

May 19, 2025

Project Update: Phase 1

TriCounty Link Transit Study

Belen Vitello & Sharon Hollis, BCDCOG

Milbrey Heard & Keaton Wetzel, Nelson\Nygaard



We're a team of transit and engagement experts – and your points of contact for this project



Belen Vitello
Project Manager
BCDCOG



Sharon Hollis
Principal-in-Charge
BCDCOG



Milbrey Heard
Project Manager/Point of
Contact
Nelson\Nygaard



Keaton Wetzel
Deputy Project Manager
Nelson\Nygaard

What are we covering today?

- 1 Study Overview and Timeline
- 2 Existing Transit Conditions & Market Analysis Findings
- 3 Survey & Next Steps



Study Overview and Timeline



1

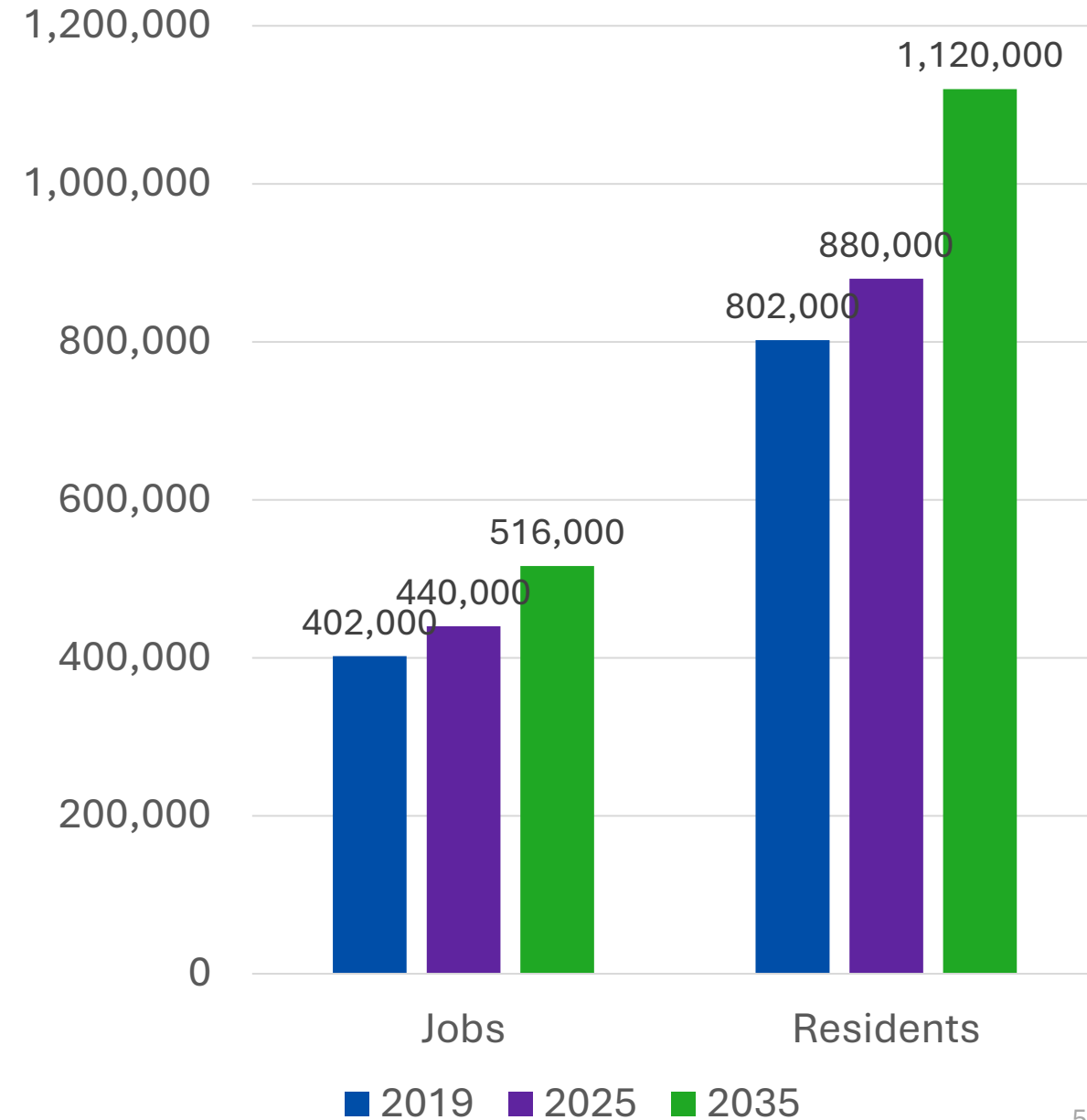
What is this study about?

The Charleston region is growing rapidly, and TCL needs to plan the expansion and improvement of its services to keep up with this growth.

TCL is developing a transit study to plan **for more efficient, effective, and convenient service for the entire TriCounty Link area**, including specific recommendations for the fast-growing Summerville area.

This project is led by the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG), which governs TriCounty Link service.

Projected BCD Area Population and Employment Growth (2019-2035)



Objectives, Goals & Priorities

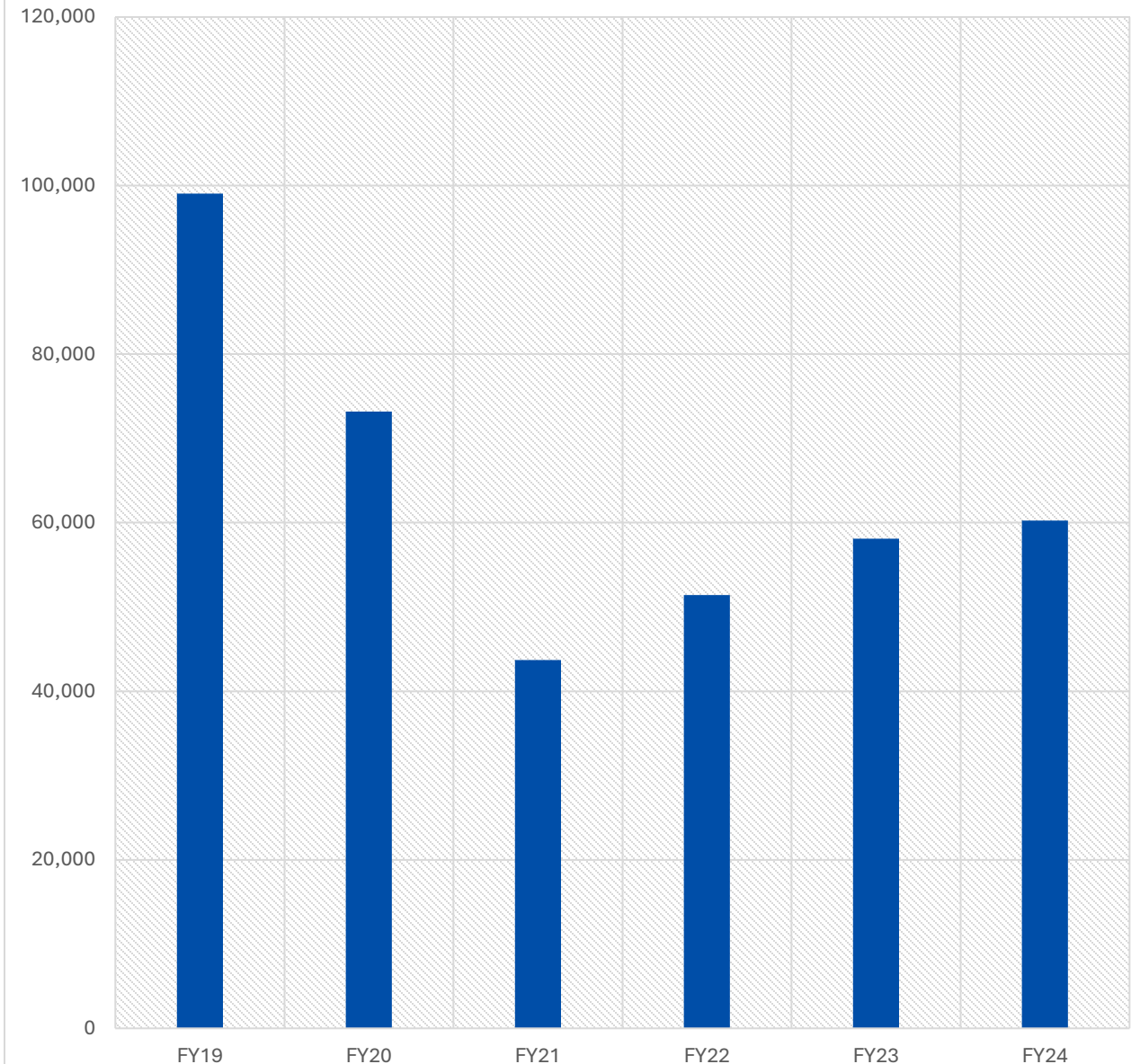
Create implementable transit plans for **both** the near-term and 2035 considering:

- Future Lowcountry Rapid Transit Line
- Other High-Capacity Transit improvements
- Funding limitations
- Rapid growth in Summerville region
- Rider needs and preferences
- Mix of urban, suburban, and rural development types

Goal:

Evolve TCL to make service more efficient, effective, and convenient.

FY19 to FY24 Annual Ridership



One Year of Work Divided Among 3 Phases



Phase 1 assesses existing conditions and identifies opportunities for improvement



Phase 1 Existing Conditions

JANUARY - MAY 2025

Questions we'll ask....

- *What changes would make your life easier?*
- *What are your goals for future service?*
- *What are your preferences among different approaches to providing transit?*

In order to inform....

- *Market Analysis*
- *Funding and Financial Assessment*
- *Project Vision, Goals, and Objectives*

Phase 2 is about producing recommendations to address the opportunities for improvement



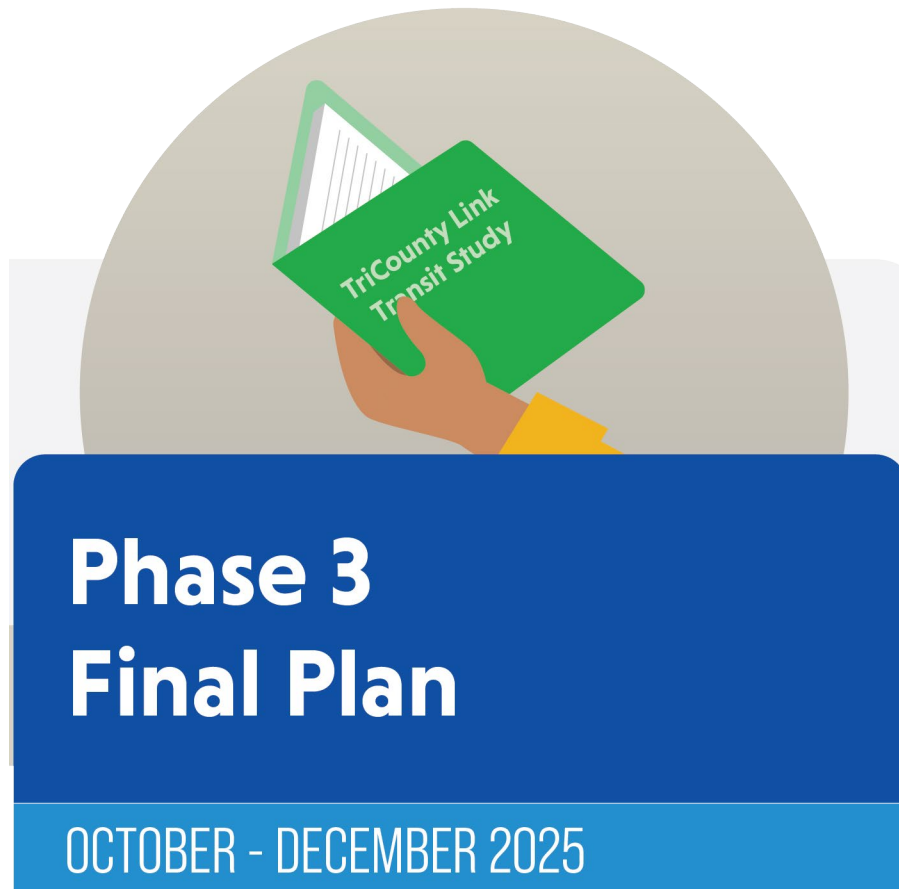
Questions we'll ask....

- *How would proposed recommendations impact you?*
- *Which recommendations should be prioritized?*
- *Are there key changes that you think are missing from the recommendations?*

In order to inform....

- *On-Demand Transit Plan*
- *Summerville Transit Plan*
- *Framework Plan*

Phase 3 is about creating a roadmap for implementation for both the near-term and after 10 years of expected growth



Questions we'll ask....

- *Do the proposed changes address your most critical needs?*
- *What needs to be revised for the final version?*
- *Are the changes in line with BCDCOG and TCL's expected funding levels?*

In order to inform....

- *Implementation Plan*
- *Financial Plan*
- *Final Plan*

We Want the Entire Community Represented In Our Engagement Process



TriCounty Link Staff: Interviewing and Engaging Planners, Bus Operators, Managers, Supervisors, Maintenance, Marketing, and Public/Customer Relations

Local/Regional Agencies, Municipalities, and Key Stakeholders: Regular TAC Meetings

Frequent Riders: Engaging those who know the system best and may rely entirely on transit to access essential and recreational goods and services through in-person and online outreach.

Non-riders or Potential Riders: Understanding how transit can better serve a broader range of trip types and travel markets through in-person and online outreach.



Existing Transit Conditions and Market Analysis Findings



2

TriCounty Link already plays a powerful role in connecting residents, visitors, students, and workers to the region

