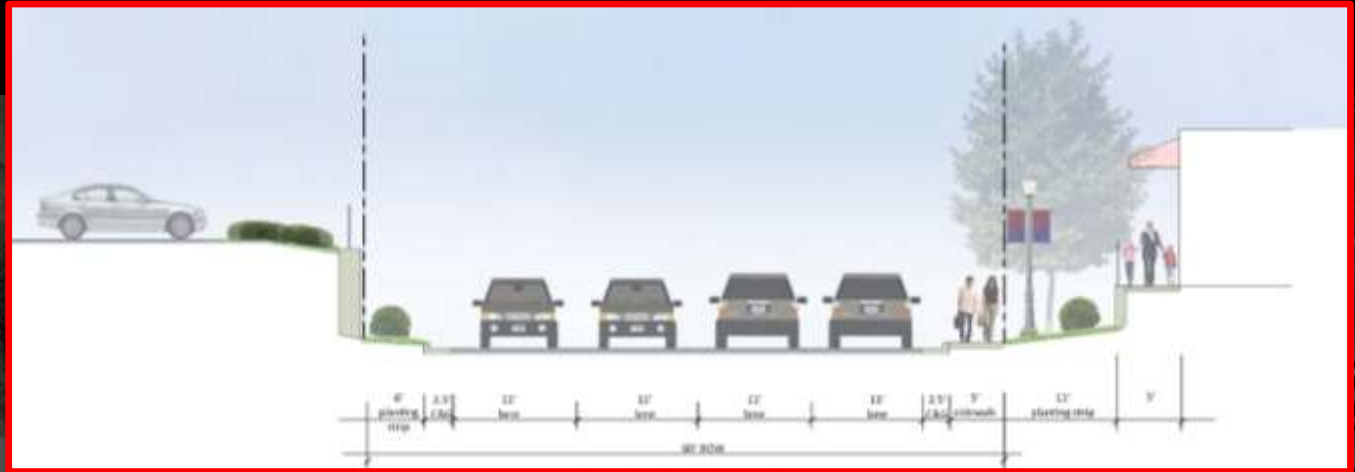


Concept illustration; scale is approximate.

LOS Summary			
Intersection Name	AM	MD	PM
NC 56 & W Lake Rd Extension	B (11.9)	A (9.8)	B (14.4)
NC 56 and N Durham Ave	C (17.3)	A (7.2)	C (18.0)
NC 56 and N Durham Ave/Lake Rd	C (23.1)	C (20.9)	C (23.3)

