

Western Corridor Rapid Bus Extension Study

The Capital Area Metropolitan Planning Organization (CAMPO) is conducting a study to identify and evaluate rapid bus service options for extensions to the planned Wake Bus Rapid Transit (BRT): Western and Southern Corridors. The planned Wake BRT: Western Corridor will connect downtown Raleigh to downtown Cary. The location of potential Western extension is between the Town of Cary and Research Triangle Park (RTP).

This study identified **four (4) key elements of BRT** that are also fundamental the rapid bus extensions:

Reliability



Comfort



Speed



Convenience



The study also identified **four (4) goals for the proposed** rapid bus service:

Provide access to local or regional destinations and major activity centers

Create productive and sustainable service

Align safety and compatibility with the surrounding environment

Provide access to transit services

Where are We in this Process? The study team has...

- Identified and evaluated potential alignments for rapid bus extensions and transit priority treatments.
- Evaluated potential transit service operating levels for each extension - the appropriate type (mode) of transit, how often service will run, and destinations to serve.
- Developed a set of recommended alternatives to consider for adoption as locally preferred alternatives (LPAs), a phased implementation recommendation for each corridor, and identified potential program funding opportunities.
- Collected and integrated community feedback throughout the identification, evaluation and development processes.

Tell Us What You Think!

The **Western Corridor Rapid Bus Extension Study** Team would like to know your thoughts on the draft results and recommendations! The **public comment period is from Nov. 7 to Dec. 16**. Please review this handout showing the recommended alignment, as well as a list of further additional operating considerations and analysis recommendations. Additional information can be found at <https://wakebrtextensionsstudy.com/>. Send comments by email or voicemail at the address/ phone number below.



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Phase I and II Evaluation Highlights

Screening results from phase I of the route evaluation process identified three alignments that could support rapid bus service from Cary to the (future) Regional Transit Center and The Hub at RTP. The evaluation considered the future transportation network, land uses, and population and employment conditions of the Western Corridor (beyond 2035).

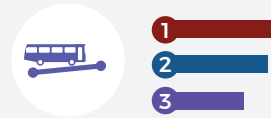
Alternative 1 travels along Chapel Hill Road and NC 54 between Cary and RTP.

Alternative 2 turns off of NC 54 at Weston Pkwy, following Evans Rd/McCrimmon Pkwy before rejoining NC 54 on its way to the Hub at RTP.

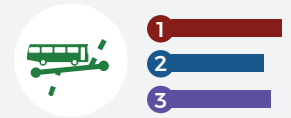
Alternative 3 turns West off of NC 54 at Morrisville Pkwy and follows Davis Dr, using Merrion Ave and extended Faulkner St through RTP, on its way to the Hub at RTP.

Each alternative features approximately 10 to 15 stations, with average spacing varying based on surrounding land uses.

