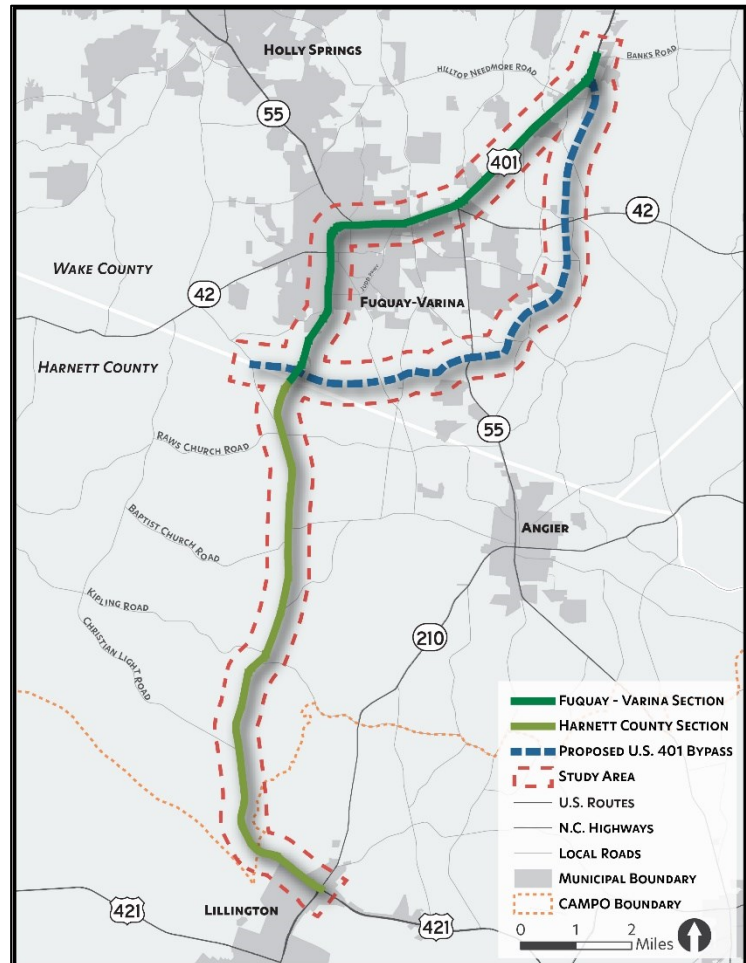




Executive Summary

The Capital Area Metropolitan Planning Organization (CAMPO) undertook the U.S. 401 Corridor Study to determine the proposed alignment and roadway type of future U.S. 401 as well as identify improvements to existing U.S. 401 and other study area roadways and intersections by developing a vision for the study area, analyzing short- and long-term solutions, developing several realistic, implementable, and prioritized projects that can be programmed into the appropriate Metropolitan Transportation Plan (MTP) time horizon, and administering an effective and meaningful stakeholder and public engagement process. This report outlines the process and results of the U.S. 401 Corridor Study and offers a recommendation for a Future U.S. 401 alignment along with other roadway improvements. Figure ES1 shows the Initial U.S. 401 Corridor Study Area (the study area would be updated during Phase 2, as described later in this Summary).

Figure ES1: Initial U.S. 401 Corridor Study Area



Study oversight consisted of a Project Management Team, made up of staff from the primary consultants, WSP, and CAMPO. A Core Technical Team and Stakeholder Oversight Team were also activated and public engagement was heavily utilized through the entire study process. Using this structure, a vision and goals were developed. The main vision was to: Develop appropriate transportation solutions for current and future growth in southwestern Wake County and Harnett County, providing a multimodal framework to accommodate growth and development through improved travel conditions that are safe and accessible while reflecting the diversity of communities, land uses, and transportation aspects within the study area and beyond, supporting economic development, and maintaining the character and livability in the area. The below goals were developed to guide the study.