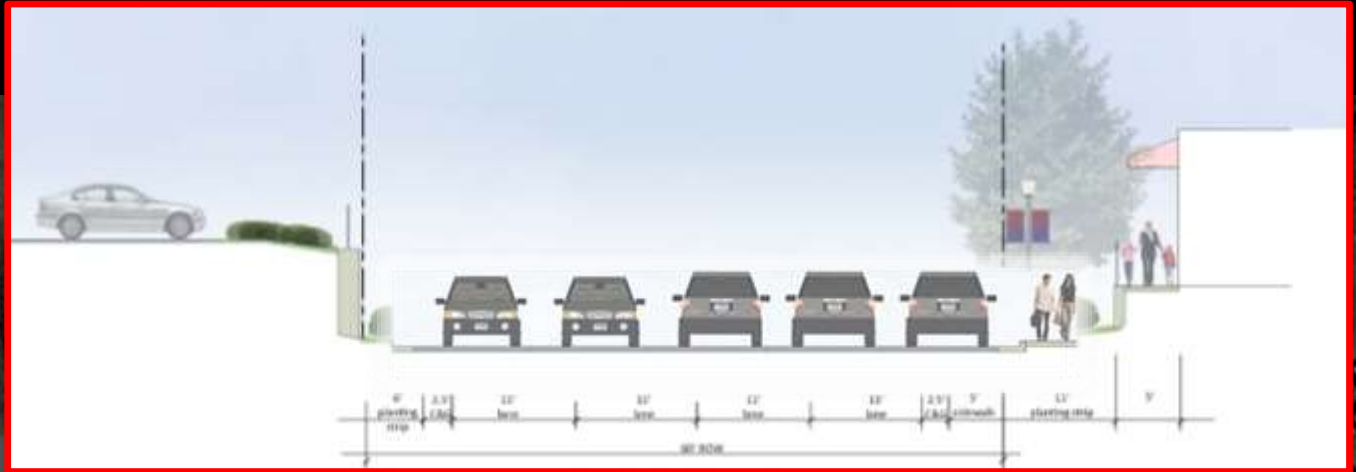
Eastern Segment

US 50 Intersection



Eastern Segment

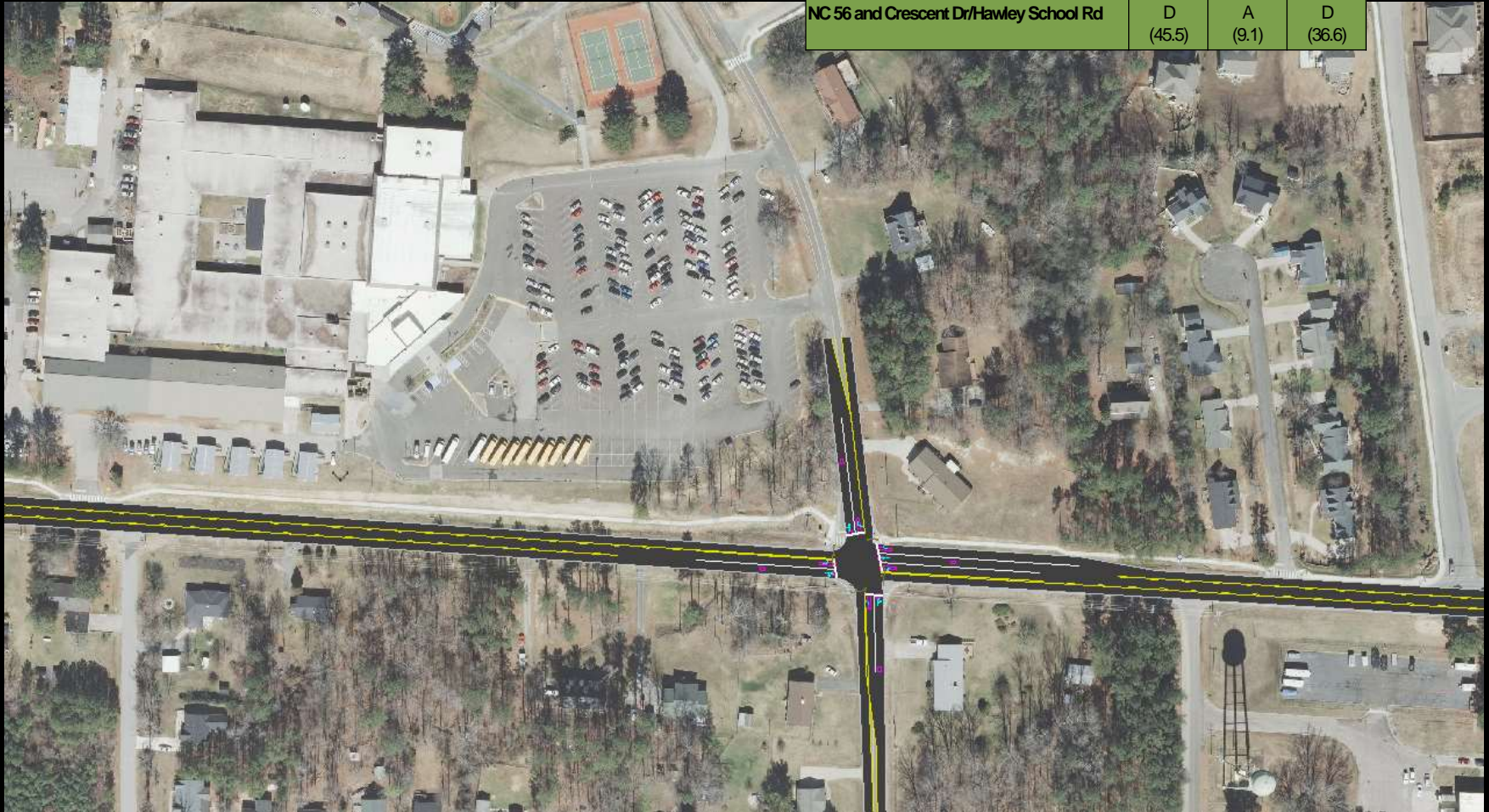
US 50 Intersection



Eastern Segment

Crescent Dr / Hawley School Rd

LOS Summary			
Intersection Name	AM	MD	PM
NC 56 and Crescent Dr/Hawley School Rd	D (45.5)	A (9.1)	D (36.6)



Concept illustrations; scale is approximate.

