



NC Capital Area **Metropolitan Planning Organization**

Executive Board Meeting

February 21, 2024

4:00 PM

7.1 U.S. 401 Corridor Study - Final Phase

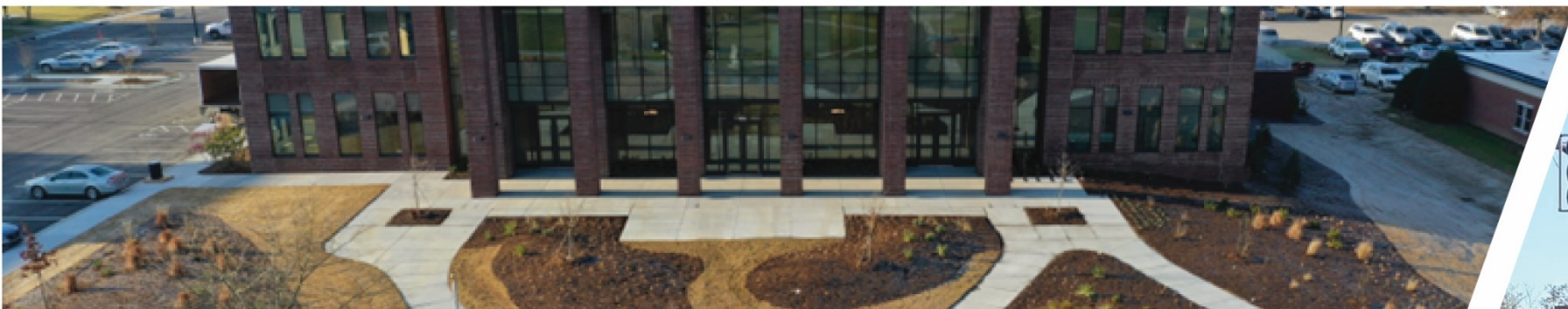


U.S. 401 CORRIDOR STUDY

Wake County / Fuquay-Varina
Harnett County / Lillington



US 401 Corridor Study
CAMPO Executive Board
February 21, 2024



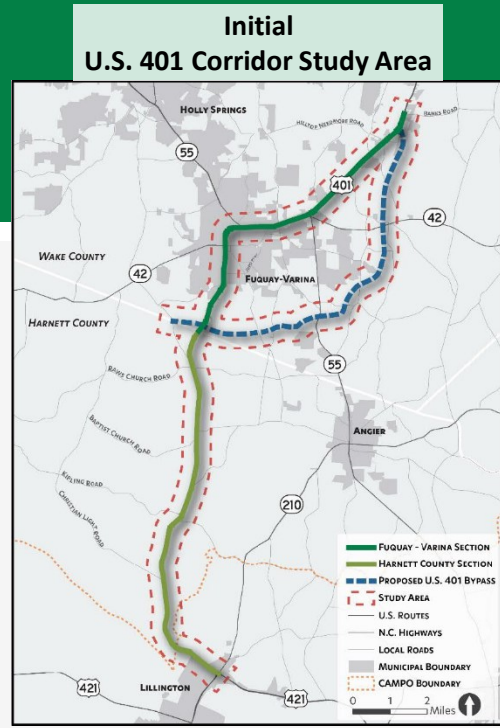
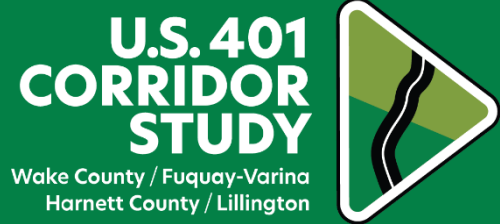
Stewart
HR&A Advisors
Spanish Speaking



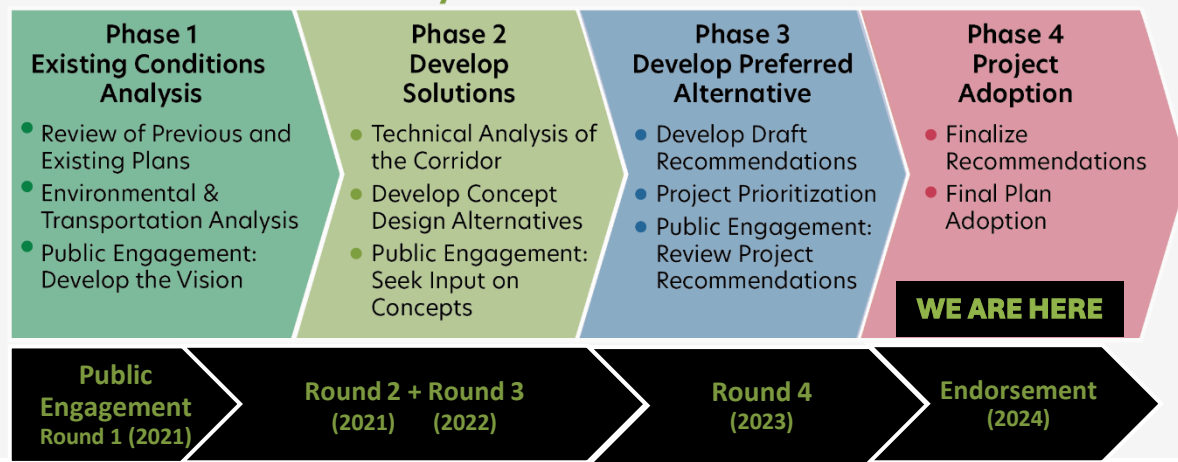
Summary

- Recap (Background, Alternatives, Public Engagement, etc.)
- Existing U.S. 401 in Wake County Recommendations*
- Existing U.S. 401 in Harnett County Recommendations*
- N.C. 55, Angier Bypass, and N.C. 210* Recommendations
- Future/Long term U.S. 401 Alignment Recommendations*
- Next Steps
- **Important Recommendation:**

Improvements to Existing U.S. 401 and existing area roadways will be prioritized for short and mid-term implementation – to occur **before the long-term** recommendation for a new roadway, known as “Future U.S. 401”.



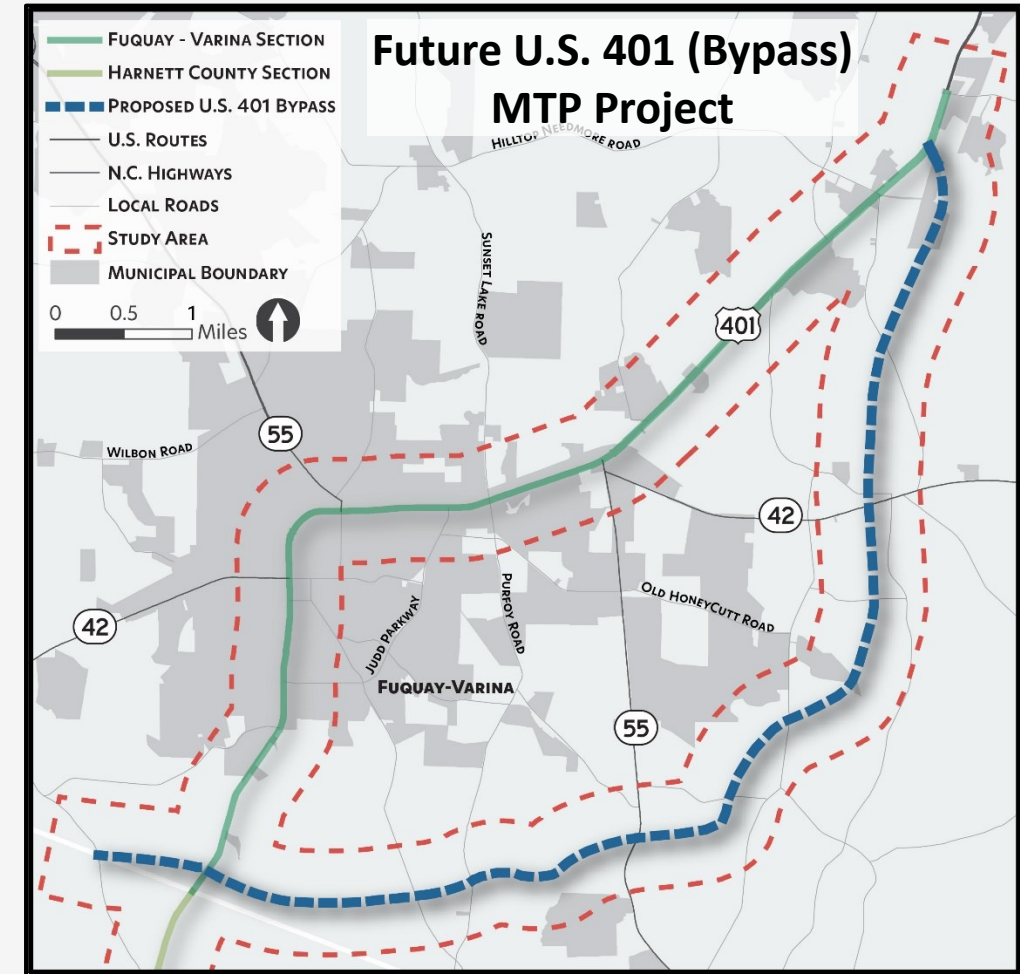
U.S. 401 Corridor Study Schedule



Project Recap

U.S. 401 Corridor Study - Background

- Initial alignment (blue line on the map) for Future U.S. 401 (Bypass) was adopted by Board of Transportation on March 10, 1997.
 - Revised alignment approved on May 7, 1999.
- Project/alignment (blue line) included in 2050 MTP
- Absent a Future U.S. 401 alignment decision, the 2050 MTP project alignment (blue line) will remain.
- **This study focused on improving Existing U.S. 401 and exploring alternative alignments for the Future U.S. 401.**



