

**Board of Commissioners**

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Charlotte J. Nash, Chairman  
Jace W. Brooks, District 1  
Lynette Howard, District 2  
Tommy Hunter, District 3  
John Heard, District 4



Official

**Informal Briefing Minutes**  
**Tuesday, October 17, 2017 – 3:00 PM**

Present: Charlotte J. Nash, Jace Brooks, Lynette Howard  
Absent: Tommy Hunter, John Heard

**I. Transportation**

Transportation/Transit Planning Update

Department of Transportation Director Alan Chapman and Cristina Pastore of Kimley-Horn updated the Board on the progress of Gwinnett County's Comprehensive Transportation Plan Update. No Official Action Taken.

**Destination2040**

Gwinnett's Comprehensive Transportation Plan

**gwinnett**county

**Board of Commissioners  
Recommendations Briefing**

**October 17, 2017**

# Gwinnett CTP Update

- Understanding of current and future transportation needs
- Collection of community vision and ideas
- Local project priority setting
- Opportunities for state and federal funding matches
- Responsible use of taxpayer dollars



# Planning Process

EXISTING  
CONDITIONS  
ASSESSMENT



VISIONING AND  
EVALUATION  
FRAMEWORK



ASSESSMENT OF  
FUTURE NEEDS

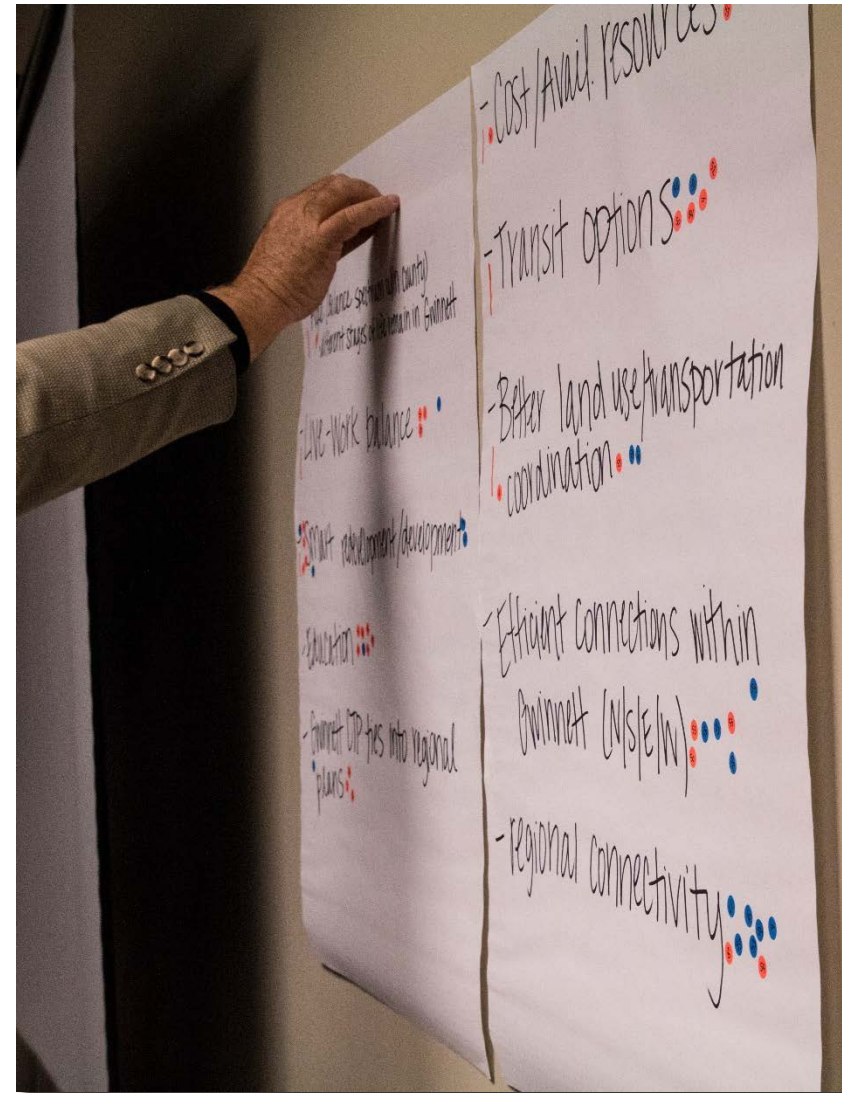


RECOMMENDATIONS



# Vision and Goals

- Improve Connectivity
- Leverage the County's Transportation System to Improve Economic Vitality and Quality of Life
- Improve Safety and Mobility for All People Across All Modes of Travel
- Proactively Embrace Future Transportation Opportunities
- Continue to Serve as Responsible Stewards of Transportation Resources





# Public Engagement

## Destination2040

Gwinnett's Comprehensive Transportation Plan

### Community Events



### Focus Groups



### Surveys

### Multilingual Collateral



### Public meetings

# Creation of Project List

- Previously developed projects
- Needs assessment analysis
- Stakeholder and public outreach
- County service requests
- County, City, and CID recommendations
- Projects from Citizens Project Selection Committee

# Project Evaluation

- Metrics reflective of Vision and Goals, regional planning guidance
- Differed by SPLOST category and project type

## EVALUATION CRITERIA

- : Criteria applies to SPLOST category
- : Criteria applies to vision/goal
- : Criteria partially applies to vision/goal

GENERAL CRITERIA		MODE		SPLOST CATEGORIES						VISION & GOALS			
				BRIDGES, CULVERTS AND TRANSPORTATION DRAINAGE	INTER-SECTIONS	MAJOR ROADS	ROAD SAFETY AND ALIGNMENT	SCHOOL SAFETY	SIDEWALKS AND PEDESTRIAN SAFETY	CONNECTIVITY	"VITALITY/ QUALITY OF LIFE"	SAFETY/ MOBILITY	EMBRACE THE FUTURE
1	Provides New or Enhanced Connectivity	Roadway, Bicycle, Pedestrian	●		●	●	●	●	●	○		○	
2	Improves Reliability	Roadway	●	●	●		●		●	○			○
	Improves Connectivity between adjacent community resources	Bicycle, Pedestrian						●	●	○			○
3	Project Proposed by recognized Agency such as ARC/GDOT, City, CID, GC Department, or Other Local Organization/ Agency	Roadway, Bicycle, Pedestrian		●	●	●	●	●	○	○		●	○
4	Economic Development Asset Index (Employment Density, Commercial RE Density, Underutilized Assets, Economic Development Incentives)	Roadway, Bicycle, Pedestrian	●	●	●	●	●	●	○	●	○	○	○
5	Proximity to Freight alignments and/ or industrial areas	Roadway	●	●	●	●			○	●	○	○	○
6	Prioritize projects based on Bicycle/Pedestrian Suitability Analysis	Bicycle, Pedestrian					●		○	●	○		○
7	Proximity to environmental areas or community resources (Bridges - reduce impact to waterway)	Roadway, Bicycle, Pedestrian	●		●		●	●		●			○
8	VMT Served (Major Roadway)	Roadway		●	●		●		○	○	●	○	○
	Population Served (Bike/Ped)	Bicycle, Pedestrian					●		○	○	●	○	○
9	Targeted and/ or Disadvantaged Population Served	Bicycle, Pedestrian					●		○	○	●	○	○
10	Crash Data	Roadway, Bicycle, Pedestrian		●	●	●	●	●		○	●		
11	Innovative Design or Improved Technologies	Roadway, Bicycle, Pedestrian	●	●	●	●	●	●			○	●	○
12	Feasibility/ Constructibility	Roadway, Bicycle, Pedestrian		●	●	●	●	●		○	○	○	●
13	MetroQuest Public Input	Roadway, Bicycle, Pedestrian		●	●	●	●	●	○	○	○	○	●
14	Existing Maintenance Need	Roadway, Bicycle, Pedestrian	●		●			●		○	○		●



# Funding / Project Constraining

- Evaluation of local, state, and federal funding
- Primary constraining of levels by local funding
- Back-check of reasonable state and federal matches
- No prioritization of projects within the levels
- City projects considered in addition

Short-Range (6-year)

**\$486,343,270**

Mid-Range (9-year)

**\$812,000,000**

Long-Range (9-year)

**\$928,000,000**

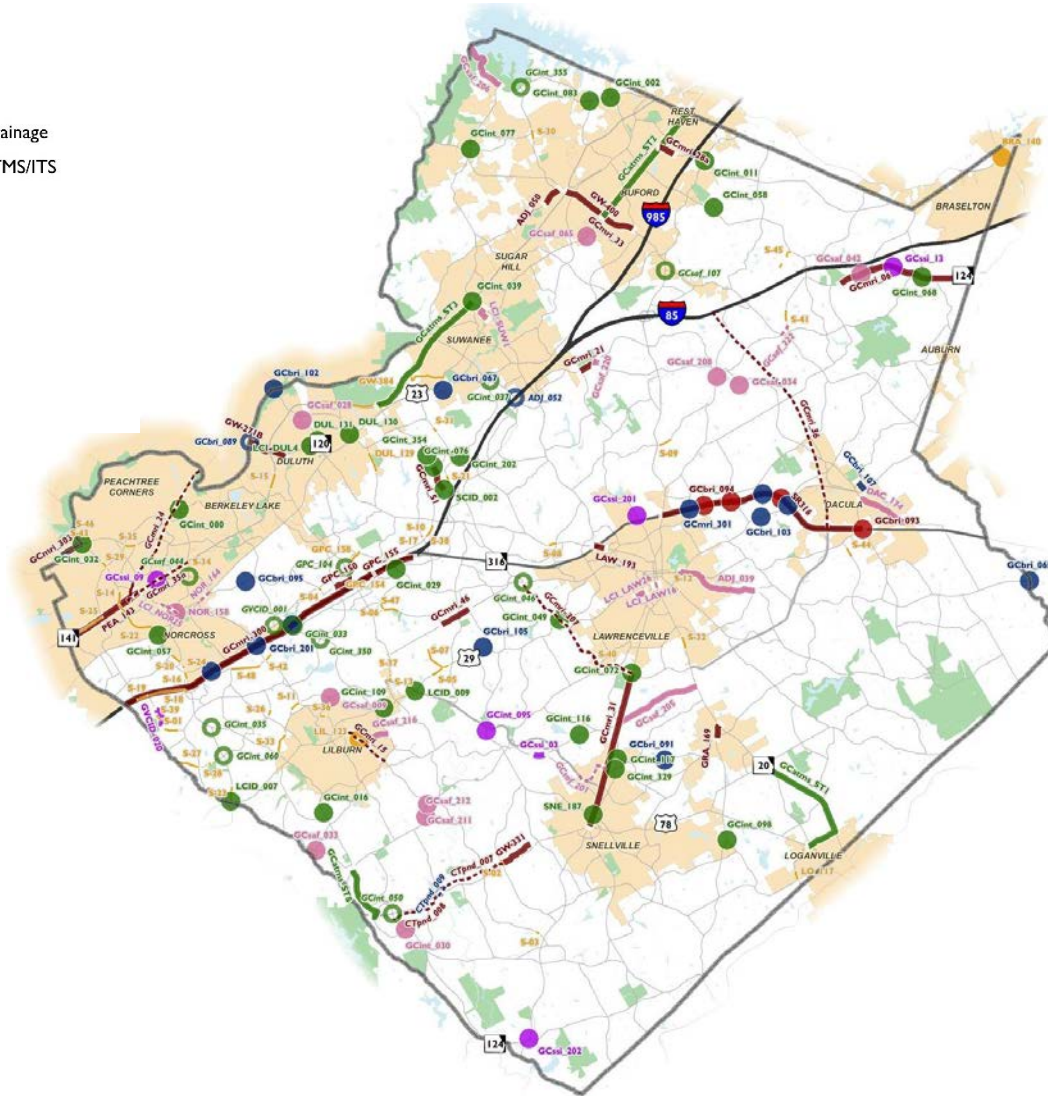
# Level I Projects

## Level I Near-Term Project Types

- Bridges, Culverts and Transportation Drainage
- Intersections and Roadway Corridor ATMS/ITS
- Major Roads
- Road Safety and Alignment
- School Safety
- Sidewalks and Pedestrian Safety

## Level I Project Funding

- Fully Funded in Level I
- Partially Funded in Level I



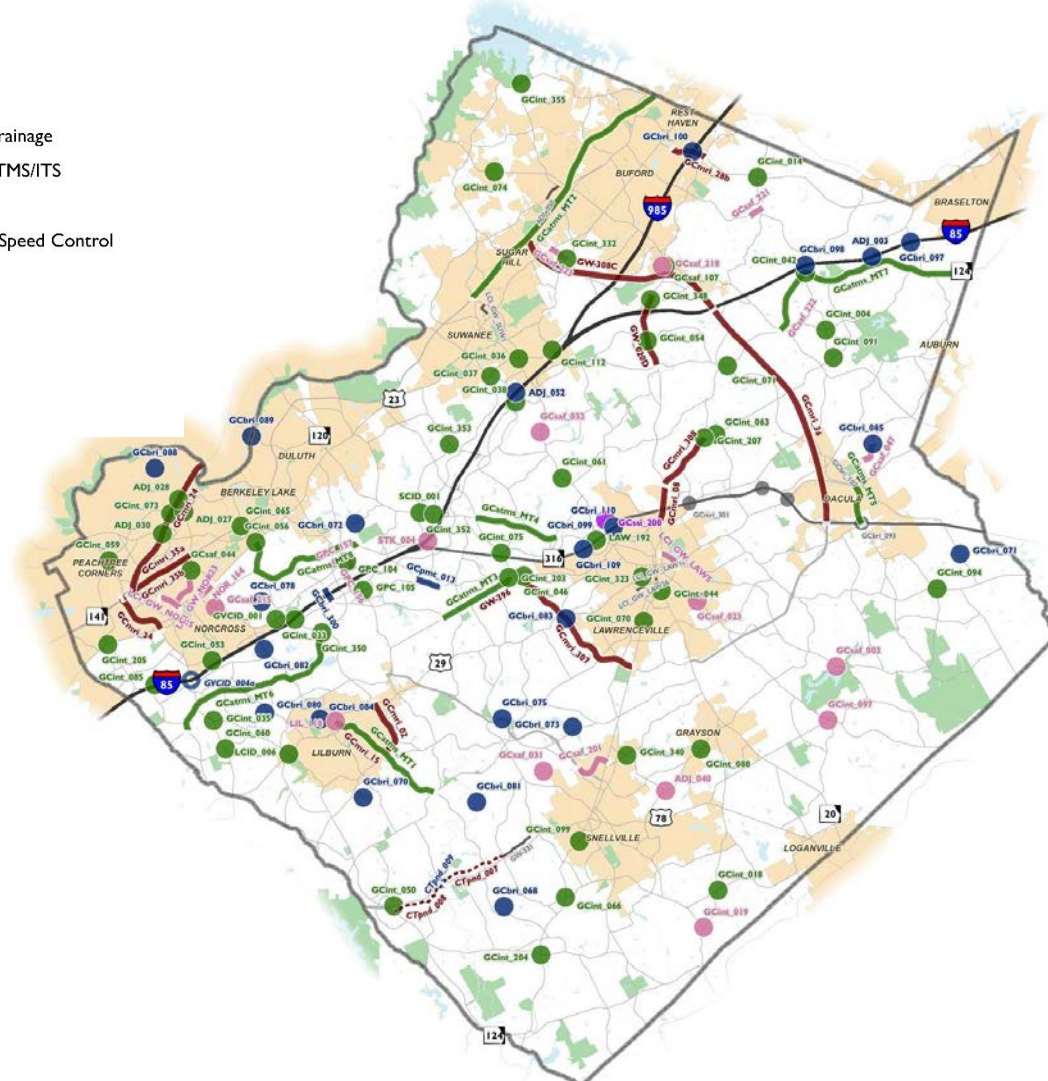
# Level 2 Projects

## Level 2 Mid-Range Project Types

- Bridges, Culverts and Transportation Drainage
- Intersections and Roadway Corridor ATMS/ITS
- Major Roads
- Road Safety and Alignment; Residential Speed Control
- School Safety

