



NC Capital Area **Metropolitan Planning Organization**

CAPITAL AREA MPO

**Technical Coordinating Committee
Meeting**

September 1, 2016

10:00 AM

1. Welcome and Introductions
2. Adjustments to the Agenda
3. Public Comments

This is an opportunity for comments by those in attendance.

Please limit comments to three minutes for each speaker.

4. Minutes

4.1 Minutes from the August 4, 2016 meeting

Requested Action:

Approve Minutes from August 4, 2016 meeting.

5.1 FY 2016-2025 Transportation Improvement Program – Amendment #4

- FY 2016-2025 Transportation Improvement Program – Amendment #4 will be released for public review and comment from September 19th through October 19th, 2016.
- Public hearing is tentatively scheduled to occur at the regular Executive Board Meeting on October 19th, 2016 at 4:00pm.

Requested Action:

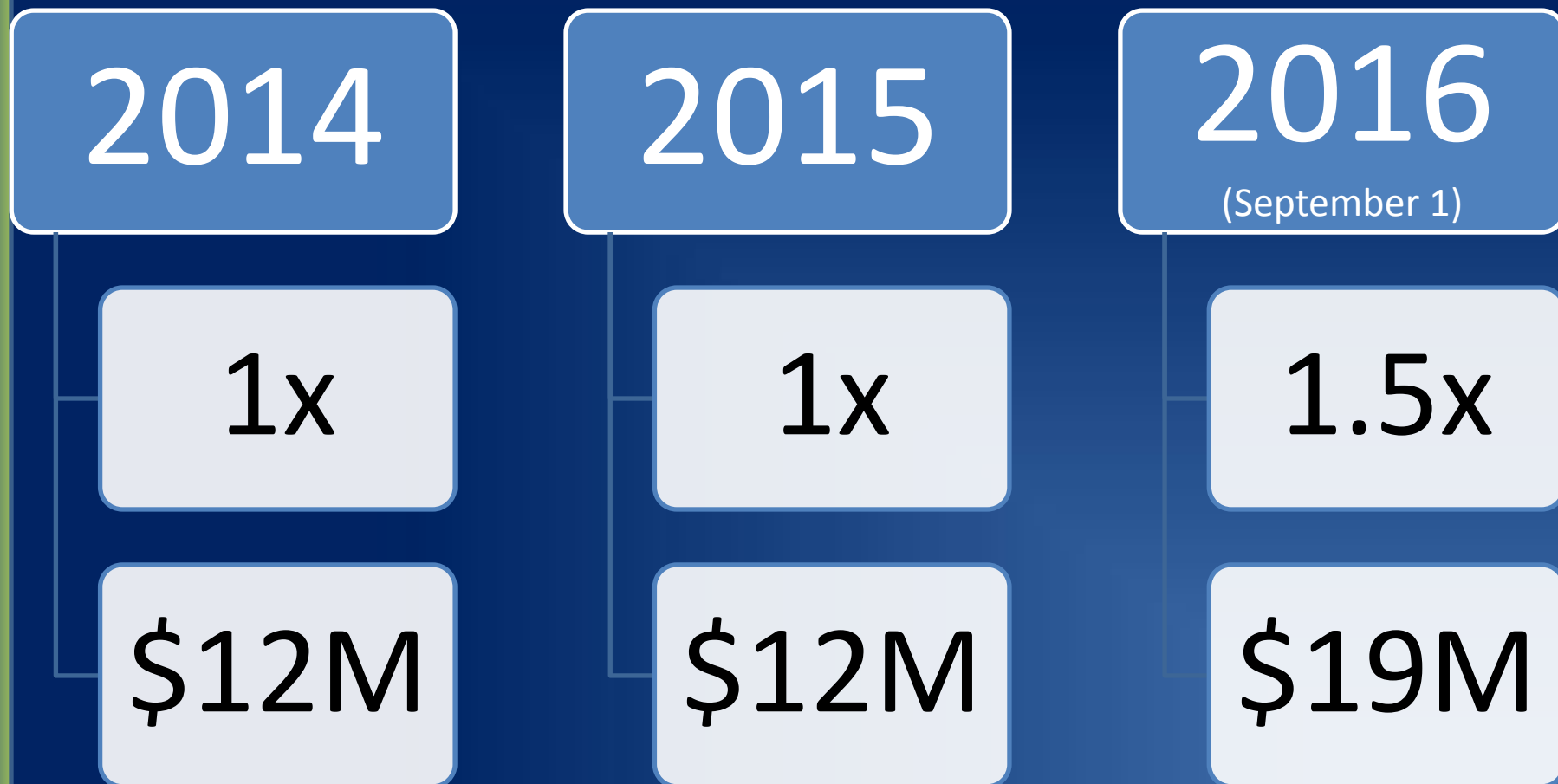
Receive as information

5.2 FFY 2016 Locally Administered Projects Program Available Funding Report

Funding Availability Chart



Unused 'Available' DA Funds Exposure Rate



Anticipated Fund Balance

	STPDA/TAP	CMAQ
Current Sept. '16 Exposure	\$19M	\$17M
Anticipated Oblig.	-\$11.5M	-\$5M
2017 Funds (Oct.)	+\$13M	+\$6M
Anticipated Dec. '16 Exposure	\$20.5M	\$18M

Agreement Status

- All but one FFY17 Agreement will be fully executed by the end of FFY16. This is the first key date identified for Shovel Ready Projects!!
- One prior year (FFY16) Agreement is currently outstanding.

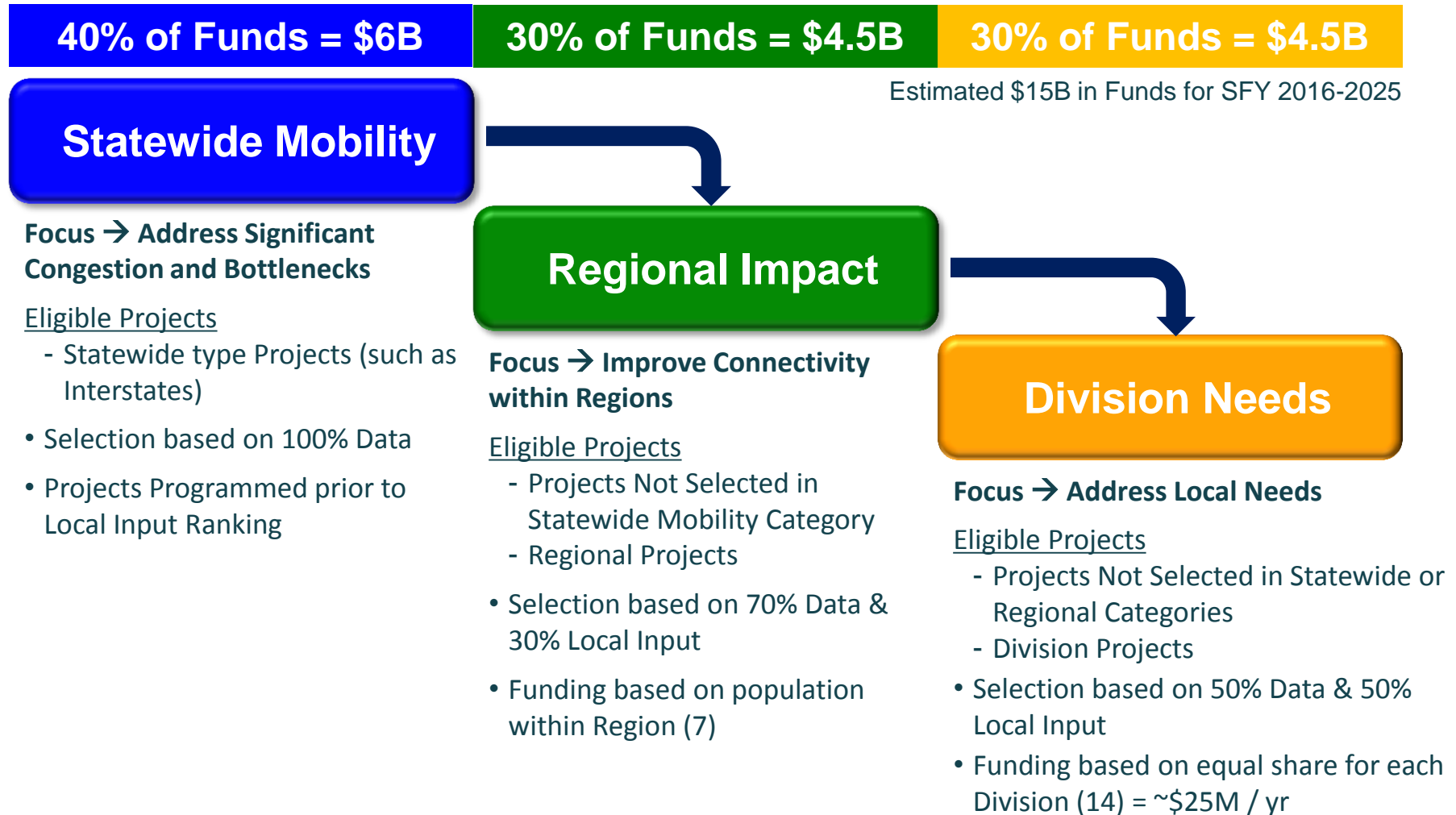
Requested Action:

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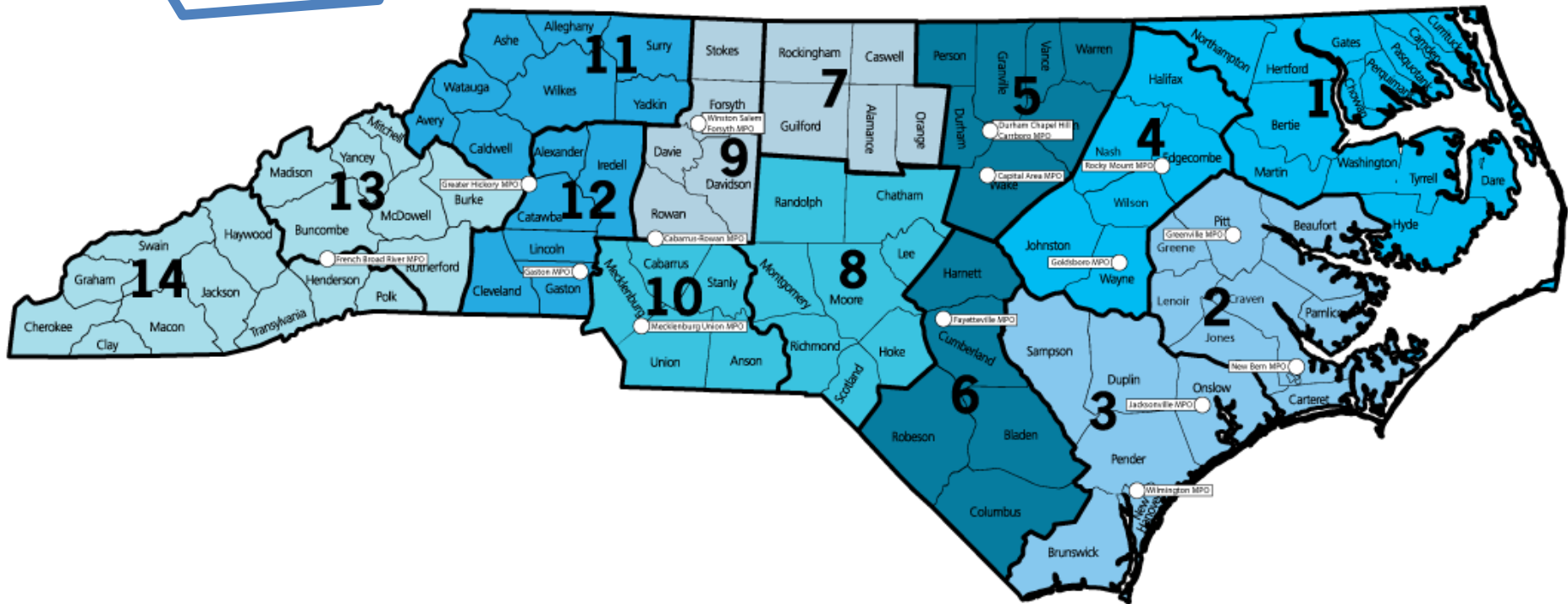
5.3 Prioritization (SPOT) 4.0

- CAMPO has drafted a recommendation for the Division Needs category point allocation based on the adopted methodology
- Public Review & Comment Period will run through October 18, 2016 with final a public hearing scheduled for the Executive Board meeting on October 19, 2016.

How the STI Works



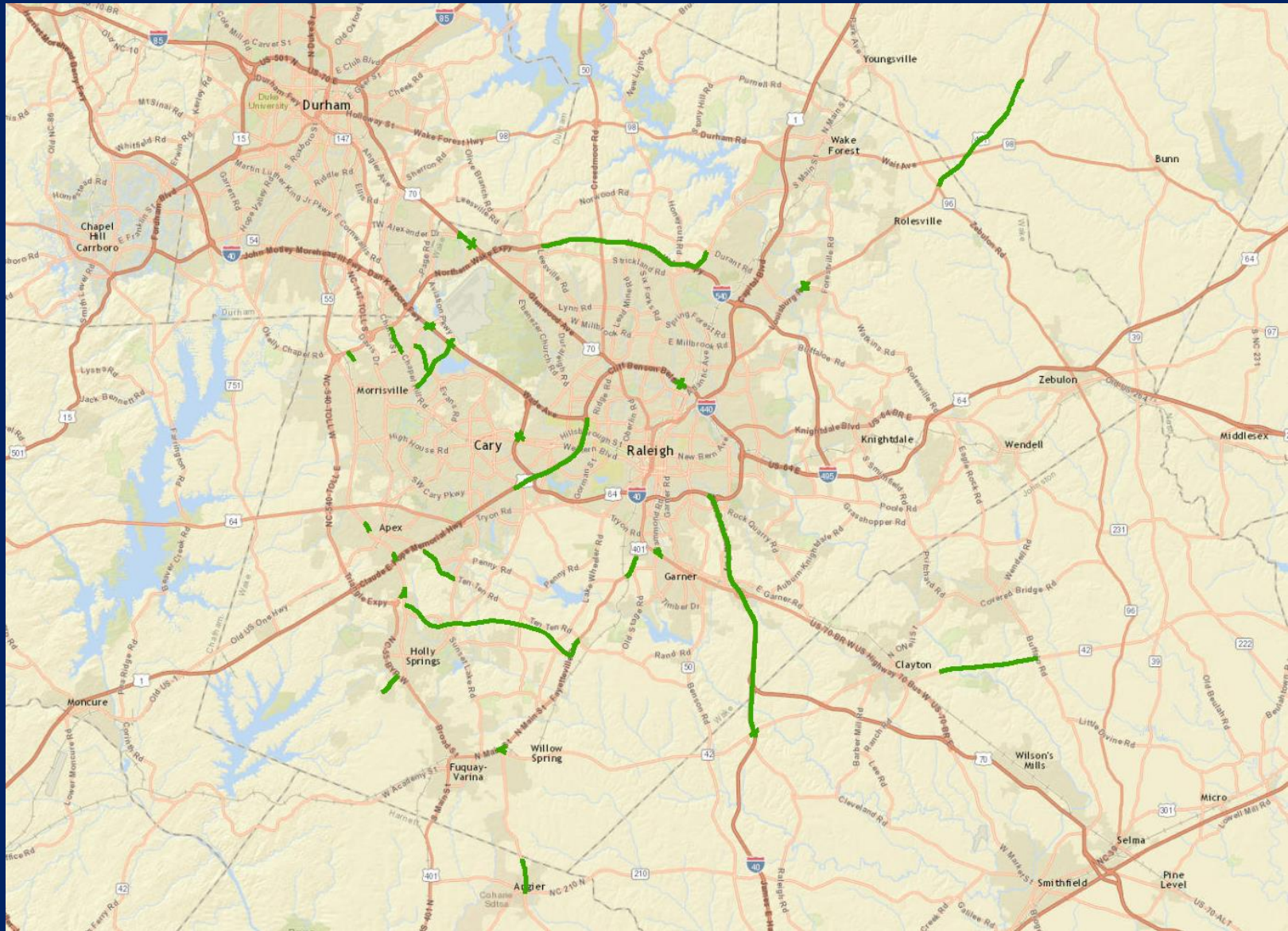
regions & divisions



Prioritization 4.0 Timeline

Date	Activity
April 13, 2016	Quantitative Scores and Draft list of Programmed Statewide Mobility Projects released
April 18, 2016 – July 29, 2016	Regional Impact Local Input Points assignment window open (Division Needs Local Input Points optional)
August 2016	NCDOT calculates Regional Impact total scores and programs Regional Impact projects
September – October 2016	Division Needs Local Input Point window opens for 2 months
November 2016	NCDOT calculates Division Needs total scores and programs Division Needs projects
December 2016	NCDOT prepares 2018-2027 Draft STIP
January 2017	2018-2027 Draft STIP released

