

Last Mile Connectivity Study

Study Overview

Purpose

The study is looking at ways to ensure people have choices in how “last mile” trips are made and to improve safety for people making these trips. It is developing a cohesive vision for multi-modal transportation in the Perimeter area. The study will produce a consolidated program of investments in bicycle, pedestrian, trail, and roadway facilities and explore future transit opportunities.

What is Last Mile Connectivity?

For the purposes of this study, “last mile” refers to the short trips between destinations in the Perimeter area, such as office complexes, retail areas, or homes, and short trips between these destinations and transit stations and stops. The goal of last mile connectivity is to make sure people have safe, comfortable ways to walk, bike, or ride transit for these short trips, so they don't have to get in their personal vehicles.



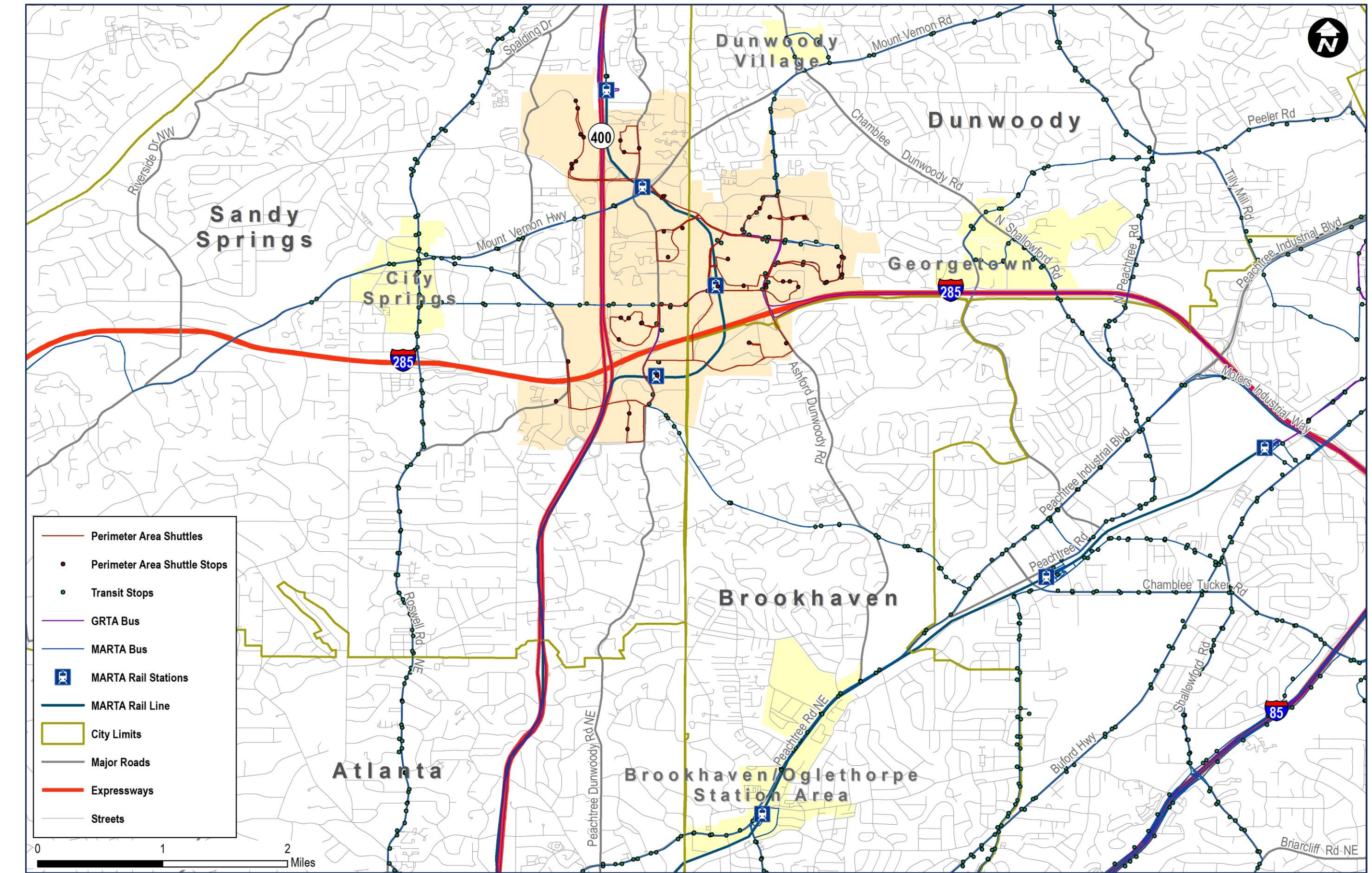
Why does Last Mile Connectivity matter?

The Perimeter area is growing at a tremendous rate, with new developments such as State Farm and Mercedes-Benz, and high-density residential and mixed-use projects. It is an exciting time to live, work, do business, and play in the Perimeter area. All of this growth, however, will put a strain on already-congested roadways. Now is the perfect time to make sure Perimeter Center has biking, walking, and transit options to keep people moving, and maintain Perimeter as a desirable destination for workers, residents, and visitors.



Vision

To help guide the study and inform future recommendations, the study team, in consultation with the cities and PCIDs developed a vision for last mile connectivity in the study area. It reads, **“In the future, the Perimeter area will offer a robust network of safe, easy, and convenient opportunities for people to walk, bike, or take transit. Well connected and accessible workplaces, commercial areas, educational and health facilities, and open spaces will increase the economic competitiveness of the area, helping the Perimeter area thrive as a desirable place to work, live, and visit and sustaining it well into the future.”**



Study area highlighting activity centers, including PCIDs (orange) and City Springs, Brookhaven/Oglethorpe station area, Georgetown and Dunwoody Village (yellow).



ZipCars at the Brookhaven-Oglethorpe MARTA Station



Bike lane near the Sandy Springs MARTA Station

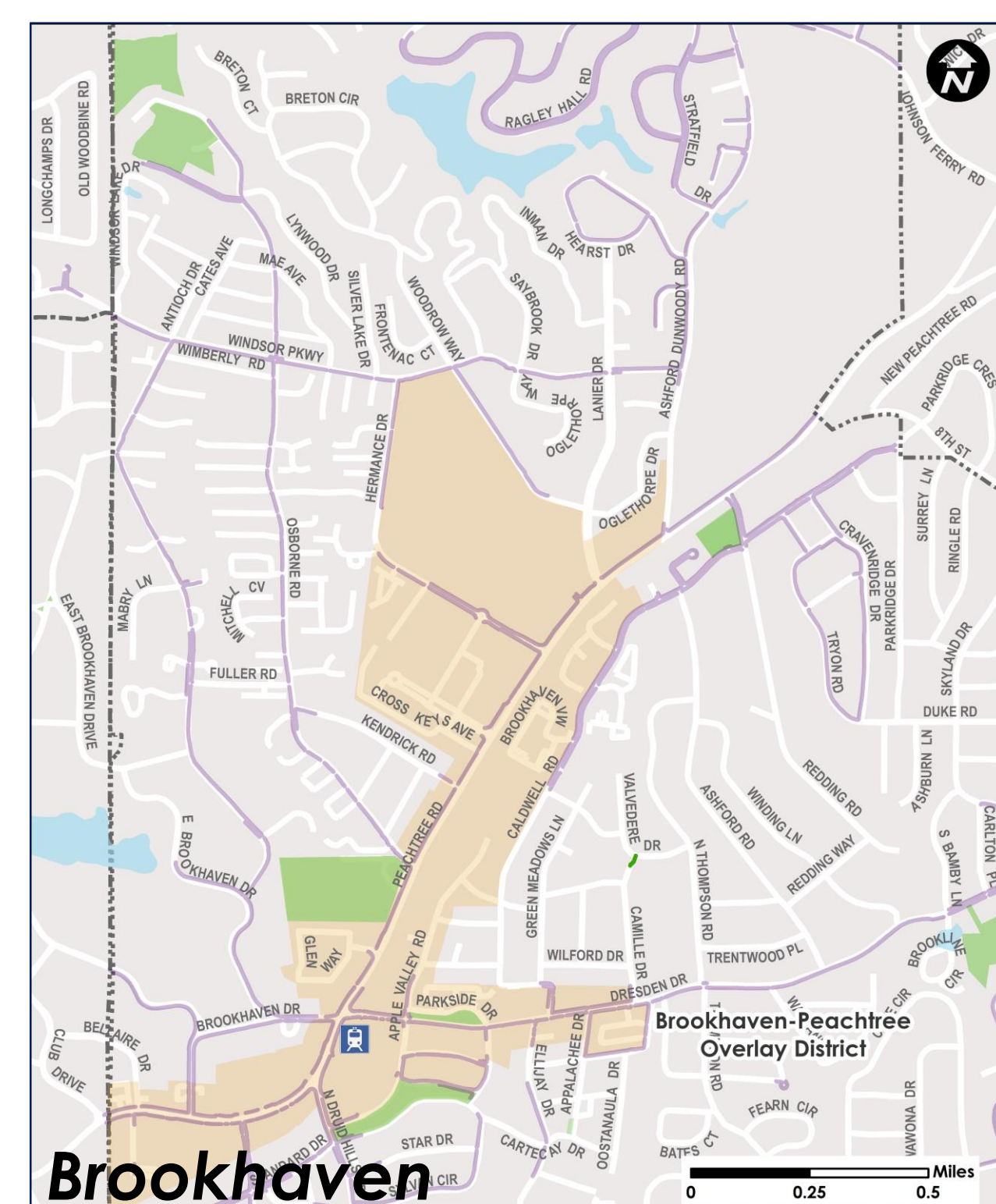
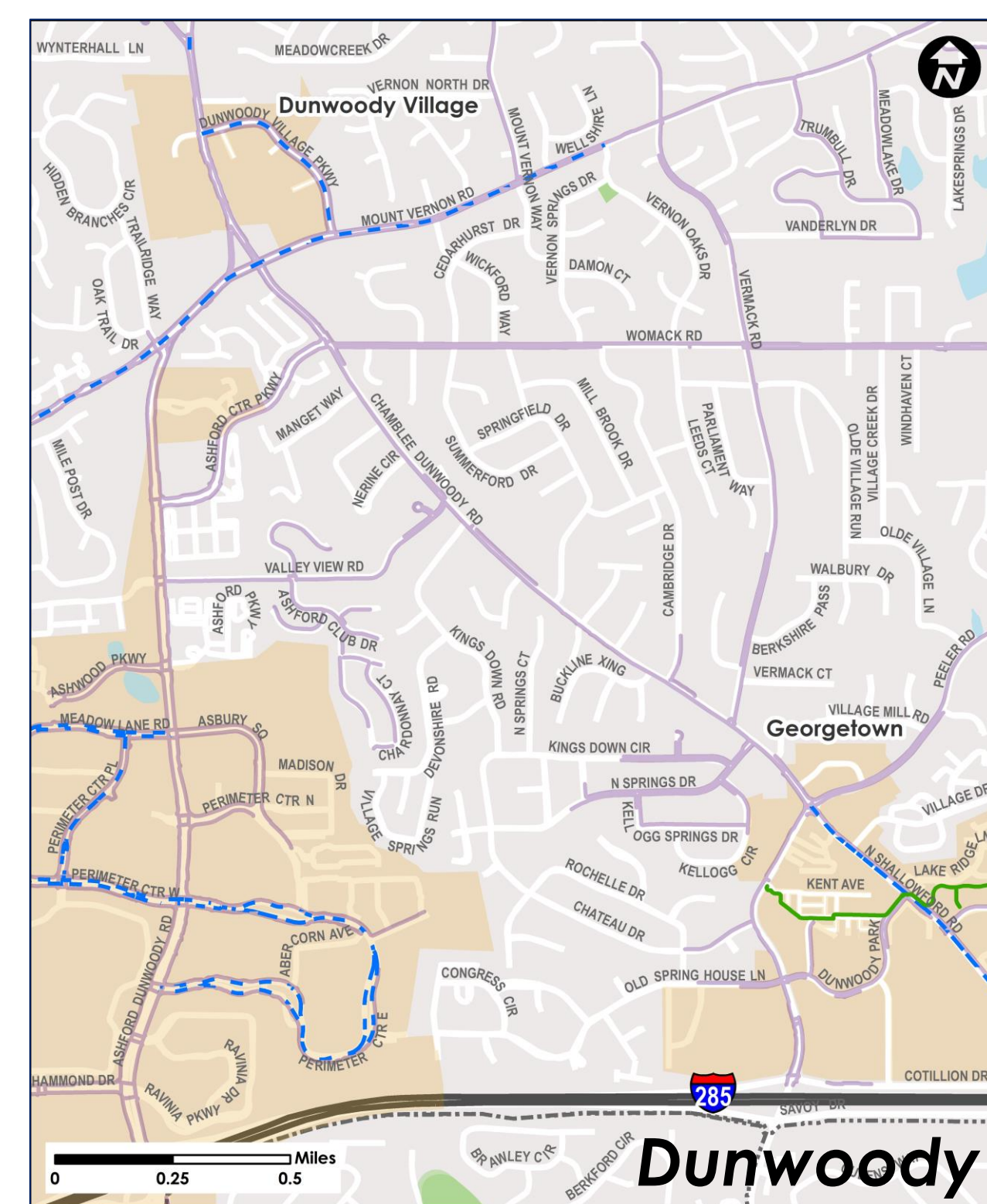
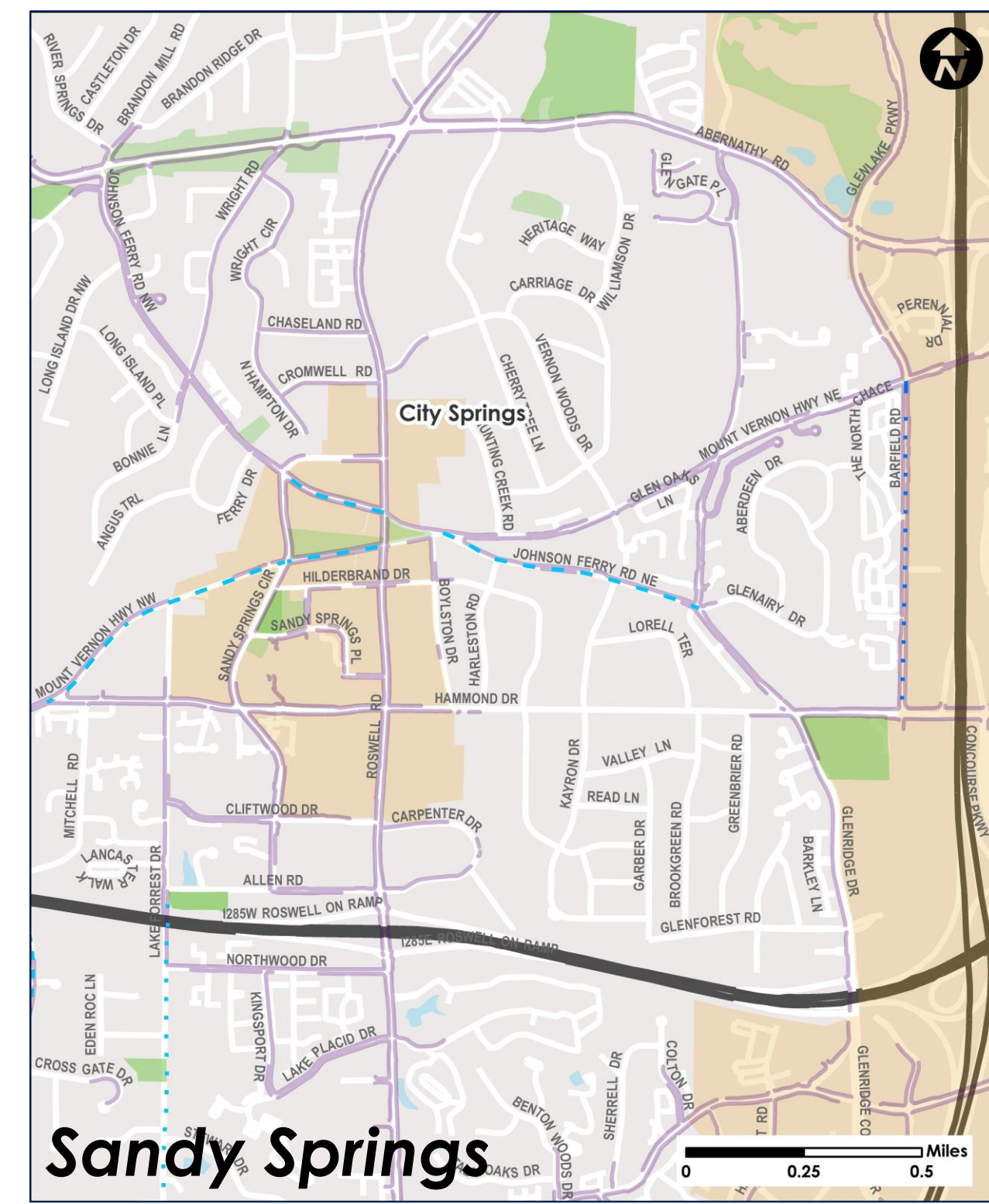
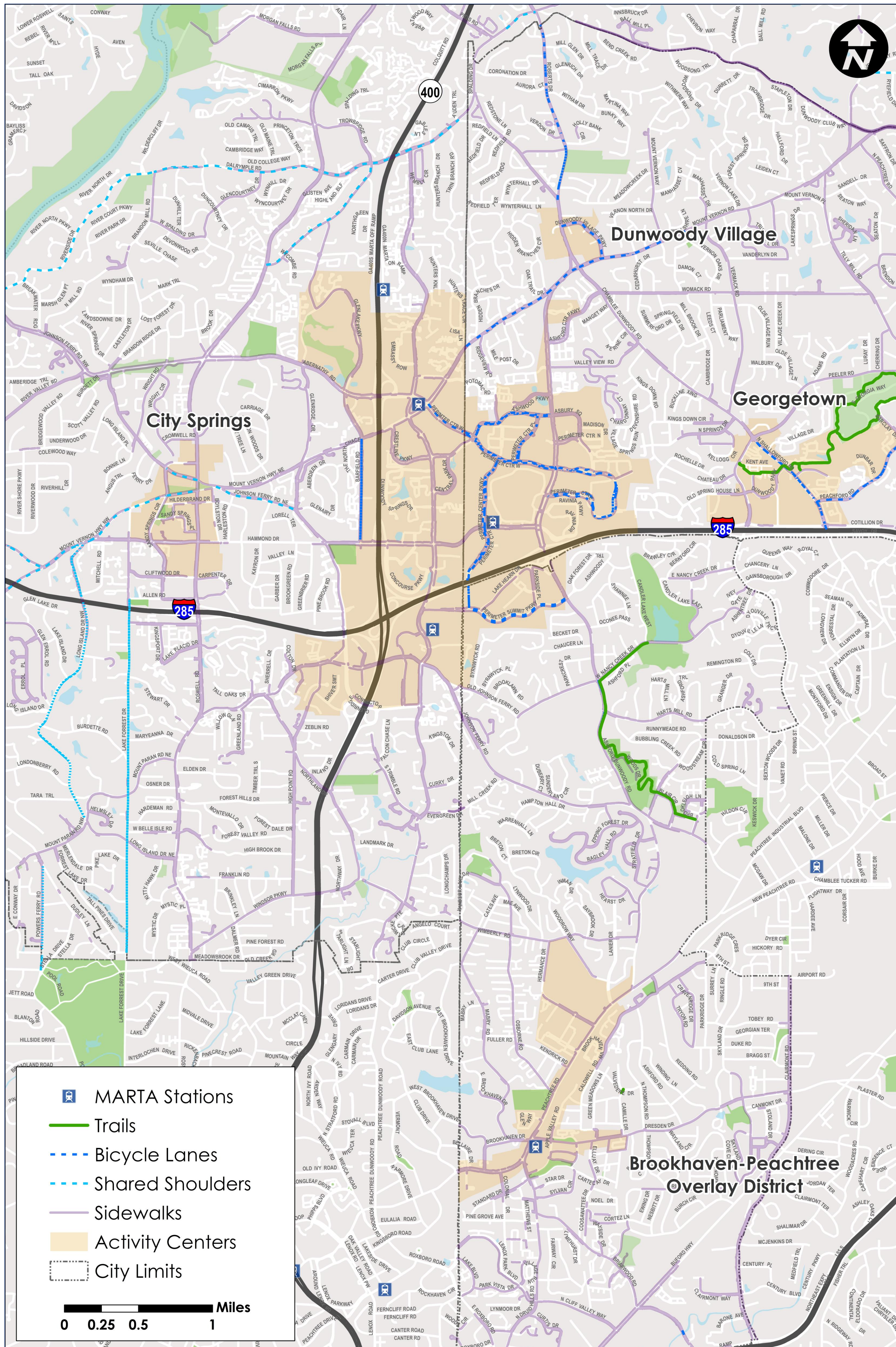
Project Partners