## Level 2 Project Funding

- Fully Funded in Level 2
- Partially Funded in Level 2







# Policy Recommendations



Transportation and Land Use



Functional Classification



Asset Management



Freight



Transit



Connected and Automated Vehicles (CAV)



Bicycle and Pedestrian



# Next Steps

- Beginning of 30-day comment period
- Incorporation of comments
- Board of Commissioners Adoption



# **GWINNETT TRANSIT DEVELOPMENT PLAN**

## **Board of Commissioners Briefing**

**October 17, 2017**



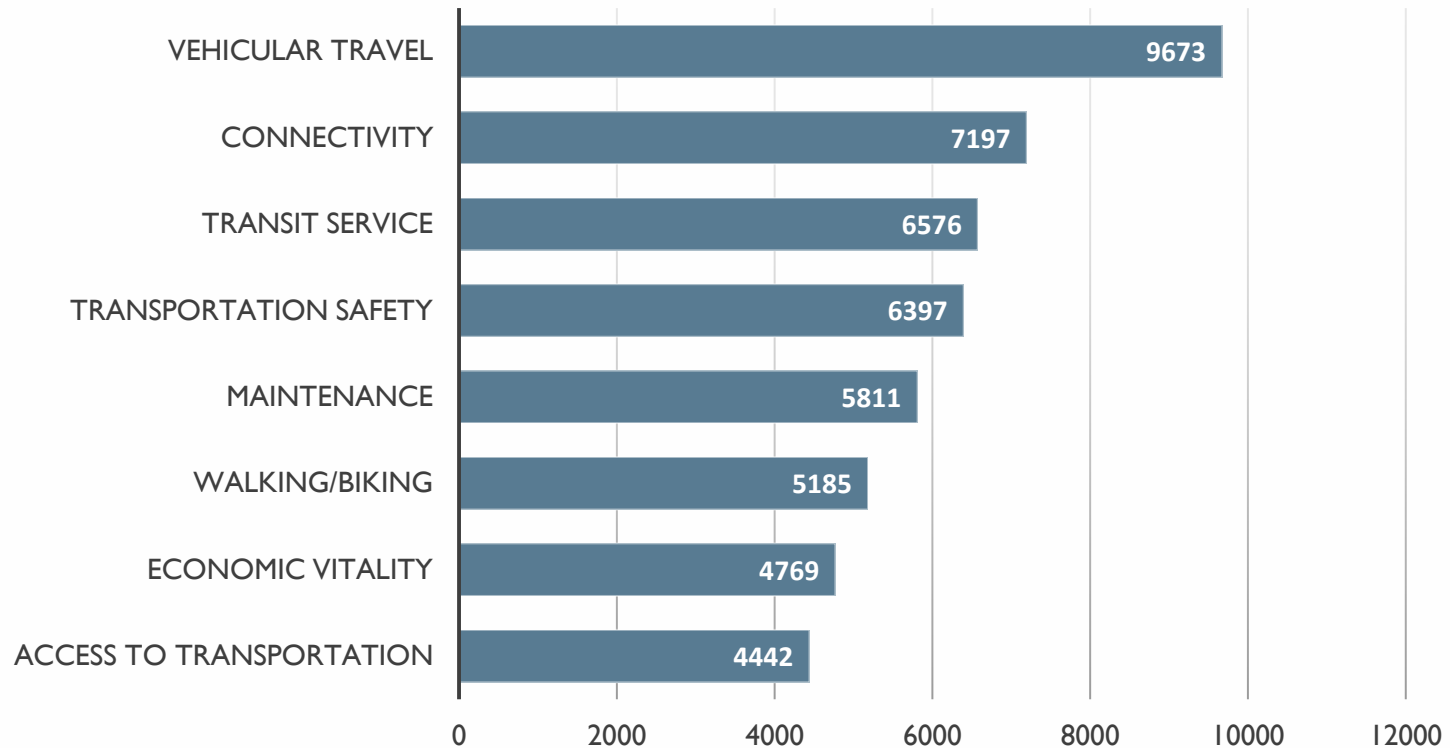
# Introduction

- Gwinnett County Transit Established in 2001
- Service began:
  - Express – November 2001
  - Local – February 2002
- 2010 Transit Development Plan
- Comprehensive Transportation Plan short-term goal
- Time is right for a fresh look



# CTP Results: Priority Rankings

Citizen Priority Rankings (Weighted)



**Destination2040**

Gwinnett's Comprehensive Transportation Plan



# CTP Results: Budgeting Activity



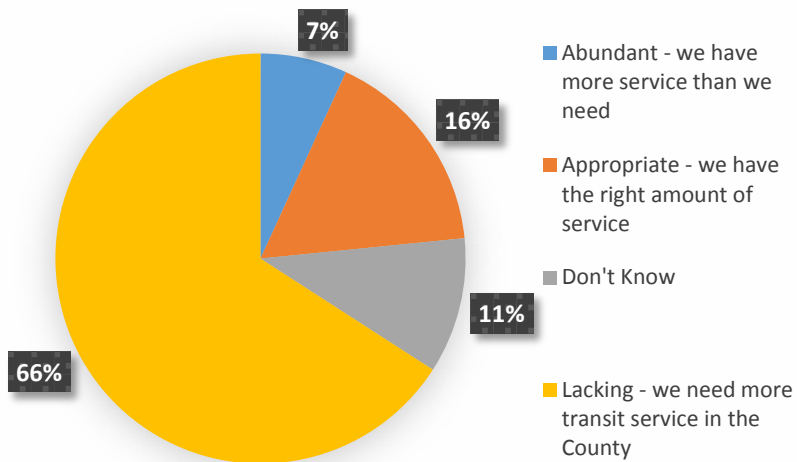
## Destination2040

Gwinnett's Comprehensive Transportation Plan

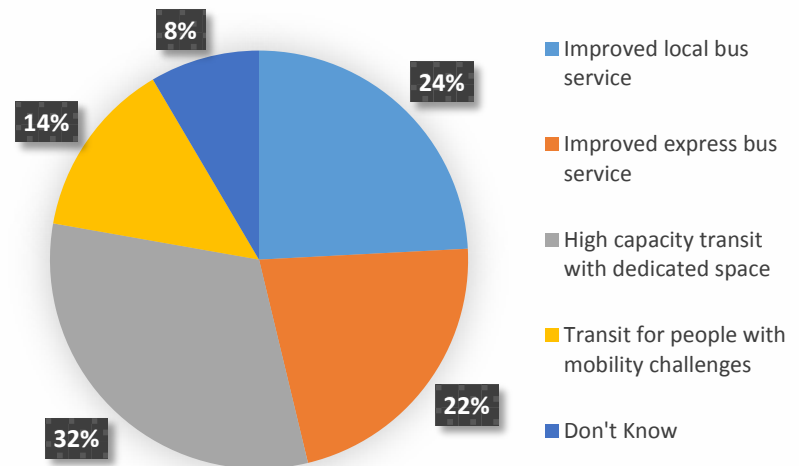


# CTP Results: Transit Questions

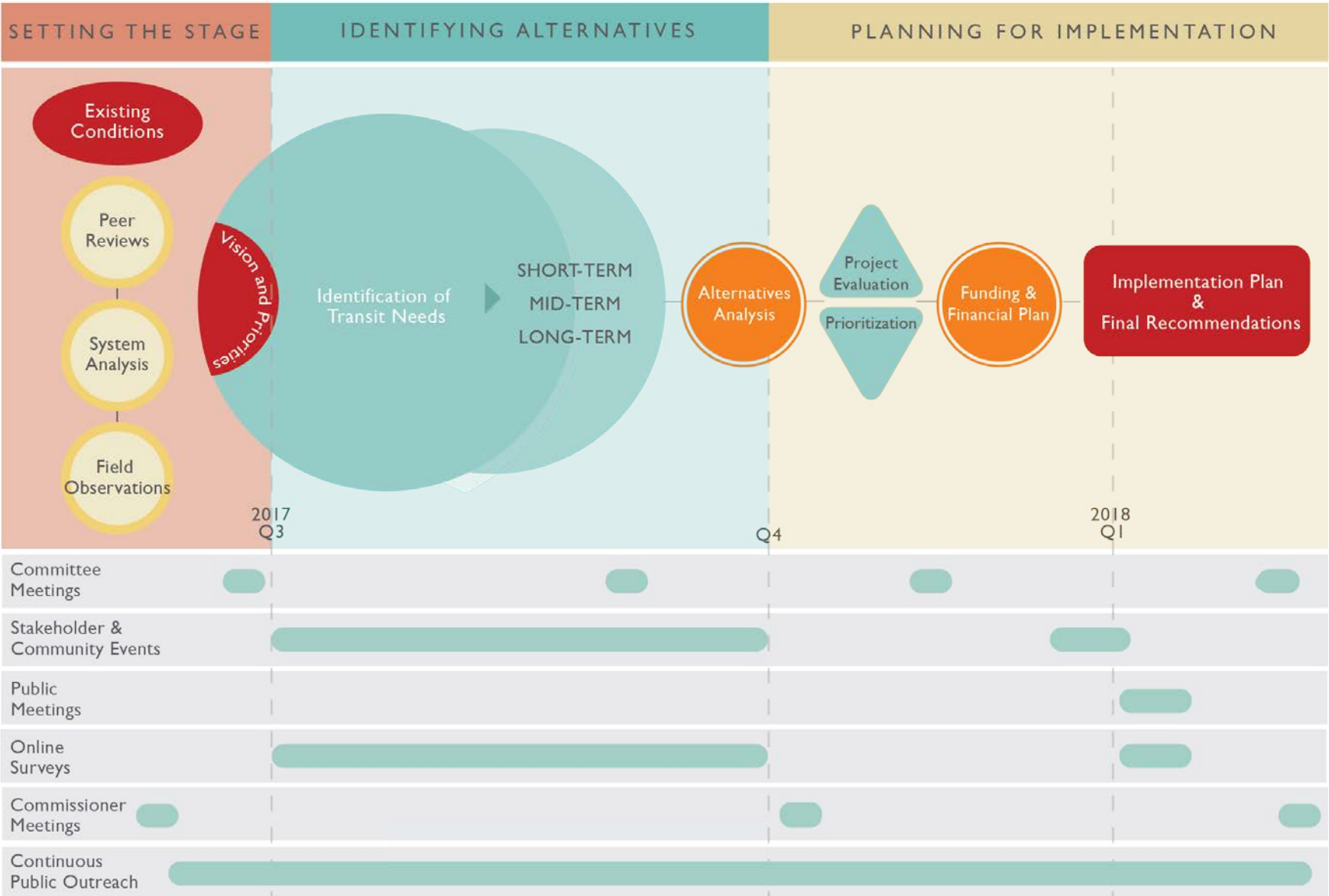
## Gwinnett's Public Transportation/Transit



## 1-2 Best Transit Improvements



# CONNECT GWINNETT TRANSIT DEVELOPMENT PLAN



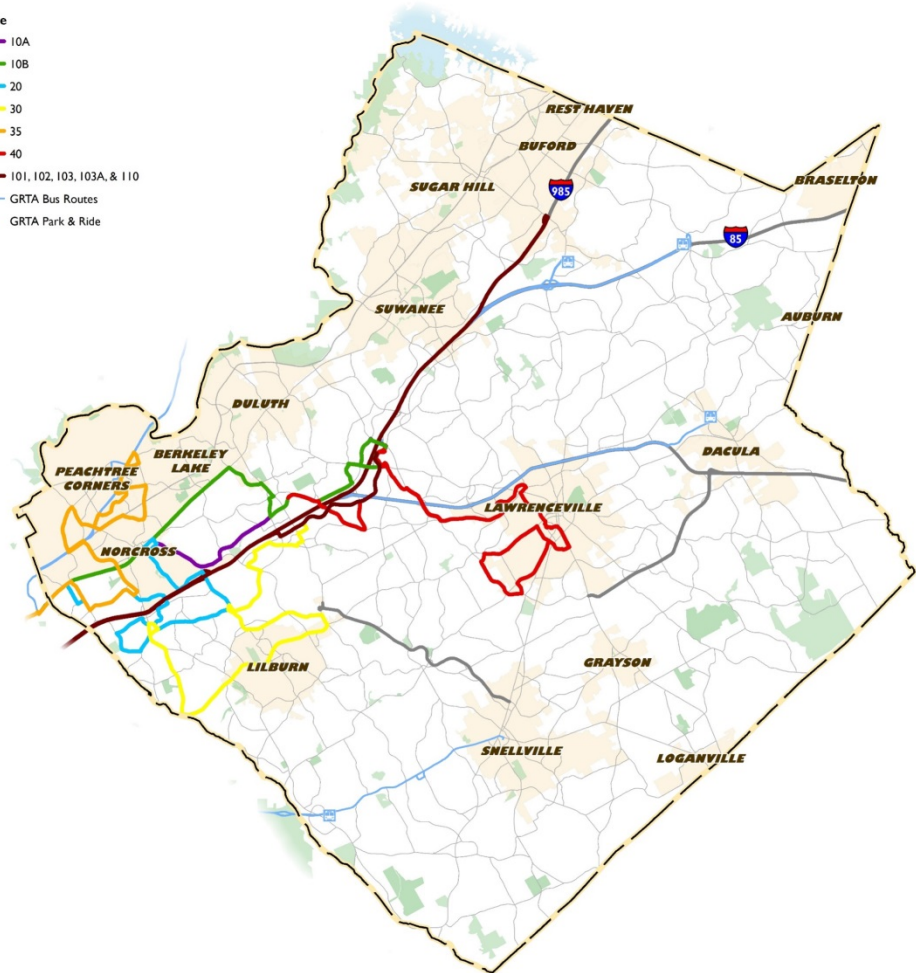
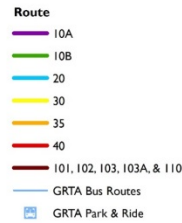
# EXISTING SERVICE & MARKETS