Prioritization (SPOT) 3.0 Committed Projects



5.3 Prioritization (SPOT) 4.0

DRAFT Statewide Mobility

YRS 1-5

2018 -2022

\$642,800,000

- I-40 (I-440/US1/64 to Lake Wheeler)
- I-540 (Glenwood to Leesville Rd) eastbound auxiliary lane
- NC 540 (US 401 to I-40) **TOLL**
- US 1 (I-540 to Durant Rd)
- US 64 (Laura Duncan Rd to US 1)
- TW Alexander Interchange (US 70)
- US 70 Freeway Upgrade (TW Alexander to I-540)

YRS 6-10

2023 – 2027

\$561,287,000

- I-40 / I-440/US 1/64 Reconstruct Interchange
- I-40 (Aviation to Harrison Ave) auxiliary lanes
- I-440/Crabtree Valley Ave. Improvements
- I-440, US 1 / Capital Blvd – Interchange Improvements
- US 70 (I-540 to Hilburn Dr) 6 lane SuperStreet
- Wade Ave (I-40 to I-440) 6 lane widening
- NC 540 (I-40 to US 64/264) **TOLL**

5.3 Prioritization (SPOT) 4.0

DRAFT Statewide Mobility



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YRS 1-5

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YRS 6-10

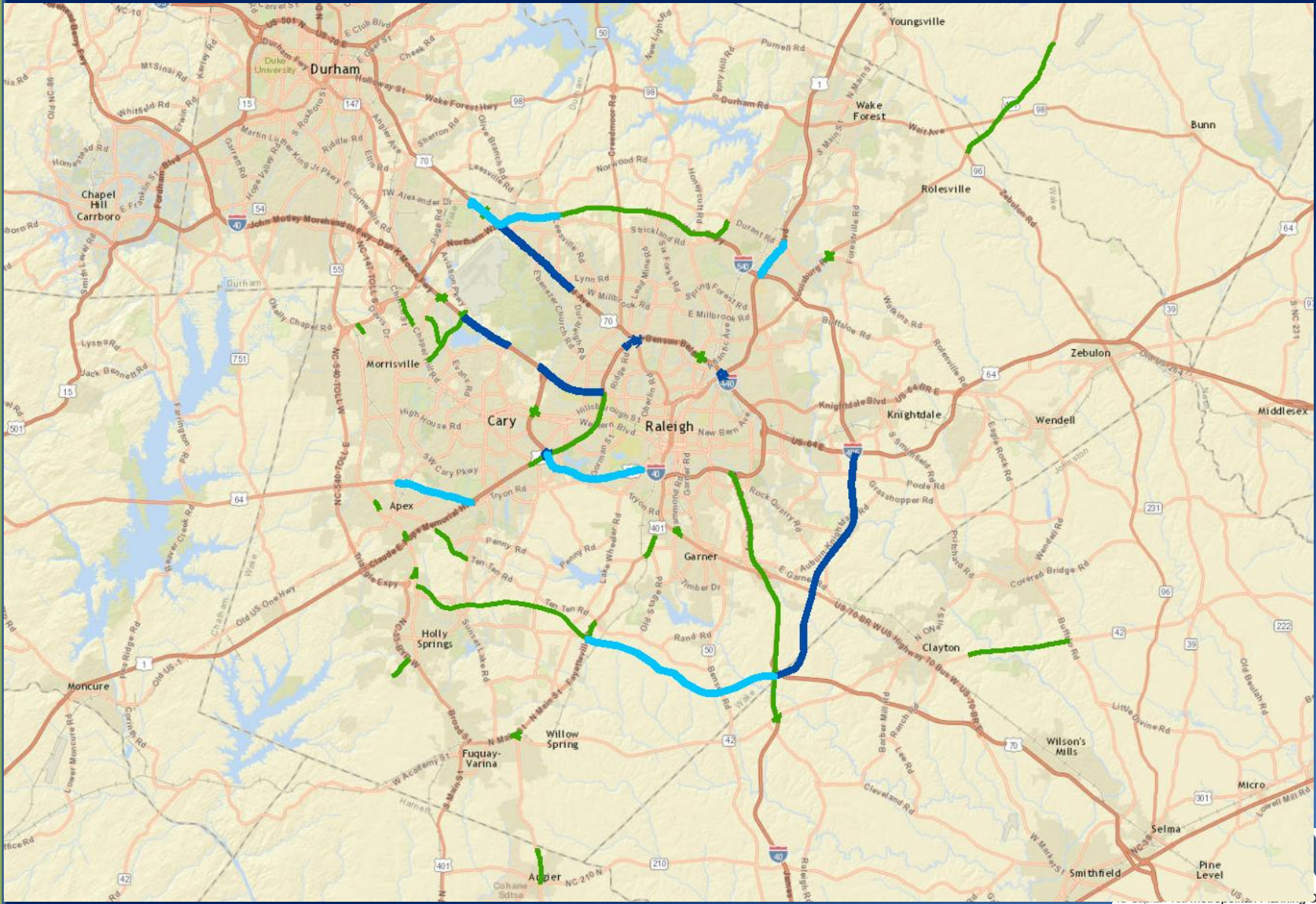
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- NC 540 (I-40 to US 64/264) **TOLL**

5.3 Prioritization (SPOT) 4.0

DRAFT Statewide Mobility



5.3 Prioritization (SPOT) 4.0

DRAFT Regional Impact

YRS 1-5

2018 -2022

\$289,295,000

- Morrisville Citywide Signal system
- NC 42 (NC 50 to US 70 Bypass)
- NC 42 (US 70 Bypass to US 70 Bus)
- NC 54 / McCrimmon Parkway Grade Separation
- US 1 (Durant Road to Burlington Mills Road)
- NC 50 (I-540 to NC 98)

YRS 6-10

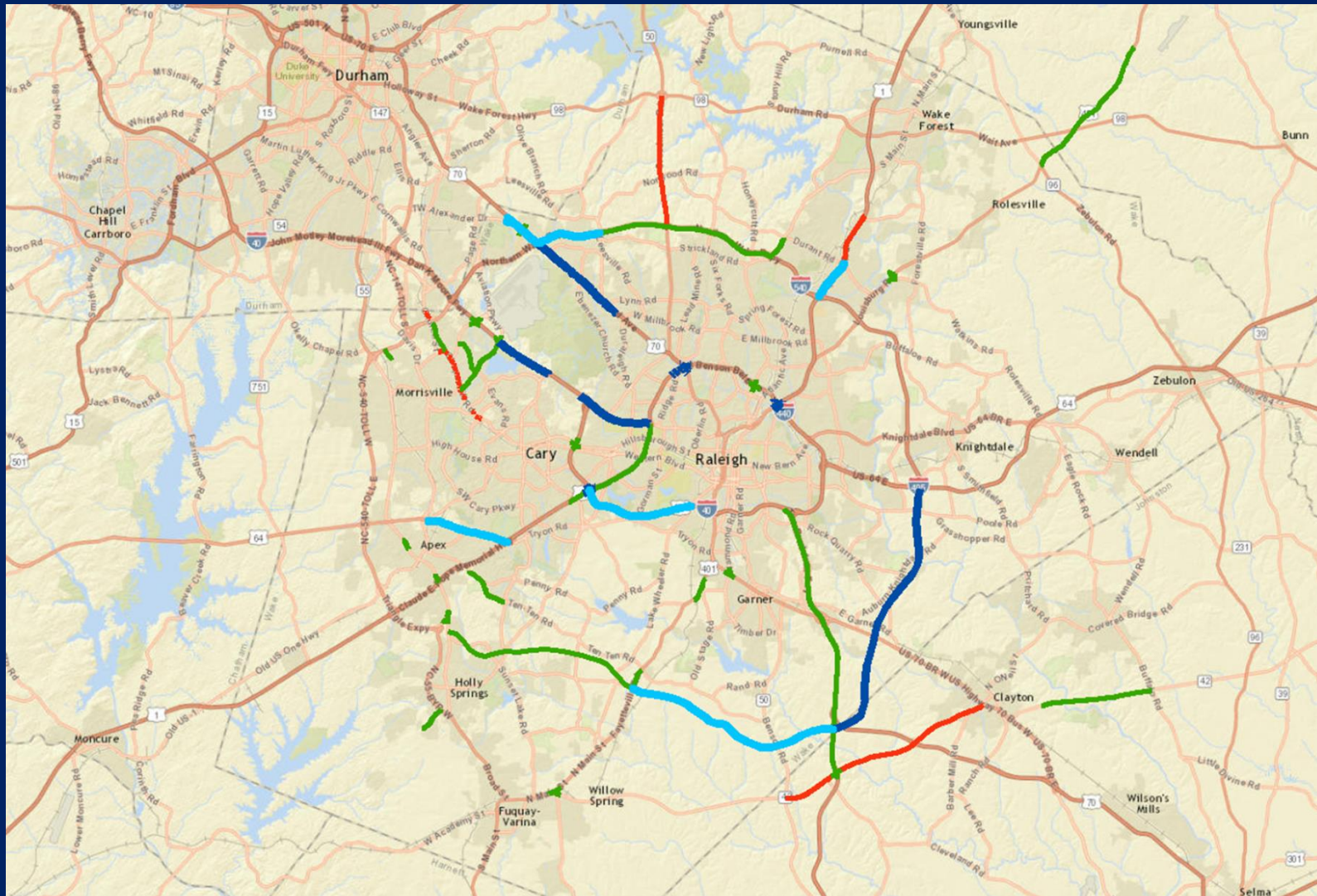
2023 – 2027

\$274,882,000

- US 401 median (Judd Parkway to NC 55/NC 42)
- Clayton Citywide Signal System
- US 1 / NC 55 DDI Interchange
- NC 147 Triangle Parkway Extension
- US 1 (Burlington Mills Road to NC 98)
- US 1 (NC 98 to Harris Road)

5.3 Prioritization (SPOT) 4.0

DRAFT Regional Impact



5.3 Prioritization (SPOT) 4.0

DRAFT Regional Impact

YRS 1-5

2018 -2022

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5.3 Prioritization (SPOT) 4.0

DRAFT Regional Impact



CAMPO Adopted Methodology

- **Maximizing Funding Potential**

- “Wasted Effort”

- Some of our projects score so well quantitatively, they do not need any additional local points



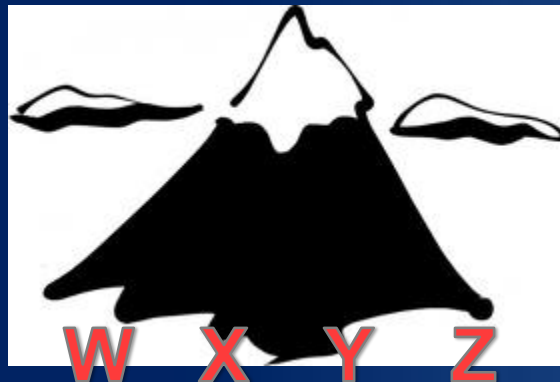
While very important to the region, putting our limited, local points here would not significantly improve their chances for funding

CAMPO Adopted Methodology

- **Maximizing Funding Potential**

- “Wasted Effort” (Part 2)

- Some of our projects score poorly, and even the maximum number of local points would not make them competitive



While important to the region, these projects are not competitive in this process

CAMPO Adopted Methodology

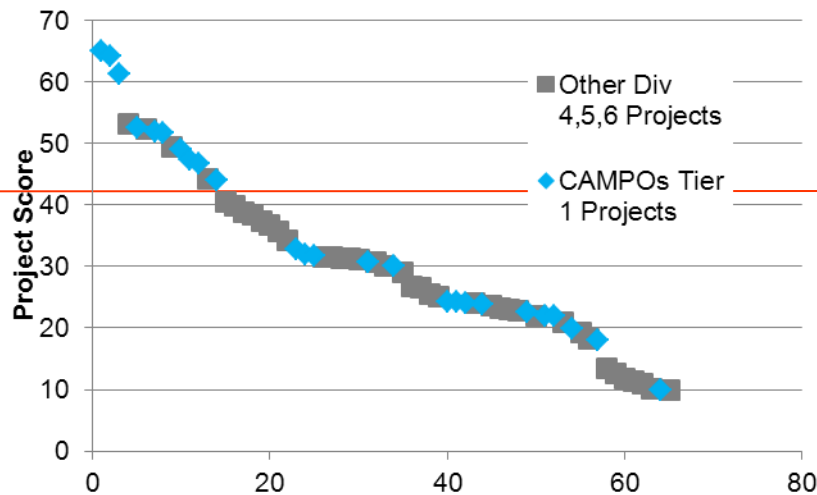
- **Maximizing Funding Potential**
 - The goal, then, is to assign points to bring projects from the middle of the pack to the top



