ATLANTA-REGION TRANSIT LINK AUTHORITY

Regional Technology Committee

Andy Macke, Chair

February 1, 2024

Regional Technology Committee Meeting
Thursday, February 1, 2024
Proposed Agenda

I. Call to Order – Andy Macke, Chair

II. Approval of the Meeting Minutes for December 7, 2023

III. Approval of the Agenda for February 1, 2024

IV. Regional ZEB Transition Report – Abby Marinelli – **Action Item**

V. ATL RIDES Mobile App Q4 Report – Abby Marinelli

VI. Cumberland Sweep Autonomous Shuttle Pilot Project – Kim Menefee & Joe Moye, Cumberland CID

VII. Adjournment

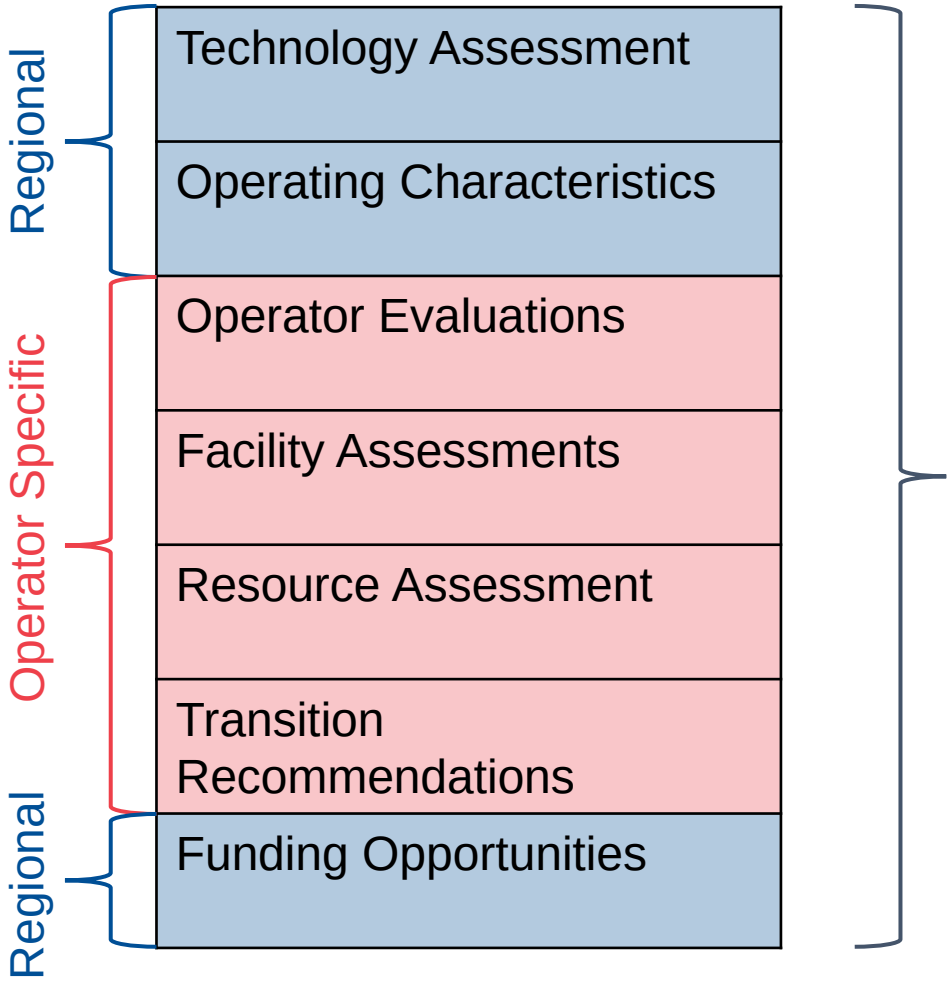
ATLANTA-REGION TRANSIT LINK AUTHORITY

Regional ZEB Transition Report

Abby Marinelli

February 1, 2024

Regional ZEB Fleet Transition Report



Regional ZEB Fleet Transition Report

ATL ATLANTA-REGION TRANSIT LINK AUTHORITY

ATL

Benefit/Cost Comparison

	Baseline Diesel	Battery Electric (BEB)	Hydrogen (FCEB)
FTA Compliant Vehicle Delivery	18 months	18-24 months	18-24 months
Time to Refuel/Recharge	-		
Operational Stability[1]	-		
Maintenance Benefits	-		
Environmental Benefits	-		
Fuel Savings[2]	-		
Est. Local Share of TCO (20 Years)	$75 M	+ 3%	+ 34%

[1]Operational stability as compared to baseline represents the variability that battery electric vehicles experience in available power due to environmental and operational factors like ambient temperature, passenger load, terrain, driving style, etc.