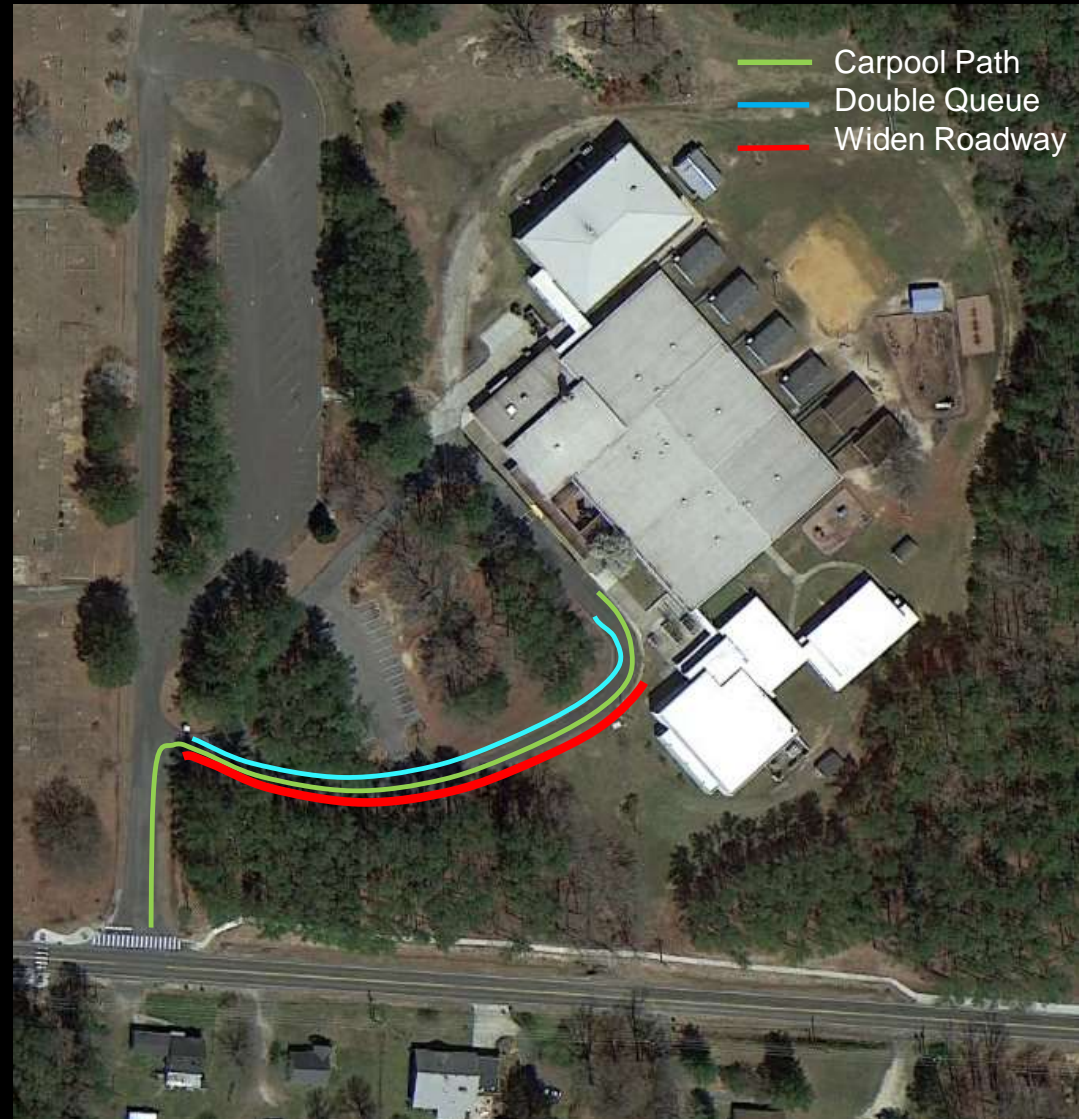
Creedmoor Elementary Queue Issues

- Existing Carpool Queue Available:
 - Approximately 665 feet
- NCDOT MSTA recommended Carpool Queue:
 - Between 925 & 1,200 feet



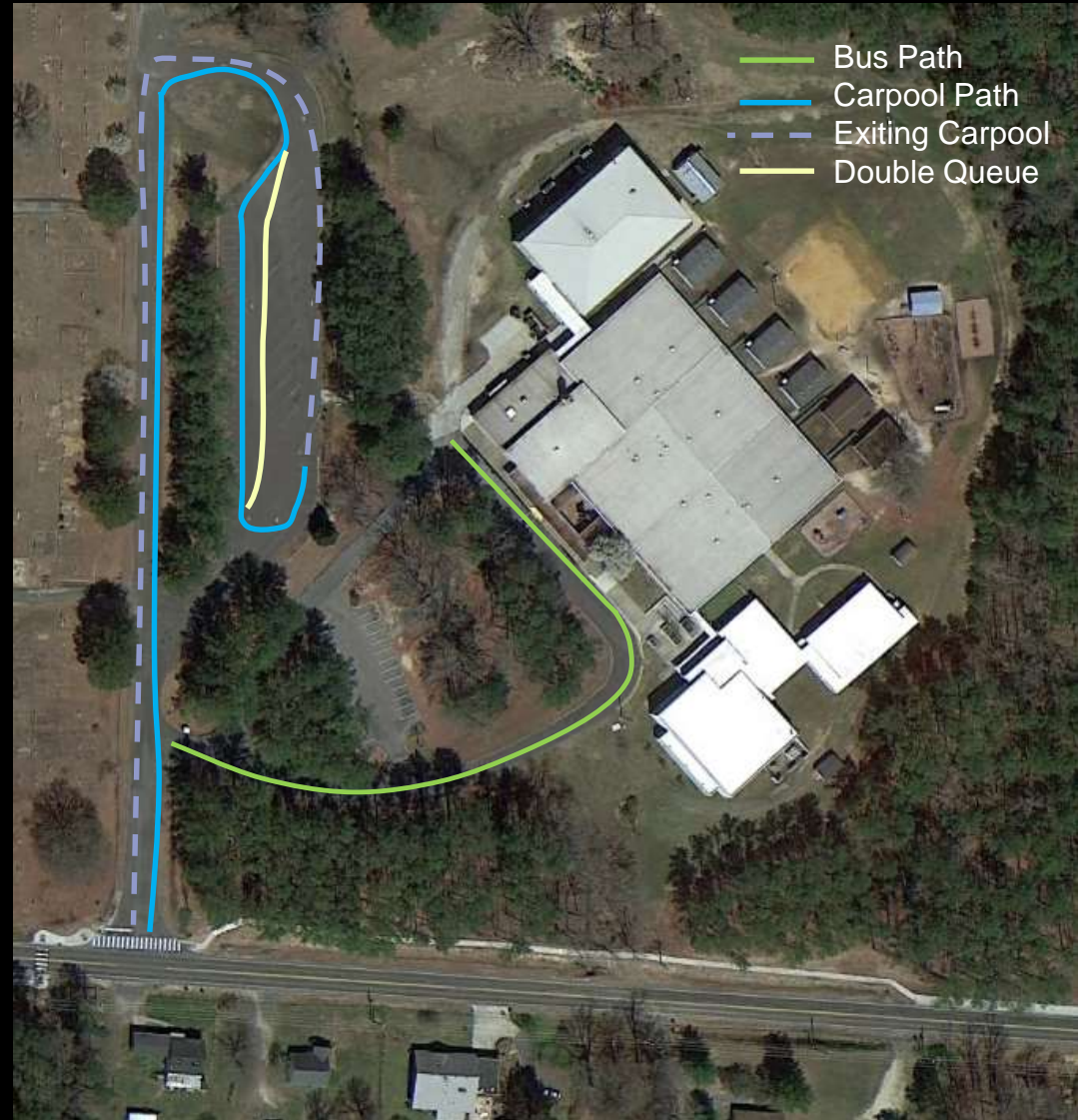
Creedmoor Elementary Potential Solution (A)

