Raleigh Downtown **Transportation Plan EXECUTIVE SUMMARY** May 2019



Acknowledgments

ADVISORY COMMITTEE

- Raleigh Transit Authority
- WakeUp Wake County
- Capital Area Ride for Safety
- Downtown Living Advocates
- North Carolina Department of Transportation (NCDOT)
- Shaw University
- African American Caucus
- Downtown Raleigh Alliance
- William Peace University
- NC Department of Administration
- Wake County
- Development Representative
- Regional Transportation Alliance
- Raleigh Mayor's Committee for Persons with Disabilities
- Oaks and Spokes

Kimley»Horn

TECHNICAL TEAM

- City of Raleigh
- Capital Area Metropolitan Transportation Organization (CAMPO)
- NCDOT
- Downtown Raleigh Alliance
- GoTriangle

SPECIAL THANKS

The City of Raleigh gives special acknowledgment to key stakeholders such as advocacy groups and committees, agencies, and downtown residents and businesses.

Summary of Volumes

The Raleigh Downtown Transportation Plan is organized in four volumes. This document is the Executive Summary of the four volumes described below.

Existing Conditions and Current System Inventory Report

Volume 1 provides information on the existing conditions in Downtown. Elements include the traffic data, on-street parking, transit ridership, transit routes, bicycle infrastructure, and sidewalk information.

Scenario Evaluation Report

Volume 2 outlines the development of the multimodal scenarios and the evaluation framework used to assess them. The Scenario Evaluation Report walks through the methodology for each metric identified in the evaluation framework, and documents the performance of each scenario.

Implementation Plan

Volume 3 provides more information on the proposed implementation strategy for the multimodal scenarios.

Public Outreach Compendium

Volume 4 shares the entirety of the public engagement process, including meeting agendas, sign-in sheets, and meeting summaries. Public comments and survey results are also documented in the Public Outreach Compendium.

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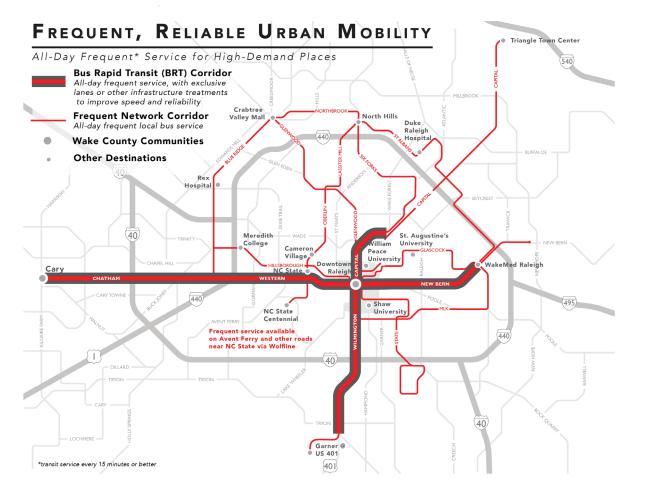


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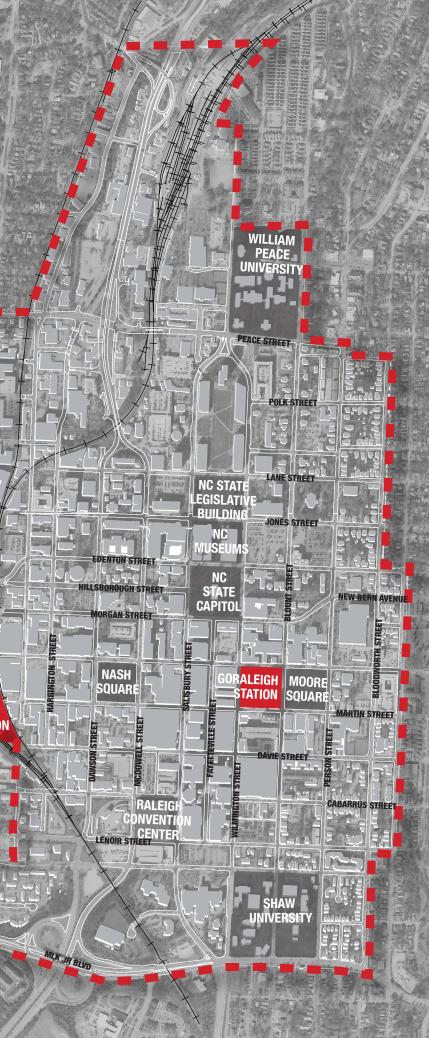
In November 2016, Wake County voters approved a transit-dedicated, half-cent sales tax to support funding the recommendations from the 2016 Wake Transit Plan. This plan created a vision for transit to connect the region and all Wake County communities by providing frequent, reliable urban mobility and enhancing access to transit.