Sandy Springs
Dunwoody
Brookhaven
Perimeter Community Improvement Districts (PCIDs)



Last Mile Connectivity Study

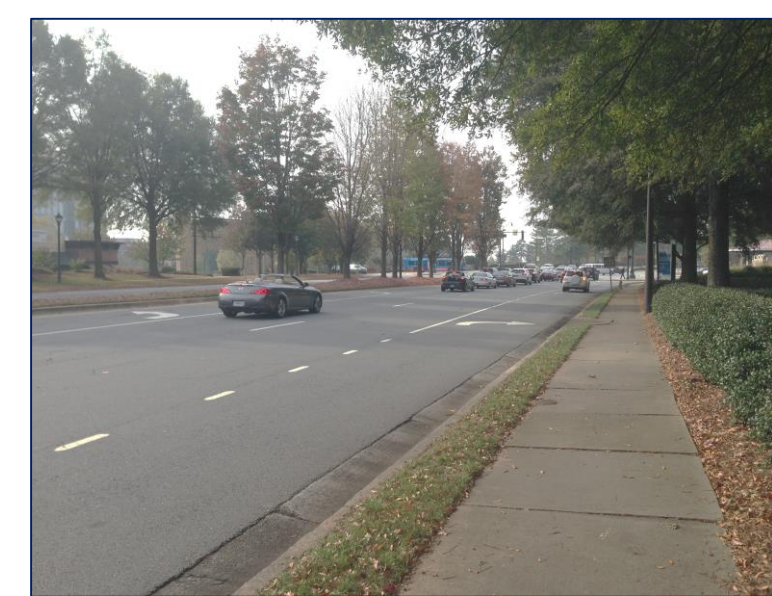
Bicycle and Pedestrian Network Existing Facilities



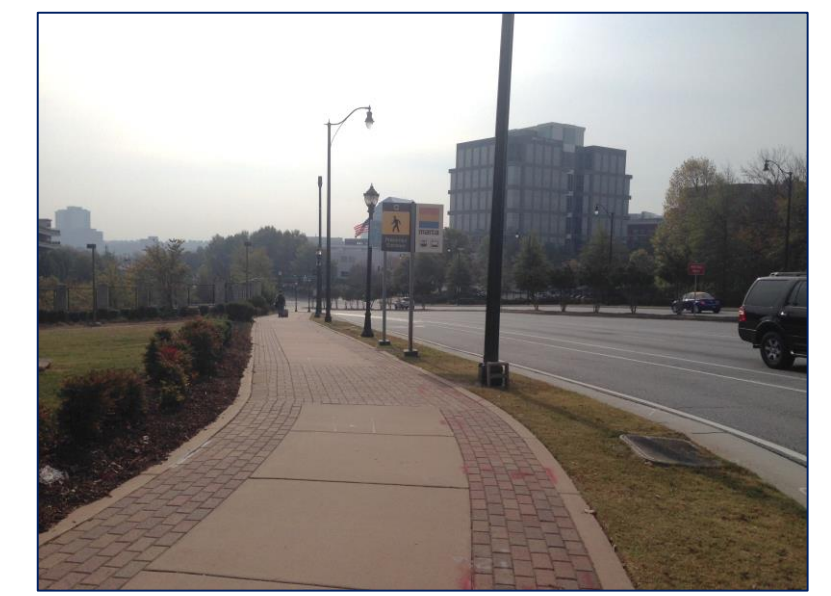
**On-Street Bike Lane,
Perimeter Center
West**



**Shared Bicycle/Vehicle Marking
a.k.a. "sharrow," Ashford
Dunwoody Rd
(Source: Google Maps)**



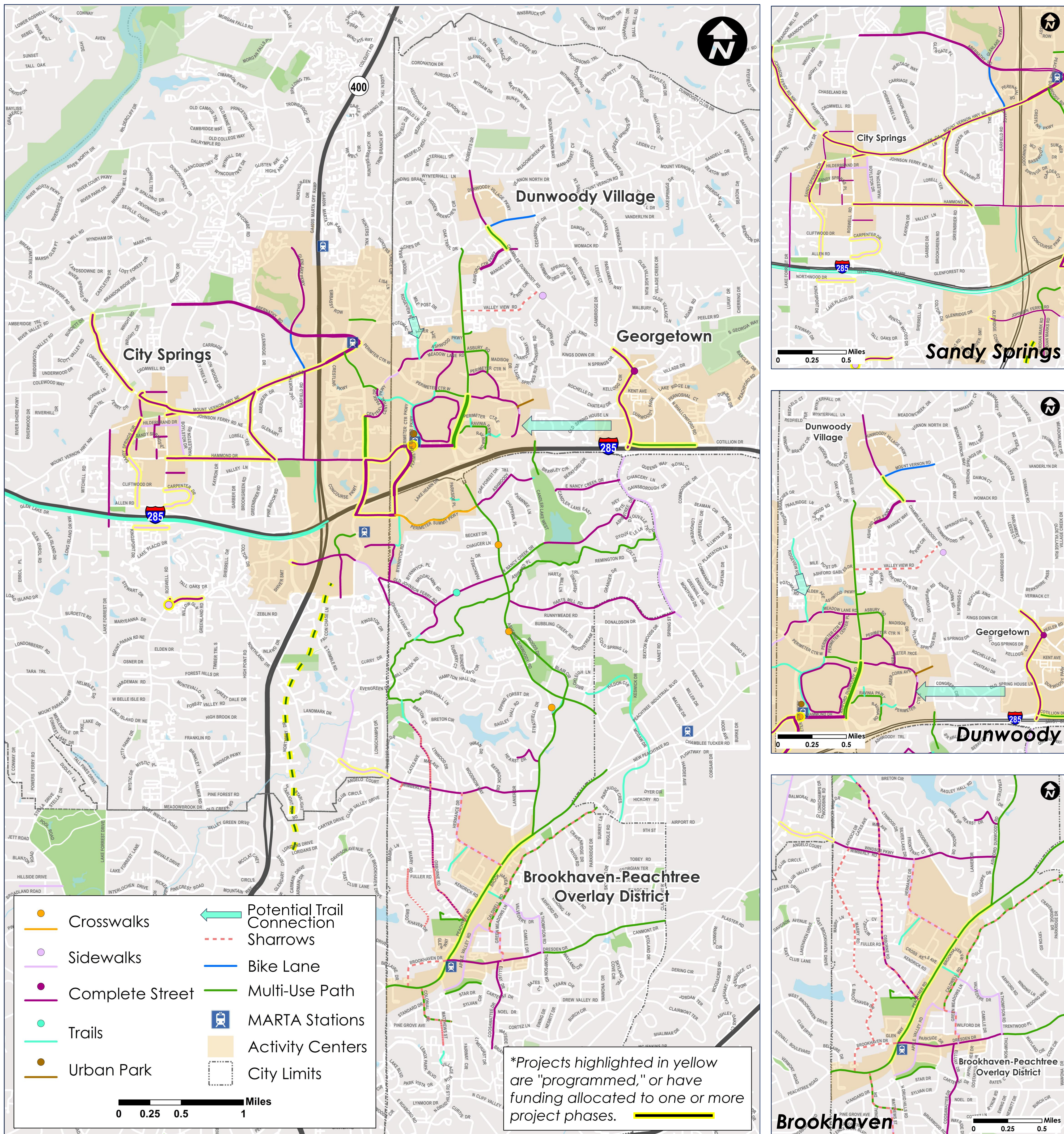
**Typical Sidewalk,
Mt. Vernon Rd**



**Wide Sidewalk,
Perimeter Center West**

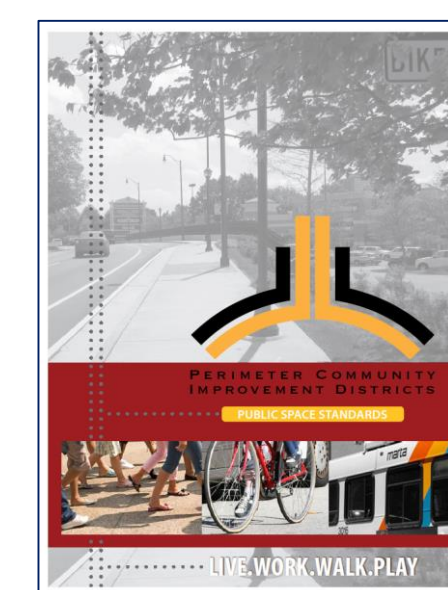
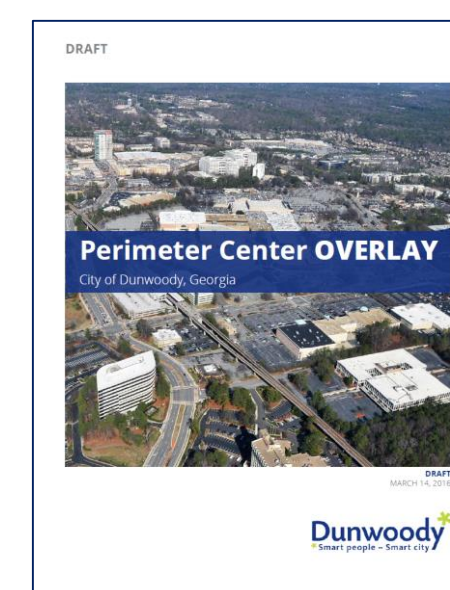
Last Mile Connectivity Study

