Raleigh Downtown **Transportation Plan**

Kimley»Horn

Background

- <u>November 2016:</u> Wake County voters approved a transit-dedicated ½¢ sales tax
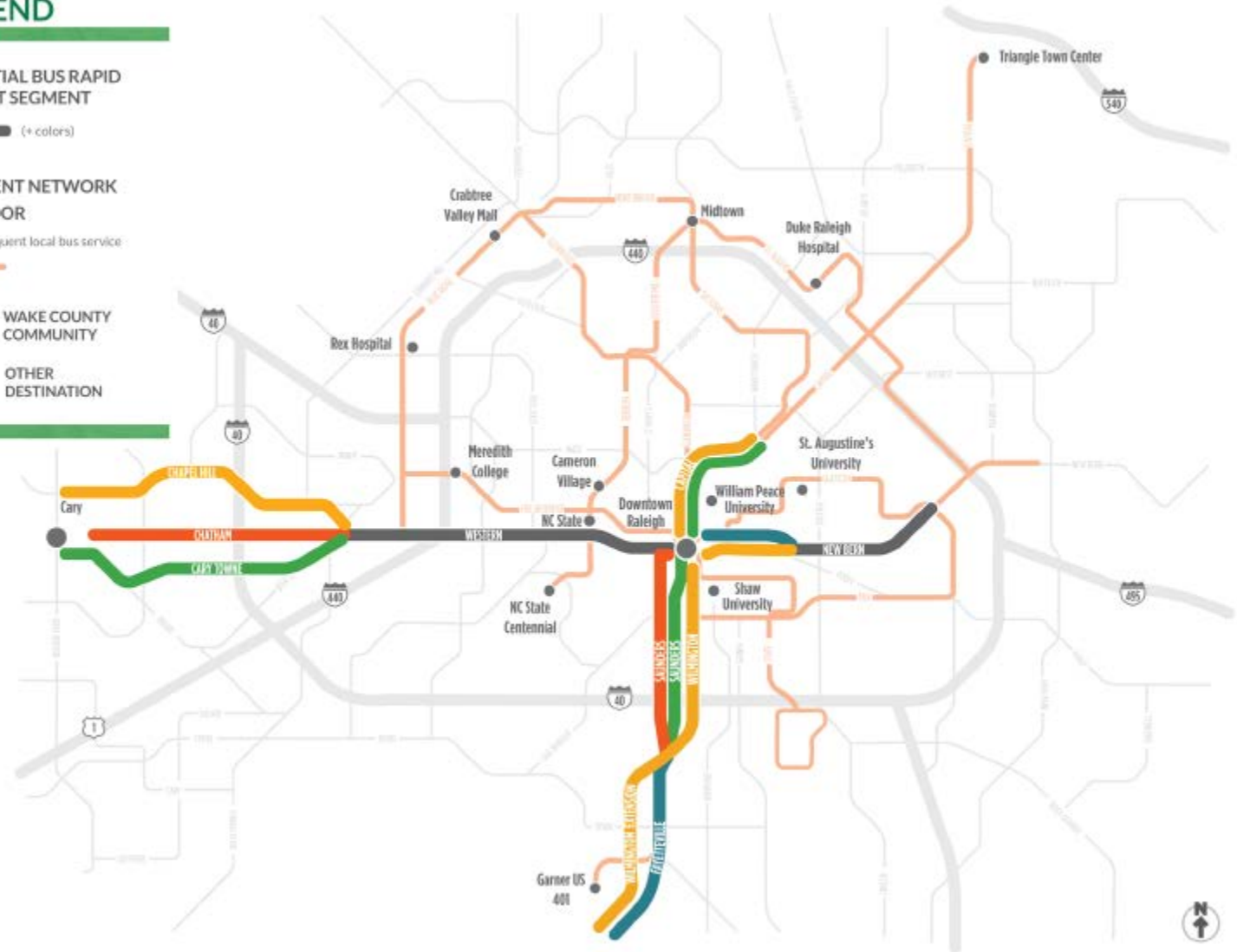
Study Area
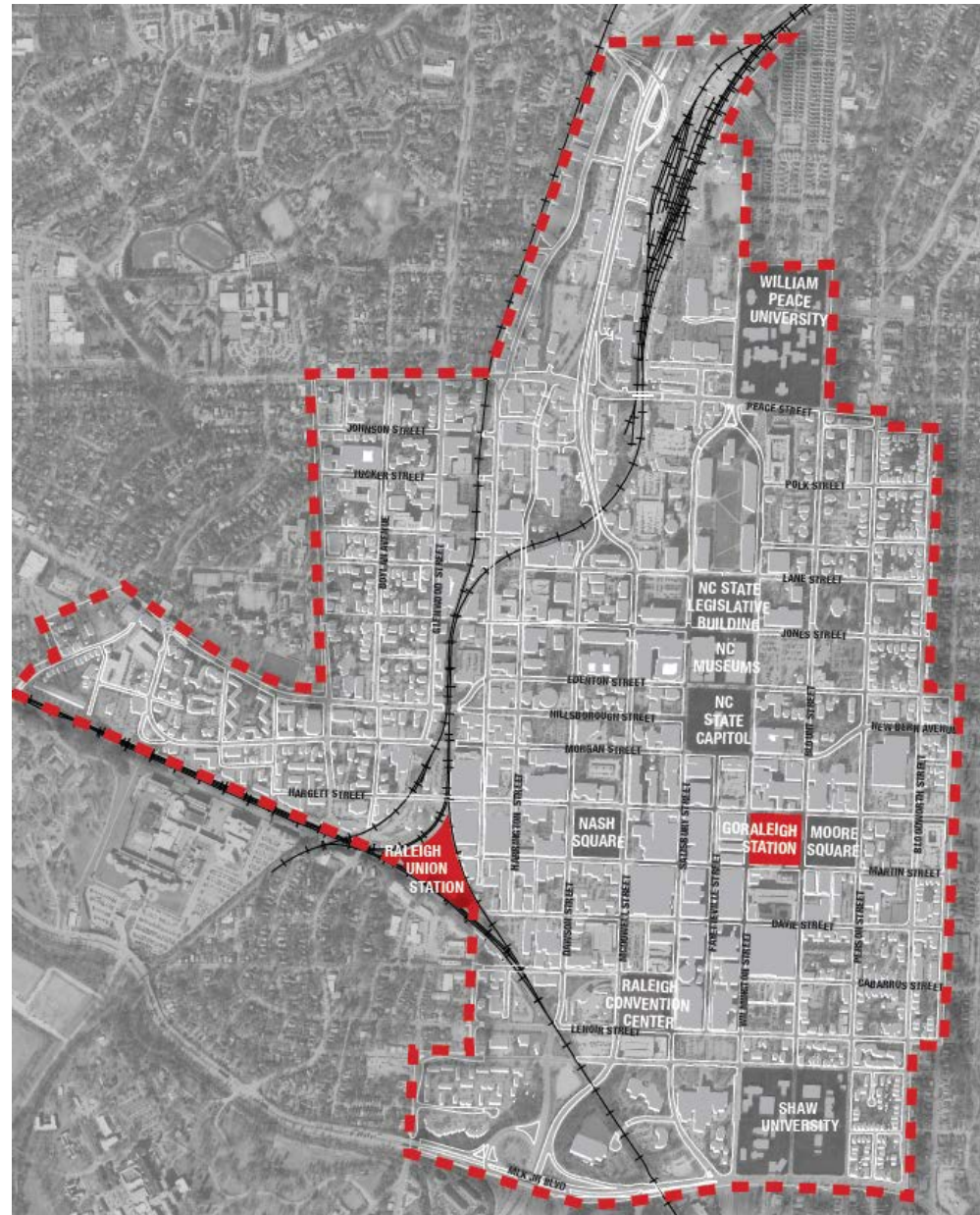
What is Multimodal?

