



How to get involved



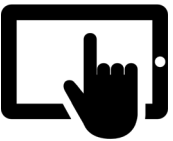
Walk around to each information booth to learn about the project and talk with staff



Fill out a comment form

Add your comments to the project map and to the community wall

You can also fill out the survey online at [planningforraleigh.com/ BRTprojects](https://planningforraleigh.com/BRTprojects)



View project materials, updates, and sign up to receive information at

[raleighnc.gov/ brt](https://raleighnc.gov/brt)



How will we use your input? Your input will be a critical part in refining the bus routes and land use study



Wake BRT: Western Boulevard Corridor Study

Public Meeting
November 12th, 2019





Agenda



Presenter



Dhanya Sandeep,
City of Raleigh



Morven Maclean, WSP



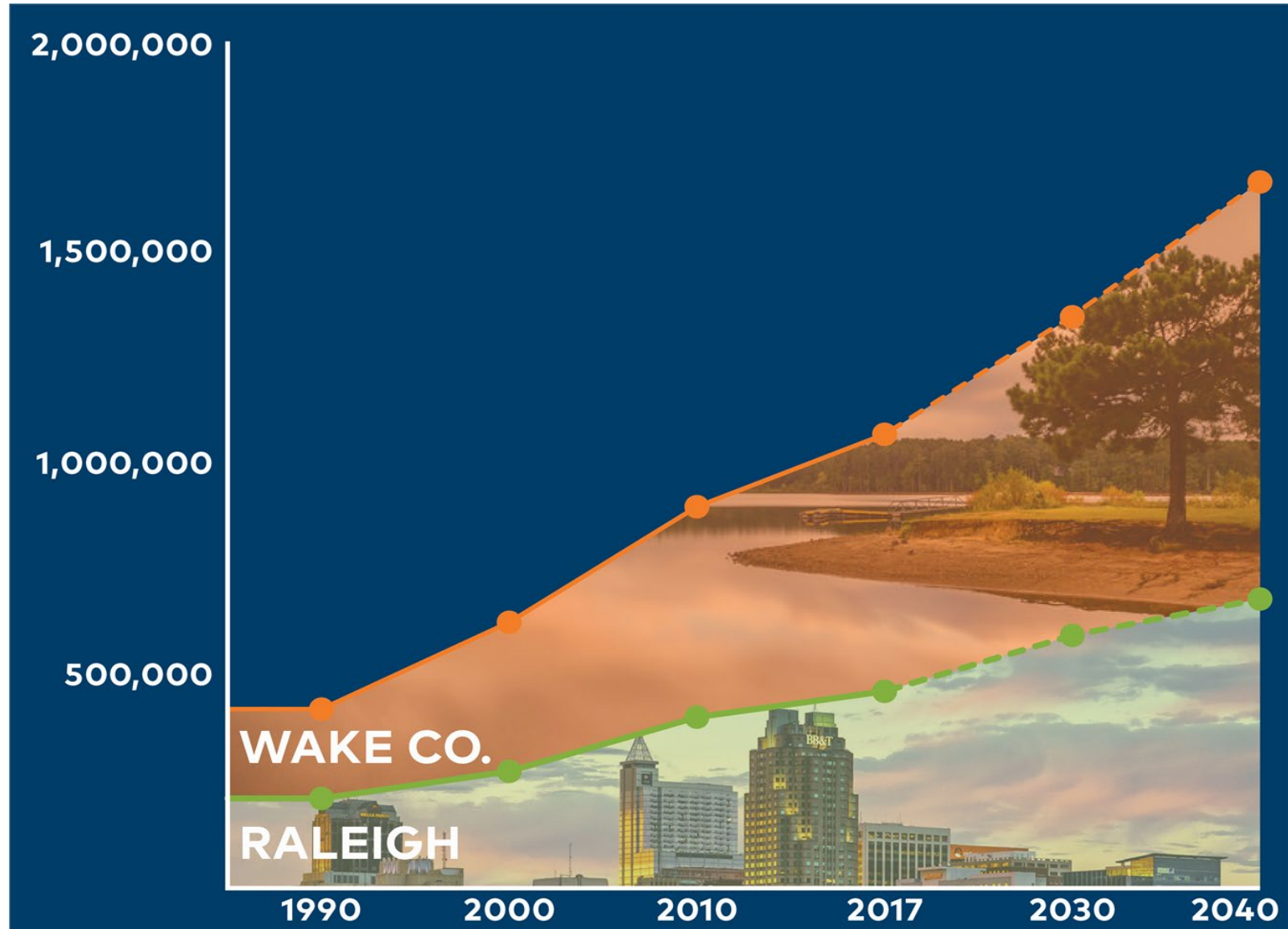
John Loughran, WSP



Kyle Vangel, HR&A

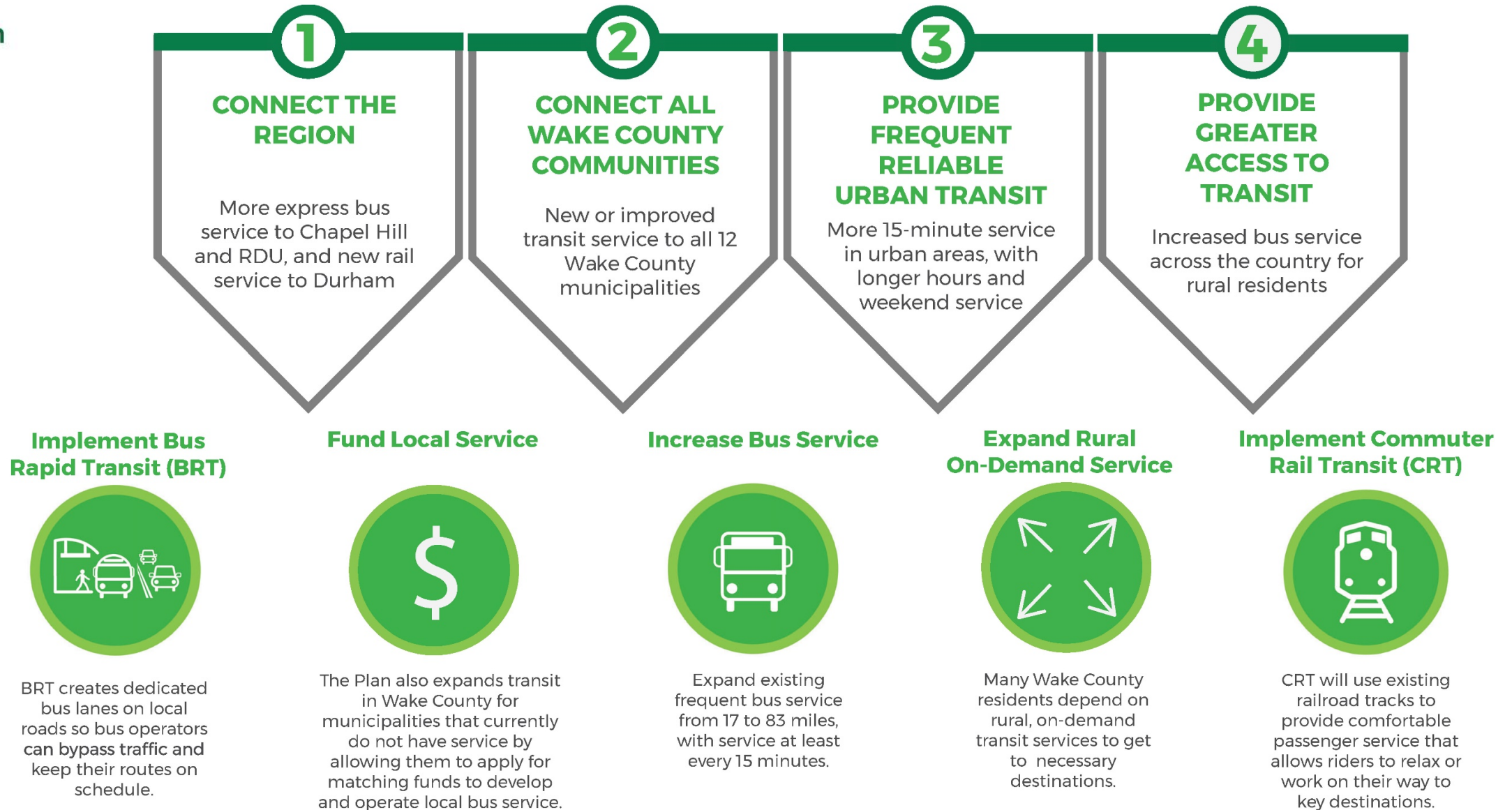


Regional Population Growth





Wake County Transit Plan –Four “Big Moves”





New Bern Avenue from Downtown Raleigh to New Hope Road

S. Saunders St./S. Wilmington St.
corridor from Downtown Raleigh to
Garner

Western Boulevard corridor from Downtown Raleigh to Downtown Cary

Capital Blvd./West St. corridor from
Downtown Raleigh to Crabtree Blvd.