- Widen existing carpool to accommodate double stacking
- Provides 400 feet of additional queue
- Total of 1,065 feet



Creedmoor Elementary Potential Solution (B)

- Switch Bus and Carpool operations
- Provides 1,250 feet of single queue
- Provides 325 feet of additional double queue



Queue Issue Recommendation

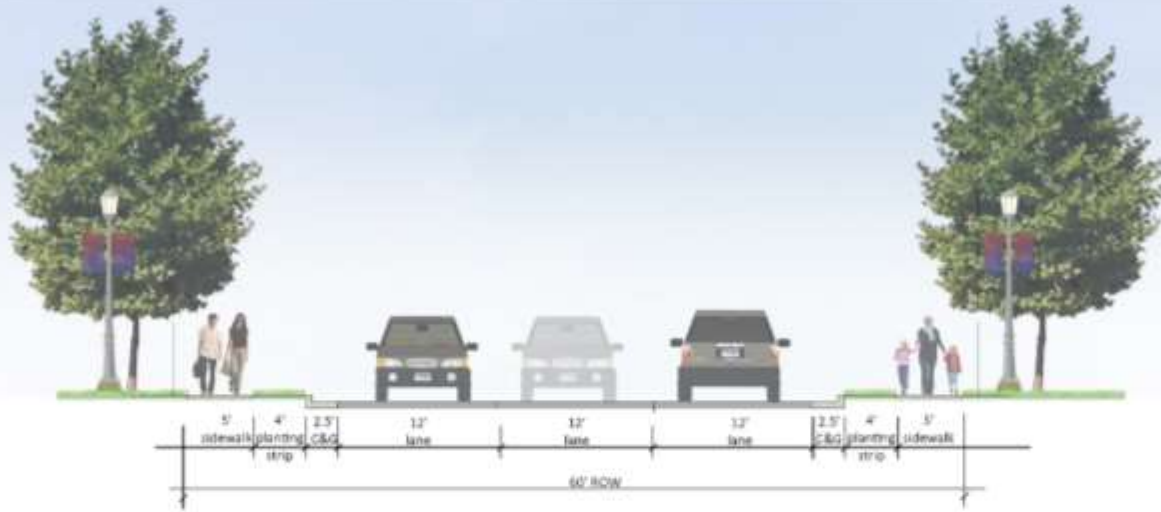
- Perform a separate School Transportation Management Plan (TMP)
 - Evaluates internal traffic operations of all modes
 - Carpool, Staff, Bus, Pedestrian, Bicycle
 - Evaluates Carpool and Bus Loading Zones
 - Provides communication between school and transportation engineers
 - Provides recommendations that are best suited for Creedmoor Elementary (either A, B, or another option)