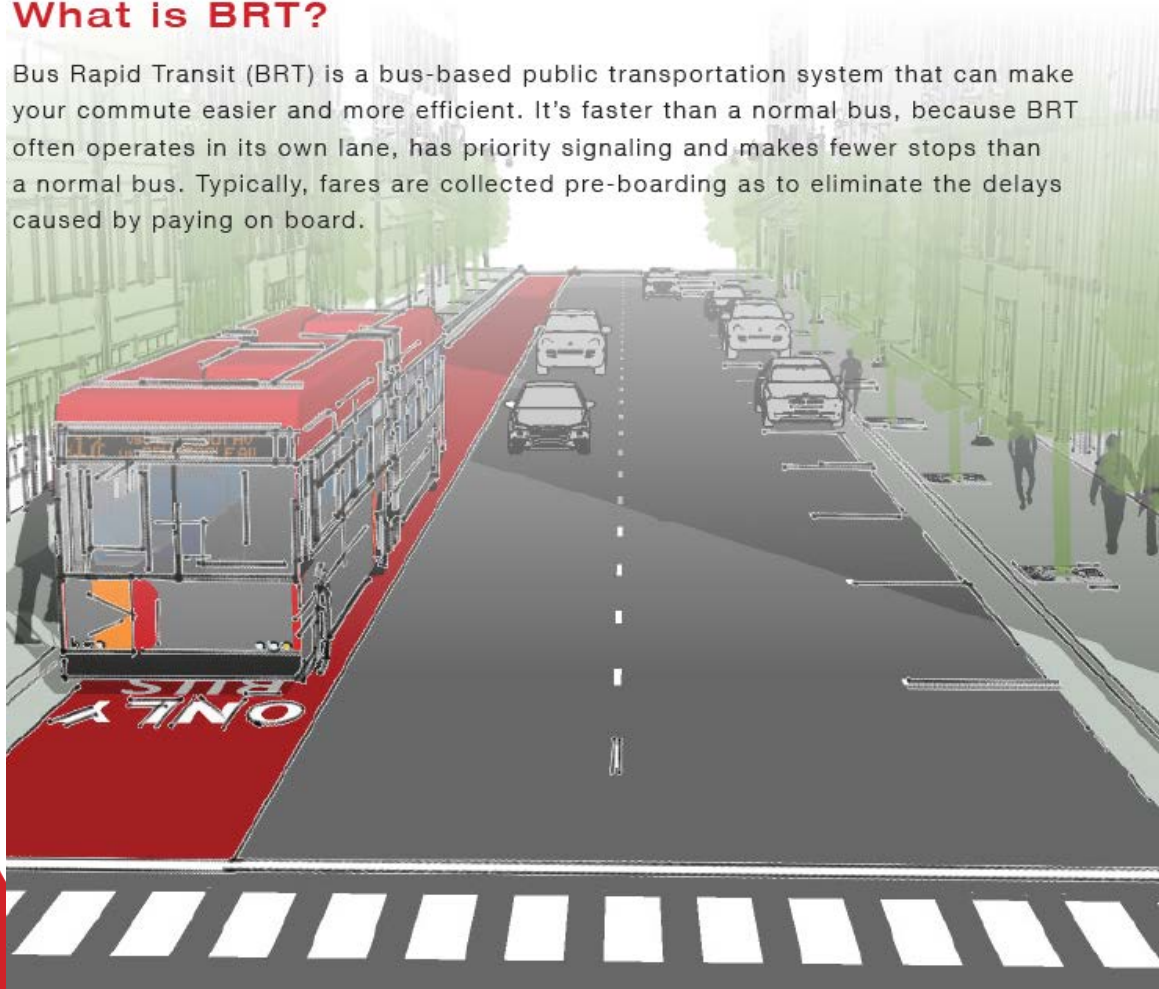A multimodal plan incorporates a variety of transportation options, including walking, biking, driving, and public transit, and finds ways to create connections among those modes. It also takes into account on-street parking, loading, ADA accessibility, streetscape, livability, and much more. By balancing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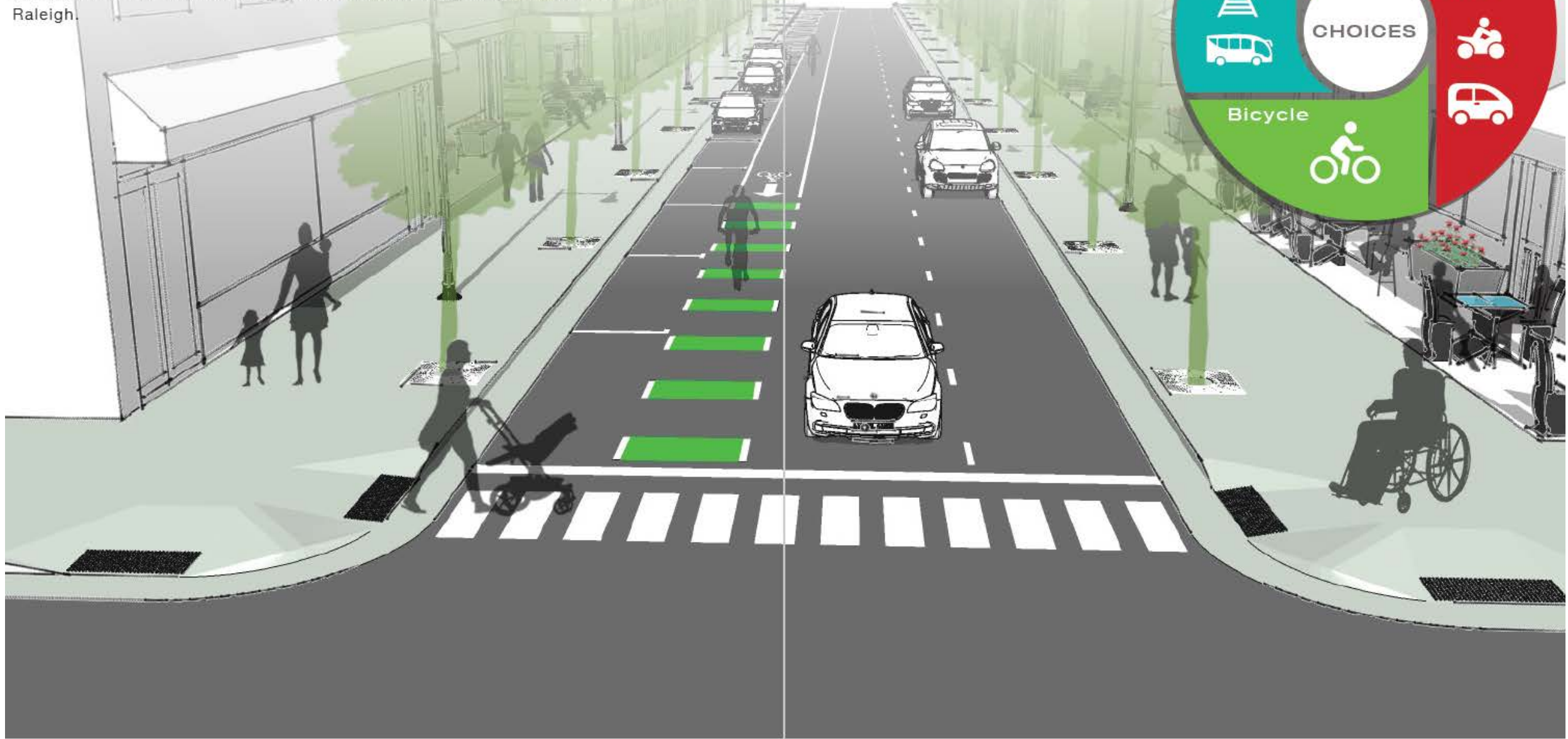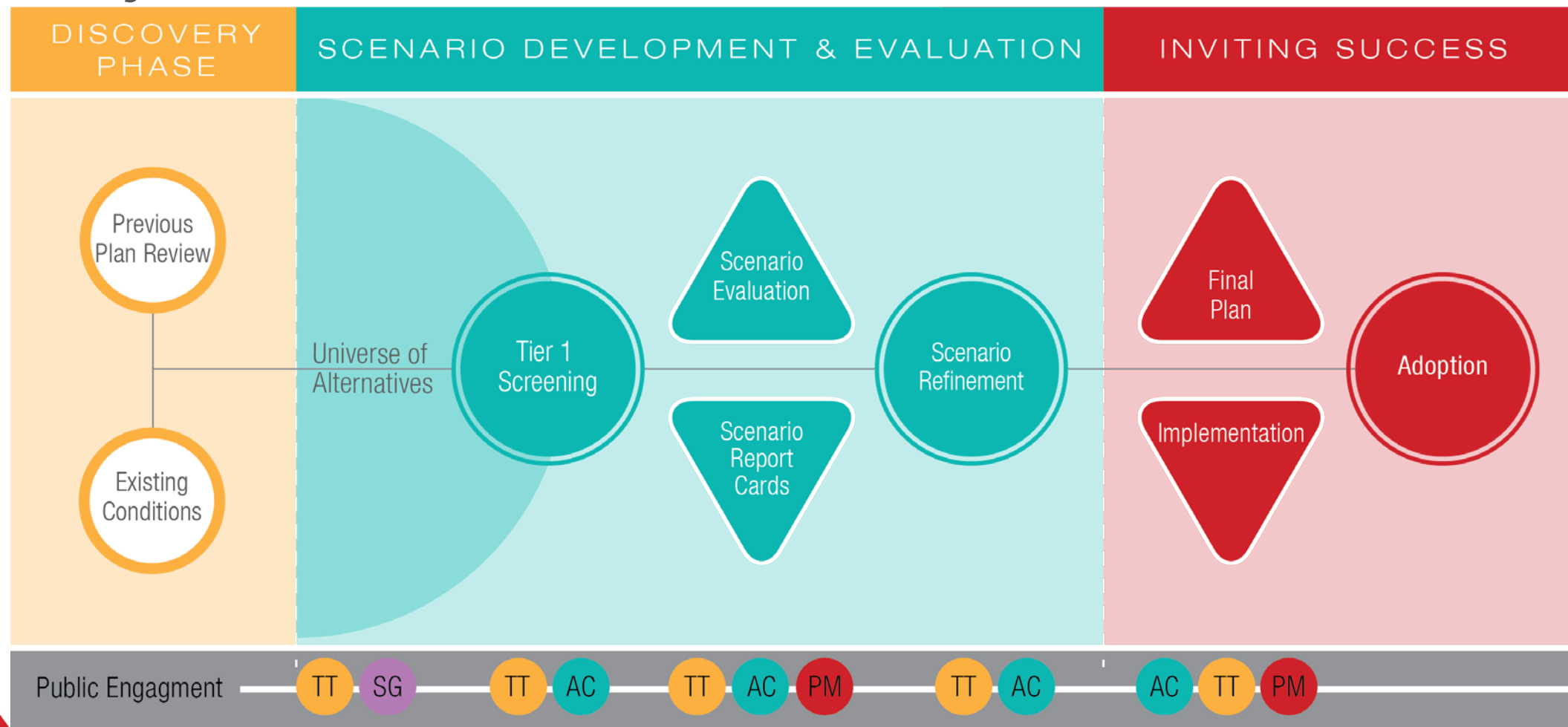
What is Bus Rapid Transit?