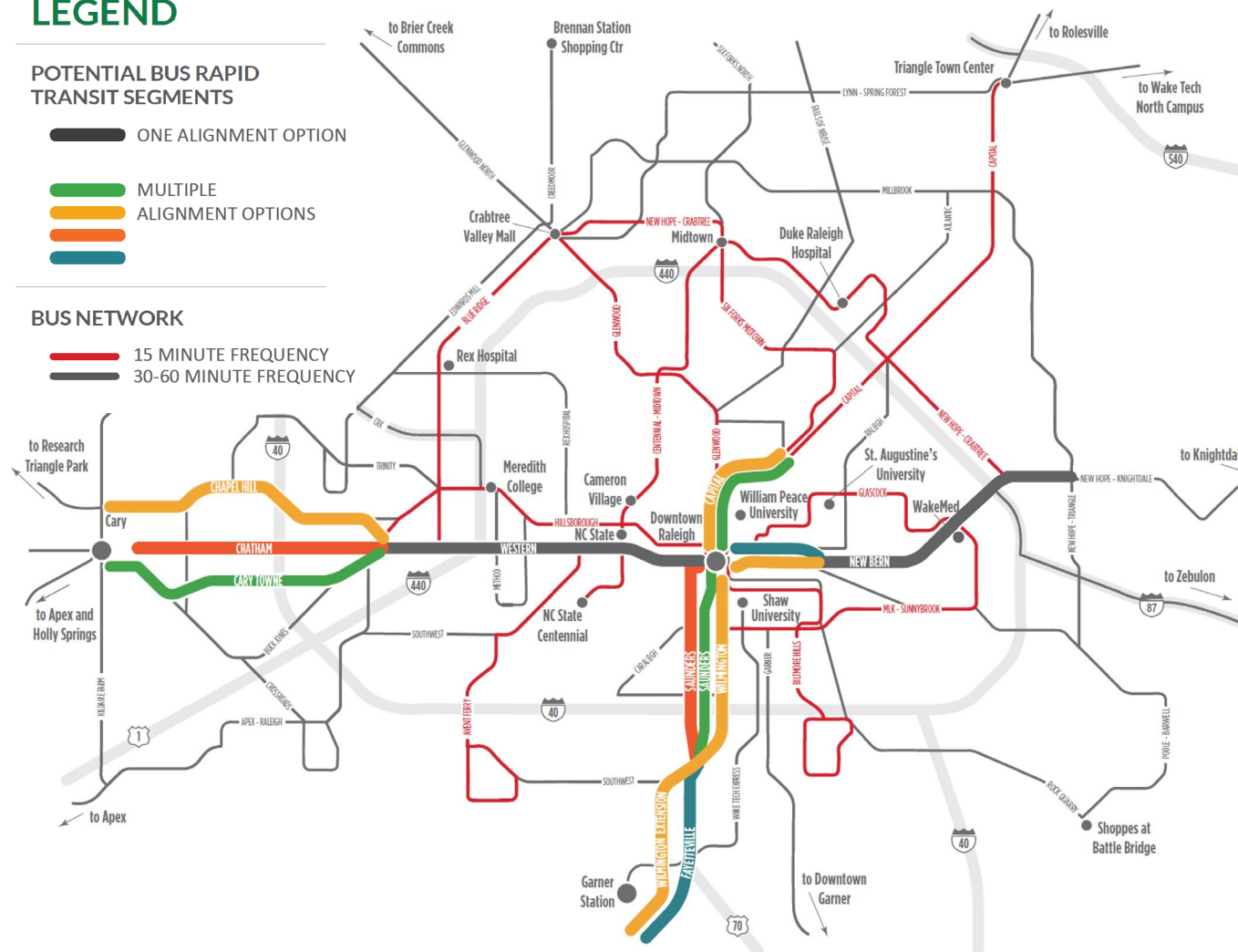
POTENTIAL BUS RAPID TRANSIT SEGMENTS

ONE ALIGNMENT OPTION

- MULTIPLE
- ALIGNMENT OPTIONS

BUS NETWORK

— 15 MINUTE FREQUENCY
— 30-60 MINUTE FREQUENCY



What is Bus Rapid Transit (BRT)?

A flexible, **high capacity transit** solution that combines physical and operational elements to improve **speed and reliability**, along with providing **high frequency services** and **extended service hours**.



SPECIALIZED
VEHICLES



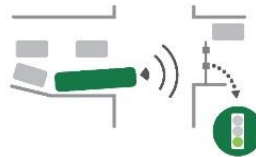
ENHANCED STATIONS



DEDICATED LANES



FREQUENT ON-TIME
SERVICE



TRANSIT
SIGNAL PRIORITY



BUS RAPID TRANSIT
BRANDING



ENHANCED FARE
COLLECTION
SYSTEMS



Wake BRT Infrastructure and Service Guidelines



Dedicated Runningway

Bus-only lanes separate transit from traffic, and may be painted a unique color to increase the lane's visibility (at least 50% in dedicated runningway).



Enhanced Stations

BRT stations include raised platforms, ticket vending machines, real -time arrival information, larger shelters, quality lighting, and other passenger amenities.



Specialized Vehicles

Custom buses provide more capacity, more doors (on either side of the bus) and lower floors for easier loading and unloading.

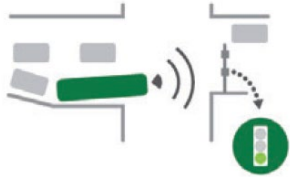


Branding

Unique branding and design make buses and stations more visible, raising awareness by distinguishing BRT from other transit services.

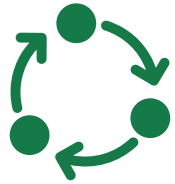


Wake BRT Infrastructure and Service Guidelines



Transit Signal Priority

Intersection improvements including transit signal priority (TSP) allow buses to bypass congestion. TSP does so by giving buses longer green lights.



Frequency

BRT buses would operate at least every 10 minutes in the peak hours, 15 minutes for off -peak hours and 20 minutes on weekends.



Longer Span of Service Hours

Weekday span of service from 4am to 12am (20 hours) and weekend span of service from 5:30am to 12am (18.5 hours).

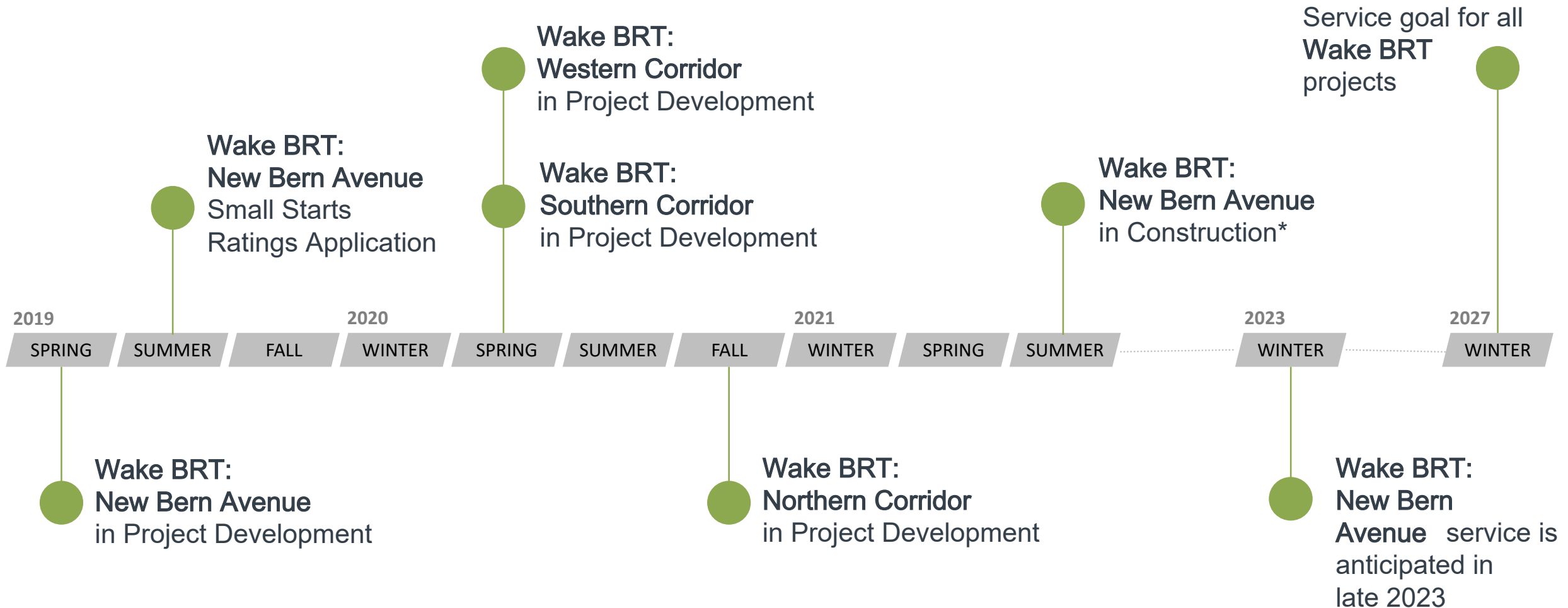


Enhanced Fare Collection System

Off-board fare collection using ticket vending machines, card readers and other tools at stations allow passengers to load without waiting in line to pay their fares.