Public Engagement Overall

U.S. 401 CORRIDOR STUDY

Wake County / Fuquay-Varina
Harnett County / Lillington



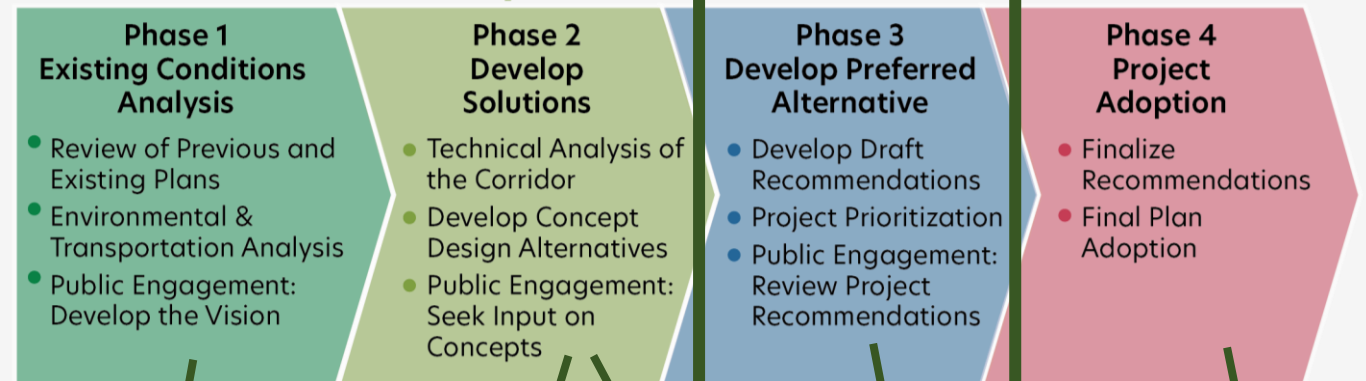
Stakeholder Oversight Team

Made up of area elected officials, public officials, community organization leaders

Public Engagement

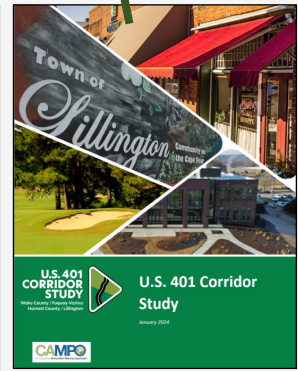
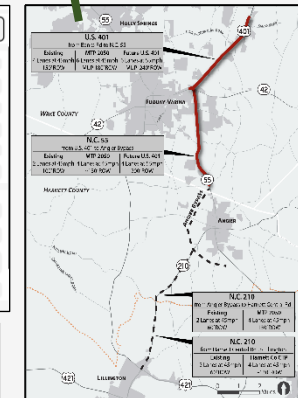
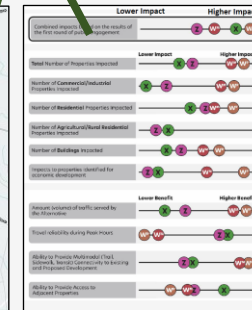
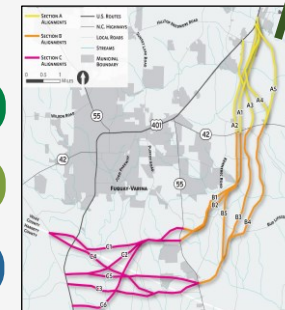
Round 1	Vision & Goals
Round 2	Initial Design Alternatives
Round 3	Additional Alternatives <i>and</i> Priorities for Determining a Preferred Alternative
Round 4	Draft Recommendations
Final	Final Recommendations & Report

U.S. 401 Corridor Study Schedule



Goals

- Reduce congestion and increase transportation capacity and safety
- Encourage economic development
- Incorporate public and stakeholder input
- Accommodate appropriate modes of travel (transit, bicycle, pedestrian, freight)



Trade-offs
For the Future U.S. 401 Corridor, for each of the trade-offs listed below, please share your preference:

Reduce property impacts but have higher environmental impacts OR

Reduce environmental impacts but have higher property impacts

Closed to responses



www.US401CorridorStudy.com



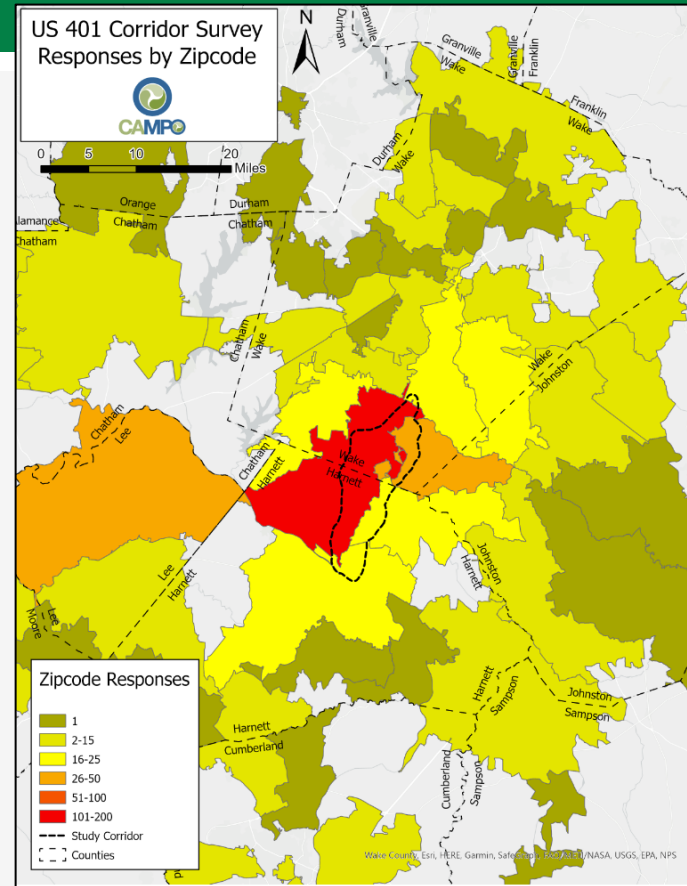
#US401CorridorStudy

Round 4 Survey on Draft Recommendations

October 3 –
November 5, 2023

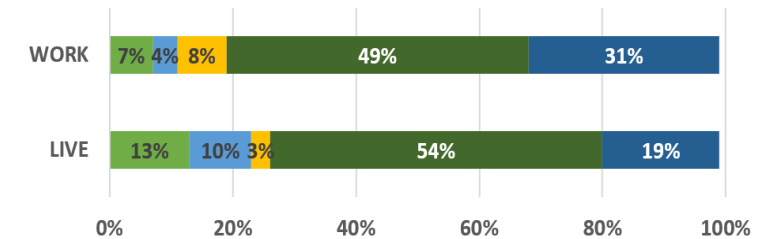
- ✓ 782 respondents in total
- ✓ 245 respondents also provided comments

- The results of the survey can be segmented based on where the respondents are located.
 - This helps inform the process by understanding the different needs and desires of those who live nearby/may be impacted by the actual route and those who would utilize the route for their daily needs.



Survey Respondents - Home/Work Location

* 509 of 782 respondents answered this question

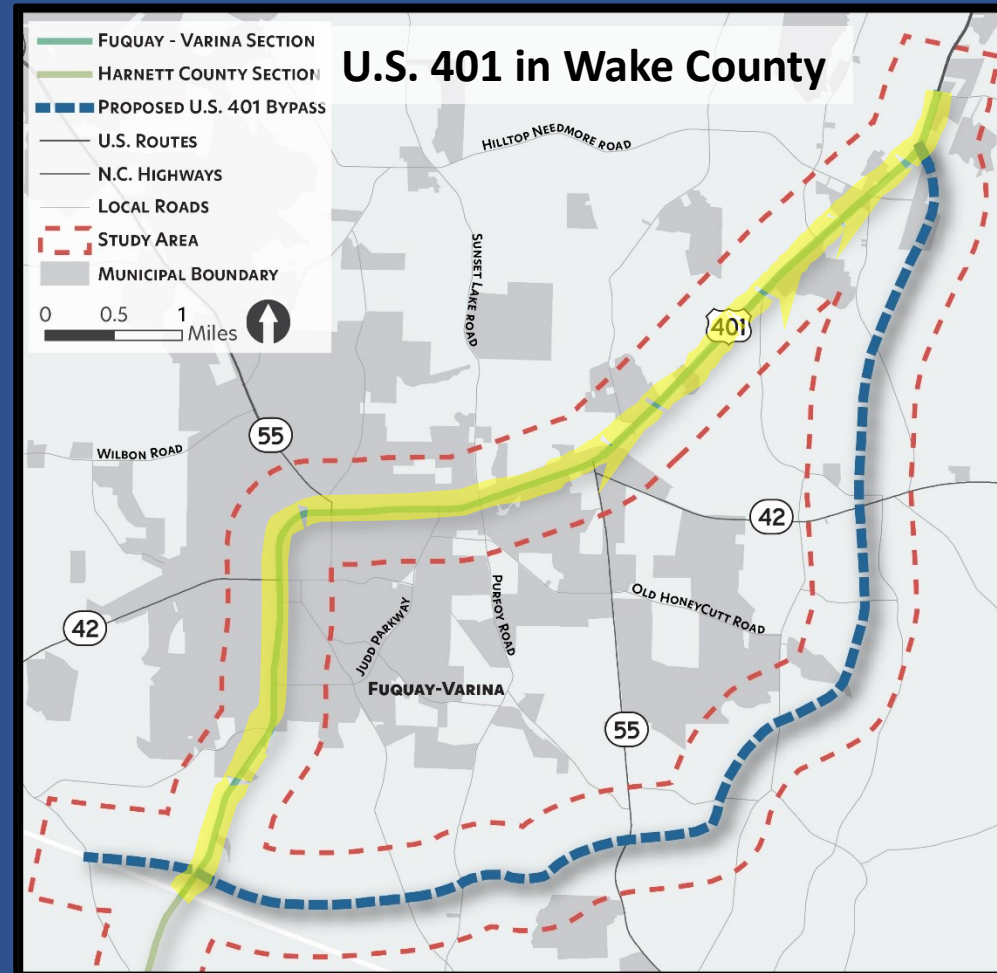


- Survey results show that the study generated participants not only in the study area, but from throughout the region
- The heaviest concentration of participants originated from zip codes within the study area