[2]Fuel cost savings depends on the price of hydrogen, which is expected to decrease over time.

Knowns and Unknowns

Knowns	Unknowns
• Buses will need to be routinely replaced	• Service and fleet changes over time
• 18-24 months between bus order and bus delivery	• Future Local and State budget allocations
• Each agency has autonomy to implement changes at will	• Availability of future competitive Federal funding dedicated to ZEBs
• Regional coordination can improve delivery timelines and costs	• Impact of reduced maintenance on spare ratios
	• Timeline for availability of FTA-compliant hydrogen coaches and cutaways

Regional Coordination

Committee Action Item

Committee Action Item

ACTION ITEM

►For approval –

1. Requesting the Committee recommend Board approval for the adoption of the Regional Zero Emission Bus Fleet Transition Report.

ATLANTA-REGION TRANSIT LINK AUTHORITY

ATL RIDES Quarterly Update

Abby Marinelli

February 1, 2024

ATL RIDES

ATL RIDES is the region's first multi-agency trip planning app for fixed route transit that provides real-time arrival information

	ATL RIDES	Google Maps
Trips across agencies	✓	✓
Multi-modal options	✓	✓
Multiple language support	✓	✓
Automatic fare calculation	✓	✗
Real-time transit reliability information	✓	✗
Potential for demand response bookings	✓	✗
Potential for statewide deployment	✓	✗
Trip data available for planning use	✓	✗

ATL RIDES Progress Report

- ATL RIDES went live on October 4, 2023
- Monitoring metrics such as count of app downloads, use rates, star rating in the app store, app up time

Number of app downloads and website visits	550+ downloads 5,000+ trips planned
Number of average monthly users	~190 website users
App store rating is at least 4/5 stars by the end of the demonstration period	*Measured at the end of the demonstration period*
Increasing trend of trips planned that incorporate services between at least 2 modes and/or transit providers	Tentative yes

Questions?

Thank you

ATLANTA-REGION TRANSIT LINK AUTHORITY

Transit Tech Project Spotlight: Cumberland Sweep

Abby Marinelli introducing Kim Menefee

February 1, 2024

Transit Technology

- Transit technology can be categorized as **Customer-Focused**, **Operations-Focused**, or as a **Blend** of Customer- and Operations-focused.