The City of Raleigh began the Raleigh Downtown Transportation Plan to build on the Wake Transit Plan by further developing the vision for transit, transportation, and mobility in Downtown Raleigh. This plan develops the vision for a balanced multimodal transportation network that reflects a diverse spectrum of transportation needs, including automobile, bicycle, pedestrian, and public transportation users.

The City of Raleigh, in partnership with CAMPO, GoTriangle, and NCDOT led this multimodal transportation plan which provides recommendations on improvements for bicycles, pedestrians, transit, and transportation through 2027. This plan includes recommendations for the proposed bus rapid transit (BRT) routes identified in the 2016 Wake Transit Plan throughout Downtown Raleigh.



ARGETT STREET LEIGH UNION **STATIO** Study Area Map



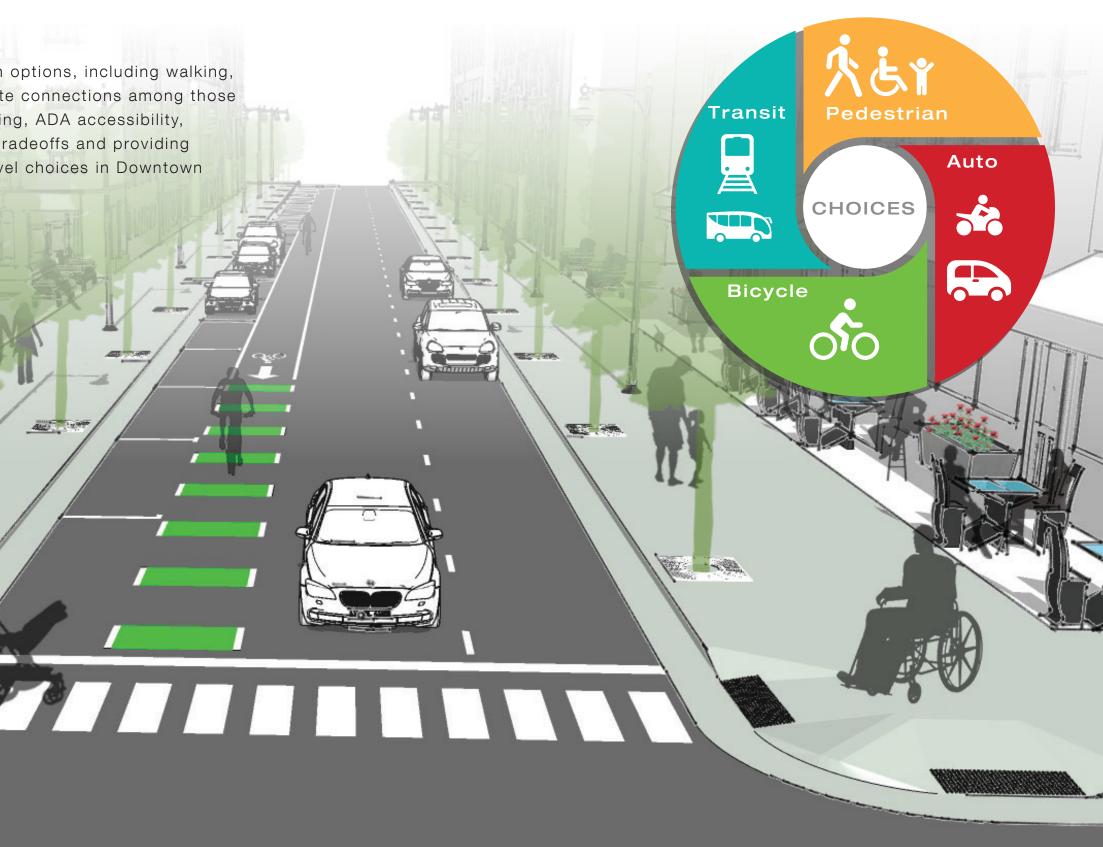
What is Multimodal?

A multimodal plan incorporates a variety of transportation options, including walking, biking, driving, and public transit, and finds ways to create connections among those modes. It also takes into account on-street parking, loading, ADA accessibility, streetscape, livability, and much more. By balancing the tradeoffs and providing accommodations for all the modes, this creates more travel choices in Downtown Raleigh.