U.S. 401 Corridor Study's Final Recommendations

Recommendations: Existing U.S. 401 in Wake County



U.S. 401 in Wake County - Sections



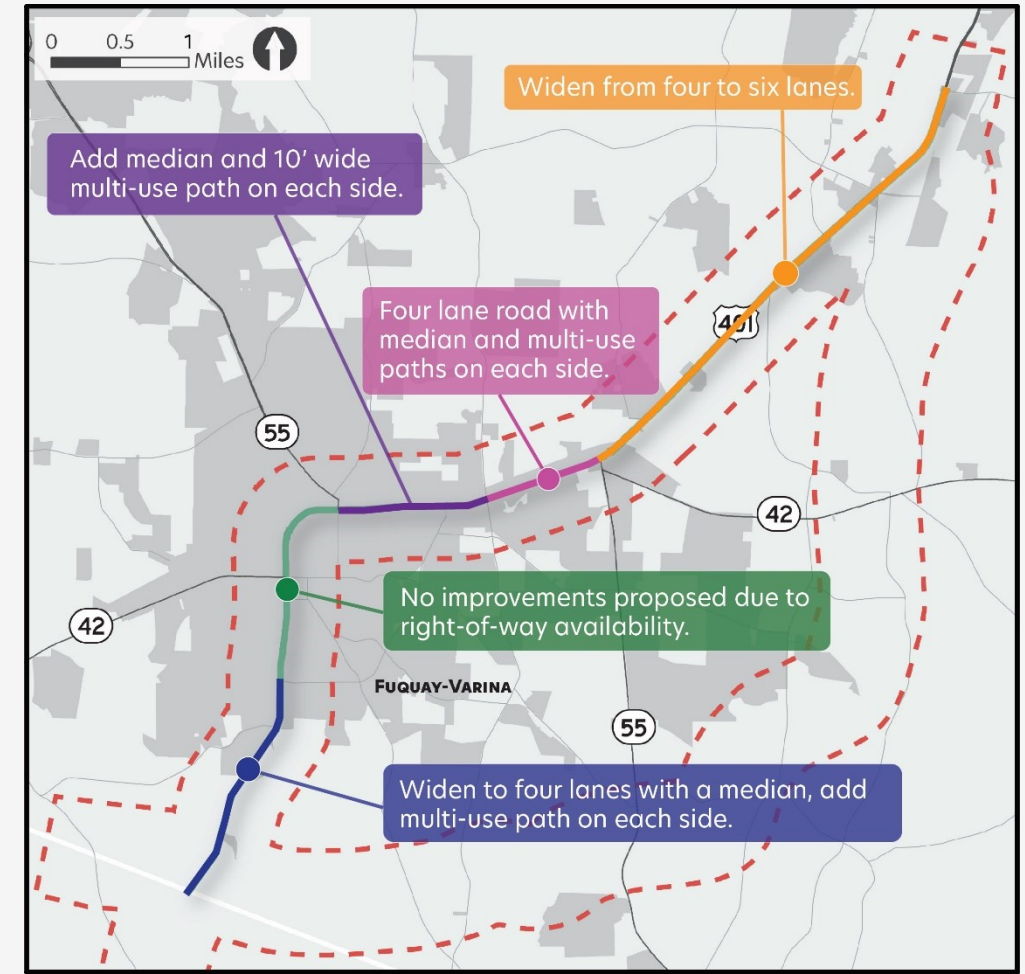
Banks Road to N.C. 55: Widen from 4 to 6 lanes.
(MTP Project)

N.C. 55 to Judd Parkway NE: Add raised median and Mixed Use Paths. (MTP Project)

Judd Parkway NE to Ennis St.: Add raised median and Mixed Use Paths (no MTP project)

Ennis St. to Judd Parkway SW: No roadway improvements.

Judd Parkway SW to Harnett Co.: Widen from 2 to 4 lanes with raised median and MUP.



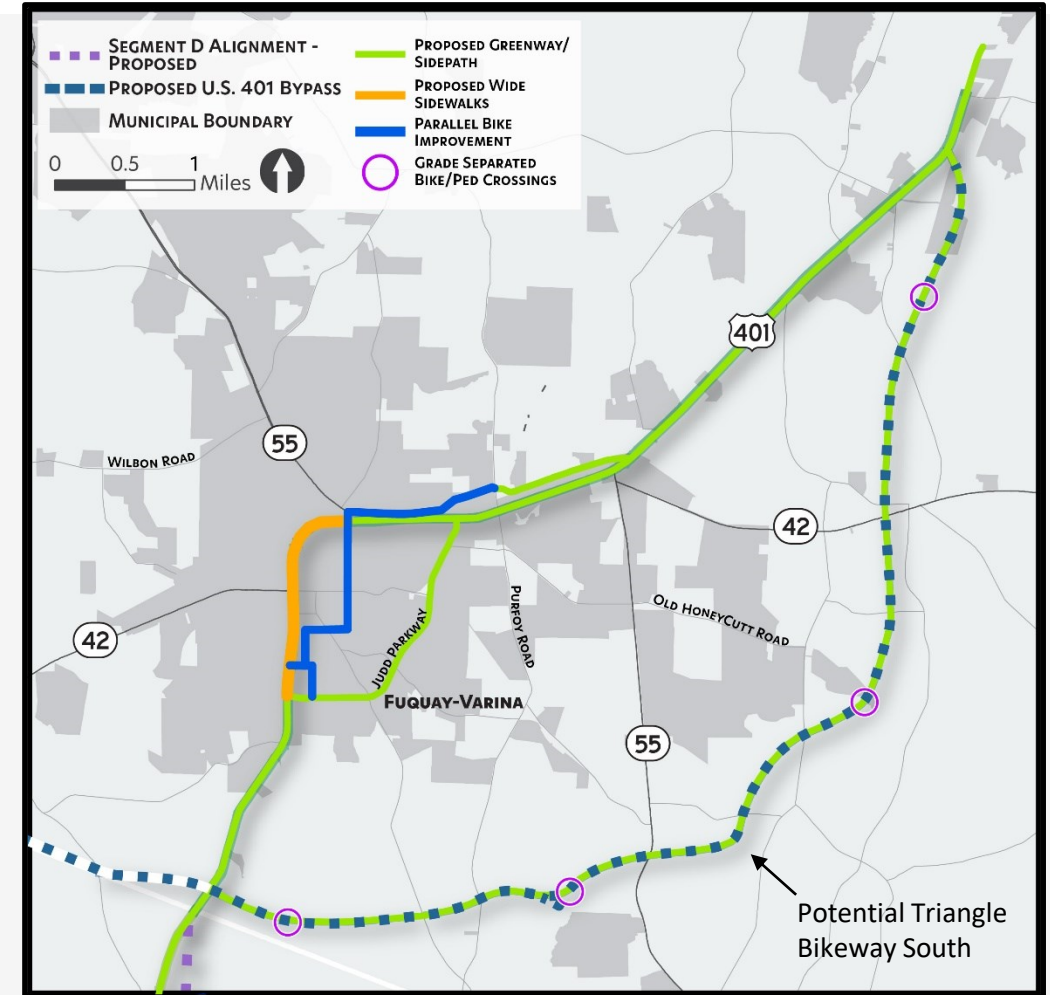
U.S. 401 in Wake County – Bicycle-Pedestrian Facilities

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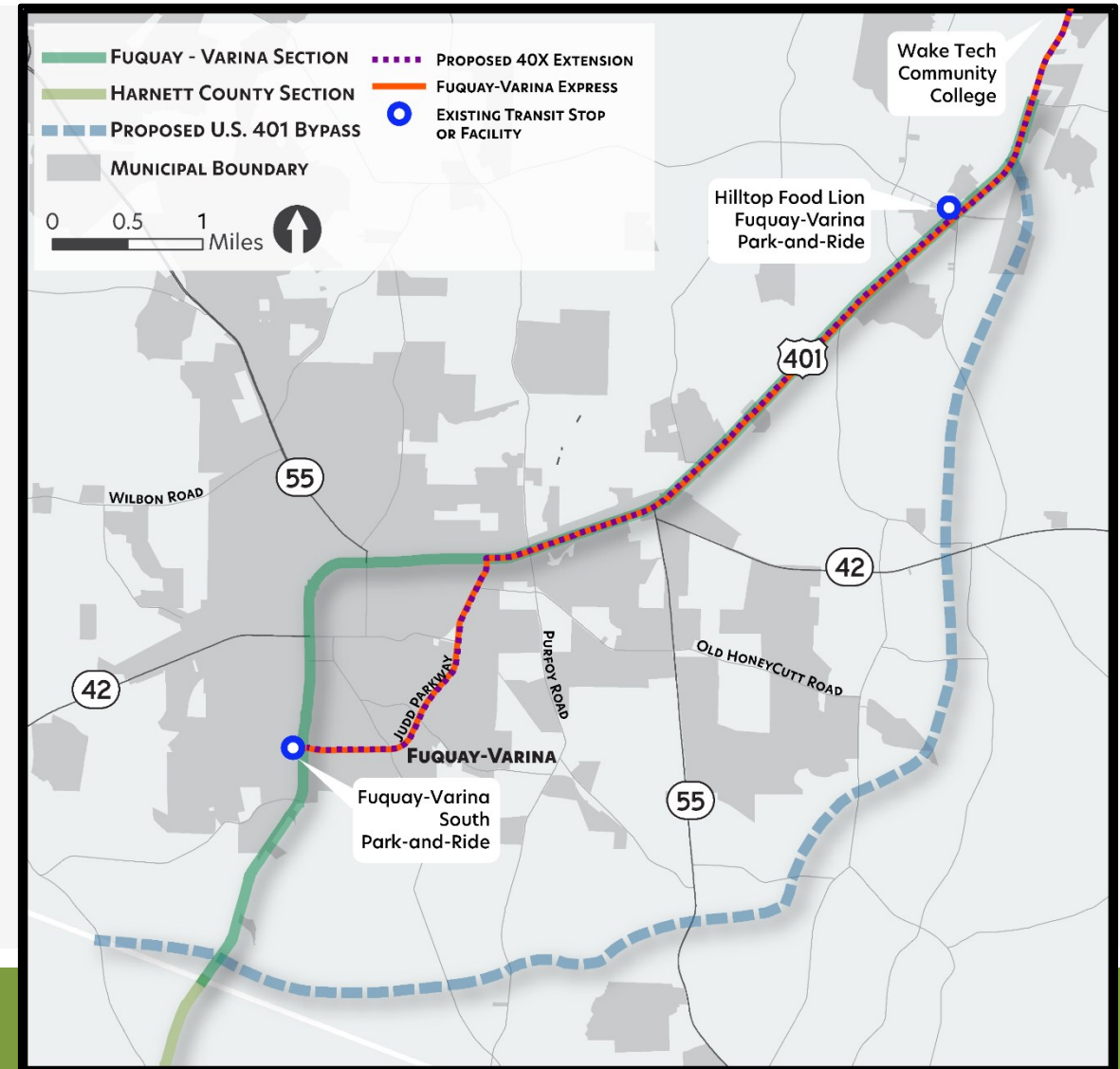


- Multi-use paths (MUP) or sidewalk and bicycle lanes throughout the corridor.
- Wide sidewalks or MUP through Downtown, parallel bike improvements.