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.

- TRANSIT SIGNAL PRIORITY
- BUS RAPID TRANSIT BRANDING
- DEDICATED LANES
- SPECIALIZED VEHICLES
- ENHANCED STATIONS
- ENHANCED FAIR COLLECTION SYSTEMS
- FREQUENT ON-TIME SERVICE

Raleigh Downtown **Transportation Plan**

Project Process

Who was involved?

- Stakeholder groups
  - CACs, BPAC, Convention and Visitor's Bureau, etc.
- Technical Team
  - City staff, CAMPO, NCDOT, DRA, NCDOT
- Advisory Committee
  - RTA, WakeUp Wake County, local universities, etc.

Public Outreach

400+ online survey responses

This is a step in the right direction for providing bike and bus options for people.

This would reshape Raleigh in a very positive way.

2 Public Workshops with over 230 attendees

November 2018

March 2019

550+ written comments

Good groundwork for future transit!

Raleigh Downtown Transportation Plan
Public Meeting
Meeting Room 302

Existing Conditions

6,000+ riders per day at GoRaleigh Station

30+ buses connecting Downtown to the rest of the City and Region

13,500+ residents

46,300+ employees

$88 million investment in Raleigh Union Station

850+ businesses located downtown

172 bike racks with room for **600** bicycles

MOORE SQUARE STATION

~4,000 on-street parking spaces

~19,700 off-street spaces

OPEN

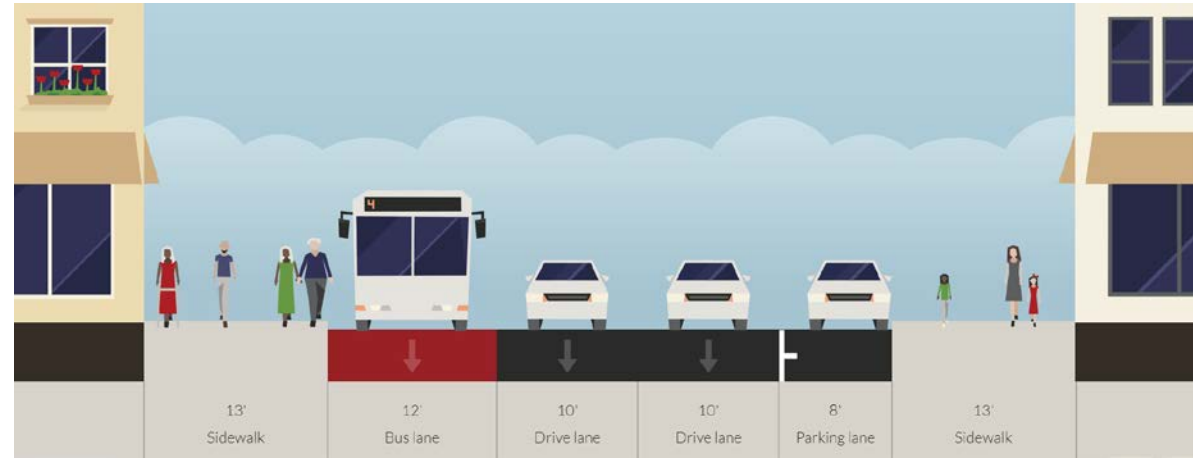# Our Challenge: Trade-offs

Two-Way Street with BRT & Cycle Track

66-ft

76-ft ✖

10'	5'	5'	2'	12'	10'	10'	12'	10'
Sidewalk	Bike lane	Bike lane	Buffe	Bus lane	Drive lane	Drive lane	Bus lane	Sidewalk