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Background

Executive Summary

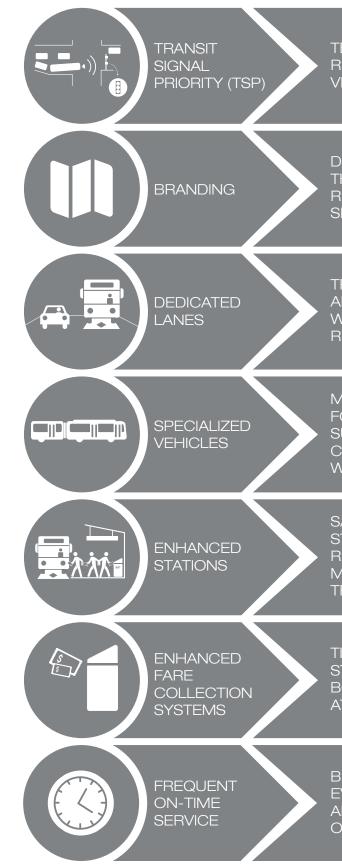




What is BRT?

Bus rapid transit (BRT) is a bus-based public transportation system that can make your commute easier and more efficient. It's faster than a normal bus, because BRT often operates in its own lane, has priority signaling, and makes fewer stops than a normal bus. Typically, fares are collected pre-boarding as to eliminate the delays caused by paying on board.

Key Elements of BRT



BRT SERVICE IS PLANNED TO OPERATE EVERY 10 MINUTES DURING PEAK HOURS AND EVERY 15 – 20 MINUTES DURING OFF-PEAK HOURS

TICKET VENDING MACHINES AT BRT STATIONS FOR FARE PAYMENT PRIOR TO BOARDING WHICH DECREASES WAIT TIME AT STATIONS

SAFE, ACCESSIBLE, COMFORTABLE STATIONS WITH ELEMENTS SUCH AS REAL-TIME ARRIVAL INFORMATION, ROUTE MAPS, SIGNS, SCHEDULES, SEATING, TRASH RECEPTACLES, AND BIKE RACKS

MODERN VEHICLES WITH MORE AMENITIES FOR INCREASED PASSENGER COMFORT SUCH AS WI-FI, WIDE AISLES, COMFORTABLE SEATS, AND LARGE WINDOWS

TRANSIT-ONLY LANES FOR BRT VEHICLES, ALLOWING THEM TO BYPASS TRAFFIC WHICH CAN IMPROVE BRT SERVICE RELIABILITY AND TRAVEL TIME

DISTINCTIVE, CONSISTENT BRANDING FOR THE BRT ROUTES AND STATIONS TO HELP RIDERS MORE EASILY IDENTIFY THE SERVICE

TECHNOLOGY USED TO IMPROVE SERVICE RELIABILITY AND REDUCE DELAY FOR BRT VEHICLES AT TRAFFIC SIGNALS

Background

Executive Summary



Process and Outreach



Who was involved?

Outreach for the Raleigh Downtown Transportation Plan involved a multi-platform approach designed with the goal of ensuring effective and inclusive interaction with our community. In addition to five Technical Team meetings, four Advisory Committee meetings, and a full day of Stakeholder Group interviews, the project team also held two public meetings throughout the 14-month planning process.

The **Stakeholder Group** provided input from the perspective of the community on tradeoffs and priorities, and gave feedback on specific needs, desires, and concerns for Downtown Raleigh.

The **Technical Team's** role was to assist in developing the scenarios, reviewing project materials, and providing oversight and direction throughout the project on behalf of each of their perspective departments or organizations.

The Advisory Committee consisted of representation from across the Downtown area, providing input on behalf of each organization and guiding decisions at key milestones throughout the project.