# Service area and routes



## Gwinnett County Transit Service

- 6 Local Routes
- 5 Express Routes
- 76 Vehicles (33 Local, 43 Express)
- Approx. 5,000 Systemwide Boardings Per Day



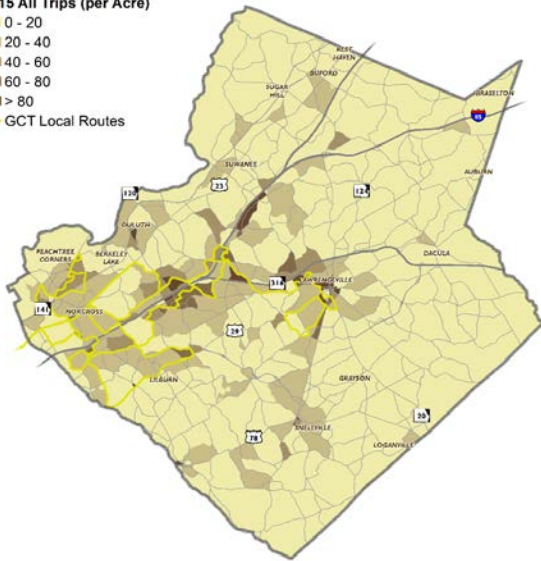


# Gwinnett County Person Trip Activity Densities

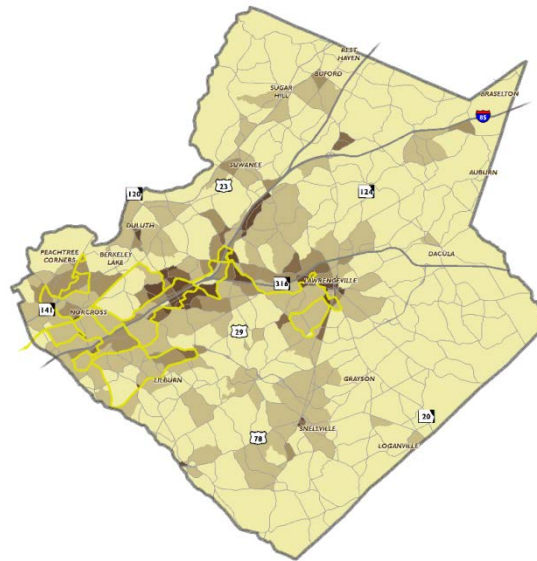
2015 All Trips (per Acre)

- 0 - 20
- 20 - 40
- 40 - 60
- 60 - 80
- > 80

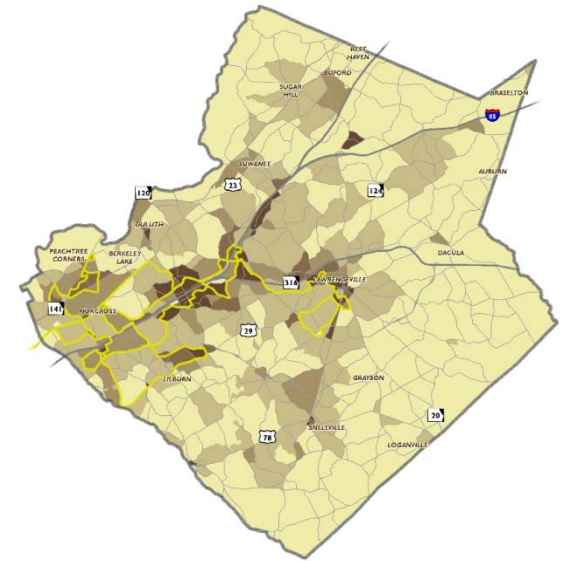
GCT Local Routes



2015



2030

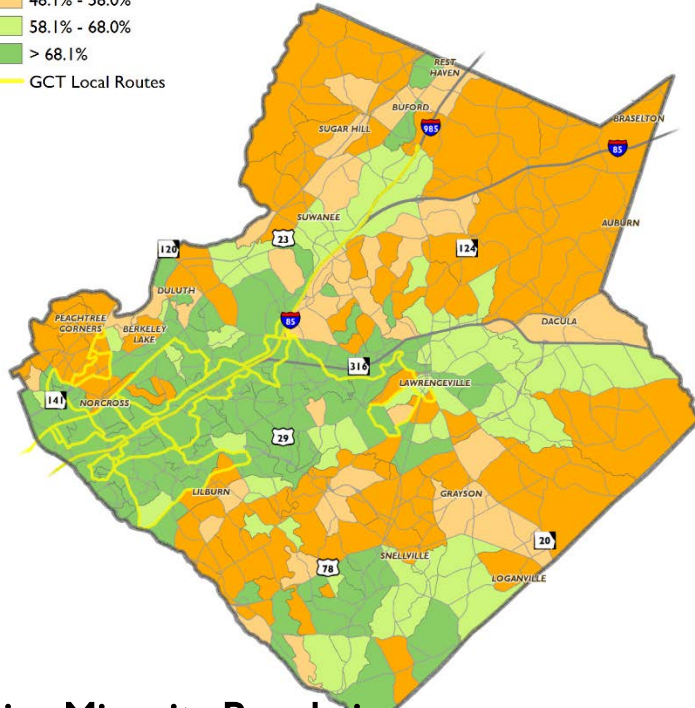
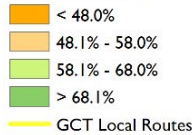


2040



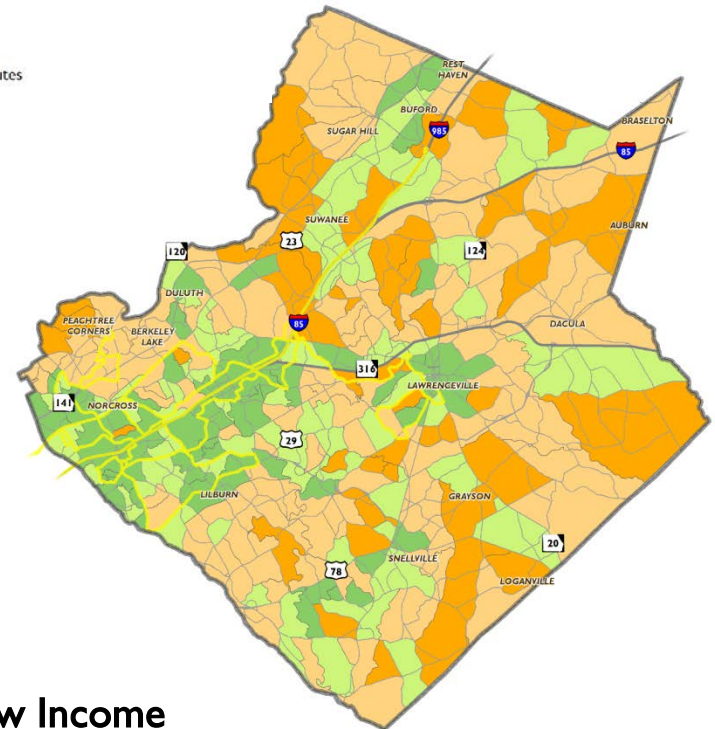
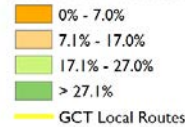
# Demographic Considerations

## Percent Minority



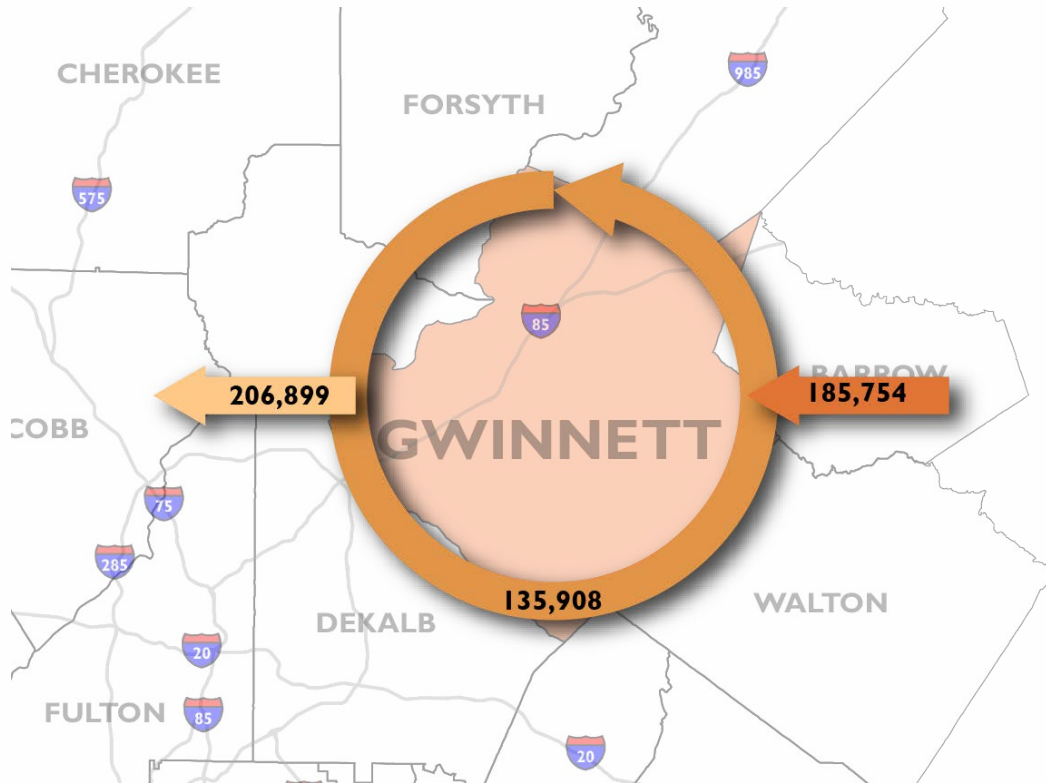
**Existing Minority Population Concentrations**

## Percent Low-Income Households (<\$25,000 Annually)



**Existing Low Income Household Concentrations**

# Home/Work Flows



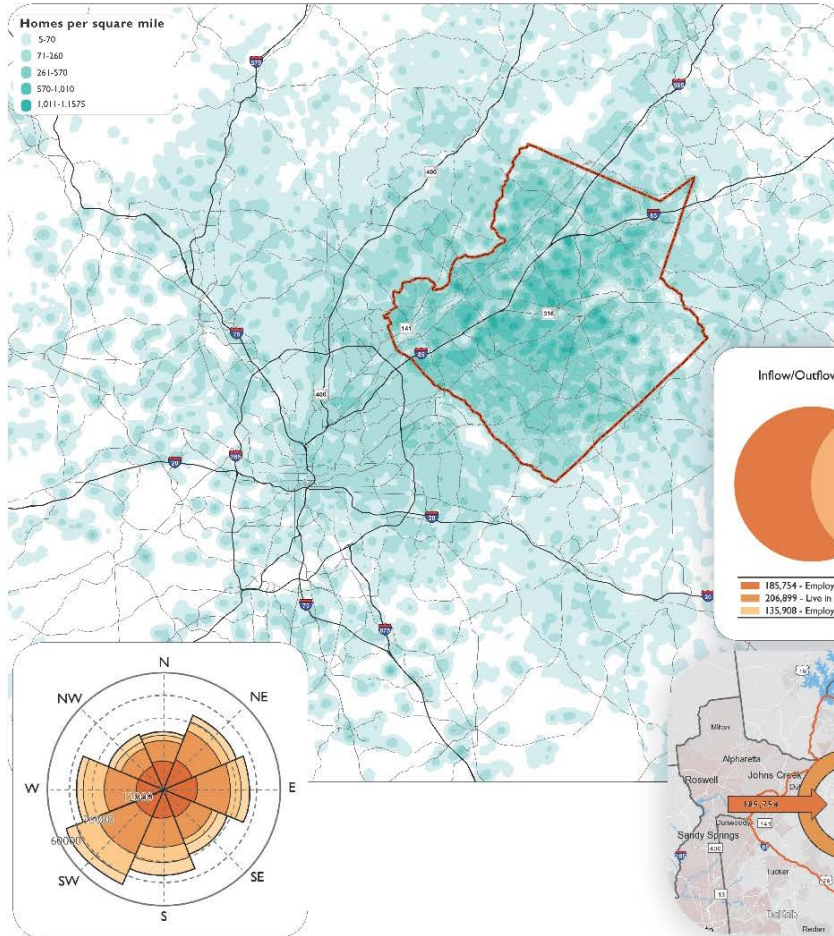
**185,754**  
Work in Gwinnett,  
Live outside of Gwinnett

**206,899**  
Live in Gwinnett,  
Work outside of Gwinnett

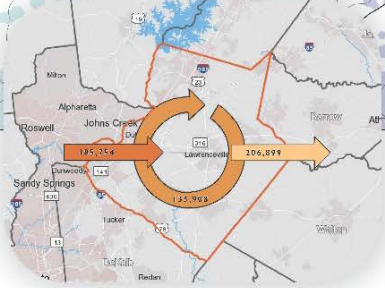
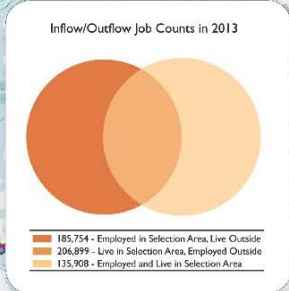
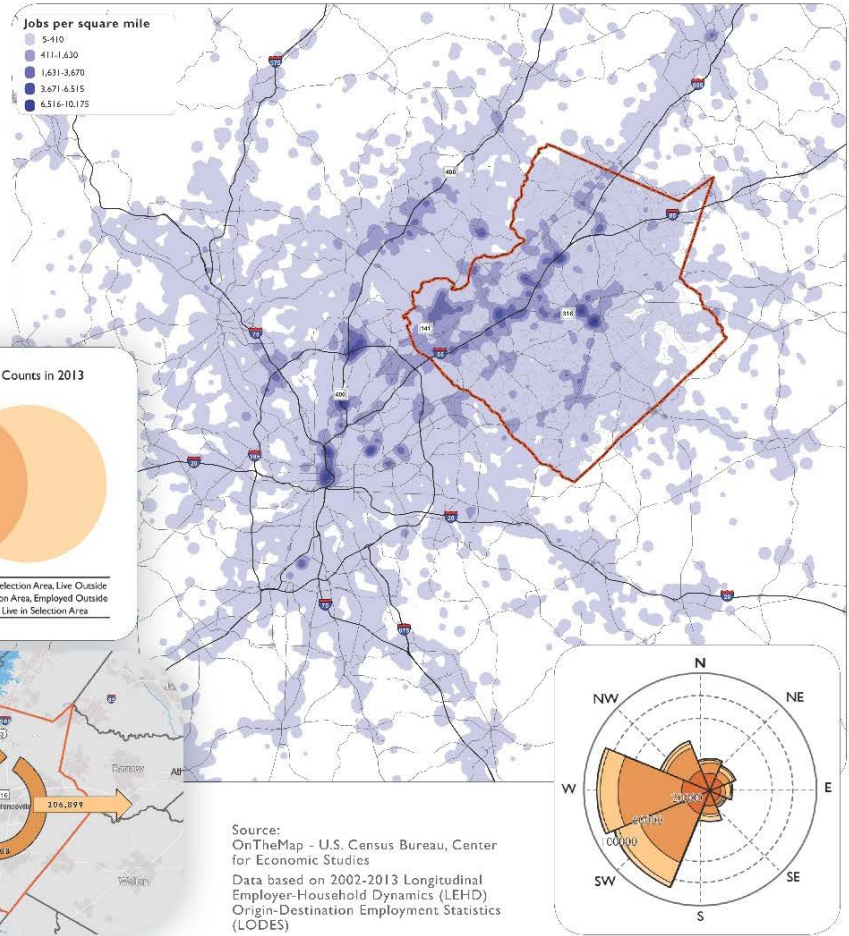
**135,908**  
Work and live in Gwinnett