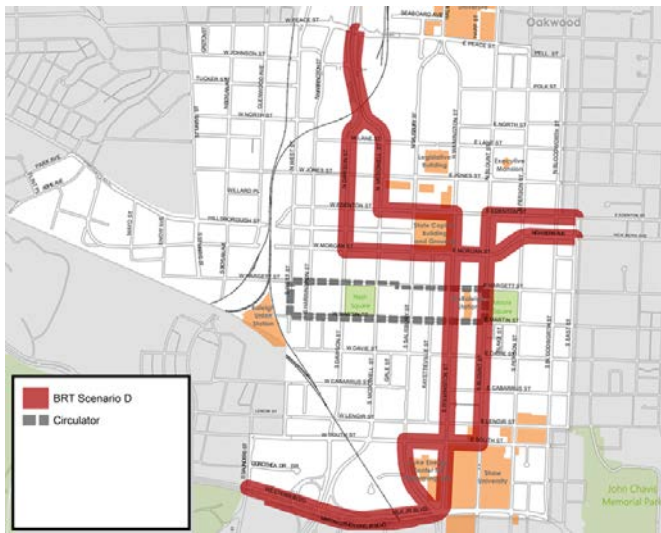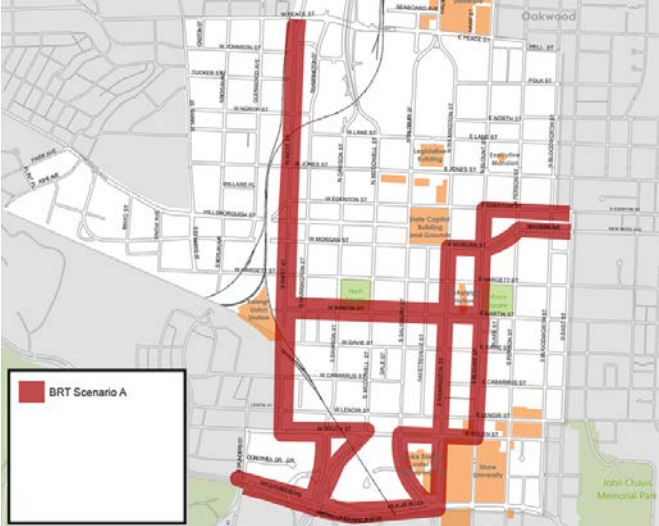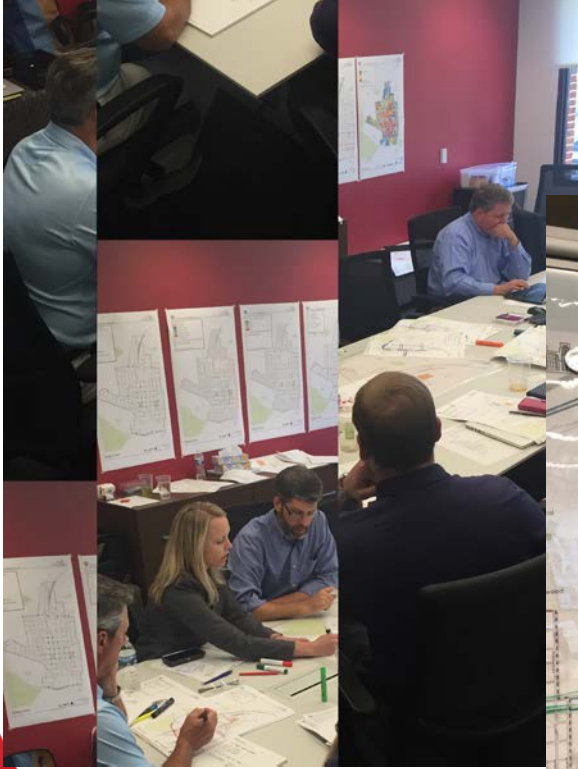Raleigh Downtown **Transportation Plan**
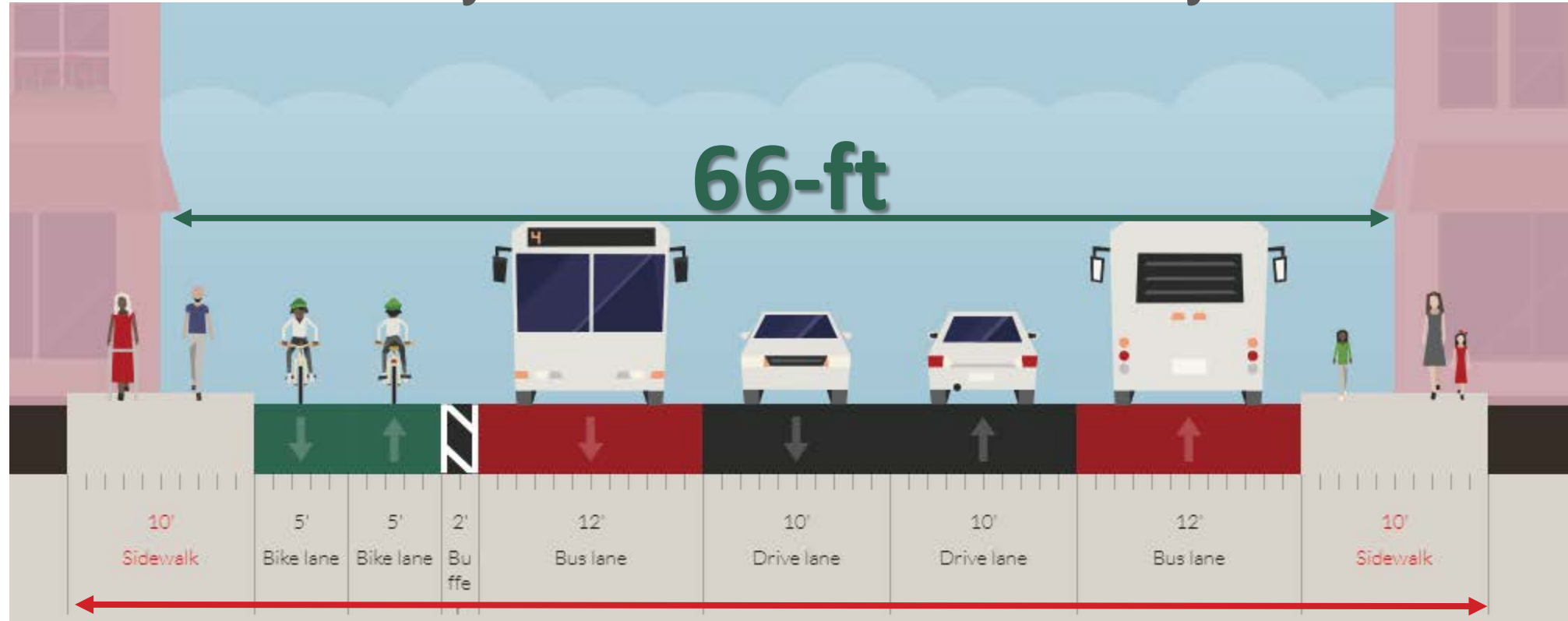
Our Challenge: Trade-offs