Wake BRT Projects Sequencing



** Schedule Dependent on Small Starts Grant Ratings and Funding Grant Agreement in Fall 2020.*



How did we get here?

2017/2018

Major Investment Study

The study analyzed and identified a single alignment alternative from Downtown Raleigh to Jones Franklin Road, and three alignment alternatives for serving Downtown Cary.

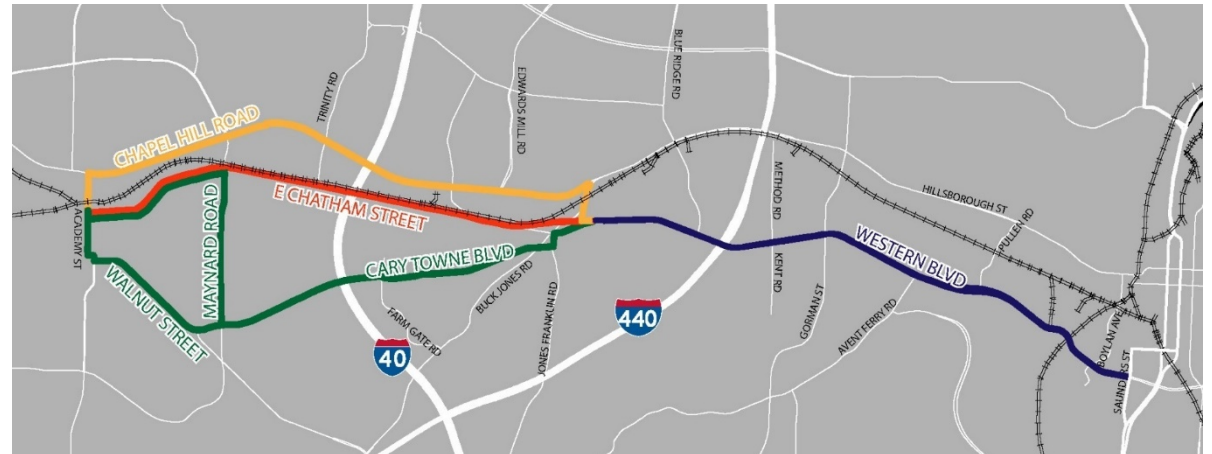


2019

Western Boulevard Corridor Study

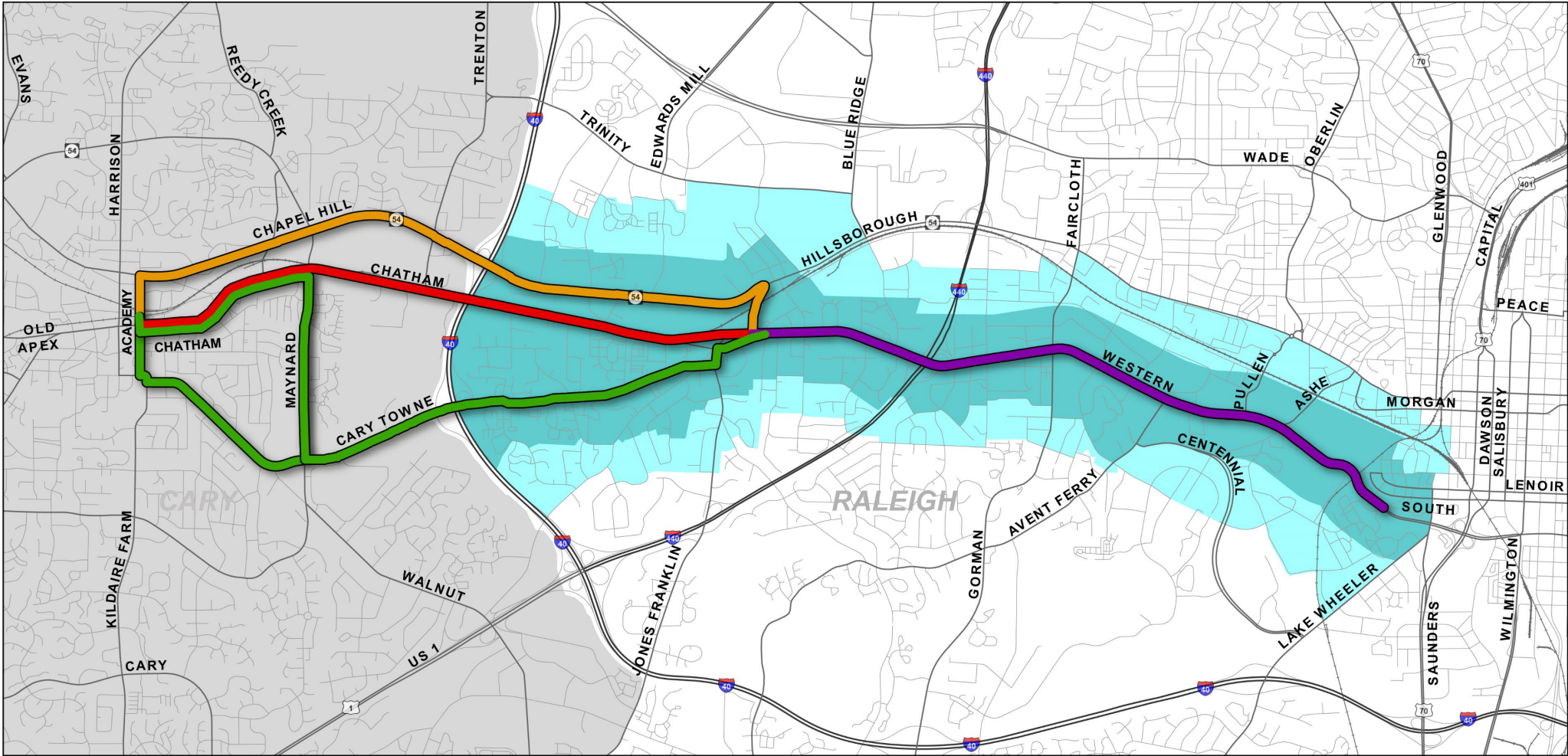
This study will help identify a preferred BRT alternative alignment to connect to Downtown Cary.

This study also introduces an additional alignment alternative, along Maynard Road, for serving Downtown Cary.





Western Boulevard Corridor: Study Area and Alignment Options



Wake BRT: Western Boulevard Corridor Alignments

- Western Boulevard
- Chapel Hill Road
- Chatham Street / Hillsborough Road
- Western Boulevard Extension / Cary Towne Boulevard

City of Raleigh Study Area

- 1/4 Mile Properties (5-minute walk)
- 1/2 Mile Properties (10-minute walk)

** A land use study for the Cary portion of the BRT Corridor will be completed after selection of a preferred route.*



Western Boulevard Corridor Study

–Project Overview

Purpose

Find the best way to integrate BRT along Western Boulevard to connect Downtown Raleigh, Dorothea Dix Park, NC State University, Downtown Cary, and all destinations along the corridor.

Goals

- Identify preferred BRT alternative alignment
- Understand the development potential
- Develop conceptual land use strategy
- Coordinate with other active projects

Tasks

- Multimodal and Safety Analysis
- Transit Analysis
- Project Coordination
- Land Use
- Market Analysis



Study Task - Multi -Modal Safety Analysis

A multi -m odal corridor provides safe and functional facilities for all users:

- Pedestrians
- Bicyclists
- Transit Users
- Motorists



Findings - Pedestrians

- Pedestrian crash data shows crashes are highest around North Carolina State University



Findings - Bicyclists

- Over half of bicycle crashes occur due to motorists making left turns or driving out of street intersections and driveways



Study Task - Transit Analysis

Existing routes and ridership within or adjacent to the Western Boulevard BRT corridor were examined:



GoRaleigh



GoCary



GoTriangle



Wolfline

Findings

- Average daily transit ridership in the corridor is robust and shows good potential for BRT ridership
- Transit Dependent populations will be well served by the new BRT route