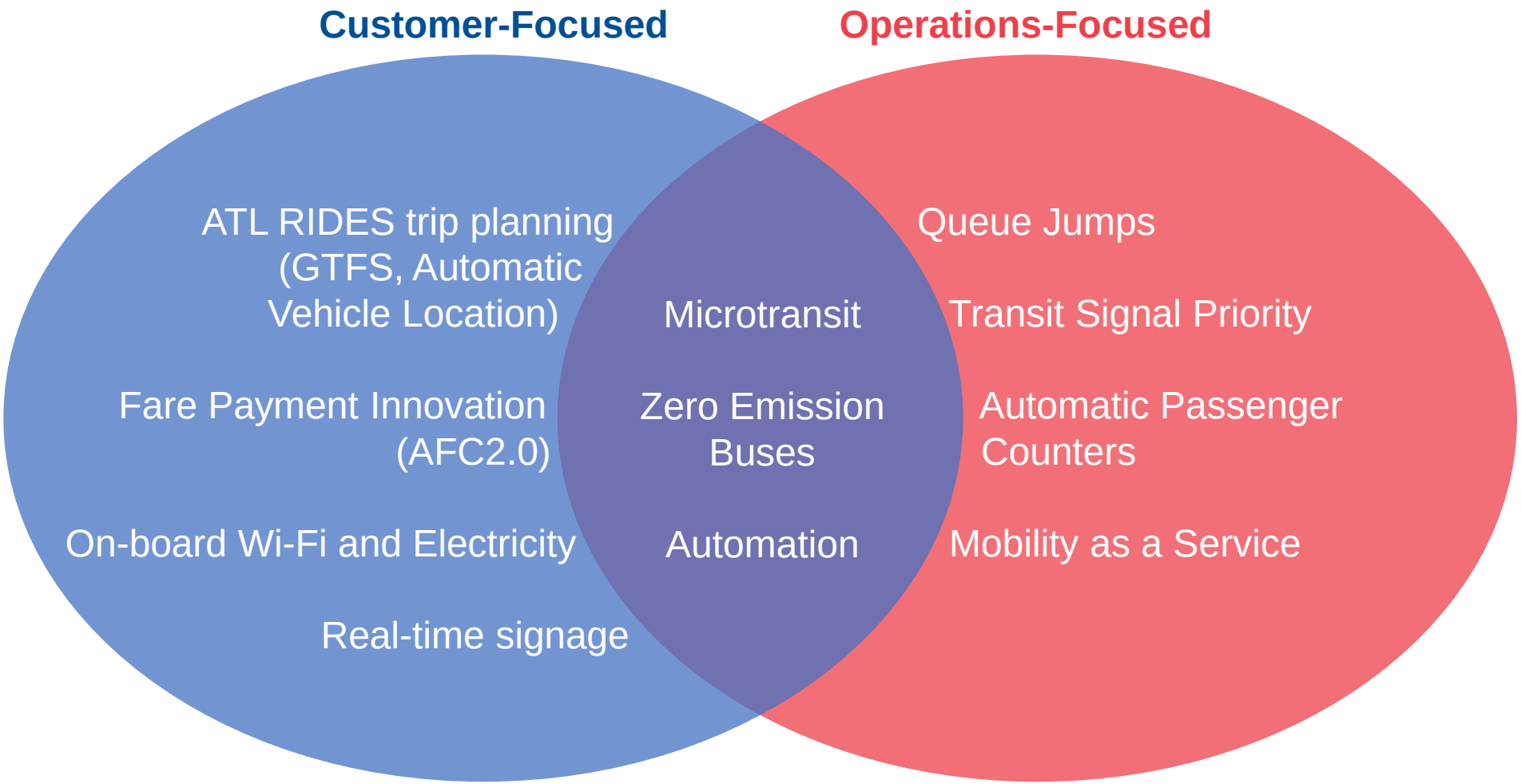
Customer-Focused

Technologies that are design for, impact, and/or support making the transit system more intelligible and easier to use for customers.