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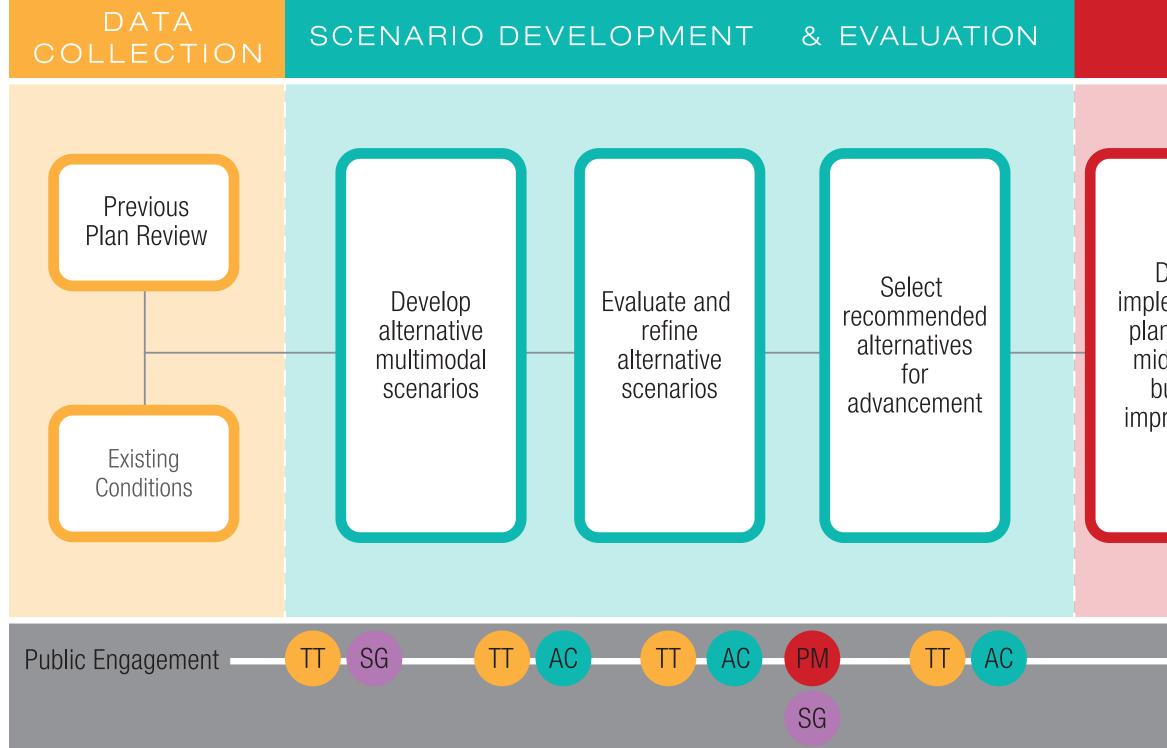
Process and Outreach

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The Planning Process

The planning process included three key phases and touch points with the Technical Team (TT), Advisory Committee (AC), Stakeholder Group (SG), and the public through Public Meetings (PM) at key milestones of the plan development.



Process and Outreach

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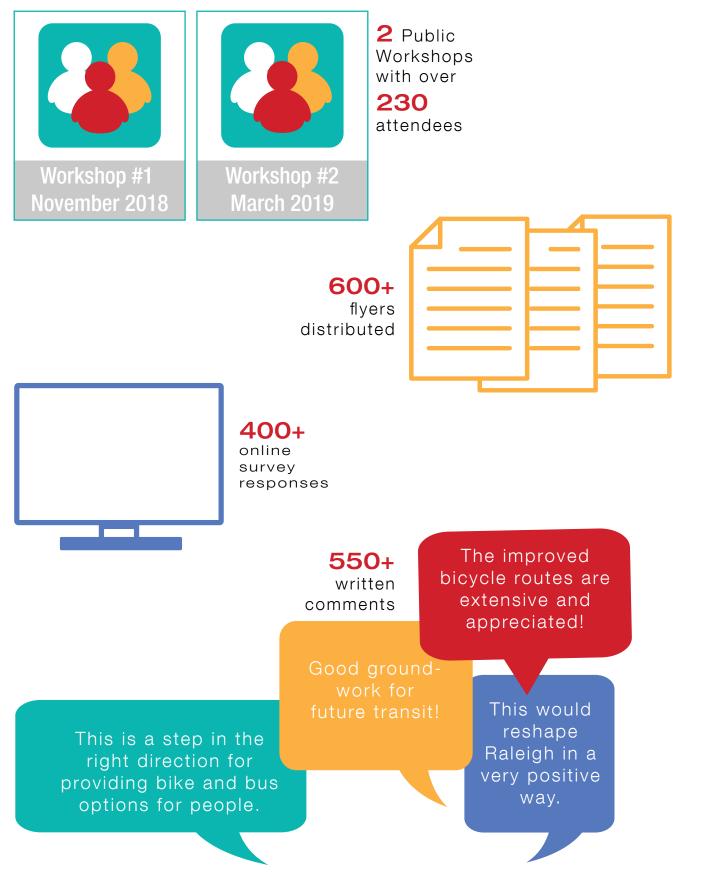
FINAL PLAN

Develop implementation plan for near, mid, and full build-out improvements Present plan recommendations to advisory committee, stakeholders, public, and City Council





Public Outreach





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Process and Outreach

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Online Survey Results

Modal Choice Activity

Online survey voters indicated how they currently travel to work, parks, and entertainment and how they preferred to travel to these destinations in the future. Based on results from the survey, participants want more diverse modal options in Downtown Raleigh.