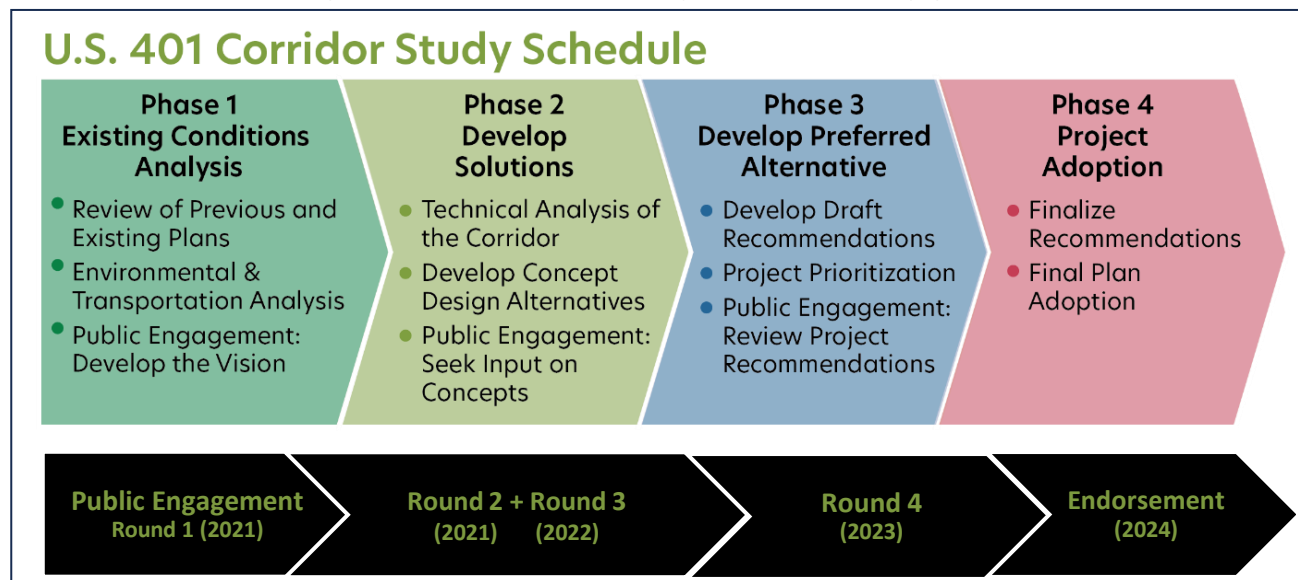
Figure ES2: U.S. 401 Corridor Study Goals



Public Engagement

Community engagement for the Study was tied to the four (4) phases of the overall project and included five (5) rounds of engagement. The following graphic demonstrates how the public was involved and their role within the phases of the Study's process.

Figure ES3: U.S. 401 Corridor Study Phases & Public Engagement



Future U.S. 401 Design Alternatives

At the onset of the study, development of the Future U.S. 401 alternatives revolved around the initial study area (see Figure ES1), which generally mirrored the alignment in the 2050 MTP. Four key parameters were chosen to evaluate impacts for each alternative: (1) Property impacts, (2) Agricultural impacts, (3) Environmental impacts, and (4) Project cost.

Initially during Phase 2: Development of Concept Design Alternatives, Future U.S. 401 alternative alignments were divided into three sections for the purpose of evaluation. Five to six alternatives were created for each section based on different parameters. At this stage, all alignments were 4-lanes at 55mph. The alignments are shown in Figure ES4.

- Section A goes from U.S. 401 to N.C. 42.
- Section B goes from N.C. 42 to N.C. 55.
- Section C goes from N.C. 55 to U.S. 401 with an optional extension to Piney-Grove Rawls Road depending on the alternative.