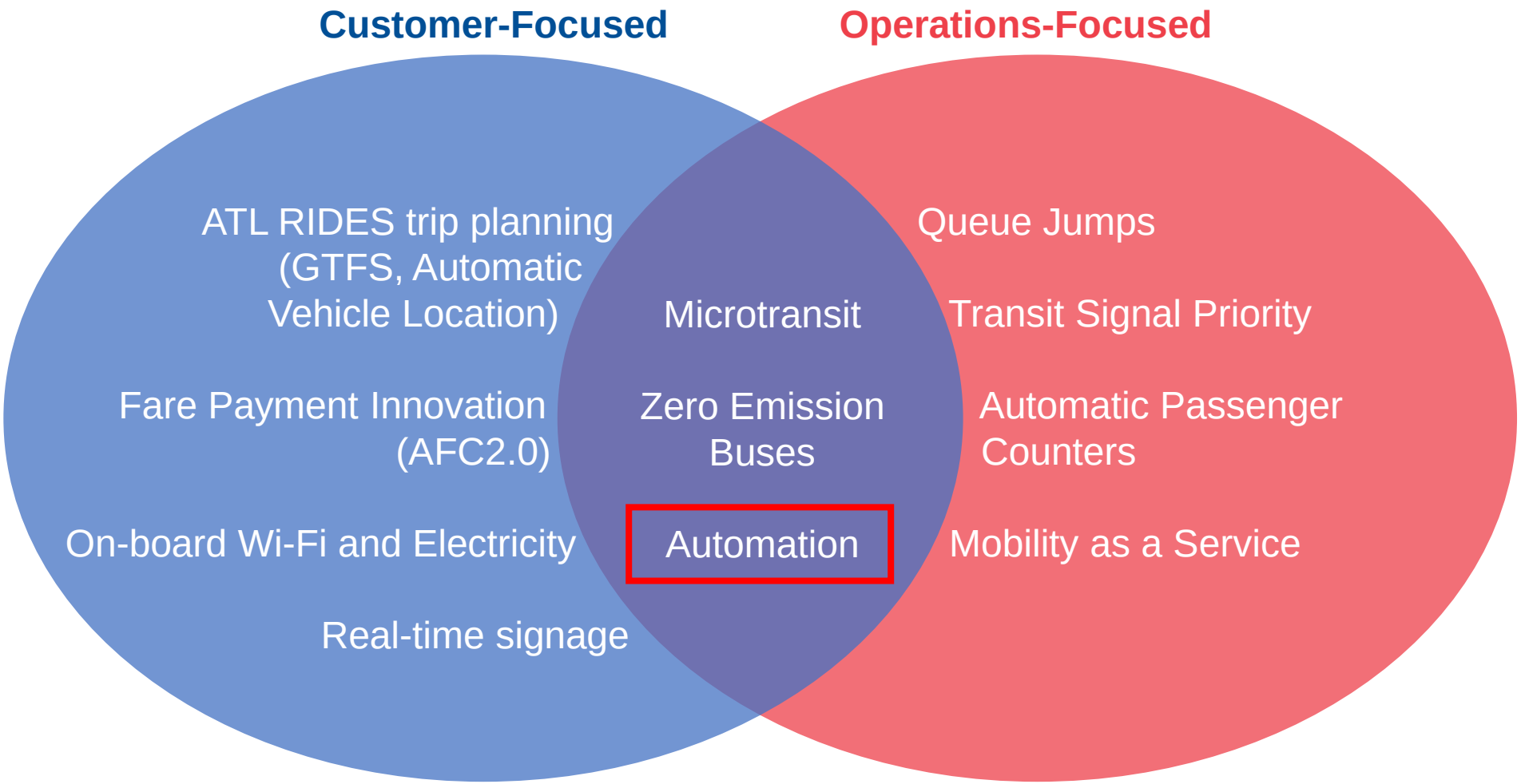
Operations-Focused

Technologies that are designed for, impact, and/or support more efficient, seamless, and integrated operations of the regional transit system.

Transit Technology



Transit Technology



CUMBERLAND

COMMUNITY IMPROVEMENT DISTRICT