5,000 average monthly riders

Transit is the most affordable mode of transportation



\$840 annual cost

Annual cost of riding TCL

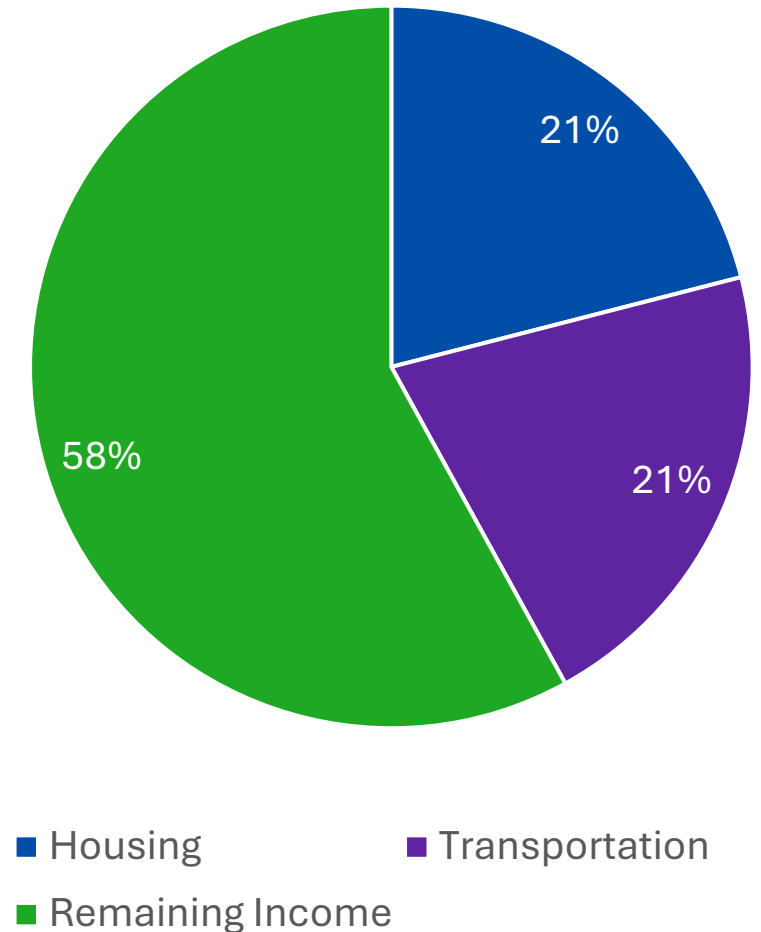


\$12,480 annual cost

*Average annual
automobile ownership
and gas cost for
BCD area residents*

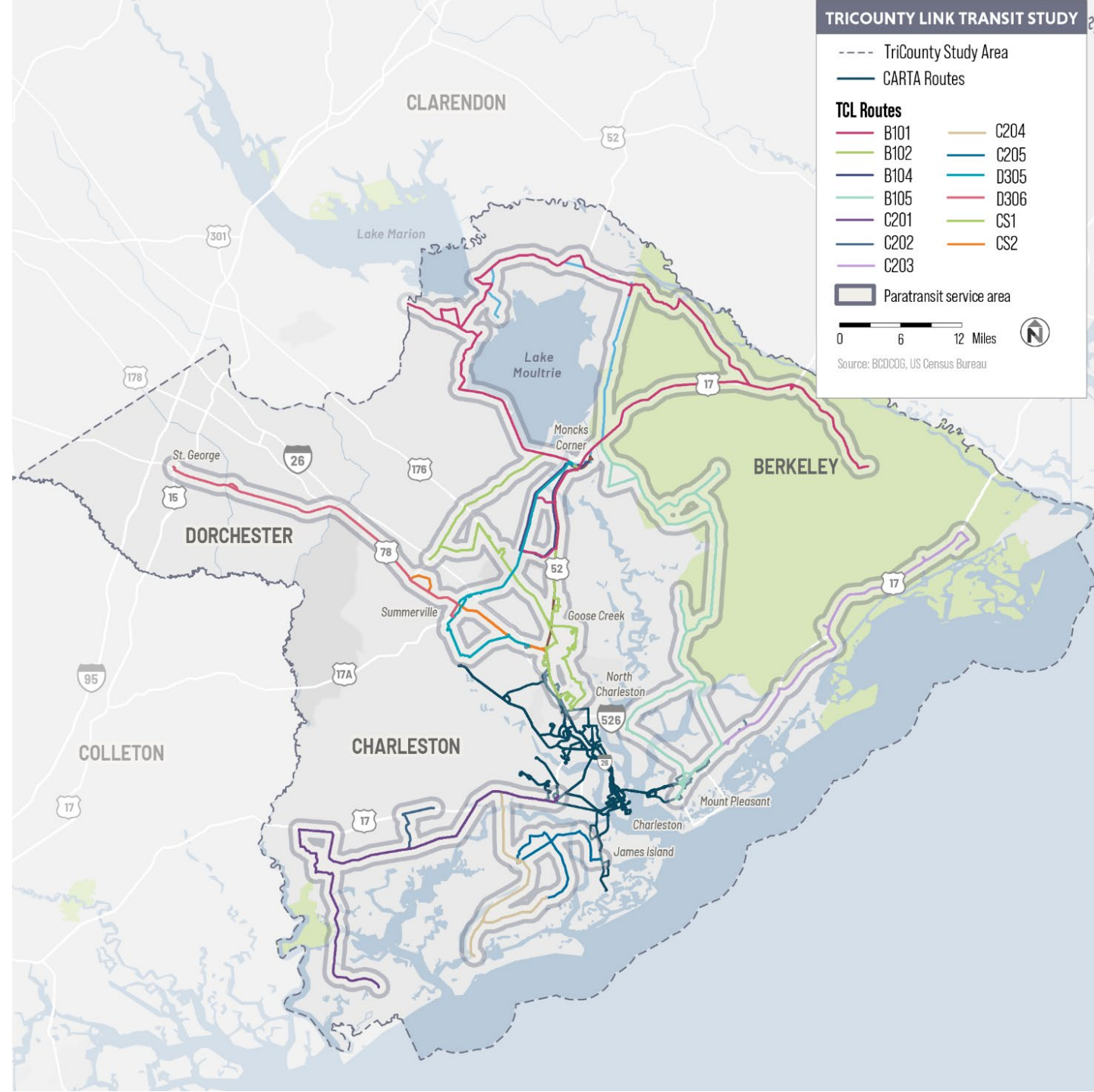
Transit is key to accommodating the region's growth by **reducing congestion, limiting air pollution, and improving access, especially for the 20,000 people in the area living in poverty.**

Housing and Transportation Costs as a Proportion of Total Household Spending for TCL Service Area Residents



13 Bus Routes & 1 On-Demand Service Zone

- **11 regular routes** that provide service across the study area
 - B101, 102, 104, 105
 - C201, 202, 203, 204, 205
 - D305, 306
- **2 Commuter Routes** (CS1, CS2) provide peak-period only service to and from the Rivers Avenue Park & Ride
- **ADA deviated route** service available within $\frac{3}{4}$ mile of route
- **Link2Lunch on-demand** service within Moncks Corner on weekdays 10:45 AM - 1:00 PM.



Most Routes Operate Every 1-2 Hours

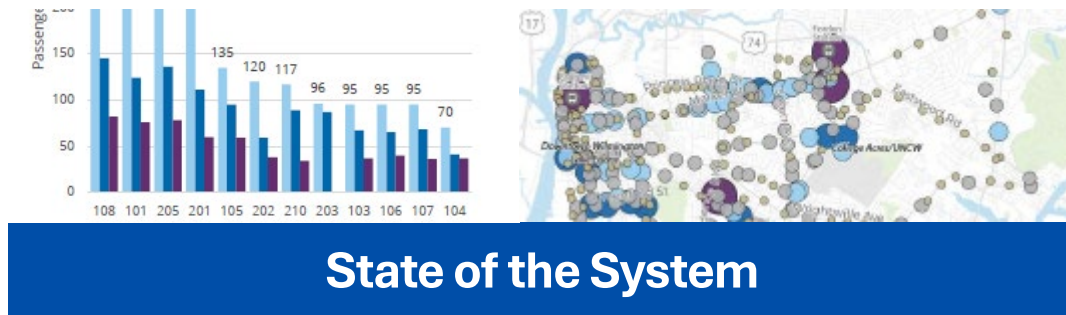
Weekday Service		5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
Number	Name	Early	AM Peak				Midday					PM Peak			Evening	
CS1	Moncks Corner/ North Charleston															
CS2	Summerville / North Charleston															
L2L	Link 2 Lunch - Moncks Corner															
B101	Moncks Corner / Jamestown															
B102	Moncks Corner / Goose Creek															
B104	Moncks Corner / St. Stephen															
B105	Moncks Corner / Mt. Pleasant															
C201	Edisto Island / Citadel Mall															
C202	Hollywood / Ravenel															
C203	McClellanville / Mt. Pleasant															
C204	Johns Island / West Ashley															
C205	Johns Island / James Island															
D305	Summerville Connector															
D306	Summerville / St. George															
Saturday Service		5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
Number	Name	Early	AM Peak				Midday					PM Peak			Evening	
C203	McClellanville / Mt. Pleasant															

Approximate Headways
<60
60
90
>90
On Demand

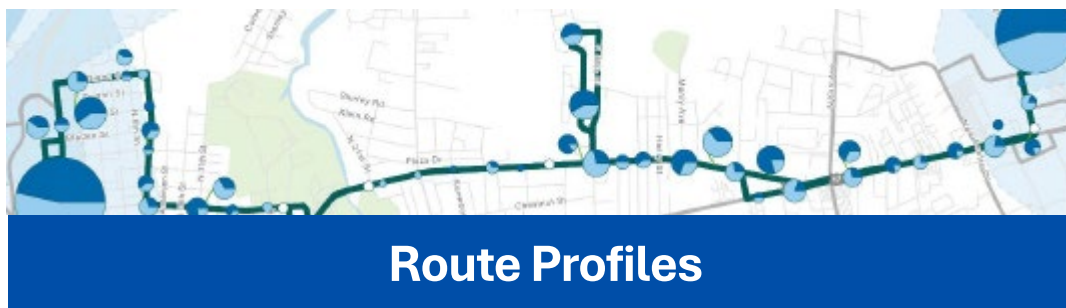
Existing conditions findings are summarized in 3 deliverables...