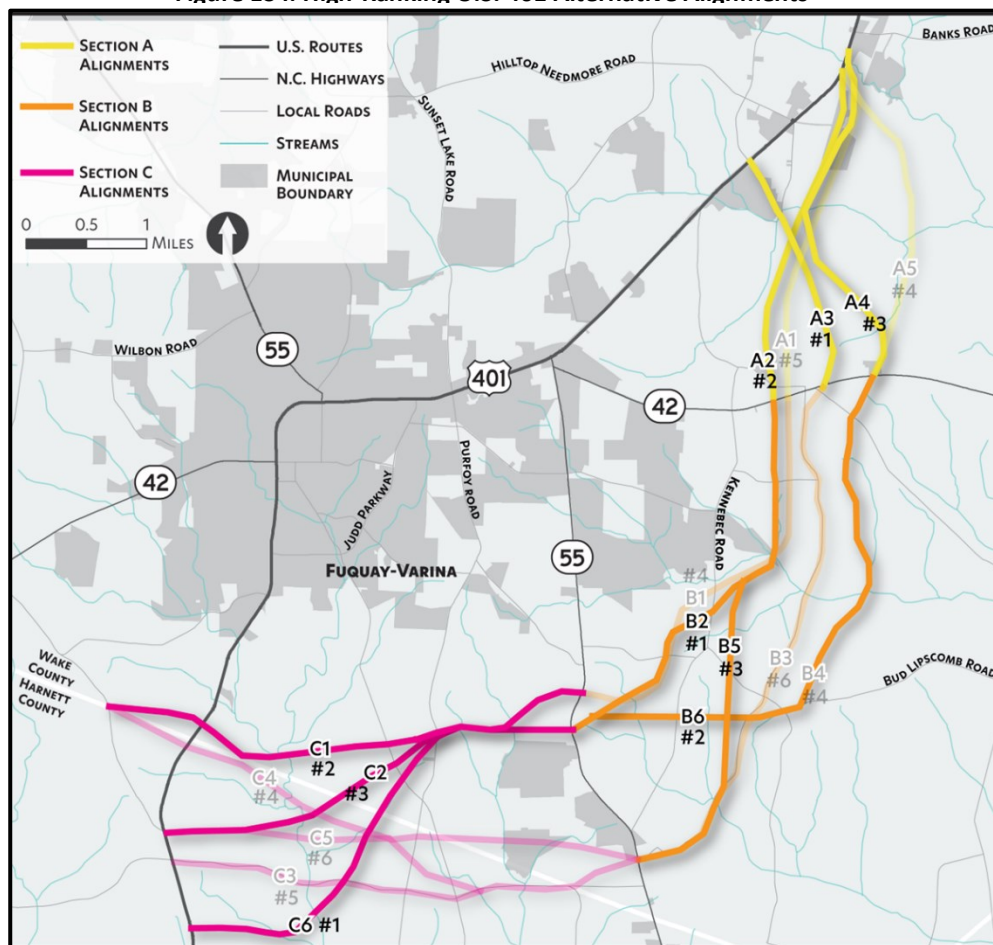
Each section also had a suffix affiliated with it, as follows:

- Suffix of 1 denotes that the alignment follows the same path as in the Triangle Regional Model.
- Suffix of 2 denotes that the alignment is a slight variation of '1' minimizing the impact on land parcels by aligning it through parcel boundaries.
- Suffix of 3 denotes that the alignment maximizes the use of existing roads.

- Suffixes of 4, 5 and 6 follow newly created alignments minimizing the constraints mentioned previously.

The analysis combining public engagement results with parameters based on GIS data resulted in filtering out the most impactful alignment alternatives. In Section A, alternatives A2, A3 and A4 ranked the highest. Similarly, alternatives B2, B5 and B6 ranked the highest among section B, and C1, C2 and C6 ranked highest among section C. The high-ranking alternatives along with the ranks of the alternatives are shown below in Figure ES4.

Figure ES4: High-Ranking U.S. 401 Alternative Alignments



Three alignment alternatives were created by combining the high-ranking segments.

- Segments A4, B6 and C1 were combined to form Alternative X.
- Segments A2, B2 and C2 were combined to form Alternative Y.
- Segments A2 and B5 were combined to form Alternative Z. For this alternative, segment C1 would remain as Southern Parkway, while N.C. 210 will be upgraded and connected to section B5 using N.C. 55 and Angier Bypass.