Study Task - Project Coordination

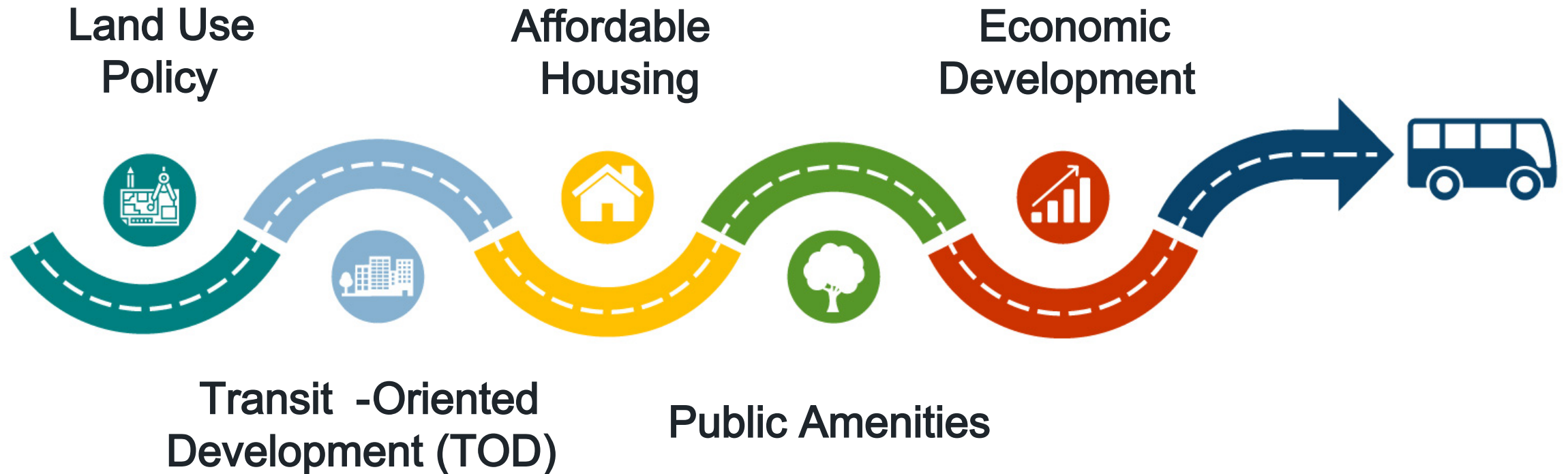
Identify locations where coordination with upcoming projects are important to the BRT planning process.



- | | |
|--|----------------------------------|
| 1. Jones Franklin / Western / Hillsborough Intersection | 4. Pullen Bridge Replacement |
| 2. I-440 Widening | 5. Entrance to Dorothea Dix Park |
| 3. Bicycle and pedestrian tunnel under Western Boulevard | 6. Boylan at Western |

**In addition to specific coordination for projects in these area, coordination will continue with City of Raleigh, NCDOT, Town of Cary, and other agencies on proposed projects within the corridor.*

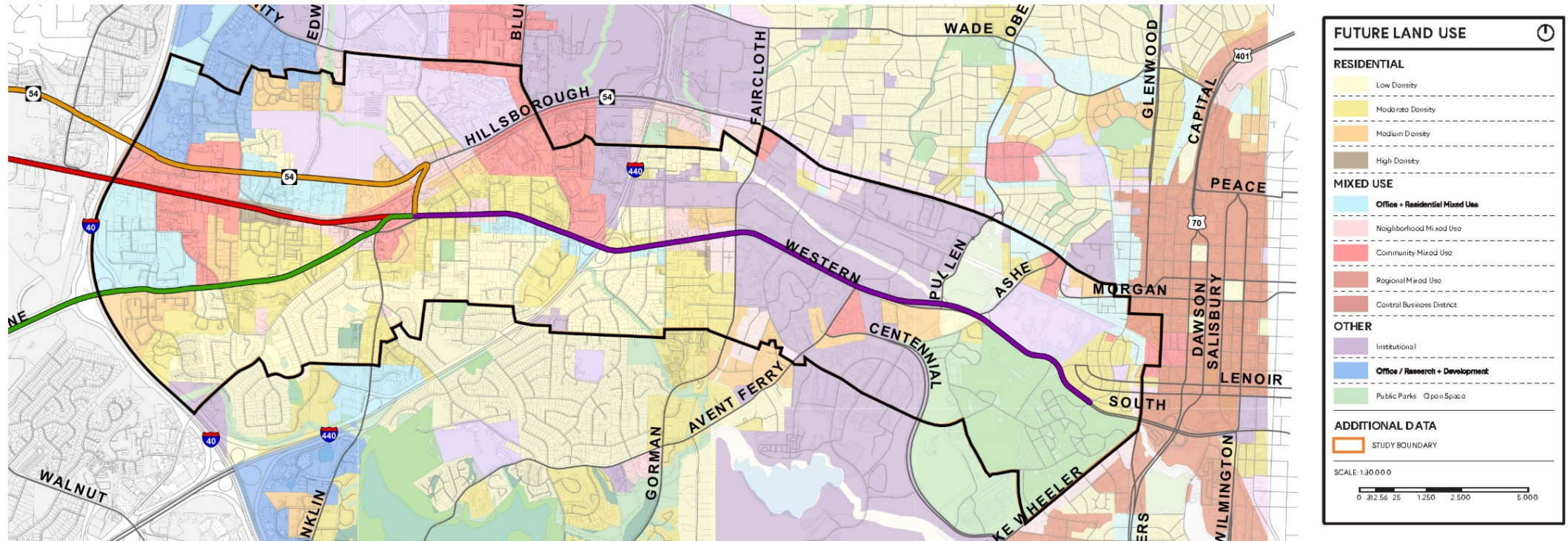
Planning Around Transit





Study Task - Development Potential and Land Use Strategy

- Precedent Study Review and Market Analysis
- Zoning and Regulatory Analysis
- Land Use and Urban Design Analysis
- Corridor Transit Oriented Development (TOD) Potential



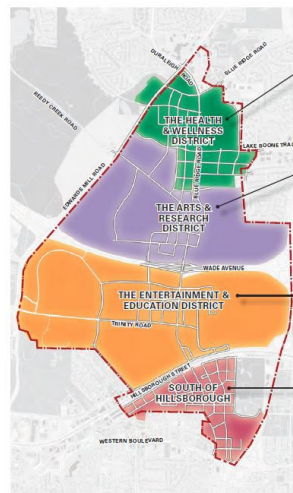


Precedent Study Review



RALBIGH, NC | AUGUST 2012

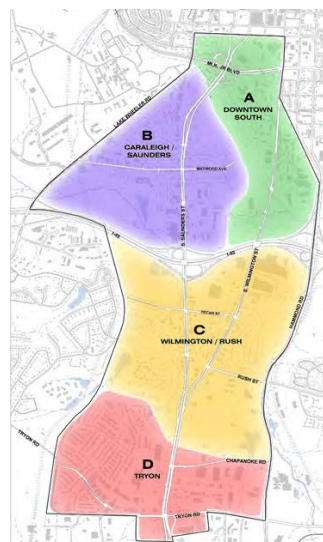
Blue Ridge Road District Study



SG Southern Gateway
Corridor Study

FINAL REPORT

Raleigh, NC | Adopted: February 7, 2017



Dorothea Dix Park Master Plan

Adopted by the Raleigh City Council
19 February 2019



A Park for Everyone, Built by Everyone



What is Transit -Oriented Development (TOD)?

Creating vibrant, compact, mixed
transport service .

-use communities with

walking distance

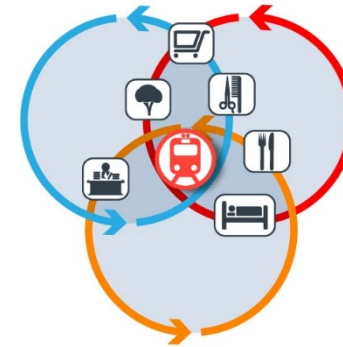
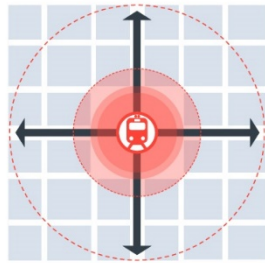
of public

TOD is:

Connected & Accessible

Focused & Compact

Mixed -Use

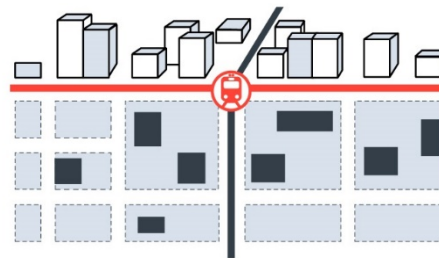
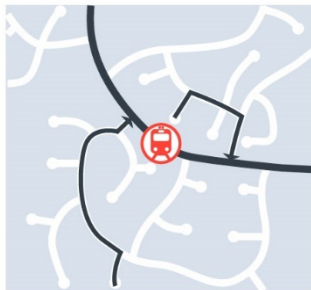


TOD is NOT:

Isolated

Sparse

Separated & Homogeneous





TOD in different uses and scales

The study will develop conceptual land use strategy for transit supportive development along Western Boulevard corridor.