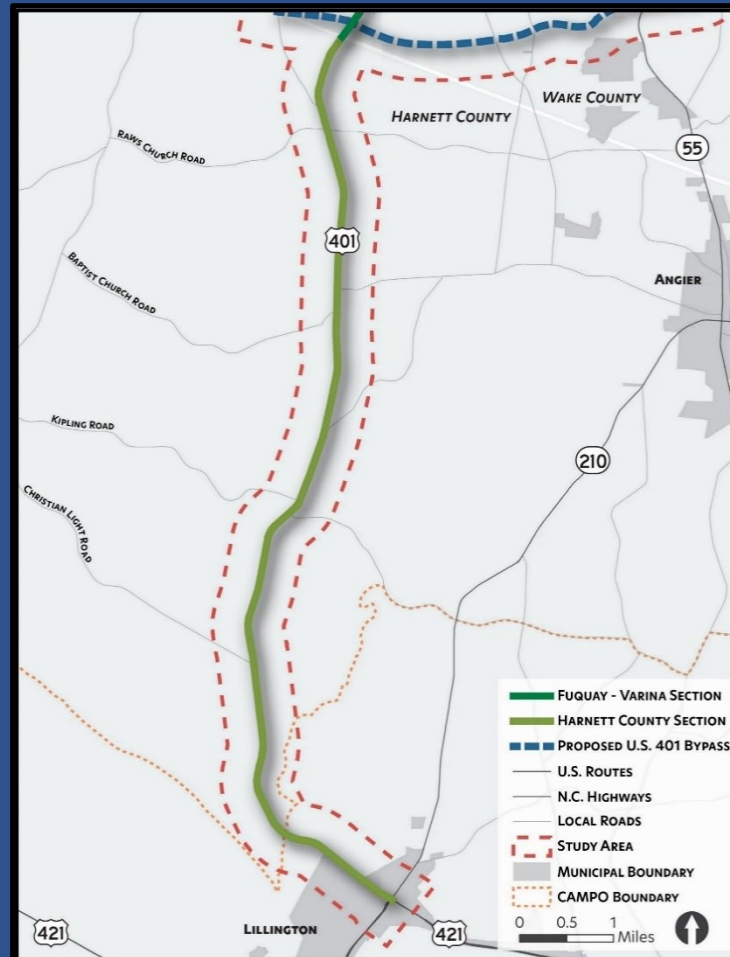


U.S. 401 in Wake County – Transit

- Strengthen connections to Garner and Raleigh.
- Connections to Holly Springs and Apex may be possible in the future.



Recommendations: Existing U.S. 401 in Harnett County



Harnett County Alignment

U.S. 401 CORRIDOR STUDY

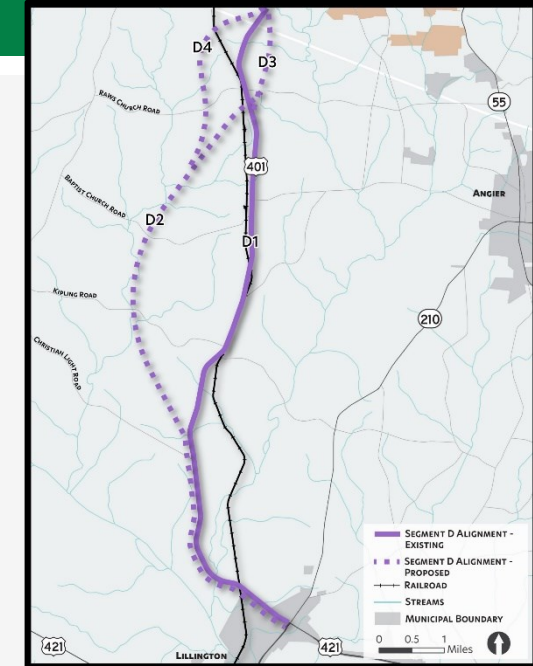
Wake County / Fuquay-Varina



- Currently 2 lanes at 55mph
- Utilize **existing U.S. 401 alignment** in Harnett County
- Widen to **4 lanes at 45mph**

Public Feedback (via survey question results and comments at in-person events and in survey):

- **Generally supportive of widening and speed reduction**
- Least support (51% *not* supportive; 8% neutral; 42% supportive) from Harnett residents *inside* the study area – comments suggest support for speed reduction but not widening due to property impacts.
- Majority support from all other respondents (including residents of Harnett County who live *outside* the study area with 32% *not* supportive).



Two Design Concepts based on Width

- **Narrow Cross Section (~120')**: Modification of section 4L with 10' MUP on both sides.
- Applicable where limited ROW is available due to railroad or other sensitive resources
- Reduction in travel lanes to 2

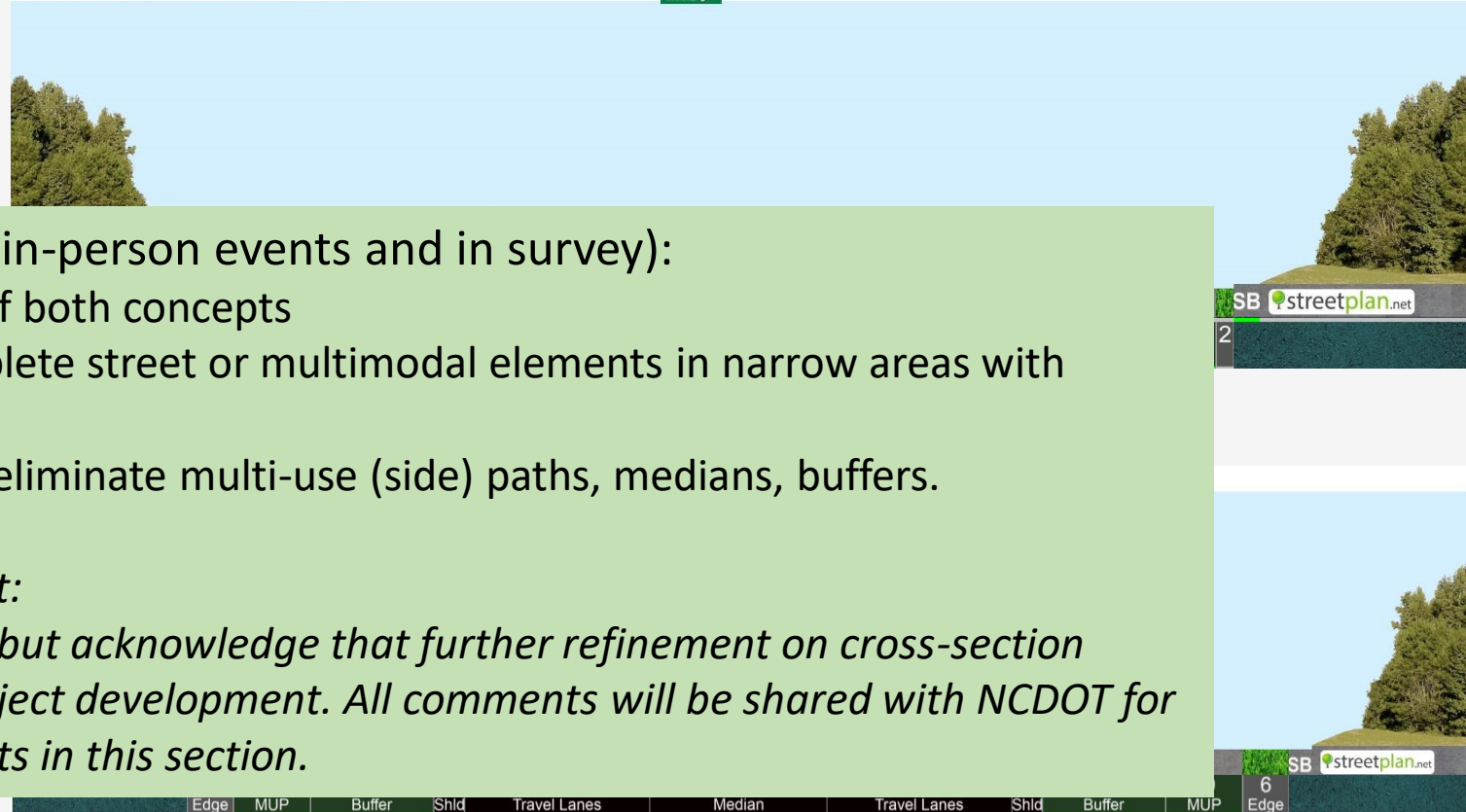
Public Feedback (via comments at in-person events and in survey):

- Majority generally supportive of both concepts
- Some concerns related to complete street or multimodal elements in narrow areas with property impacts
 - Desire to reduce width or eliminate multi-use (side) paths, medians, buffers.