Cumberland Sweep: Reimagining Mobility in the Region

Kim Menefee, Executive Director, Cumberland CID & One Cumberland

February 1, 2024

INTRODUCING THE CUMBERLAND SWEEP

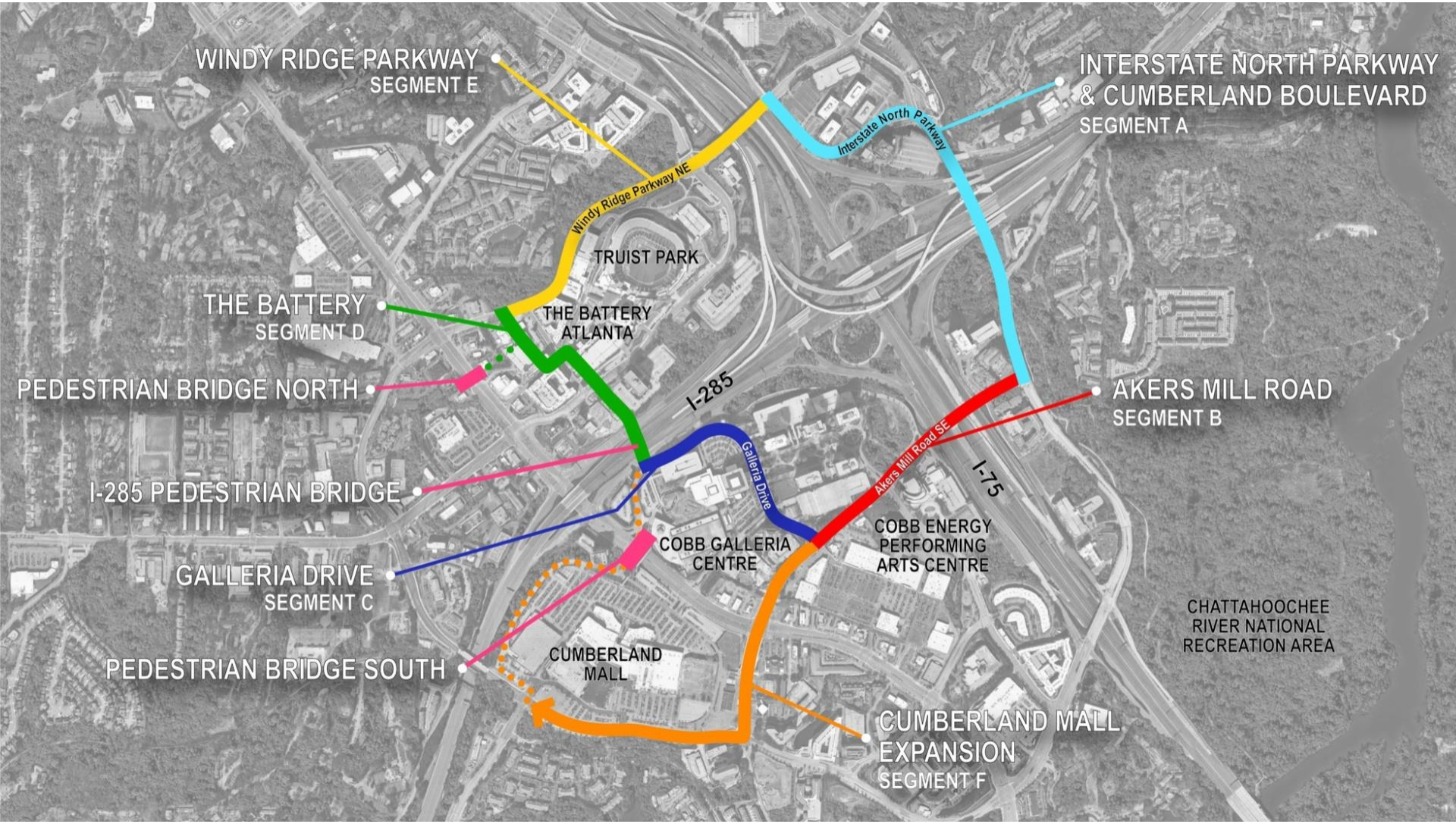
A three-mile multimodal corridor connecting Cumberland's major, employment, cultural, and entertainment destinations