Provides an understanding of the underlying demand for transit.



Provides an understanding of how well the existing system is meeting this underlying demand and customer needs






























Provides an assessment of each route and offers recommendations for restructuring to better serve the region

...that will guide us as we develop our Phase 2 service recommendations.

How do we determine the market for transit?




























- A main factor in determining transit demand is **density: where people live and work, and how those areas are concentrated.**
 - Density means that any given service investment is useful to more people

LAND USE			TRANSIT	
Land Use Type	Residents per Acre	Jobs per Acre	Appropriate Types of Transit	Frequency of Service
 Downtowns & High Density Corridors	>45	>25	    Light Rail BRT Rapid Bus Local Bus	 10 mins or better
 Urban Mixed-Use	30-45	15-25	   BRT Rapid Bus Local Bus	 10-15 minutes
 Neighborhood & Suburban Mixed-Use	15-30	10-15	 Local Bus	 15-30 minutes
 Mixed Neighborhoods	10-15	5-10	  Local Bus Micro-transit	 30-60 minutes
 Low Density	2-10	2-5	   Micro-transit Rideshare Volunteer Driver Pgm	 60 mins or less or On Demand
 Rural	<2	<2	  Rideshare Volunteer Driver Pgm	 On Demand

Source: Thresholds based on research by Nelson\Nygaard.

How do we determine the market for transit?




























- A main factor in determining transit demand is **density: where people live and work, and how those areas are concentrated.**
 - Density means that any given service investment is useful to more people
- Where demand is higher = more frequent and higher capacity transit services

LAND USE			TRANSIT	
Land Use Type	Residents per Acre	Jobs per Acre	Appropriate Types of Transit	Frequency of Service
 Downtowns & High Density Corridors	>45	>25	    Light Rail BRT Rapid Bus Local Bus	 10 mins or better
 Urban Mixed-Use	30-45	15-25	   BRT Rapid Bus Local Bus	 10-15 minutes
 Neighborhood & Suburban Mixed-Use	15-30	10-15	 Local Bus	 15-30 minutes
 Mixed Neighborhoods	10-15	5-10	  Local Bus Micro-transit	 30-60 minutes
 Low Density	2-10	2-5	   Micro-transit Rideshare Volunteer Driver Pgm	 60 mins or less or On Demand
 Rural	<2	<2	  Rideshare Volunteer Driver Pgm	 On Demand

Source: Thresholds based on research by Nelson\Nygaard.

How do we determine the market for transit?

- A main factor in determining transit demand is **density: where people live and work, and how those areas are concentrated.**
 - Density means that any given service investment is useful to more people
- Where demand is higher = more frequent and higher capacity transit services
- Where demand is low = alternative service models such as on-demand (also known as microtransit), rideshare subsidies, and volunteer driver programs

LAND USE			TRANSIT	
Land Use Type	Residents per Acre	Jobs per Acre	Appropriate Types of Transit	Frequency of Service
 Downtowns & High Density Corridors	>45	>25	   	 10 mins or better
 Urban Mixed-Use	30-45	15-25	  	 10-15 minutes
 Neighborhood & Suburban Mixed-Use	15-30	10-15		 15-30 minutes
 Mixed Neighborhoods	10-15	5-10	 	 30-60 minutes
 Low Density	2-10	2-5	  	 60 mins or less or On Demand
 Rural	<2	<2	 	 On Demand

Source: Thresholds based on research by Nelson\Nygaard.

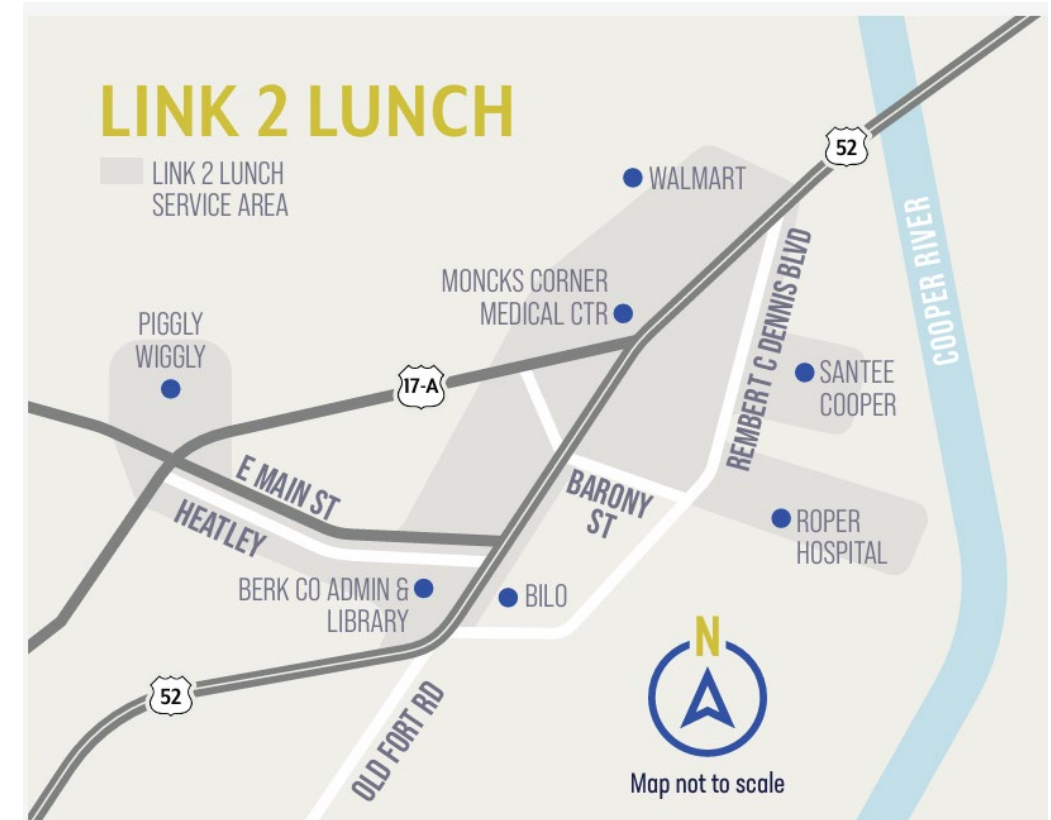
Low-Demand Alternative Service Models include On-Demand (Microtransit), Rideshare Subsidies, Volunteer Driver Programs

Where are these services best suited?

- ✓ To connect riders in higher need areas to bus service and critical destinations
- ✓ To connect riders in hard-to serve areas:
 - Poor sidewalks
 - Difficult barriers like railroads, highways, water
 - Circuitous or very narrow streets

With microtransit and rideshare subsidies, it is important to **avoid competing with your own bus service**, which is typically much more cost effective.

- Microtransit's cost per passenger is very high.