Transit Trip Generators



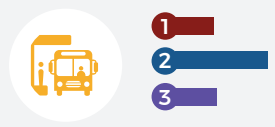
Transit Connections



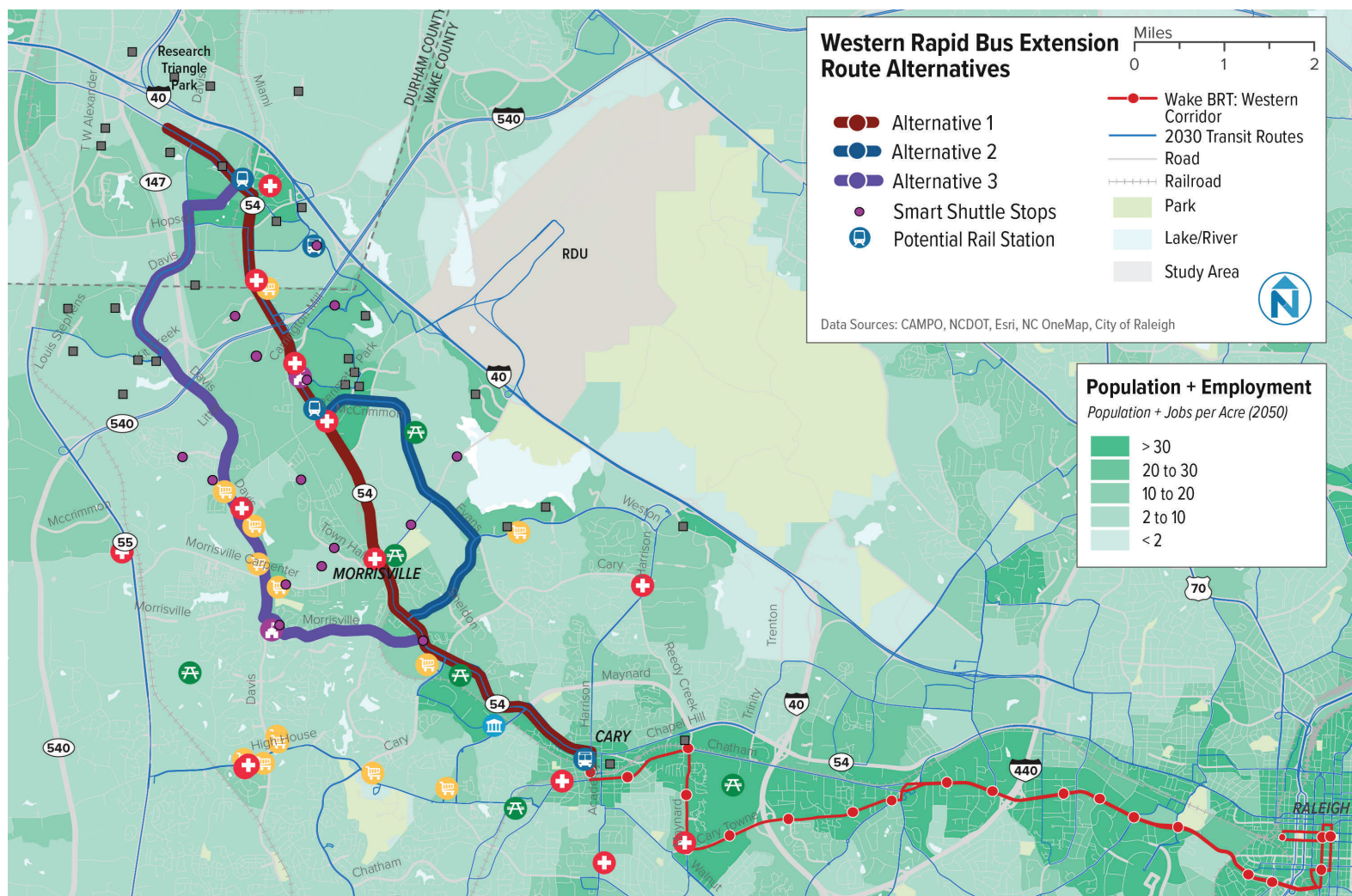
Transit Priority & Traffic Operations



Service Productivity



The colored bars represent how well the alternatives scored in each of these categories.



Phase II used ten (10) detailed criteria to evaluate the alignment and routing options. Each Alternative potentially offers different benefits and tradeoffs when looking at potential to support rapid bus service.

GOAL: Access to local or regional destinations and major activity centers



Station area connections to daily needs (supermarkets, hospitals, schools, retail, etc.)



Future station area employment density and total jobs

GOAL: Safety and compatibility with the surrounding environment



Planned roadway and land use improvements



Transit priority compatibility (speed & reliability treatments)



Station area pedestrian safety (existing/planned pedestrian facilities and conditions)

GOAL: Access to transit services



Station area population served

Equitable station area access (potential transit-reliant riders)



Future Local and regional transit connectivity

Non-motorized connections (existing/future bikeways and trails)

GOAL: Productive and sustainable service



Construction costs (includes any land and vehicles)

Annual operating costs



Potential ridership (all riders and transit-reliant riders)

The detailed analysis looked at long-term (2050) conditions in the Western Corridor, assuming opening year of **rapid bus service would likely occur after 2035**.

Alternative 2 is the top performing alternative (from Cary to RTP), due to better long-term redevelopment opportunity and potential for transit speed and reliability investments.