Staff Recommendation for Final Report:

- *Keep the two design concepts but acknowledge that further refinement on cross-section elements will occur during project development. All comments will be shared with NCDOT for consideration on future projects in this section.*

US 401 Narrow Cross Section (~120') Right-of-Way: 113.5' of 113.5'



Bicycle and Pedestrian

U.S. 401 CORRIDOR STUDY

Wake County / Fuquay-Varina
Harnett County / Lillington

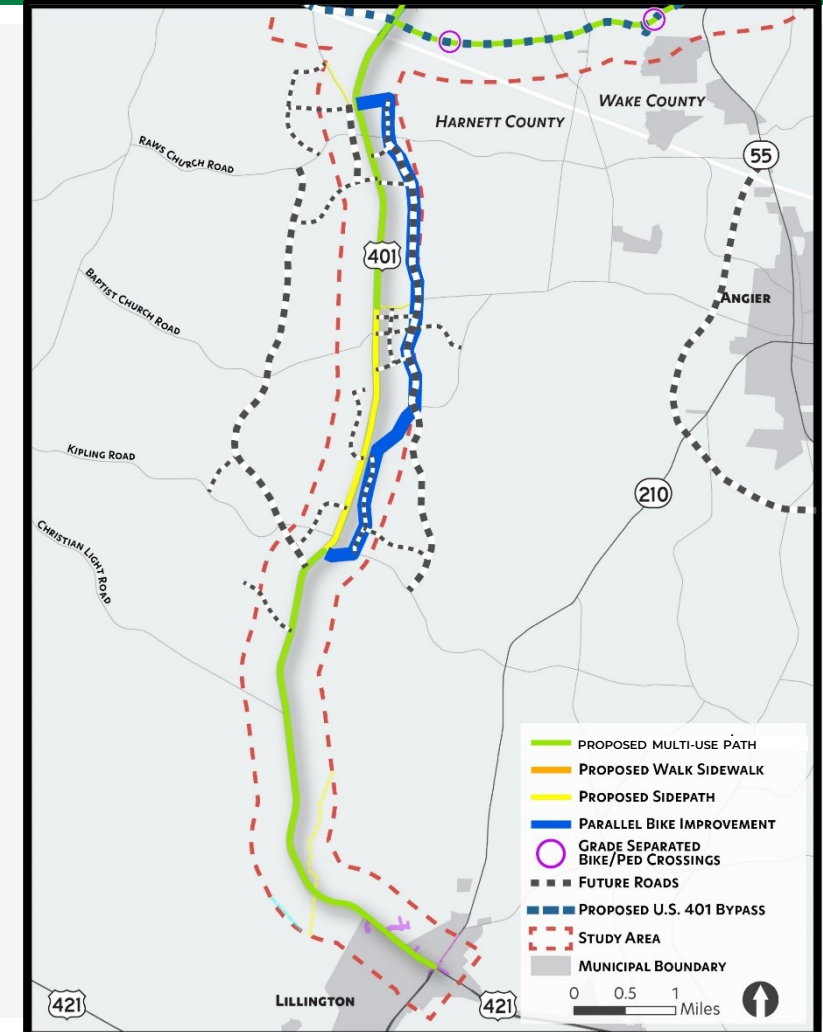


Pedestrian and bicycle facilities along
U.S. 401

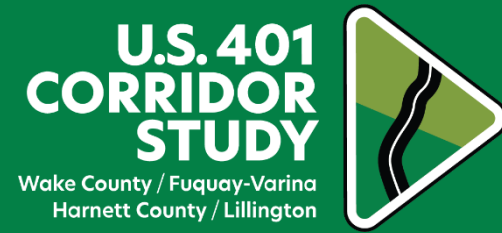
AND

Bicycle facilities along collector / local
streets between Rawls Church Rd and
Harnett Central Rd constructed as
development occurs

- Public Feedback for bike facilities on local streets:
Generally supportive or neutral.



U.S. 401 in Harnett County – Railroad Recommendations



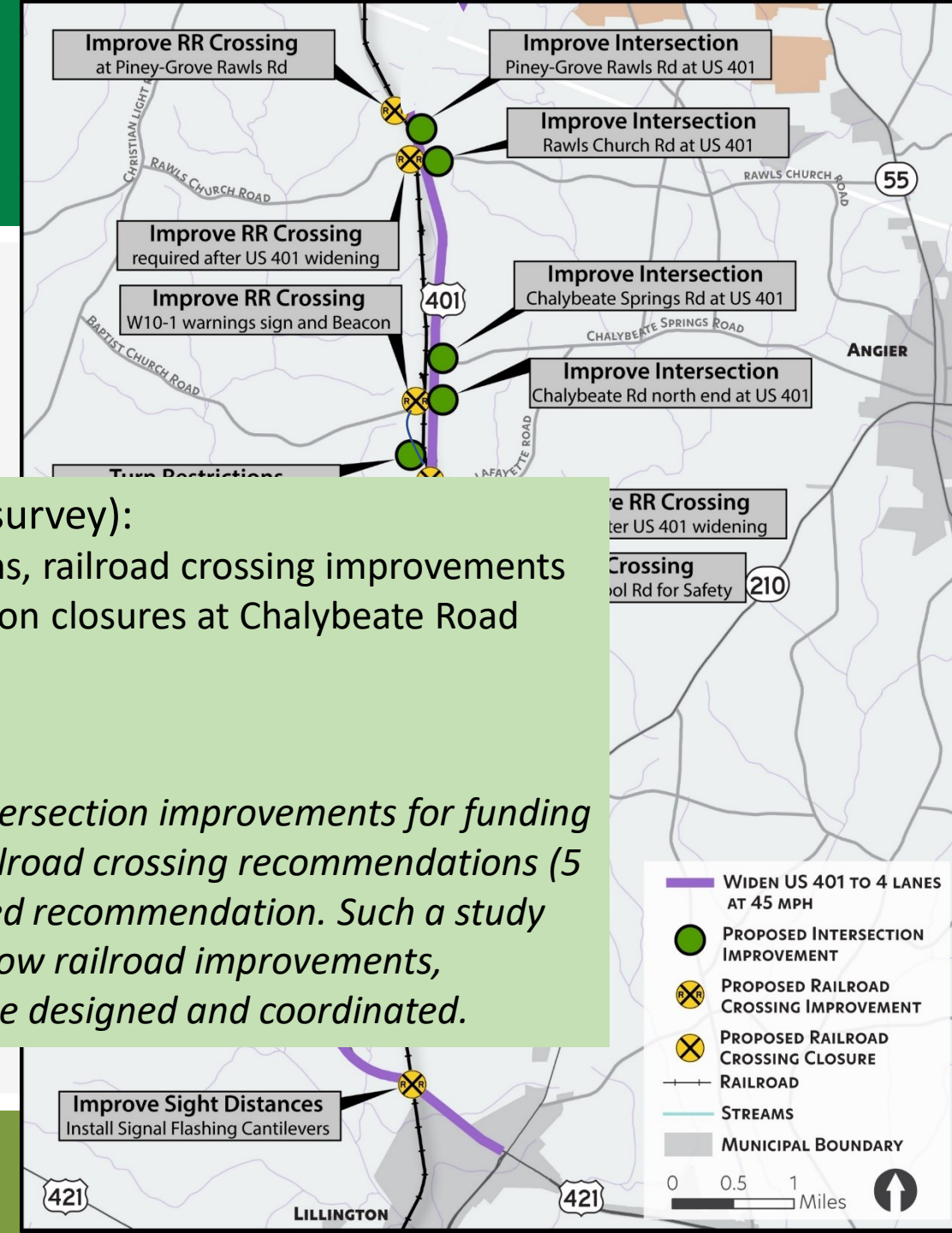
- Redesign the railroad crossings along U.S. 401 and other roadways in the study area to accommodate future widening anticipated due to growth in the area.
- Specific improvements recommended for crossings at/near:
 - Matthews Rd
 - Lafayette School Rd
 - Chalybeate Rd – northern and southern ends

Staff Note: Fayetteville to Raleigh Corridor submitted by NCDOT for the federal Corridor Identification and Development Program



Intersection Improvements

Piney Grove Rawls Rd	Signalize the intersection.
Rawls Church Road	Signalize the intersection.
Chalybeate Springs Road	Signalize the intersection.
Chalybeate Road	Signalize the intersection.



Public Feedback (via comments at in-person events and in survey):

- Strong support for intersection improvements, signalizations, railroad crossing improvements
- Concerns from within study area respondents for intersection closures at Chalybeate Road (southern end) and Lafayette School Road

Staff Recommendation for Final Report:

- CAMPO has begun process of submitting several of the intersection improvements for funding
- For Chalybeate (southern), Lafayette School Roads and railroad crossing recommendations (5 projects together) a smaller “hot spot” study is the updated recommendation. Such a study would look at all five projects together to better identify how railroad improvements, widening of U.S. 401, and the roadway intersections can be designed and coordinated.

intersection.



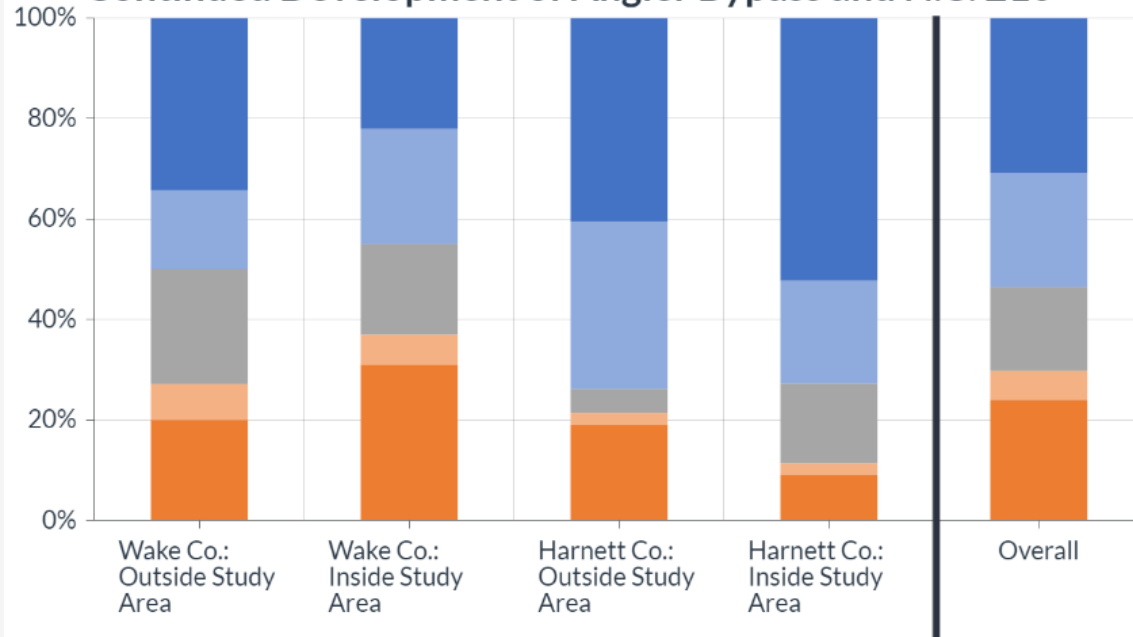
Recommendations:
NC 55, Angier Bypass, and NC 210