Alternatives X and Z were selected to advance to further evaluation. Alternative Y was not selected because it was very similar to the original alignment in the MTP. At this stage of the project, the two

alternatives under consideration were X and Z, both at 4-lanes at 55 mph speed. Alternative X is highlighted in Figure ES5 and Alternative Z is highlighted in Figure ES6.

Figure ES5: Alternative X

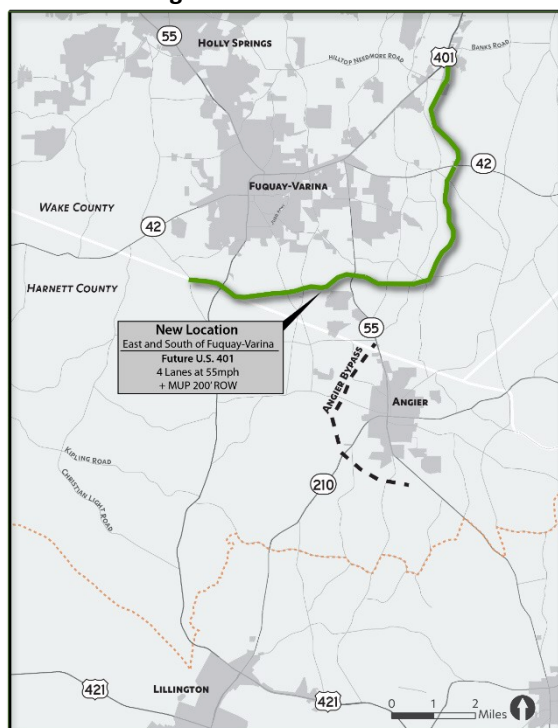
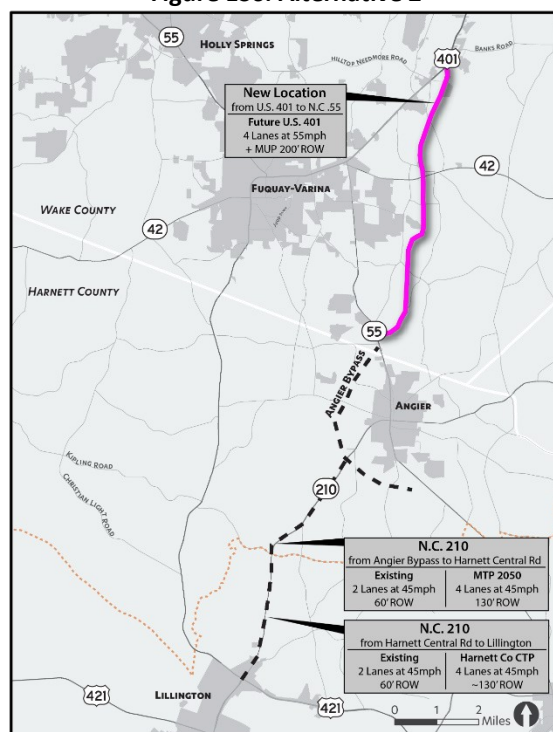


