



MEMORANDUM

To: Ben Howell (CAMPO)
From: Yanisa Techagumthorn & Thomas Wittmann (Nelson\Nygaard)
Date: May 21, 2026
Subject: **Wake BRT Western and Southern Extensions: Locally Preferred Alternative**

Overview

The Wake Bus Rapid Transit (BRT) Extensions Concept of Operations (COO) Study builds upon the previous 2023 Wake BRT Extensions Major Investment Study (MIS) and confirms locally preferred alternatives (LPAs) for BRT service along two extension corridors in the Wake Transit BRT program. The Western BRT Extension is a proposed 11.4-mile corridor that would connect the Town of Cary to Research Triangle Park (RTP), and the Southern BRT Extension is a proposed 17.2-mile corridor that would connect the towns of Garner and Clayton. Together with the core Western and Southern BRT corridors, the recommended extension corridors would provide BRT service from RTP to Clayton via Downtown Raleigh.

The LPA for each extension corridor includes the preferred alignment, mode, termini, and station locations. Recommended operating patterns, spans and frequencies, and transit priority treatments are also included for each extension corridor. Recommendations will be refined during subsequent design and engineering phases of BRT service development. Construction of necessary infrastructure for the Western and Southern BRT Extensions is funded to begin as early as 2030, and revenue operation is proposed to begin as early as 2032, but will be dependent on the implementation timelines of the core Western and Southern BRT corridors.

LPA Development Process

The LPA for the Western and Southern BRT Extension corridors was developed by CAMPO through the 2023 MIS and 2026 COO Study. Activities conducted as part of each study are summarized below:

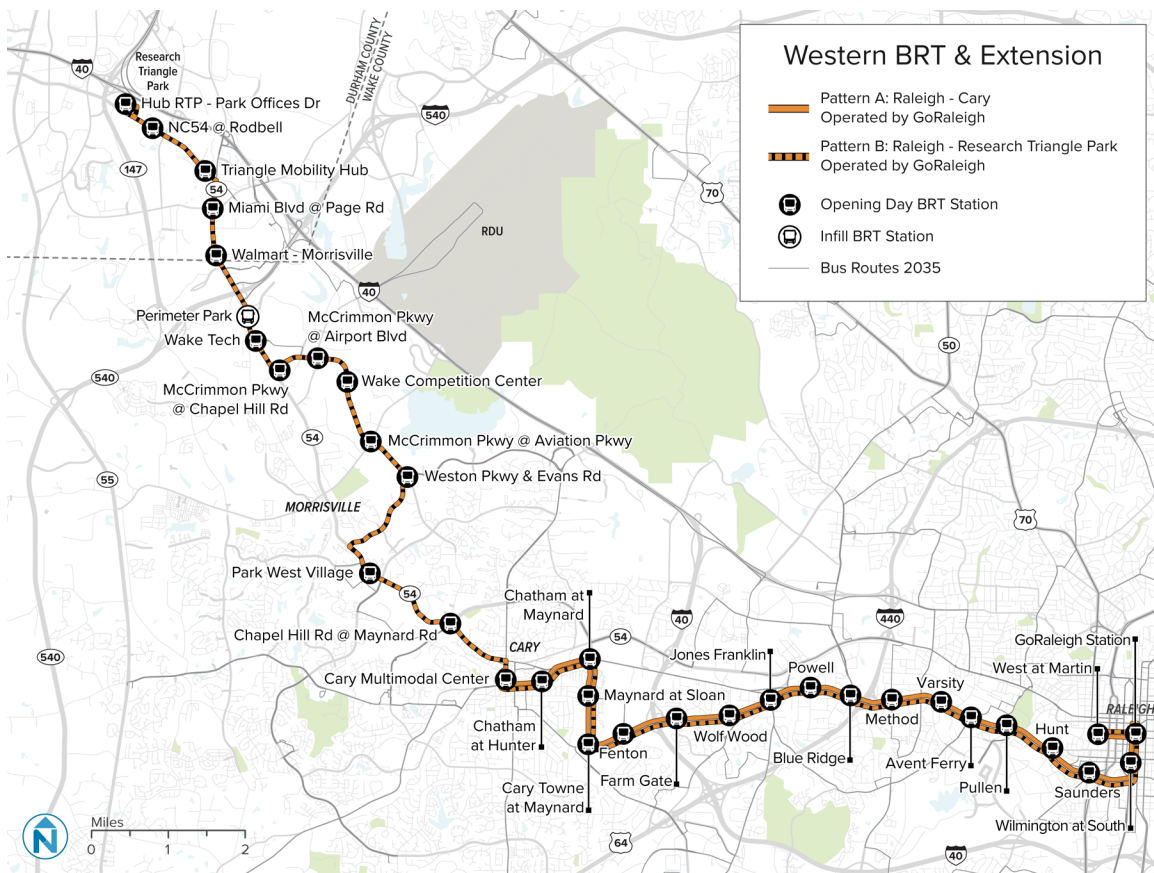
- **2023 MIS:** The 2023 MIS was conducted in response to anticipated growth in the region that would justify the need for extensions of the core Western and Southern BRT corridors identified in the 2018 Wake BRT MIS following the original 2016 Wake Transit Plan. Alignment alternatives were developed based on existing conditions and