Bicycle and Pedestrian Network Planned and Programmed Facilities



This map represents projects compiled from previous plans and studies already approved by the cities and/or PCIDs.

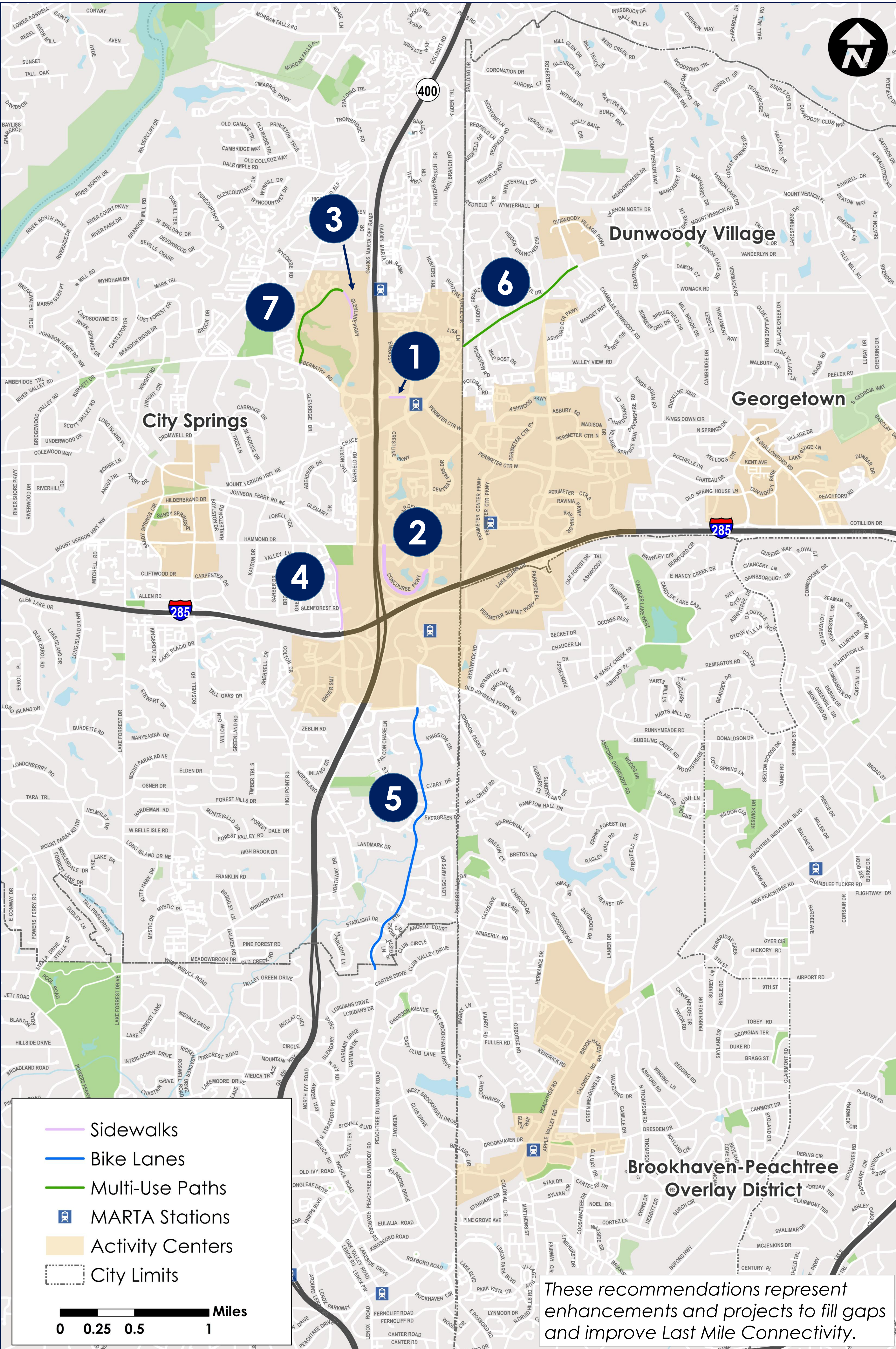
- **Programmed** projects have funding allocated and are in some stage of design, engineering, or construction. These are therefore likely short- to mid- term projects, depending on complexity and the level of effort involved.
- **Planned** projects are those that are recommended in plans or studies but do not have any funding associated with them. These are therefore likely to be mid- to long-term projects, if they are ever implemented.



Last Mile Connectivity Study

Bicycle and Pedestrian Network

Recommendations: Sidewalk, Bike Lanes, and Multi-Use Paths



Sidewalks

1. Construct sidewalk along the south side of Abernathy Rd from the GA 400 entrance ramp to Peachtree Dunwoody Rd (*short-term*)
2. Work with developer/property owner to encourage construction of sidewalk along Concourse Pkwy from Peachtree Dunwoody Rd to Hammond Dr (*short-term*)
3. Fill gaps in sidewalk on both sides of Glenridge Dr and Glenlake Pkwy from Abernathy Rd to the entrance of 50 Glenlake (*short-term*)
4. Fill gaps in sidewalk on the east side of Glenridge Dr from the I-285 ramp to Hammond Dr (*short-term*)

- Improve mobility and safety
- Improve connectivity
- Encourage non-auto travel
- Improve access to existing transit
- Improve connectivity in/around campuses

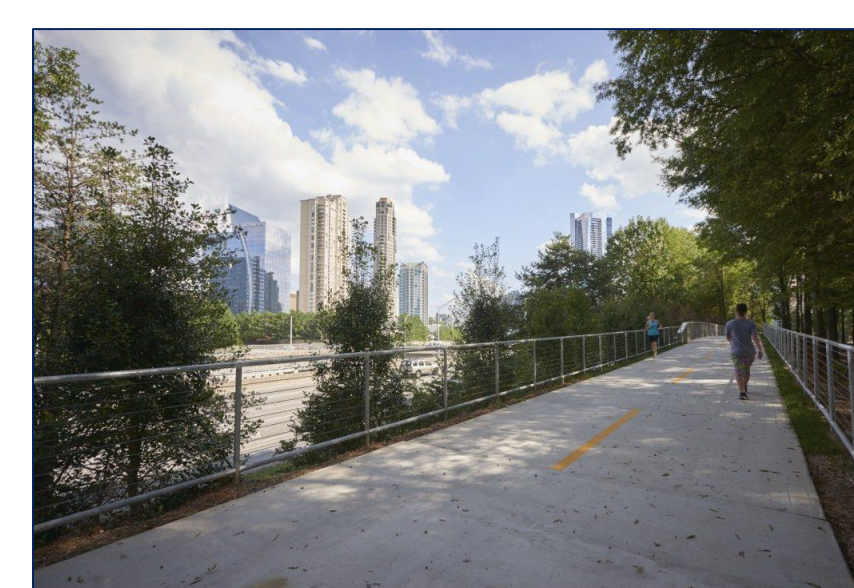
Bike Lanes

5. Design and construct bicycle lanes on Peachtree Dunwoody Rd from Glenridge Conn southward to the City of Atlanta limits (*long-term*)

- Improve mobility and safety
- Improve connectivity
- Encourage non-auto travel
- Improve connectivity in/around campuses



On-Street Bike Lane, Louisville, KY



PATH400 Trail

(source: PATH Foundation)

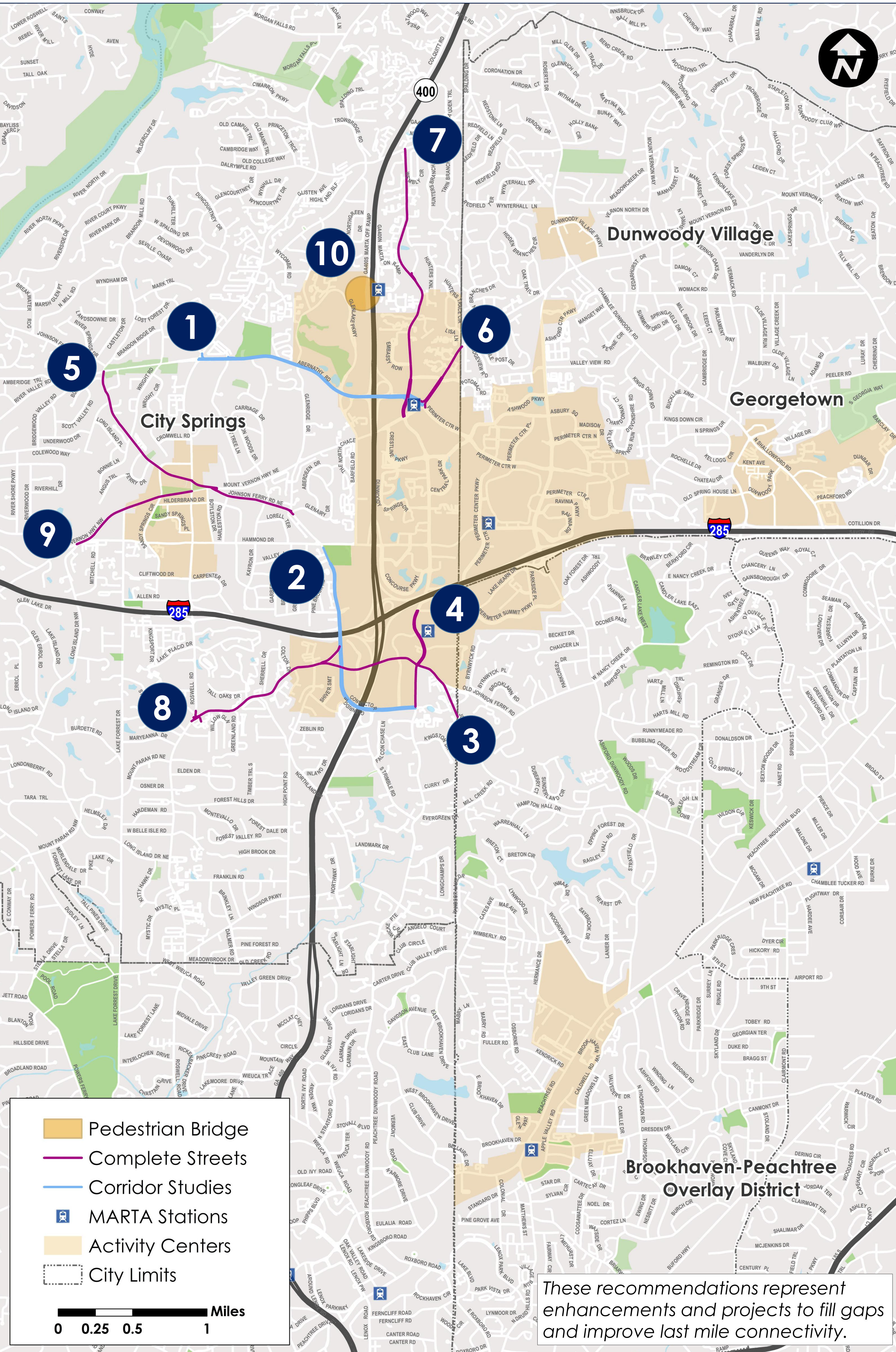
Multi-Use Paths

6. Design and construct a multi-use path and other complete street treatments on Mt. Vernon Rd from Ashford Dunwoody Rd westward to the Sandy Springs-Dunwoody city limits (*long-term*)
7. Design and construct a multi-use path along Glenridge Dr/Glenlake Pkwy from Abernathy Rd to the entrance to UPS (*long-term*)

- Improve mobility and safety
- Improve connectivity
- Encourage non-auto travel
- Improve connectivity in/around campuses

Last Mile Connectivity Study

Bicycle and Pedestrian Network Recommendations: Complete Streets and Corridor Studies



Complete Streets

Design and construct complete street treatments, including but not limited to restriping, pedestrian facilities, and bicycle facilities on the following segments of roadway:

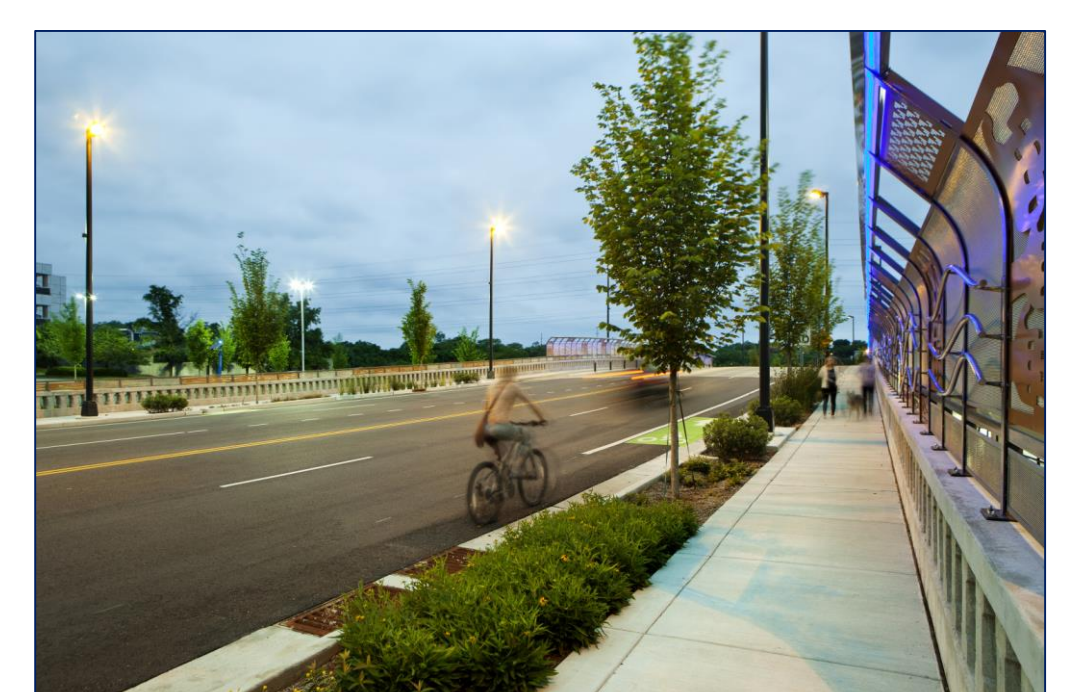
3. Johnson Ferry Rd from Glenridge Conn eastward to city limits (*short-term*)
4. Peachtree Dunwoody Rd from Glenridge Conn to Lake Hearn Dr (*short-term*)
5. Johnson Ferry Rd from Abernathy Rd to Glenridge Dr/Glenairry Dr (*mid-term*)
6. Mt. Vernon Rd from Sandy Springs MARTA station to Dunwoody city limits (*mid-term*)
7. Peachtree Dunwoody Rd from Mt. Vernon Hwy to Spalding Rd (*long-term*)
8. Glenridge Dr from Johnson Ferry Rd/Glenridge Conn to Greenland Rd (*long-term*)
9. Mt. Vernon Hwy from Long Island Dr to Roswell Rd (*long-term*)

- Improve mobility and safety
- Improve connectivity
- Encourage non-auto travel
- Improve access to existing transit

Pedestrian Bridge

10. Design and construct a pedestrian bridge between North Springs MARTA station and Glenlake Pkwy (*long-term*)

- Improve mobility and safety
- Improve access to existing transit
- Improve connectivity
- Encourage non-auto travel



Complete Street: 28th-31st Ave Corridor, Metro Nashville

Corridor Studies

1. **Abernathy Road Corridor Study:** Conduct a corridor study of 2 segments (from Roswell Rd to Glenridge Dr and Glenridge Dr to Mt. Vernon Rd) to determine future complete street needs and develop a cohesive vision for the corridor (*short-term*)
2. **Glenridge Drive/Glenridge Connector Corridor Study:** Conduct a corridor study from Hammond Dr to Peachtree Dunwoody Rd to develop a vision for the corridor and identify specific improvements and future projects to create a cohesive complete street (*short-term*)

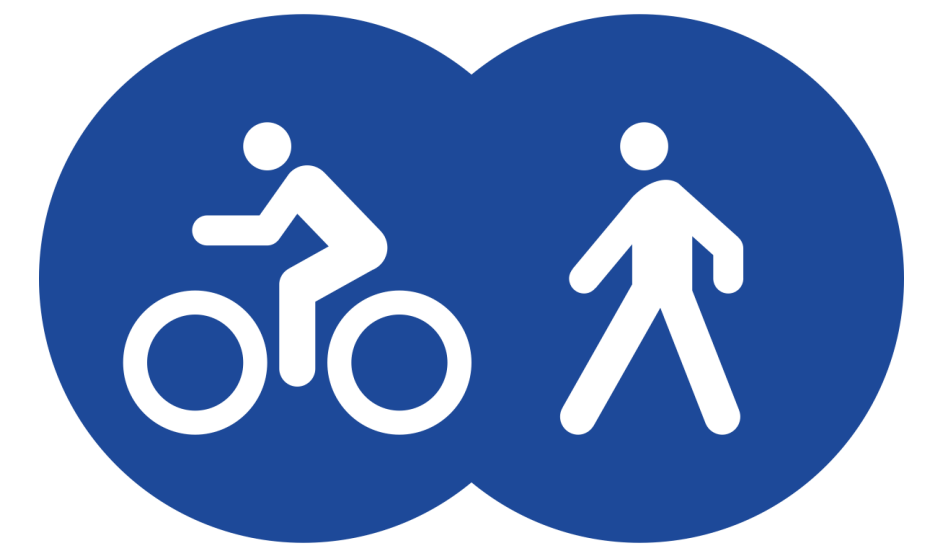
- Improve mobility and safety
- Establish cohesive vision
- Improve connectivity

Last Mile Connectivity Study

Bicycle and Pedestrian Network Overarching Recommendations

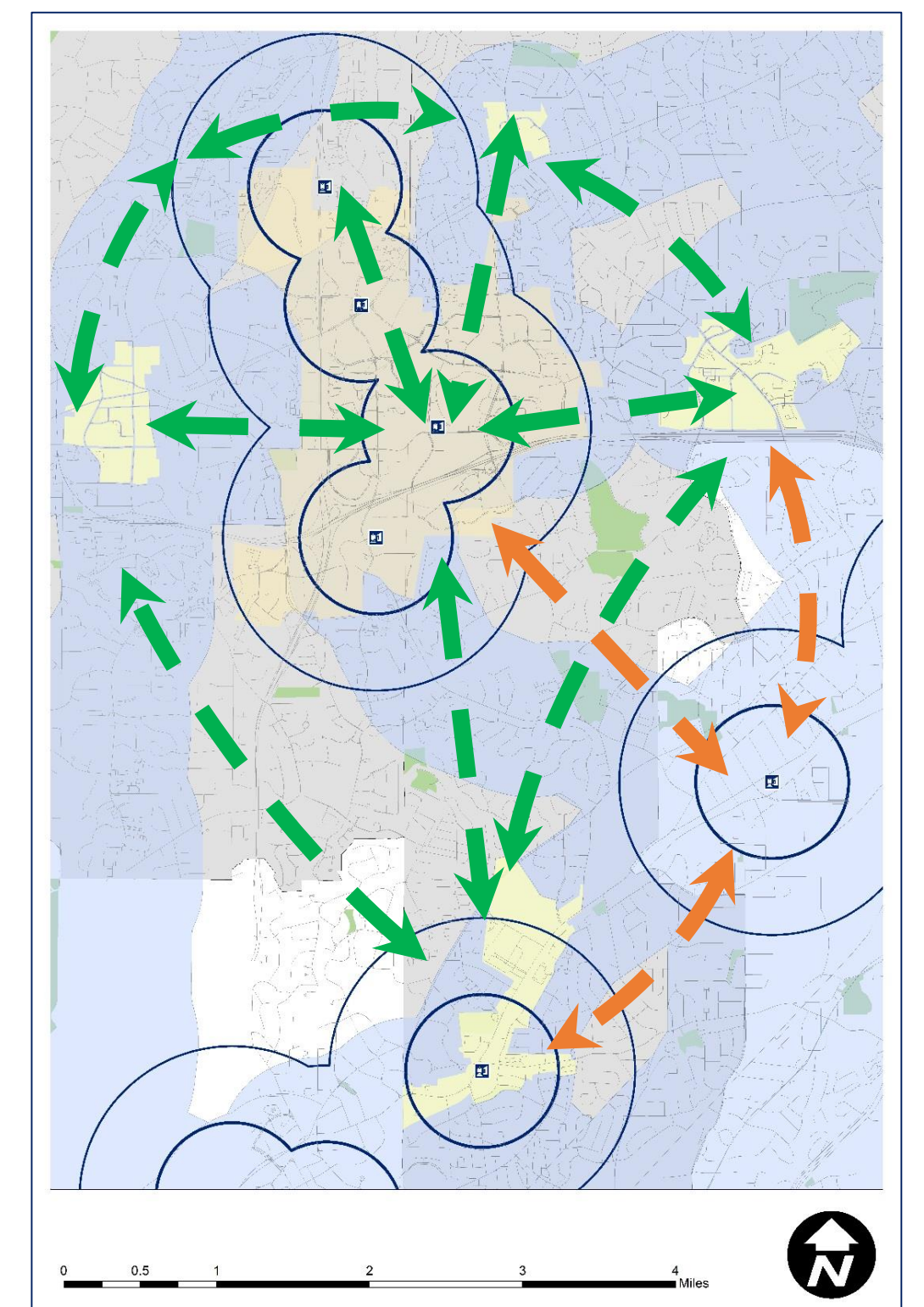
Integrate New Bicycle and Pedestrian Facilities into Local Projects

- Cities should identify opportunities to incorporate bicycle and pedestrian facilities on local streets as individual projects advance.
- Systematize regular bicycle and pedestrian improvements/upgrades
- Continue to expand multi-modal network



Develop and Establish a “Greenbelt” Connecting Activity Centers

- Identify, develop, and brand a network of trails to connect the cities and PCIDs. Connections to the City of Chamblee should also be considered.
- Improve mobility
- Leverage and connect existing facilities
- Increase visibility of the region



Establish a Task Force to Explore Bikeshare in the Perimeter Area

- Create a task force of representatives of the cities and PCIDs to explore the feasibility of creating and implementing a bikeshare program within the Perimeter area.
- Improve mobility
- Leverage and connect existing facilities
- Increase visibility of the region



Capital Bikeshare
(Source: Flickr.com/DaniellLobo)

MARTA Rail Station Enhancements

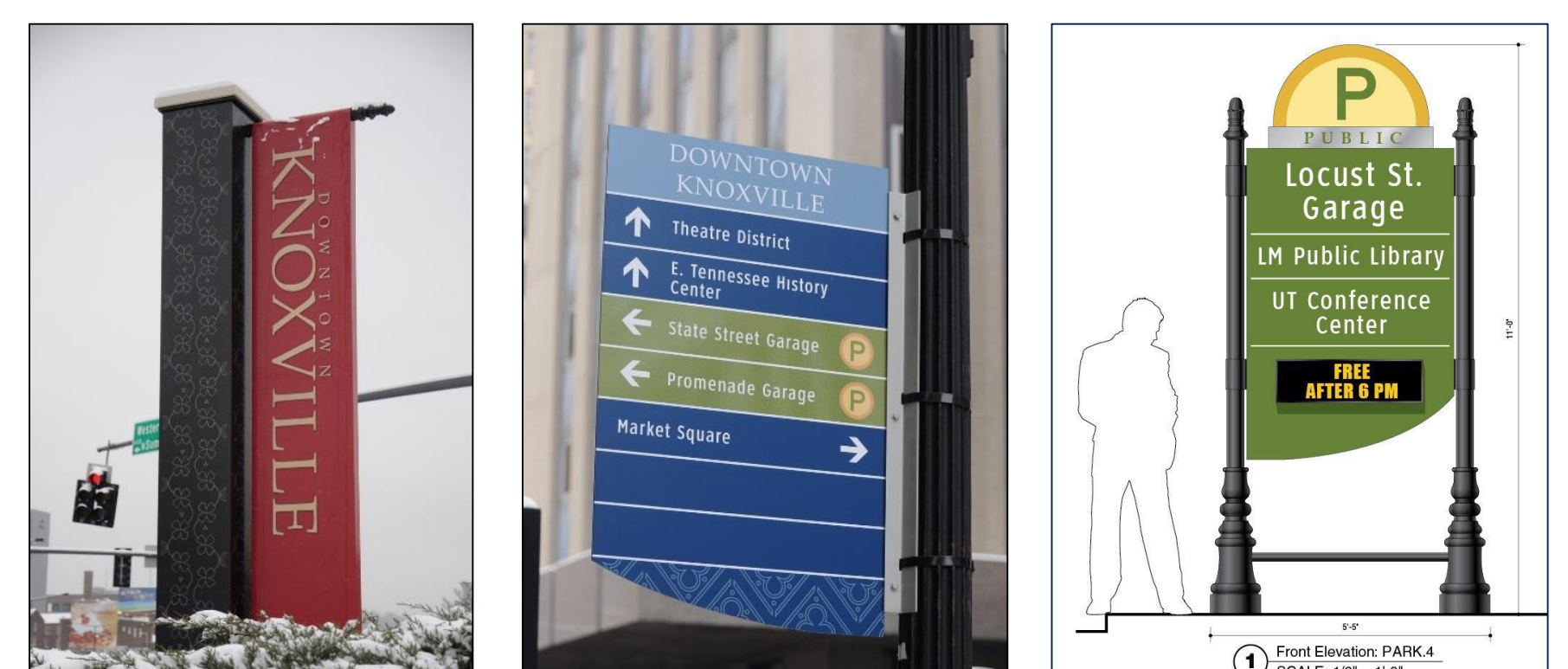
- Initiate a planning process, in collaboration with MARTA, to identify and design enhancements to MARTA rail stations within the Perimeter area to improve pedestrian accessibility, internal circulation, and connections to surrounding sites and facilities.
- Increase visibility of and safety at rail stations
- Facilitate easier multi-modal transfers
- Encourage use of non-auto transportation



Sandy Springs MARTA Station

Wayfinding Program

- Develop a branded wayfinding program and guidelines to facilitate more informed travel by motorists, pedestrians, and cyclists within the Perimeter area.
- Increase visibility of and safety at rail stations
- Facilitate easier multi-modal transfers
- Encourage use of transportation