# Home/Work Flows

## Where Gwinnett Workers Live



## Where Gwinnett Residents Work



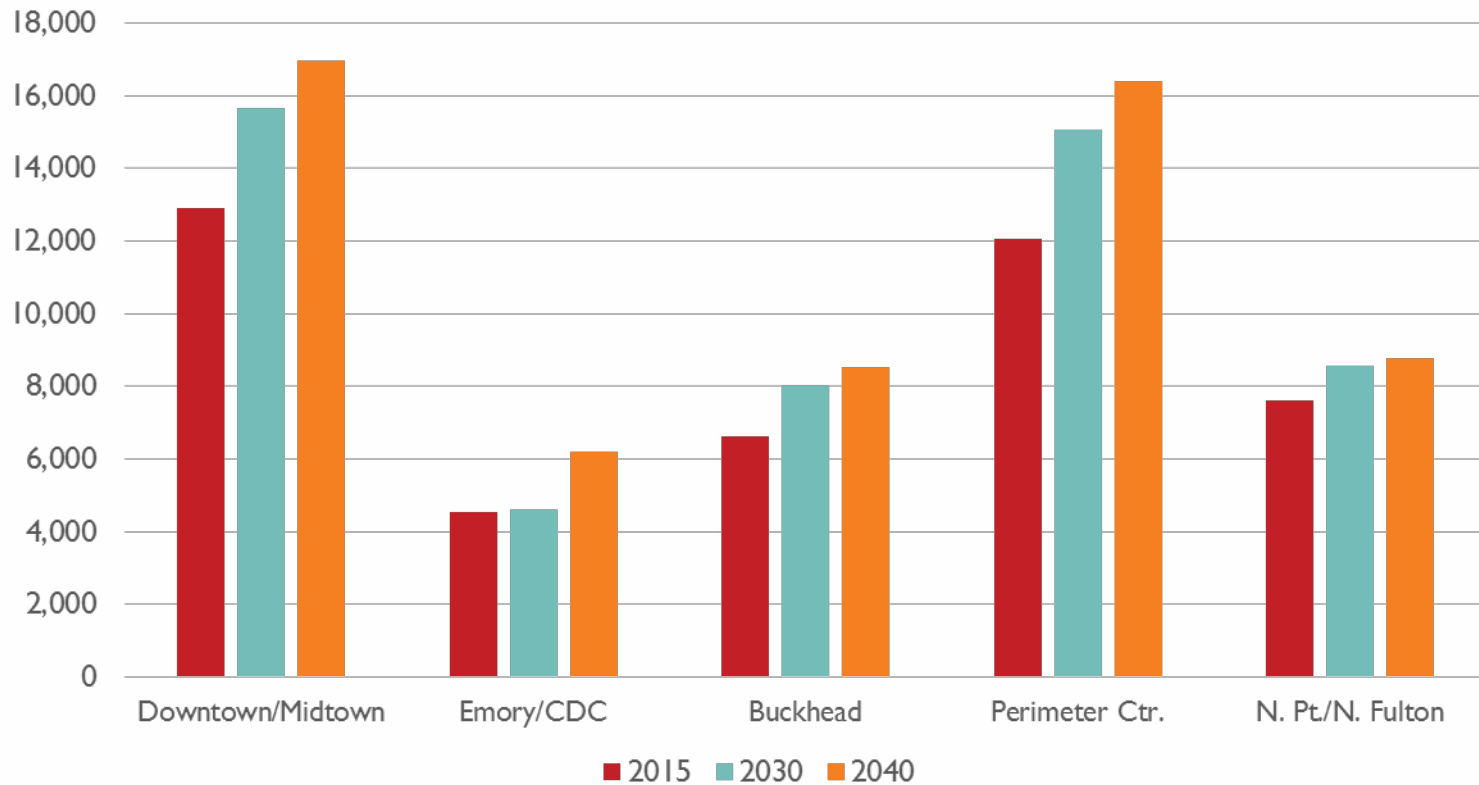
Source:  
OnTheMap - U.S. Census Bureau, Center  
for Economic Studies  
Data based on 2002-2013 Longitudinal  
Employer-Household Dynamics (LEHD)  
Origin-Destination Employment Statistics  
(LODES)





# Gwinnett County Work Trips to Activity Centers

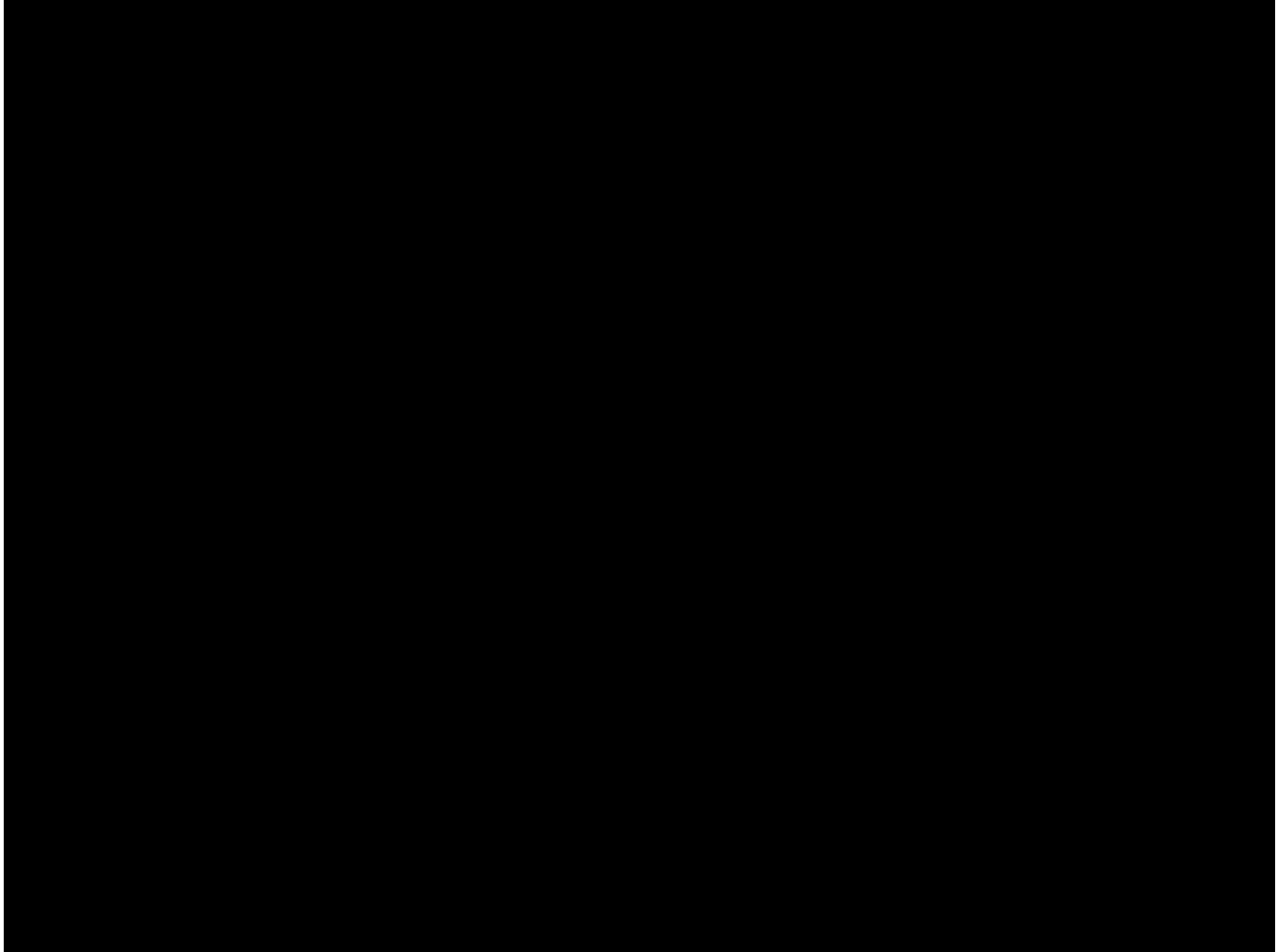
Work Trip Volumes



Data Source: ARC trip table projections in travel demand model's Traffic Analysis Zonal data,

# OUTREACH RESULTS









# System Goals and Priorities



## SUSTAINABILITY

Preserve and promote social and environmental character through an integrated strategy that addresses transportation solutions

### ENVIRONMENT

Encourage the reduction of air pollution, fuel consumption, and impacts to natural resources by providing/enhancing more sustainable modes of transportation

### ECONOMIC DEVELOPMENT

Influence economic development patterns by providing an enhanced transportation network to better connect population, employment, and commercial centers

### CONGESTION RELIEF

Reduce congestion and/or the demand to increase roadway capacity for automobiles by encouraging transit use



## STEWARDSHIP

Utilize available resources in an efficient manner to meet the transportation need

### EQUITY

Increase the mobility of those with limited financial or traveling capabilities by focusing service on the mobility needs of disadvantaged communities

### PRODUCTIVITY AND EFFICIENCY

Use constrained financial resources in the most cost-effective manner while maximizing ridership

### SYSTEM MAINTENANCE

Continuously maintain existing capital investments to achieve a state of good repair



## SERVICE QUALITY

Enhance the desirability and utility of the transit service for Gwinnett residents and workers

### COVERAGE AND CONNECTIVITY

Expand the number of communities and destinations served to increase transit accessibility

### TRAVEL TIME REDUCTION

Make the transit network more competitive and effective for its users through capital and operating investments

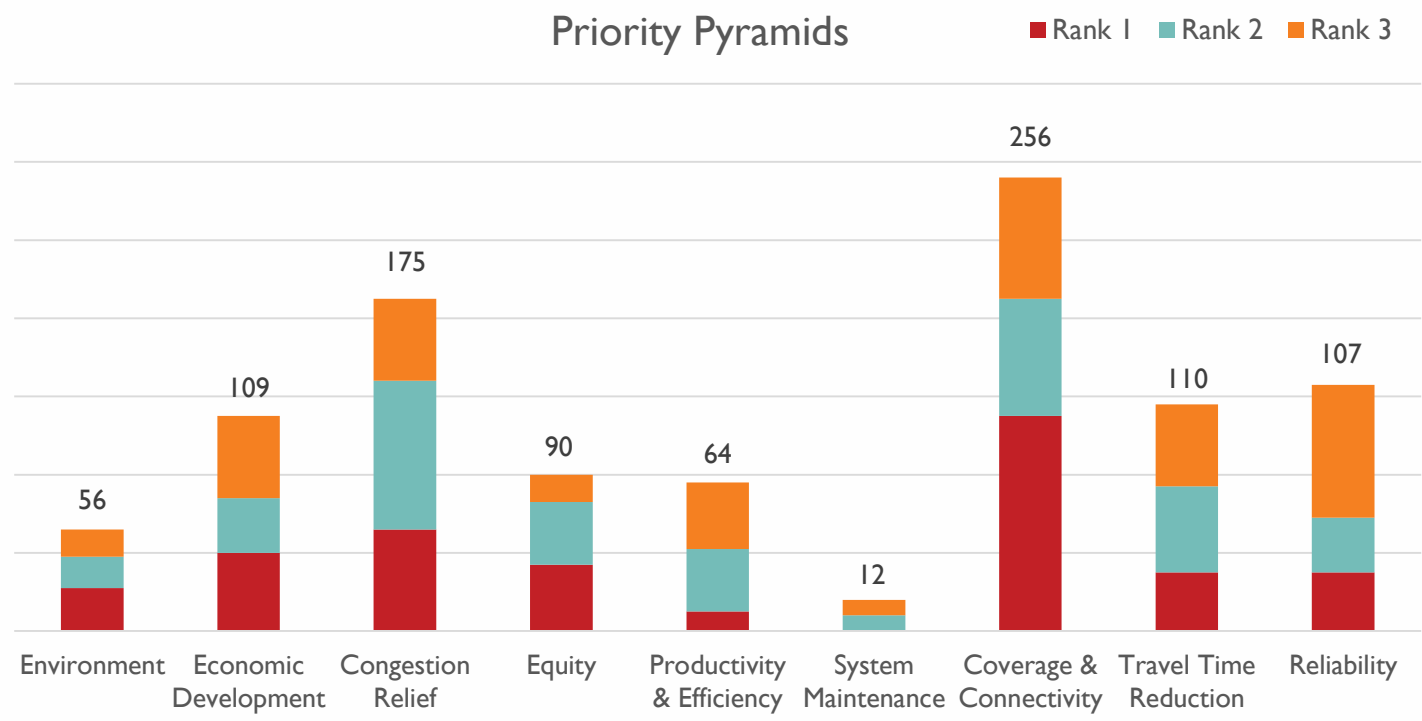
### RELIABILITY

Increase the reliability of the transit network through investment in priority treatments, technologies, safety, and operations