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projected transit demand and were evaluated based on detailed criteria to select the preferred alignment for each extension corridor. The 2023 MIS also included a robust outreach program, including three engagement phases throughout 2021 and 2022, that informed the preferred alternative selection.

- **2026 COO:** The 2026 COO was intended to answer remaining operational questions coming out of the 2023 MIS, ultimately selecting a project sponsor, refining the LPA for each extension corridor, and developing detailed capital, operating, and implementation plans in support of the design and engineering phases. Operating scenarios were developed and evaluated through site visits, technical analysis, and stakeholder input.

Figure 1 Western BRT & Extension LPA Alignment and Station Locations



Western BRT Extension LPA

The 2023 MIS identified the preferred Western BRT Extension alignment from **Cary to RTP via Chapel Hill Road and McCrimmon Parkway**. BRT service would operate along the Western BRT Extension corridor starting at Cary Multimodal Center, the core Western BRT western terminus, to Hub RTP at Park Offices Drive. It would include 13 new opening-day

stations with the possibility of one future infill station. The recommended alignment and station locations along the Western BRT and Extension are shown in Figure 1.

Western BRT Extension Operational Recommendations

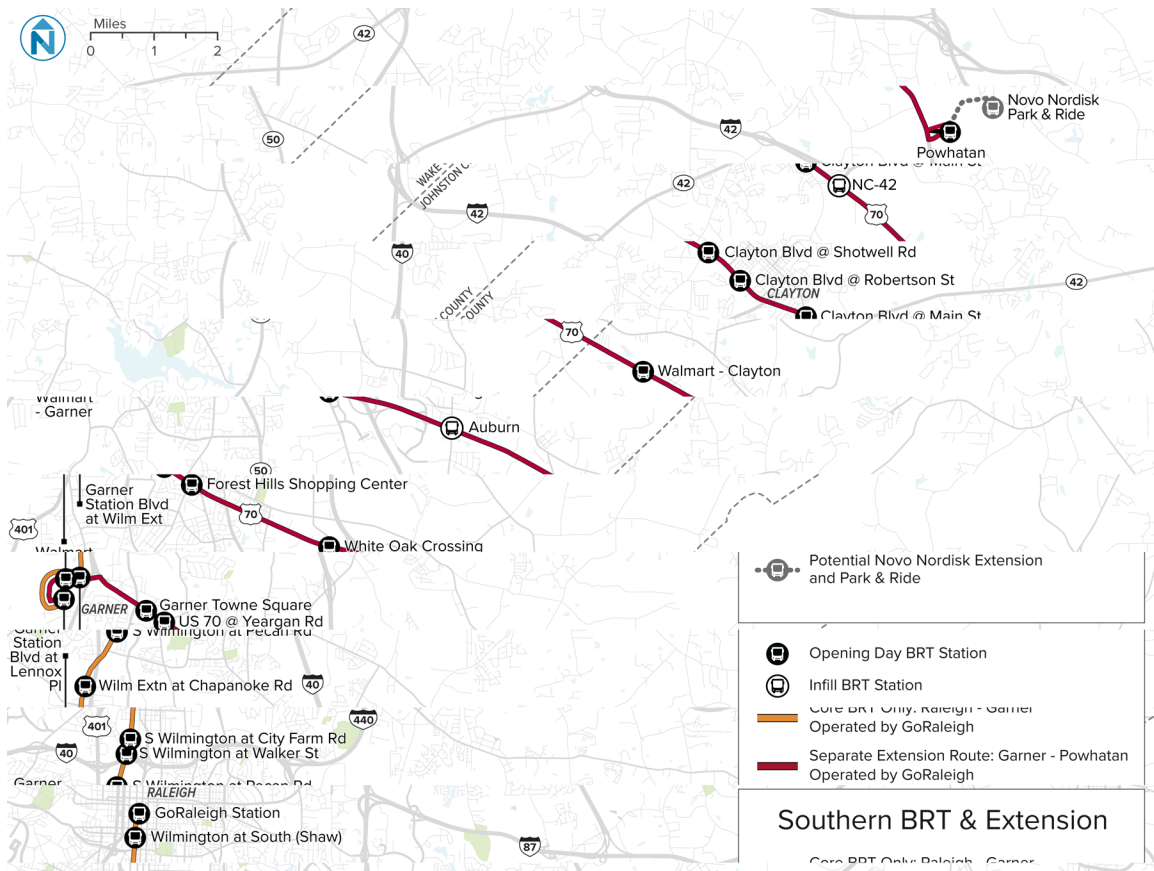
The 2026 COO Study evaluated four operating scenarios along the Western BRT Extension LPA alignment and ultimately recommended **extending alternating trips of the core Western BRT along the Western BRT Extension corridor, operated by GoRaleigh using 60-foot articulated buses**. Service is recommended to be half as frequent as the core BRT corridors (approximately every 20 minutes during weekday peak and 30-40 minutes during weekends and weekday off-peak) and will operate for 19 hours on weekdays (5:00 AM to 12:00 AM), 18 hours on Saturdays (6:00 AM to 12:00 AM), and 16 hours on Sundays (6:00 AM to 10:00 PM).

Transit signal priority (TSP) is recommended at all 31 existing and planned signalized intersections along the corridor, and queue jumps are recommended at 18 of these intersections. Queue jumps are recommended only where feasible within the existing right-of-way at a relatively low cost. Additional site-specific analyses of recommended queue jump locations will be required to confirm feasibility during the design and engineering phases.