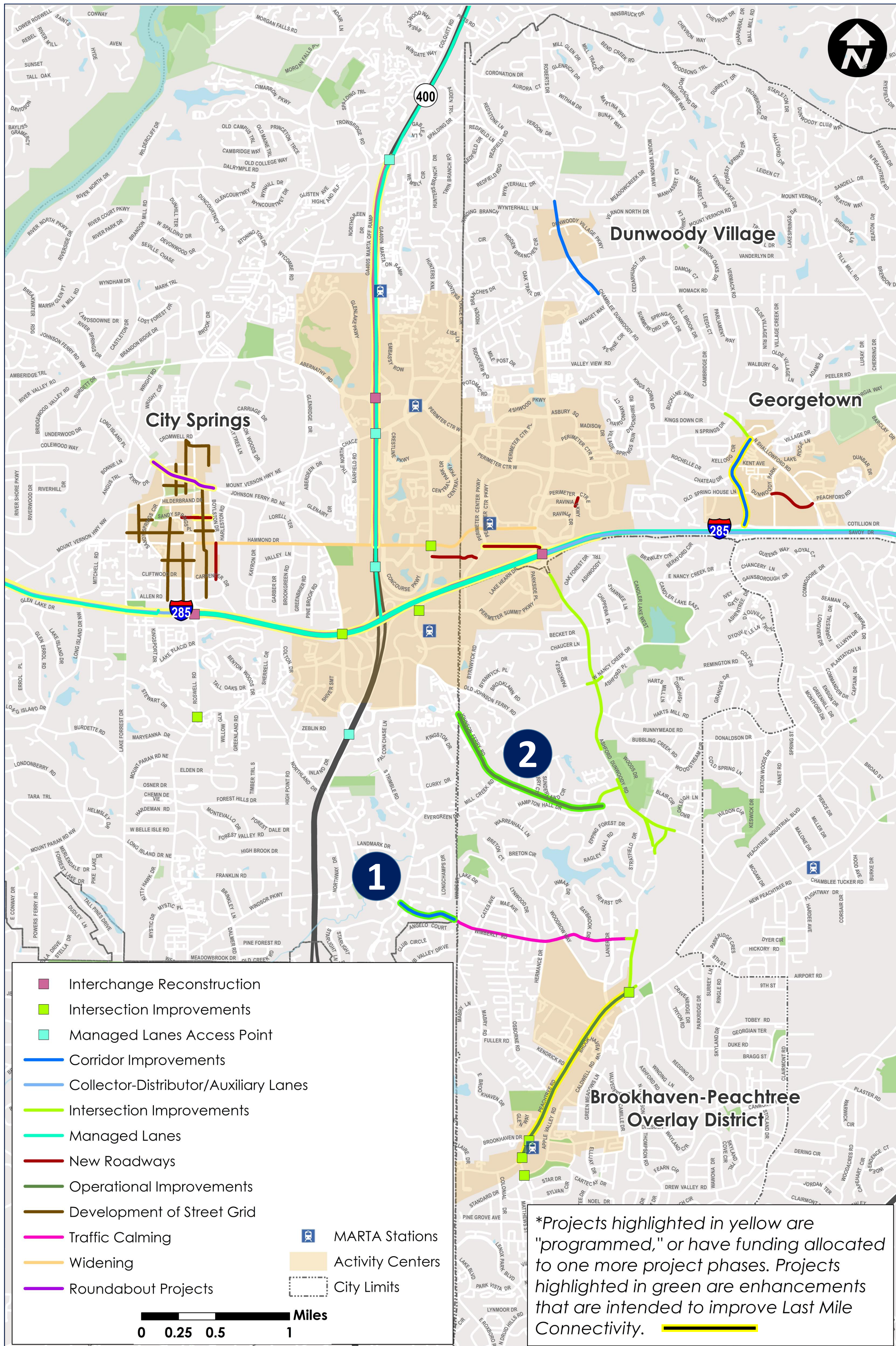


**Examples of wayfinding signs in Knoxville, TN
designed by GS&P**

Last Mile Connectivity Study

Roadway Network

Existing, Programmed, and Planned Facilities and Recommended Improvements



1. Design and implement context-sensitive corridor improvements along Windsor Parkway from Peachtree Dunwoody Rd east to the city limits (Sandy Springs-Brookhaven)

- Connect and extend planned bicycle facilities and traffic calming on Windsor Pkwy in Brookhaven to Sandy Springs
- Improve safety and mobility
- Fill gaps in existing pedestrian facilities

2. Design and implement operational improvements on Johnson Ferry Road from the city limits (Sandy Springs-Brookhaven) to Ashford Dunwoody Rd

- Improve safety and mobility
- Fill gaps in existing pedestrian facilities

Roadway Implementation Strategies

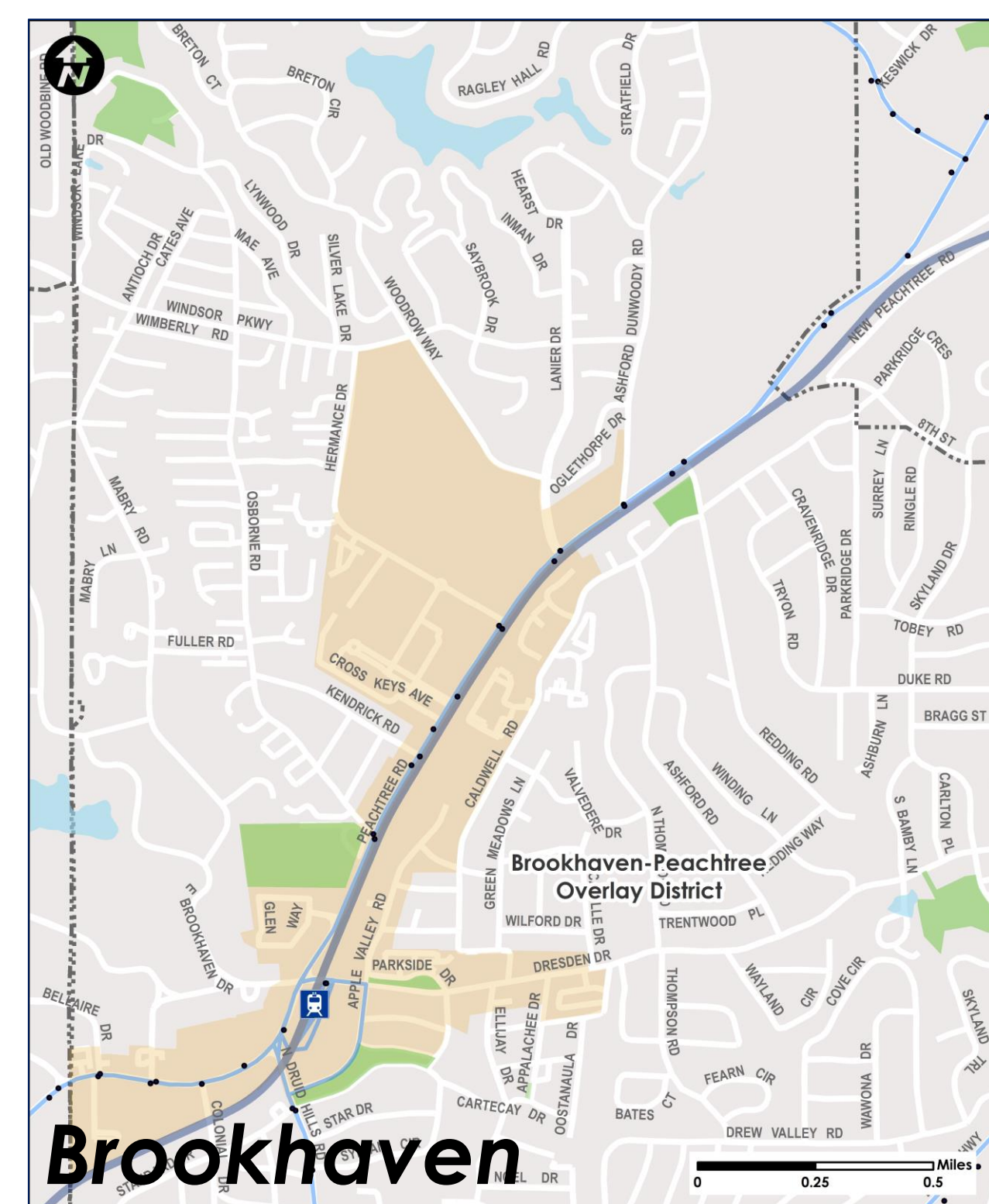
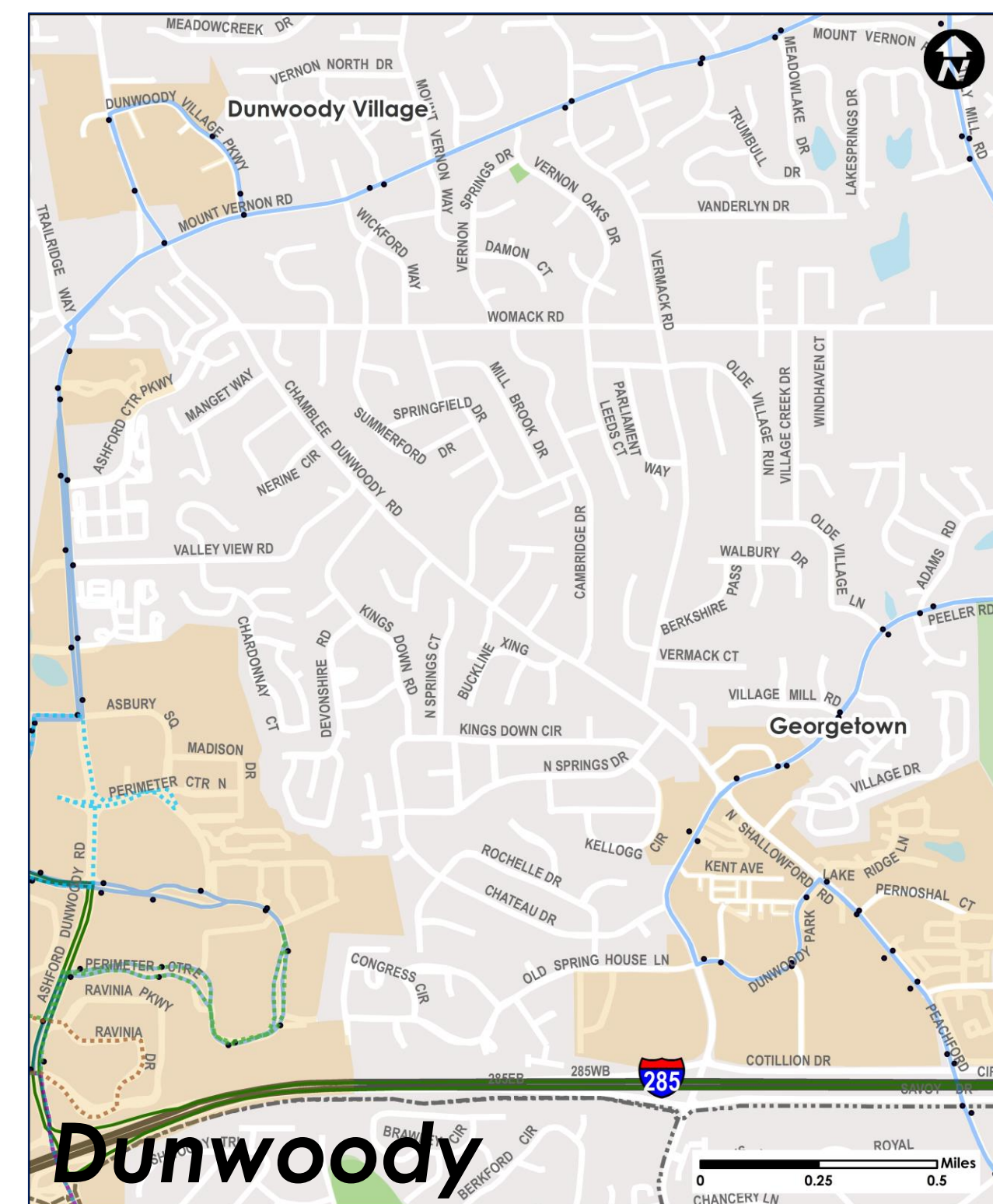
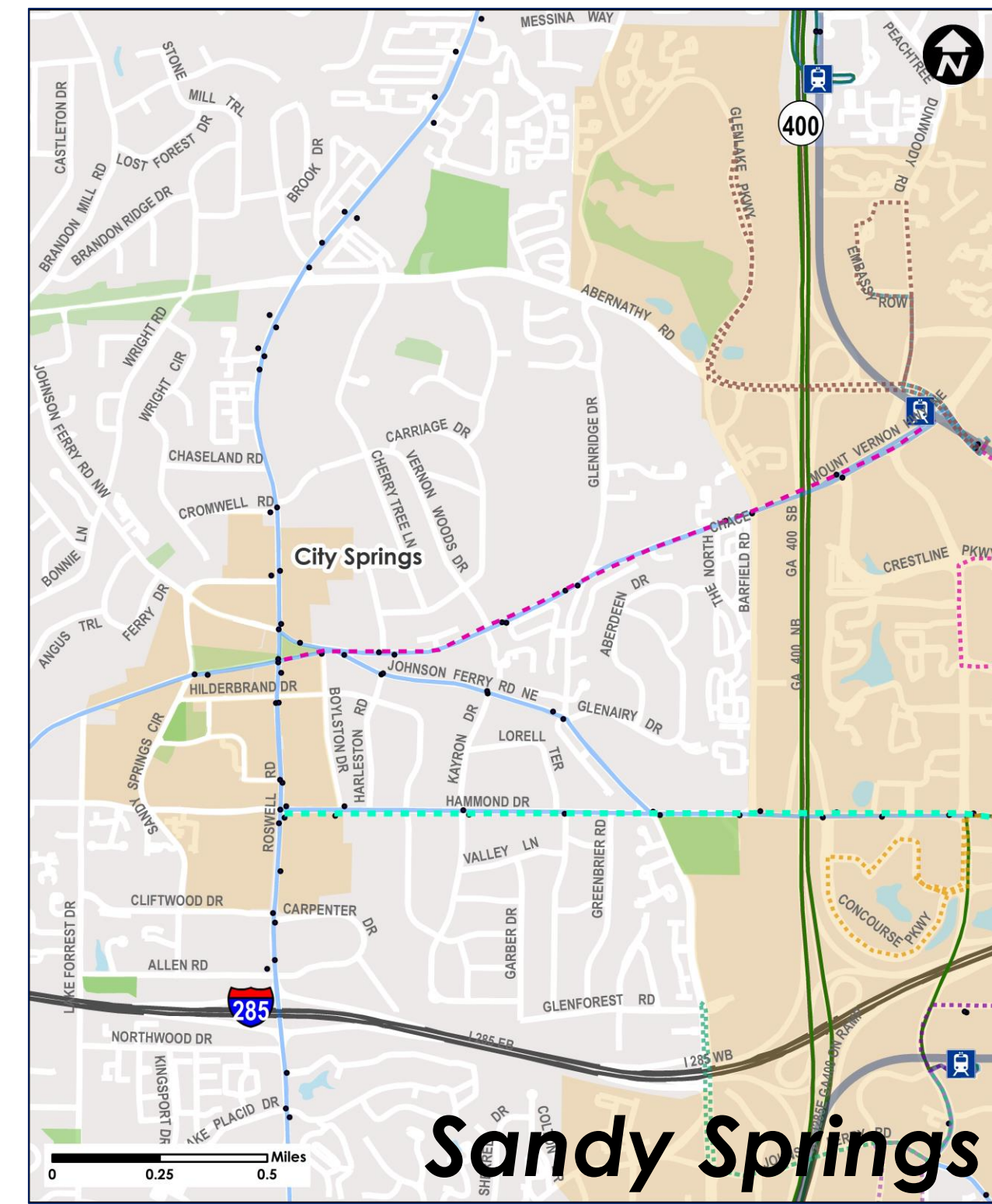
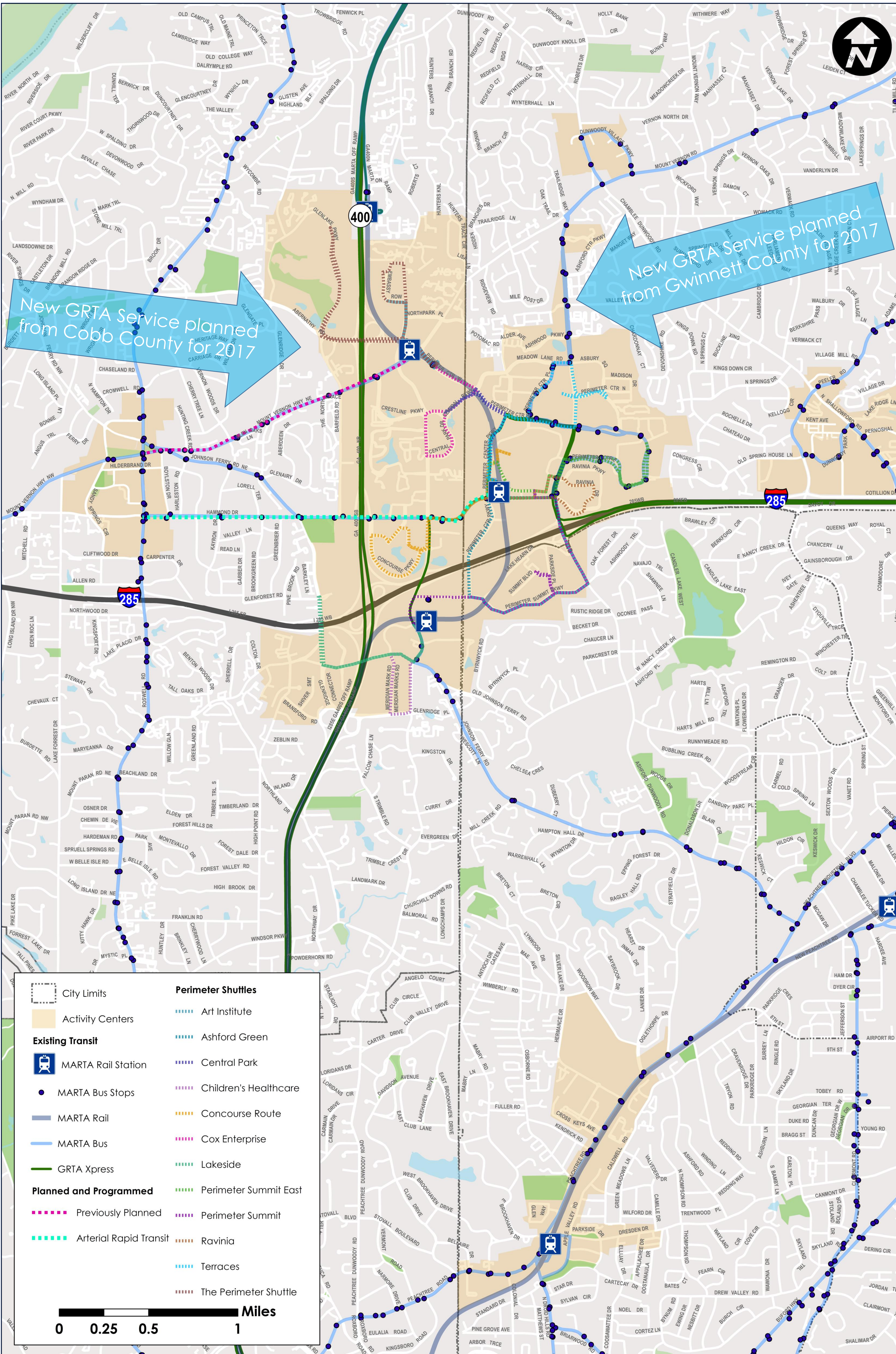
Strategies to support improvements to the roadway network that will support last mile connectivity.