CAMPO Adopted Methodology

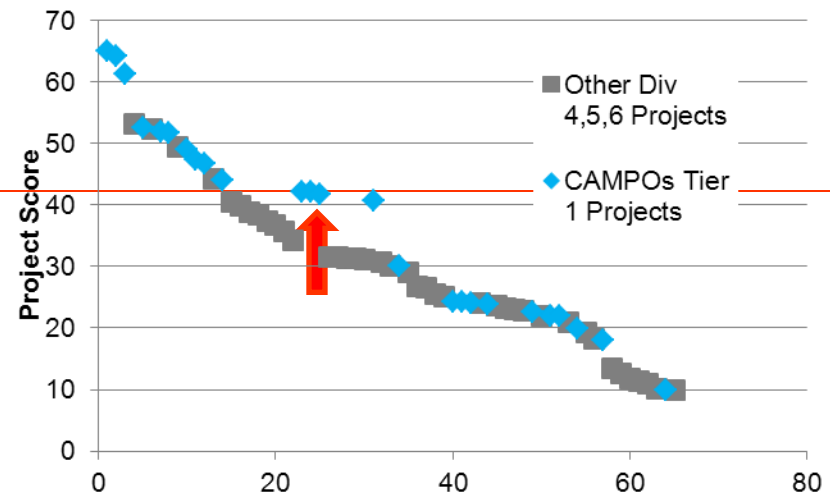
- **Maximizing Funding Potential**
 - Example: Regional Projects

Before



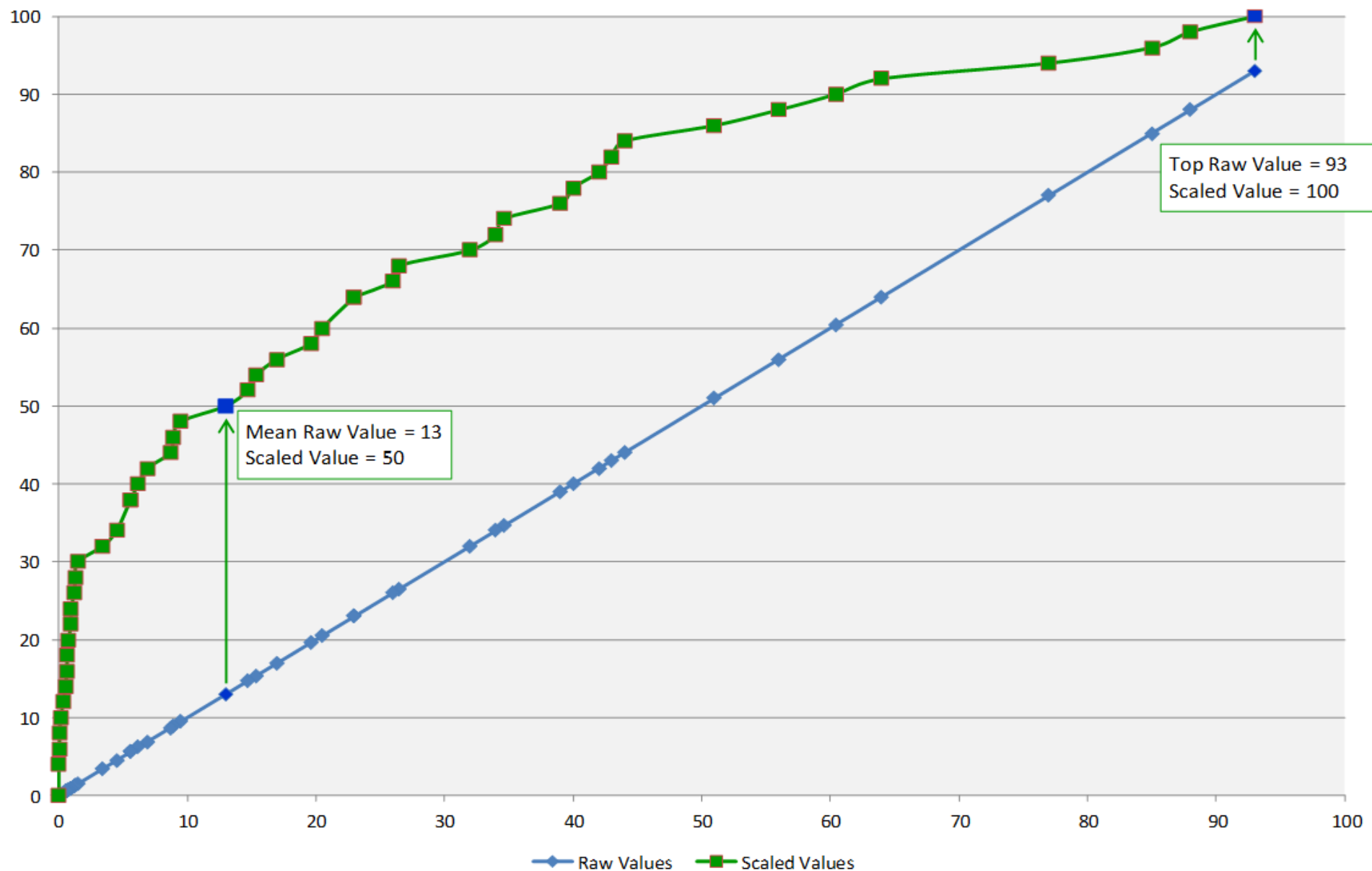
No local points applied to projects above the red line (already competitive)

After

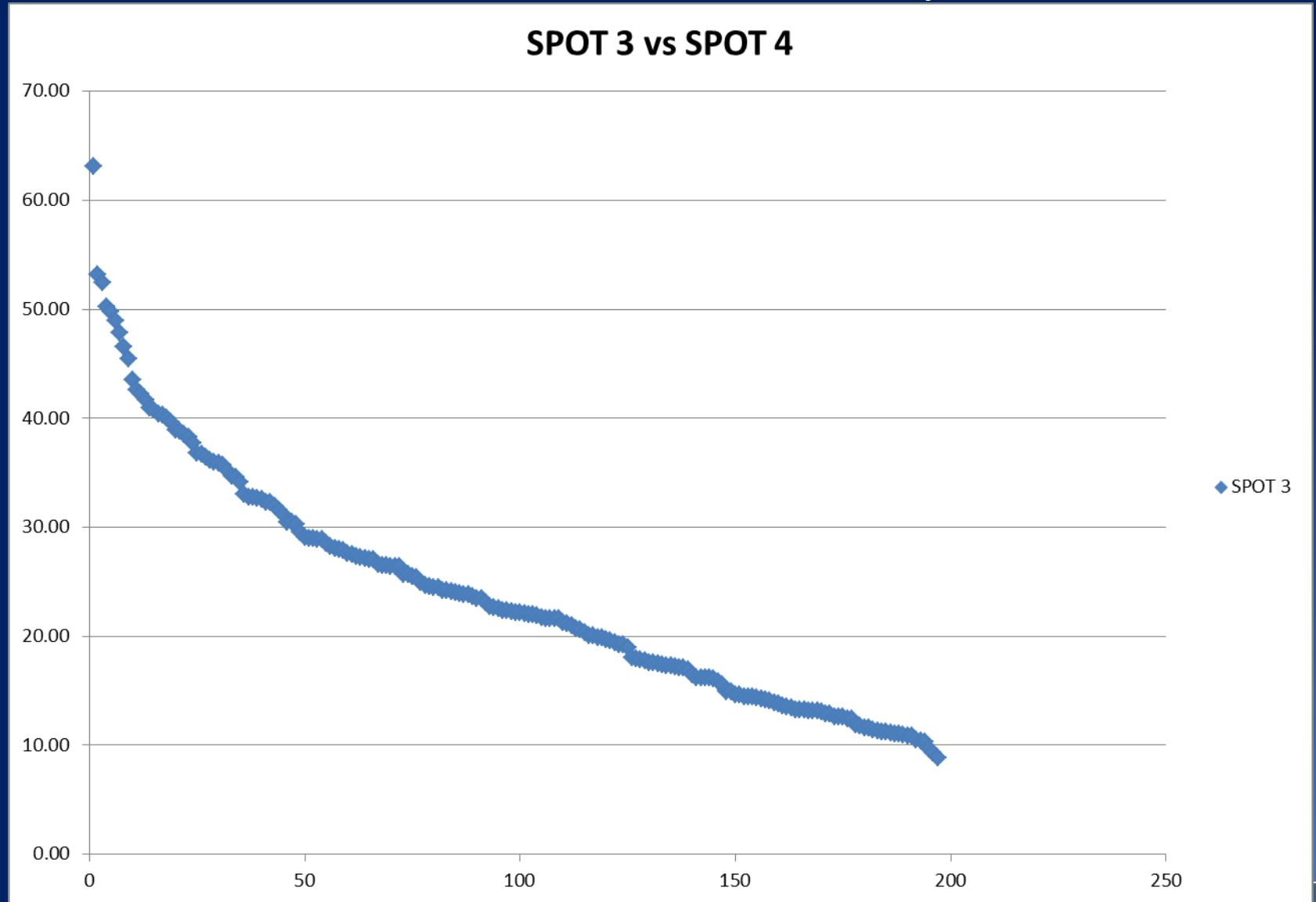


This strategy increases the number of projects with a chance at funding

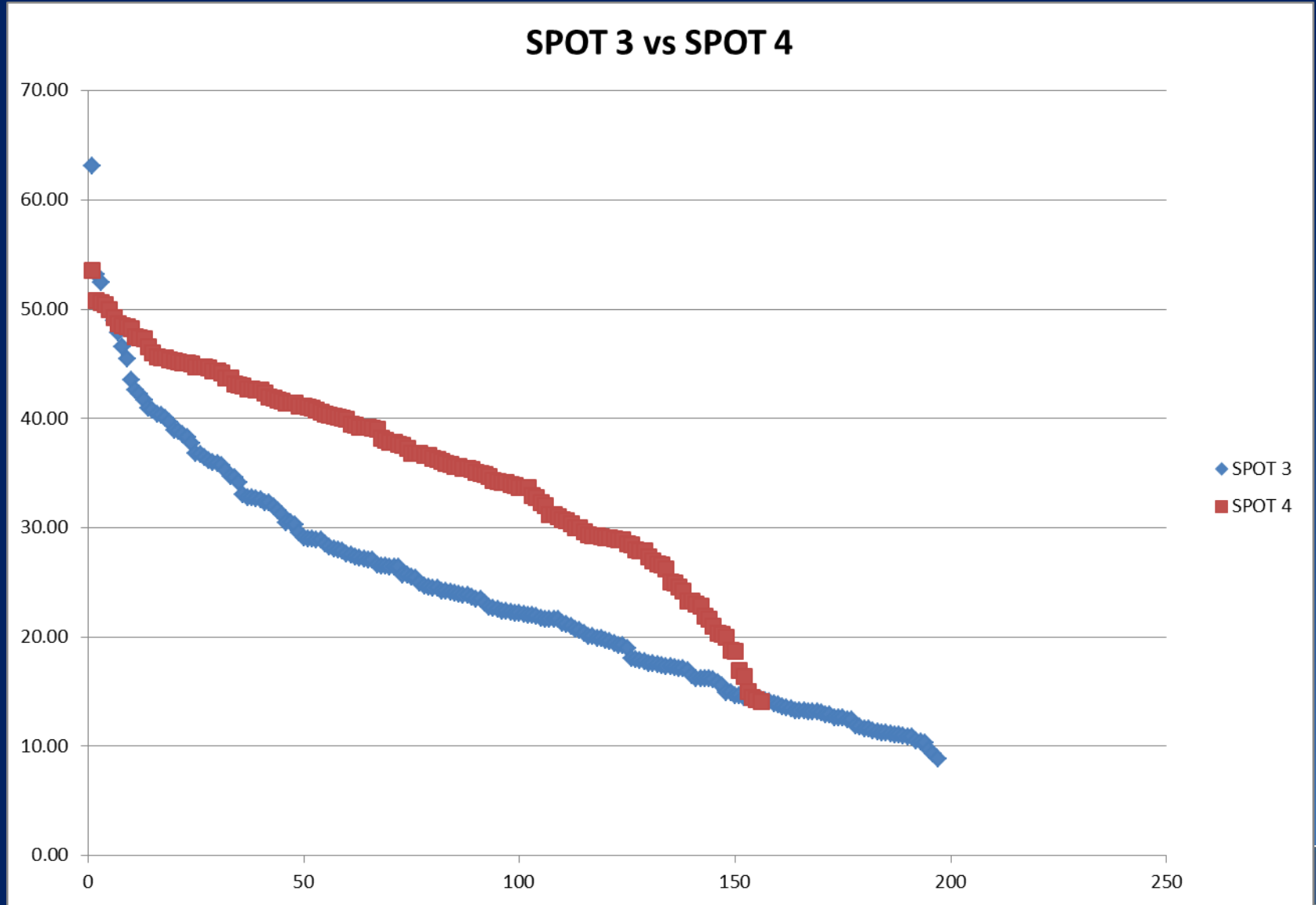
Scaling Example 1: Raw vs. Scaled Values



Region C Technical Score Comparison

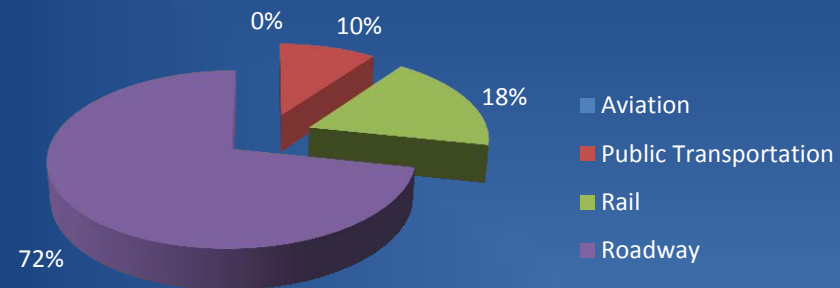
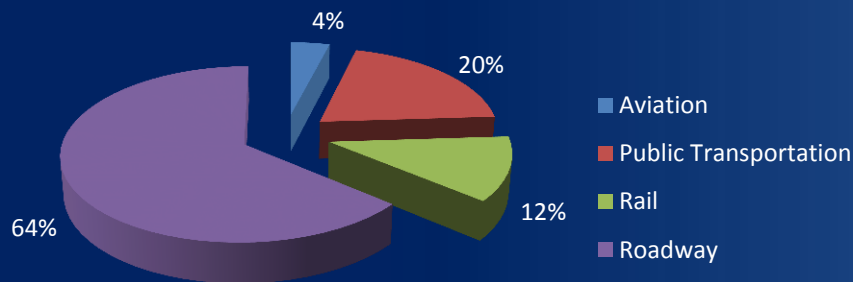