# System Goals and Priorities

- 1. Coverage and Connectivity
- 2. Congestion Relief
- 3. Travel Time Reduction



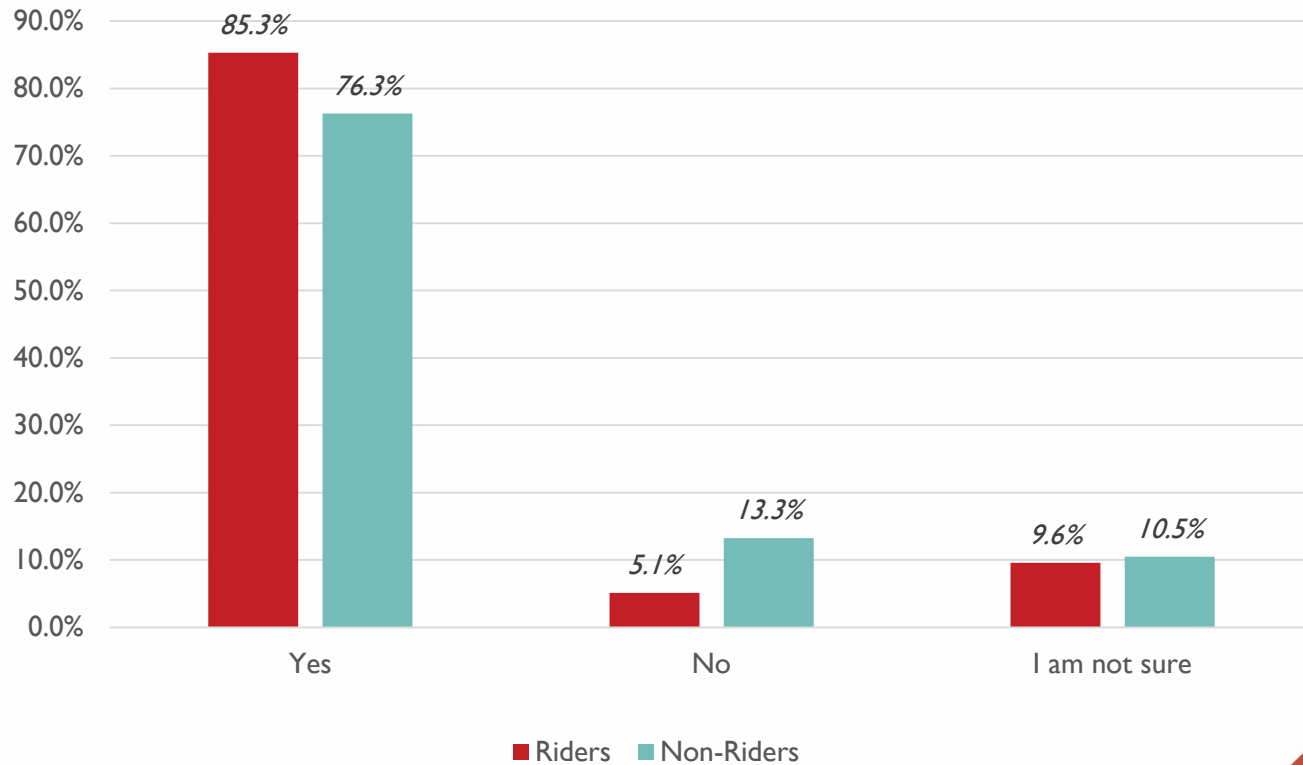


# Survey Results – Basics

- Total respondents = 3,674
  - 3,249 online
  - 425 paper
- Rider/Non-rider
  - 841 GCT riders
  - 2,833 non-GCT riders
- Home ownership:
  - Riders – 503 own, 335 rent
  - Non-riders – 2,354 own, 476 rent

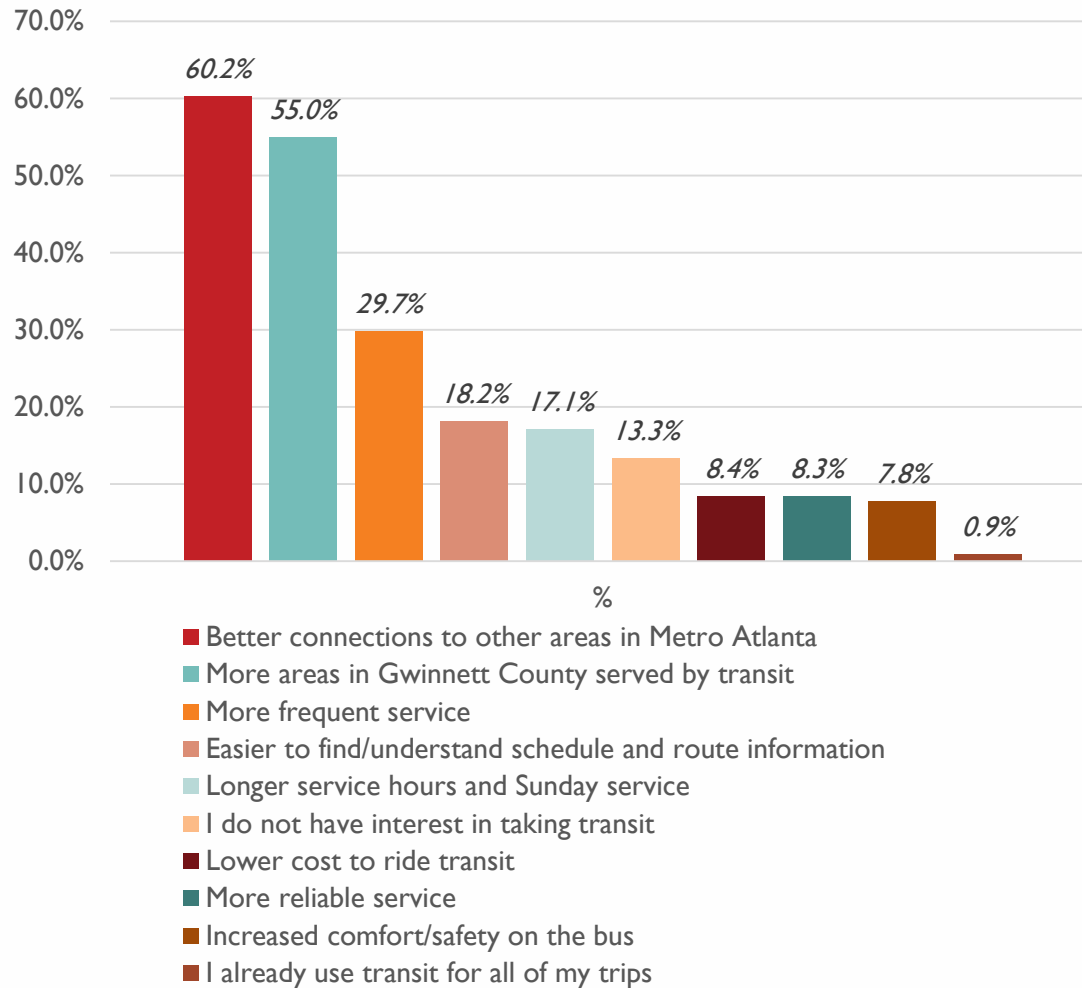


# Need for Expansion



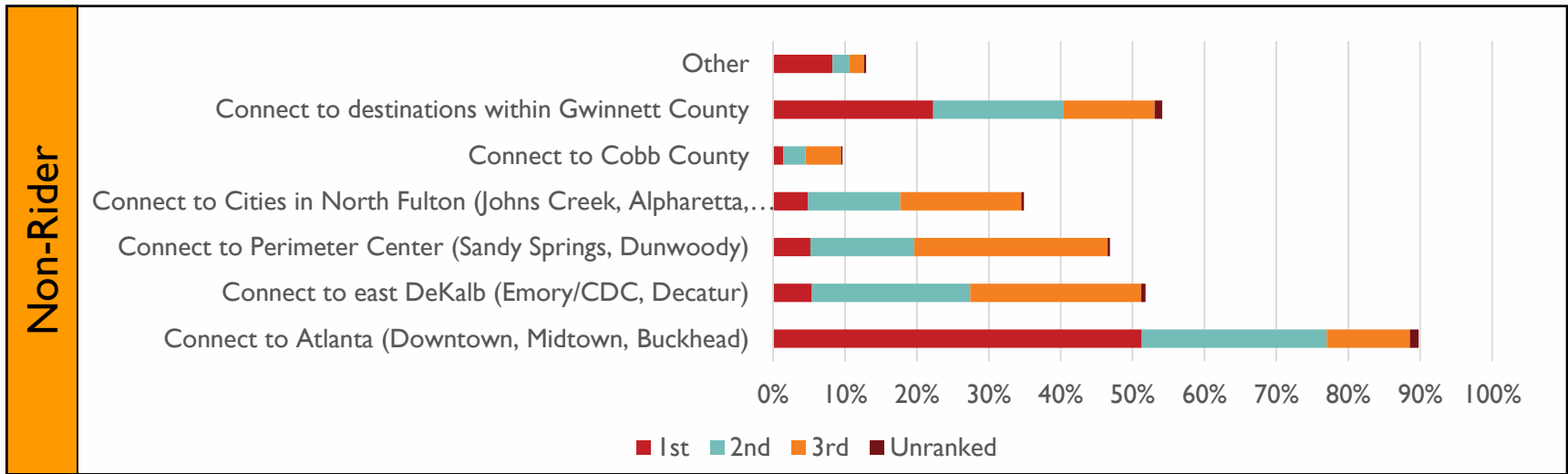
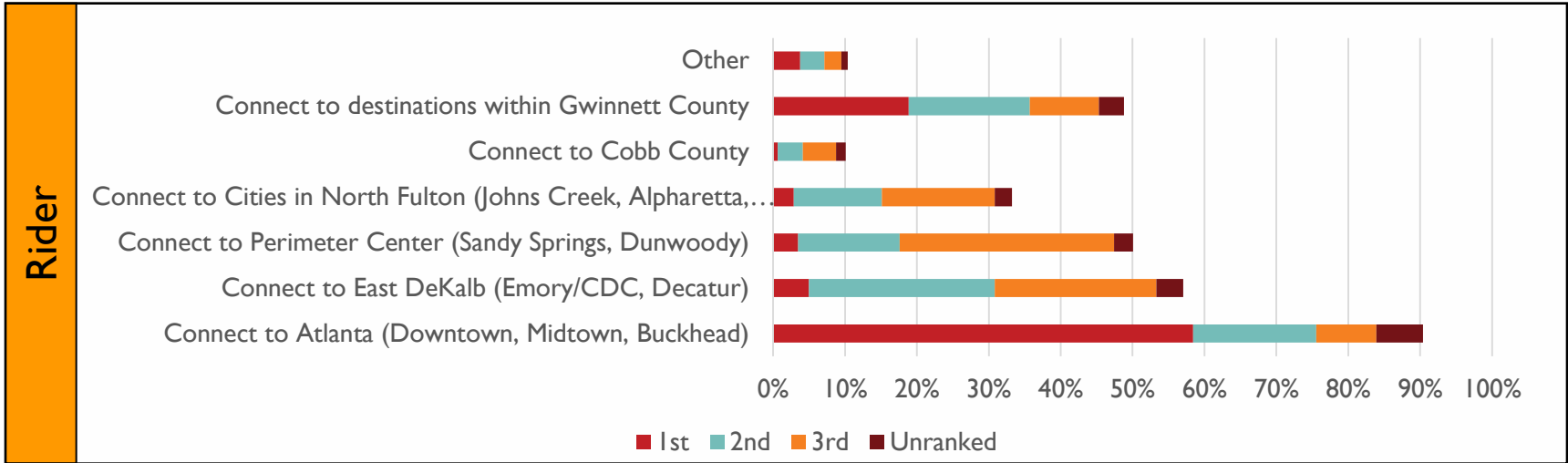