NC 55, Angier Bypass, NC 210

Public Feedback

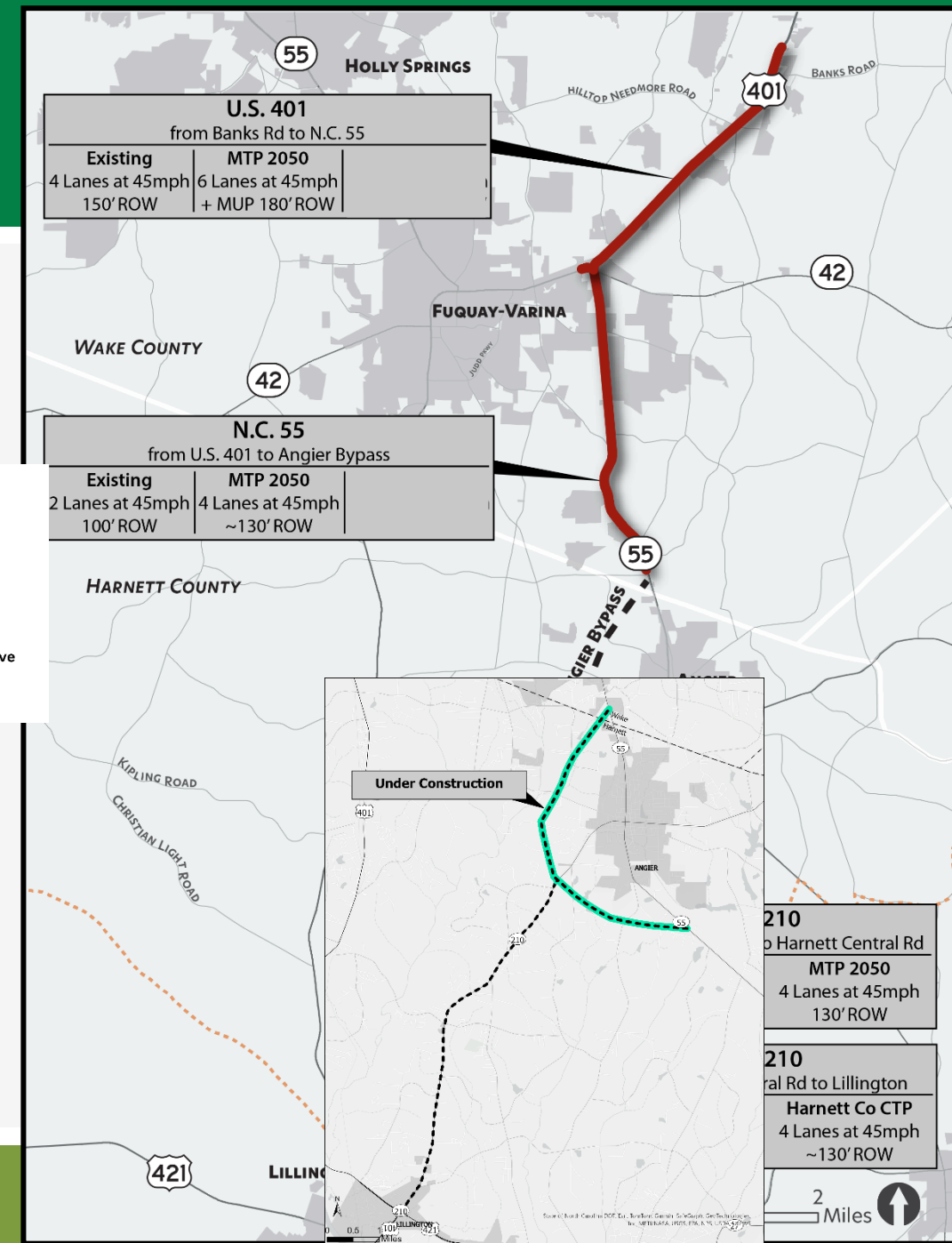
- Generally supportive
- Harnett Co.: Inside Study Area had strong approval with 73% support

Continued Development of Angier Bypass and N.C. 210



Level of Support

- Fully Supportive
- Somewhat Supportive
- Neutral
- Somewhat Unsupportive
- Not At All Supportive



Alternative X/Z

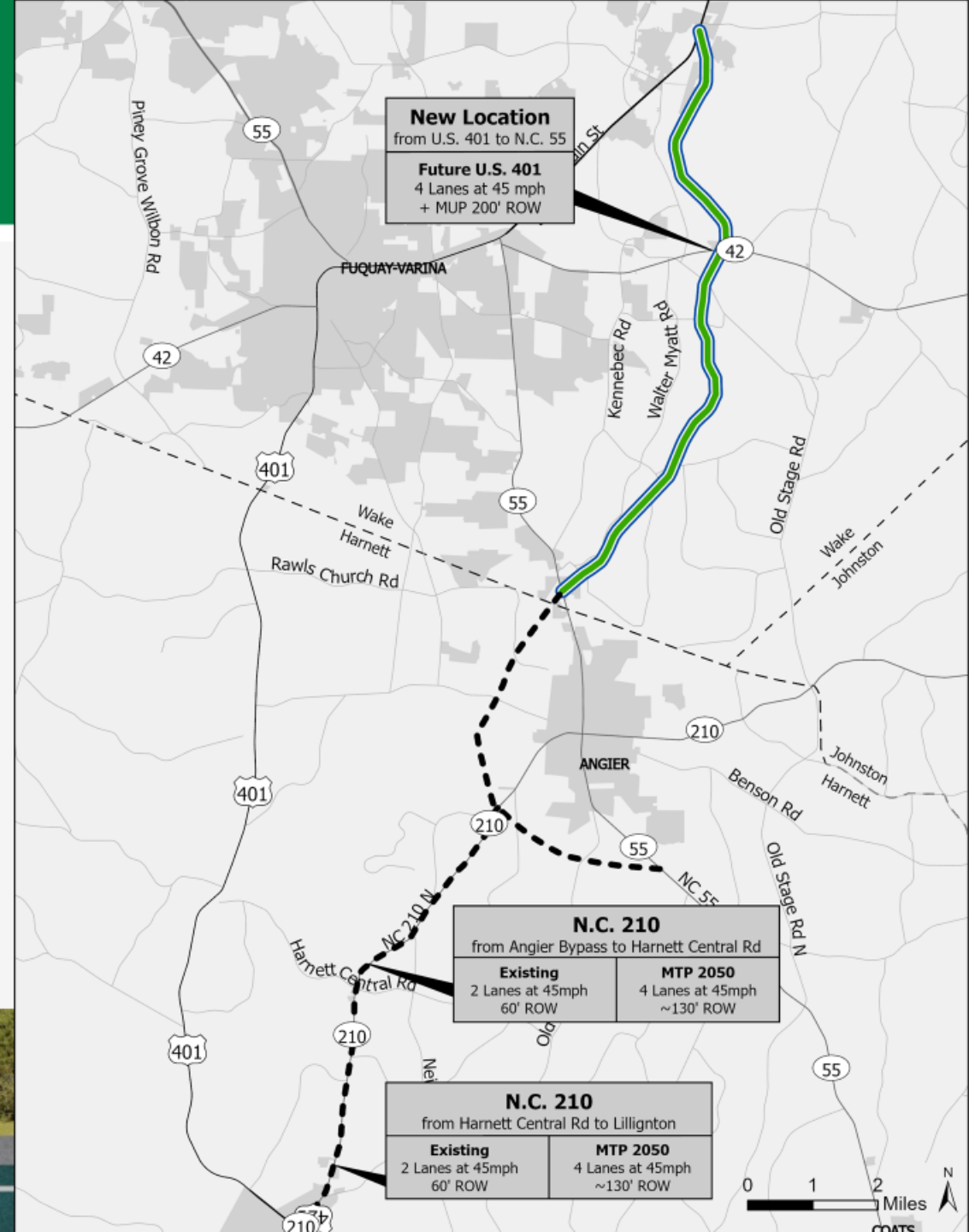
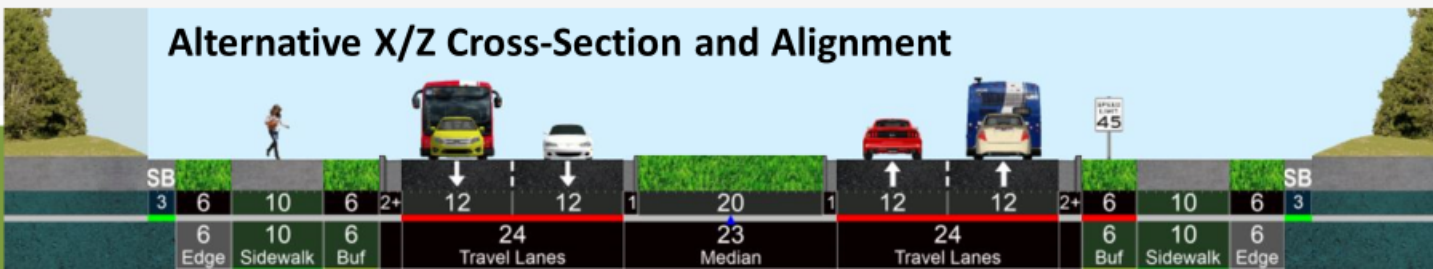
Benefits of Alternative X/Z

- Responsive to community feedback on priorities for impacts from any preferred alignment
- Connects to Angier Bypass and uses N.C. 210 widening proposed in MTP to accommodate Future U.S. 401
- Enhances existing travel patterns between Lillington and Banks Road
- Can still connect with Southern Parkway section shown in Alt X
- Places an alignment further east to accommodate growth in the area
- Can downgrade Southern Parkway to arterial road with 2/3 lanes at 35 mph