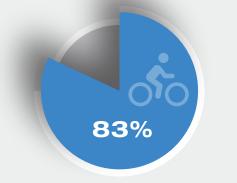
How you currently get thereHow you would prefer to get there

Walking & Biking

I would **walk more** Downtown if there was less vehicular traffic and more aesthetic elements were provided.



I would **bike more** Downtown if there were more on-street, protected bicycle facilities and urban trails.



Top Three Destinations for Bus Rapid Transit





Process and Outreach

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Existing Conditions





Downtown Raleigh At-a-Glance





6,000+ riders per day at GoRaleigh Station

30 +

GoRaleigh and GoTriangle bus routes connecting Downtown to the rest of the City and region

> 96 Downtown Walk Score



13,500+ residents

46,300+ employees



172 bike racks

16 Citrix Cycle bike share stations in Downtown Raleigh





~4,000 on-street parking spaces

~19,700 off-street parking spaces

Existing Conditions

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\$88 million investment in Raleigh Union Station

\$9.9 million

GoRaleigh Station Renovation

850+ businesses located downtown



Source: State of Downtown 2018, Downtown Raleigh Alliance



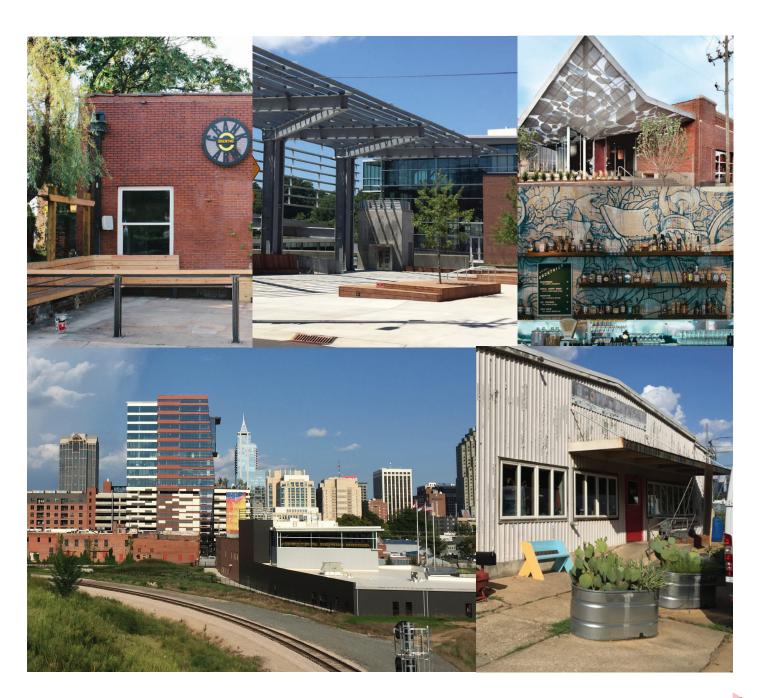
Downtown Raleigh Streetscape Assessment

The Downtown Raleigh Streetscape Assessment was developed in parallel with the Raleigh Downtown Transportation Plan. The Streetscape Assessment provides a baseline of existing streetscape elements and the cultural features that make Downtown Raleigh unique. Some of the elements in the Streetscape Assessment include existing street character, street furniture, street trees, hardscape, street lights, and sidewalk width and are summarized in the Existing Conditions chapter of the Downtown Raleigh Transportation Plan. Upon completion of the Streetscape Assessment, the City will initiate the next step toward updating the Downtown Streetscape Design Guidelines.



Warehouse District Assessment

A Warehouse District Assessment was also developed in parallel with the Raleigh Downtown Transportation Plan. This assessment provides an inventory of existing identity, culture, architecture, zoning, and land-use within the Warehouse District. Information gathered in this assessment will be used to help guide future development in the Warehouse District and will also be used to develop specific requirements to include in the updated Downtown Streetscape Design Guidelines.