Region C Technical Score Comparison



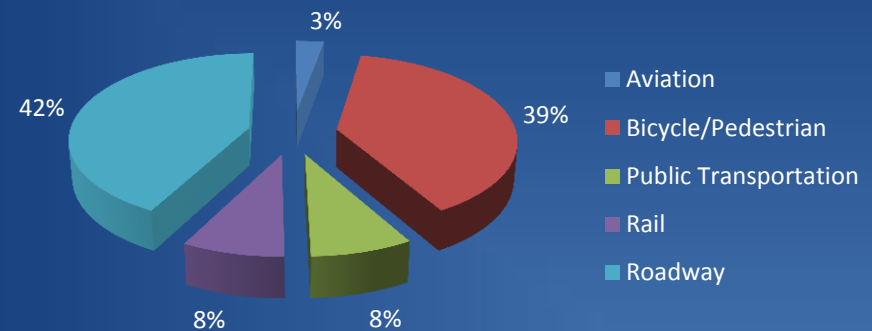
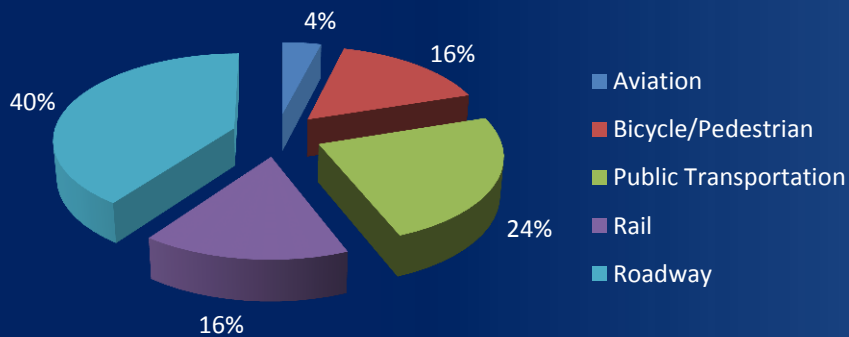
Regional Impact Modal Targets

	Target	Recommendation
Aviation	100	0
Bike/Ped	N/A	N/A
Public Transportation	500	250
Rail	300	458
Roadway	1600	1792
Total	2500	2500



Division Needs Modal Targets

	Target	Recommendation
Aviation	100	72
Bike/Ped	400	970
Public Transportation	600	200
Rail	400	200
Roadway	1000	1058
Total	2500	2500



5.3 P4.0 Regional Impact Point Assignment

- Division Needs Point Assignment (2500 points)

Division 4 Projected

10 yrs Funding: \$391,582,000

Available: \$190,524,000

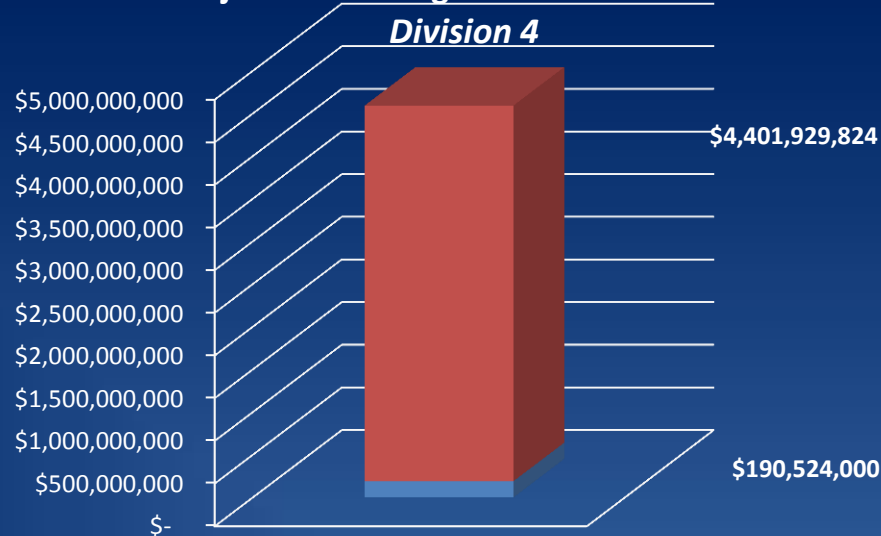
Division 4 Projects: 130

CAMPO Projects: 8

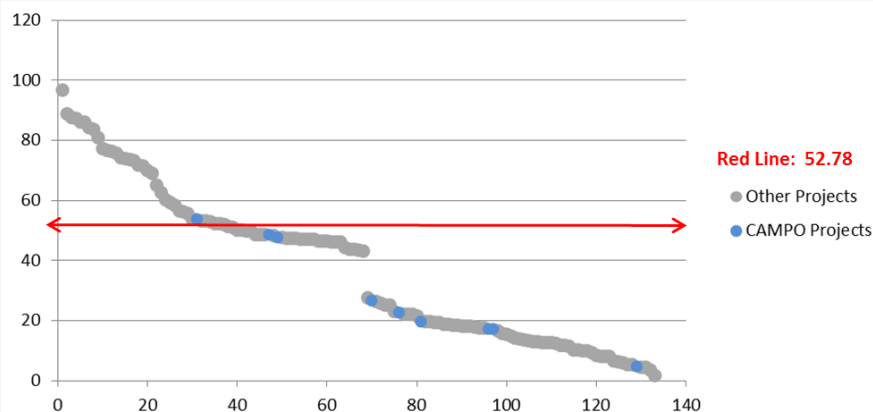
Potentially Competitive

CAMPO Projects 3

Projected Funding vs. Submitted Need



■ Division 4 Projected Available Funding ■ Division 4 Total Project Needs:



5.3 P4.0 Regional Impact Point Assignment

- Division Needs Point Assignment (2500 points)

Division 5 Projected
10 yrs Funding: \$391,582,000

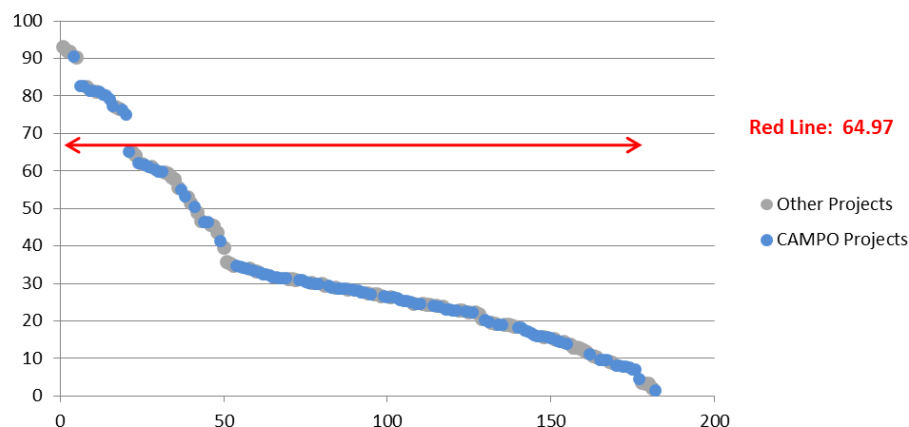
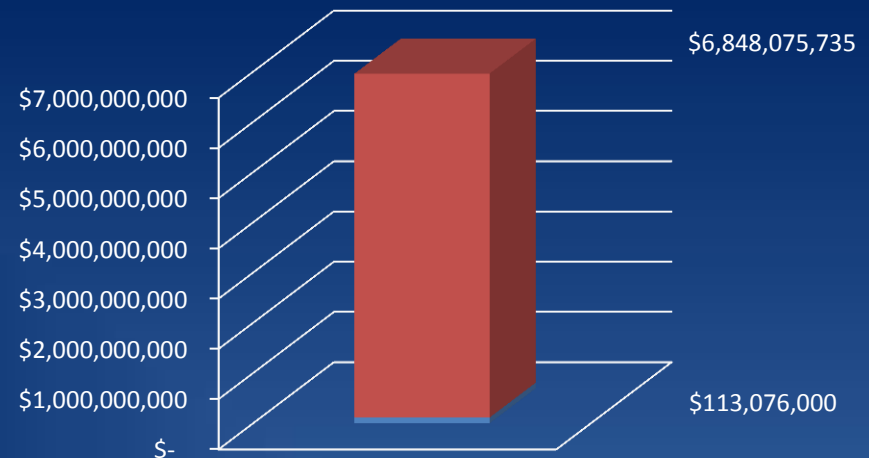
Available: \$113,076,000

Division 5 Projects: 182

CAMPO Projects: 104

Potentially Competitive
CAMPO Projects 13

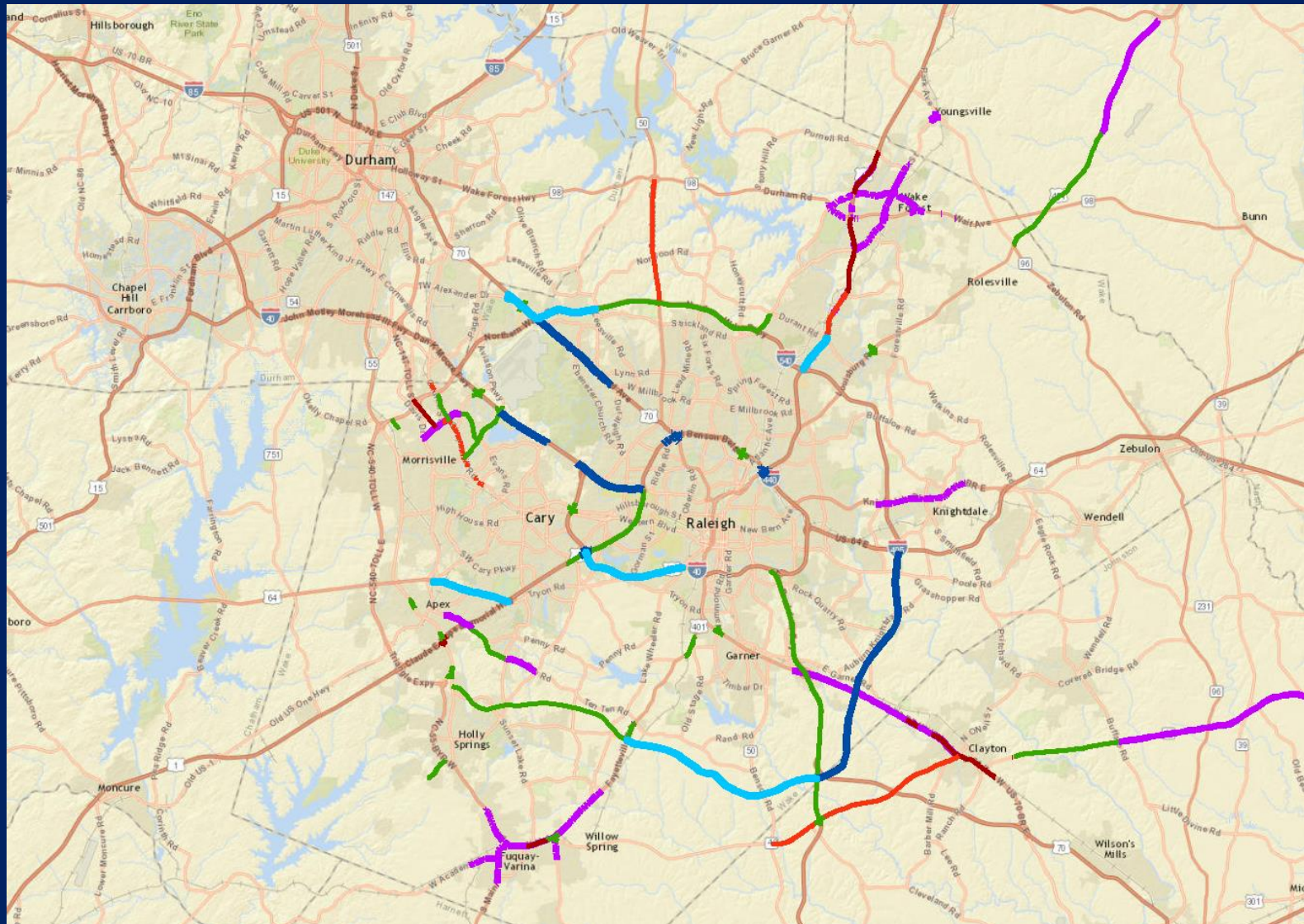
Projected Funding vs. Submitted Need
Division 5



■ Division 5 Projected Available Funding
■ Division 5 Total Roadway Project Costs:

5.3 Prioritization (SPOT) 4.0

DRAFT Regional Impact



5.3 P4.0 (SPOT) Division Needs Point Assignment

Requested Action:
Receive as information

5.4 Wake County Transit Planning Advisory Committee Bylaws, Including Voting Membership and Agency Administrative Support

5.4 Bylaws Components

Membership

Organization	Voting Members
CAMPO	2
GoTriangle	2
Wake County	2
City of Raleigh	2
Town of Cary	2
Town of Apex	1
Town of Fuquay-Varina	1
Town of Garner	1
Town of Holly Springs	1
Town of Knightdale	1
Town of Morrisville	1
Town of Rolesville	1
Town of Wake Forest	1
Town of Wendell	1
Town of Zebulon	1
NC State University	1
RTP Foundation	1
TOTAL	22

5.4 Bylaws Components

Other Highlights

- Chair and Vice-Chair elected annually to serve for calendar year
- CAMPO to provide administrative support staff for TPAC
- Minimum quarterly meetings; more frequent if needed
- Quorum: 5 of 6 members from ILA parties
- Voting not unanimous → both majority and minority perspectives
- Weighted Voting
- Sub-Committees and Steering Committees

5.4 Wake County Transit Planning Advisory Committee Bylaws, Including Voting Membership and Agency Administrative Support

Requested Action:

Recommend the Executive Board approve the TPAC's recommended bylaws.

5.5 Wake Transit On-Call Services Consultant Selection

Highlights

- Selection of on-call consultants across 4 categories of service types:
 - Planning
 - Environmental
 - Technology
 - Public Outreach
- Also includes TPAC roles and responsibilities
- Statements of qualifications received from 9 firms
- Each service category → 3 firms in ranked order
- Top-ranked firms have right of 1st refusal

5.5 Wake Transit On-Call Services Consultant Selection

Draft On-Call Consultant List:

Planning Services:

- 1) Nelson Nygaard
- 2) WSP/PB
- 3) Cambridge Systematics

Environmental Services:

- 1) Davenport
- 2) WSP/PB
- 3) Cambridge Systematics

Technology Services:

- 1) WSP/PB
- 2) Nelson Nygaard
- 3) Tindale Oliver

Public Outreach Services:

- 1) Nelson Nygaard
- 2) AECOM
- 3) Cambridge Systematics

5.5 Wake Transit On-Call Services Consultant Selection

Contract For On-call Services:

- Duration of 3 years (FYs 2017, 2018, 2019, part of 2020) with option to renew
- Master contract with individual task orders/statements of work issued for specific services
- \$1,175,000 for FY 2017 committed from City of Raleigh, GoTriangle and CAMPO
- \$175,000 contributed by CAMPO
- Presumes funding for FYs 2018, 2019, 2020 will come from Wake Transit revenues – not to exceed amounts in current adopted financial model
- Funding partners are parties to contract

5.5 Wake Transit – Selection of Consultants for On-Call Transit Planning Services

Requested Action:

Recommended the Executive Board consider approval of the “On-Call Consultant List” selections and corresponding contract for on-call services.