# Improvements for More Frequent Use





# Long-term Strategy

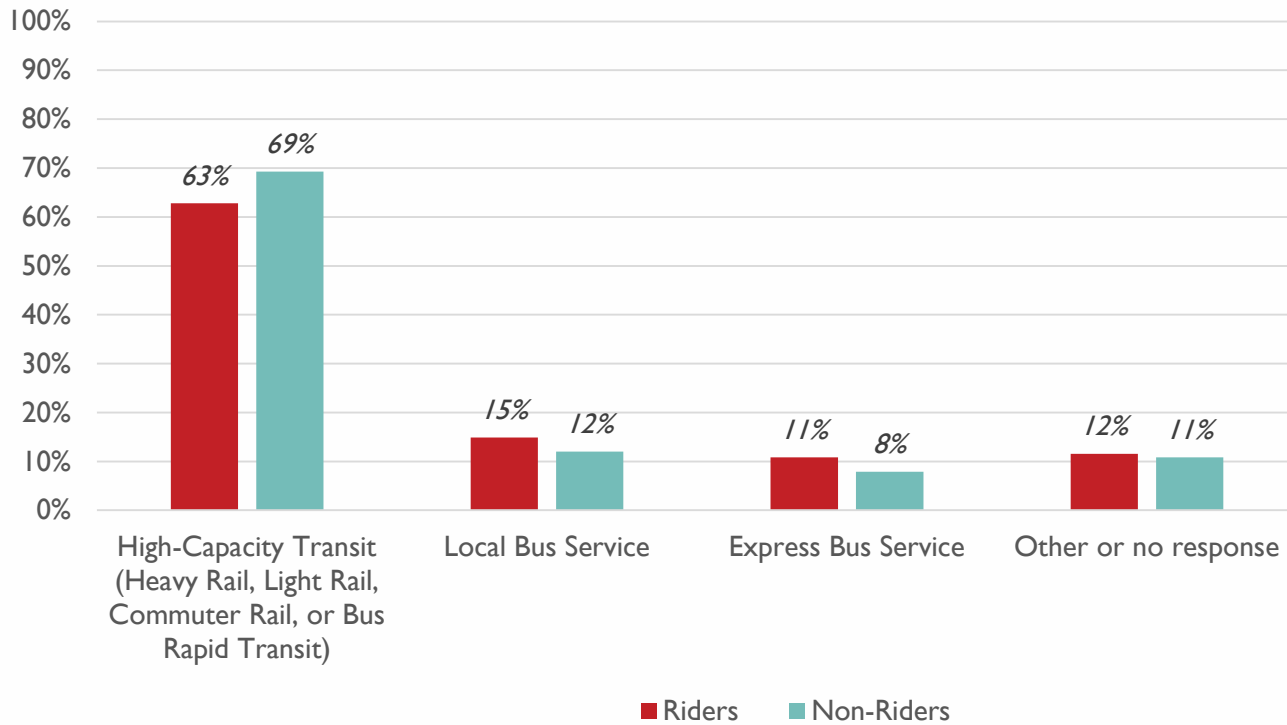






# Long-Term Investments

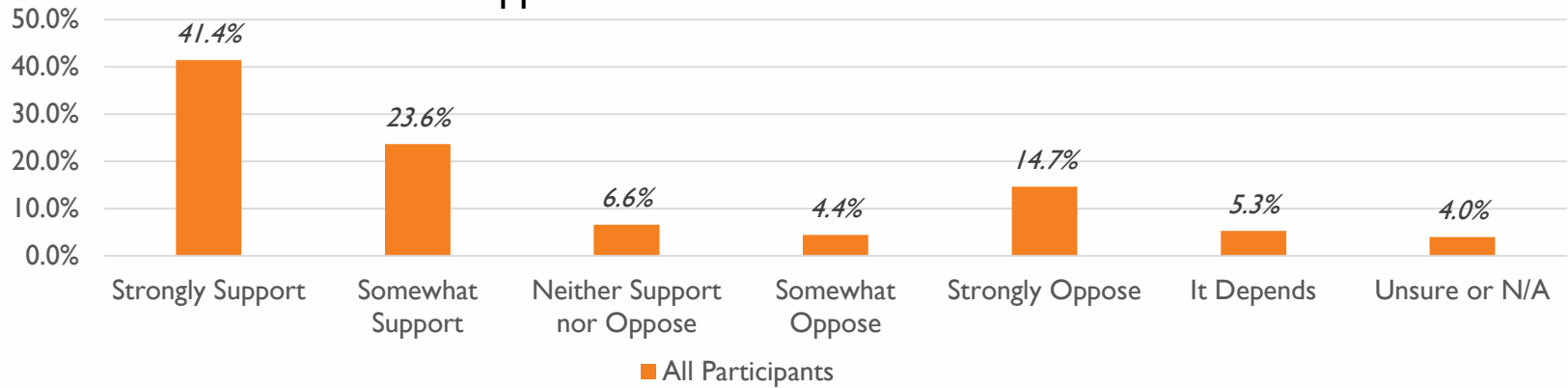
Long-Term Investments



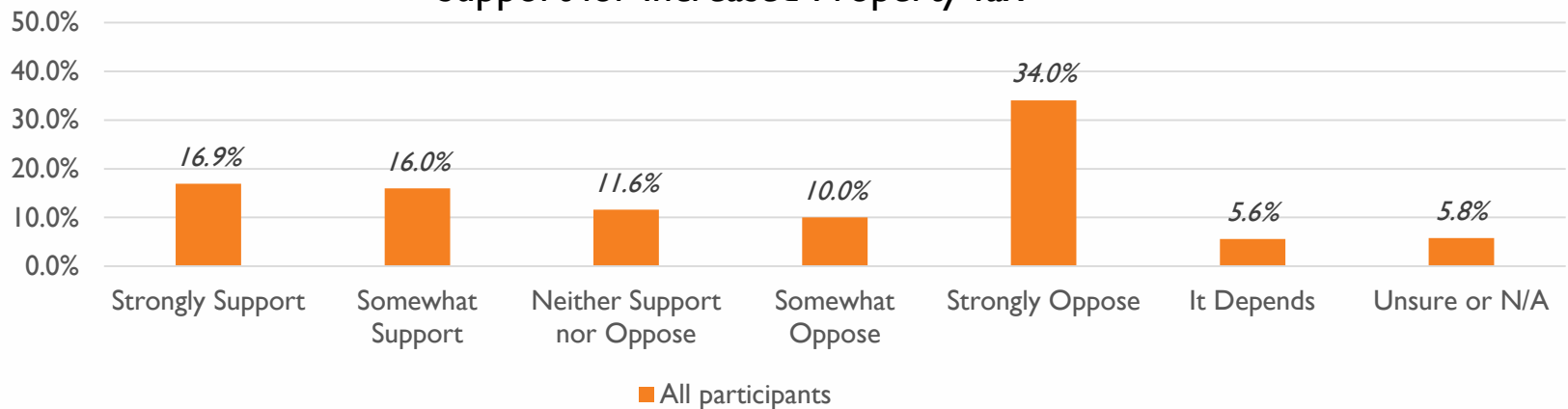


# Support for Taxes

## Support for New Local Sales Tax



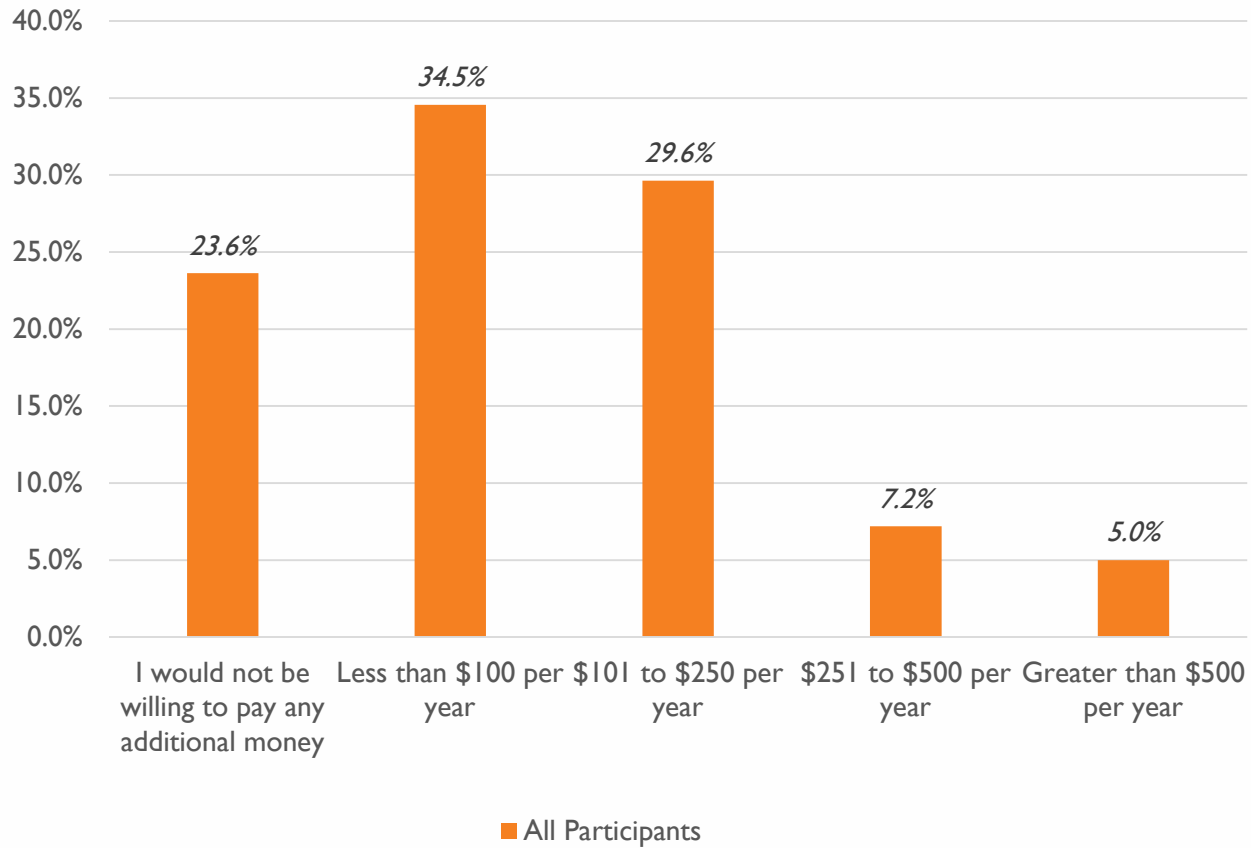
## Support for Increased Property Tax





# Support for Taxes

Additional Taxes (\$)



# MODES UNDER CONSIDERATION

# Major Investments



## Heavy Rail

- High speed/rapid acceleration rail cars
- Electrified and fully grade-separated
- Substantial stations with faregates
- Stations spaced every 1 to 5 miles

## Cost



## Light Rail (LRT)

- Operates most commonly in dedicated right-of-way
- Electrified, can be grade-separated or street level
- Lower capacity and speed than heavy rail
- Stations spaced every 1/2 to 1 mile



## Commuter Rail

- Electric or diesel propelled
- Carries moderate to long distance commuters
- Often runs in corridor shared with freight services
- Stations spaced at least every 2 to 5 miles



## Bus Rapid Transit (BRT)

- Rubber tired vehicles in primarily dedicated right-of-way
- Priority treatments to increase speed and reliability
- Enhanced stations spaced like LRT with distinctive branding and off-board fare collection



# Enhanced/Rapid Bus

- Amenities May Include:
  - Queue Jump Lanes
  - Transit Signal Priority
  - Level Boarding
  - Some Dedicated Lanes
- Service Characteristics:
  - Minimum 15-minute frequency during peaks
  - All-day service
  - Longer stop spacing (1/4 to 1/3 mile)



## Cost





# Moderate Investments



## Express Bus

- Rubber tired vehicles
- Serves long-distance, commute flow
- Mostly mixed flow, benefit from managed lanes
- Limited stops, primarily route termini

## Cost



## Local Bus

- Electric, hybrid, natural gas, or diesel vehicles
- Mixed flow traffic, shared-right-of-way
- Limited amenities at stops
- Stations spaced 1-2 blocks to 1/4 mile



## Flex Service

- Demand responsive bus or shuttle
- Mixed flow traffic, shared-right-of-way
- Operates in a defined geographic area without fixed routes
- Combination of door-to-door service and/or designated stops



## Transportation Network Companies (TNCs)

- Demand responsive service by a private operator
- Mixed flow traffic, shared-right-of-way
- Often used in low density areas to connect to a transit station
- N/A, no stations





# Service Plan Basics

- Short-Range will be subset of Mid-Range
  - What gets implemented first
  - Will depend on funding levels
- Mid-Range lays groundwork for higher-capacity in Long-Range
  - Build ridership in key corridors, making them more competitive for federal funding
  - Expand service area and improve route connectivity
- Long-Range will build on Mid-Range with substantial investments in some higher-demand corridors
  - Invest in travel time, reliability, and capacity improvements in higher-demand corridors
  - Grow overall coverage of the County through appropriate levels of investment by area

## Timeframes

Short-Range: 1 to 5 years

Mid-Range: 6 to 10 years

Long-Range: > 10 years

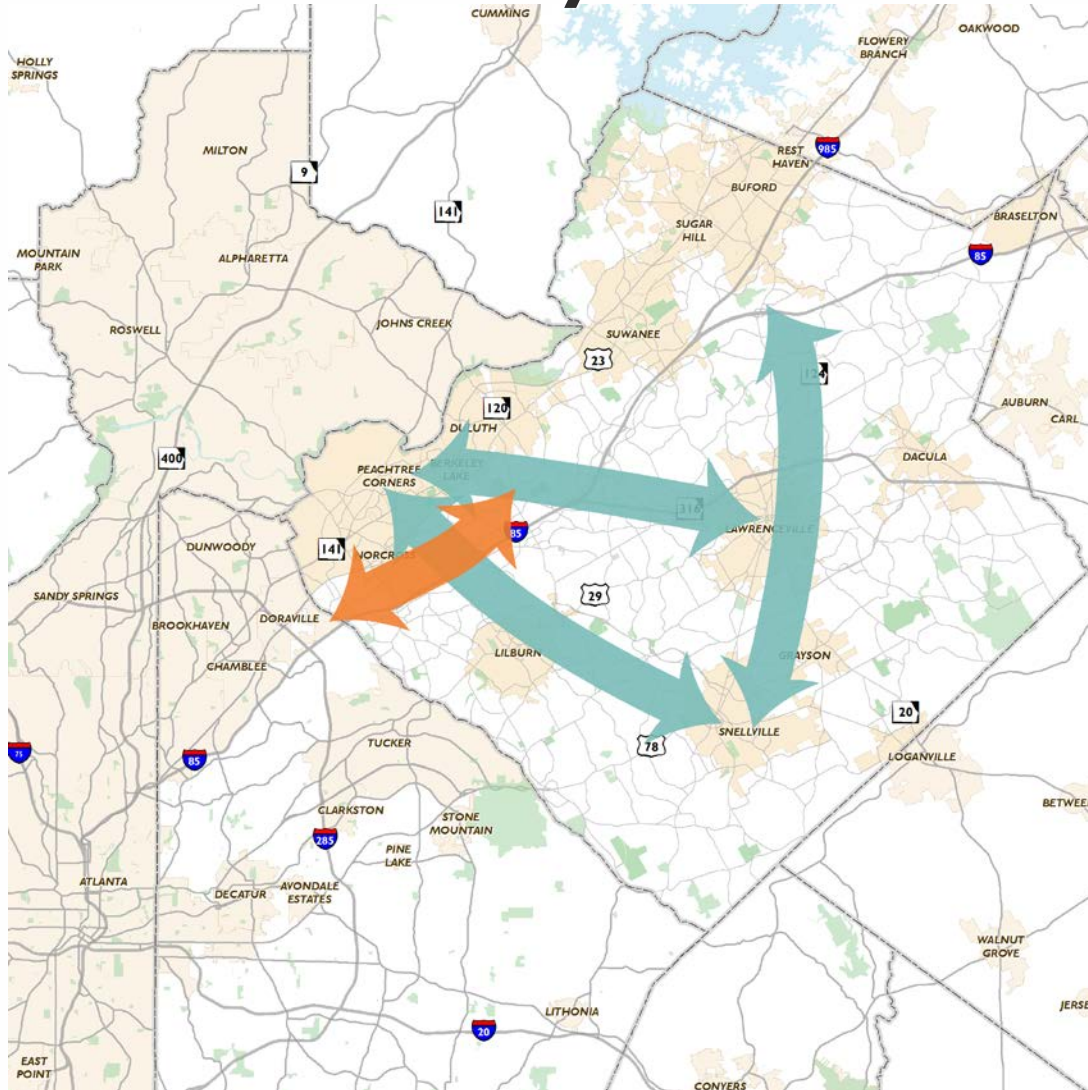
# TRAVEL PATTERN ANALYSIS







# Cross-County Corridors

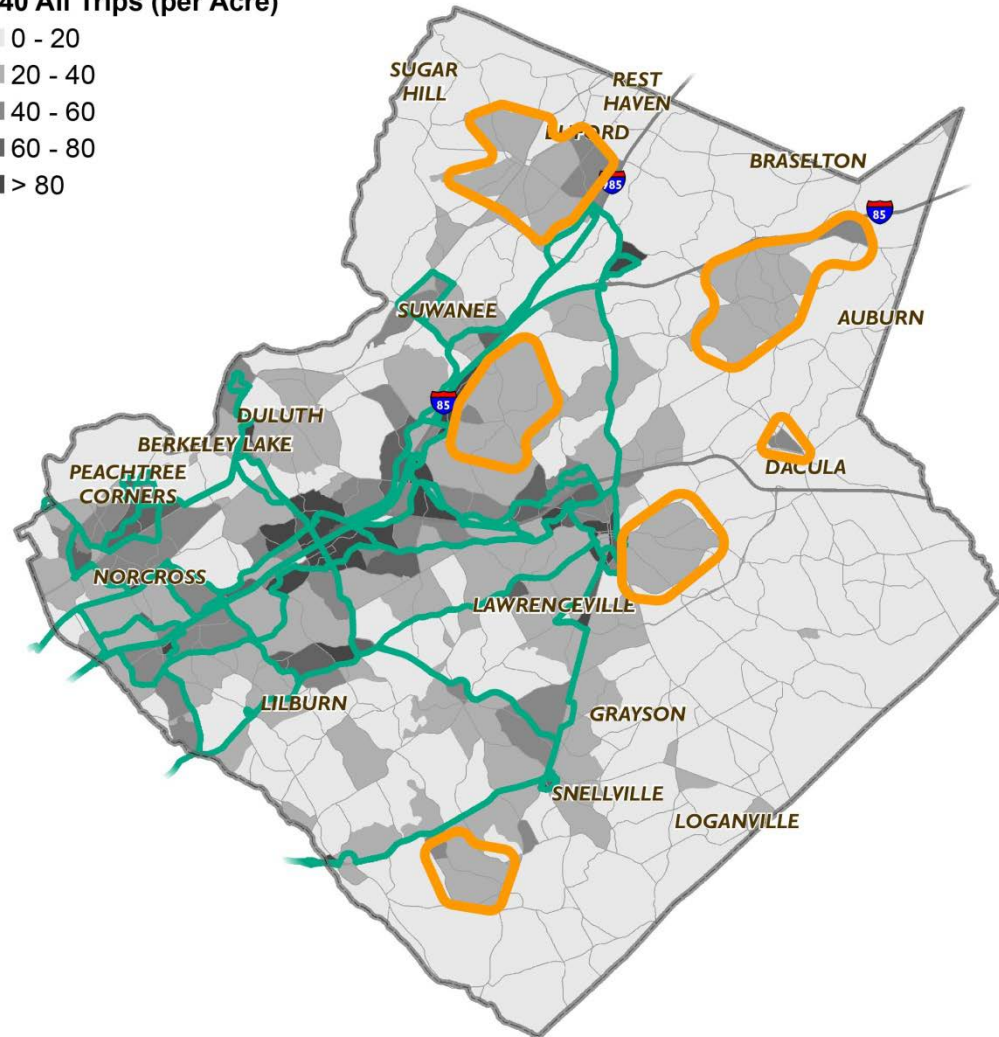
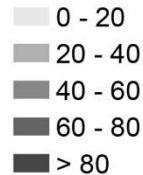