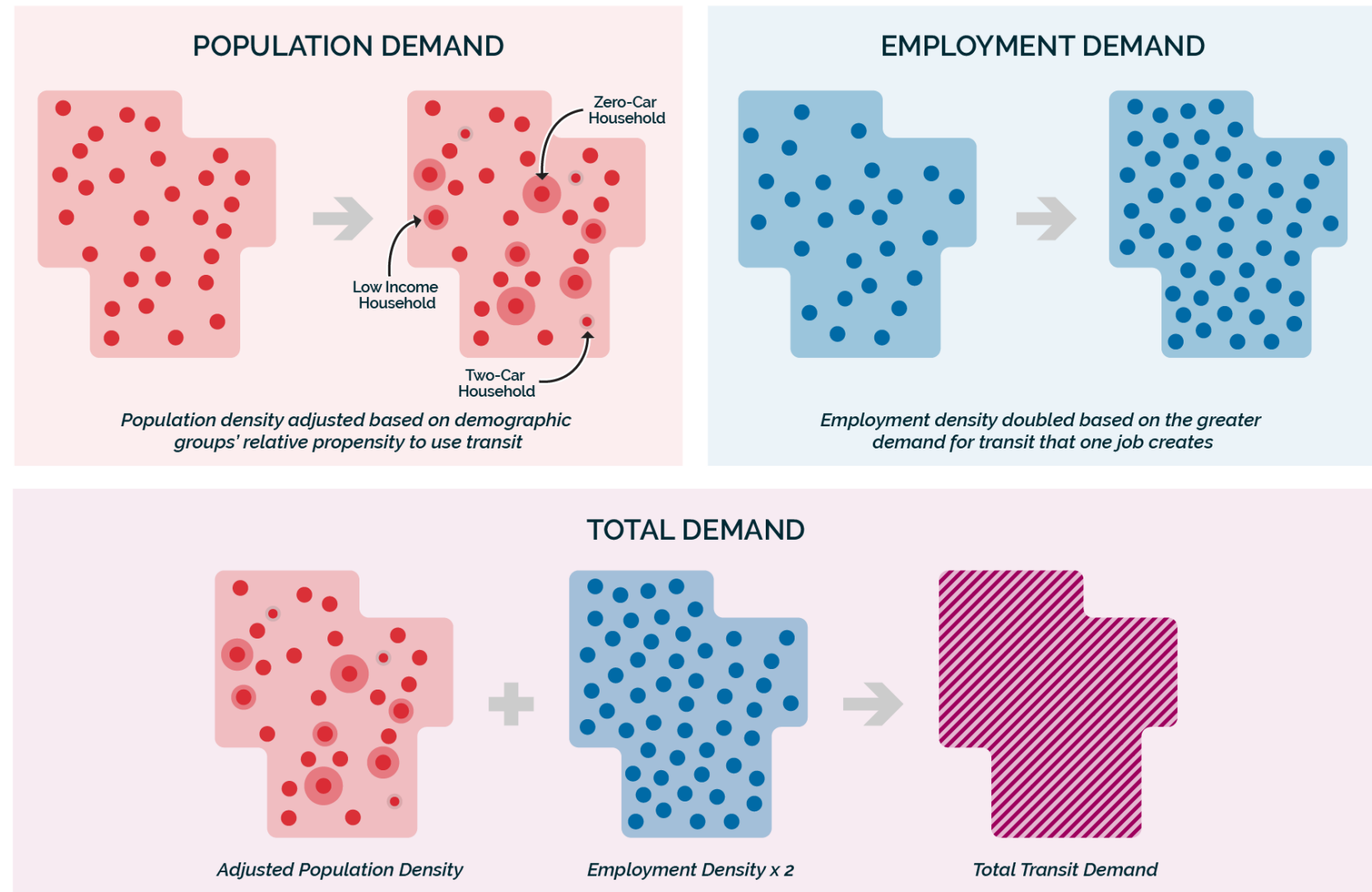


 Low Density	2-10	2-5	 Micro-transit  Rideshare  Volunteer Driver Pgm	 60 mins or less or On Demand
 Rural	<2	<2	 Rideshare  Volunteer Driver Pgm	 On Demand

Overall Demand for Transit = Adjusted Population + Adjusted Jobs

We can study this for existing (2025) demand *and* forecasted future (2035) demand using BCDCOG's model data.

Note: To more accurately show density, we calculated land area to be all land within a half-mile of existing streets, rather than the size of the TAZ.



Impacts of Demographics

Race & Ethnicity

White	1.13
Black	2.49
Asian	3.70
Other Race	0.48
Hispanic	0.96

Vehicle Ownership

No Car	17.00
One Car	1.02
Two or More Cars	0.52

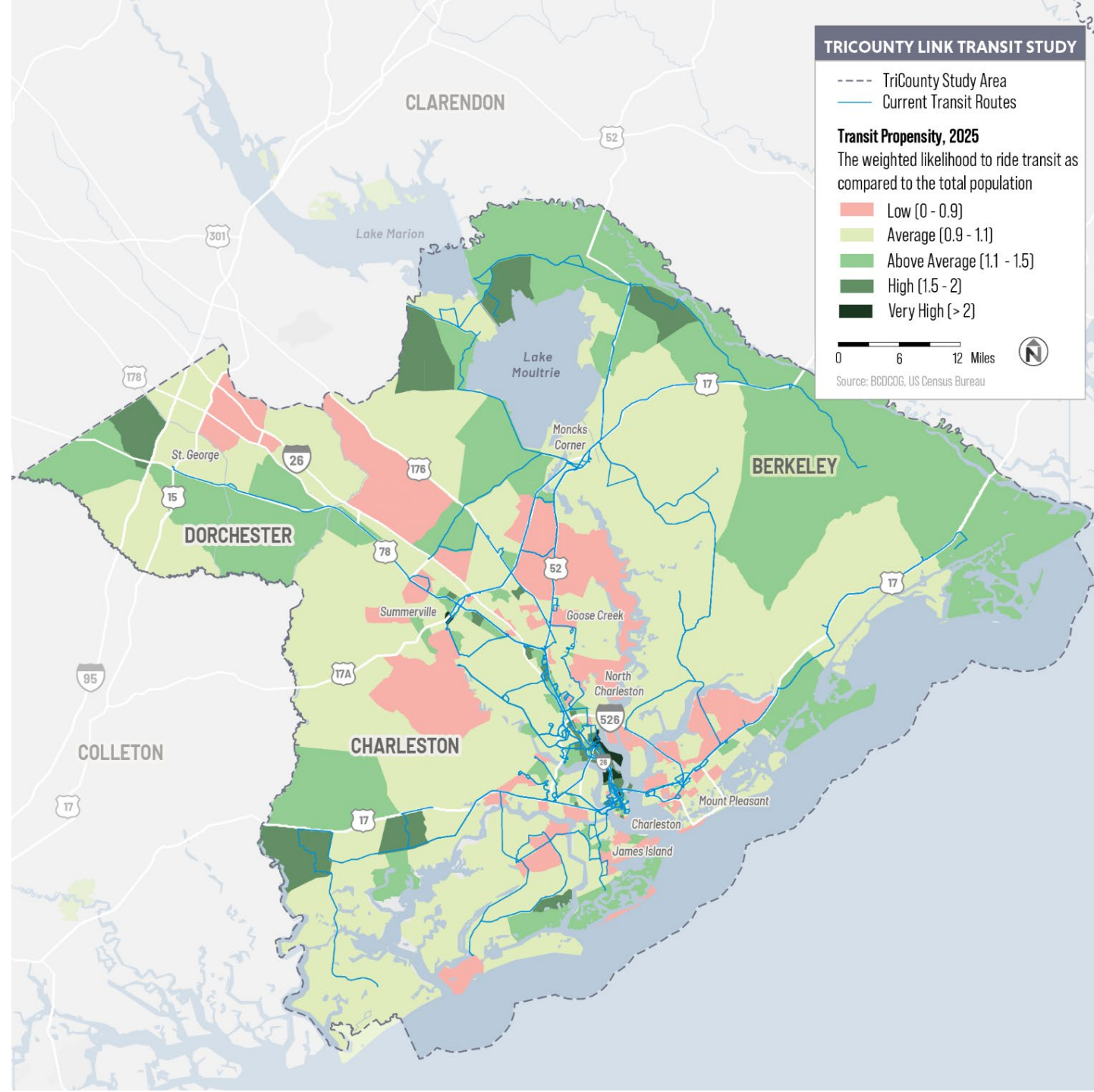
Poverty Level

Below 100 percent of the poverty level	4.12
Between 100 and 149 percent of the poverty level	1.81
At or above 150 percent of the poverty level	0.67