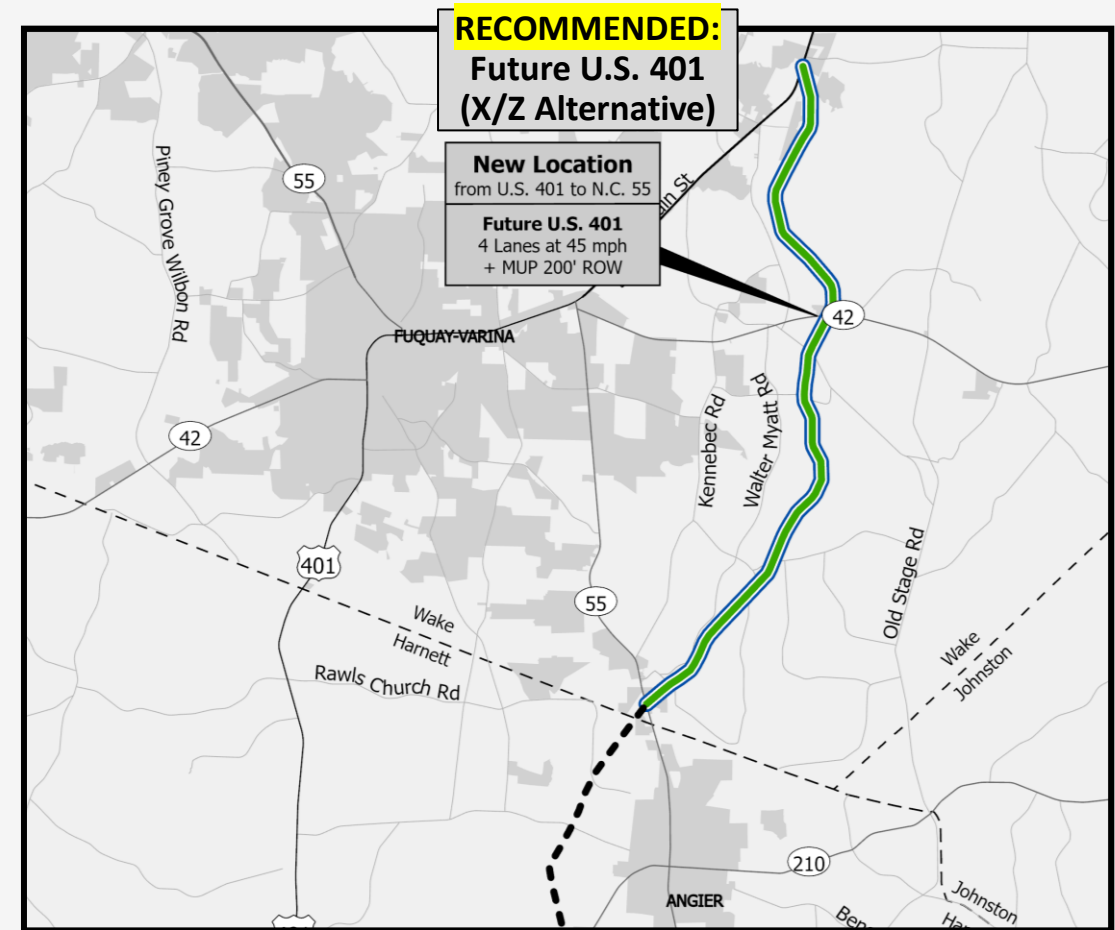
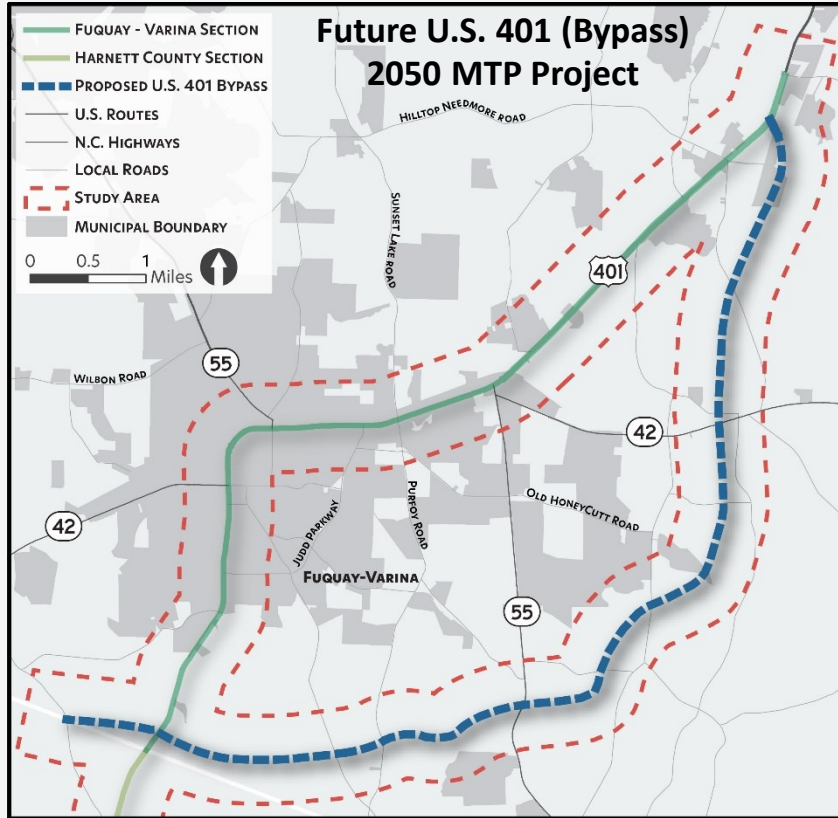
Challenges of Alternative X/Z

- Requires new Right-of-Way to construct
- Impacts approximately 100 properties; 58% of which are residential and 25% of which are Agricultural

Alternative X/Z Cross-Section and Alignment



Existing MTP Alignment vs. X/Z Alternative



X/Z Alignment is 1 to 1.5 miles east of the MTP alignment;
X/Z Terminates at NC 55 whereas MTP alignment goes further west



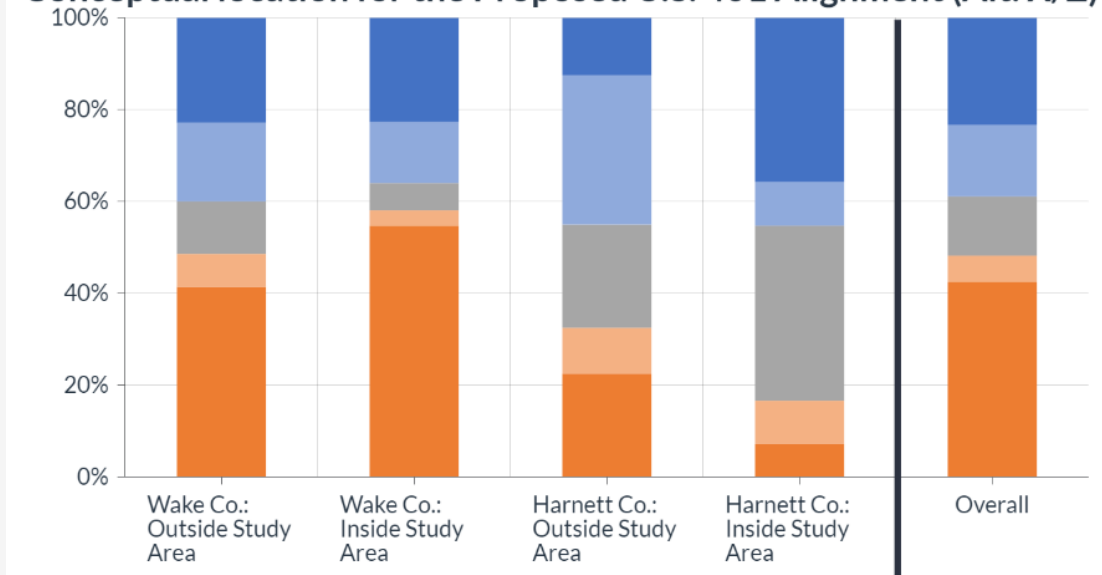
Proposed X/Z Alignment Public Feedback

- There were 365 responses to the question on the public's level of support to the Alternative X/Z, of which 200 responders described themselves as in Wake County: Inside the study area
- The responses **show generally mixed opinions** with 48% unsupportive, 13% neutral, and 39% supportive.
- The support for the alignment is consistent among all geographies

Comments: Reasons Not Supportive of XZ Alignment

- **Property Impacts**
- **Design**
 - Speed (45MPH) too low – desire for 55+MPH as identified with initial bypass project
 - Complete Street Elements - Not supportive of side paths, etc.; prefer narrow roadway to limit impacts
- **Growth:** Concerns that new roadway will encourage more development; prefer no new growth

Conceptual location for the Proposed U.S. 401 Alignment (Alt. X/Z)



Level of Support



Future U.S. 401 Recommendations

U.S. 401 CORRIDOR STUDY

Wake County / Fuquay-Varina
Harnett County / Lillington



- Based on:
 - Public feedback during Round 4,
 - Coordination with the Study's Technical Team, and,
 - Coordination with Stakeholder Jurisdictions

**The final recommendation is to advance
Alternative X/Z.**

- Alternative X/Z provides a better alignment than the U.S. 401 Bypass currently in the 2050 MTP.
- The project is still in the Planning Phase and is not planned for **construction until at least 2050.**