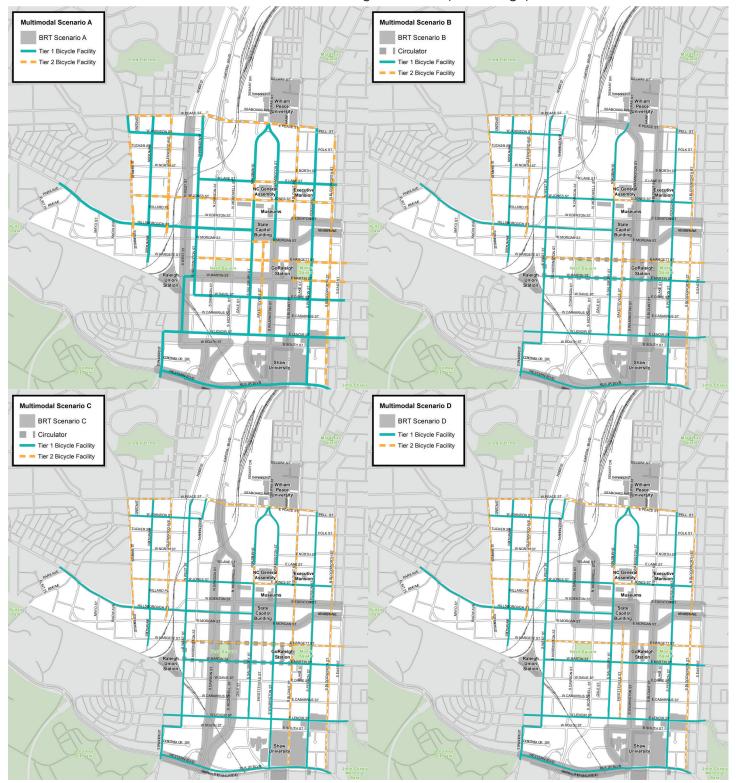
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Scenario Evaluation

SOUTH SAUNDERS

Scenario Evaluation

Through an iterative process, the Raleigh Downtown Transportation Plan developed four multimodal scenarios for evaluation. The scenario evaluation process shows how each combination of multimodal infrastructure performs against performance indicators and core values identified throughout the planning process.



Key Evaluation Metrics



Provide High Quality Bus Rapid Transit Service

- Transit hub connections
- Travel time
- Customer experience (transfers, walking distance)



Provide Cost-Effective Multimodal Investments

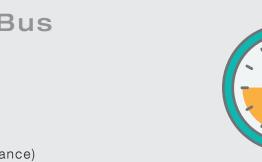
• Construction impacts to existing infrastructure

Scenario Evaluation

Executive Summary

Improve Mobility and **Travel Choice**

- Access to existing and future employment
- Access to existing and projected population
- Access to affordable housing, community services, and recreation and entertainment





Minimize Impacts to Vehicular Travel

- On-street parking and loading zone impacts
- Vehicular delay at intersections
- Vehicular queuing at intersections









Recommendations and Implementation

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BUS

Bus Rapid Transit Recommendations

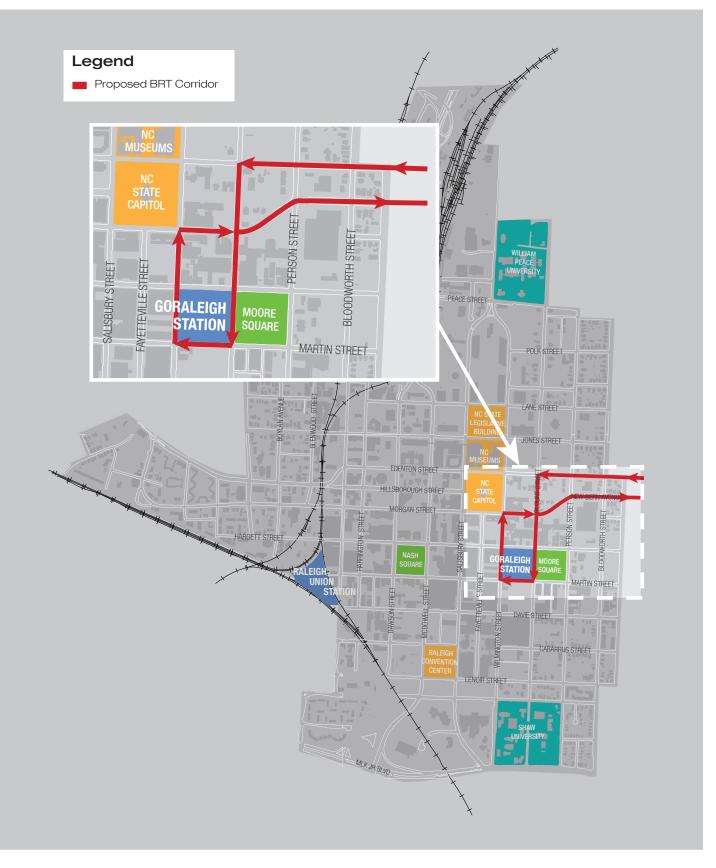
BRT recommendations are organized around three time frames: near-term (revenue service as early as 2023), mid-term (2025), and full build out (2027). Recommendations in the near-term and mid-term time lines have identified proposed routing within Downtown for BRT. In the full build out recommendation the nearterm and mid-term BRT routes are shown along with a number of alternative routes, of which the final proposed routing will need to be determined based on certain key decisions and determinations in the upcoming years. With variables such as upcoming proposed mixed-use developments, future commuter rail, a future bus station at Raleigh Union Station (RUSBus), and the proposed West Street extension project, these alternate BRT corridors provide flexibility while still offering guidance for further study as these variable elements play out in the upcoming years. All of the recommendations on these maps will be studied in greater detail in subsequent project phases.