Proposed Widenings

- 3-lane
- 4-lane, Priority 1
- 4-lane, Priority 2

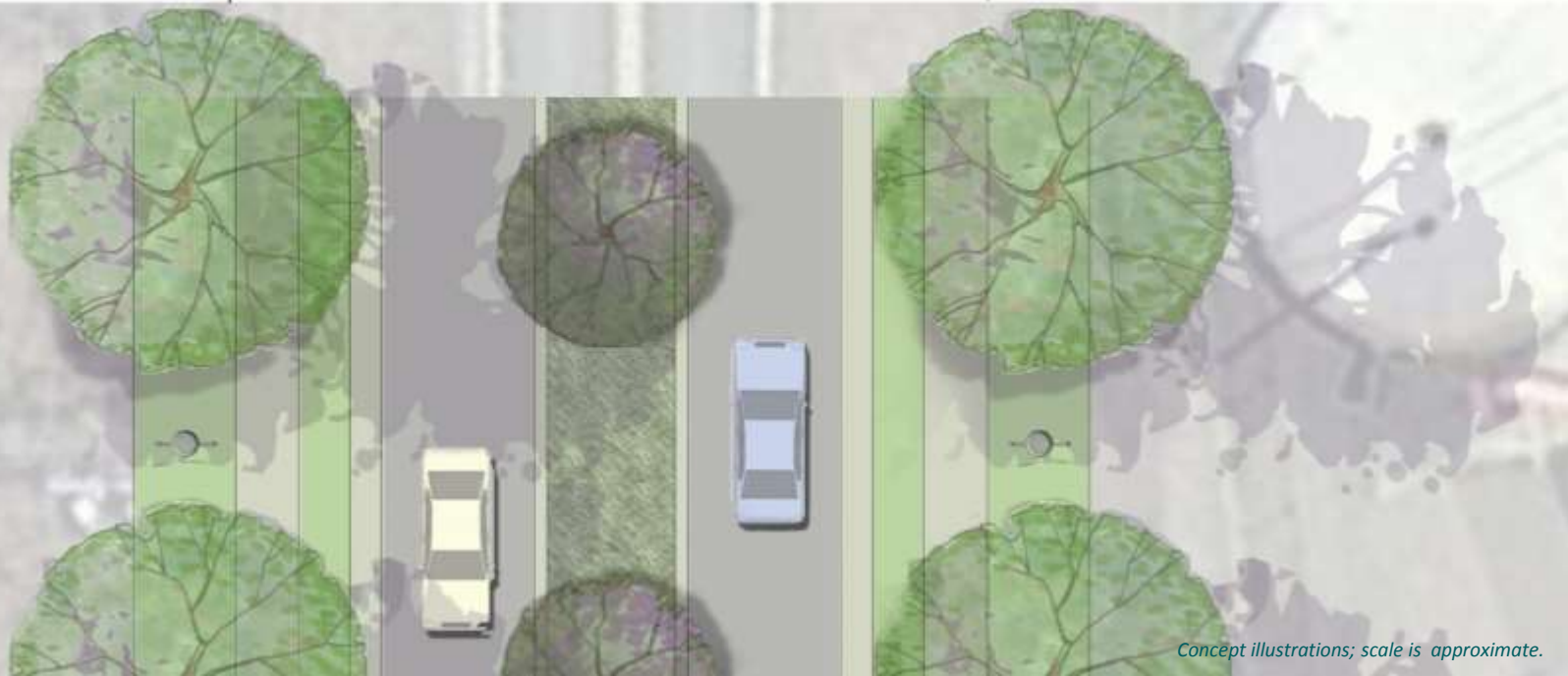
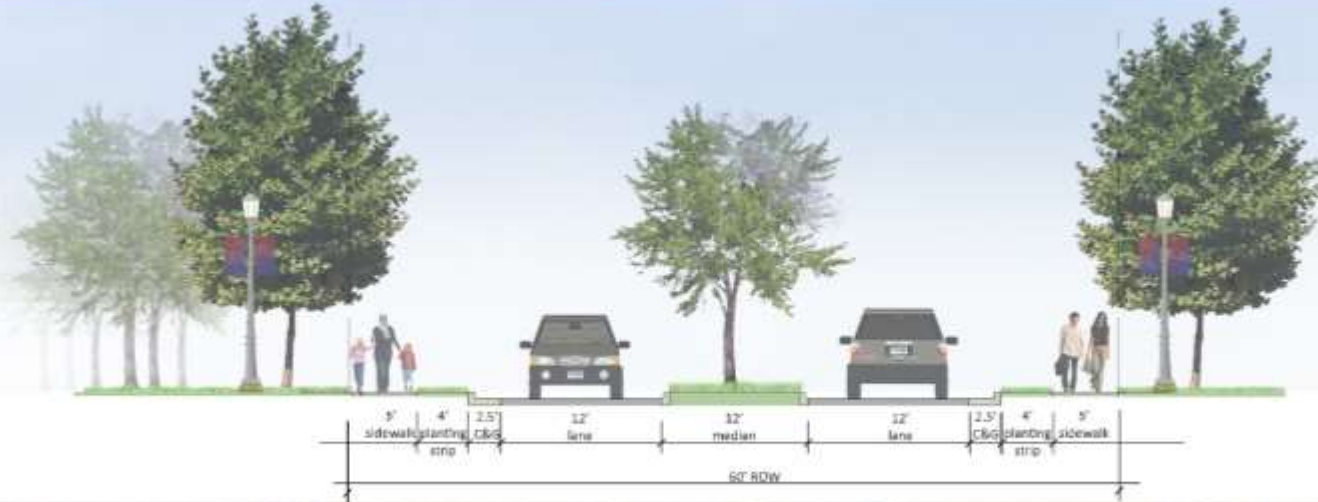
Three-Lane Without Median



Concept illustrations; scale is approximate.

Two-Lane With Median

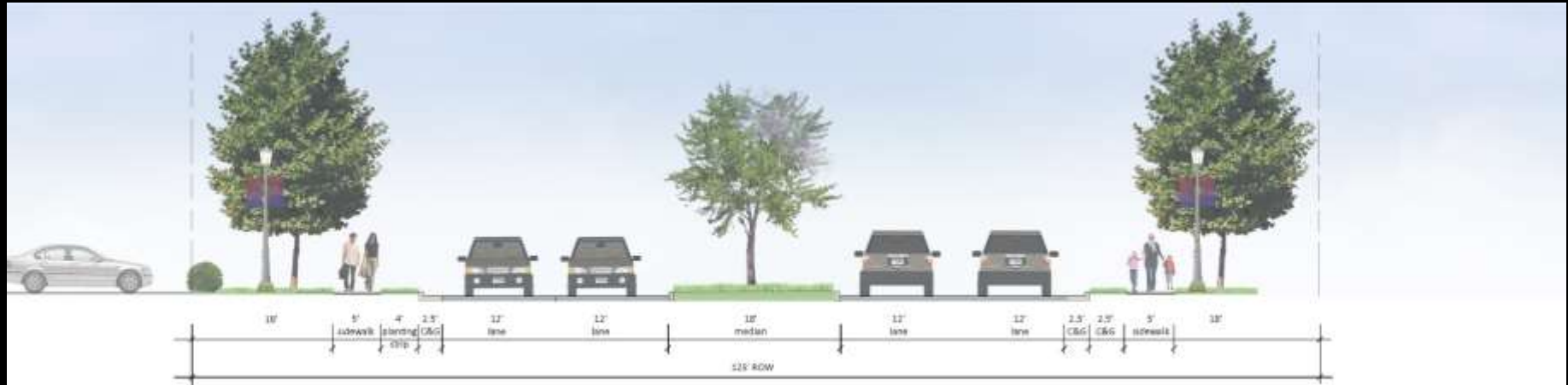
12' Median



Concept illustrations; scale is approximate.