Planning

Programming
/Funding

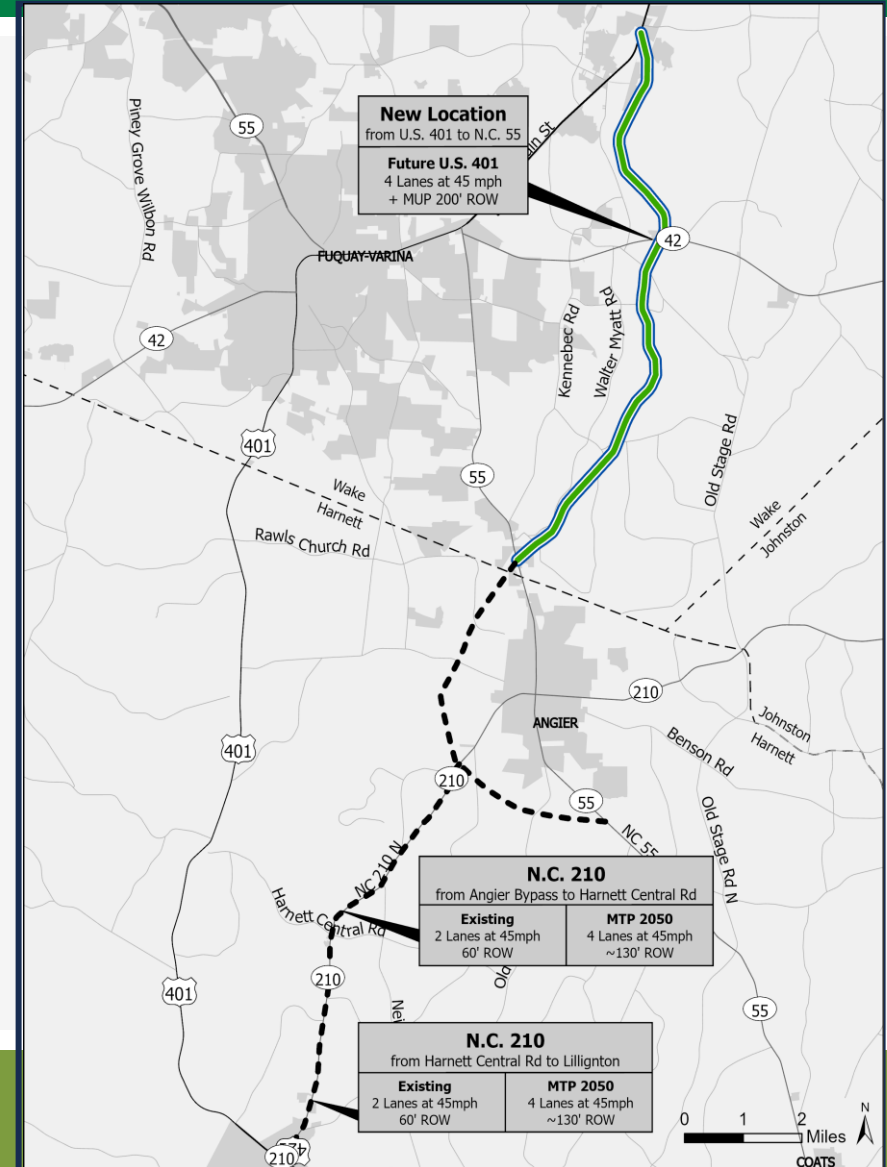
Project
Development

Design

Property
Acquisition

Construction

Maintenance



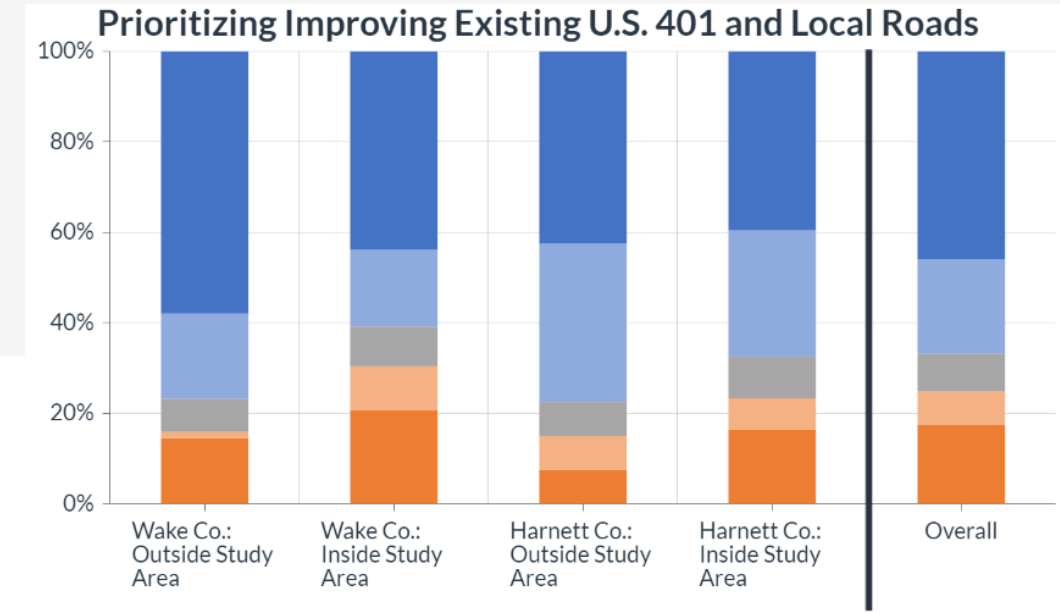
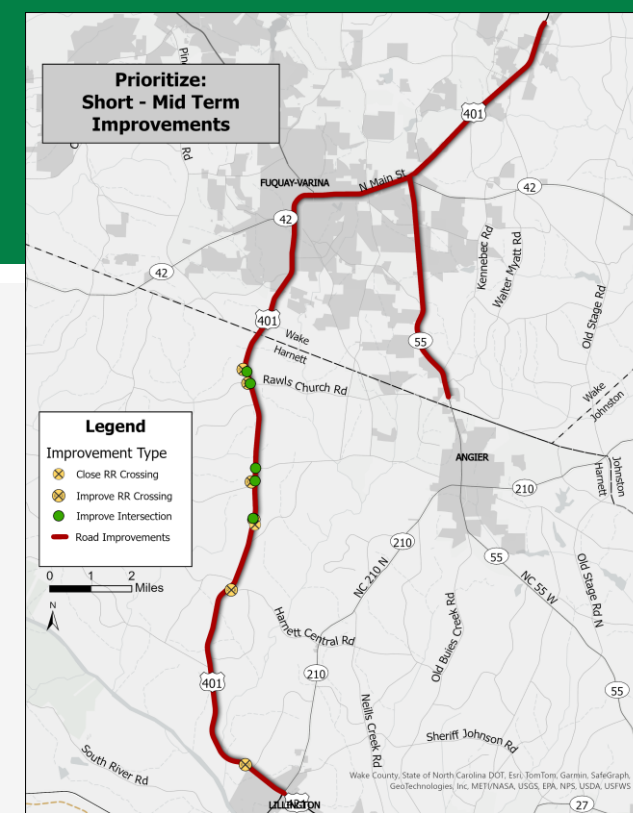
Recommendations: Short and Mid-Term Projects

Order of Project Delivery

- Recommended **projects for Existing U.S. 401** between Banks Road and NC 55, as **well as NC 55** between U.S. 401 and **Angier Bypass** should be **elevated to a nearer build year**.
 - Improvements to the Existing U.S. 401 occur in segments to best fit the topography and current conditions along the roadway

Public Feedback:

- Broad support for improvements on Existing U.S. 401 through downtown Fuquay-Varina and south into Lillington
- Support for prioritizing these as short-term recommendations with 67% of respondents supportive, 8% neutral, and 25% unsupportive

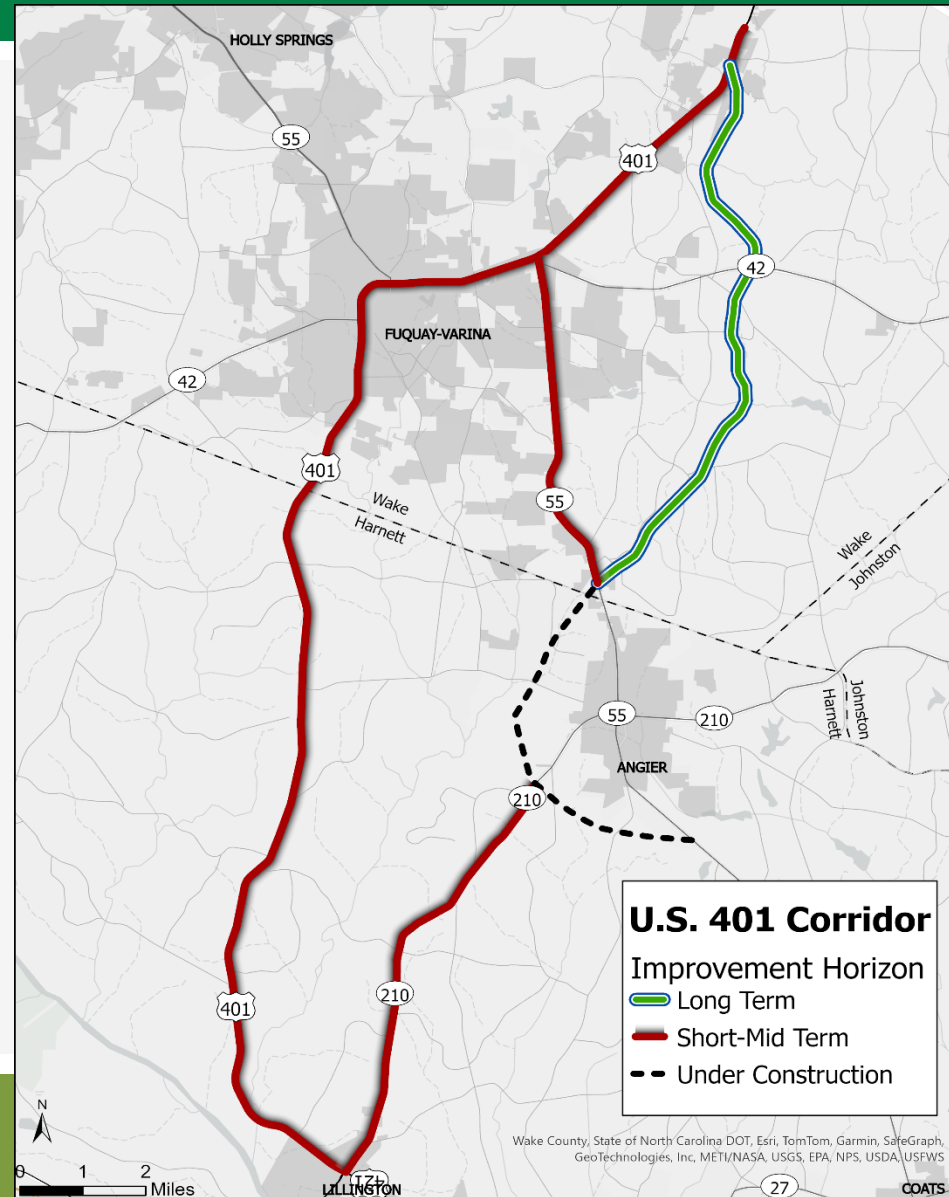


Level of Support



Order of Project Delivery

Final Recommendation



Final Steps

- Release of final recommendations and final report
 - CAMPO Executive Board considers “Endorsement” of the study’s recommendations/report for use in future MPO planning processes, in particular the 2055 Metropolitan Transportation Plan.
 - Round 4 Public Engagement Report will include all comments
- MPO, NCDOT, and local jurisdictions work to program the recommended study into the next project planning and funding steps in development, funding, and construction.

Final Report – Public Comment Period:
Feb. 19 – Mar. 20



Local Presentations

Town of Angier Board
January 10, 2024. 6:30 pm.

Harnett County Commissioners
January 30, 2024. 9:00 am.

Town of Fuquay-Varina Board
March 4, 2024. 7:00 p.m.

Wake County
Letter



7.1 US 401 Corridor Study – Final (Endorsement) Phase

Requested Action:
Receive as information.