- Certain demographic groups are more likely than others to take transit
 - People without cars
 - Racial and ethnic minorities
 - People with low incomes
- A measure of population density-based transit demand is *most useful* if we factor in the likelihood of certain groups to take transit
 - We call that “likelihood” to take transit “***transit propensity***”

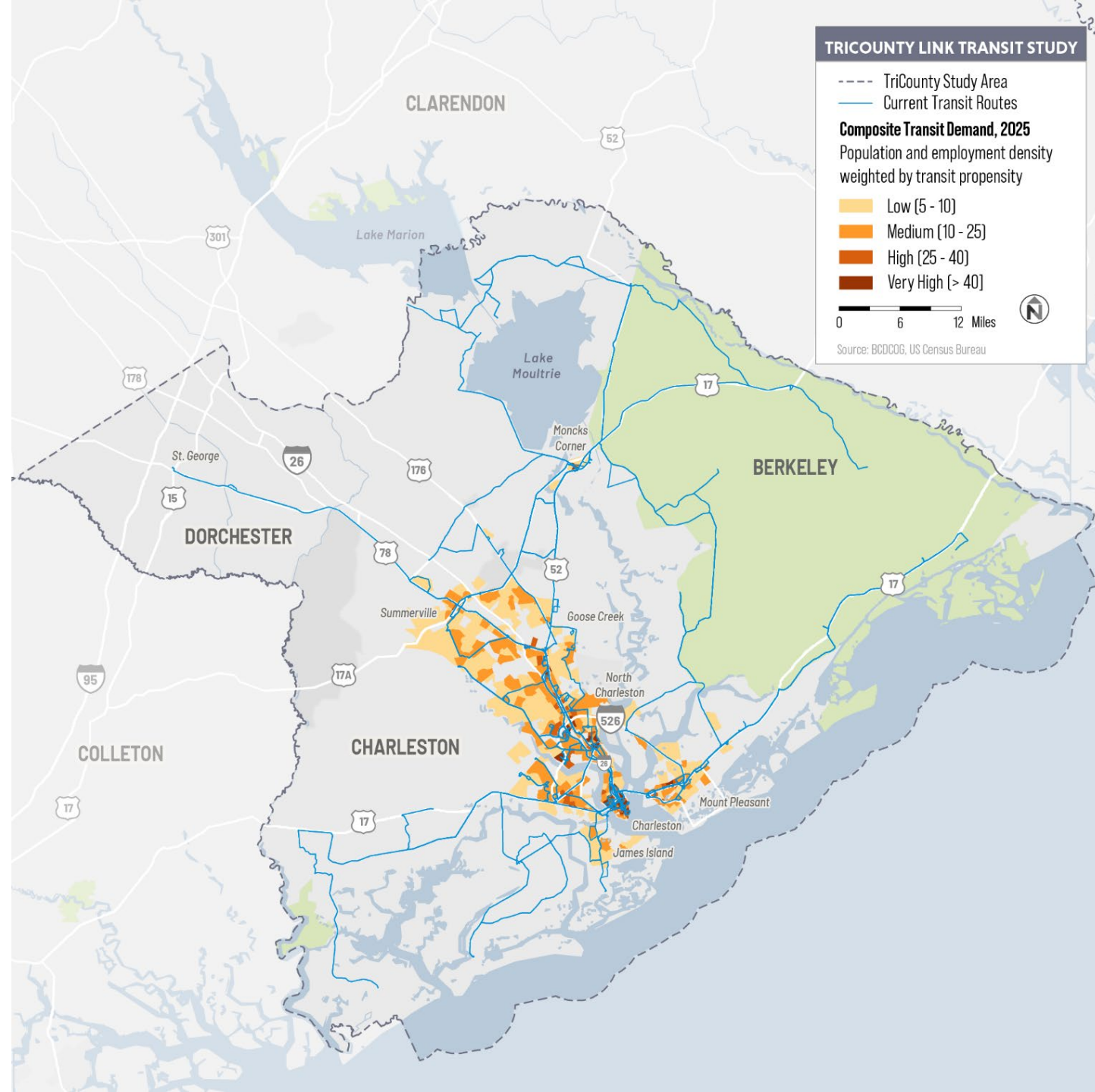
Transit Propensity

- Neighborhoods outside of CARTA service area where residents are most likely to use transit:
 - Along future LCRT corridor
 - Downtown Summerville
 - Sewee along eastern Highway 17
 - Ravenel and Parkers Ferry along western Highway 17
 - Extreme western Dorchester County and northern/northeastern Berkeley County
- Neighborhoods less likely to use transit:
 - Mount Pleasant
 - Goose Creek