66-ft of right-of-way
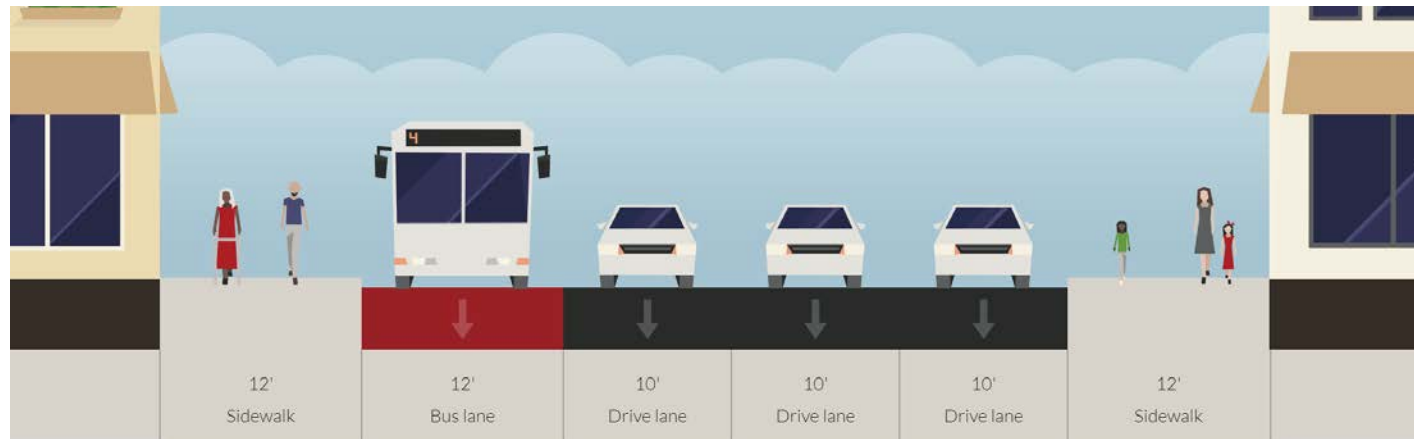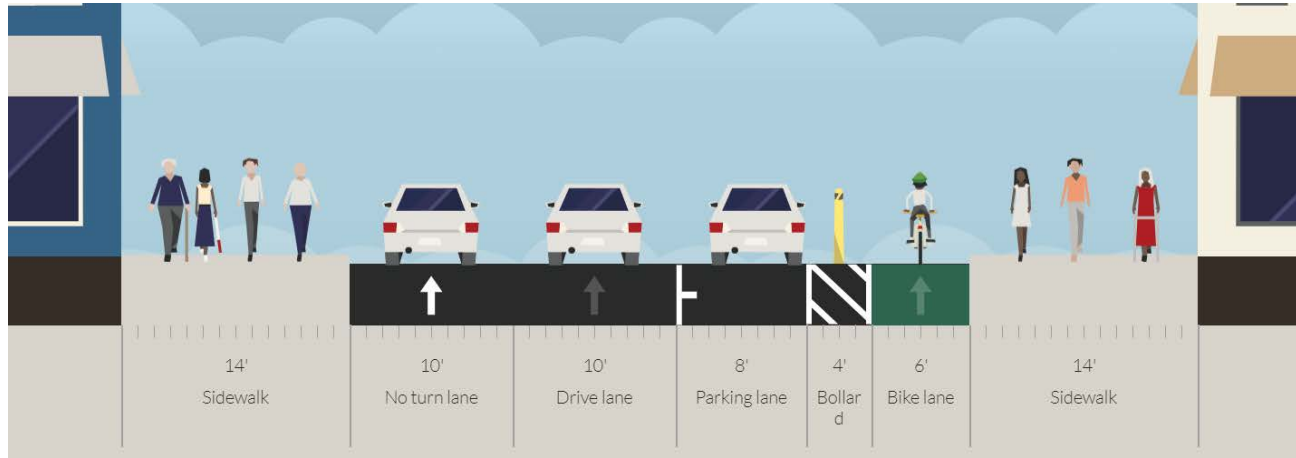
Scenario Development
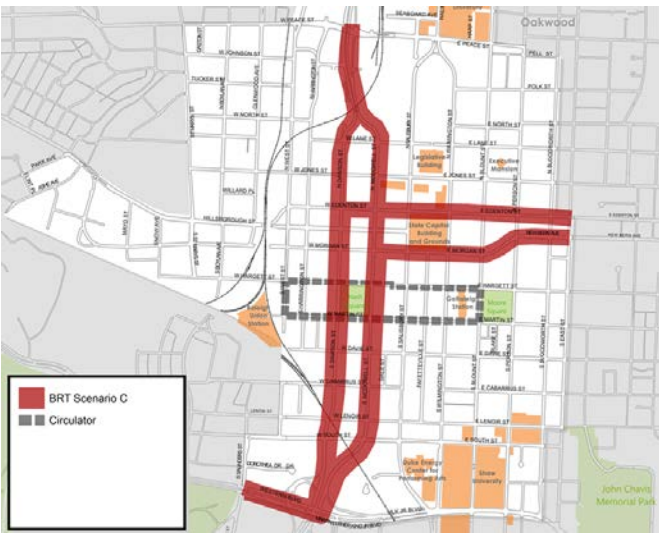
Scenario Development – Bike Networks

Tier 1 Facilities:

Multluse Path/Urban Trail

Parking-Protected Separated Bike Lane

Two-Way Cycle Track

One-Way Cycle Track

Tier 2 Facilities:

Buffered Bike Lane

Bikeway

Scenario Development – Bike Networks

Scenario Evaluation

- Existing and future population
- Existing and future employment
- Affordable housing
- Community services
- Recreation and entertainment
- Transit hub connections
- Travel time
- Customer experience
- Parking impacts
- Vehicular delay and queuing
- Construction impacts

IMPROVE MOBILITY AND TRAVEL CHOICE

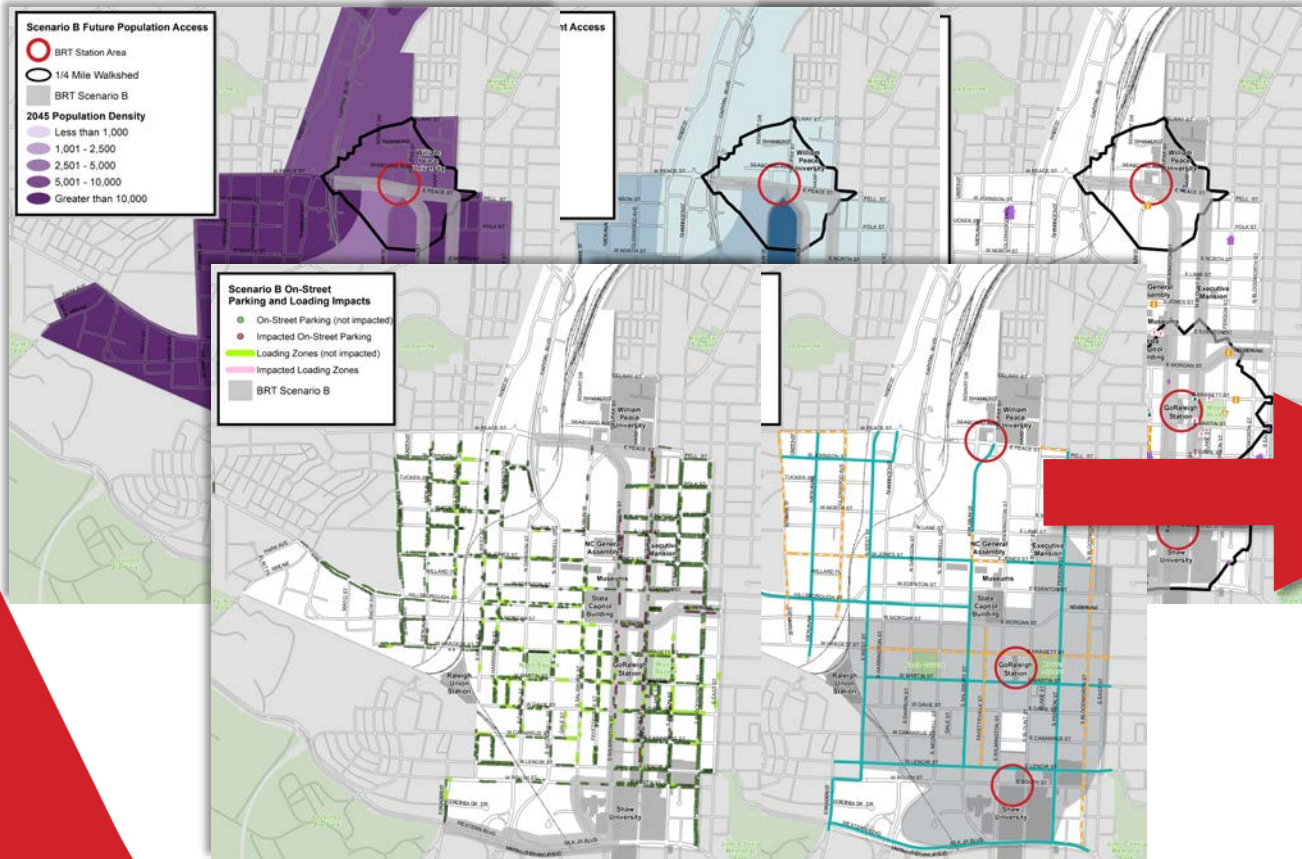PROVIDE HIGH-QUALITY BUS RAPID TRANSIT SERVICE

MINIMIZE IMPACTS TO VEHICULAR TRAVEL

PROVIDE COST-EFFECTIVE MULTIMODAL INVESTMENTS

Scenario Performance Reporting

Raleigh Downtown **Transportation Plan**

Scenario Performance Reporting

BRT Trip Example
From S. Saunders to GoRaleigh Station

Customer Time (minutes)

Scenario A   Scenario B   Scenario C - Walk   Scenario C - Circulator   Scneario D