Development Scales in Raleigh



18-STORY OFFICE, RESIDENTIAL, AND RETAIL
The Dillon, Raleigh, NC



FOUR-STORY RESIDENTIAL OVER RETAIL
401 Oberlin apartment building, Raleigh, NC



THREE-STORY SUBSIDIZED RENTAL HOUSING
The Village at Washington Terrace, Raleigh, NC



TWO-STORY TOWNHOUSES
St. Mary's Townhomes, W. Hargett Street, Raleigh, NC

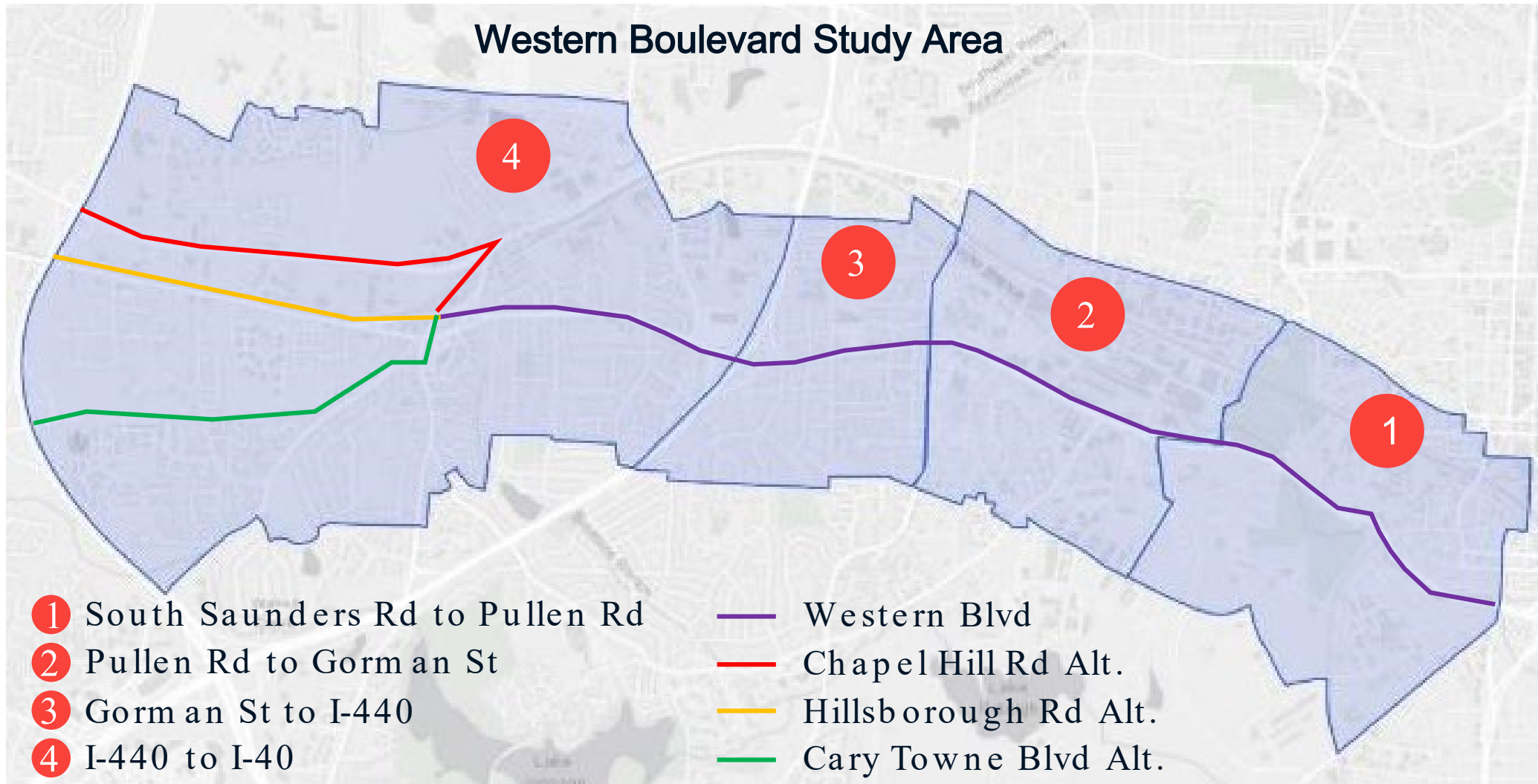


FOURPLEX APARTMENT
122 Hillcrest, Raleigh, NC



MARKET ANALYSIS - SUBMARKETS

The consultant team divided Western Boulevard into four submarkets to better understand existing conditions along the corridor.

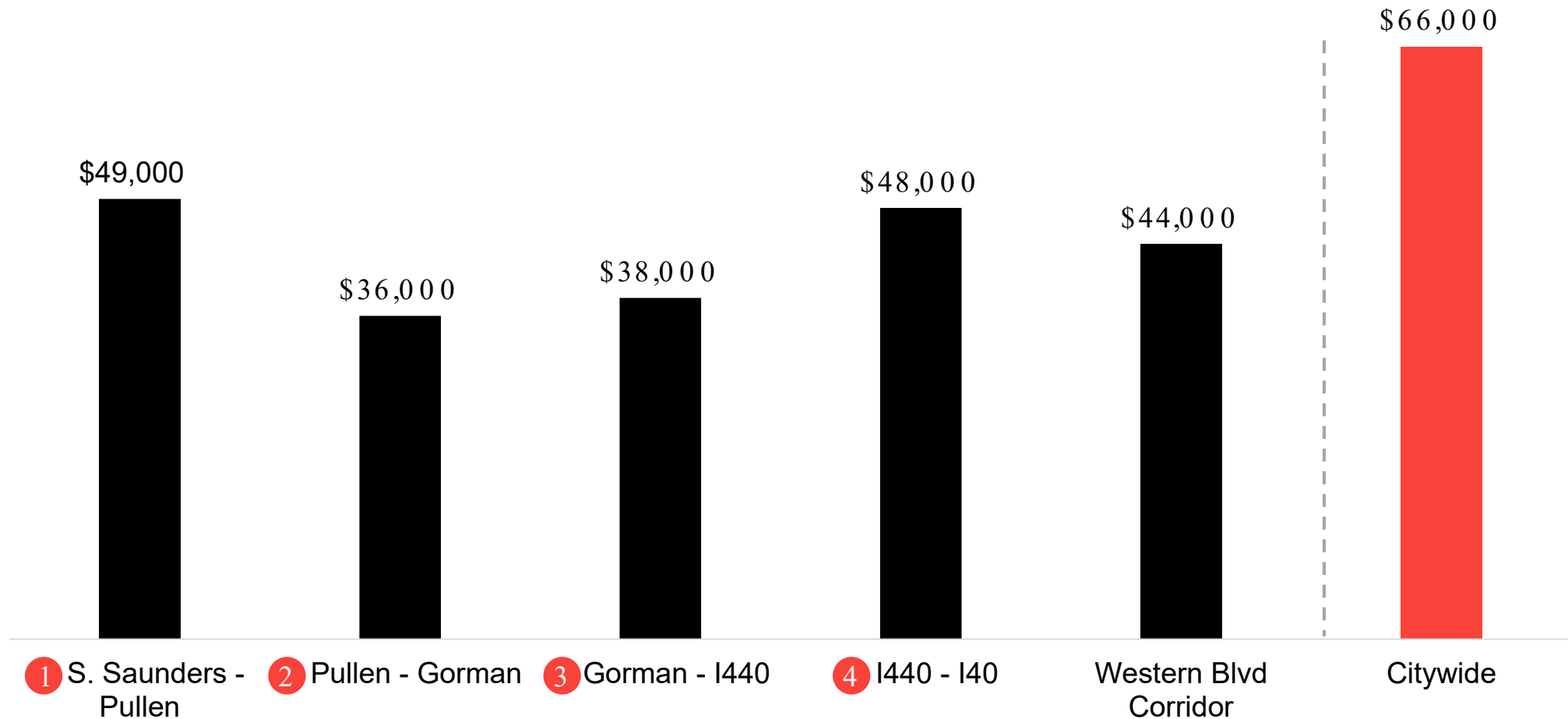




MEDIAN INCOME

The corridor has a lower median household income than the city overall, highlighting the need for affordable transportation options.