Four-Lane With Median

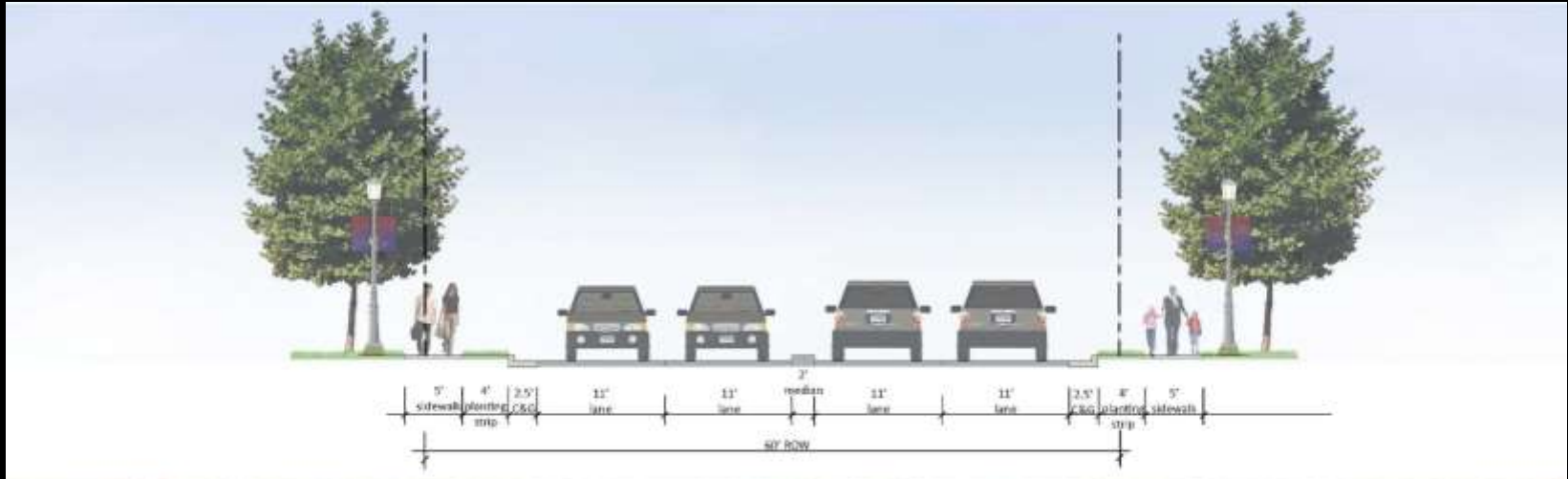
18' Median. Buried Utilities



Concept illustrations; scale is approximate.

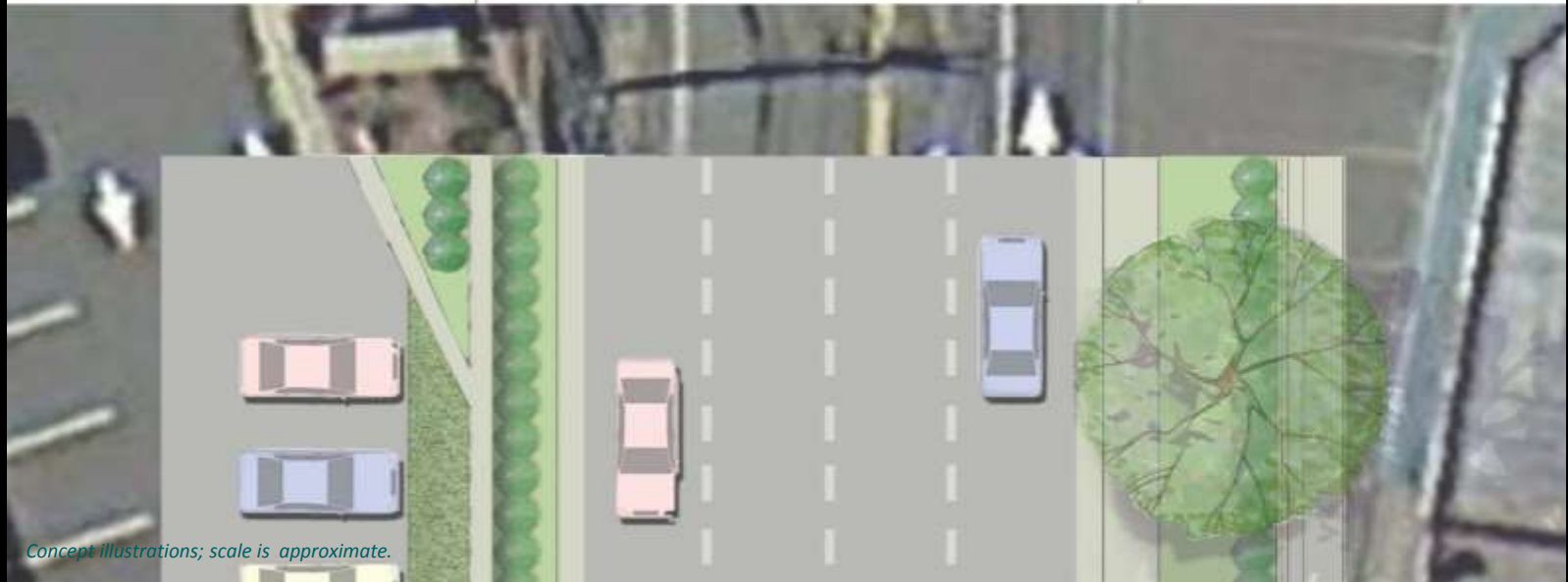
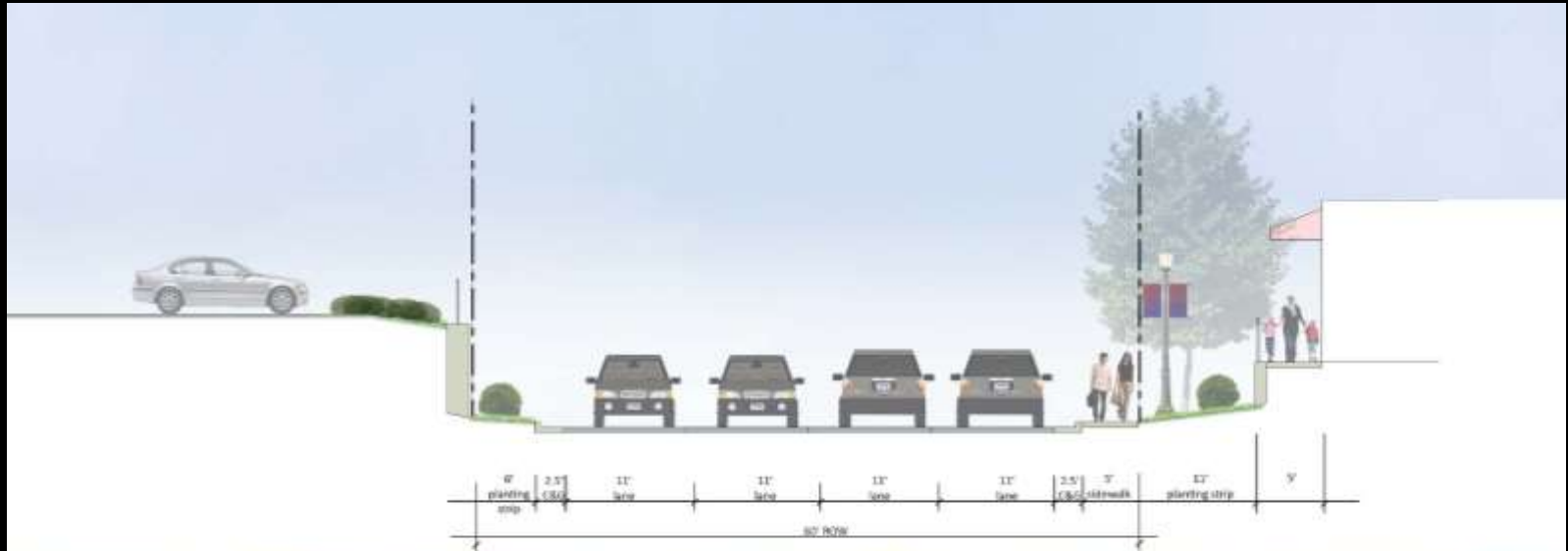
Four-Lane With Median