5.6 NC 54 & More Feasibility Study

Matthew Potter, AECOM

NC 54 and More Feasibility Study

CAMPO Technical Coordinating Committee Meeting

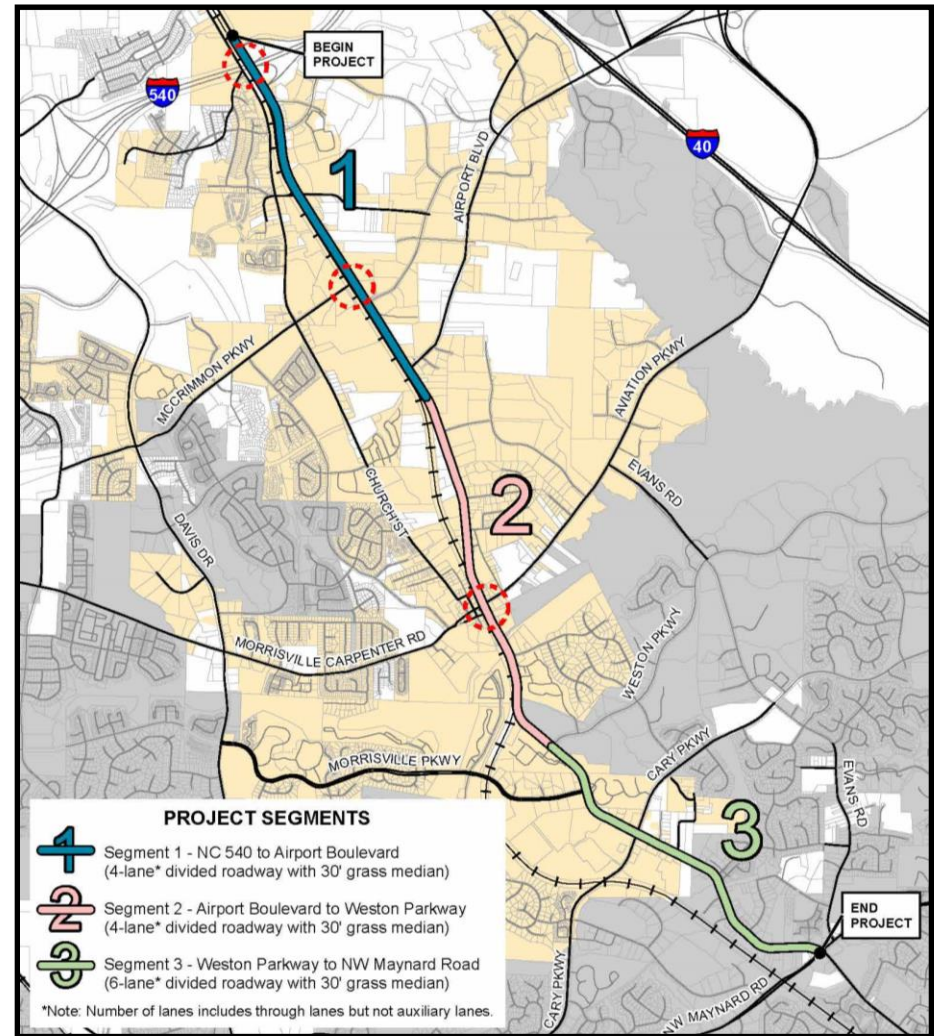
September 1, 2016

Agenda

- Introductions
- NC 54 Feasibility Study
- Feasibility Study Recommendations
- Cost Estimates
- Constraints
- General Recommendations
- Questions

Feasibility Study

- Improvements to NC 54 from NC 540 / I-540 to Northwest Maynard Road (SR 3073)
- Approximately 5.5 miles
 - **Segment 1:** 4-lane divided roadway with 30' grass median
 - **Segment 2:** 4-lane divided roadway with 30' grass median
 - **Segment 3:** 6-lane divided roadway with 30' grass median



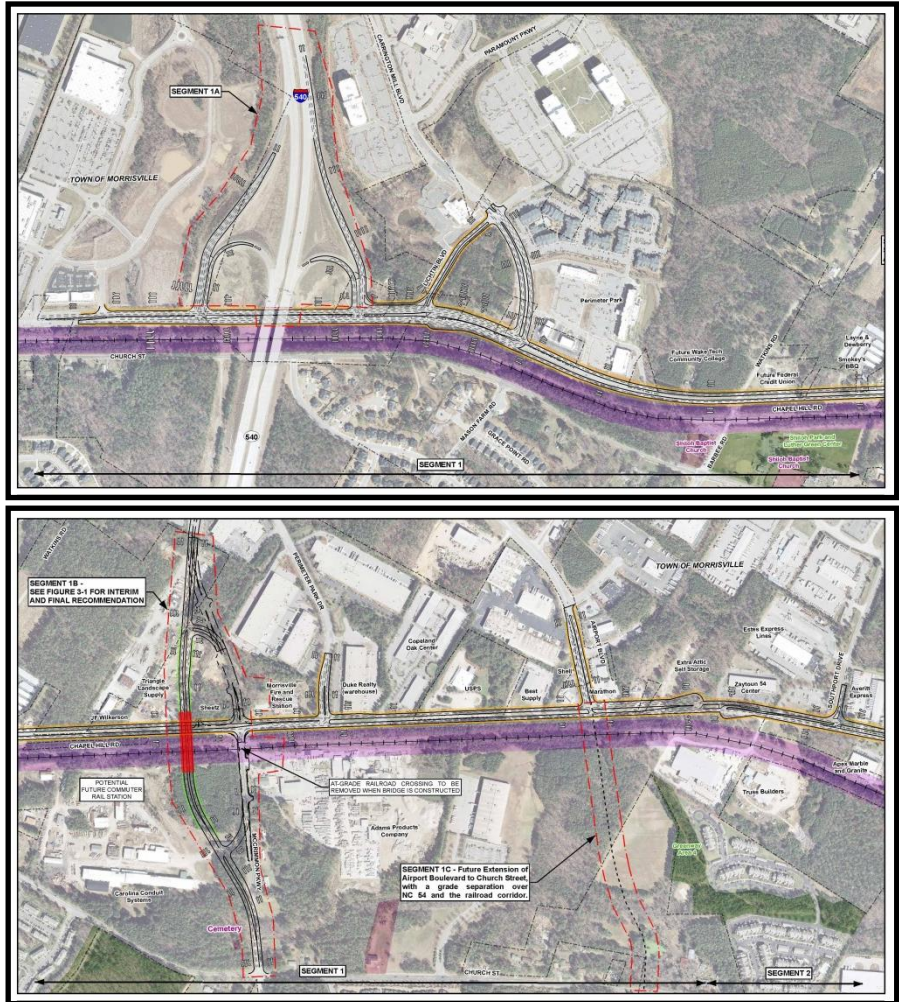
Purpose

- Improve Traffic Operations
- Remove longitudinal highway encroachment from NCRR right of way
- Minimize highway-rail at-grade conflict points



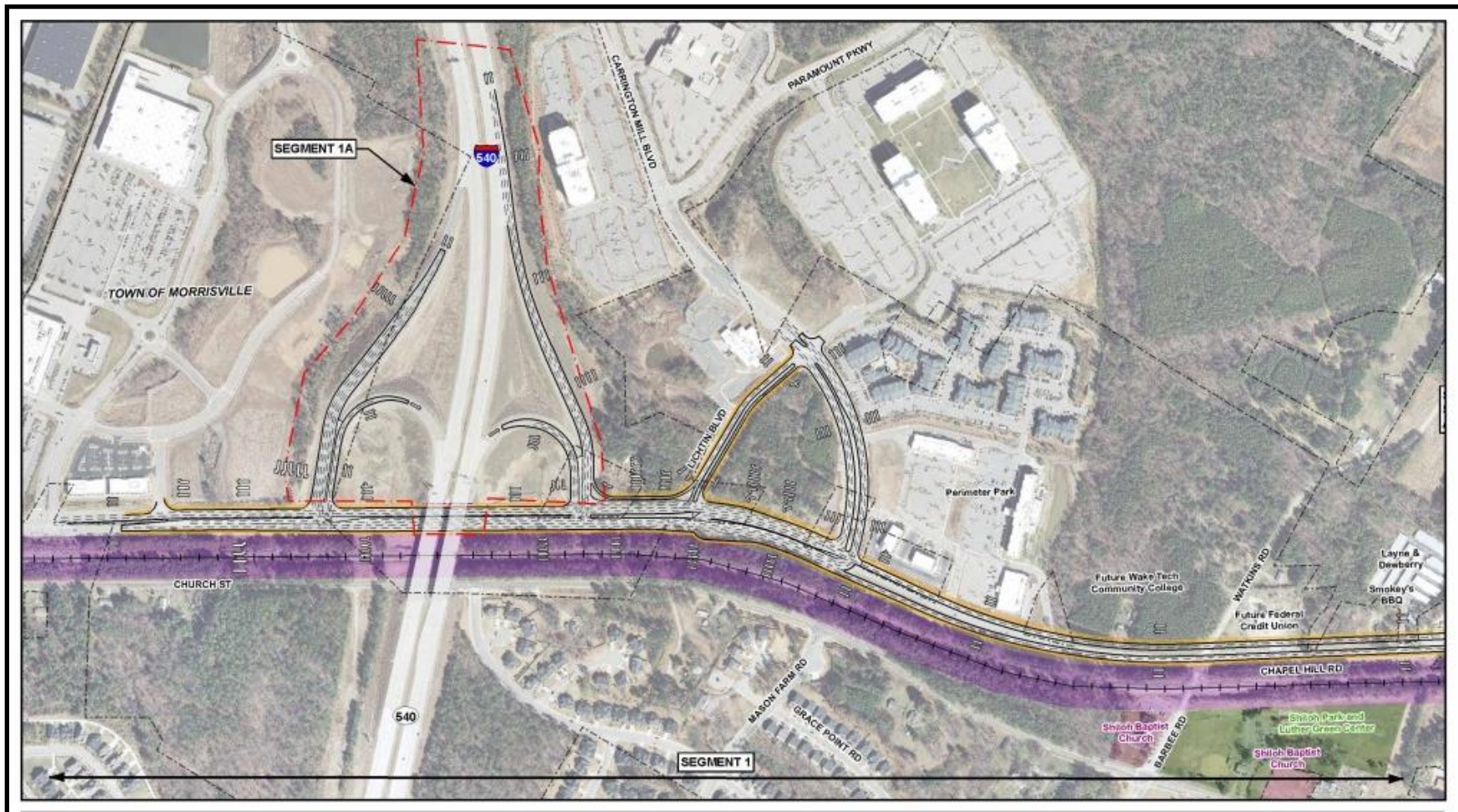
Segment 1

- Widen NC 54 from NC 540 / I-540 to Airport Boulevard (SR 3015) to four lanes
- Construct the recommended improvements to the NC 540 / I-540 ramp termini
- Construct the McCrimmon Parkway (SR 1635) interchange
- Close the existing at-grade railroad crossing at McCrimmon Parkway