■ BRT Vehicle Time   ■ Circulator Time   ■ Walk Time
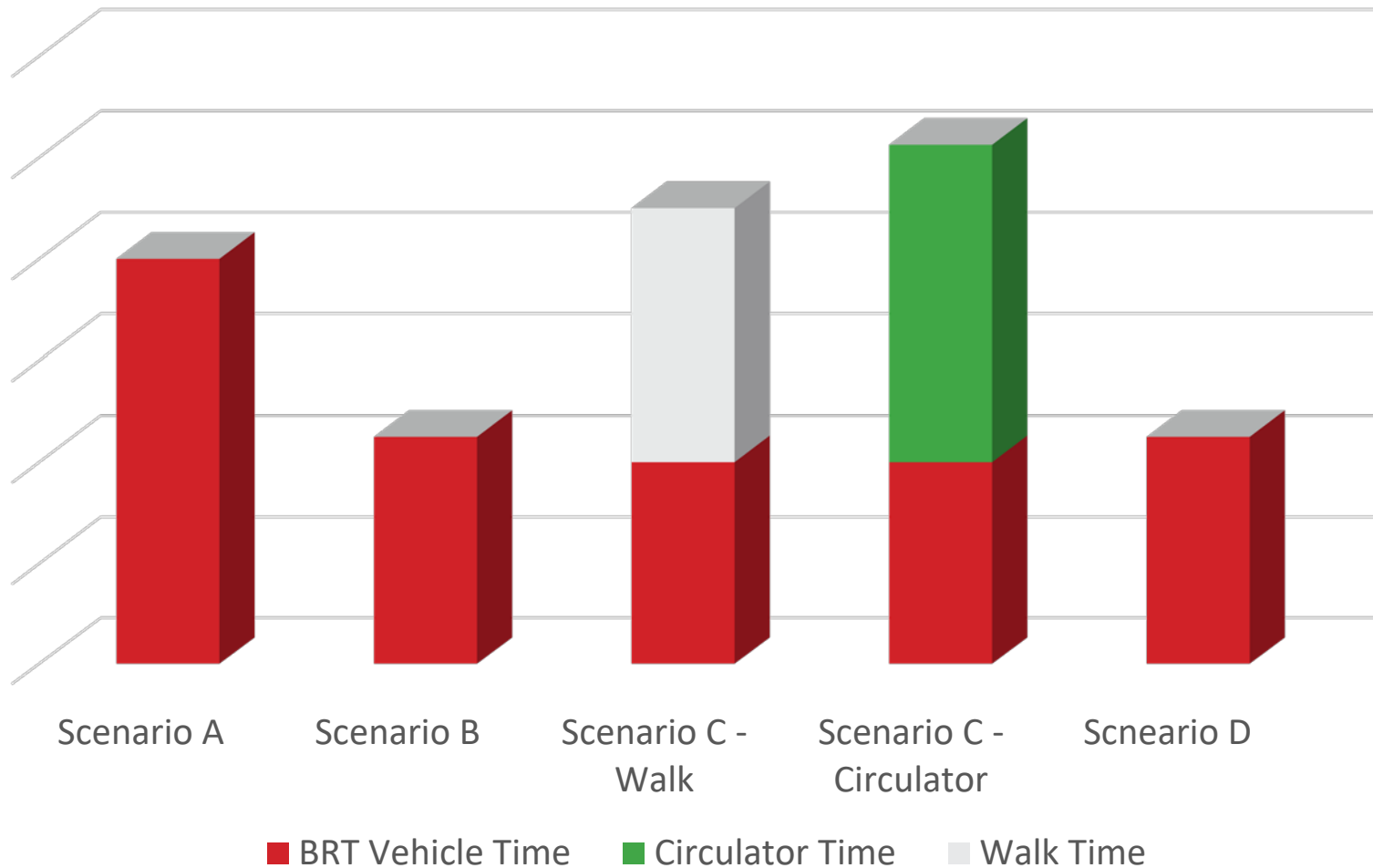
Assumptions:
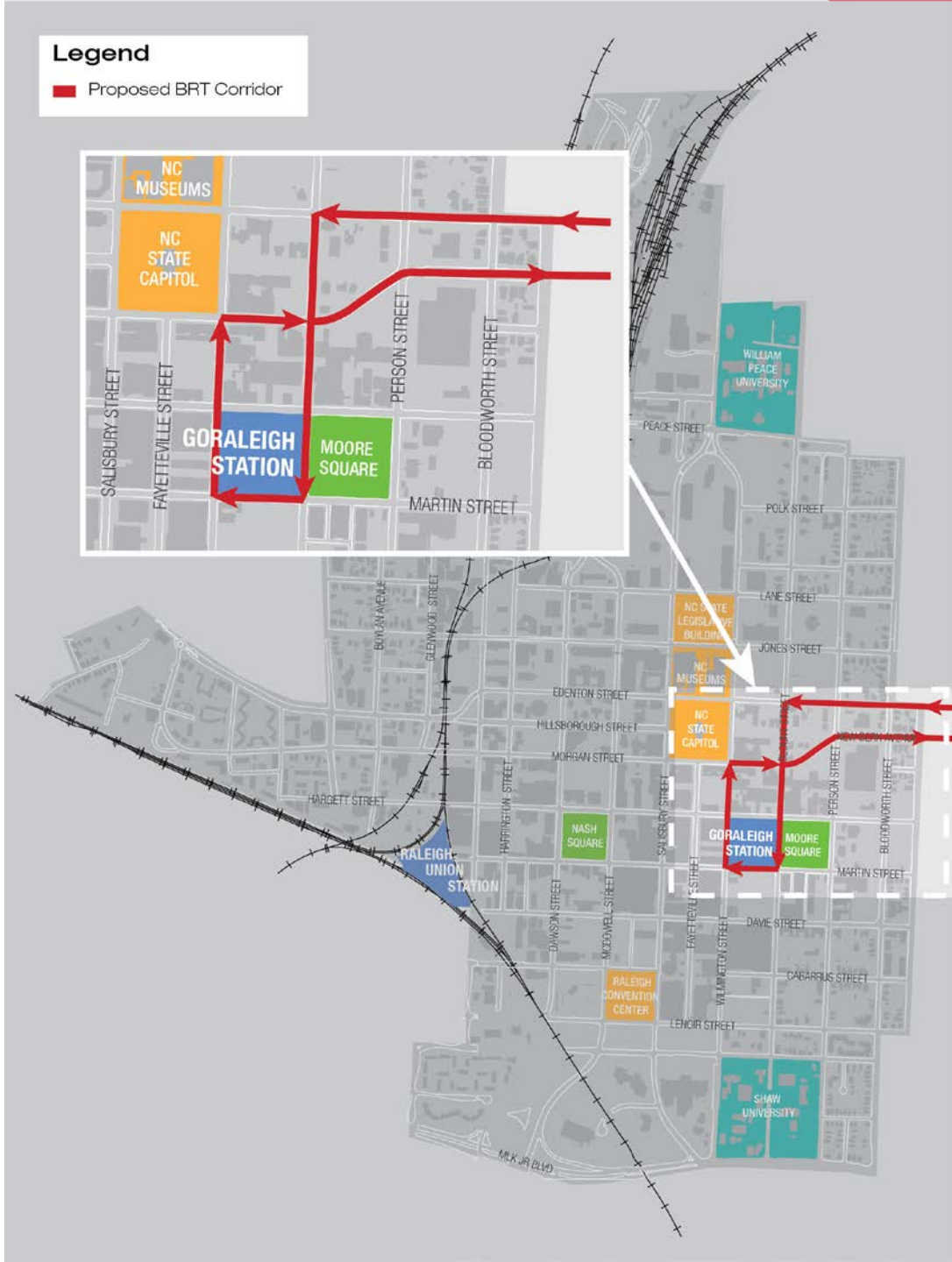- Circulator every 10 mins, wait time = 5 mins