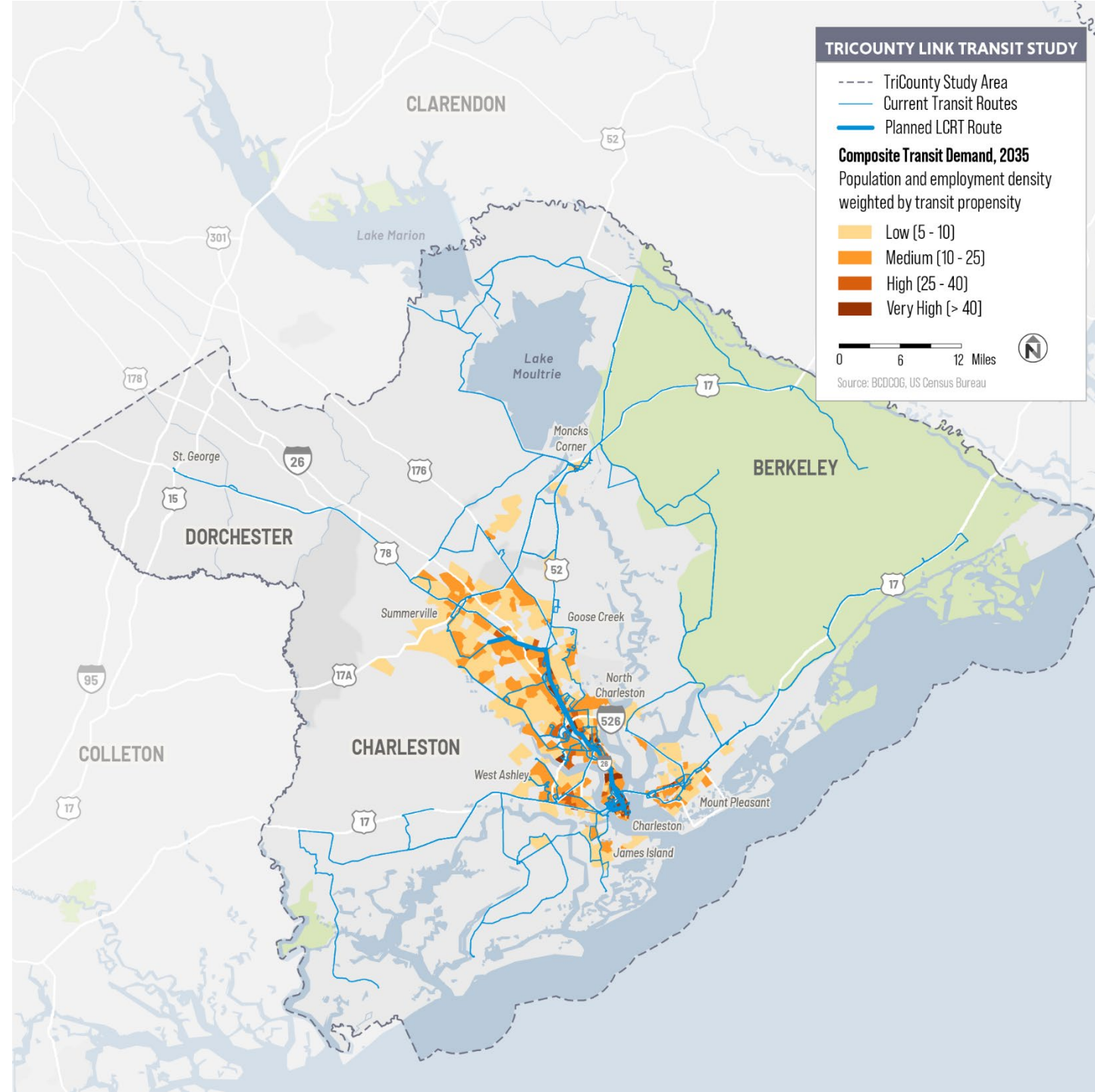
Existing Total Demand for Transit

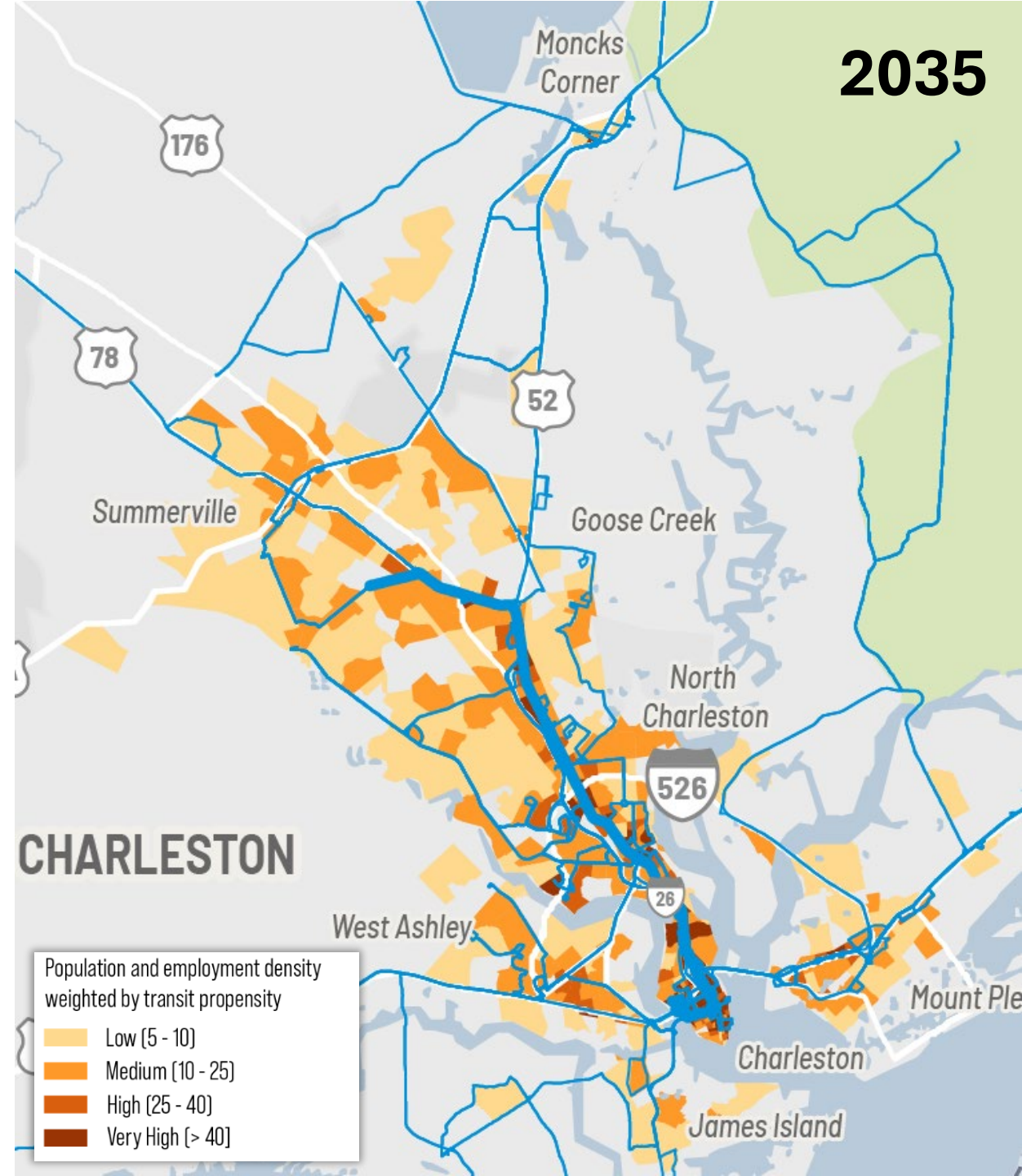
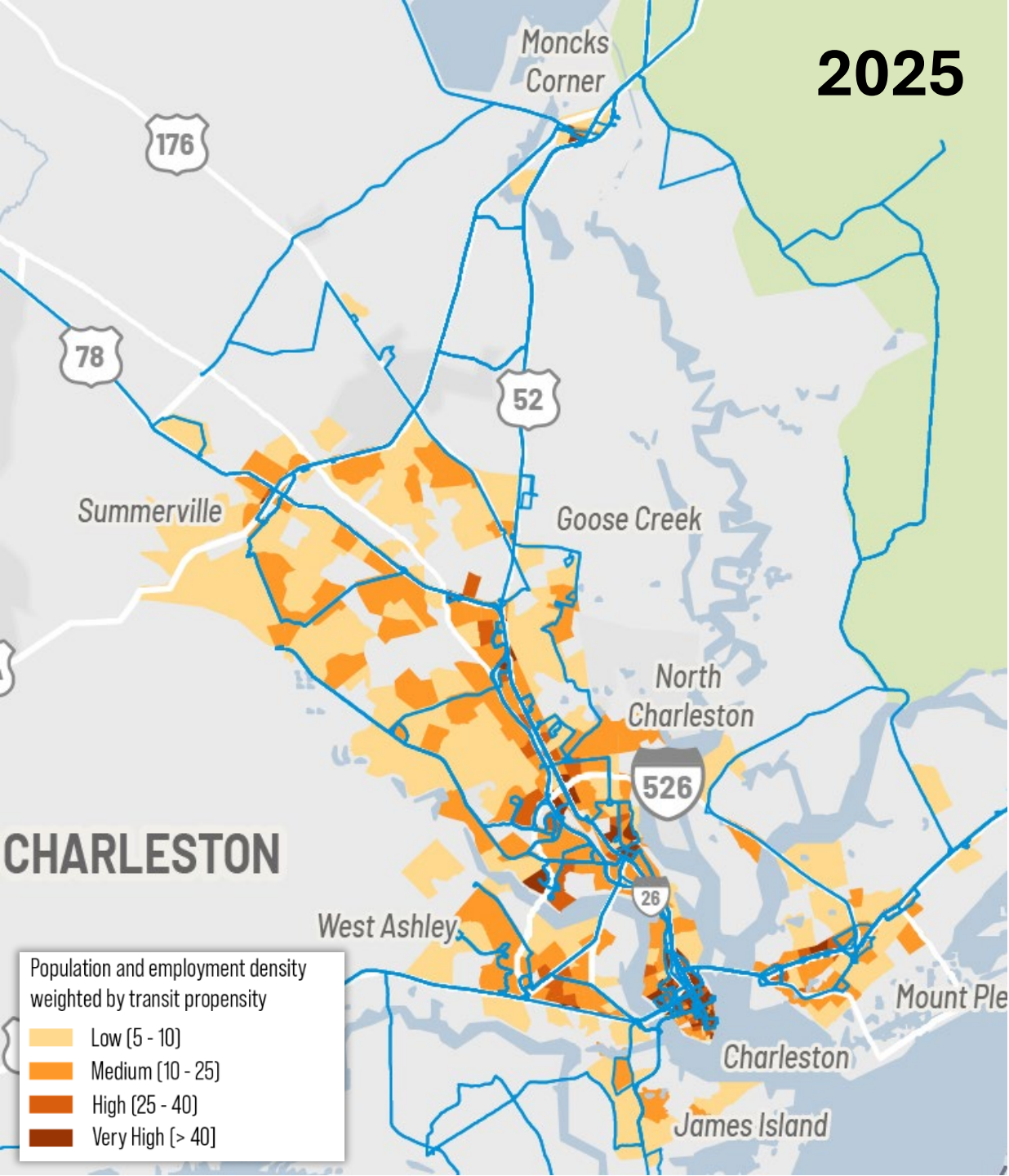
- Supportive of frequent service:
 - Downtown Summerville
 - Downtown Moncks Corner
- Supportive of 30-minute service
 - Hwy 78 corridor between Summerville and LCRT
 - N Main Street/Highway 17 to Nexton
 - St James Avenue/Red Bank Road
- Supportive of hourly service
 - Dorchester Road west of 526
 - Eastern Highway 17 to Sewee
- Very low to no demand elsewhere
- *Note: Major activity centers do produce additional demand not captured here*