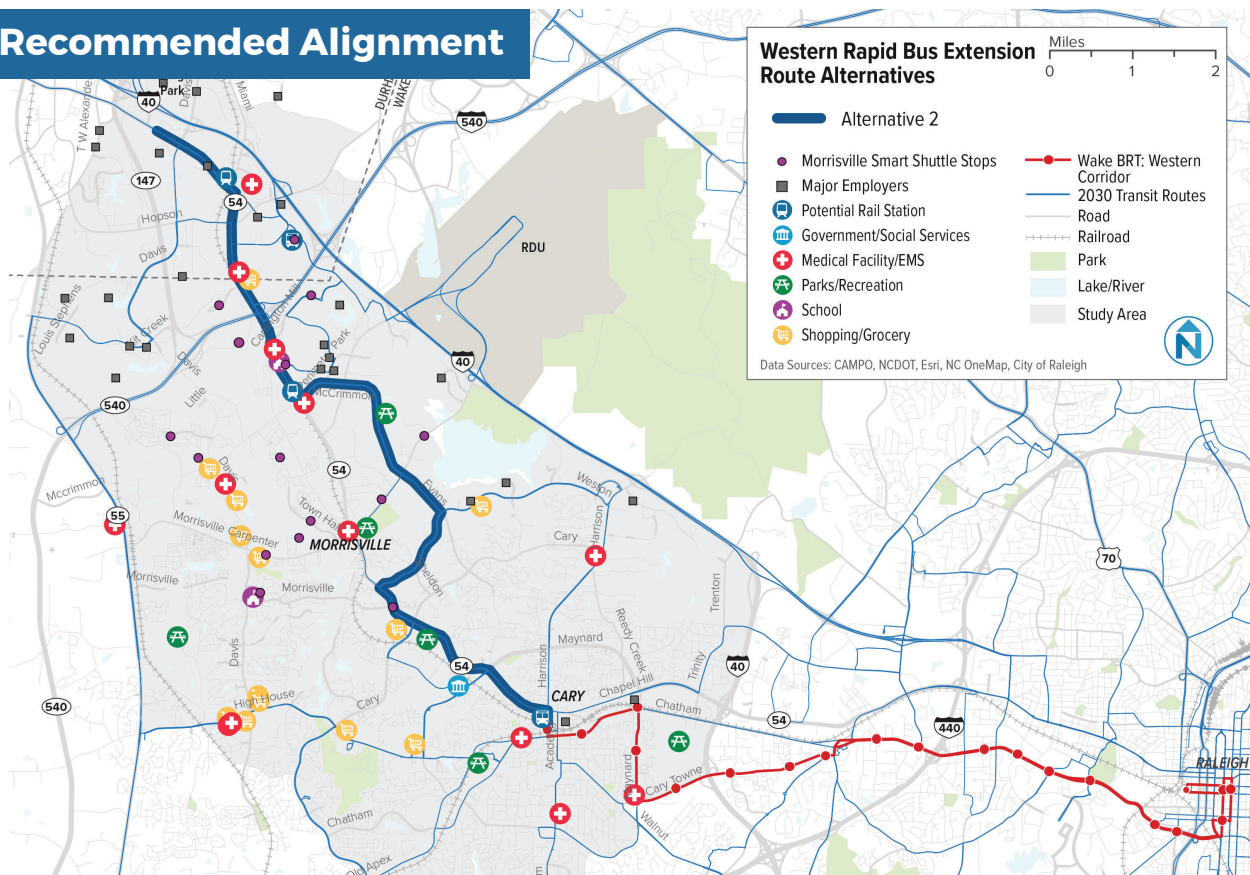
- **Alternative 1** is the most direct alignment and connects to slightly higher density land uses but is also significantly constrained by the railroad (NCRR).
- **Alternative 3** would introduce high quality transit service to several communities that do not currently have any. But its routing would not serve the proposed Morrisville commuter rail station.
- Planned roadway improvement projects along Chapel Hill Rd and N.C. 54 are more beneficial to **Alternative 1** and **Alternative 2** than those along Davis and Dr **Alternative 3**.
- Estimated differences for both construction and operating costs are minor between the alternatives.

A "1-seat ride" to Raleigh is more attractive than a separate service from Cary to RTP.

- The ridership forecast projects a low number of riders in the Western extension, by itself, regardless of alternative selected (maximum of +/- 1,000 per day).
- Creating a seamless, 1-seat rapid bus ride from RTP to Downtown Raleigh may increase ridership to +/- 2,200 per day.

Additional analysis needed: Since rapid bus service between Cary and RTP would operate less often than the core BRT service (Cary to Raleigh), additional analysis is needed to determine the operating schedule as well as create a consistent look and feel through the design of stations and vehicles.

Draft Recommended Alignment



Community Feedback

Public engagement has been an important component helping to inform this study. A robust outreach and engagement program was designed to reach the diverse communities that live, work, and travel through the study area. **Community input was used to:**

(Phase 1) Develop study goals (shown on the front cover)

(Phase 2) Prioritize the evaluation criteria and provided preferences for alternative routing options. Community members and stakeholders in the Western corridor extension had stronger preferences towards connecting to local centers of daily activity and multimodal transportation options (Goal 1), as well as developing a competitive transit network that can grow and evolve with time (Goal 4).

Over 75% of survey respondents indicated that all three alternatives "met" or "somewhat meet" the goals of the study, with **Alternative 3** receiving slightly higher overall support than **Alternative 1** and **Alternative 2**.

Next Steps

The local and regional transportation network between Raleigh and Durham continues to evolve with growing markets. The **Western BRT corridor (Raleigh to Cary)** is proposed to begin revenue operation after 2026. Additional improvements to the fixed route bus network are under development through the Wake Bus Plan as well as plans by stakeholders like the Towns of Cary and Morrisville to invest in transit supportive land uses and infrastructure in advance of the projected implementation of rapid bus service (beyond 2035).

Conceptual solutions for rapid bus service between Cary and RTP are envisioned to go through additional planning and development to determine the appropriate method of extending the Western BRT. The Rapid Bus team will coordinate with CAMPO and regional stakeholders to identify a locally preferred alternative (LPA) alignment for rapid bus service as well as identify unresolved or critical operating, funding, and constructability issues for further study.