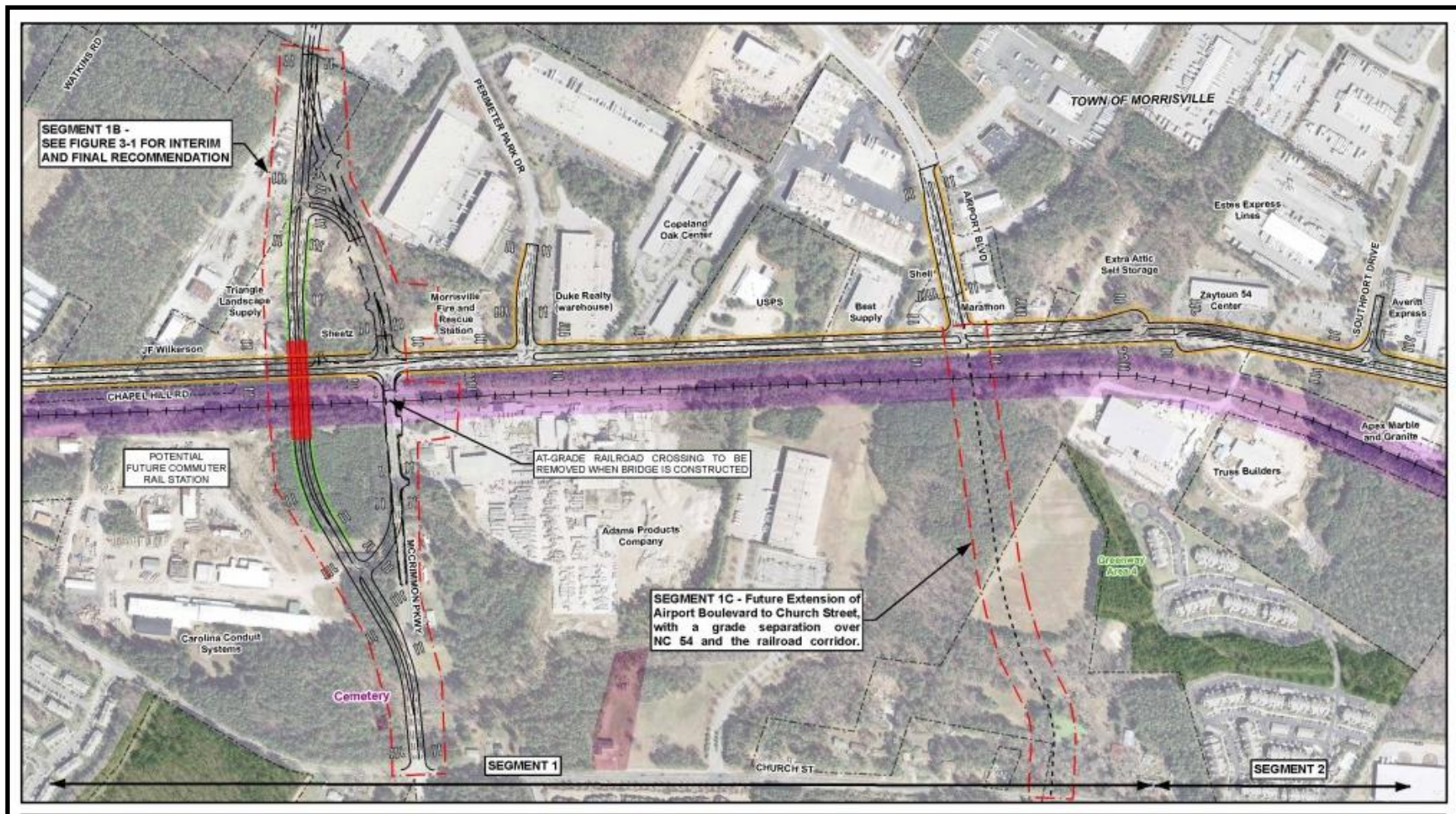
NC54 & MORE

Feasibility Study



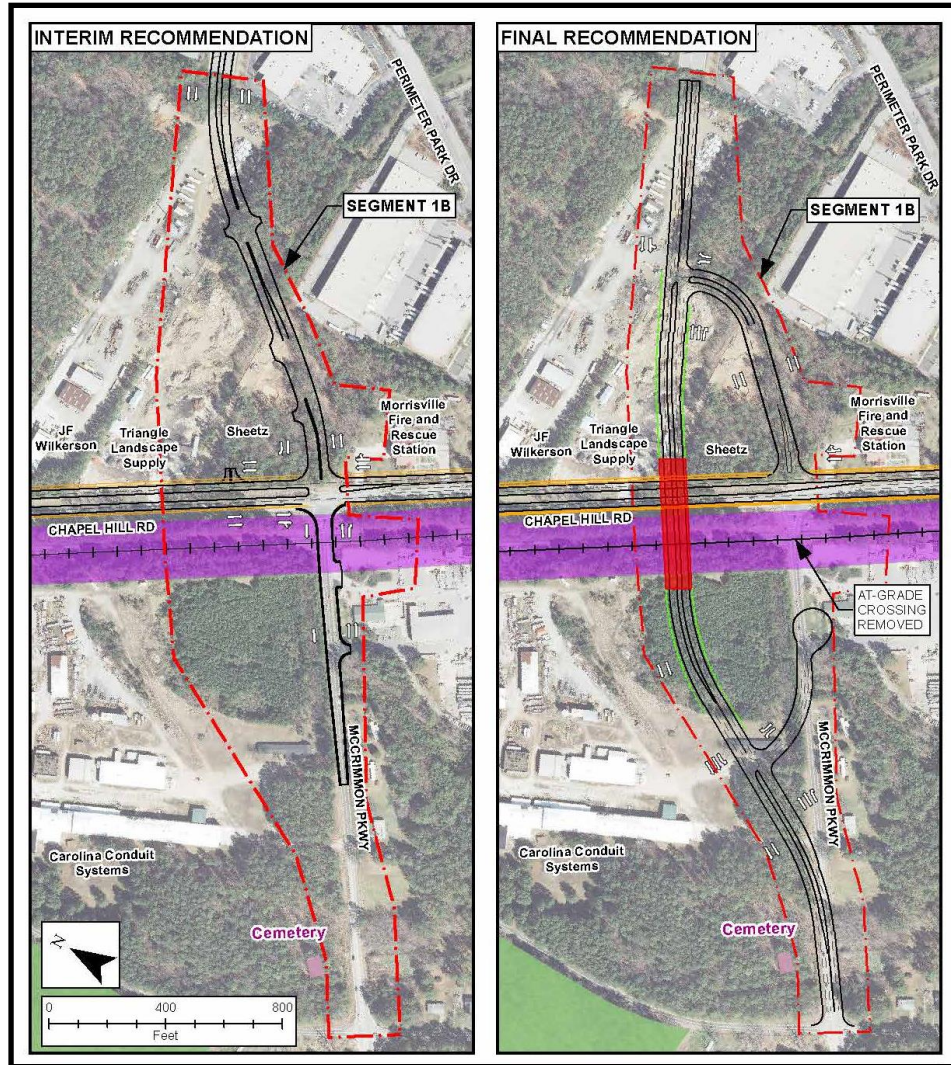
NC54 & MORE

Feasibility Study



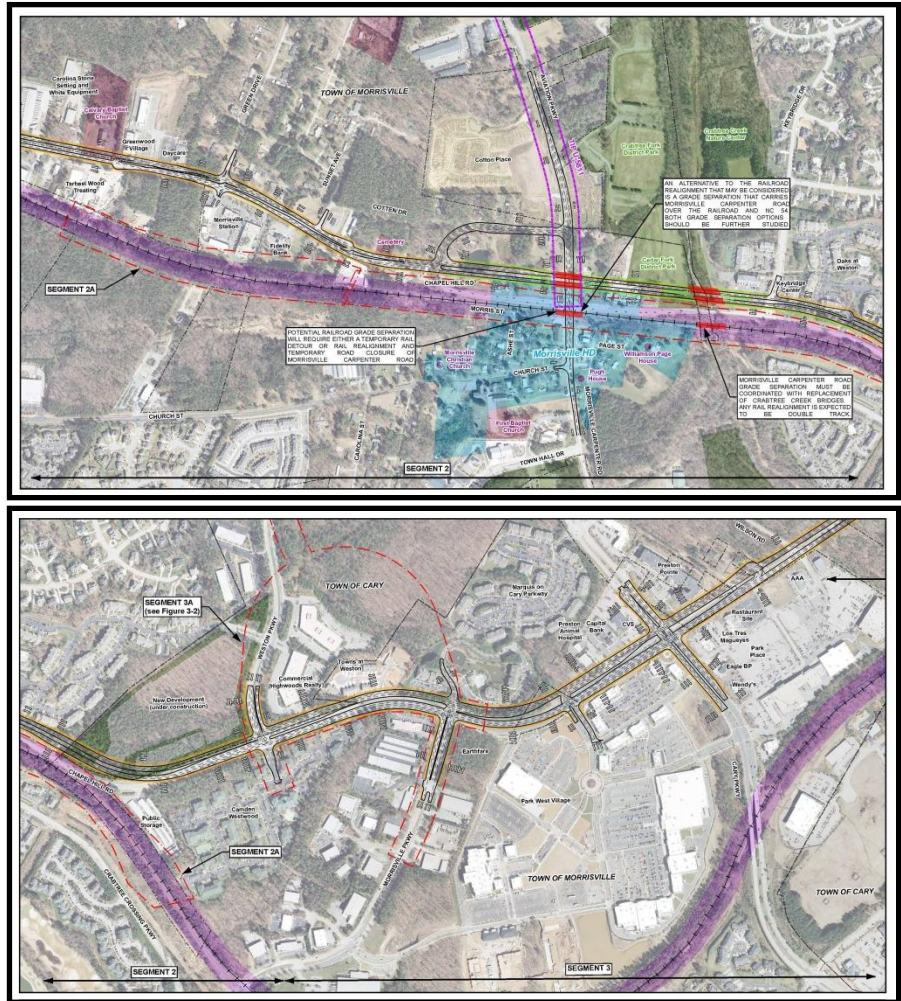
NC54 & MORE

Feasibility Study



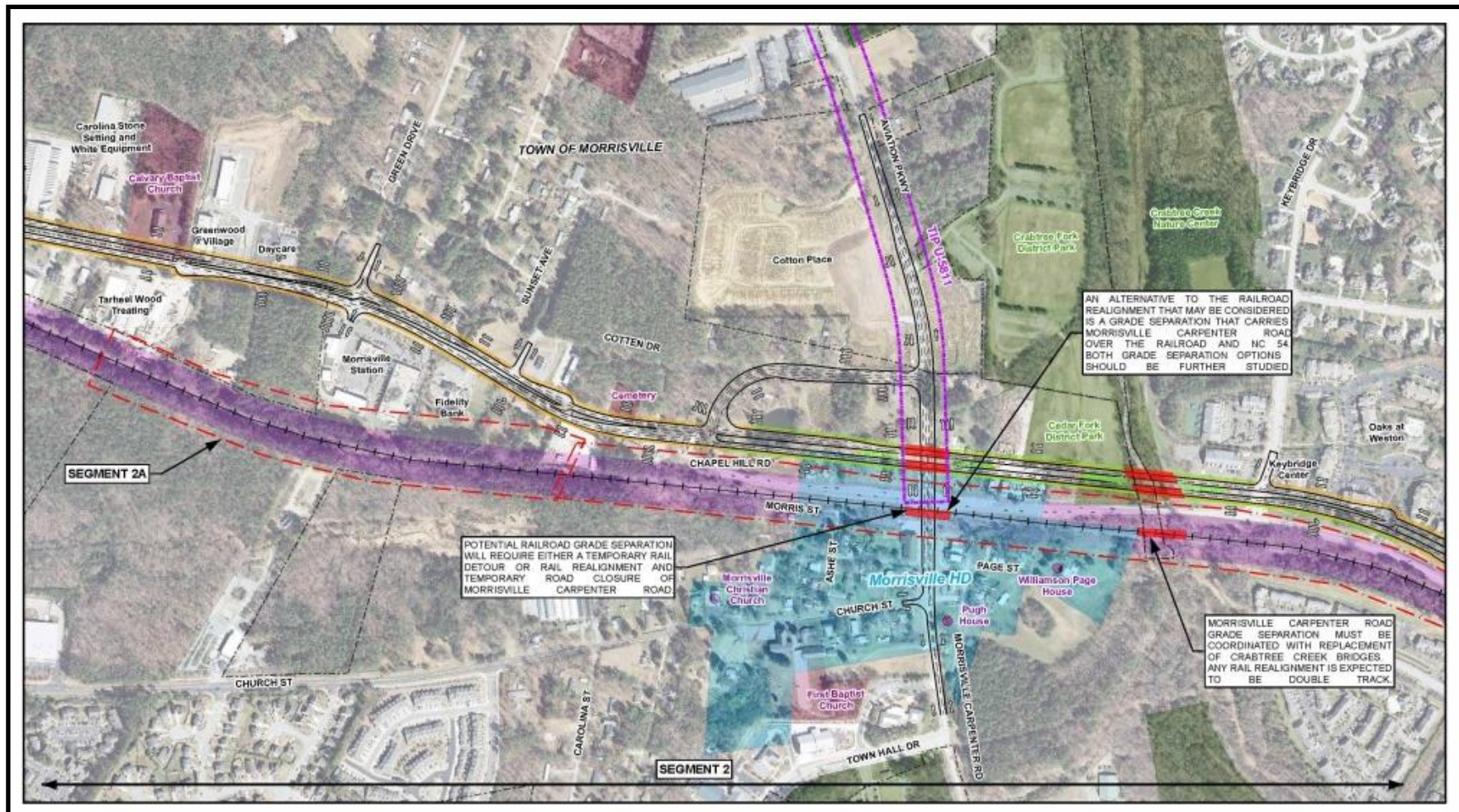
Segment 2

- Widen NC 54 to four lanes and realign NC 54
- Construct the quadrant interchange at Aviation Parkway (SR 1002) / Morrisville-Carpenter Road (SR 3014)
- Construct the grade-separation of the railroad and Morrisville-Carpenter Road (SR 3014), but only after the McCrimmon Parkway (SR 1635) interchange is completed