2' Median



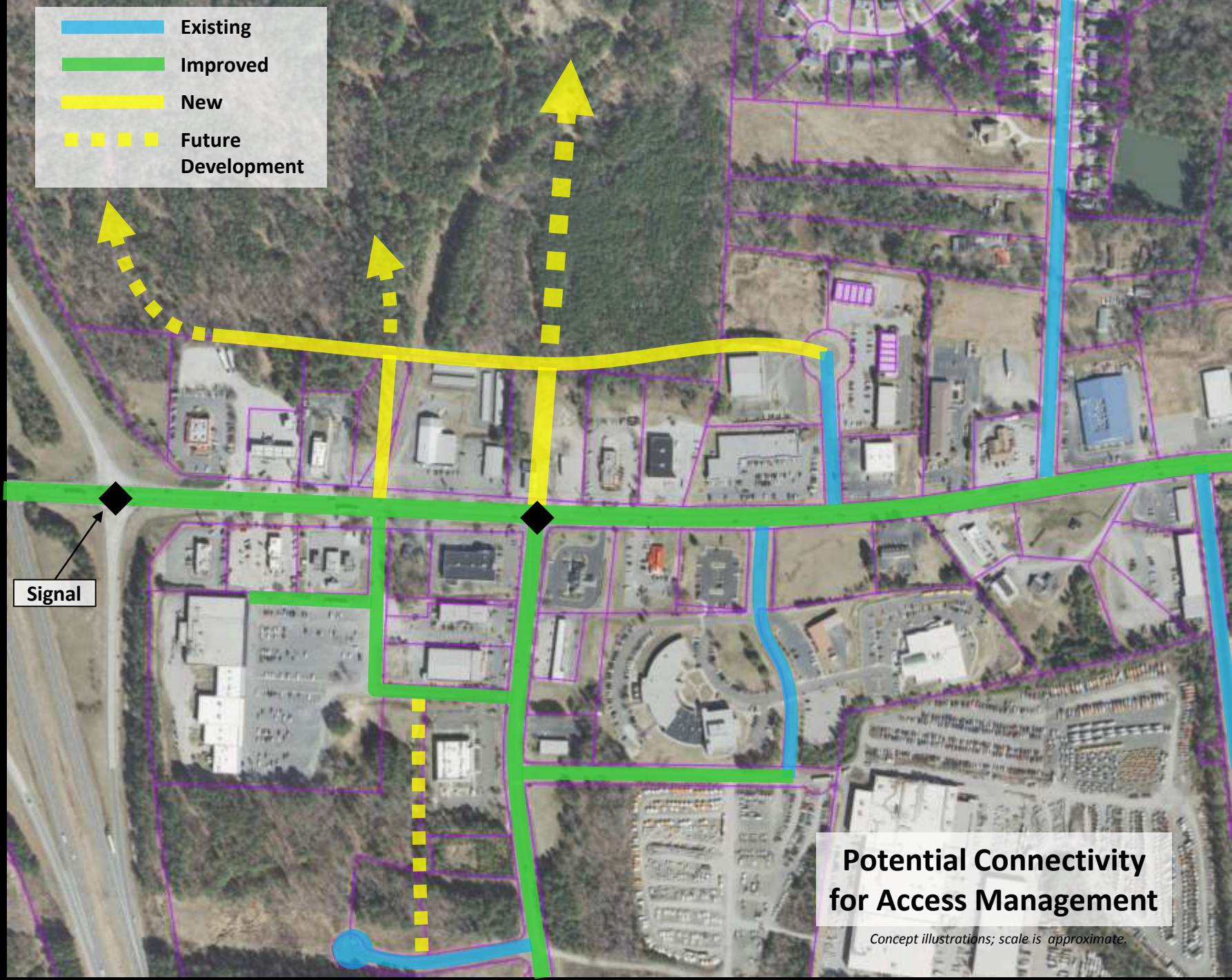
Concept illustrations; scale is approximate.