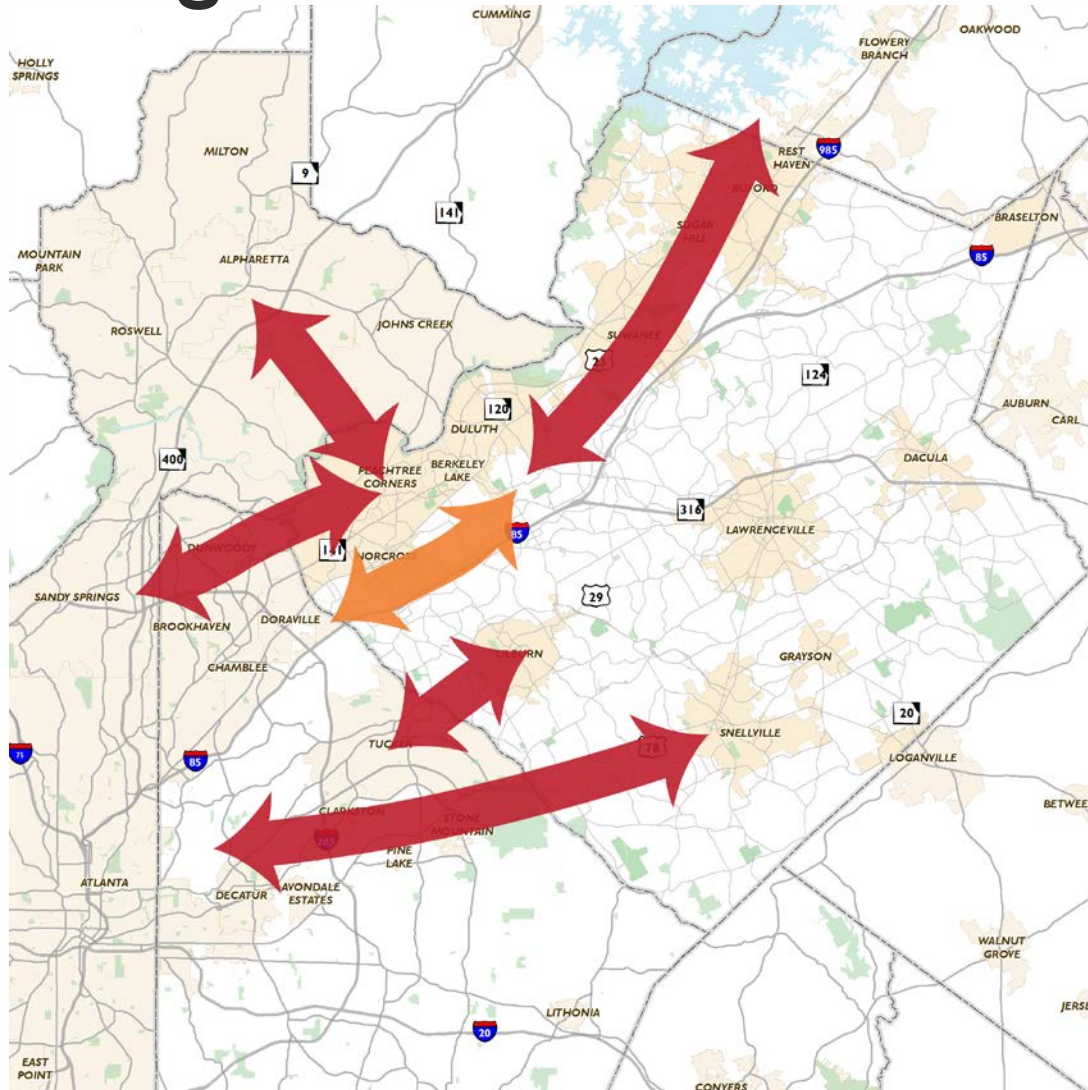
# Expanded Service Areas

- Flex service to connect to nearby transit facility
- Subsidized TNC rides to nearby transit facility
- Deviated service along lower-ridership local service

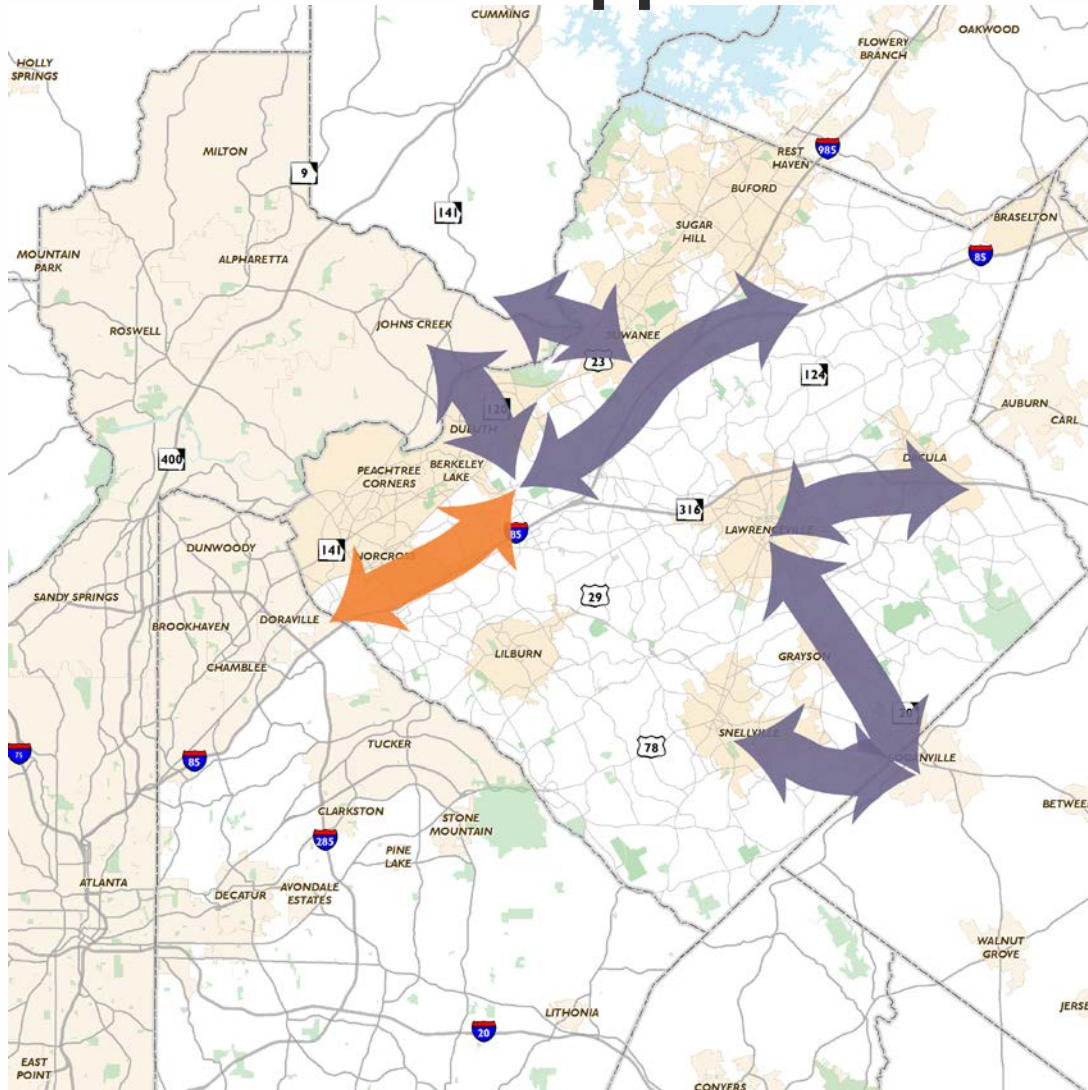
2040 All Trips (per Acre)