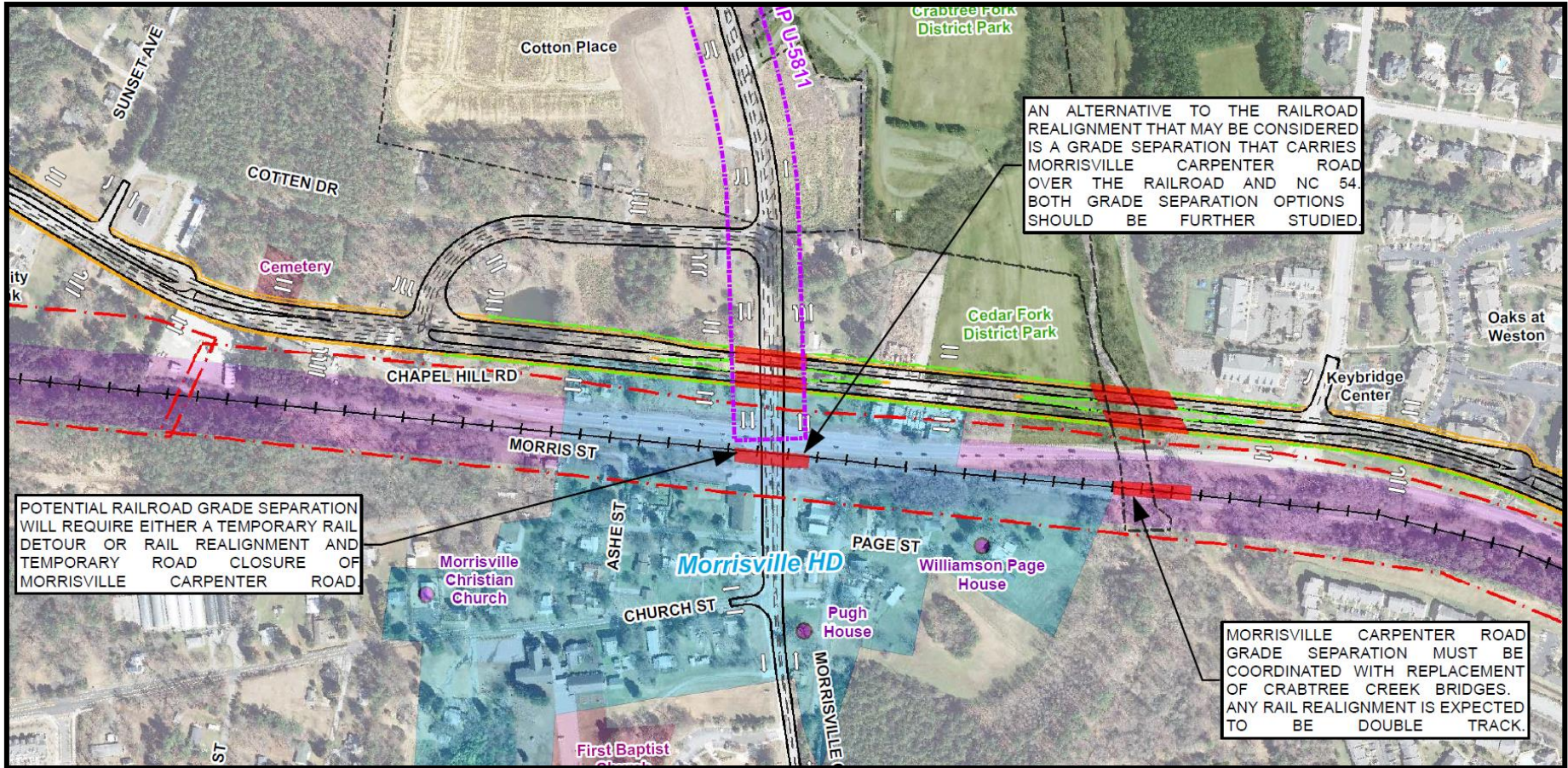


NC54 & MORE

Feasibility Study

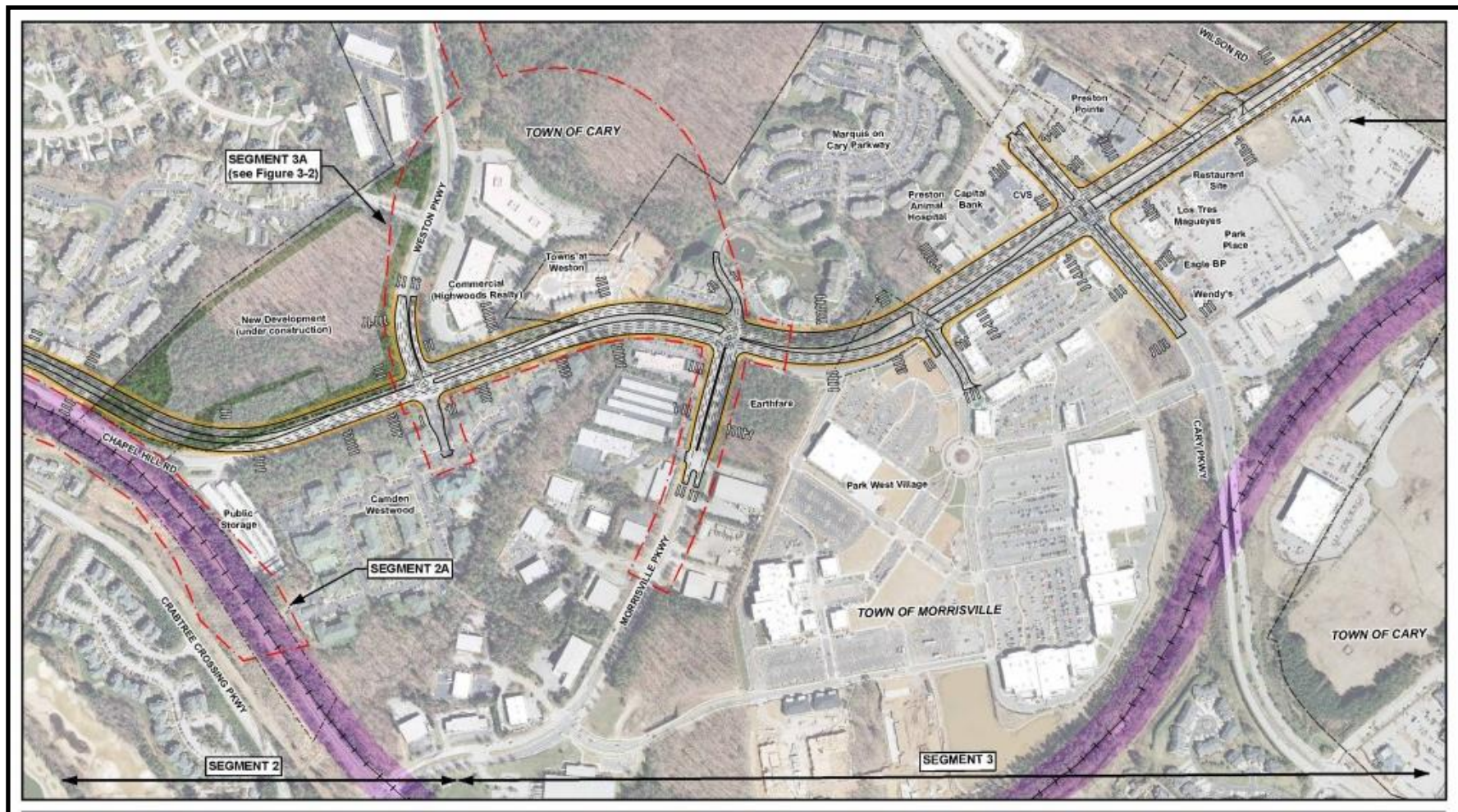


Morrisville-Carpenter Road/Aviation Parkway



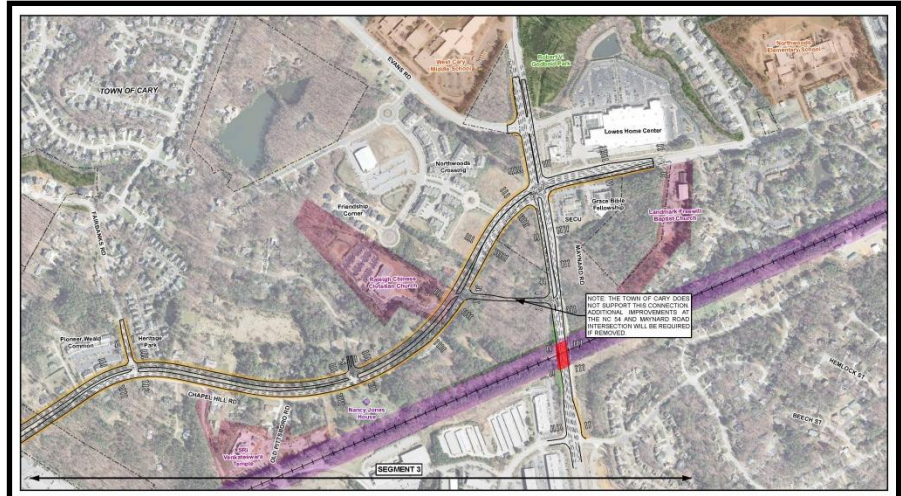
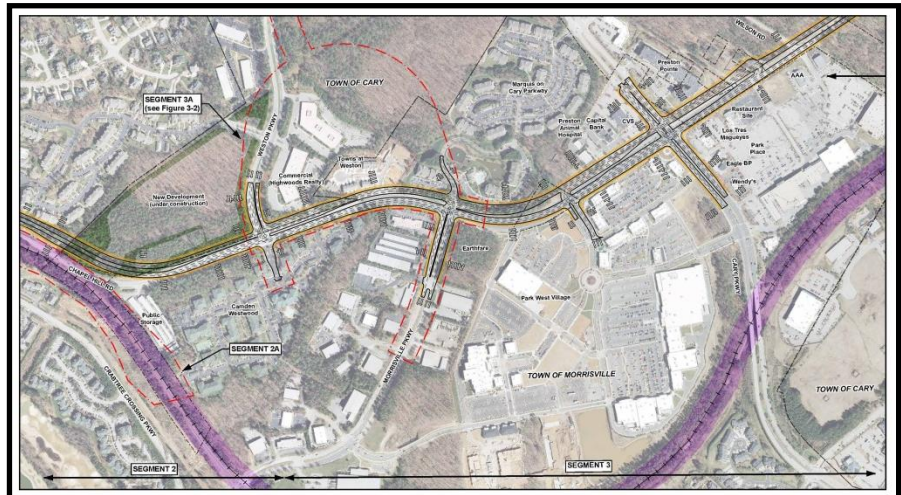
NC54 & MORE