- Implement intersection improvements in coordination with existing and planned bicycle and pedestrian facilities.
- Explore satellite park-and-ride lots in conjunction with managed lane exits.
- Consider opportunities to provide dedicated right-of-way for bus pull-outs.
- Establish a consistent lane width policy to accommodate transit-only lanes as needed over time.
- Encourage carshare companies (such as ZipCar and others) to partner with and integrate services with existing and future transit.

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Transit Network

Existing, Programmed, and Planned Services

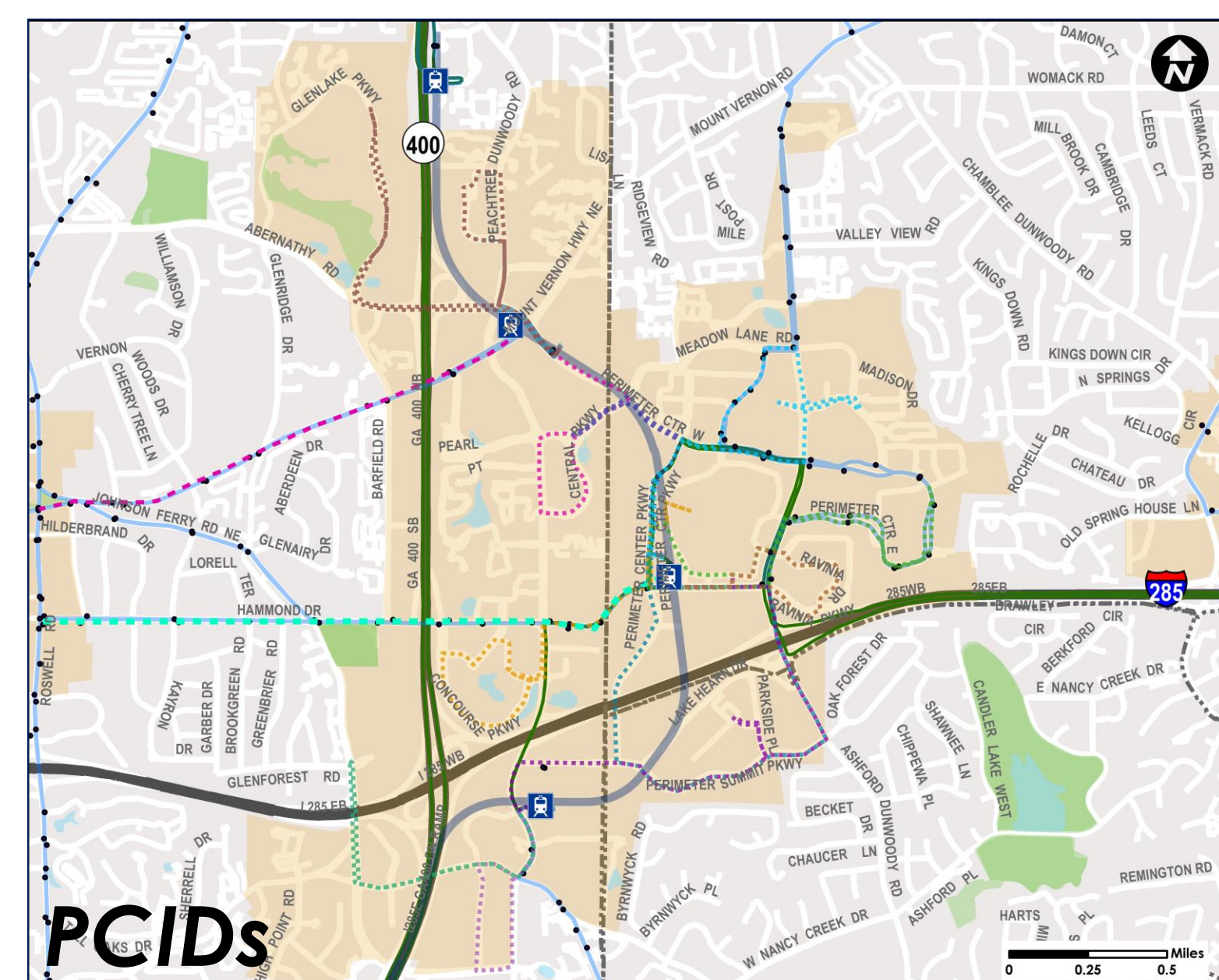


Previously Planned

- Transit connection between City Springs and Sandy Springs MARTA Station along Mt. Vernon corridor

Programmed Service

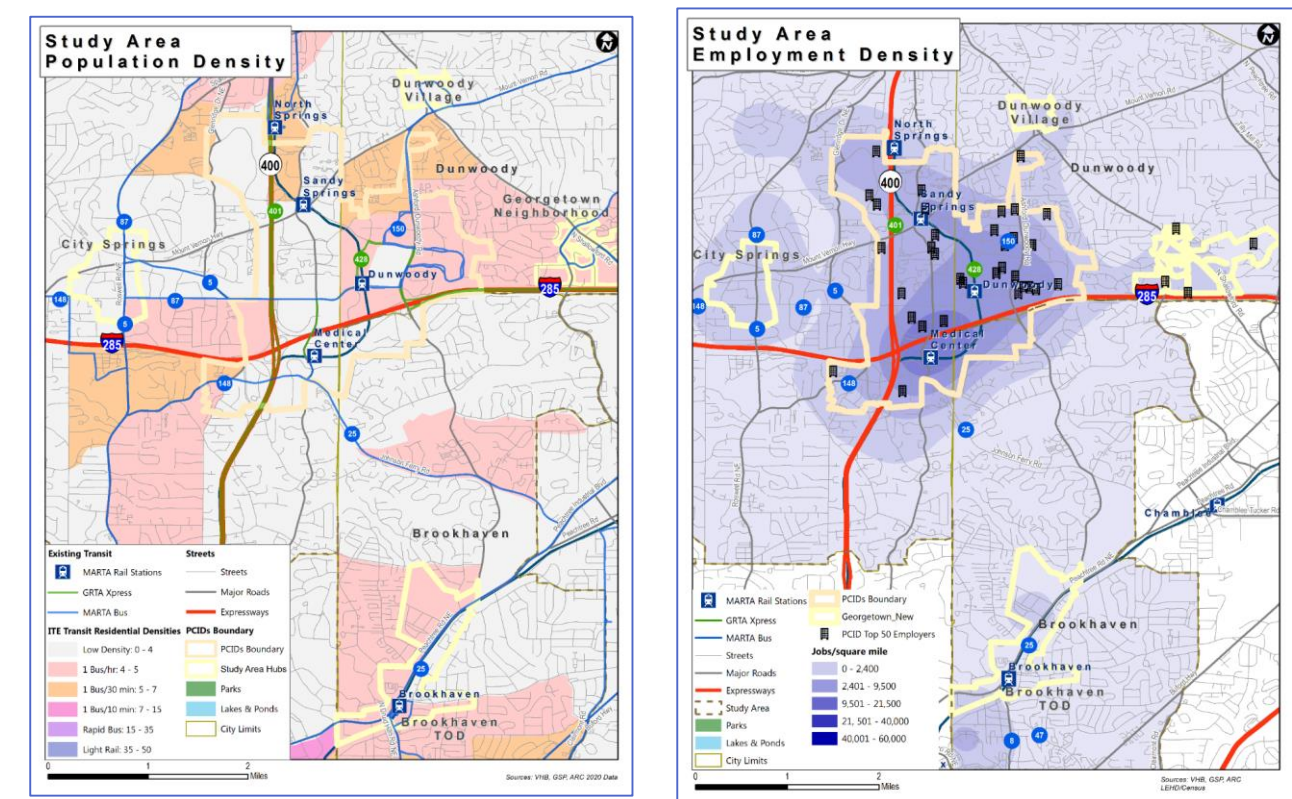
- New MARTA arterial rapid transit (ART) service planned along Hammond Dr between City Springs and Dunwoody MARTA Station
- New GRTA routes from Cobb County and Gwinnett County to Perimeter coming online in 2017, with likely stop(s) at MARTA rail stations



Last Mile Connectivity Study

Transit Vision Development Process

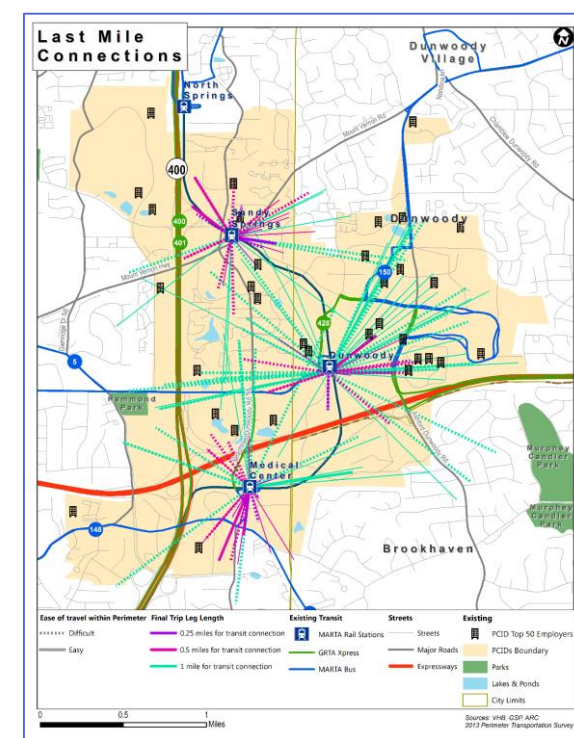
Demographic Analysis



The density of both origins (homes) and destinations (work) were key inputs to identify critical connections.