Key destinations: The Battery Atlanta, Truist Park, Cumberland Mall, CEPAC, Cobb Galleria Centre, Galleria Office Park, and the CRNRA.

Dedicated lanes for walking, biking, and an autonomous shuttle system

Sweep Goals:

- Offer a potential solution for the “first and last mile challenge.”
- Unify the District
- Connect to Transit
- Reduces Carbon Emissions
- Foster Equity

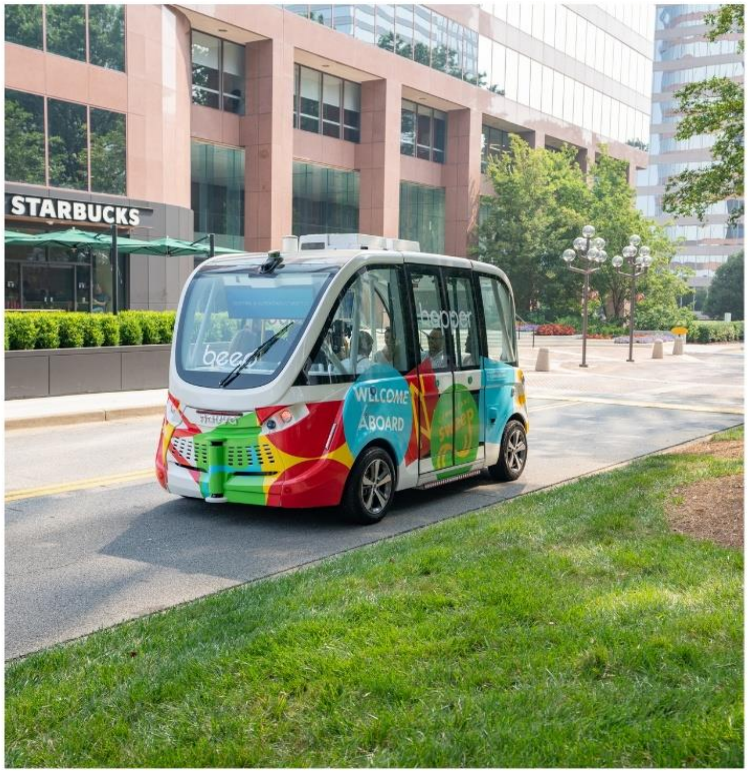

WINDY RIDGE PARKWAY
SEGMENT E
INTERSTATE NORTH PARKWAY
& CUMBERLAND BOULEVARD
SEGMENT A
Windy Ridge Parkway NE
Interstate North Parkway
TRUIST PARK
THE BATTERY
SEGMENT D
THE BATTERY
ATLANTA
PEDESTRIAN BRIDGE NORTH
I-285
AKERS MILL ROAD
SEGMENT B
Galleria Drive
Akers Mill Road SE
I-75
I-285 PEDESTRIAN BRIDGE
COBB GALLERIA
CENTRE
COBB ENERGY
PERFORMING
ARTS CENTRE
GALLERIA DRIVE
SEGMENT C
CHATTAHOOCHEE
RIVER NATIONAL
RECREATION AREA
CUMBERLAND
MALL
PEDESTRIAN BRIDGE SOUTH
CUMBERLAND MALL
EXPANSION
SEGMENT F