Implementation Tradeoffs

The Raleigh Downtown Transportation Plan focused on the importance of tradeoffs and how to balance these in a Downtown setting. Due to the limited right-of-way widths in Downtown, typically around 66-feet, it was determined that streets should be assigned a modal priority so that all modes can be accommodated with highquality facilities. Implementing the high-quality BRT and bicycle facilities will have tradeoffs that impact existing on-street accommodations, such as on-street parking and/or loading zones. For more information about modal tradeoffs and impacts see Volumes 2 and 3.

Near Term BRT Recommendations

Implementation as early as 2023



Implementation

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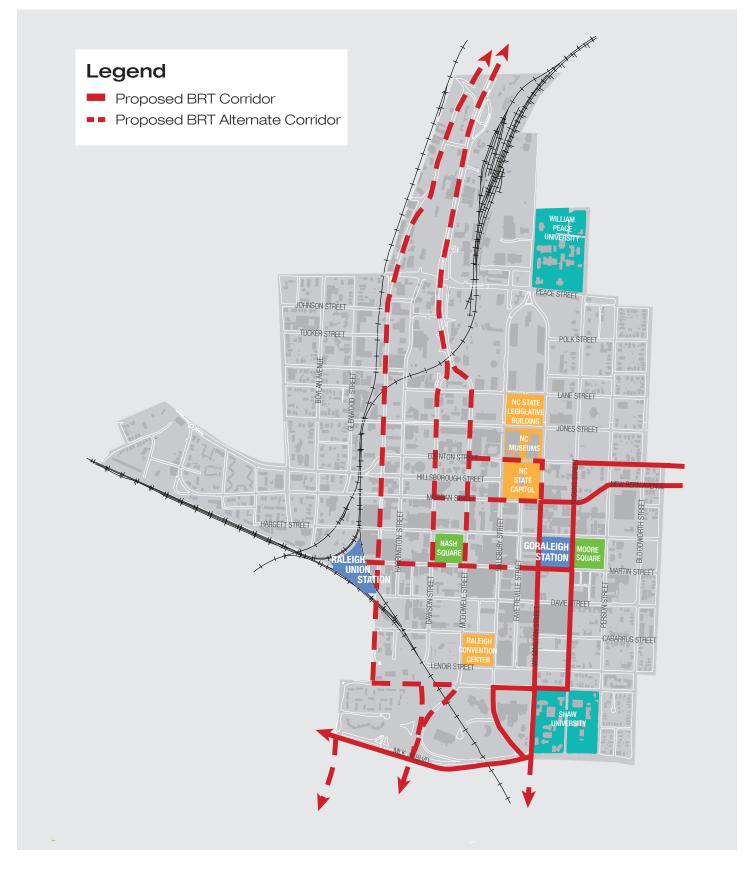
Mid Term BRT Recommendations

Implementation as early as 2025



Full Build Out BRT Alternatives

Implementation proposed by 2027



Implementation

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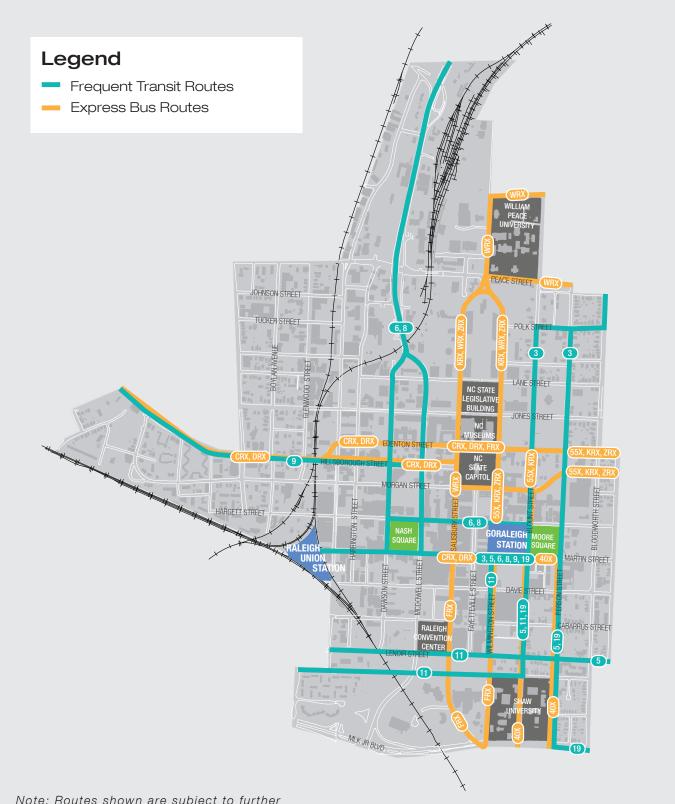
Bus Service Enhancements