# Regional Corridors

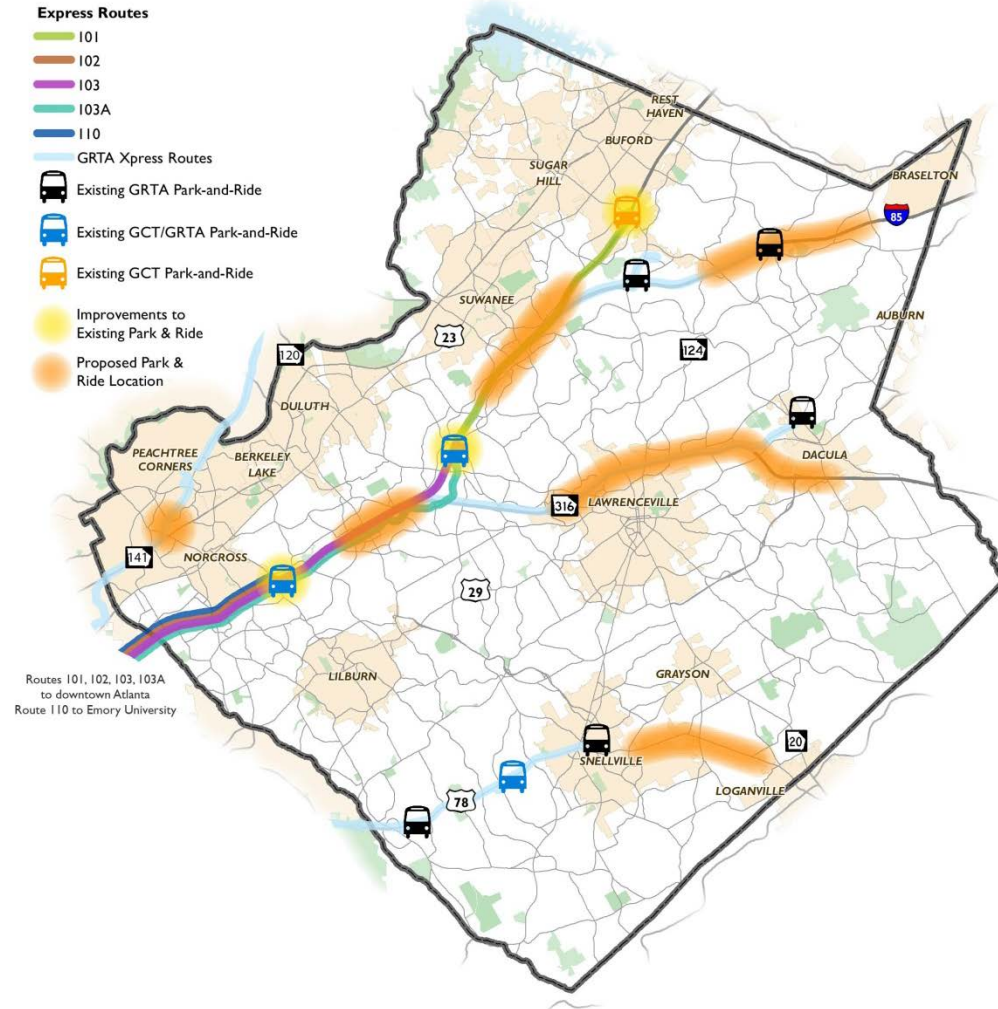


# Commuter Opportunities



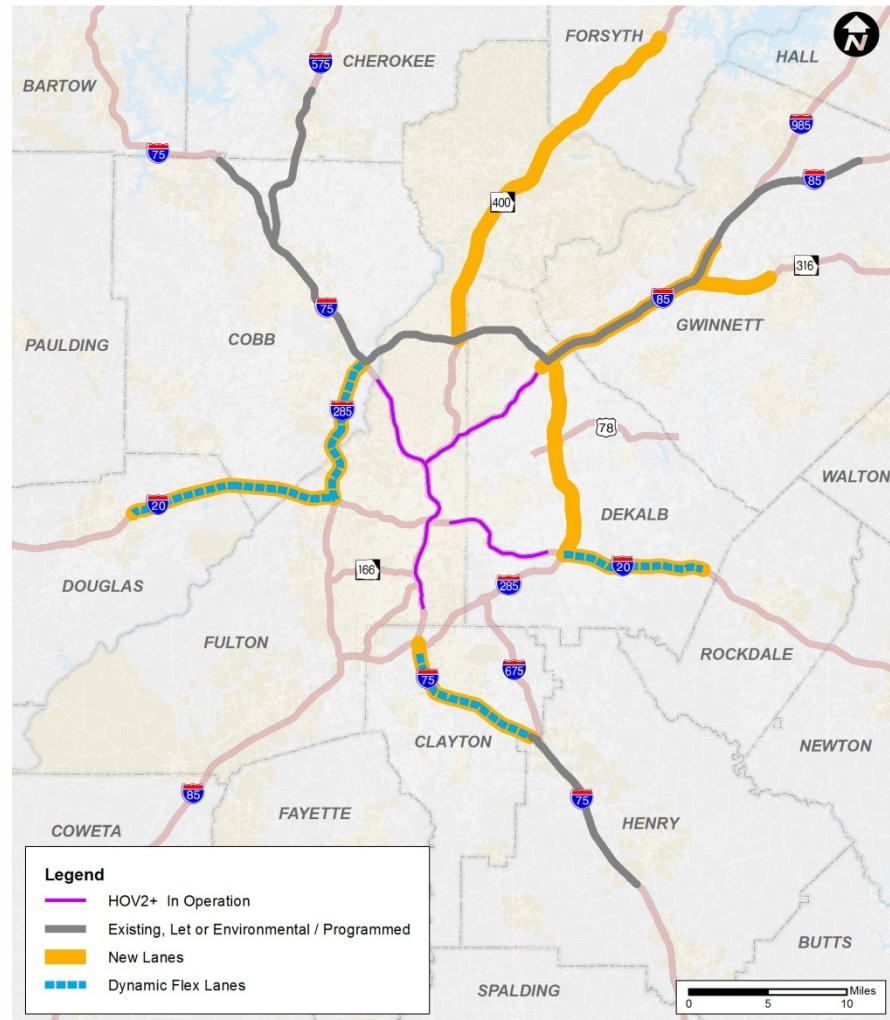


# Park-and-Ride Opportunities



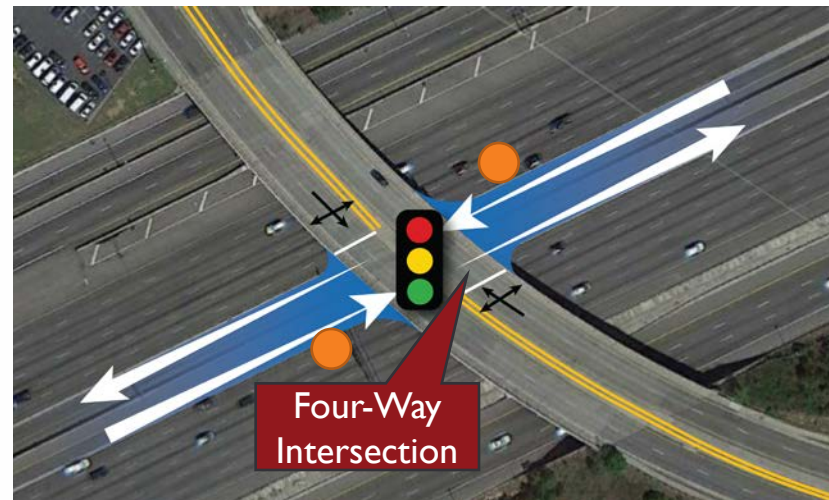
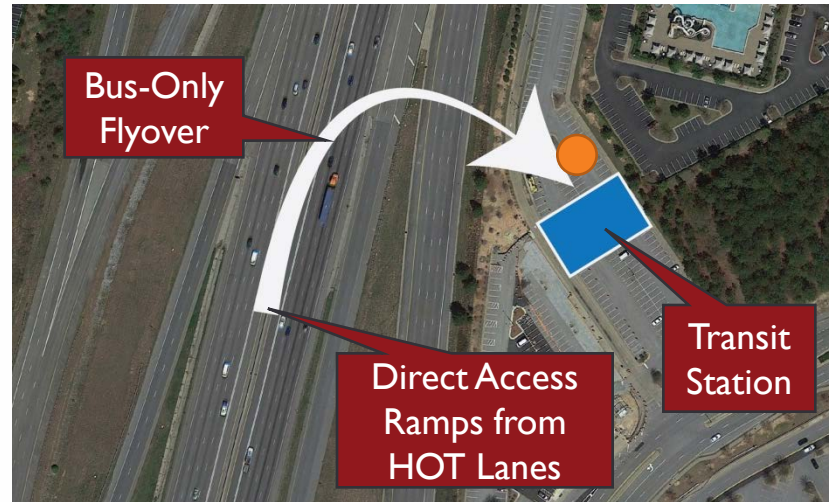
# Express Lane System

- Vision for Express Lane (EL) System build-out
  - Major Mobility Investment Program (MMIP)
  - Aspirational elements
- Enhance commuter express service throughout the County to take advantage of GDOT investment
- Build new Park-n-Ride lots near EL corridors



# Connections to Managed Lanes

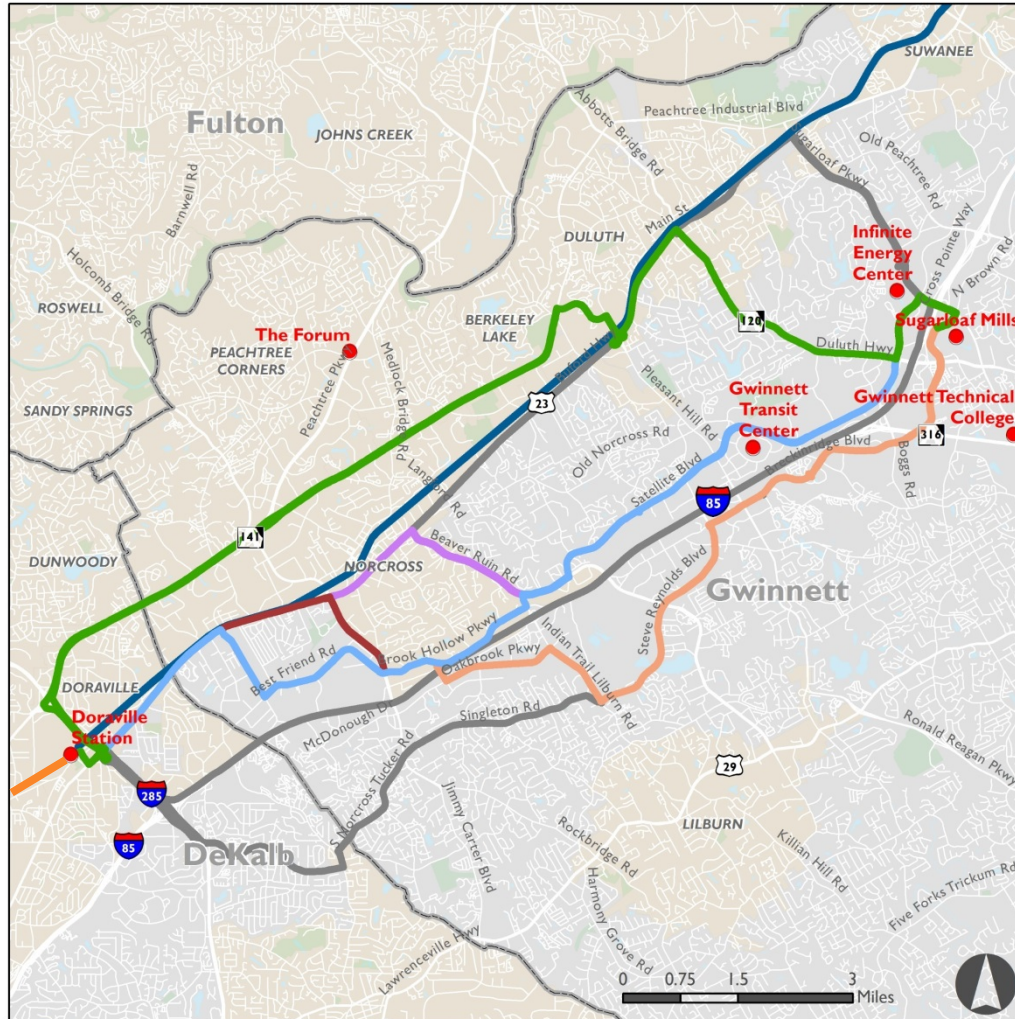
Leverage future managed lanes enhancements on I-85 to improve express bus service by improving access to Park-and-Rides and reducing travel times



# SOUTH I-85 CORRIDOR



# South I-85 Long-Term Alignments Considered





# Area of Consideration for Multimodal Hub

## Components of the Multimodal Hub:

- Regional Heavy Rail
- Connectivity to I-285 Managed Lanes
- South I-85 Corridor High-Capacity Transit Service
- Local Bus Service
- Regional Bus Service (Gwinnett and North Fulton)
- Bike Parking and Connectivity
- Carpool/Vanpool and Auto Parking
- Pick-up/Drop-off Areas



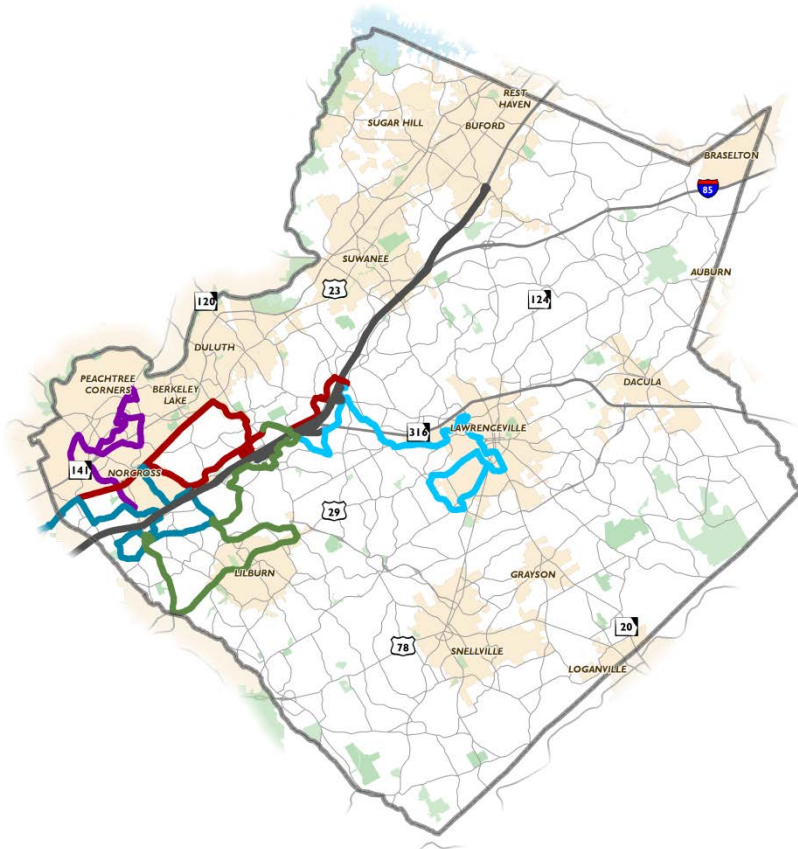
# MID-RANGE PLAN SUMMARY



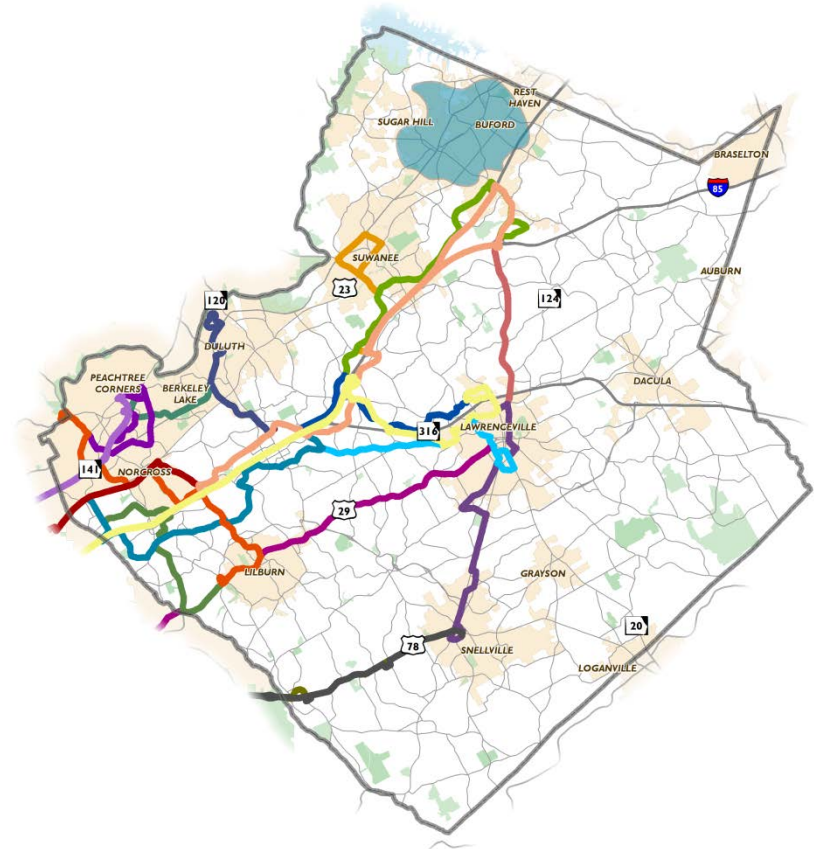


# Mid-Range Network Overview (Not Including Express Routes)

## Existing Network



## Mid-Range Network

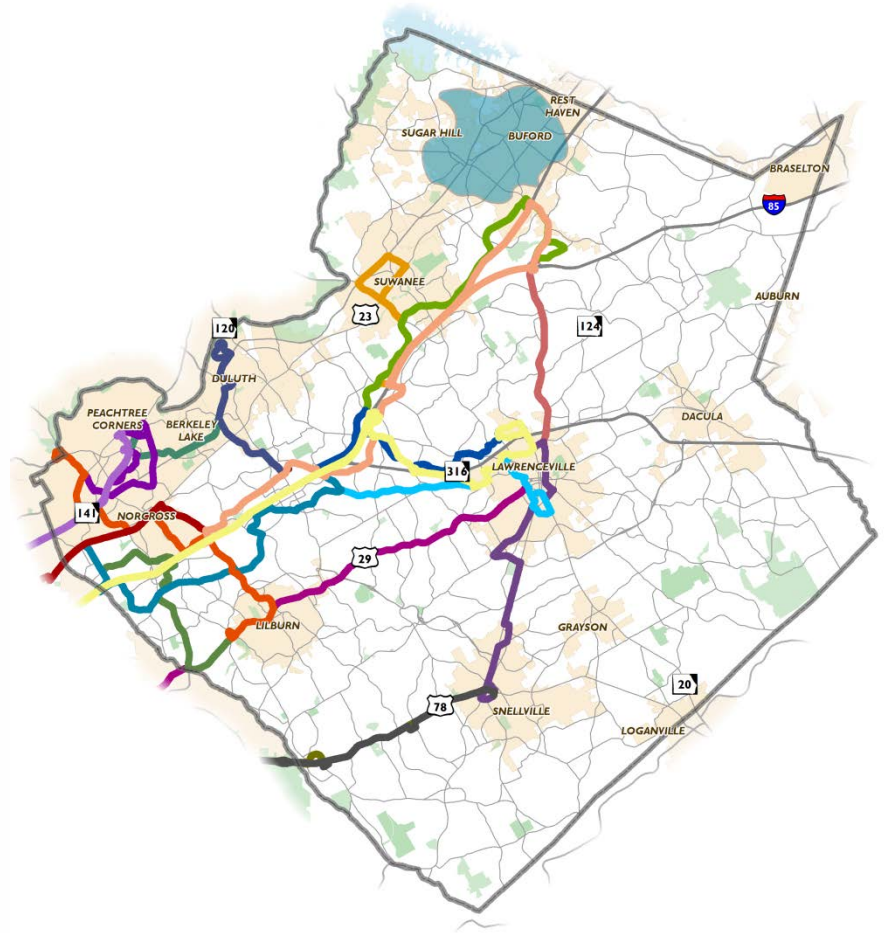






# Mid-Range Network

- Expands direct Doraville connections
- Provides new connections to Chamblee, Indian Creek, Tucker and Spalding Dr.
- New service to GA Gwinnett College, Gwinnett Medical Center-Duluth, Mall of GA
- Service to new areas of the County
- More direct routing
- Expanded evening service coverage
- Buford/Satellite corridor has 15 minute all-day service
- Select routes and route segments with 30 minute all-day service
- New “Direct Connect” service to Chamblee Station
- Service structured in a manner that allows for “packaging” of improvements that can be advanced into 5-year short-range plan



# NEXT STEPS



# Next Steps

## Mid-Range

- Determine Ridership Potential
- Evaluation of Costs and Benefits
- Draft Mid-Range Service Plan Recommendations
- Packaging of Improvements by Time Frame (Short- or Mid-Range)

## Long-Range

- Further Definition of Corridor Service Improvements
- Determine Ridership Potential
- Evaluation of Costs and Benefits
- Draft Long-Range Service Plan Recommendations

## Financial Plan

- Evaluation of possible financial scenarios and development of initial financial plan