CUMBERLAND SWEEP: AV SHUTTLE PILOT PROGRAM (THE HOPPER)

- CID Board has fully funded an 8-month AV Shuttle Pilot Program in Cumberland
- A partnership with Beep Inc, a national leader in AV technology and operations
- July 2023 - March 2024
- Deployment Routes:
  - 1) I-285 Transit & Pedestrian Bridge (Blue)
  - 2) Galleria Office Park (Green)
- 8 Passenger - 15MPH - Attendant on Board
- Program Goals:
  - Learn and become a leader in AV technology
  - Raise Awareness
  - Educate public and key stakeholders
  - Use data to prepare for implementation - 2027

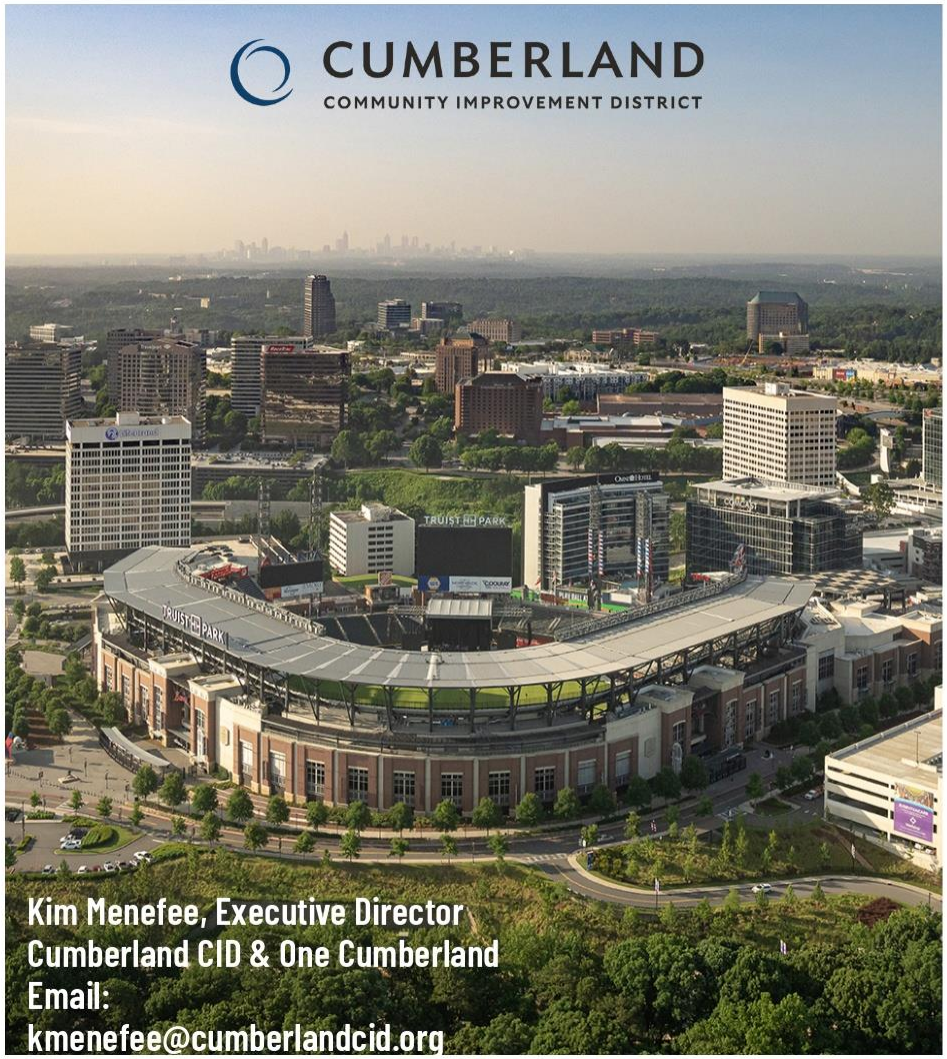

CUMBERLAND
sweep
CUMBERLAND
COMMUNITY IMPROVEMENT DISTRICT
Truist Park
Circle 75 Pkwy SE
Circle 75 Building 1100
The Battery Atlanta
285
75
Heritage Court
Circle 75 Building 900
TKE & Papa Johns
hopper
Galleria 200
Galleria 300
Galleria 400
Galleria 600
Galleria 100
US HWY 41/Cobb Parkway
Renaissance Waverly Hotel
Cobb Galleria Centre
Galleria Pkwy SE
Galleria Dr. SE
Akers Mill Rd. SE
Cobb Galleria Pkwy.
INPO
Cobb Energy Performing Arts Centre
Galleria Office Park Route
I-285 Transit & Pedestrian Bridge
STOPS

CUMBERLAND SWEEP: LOOKING FORWARD



- **Hopper pilot results**
  - Over 4100 riders to date
  - 95 percent surveyed said they felt safe
  - 95 percent surveyed said they support seeing autonomous shuttles in Cumberland
- **Jacobs AV deployment study**
  - Provides a plan for implementation for the AV shuttle system
  - Recommended number of shuttles for future implementation
  - Identified ridership demands
- **SMART Grant**
  - Goal: Study and implement a new phase of the AV Pilot


Photo Credit: Atlanta Ballet


CUMBERLAND
COMMUNITY IMPROVEMENT DISTRICT
TRUIST PARK
Kim Menefee, Executive Director
Cumberland CID & One Cumberland
Email:
kmenefee@cumberlandcid.org

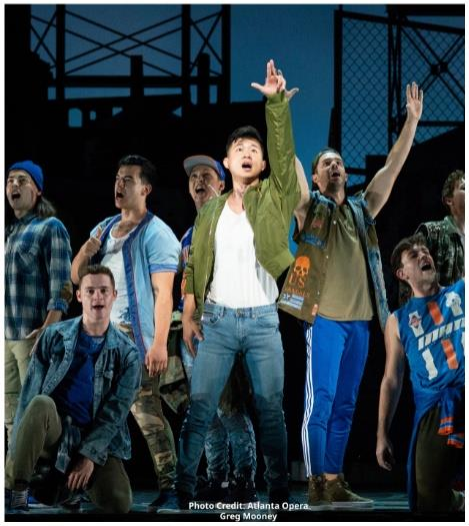
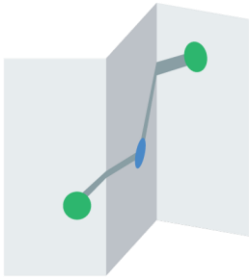


Photo Credit: Atlanta Opera
Greg Mooney

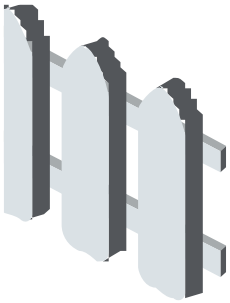


First/Last-Mile Mobility

Extends access to public transit & provides mobility options for underserved communities

Multi-Passenger Form Factor

More effectively reduces congestion, carbon emissions and parking infrastructure than other form factors



Geofenced Routes

Brings advantages of autonomous transit to the real world now, while advancing tech through data & learnings

Enabled by Autonomy: The Multi-Passenger Form Factor

✓ Frequency
✗ Capacity

✓ Frequency
✓ Capacity

✗ Frequency
✓ Capacity

- Micromobility represents **most underserved segment** for U.S. transportation access
- **Multi-passenger form factor provides unique advantages** for enabling mobility, reducing traffic, extending public transit access
- Autonomous vehicle platforms will first be adopted in **more controlled ODDs**
- **Next-generation platforms** will transform mobility with supervised autonomy

Connect communities

HOLON

Top Speed	37 mph
Range	60+ miles
Power	150 kW
Capacity	11 seated + 4 standing
GVWR	>11,000 lb
Dimensions	15.7’ L x 7.6’ W x 9.2’ H
Step-In Height	10.6”
ADS	Mobileye Drive
ADA Compliant	Yes
Availability	2025

Next generation vehicles to provide Level 4 autonomous transit in real world use cases in 2025 and 2026

ADJOURN

The Regional Transit Planning Committee Meeting Will Begin Momentarily