Median Household Income, 2019

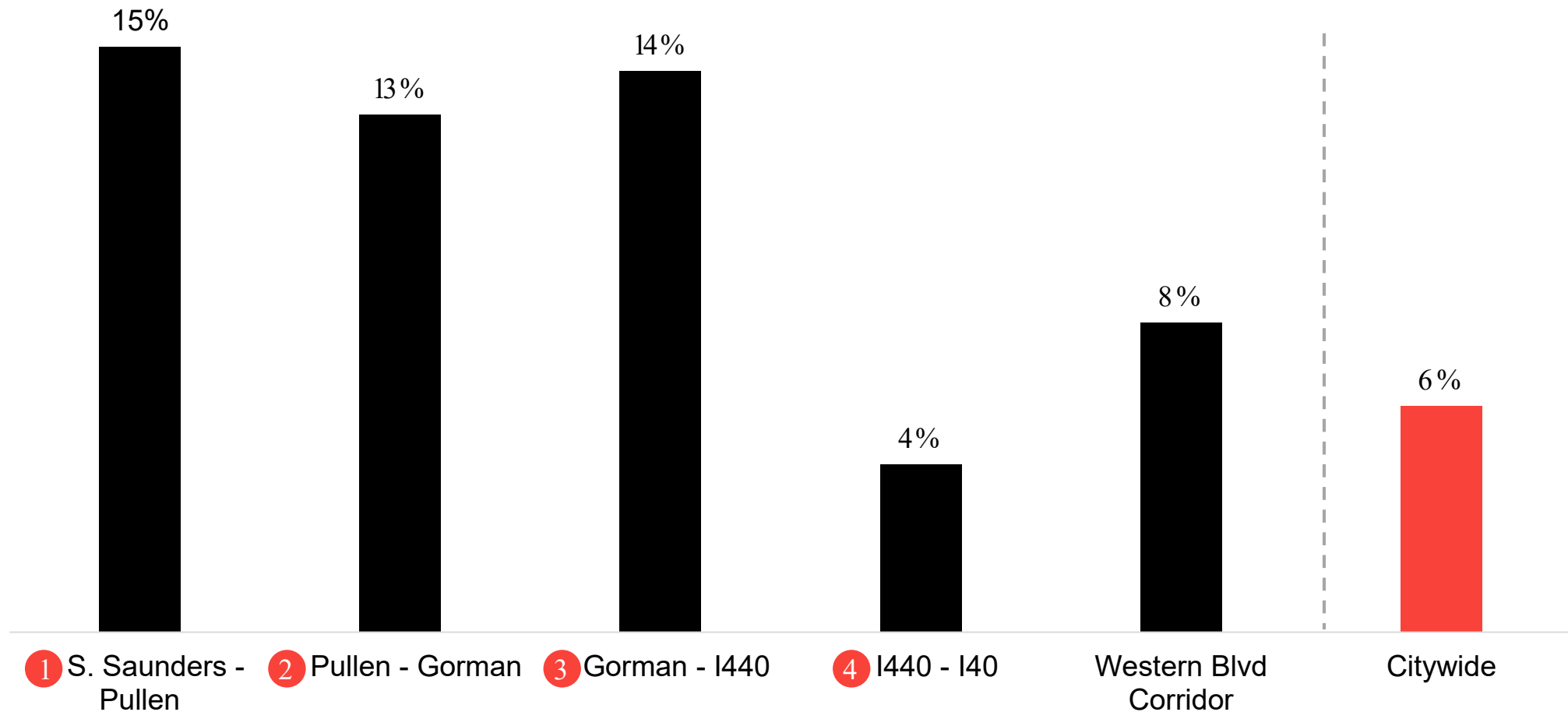




VEHICLE OWNERSHIP

Lower vehicle ownership indicates a greater need for alternative modes of transportation, particularly east of the I-440 Beltline.

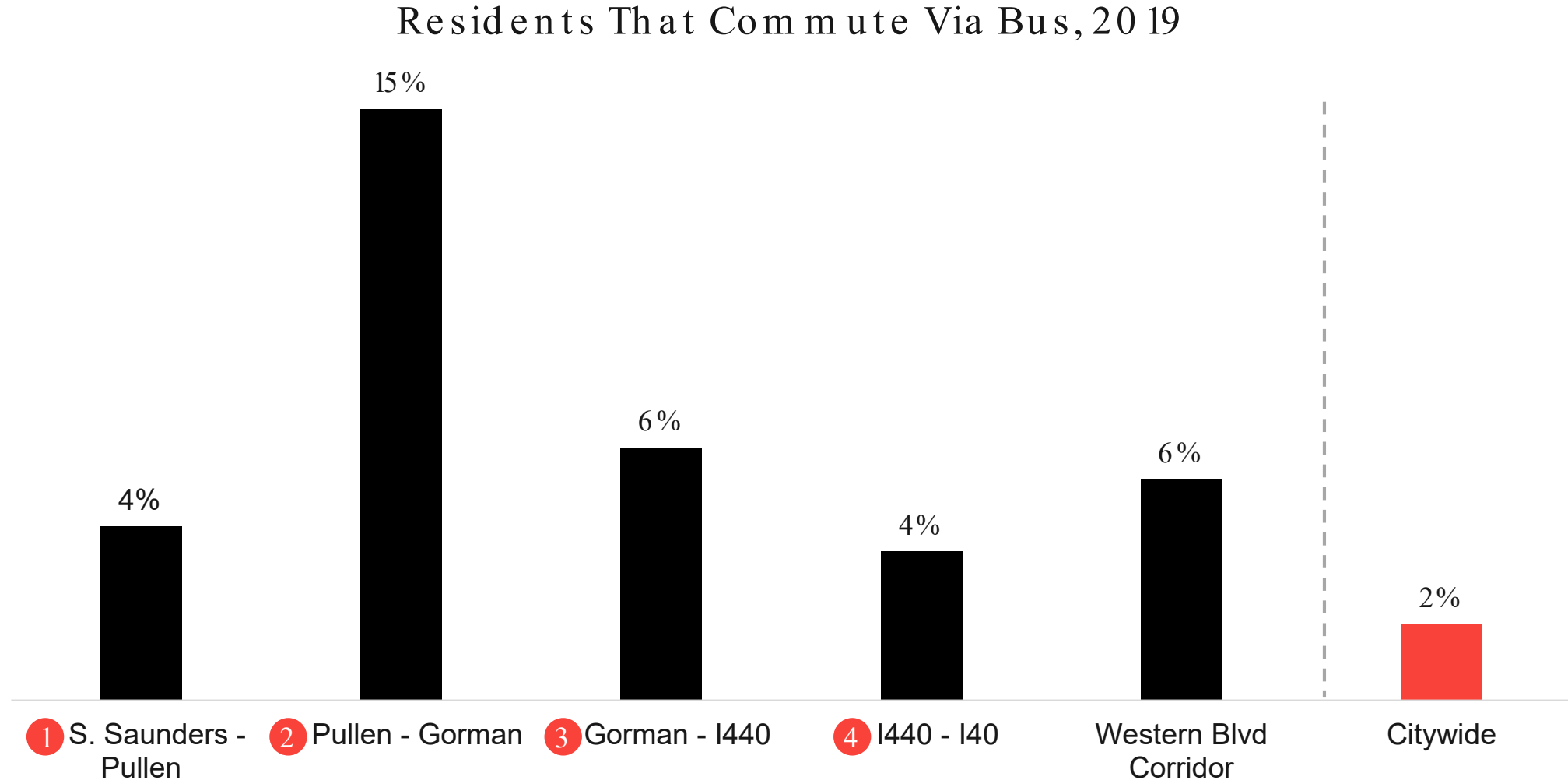
Housing Units Without A Car, 2019





TRANSPORTATION

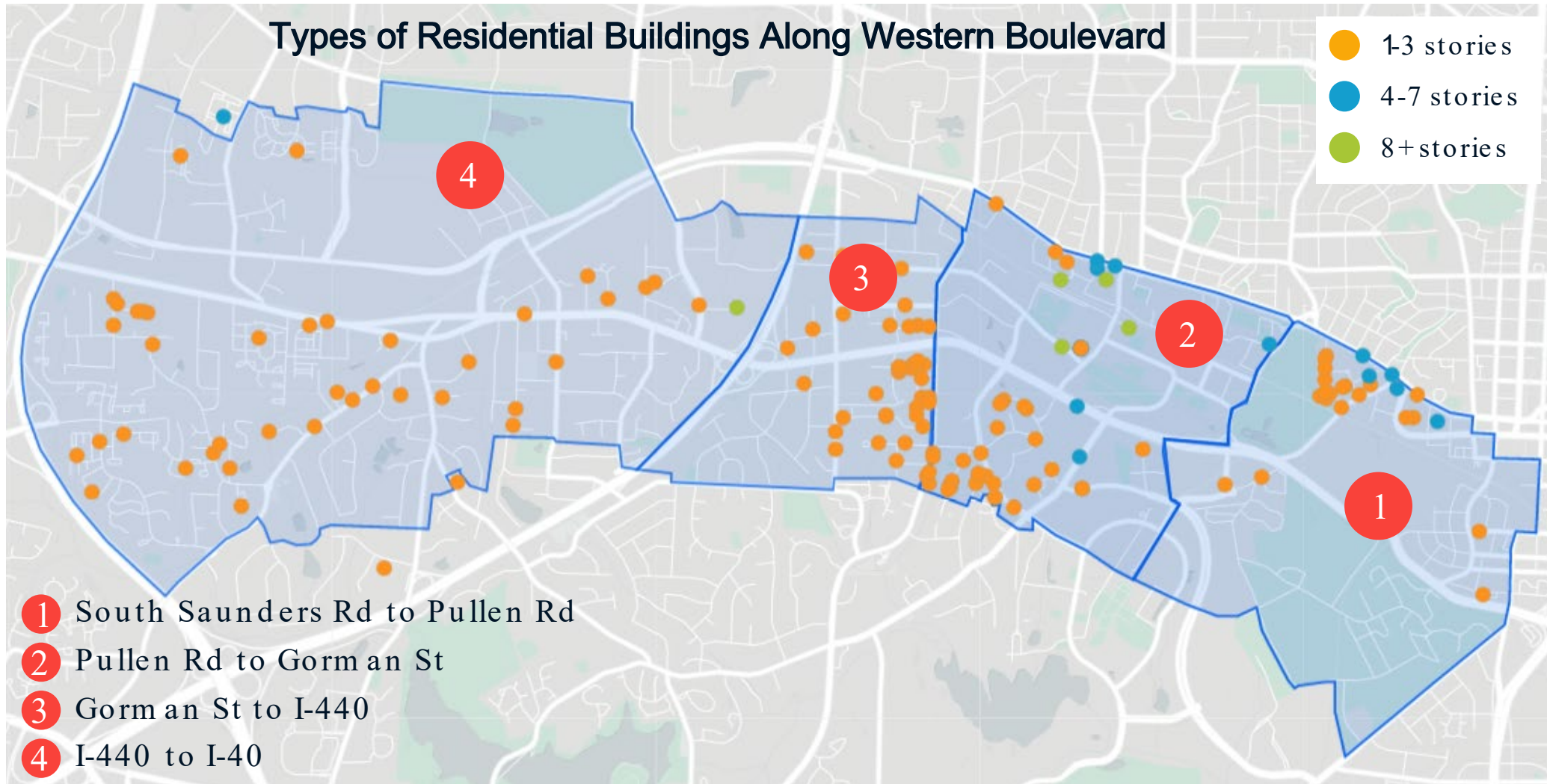
A high proportion of people along the corridor commute to work by bus, indicating the potential for high BRT ridership along the corridor.