Future (2035) Total Demand for Transit

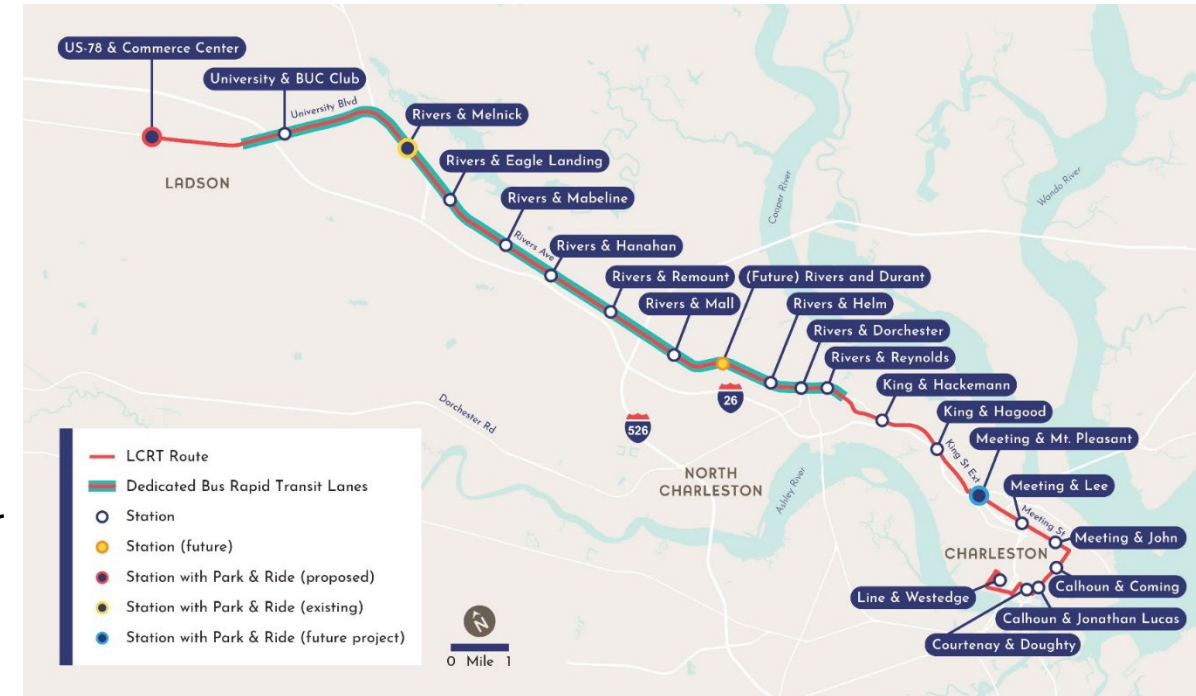
- By 2035, Highway 78 between Summerville and LCRT can support frequent service
- New areas supportive of 30-minute service include:
 - Area north of Downtown Summerville
 - Live Oak Drive/Highway 17 between Summerville and Moncks Corner
- New areas supportive of hourly service include:
 - Areas along Maybank Highway on Johns Island
 - Whitesville/Cane Bay community
 - Along Highway 176/State Rd between Highway 17 and Black Tom Rd
- Note: future major activity centers will produce additional demand not shown here*





Market Analysis Key Findings

- Downtown Summerville and Moncks Corner could support additional service up to all-day 15-30 minute frequencies
- Several regional corridors could support additional service up to all-day 30-60 minute frequencies
 - Hwy 78 corridor between Summerville and LCRT
 - N Main Street/Highway 17 to Nexton
 - St James Avenue/Red Bank Road
- More frequent service could be supported on Dorchester Road and along Highway 17 to Sewee
- Isolated pockets of demand on Daniel Island
- Some areas of low demand may be better served by on-demand service, including around Lake Moultrie, far eastern Charleston County, and far western Charleston County



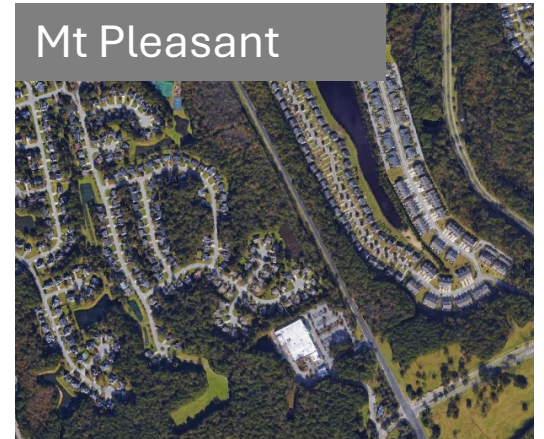
Coverage vs. Frequency: A Key Decision

- **Two types of service:** demand- and coverage-based:
 - **Demand-based** services operate where demand is highest
 - **Coverage-based** services operate where demand is low, to provide at least some service to as many areas as possible
- **Ridership will always be much higher in densely developed areas** than in lightly developed areas
- All transit systems provide both types, but **most systems focus on demand-based services, because transit is typically considered more useful and effective when more people use it**

Historic District



Mt Pleasant



Survey & Next Steps

3

Take our survey that asks for input on transit planning “guardrails”

- Answer the question of “Would you rather...”
 - Improve existing service **OR** expand service to new areas
 - Make service more frequent **OR** operate it for more hours of the day?
- Provide specific feedback on existing services and request service to new areas.
- Survey will remain open through June 1, 2025



How can TriCounty Link serve you better?

Survey open now to June 1!

Share your experience with TriCounty Link and your priorities for future transit service to inform the TriCounty Link Transit Study!

publicinput.com/TCLtransitstudy



**TriCounty
Transit Study
Website**

ridetricountylink.com/transitstudy



**Online
Survey**

publicinput.com/TCLtransitstudy



Thank you!