Southern BRT Extension LPA

The 2023 MIS identified the preferred Southern BRT Extension alignment from **Garner to Powhatan via US 70/US 70 Business** but concluded that the exact routing near the core Southern BRT terminus in Garner would depend on how the extension and core services connect. The 2026 COO Study finalized the alignment based on operational recommendations. The Southern BRT Extension would run from the Garner Walmart to Powhatan. It would include nine new opening-day stations with the possibility of two future infill stations. The project team also explored a potential extension via Powhatan Road to serve Novo Nordisk past the planned Powhatan terminus. Further conversations with Novo Nordisk would be needed to determine feasibility of a park-and-ride on their site, which should be done during the design and engineering phase. The recommended alignment and station locations along the Southern BRT and Extension are shown in Figure 2.

Figure 2 Southern BRT & Extension LPA Alignment and Station Locations



Southern BRT Extension Operational Recommendations

The 2026 COO Study evaluated three operating scenarios along the Southern BRT Extension LPA alignment and ultimately recommended **operating a separate bus serving the extension corridor with a timed transfer to the core Southern BRT, operated by GoRaleigh using 40-foot buses**. Service is recommended to be half as frequent as the core BRT corridors (approximately every 20 minutes during weekday peak and 30-40 minutes during weekends and weekday off-peak) and will operate for 19 hours on weekdays (5:00 AM to 12:00 AM), 18 hours on Saturdays (6:00 AM to 12:00 AM), and 16 hours on Sundays (6:00 AM to 10:00 PM).

Transit signal priority (TSP) is recommended at all 25 existing and planned signalized intersections along the corridor, and queue jumps are recommended at 21 of these intersections. Queue jumps are recommended only where feasible within the existing right-

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of-way at a relatively low cost. Additional site-specific analyses of recommended queue jump locations will be required to confirm feasibility during the design and engineering phases.