RESIDENTIAL TYPOLOGIES

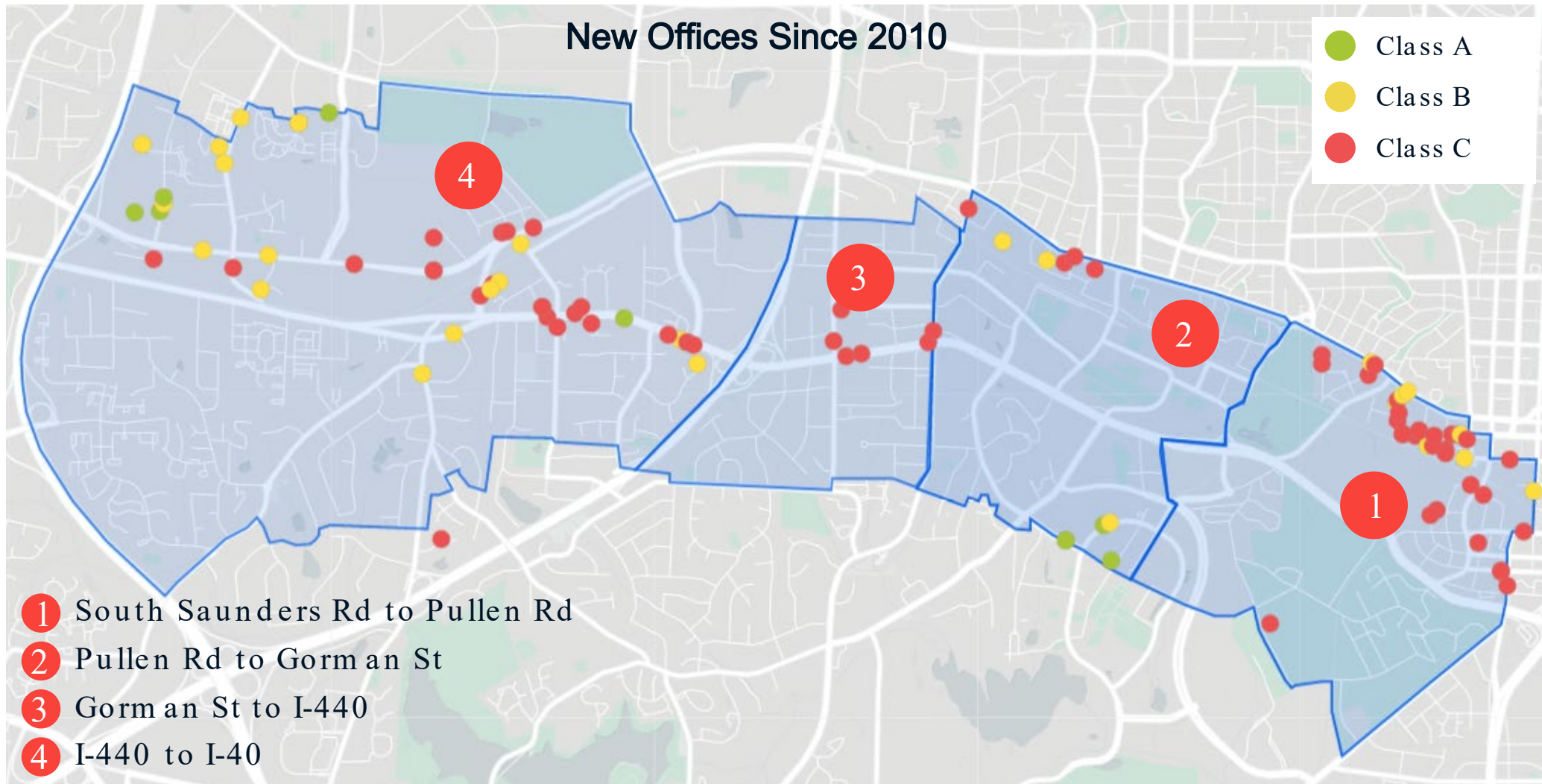
Low-rise apartments predominate along the corridor. Higher-density apartments cluster along Hillsborough St. near NC State University.





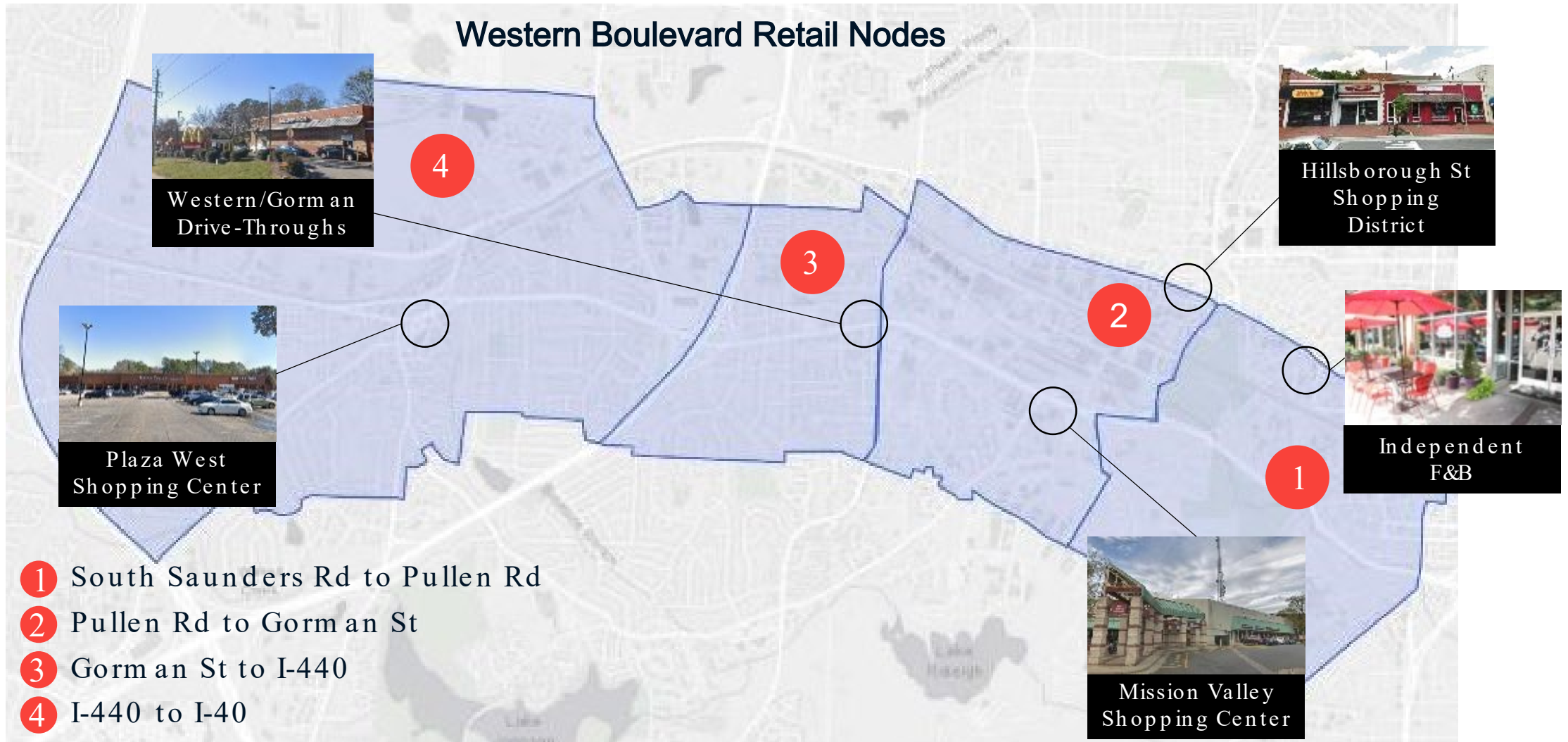
OFFICE TYPOLOGIES

The office market is clustered at Centennial Campus and the Raleigh Corporate Center office complex. There is no pipeline.