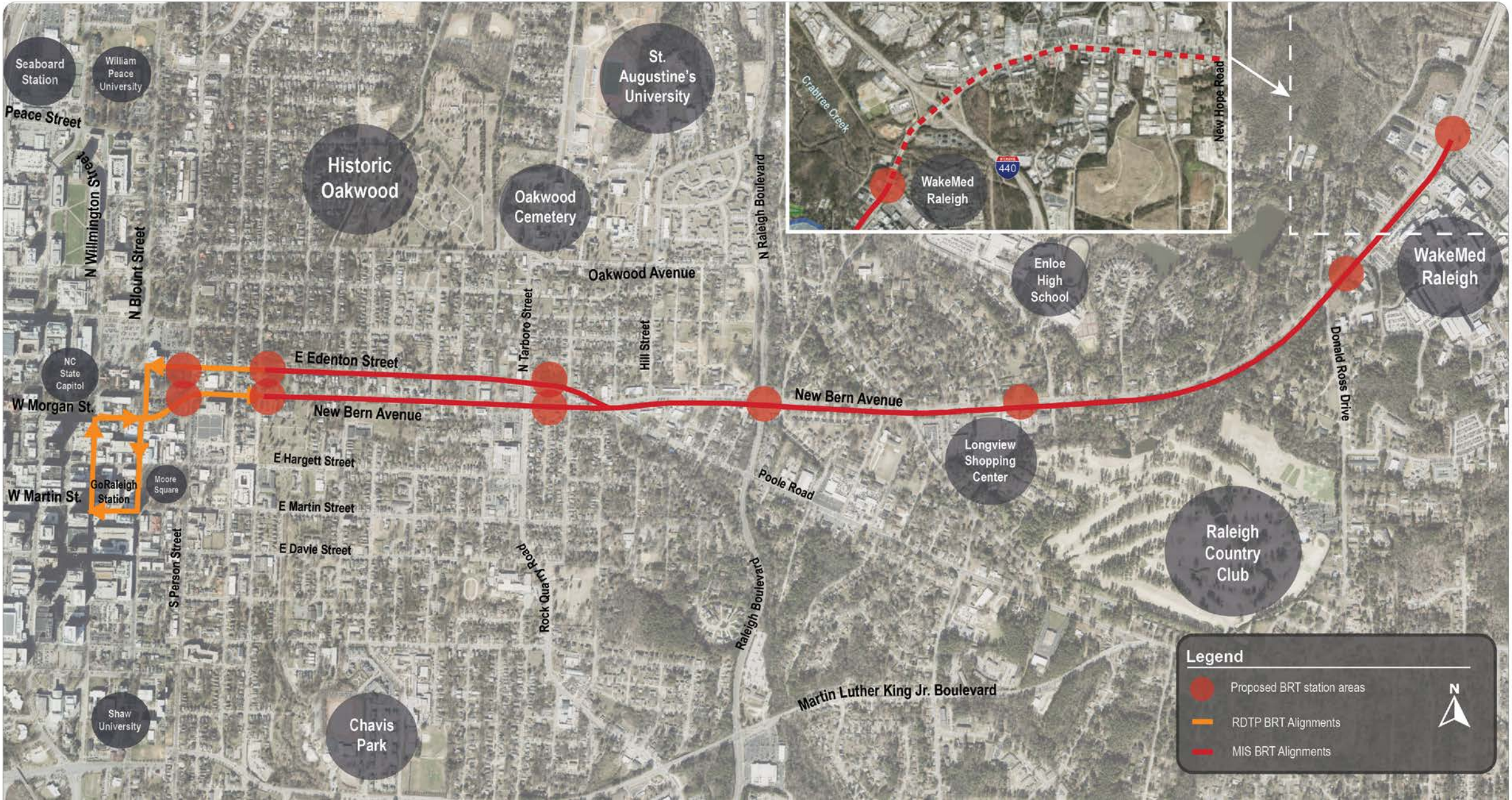- Walk speed of 5 minutes per ¼ mile, or 20 minutes per mile
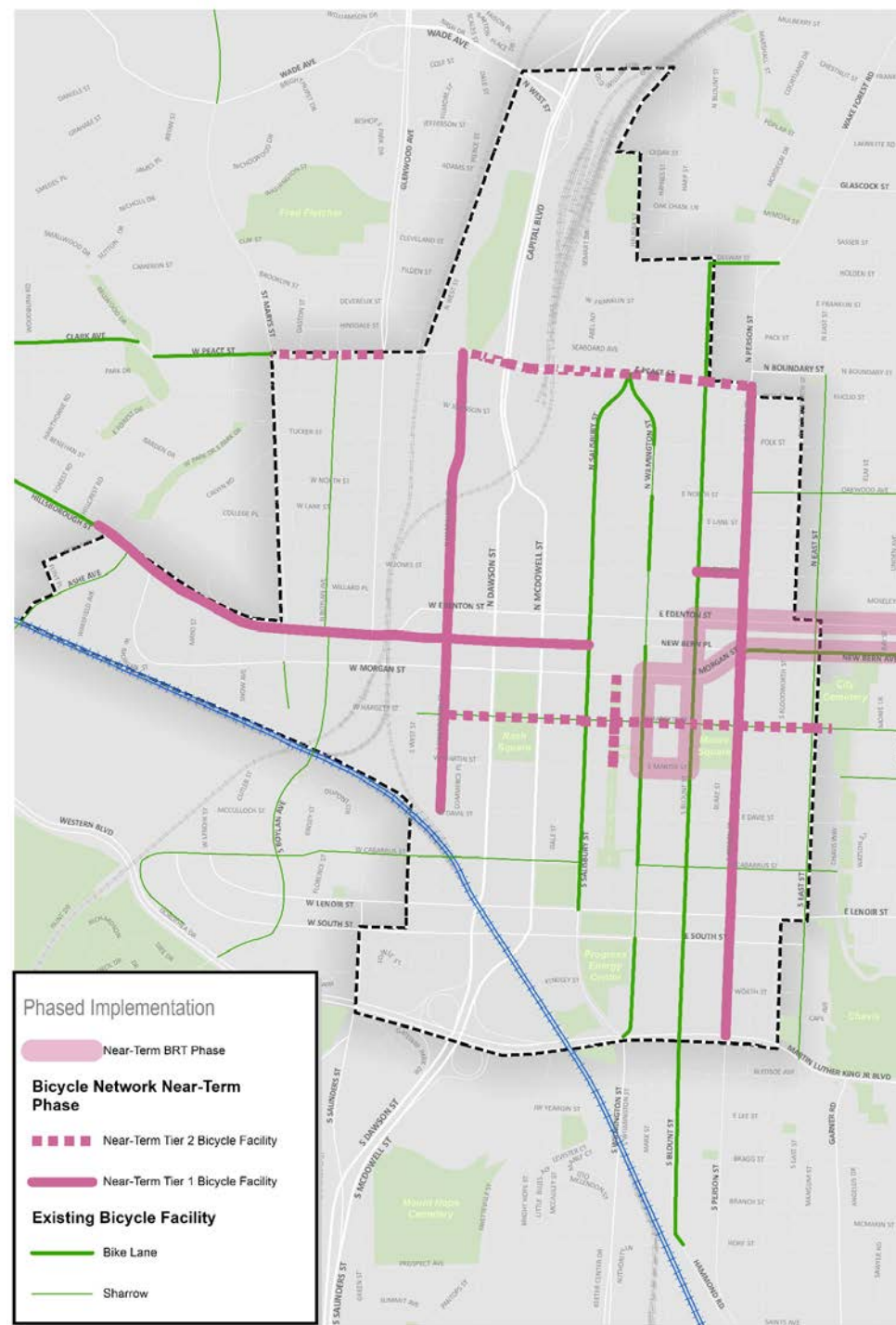- PM Peak Traffic