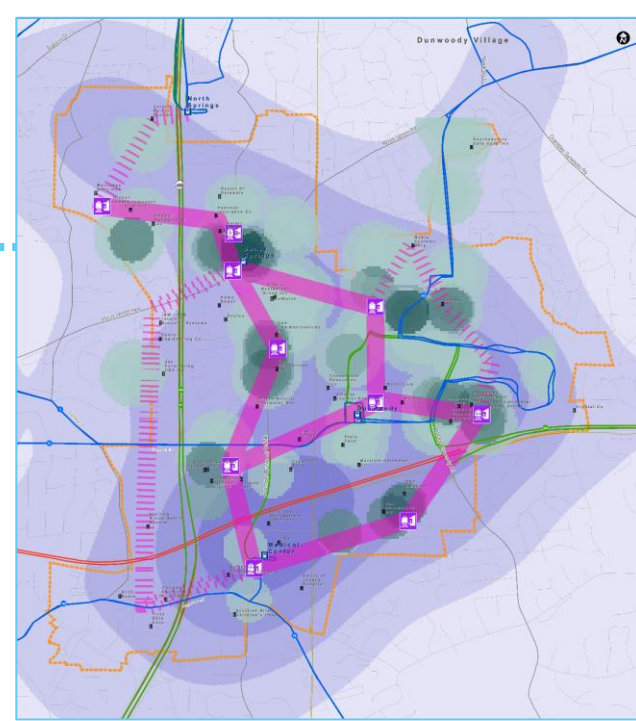
In addition, we analyzed land uses to identify non-work destinations for travelers.

Current Trip Analysis

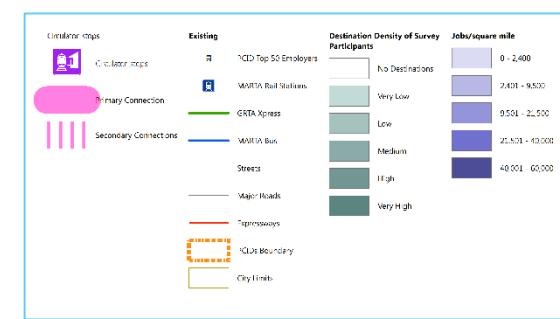


Detailed survey data collected through interviewing employees at Perimeter offices, Perimeter residents, and MARTA riders at Perimeter rail stations.

Alternative 1



Rapid Transit Alternative: Examined multiple rapid modes to connect major office campuses, retail locations and residential developments.



Transit Mode Assessment

Automated Guideway Transit – operates in elevated right-of-way	Operating Costs: \$50-\$150/ revenue hour	Vehicle Costs: \$350k-\$600k/ vehicle	Capital Costs: \$60-\$90 million/ mile	ROW: Elevated rail, direct connection between stops
Personal Rapid Transit – operates in elevated right-of-way	Operating Costs: \$2-\$20 million/ year	Vehicle Costs: \$75k/ vehicle	Capital Costs: \$15-\$20 million/ mile	ROW: Elevated guideway, additional miles to connect all stops
Bus Rapid Transit – Operating in separate right-of-way	Operating Costs: \$50-\$150/ revenue hour	Vehicle Costs: \$350k-\$600k/ vehicle	Capital Costs: \$0.5-\$5 million/ mile	ROW: Additional 12' per lane in each direction

Coordination with Regional Partners



We connected with all transit in the area:

- Perimeter Employers
- MARTA Planning Department
- GRTA Xpress Planning and Operations



Photo Source: Perimeter Connects

Transit-Supportive Strategies

- Continue to Encourage Direct Local Shuttles
- Area-wide Parking Management
- Improve Walkability around Transit Stops
- Partner with Existing Uber/Lyft
- Improve/Standardize Amenities for Existing Transit
- Improve Travel Time for Existing Transit

Policies and Strategies to Support Transit: Uniform policies in Perimeter as well as Sandy Springs, Brookhaven, and Dunwoody will improve rider expectations and improve overall experience and travel decisions.

Data Collection & Analysis

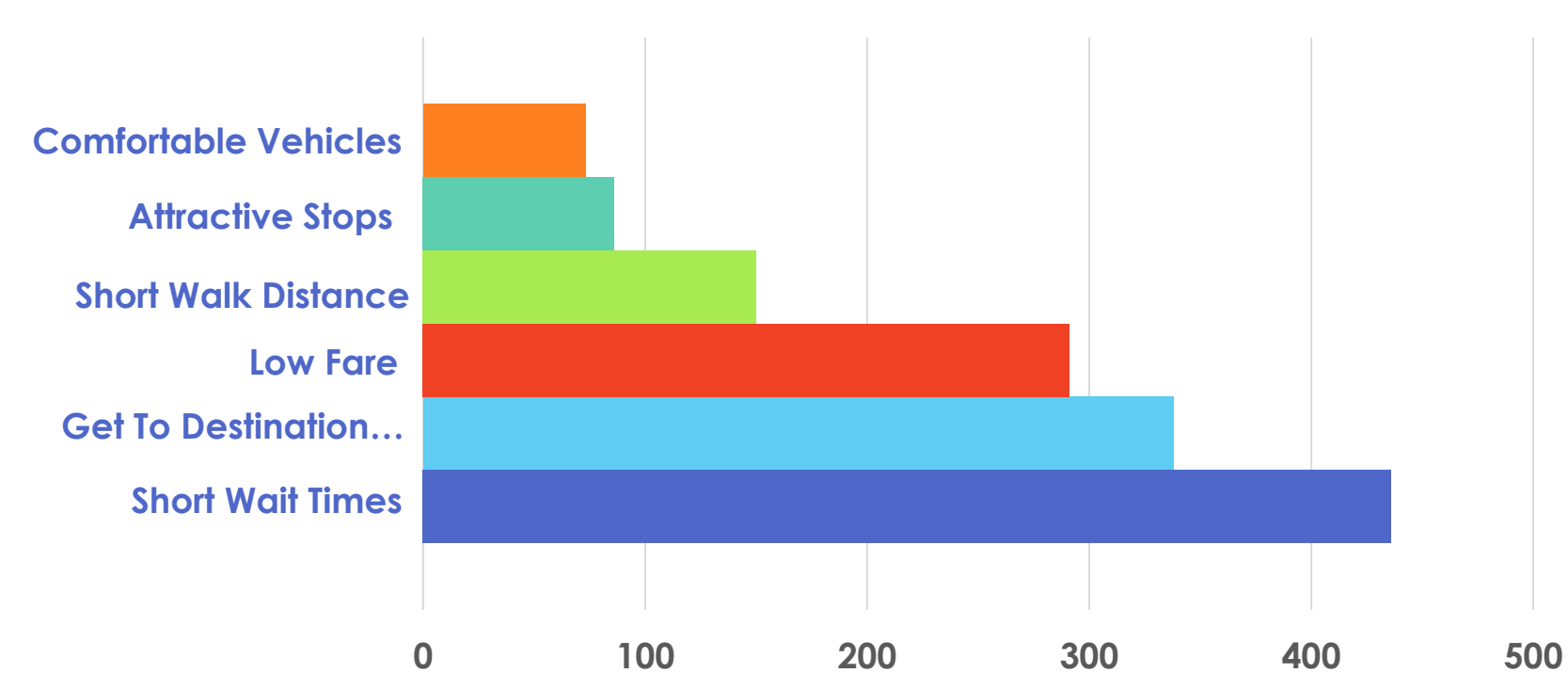
Alternatives Analysis & Vetting

Coordinate with all local Transit Providers

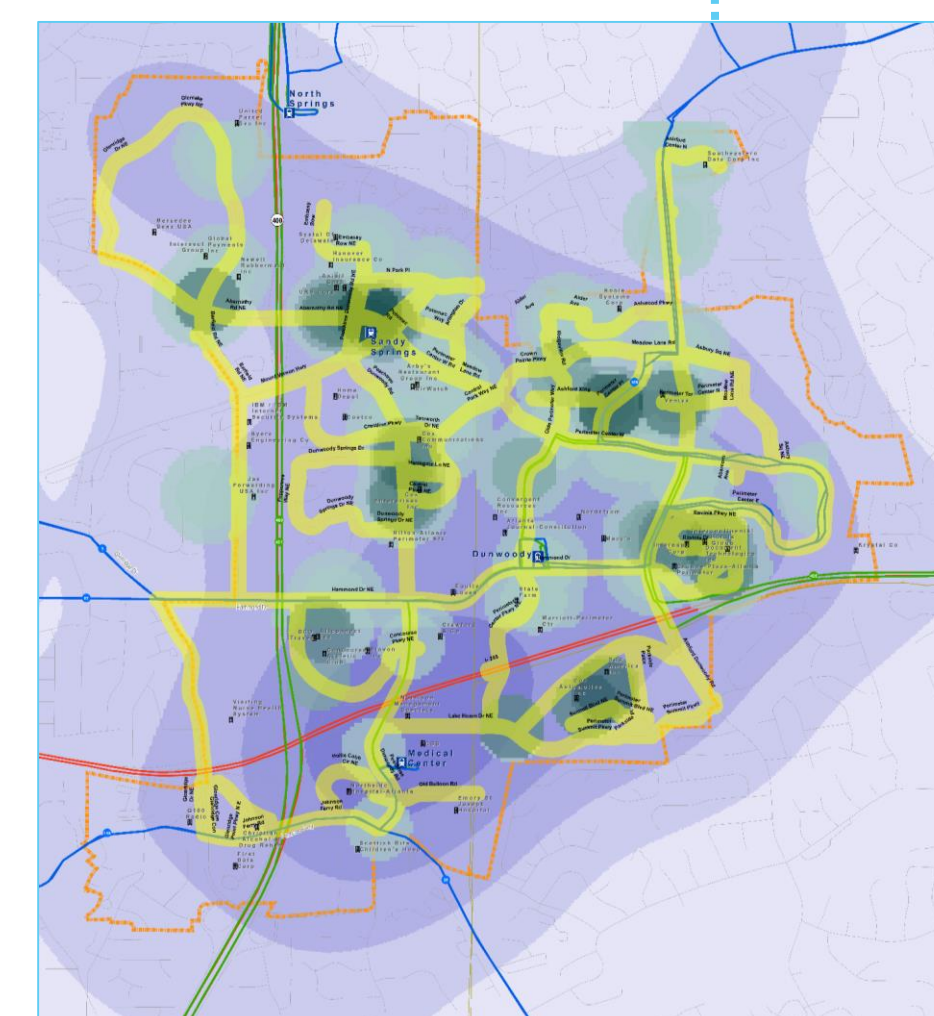
Recommendations

Survey Data Analysis

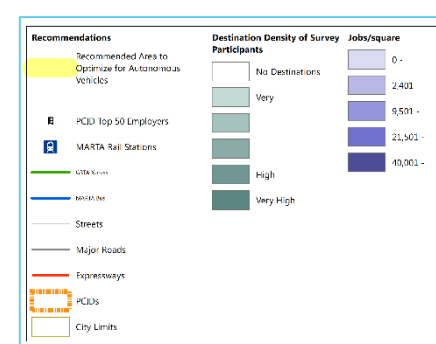
What are the Most Important Factor(s) for Deciding to Take a Local Circulator?



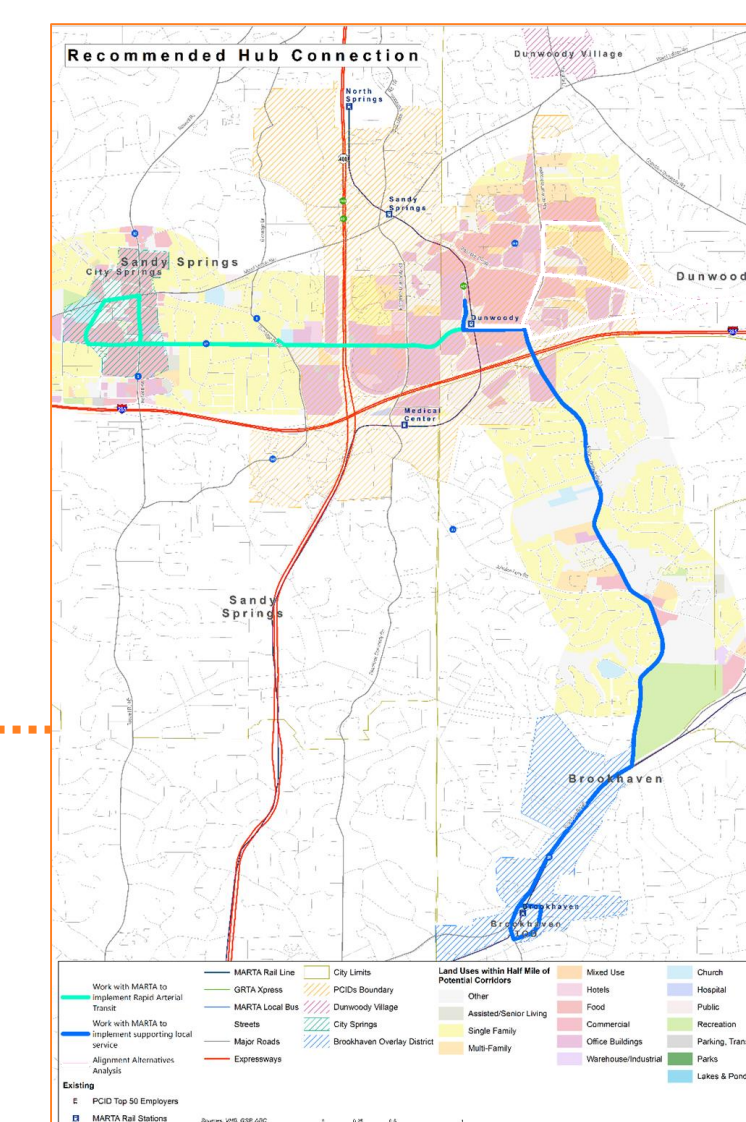
Alternative 2



Connected Vehicle Alternative: Examine multiple rapid modes to connect major office campuses, retail locations and residential developments.