RETAIL

Retail along the corridor consists of restaurants and drive-throughs, convenience stores, and strip centers that primarily serve residents.

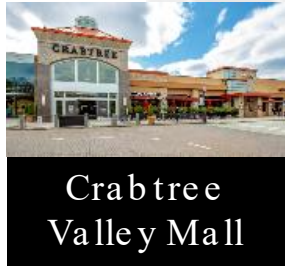




COMPETITIVE RETAIL

Given competitive retail offerings in the area, retail along Western will likely consist of ground-floor spaces in transit-oriented buildings.

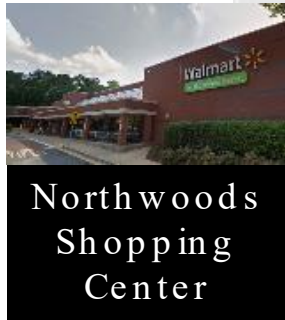
Retail Areas Within 10 -Minute Drive of Western Boulevard



Crabtree
Valley Mall



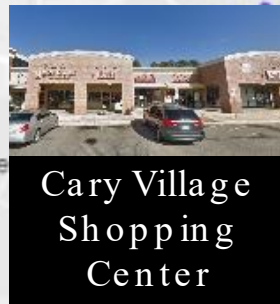
North Hills



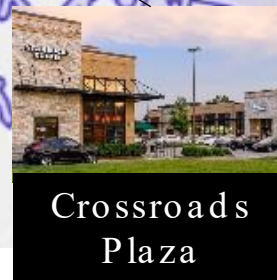
Northwoods
Shopping
Center



Creekside
Crossing &
Shops



Cary Village
Shopping
Center



Crossroads
Plaza



Cameron
Village



KEY IMPLICATIONS FOR TRANSIT AND LAND USE

Demographics and Socioeconomics

- An affordable and reliable transportation alternative like BRT can provide an important mobility solution for residents along the corridor.

Residential

- BRT has the potential to encourage more housing along the corridor since enhanced mobility and investments around stations will be attractive to potential residents. Policies promoting equitable development are important to ensure that both current and new residents can benefit from the transit investment .

Office

- Overall, BRT will likely encourage less office development than residential development given the lack of widespread momentum for office uses on the corridor. With appropriate connections, BRT will likely make Centennial Campus and the Raleigh Corporate Center office complex more attractive.

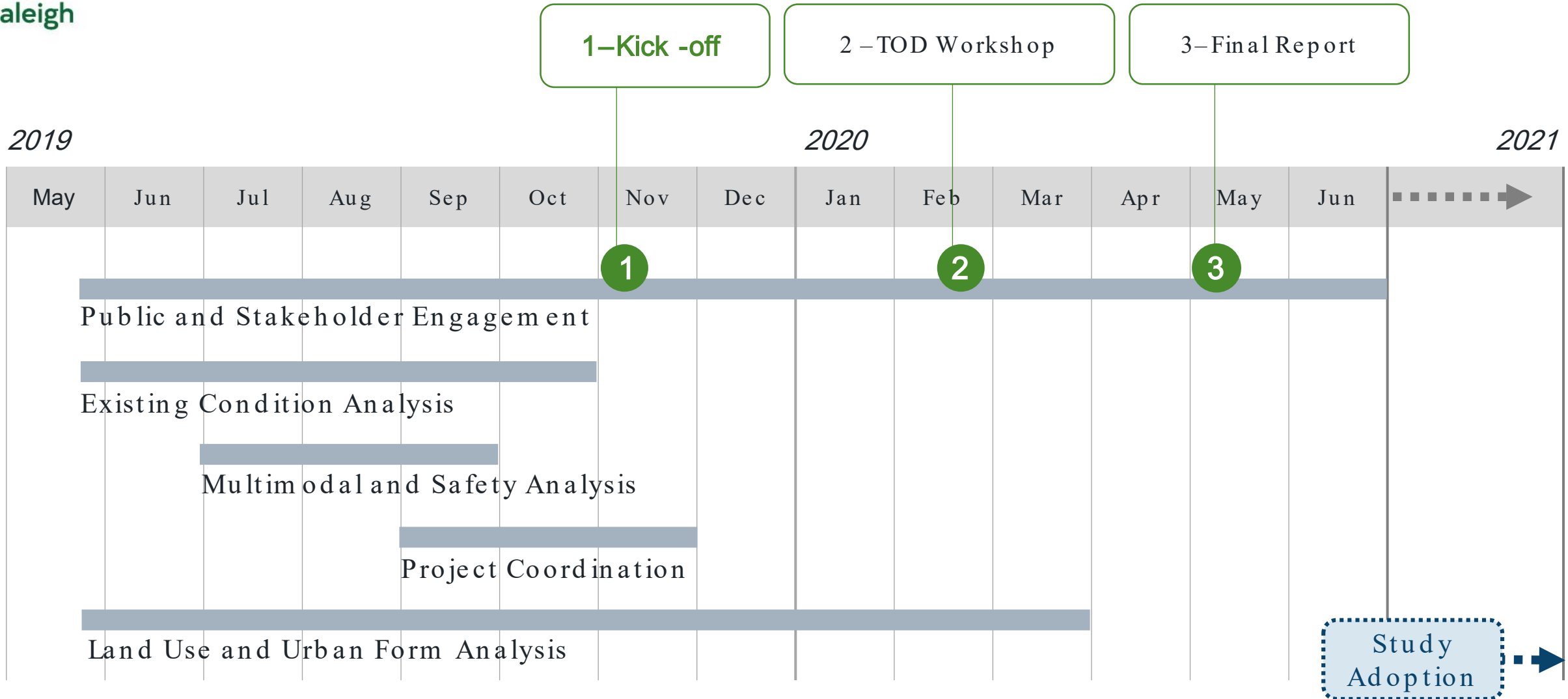
Retail

- With the opening of a BRT system, the corridor is poised for new ground floor, transit oriented retail that draws local residents attracted to mixed -use environments. -



Western Boulevard Corridor Study

–Tasks and Schedule



**Note: additional pop-up meetings will be hosted.*



Ongoing Projects: Supporting Wake Transit Plan Implementation



Wake BRT:
Western Boulevard
Corridor Study

Raleigh BRT:
Equitable
Development
Around Transit

Wake BRT:
New Bern Avenue

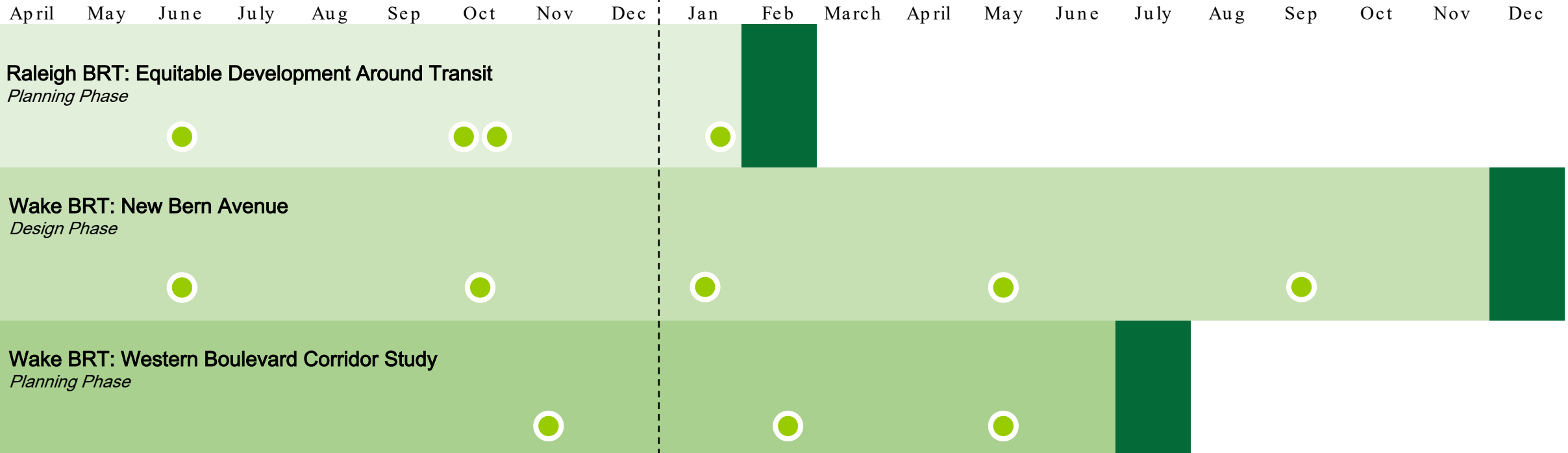
Wake BRT:
Future Projects



Timelines and Public Engagement Opportunities

2019

2020





How to get involved



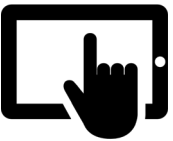
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