Feasibility Study



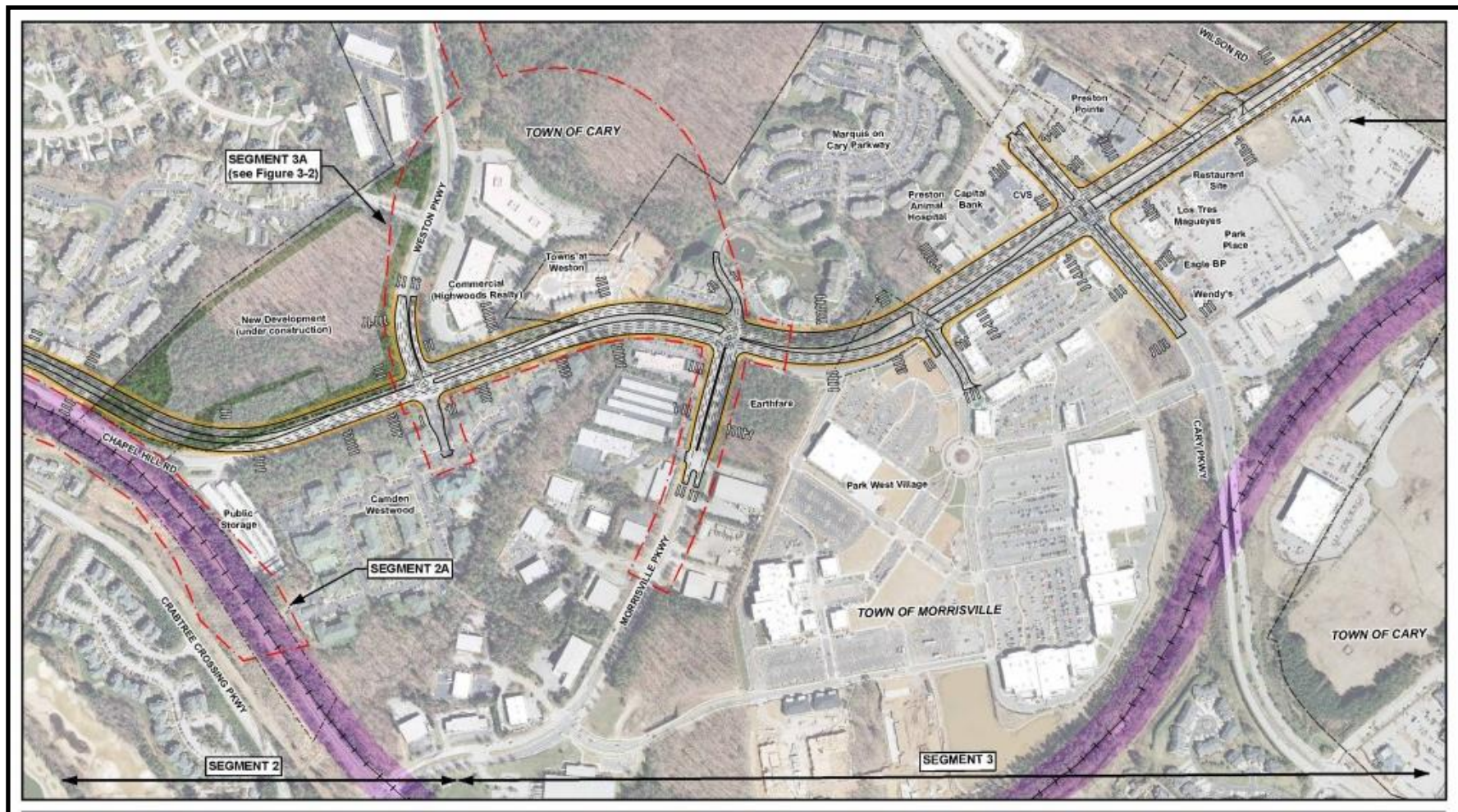
Segment 3

- Widen NC 54 to a six-lane median divided facility



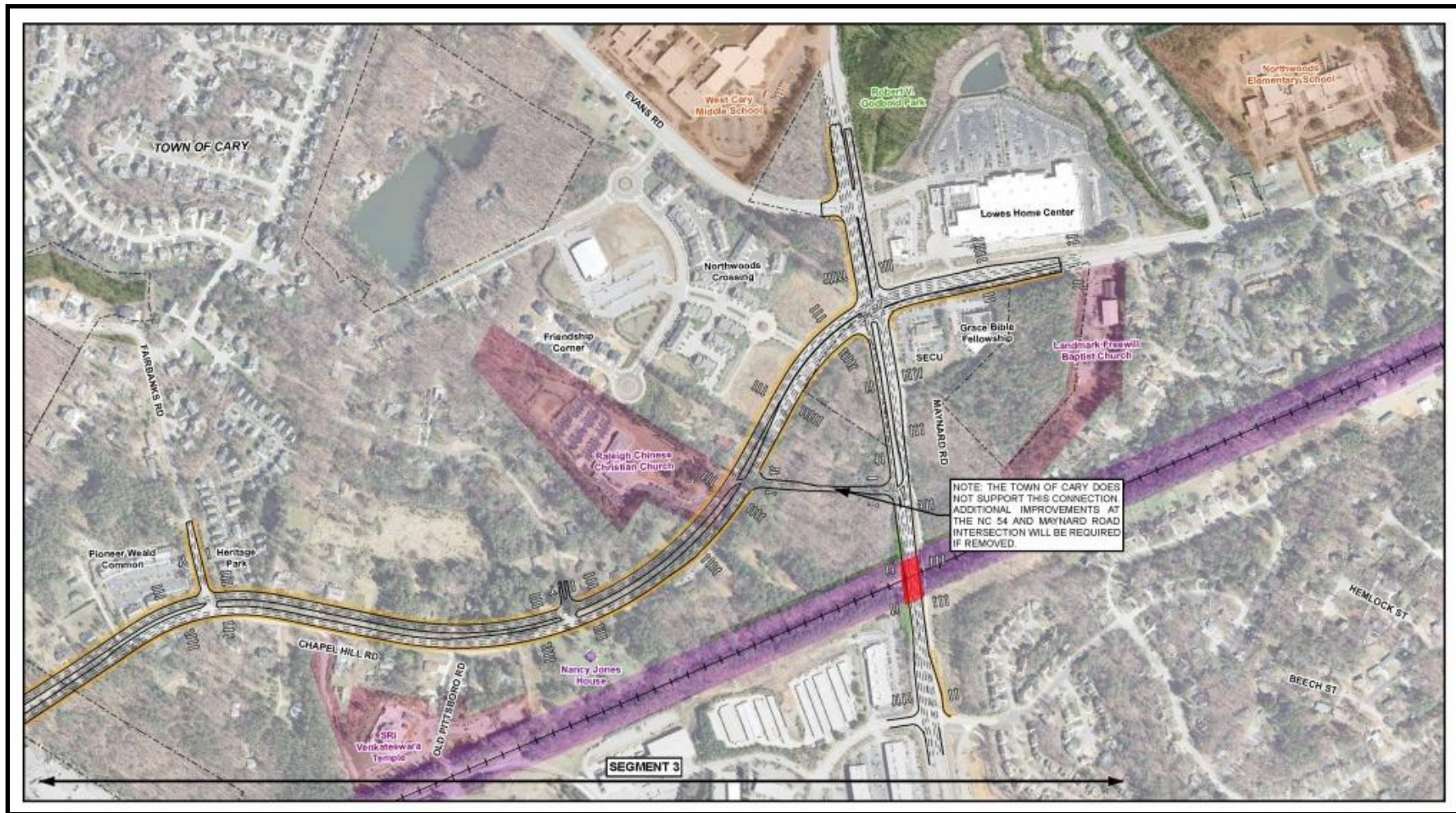
NC54 & MORE

Feasibility Study



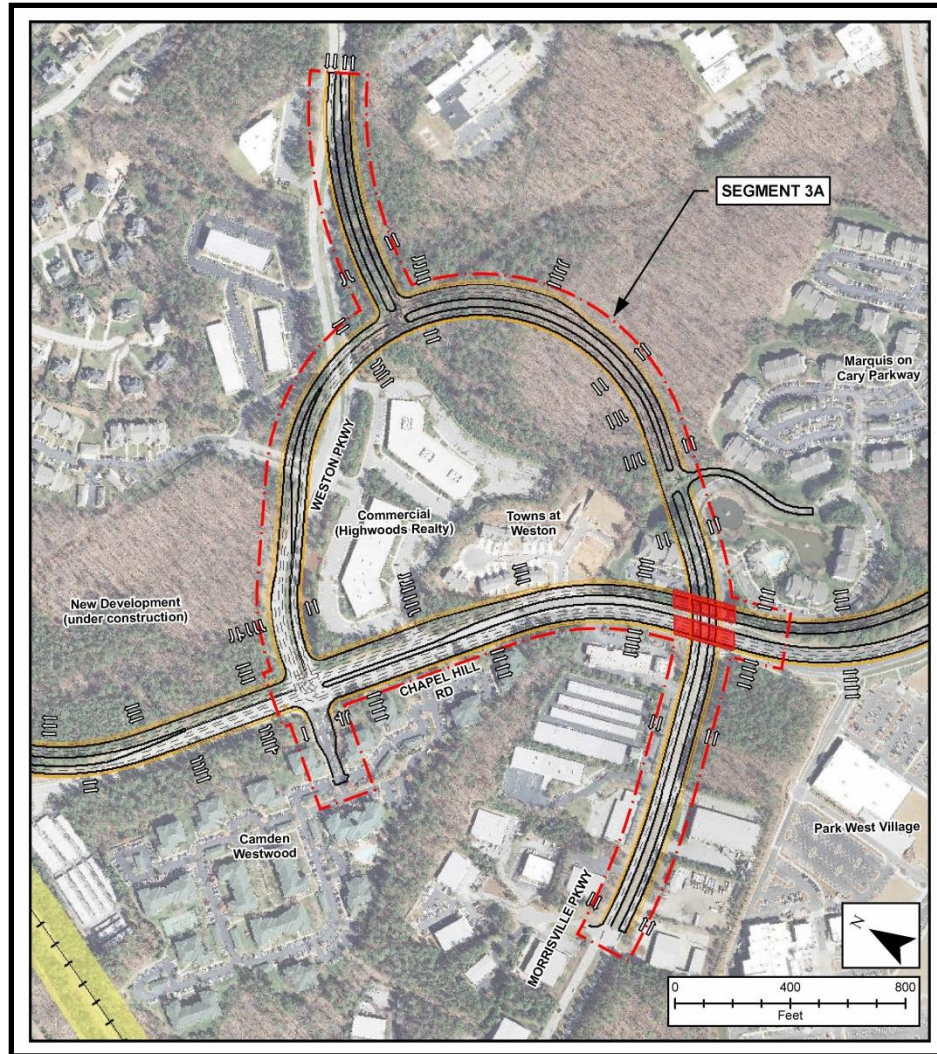
NC54 & MORE

Feasibility Study



NC54 & MORE

Feasibility Study



Cost Estimates

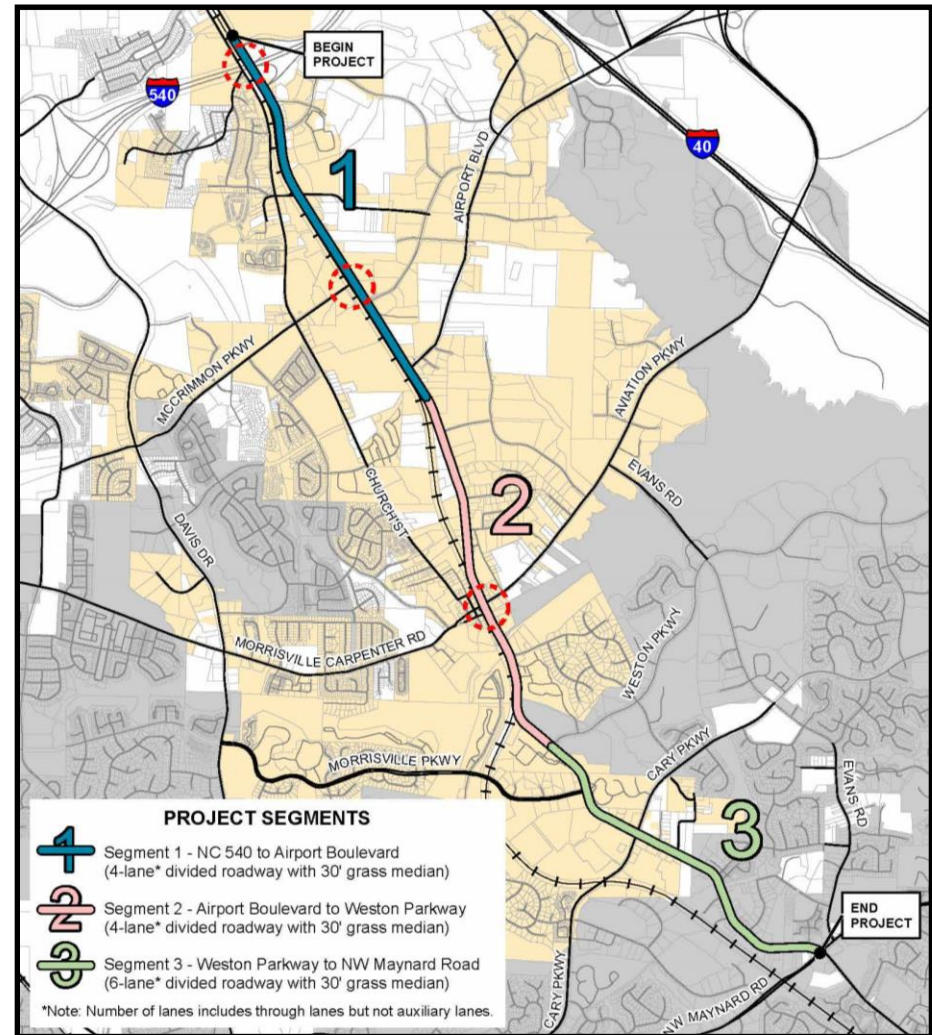
- The following estimates utility relocation, right-of-way and construction costs for recommended improvements to NC 54

Segment	Utility Relocation Costs (\$)	Right-of-way Costs (\$)	Construction Costs (\$)	Total Costs (\$)
1	\$ 800,000	\$ 17,500,000	\$ 17,600,000	\$ 35,900,000
1A	\$ 50,000	\$ -0-	\$ 825,000	\$ 875,000
1B	\$ 100,000	\$ 7,800,000	\$ 12,400,000	\$ 20,300,000
2	\$ 1,000,000	\$ 47,400,000	\$ 24,300,000	\$ 72,700,000
2A	\$ 500,000	\$ 5,000,000	\$ 15,100,000	\$ 20,600,000
3	\$ 1,100,000	\$ 31,300,000	\$ 22,000,000	\$ 54,400,000
Totals	\$ 3,550,000	\$ 109,000,000	\$ 92,225,000	\$ 204,775,000

Construction Costs include sidewalks and 14-foot outside travel lanes (6-foot dedicated bike lanes are not included).

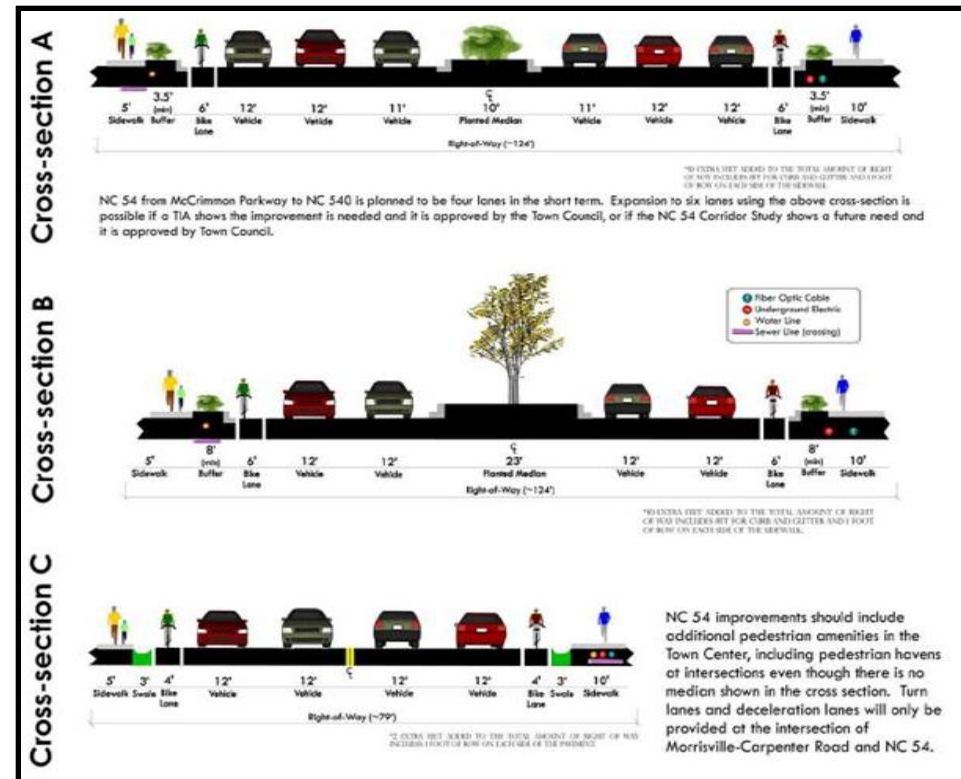
Constraints

- Traffic operational goal is LOS D in 2040
- Optimal median width of 30-foot
- Remove NC 54 from NCRR Right-of-way
- Grade separation of Railroad crossings were considered optimal



General Recommendations

- Possibly reduce operational goal from LOS D in 2040
- Coordinate with applicable transit services
- Evaluate reducing 30-foot median width
- Possibly remove sidewalk for west side of NC 54, within NCRR Right of way
- Evaluate alternative to widen NC 54 from the existing western edge of pavement (NCRR ROW)



Questions?

5.6 NC 54 & More

Requested Action:
Receive as information

5.7 Complete 540: No-Build Scenario Quantitative Indirect & Cumulative Effects Assessment

Roy Bruce, HW Lochner



North Carolina Department of Transportation

CAMPO: Complete 540 Next Steps

September 1, 2016

Roy Bruce

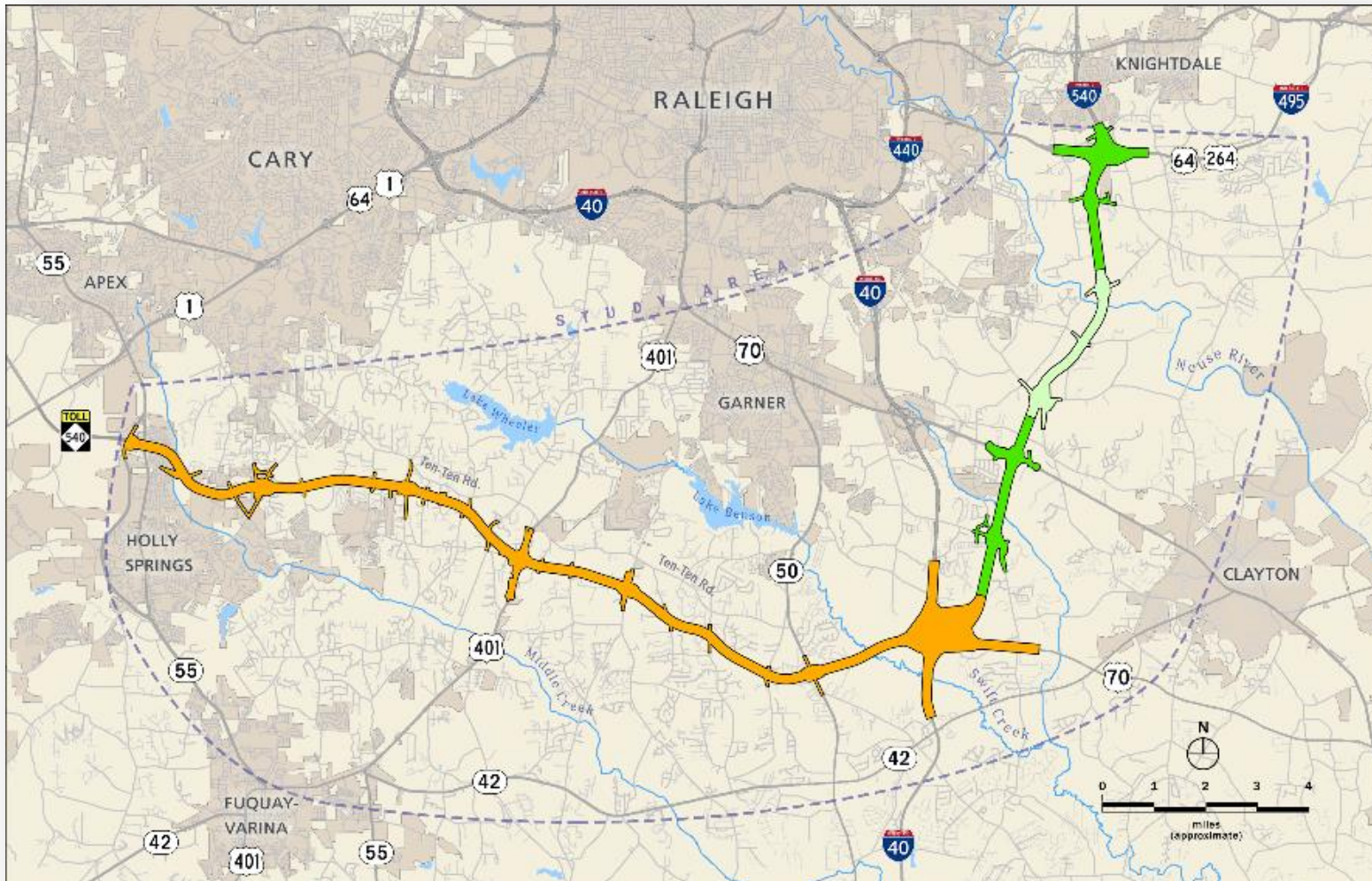


Presentation Topics

- Update
- Final Environmental Impact Statement under development based on NCDOT's Preferred Alternative
- Request for Input: Quantitative Indirect and Cumulative Effects Assessment
- Schedule/Next Steps



NCDOT's Preferred Alternative



Request for Input

Analysis of Quantitative Indirect & Cumulative Impacts & Effects

- NCDOT will look at the effects of the project beyond the road's footprint including how this will effect the people, environment and future of the area with or without the project.
- Current land use plans and Imagine 2040 anticipate that Complete 540 will be constructed
- How would land use change if the Complete 540 project were not built?
- NCDOT consultants have contacted local jurisdictions to request their input.
- Interviews with jurisdictions are anticipated through September 15th.



Draft Meeting Agenda

- Overview of ICE process for Complete 540
- Review of Imagine 2040 Inputs and Processes
- Discussion of Current Imagine 2040 Inputs
- Discussion of Changes to Place Types in a Complete 540 No-Build Scenario
- Review of Action Items and Follow Up Items

Note: Summaries of meetings will be prepared for jurisdiction approval and documentation.



Project Next Steps

- Indirect and Cumulative Effects Assessment
- Coordination with the U.S. Fish and Wildlife Service about the Dwarf Wedgemussel
- Update Traffic Forecast
- Final Environmental Impact Statement
- Record of Decision

Contact Information

- Website: www.ncdot.gov/complete540
- Email: complete540@ncdot.gov
- Hotline: 1-800-554-7849



Project Schedule

Final EIS Approved Mid 2017

Record of Decision Published Late 2017

Construction Contract Awarded for:

R-2721 - NC 55 Bypass to U.S. 401FY 2017- 2018

R-2828 - US 401 to I-40FY 2024/2025

R-2829 - I-40 to US 64 / US 264 Bypass Beyond FY 2025



5.7 Complete 540: No-Build Scenario Quantitative Indirect & Cumulative Effects Assessment

Requested Action:
Receive as information

6. Budget Informational Items

6.1: Operating Budget 2016

6.2: FY 16 Member Shares

Requested Action:
Receive as information

7. Information Item: Project Updates

7.1 Project Updates

- Hot Spot Program
- NC 54 & More
- Transit Systems Planning
- Southeast Area Study
- Regional Freight Plan Study
- LAPP Program
- (SRTS) John Rex Endowment Grant Award Update
- NC Non- Motorized Volume Data Program – Phase II Region Roll-out
- Triangle Tolling Study
- NC 98 Corridor Study

Requested Action:
Receive as information

8. Information Item: Staff Reports

- MPO Executive Director, Chris Lukasina
- TCC Chair
- NCDOT Transportation Planning Branch
- NCDOT Division 4
- NCDOT Division 5
- NCDOT Division 6
- NCDOT Rail Division
- NC Turnpike Authority

Requested Action:

Receive as information

Upcoming Events

Date	Event
Sept. 16-17, 2016	NC Bike Summit
Sept. 21, 2016	Executive Board
Oct. 6, 2016	TCC
Oct. 19, 2016	Executive Board
Nov. 3, 2016	TCC
Nov. 16, 2016	Executive Board

ADJOURN