Four-Lane Without Median



Concept illustrations; scale is approximate.

Access Management



Potential Connectivity for Access Management

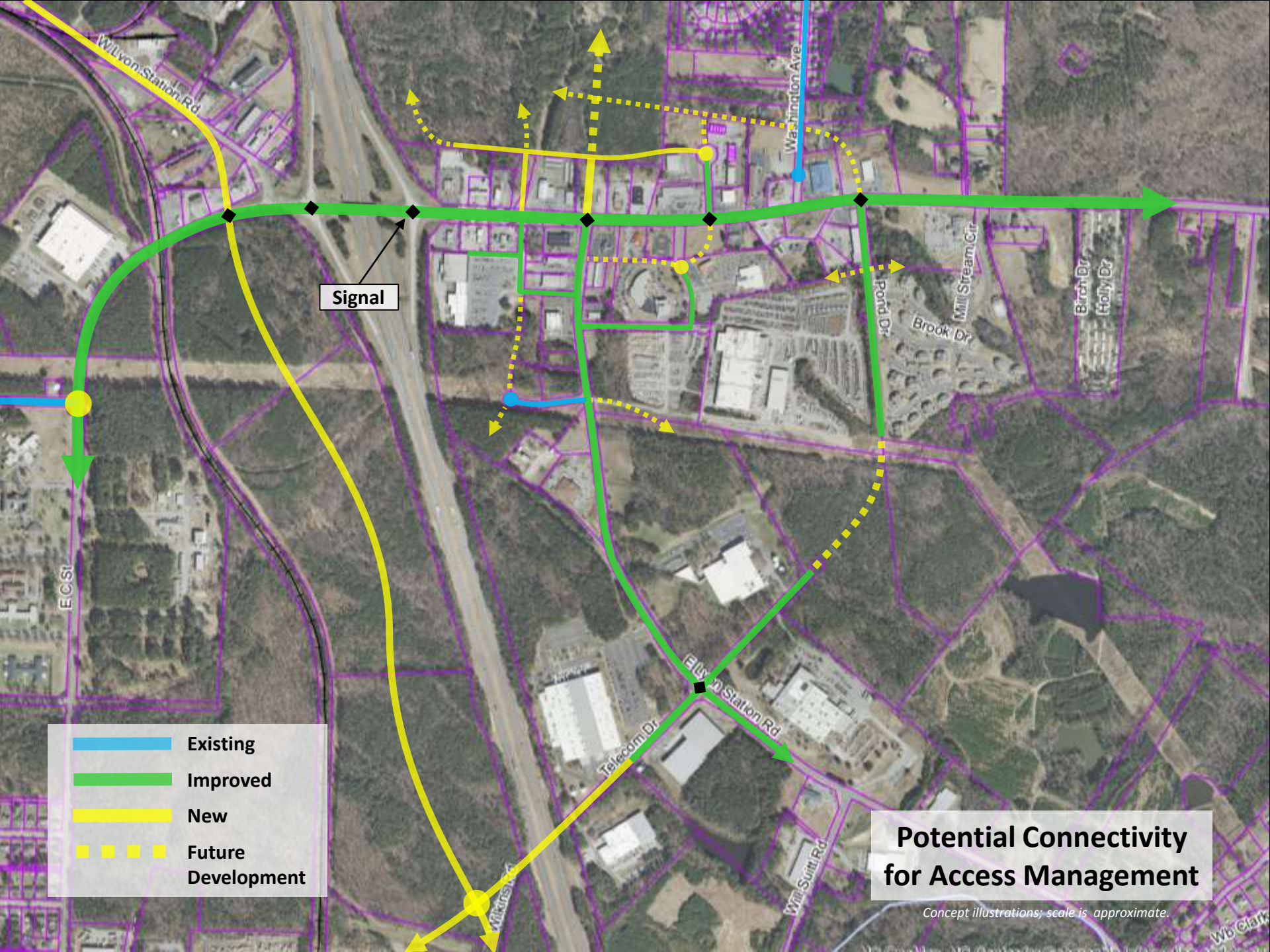
Concept illustrations; scale is approximate.

- Existing
- Improved
- New
- Future Development

Signal

Potential Connectivity for Access Management

Concept illustrations; scale is approximate.



Signal

- Existing
- Improved
- New
- Future Development

Potential Connectivity for Access Management

Concept illustrations; scale is approximate.

Wrap-Up

- Questions/Comments
- Next steps