Wake Transit funding will increase frequency and span of service for local, regional, and express bus routes to Downtown. These service enhancements, in addition to the BRT routes, will be incrementally implemented over the next 10 years. The 2018 Wake Bus Plan provides details regarding the implementation of these services and includes proposed Frequent Transit Routes which are planned to operate every 15 minutes for at least 18 hours per day. The Frequent Transit Routes and the Express Bus Routes shown on the adjacent page will be studied further to determine which routes could potentially operate within the dedicated BRT lanes, in addition to the BRT routes. If certain frequent or express bus routes can be modified to utilize the dedicated transit lanes in Downtown, a wider range of services can benefit from this time-saving transit investment.



2027 Frequent Transit and Express Bus Routes





Note: Routes shown are subject to further coordination with GoRaleigh and GoTriangle. Executive Summary

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Bicycle Facility Recommendations

Bicycle facility recommendations respond to both the BRT recommendations, previous bicycle planning efforts, and the desire expressed by the public and stakeholders for an enhanced bicycle system in Downtown. Recommendations include Tier 1 facilities (those that have both a vertical and horizontal separation between bicycle and auto traffic) and Tier 2 facilities (those without vertical separation). These recommendations would result in a significant increase in enhanced bicycle accommodations within the Downtown area. Further information will be available on these projects once they are programmed and additional public meetings will be held.

Tier 1 and Tier 2 Bicycle Facilities







Two-Way Cycle Track

One-Way Cycle Track

Parking-Protected Separated

Bike Lane





Bikeway

Full Build Out Bicycle Network



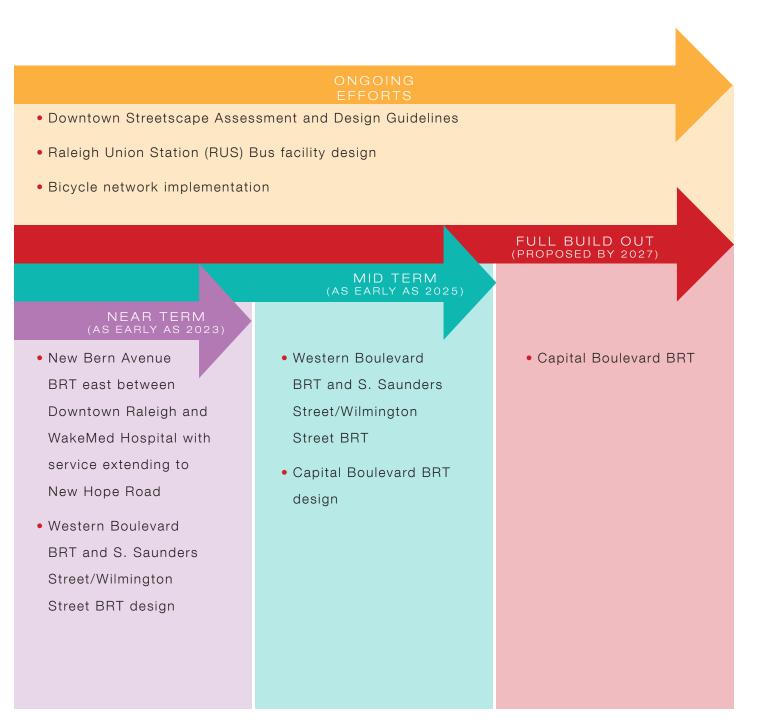


Implementation

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Next Steps

The Raleigh Downtown Transportation Plan is a small piece of the puzzle in achieving a more robust multimodal network in the City of Raleigh. This plan is the framework for multimodal infrastructure in Downtown, but its success hinges on continued collaboration of many stakeholders and tie-ins to the transportation network outside of Downtown. Key next steps between now and the full build out year of 2027 are outlined below.



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