Figure ES6: Alternative Z



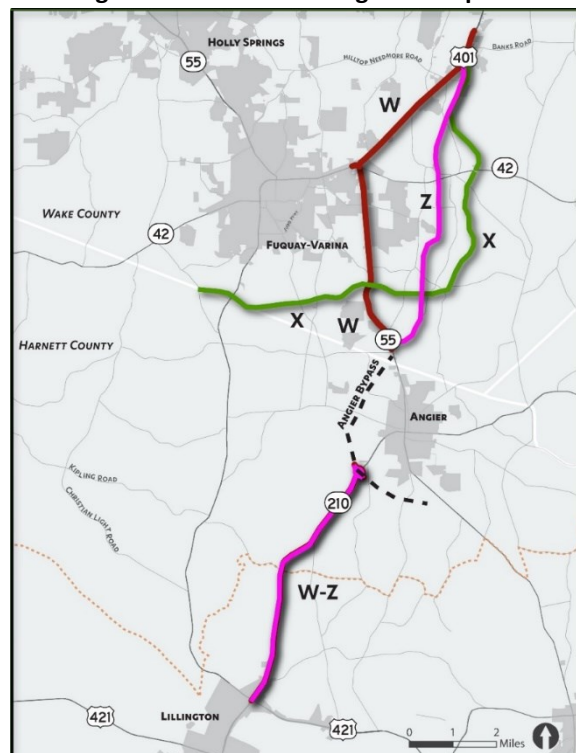
Development of Additional Alignments for Future U.S. 401

During the previously described Phase 2 review of the first set of design alternatives, requests were received from members of the community to expand the study area in order to explore and evaluate additional options that could accomplish the study goals.

In December of 2021, the CAMPO Executive Board directed staff to review additional ideas for alternatives, including considering options that widen existing roadways as well as alternatives further east of the alignments under consideration at the time of the resolution.

Findings of analysis were presented to the CAMPO Executive Board in March of 2022. At that point, the Board directed staff to revise the study scope and schedule to include the additional route of Alternative

Figure ES7: Additional Alignment Options



Alternative XZ is a combination of the eastern part of Alternative X with the southern part of Alternative Z, the conceptual alignment of which is shown in Figure XXX. The resulting Alternative XZ Alignment starts at U.S. 401 near Banks Road, follows alignment X (green corridor) until it crosses over to alignment Z (purple corridor) and connects to the Angier Bypass. The Alternative XZ alignment is shown in figure ES8, with the connection between the Alternative X and Alternative Z segments smoothed out.

The latest analysis was then presented during a 4th round of community engagement in the Fall of 2023 as the Preferred Alternative for a Future U.S. 401, along with the rest of the corridor study's roadway, transit, and bicycle and pedestrian improvements (simply put, these were the project's Draft Recommendations).

Overview of Recommendations:

The following U.S. 401 Corridor Study Full Report details the project's final recommendations, which were finalized considering input received through the Study's CTT, SOT, public engagement process, and coordination with stakeholder jurisdictions.

- Alternative XZ should become the Future U.S. 401 alignment included in the 2055 MTP, updated from the U.S. 401 Bypass alignment included in the MTP 2050. Alternative X/Z provides a better alignment than the current US 401 alignment in the 2050 MTP.
- The project is still in the planning phase and is not planned for construction until at least 2050. Future studies of US 401 may be considered over time in future years to refine the alignment based on development in the area.



Planning	Programming /Funding	Project Development	Design	Property Acquisition	Construction	Maintenance
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- CAMPO should work to prioritize projects identified in the MTP 2050 for U.S. 401 between Banks Road and N.C. 55, N.C. 55 between U.S. 401 and Angier Bypass, and N.C. 210 between Angier Bypass and U.S. 401/ U.S. 421. These projects should be elevated in priority and given a construction horizon year for completion before Alternative XZ is built.
- CAMPO should examine and determine the cost of a variety of small intersection projects on study area roadways and consider these for inclusion into the MTP. The inclusion of projects will provide better context on the timing of the Alternative XZ development.
- The recommendations also include improvements to, or creation of, bicycle and pedestrian facilities as well as transit service along the corridor.
- In Harnett County, between the Wake County line and Lillington, in order to mitigate the potential impacts to property and sensitive resources, two alternative concepts were developed and recommended for this section of U.S. 401 that would result in widening from two lanes to four lanes: a standard 150' right-of-way to be used where sufficient right-of-way can be obtained and a narrow cross-section of 120' to be used where right-of-way constraints due to the railroad or cultural resources exist.
 - There are also a number of shorter-term improvements identified for the U.S. 401 segment in Harnett County that would address several congestion and safety concerns.