Preferred Scenario

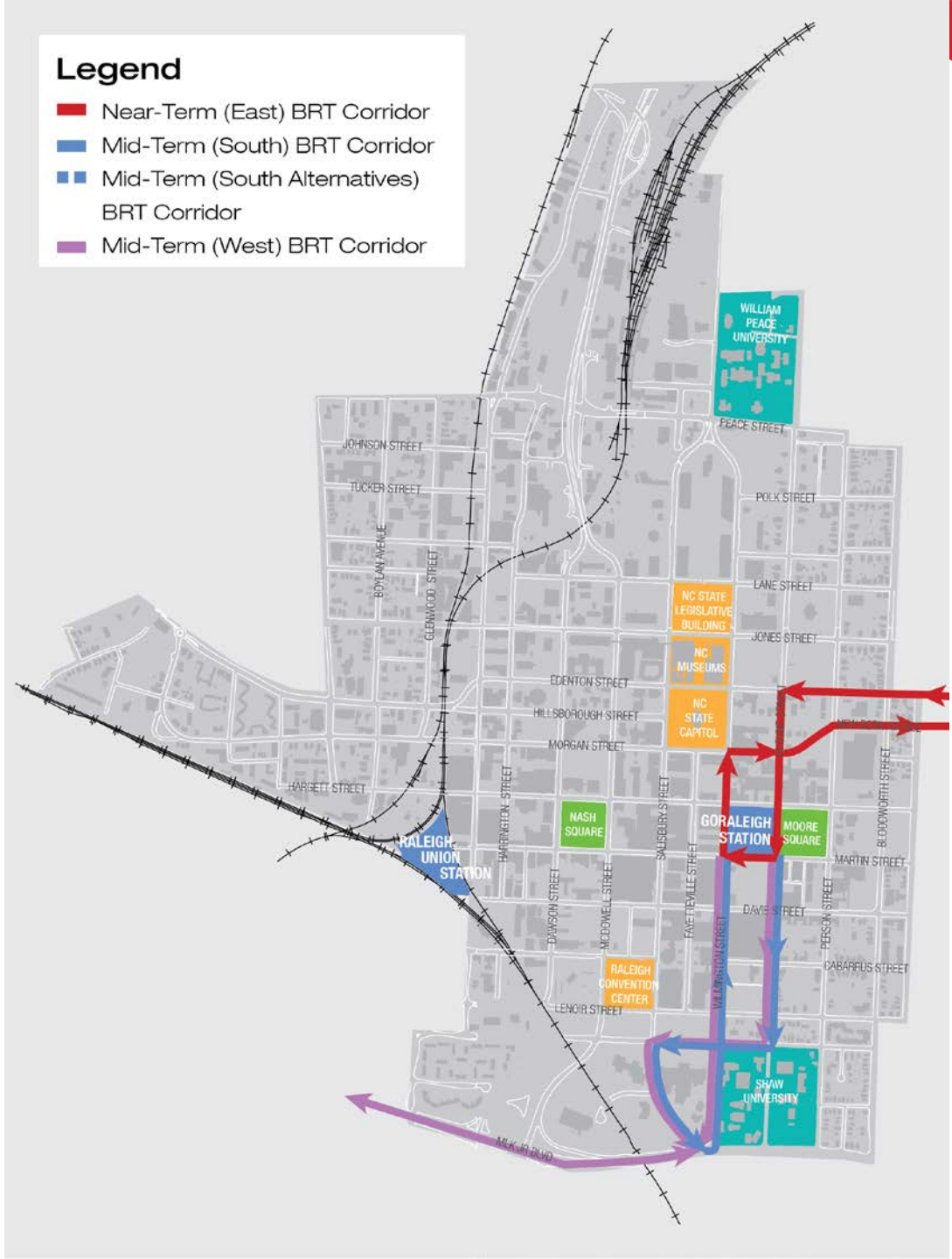# BRT Implementation – Near Term (2023)

Seaboard Station

William Peace University

Peace Street

St. Augustine's University

Historic Oakwood

Oakwood Cemetery

N Willmington Street

N Blount Street

N Raleigh Boulevard

Oakwood Avenue

Crabtree Creek

New Hope Road

440

WakeMed Raleigh

WakeMed Raleigh

Enloe High School

Donald Ross Drive

NC State Capitol

W Morgan St.

E Edenton Street

N Tarboro Street

Hill Street

New Bern Avenue

New Bern Avenue

GoRaleigh Station

Moore Square

W Martin St.

S Person Street

E Hargett Street

E Martin Street

E Davie Street

Longview Shopping Center

Poole Road

Rock Quarry Road

Raleigh Boulevard

Raleigh Country Club

Shaw University

Chavis Park

Martin Luther King Jr. Boulevard

Legend

⬤ Proposed BRT station areas

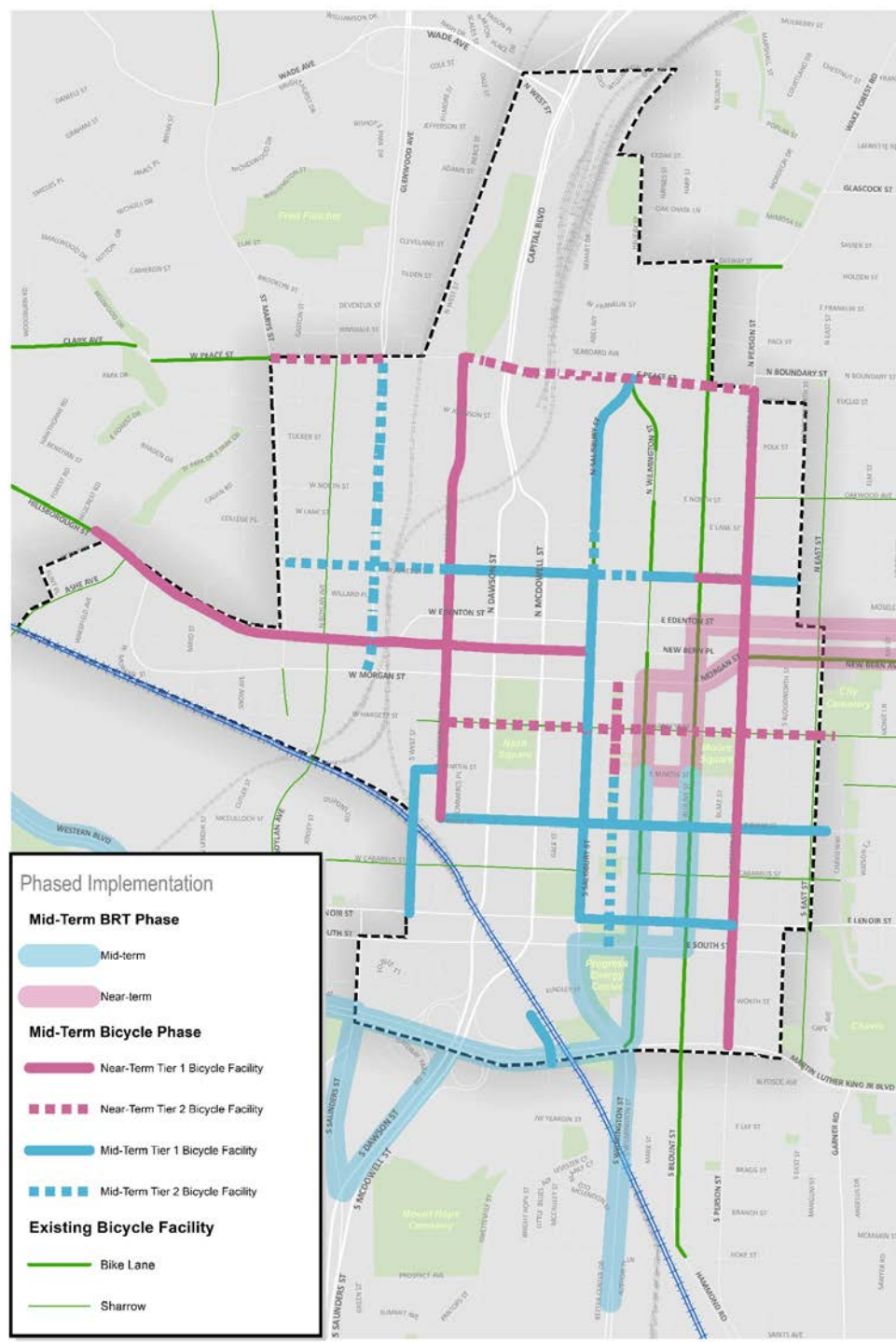▬ RDTP BRT Alignments

▬ MIS BRT Alignments

N

Bike Implementation– Near Term (2023)

BRT Implementation– Mid-Term (2025)

Bike Implementation – Mid-Term (2025)

BRT Implementation – Full Build-Out (2027)

Bike Implementation — Full Build-Out (2027)

Questions?