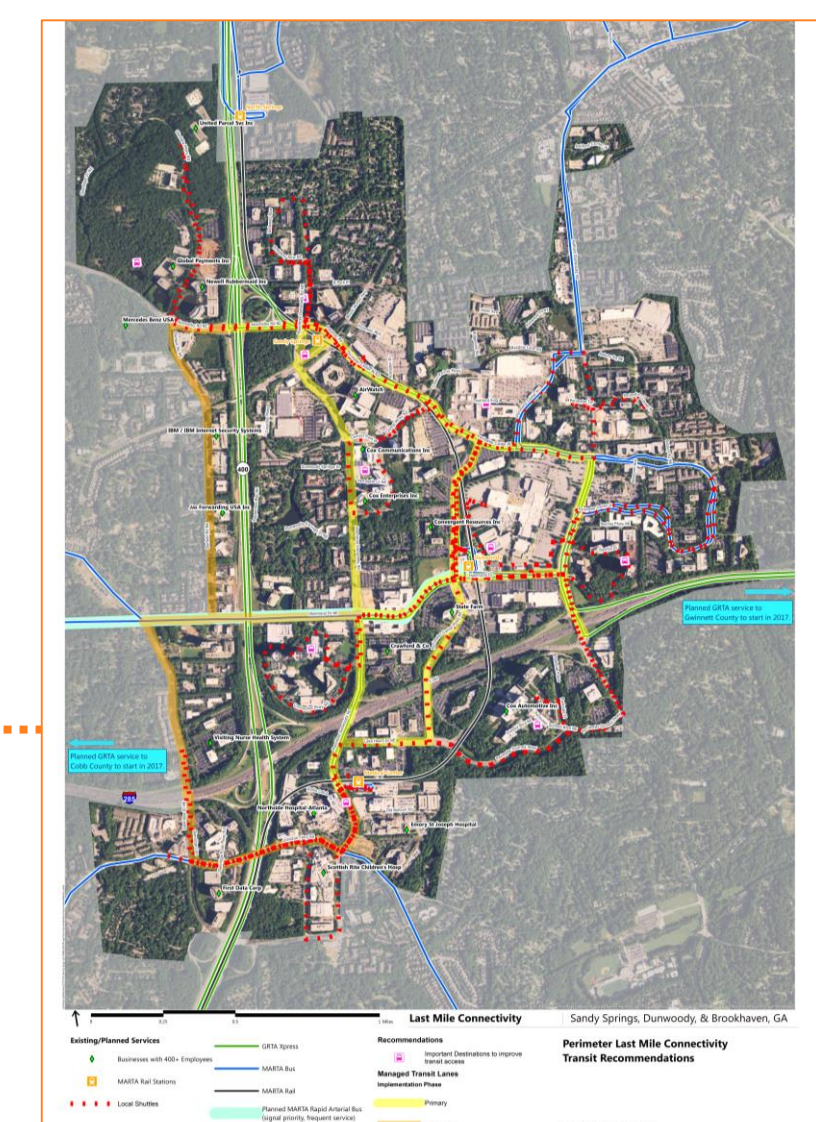


Hub Connections



Connections to Local Hubs: Transit amenities and supporting infrastructure like signal priority and intersection queue jumpers can improve travel time and reliability along key corridors. Connecting City Springs and Brookhaven TOD district to Perimeter would provide these key connections.

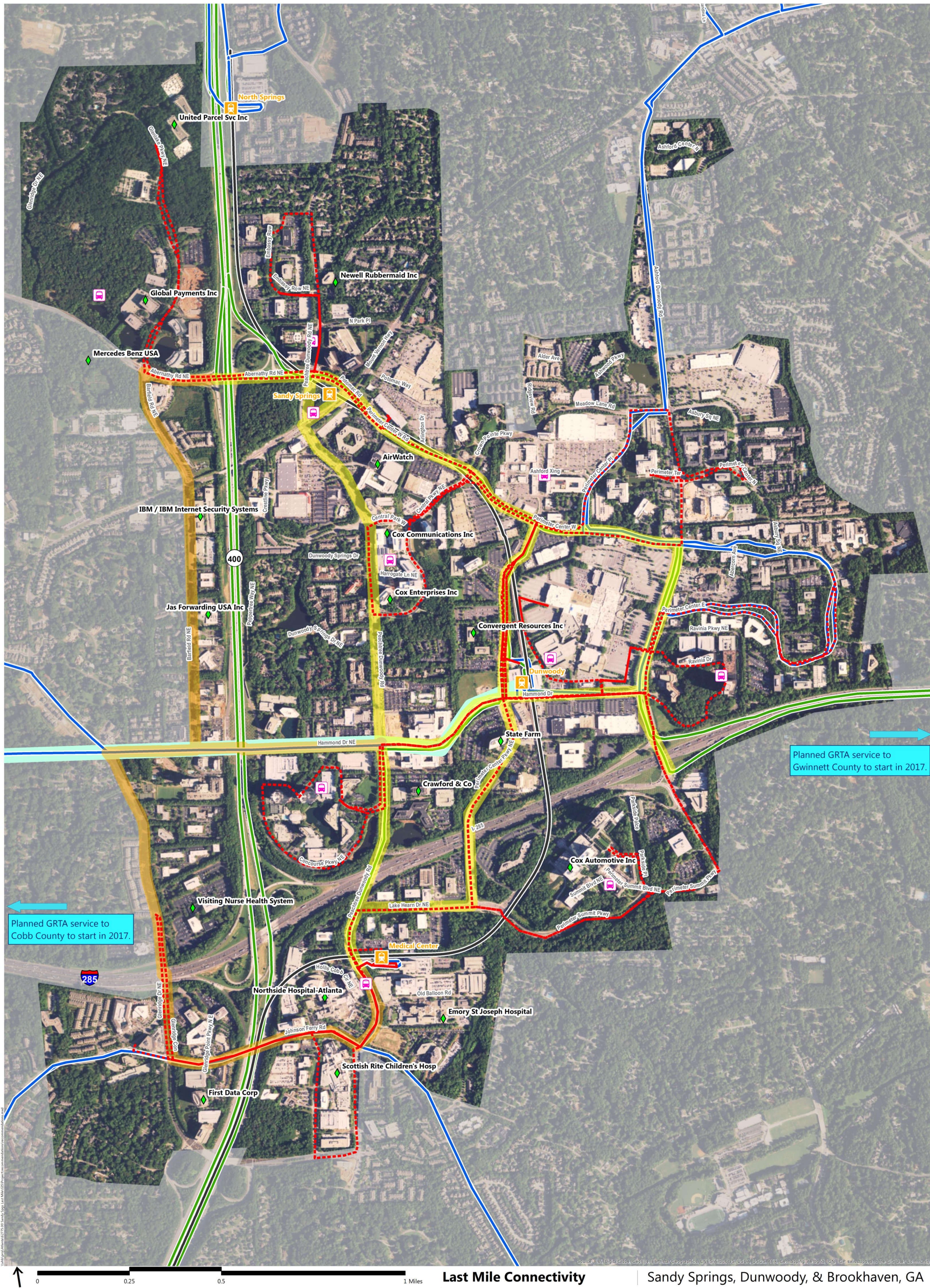
Perimeter Circulation



Peak-hour Transit Lanes: Lanes dedicated to transit in the Perimeter area would improve circulation for all agencies providing transportation services, including MARTA, GRTA, employer shuttles, and others.

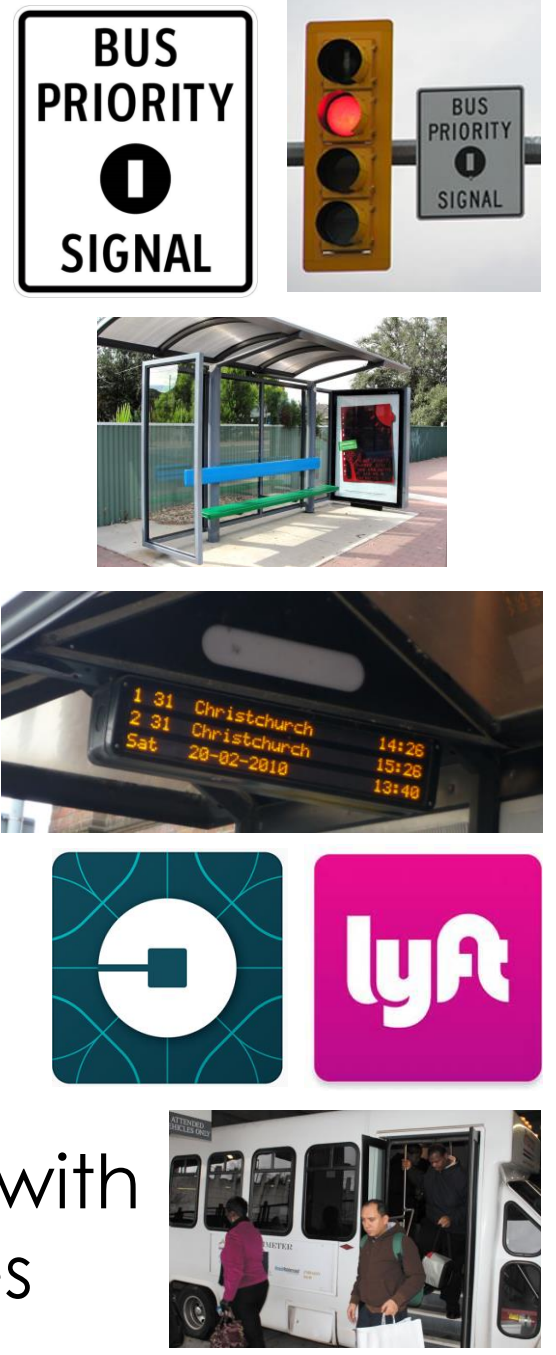
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Transit Network Future Recommendations



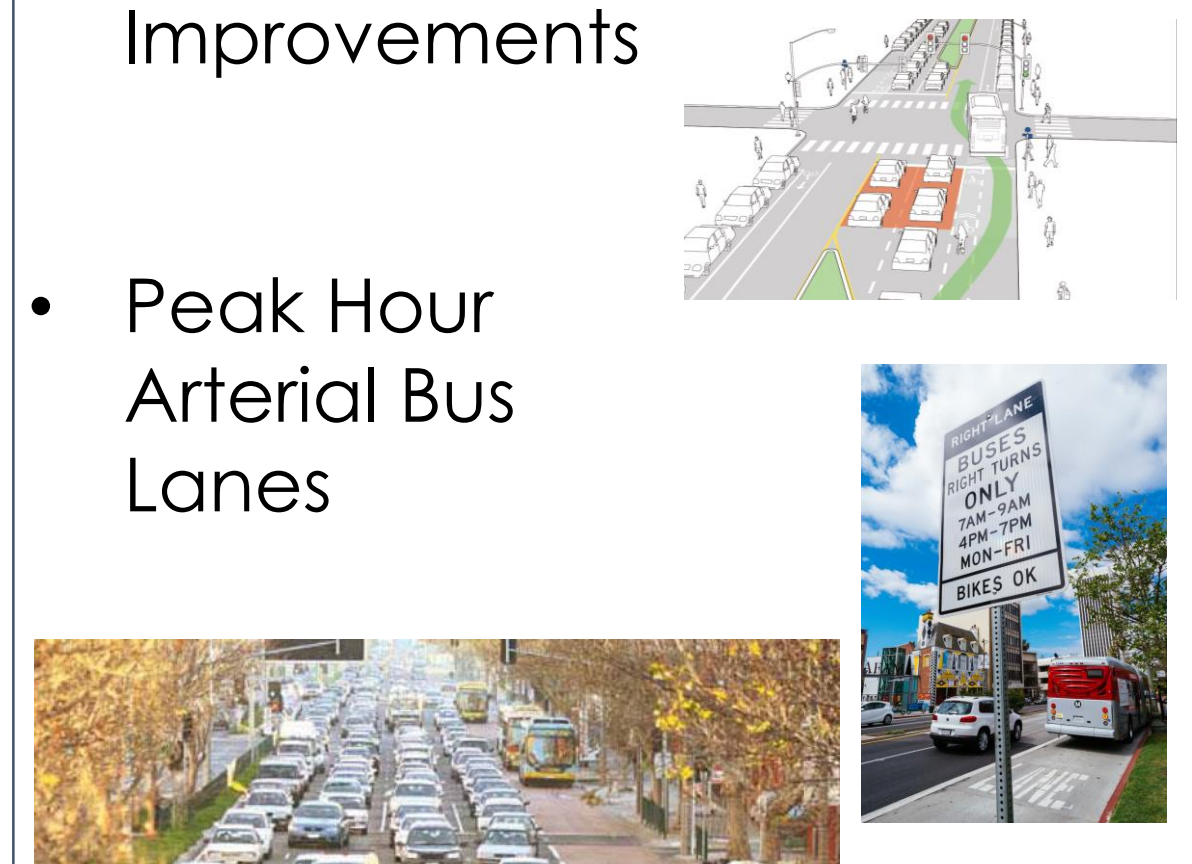
Short Term Transit Projects

- Transit Signal Priority
- Bus Stop Amenities
- Real-time Information
- Uber/Lyft Partnerships
- Coordination with Private Shuttles



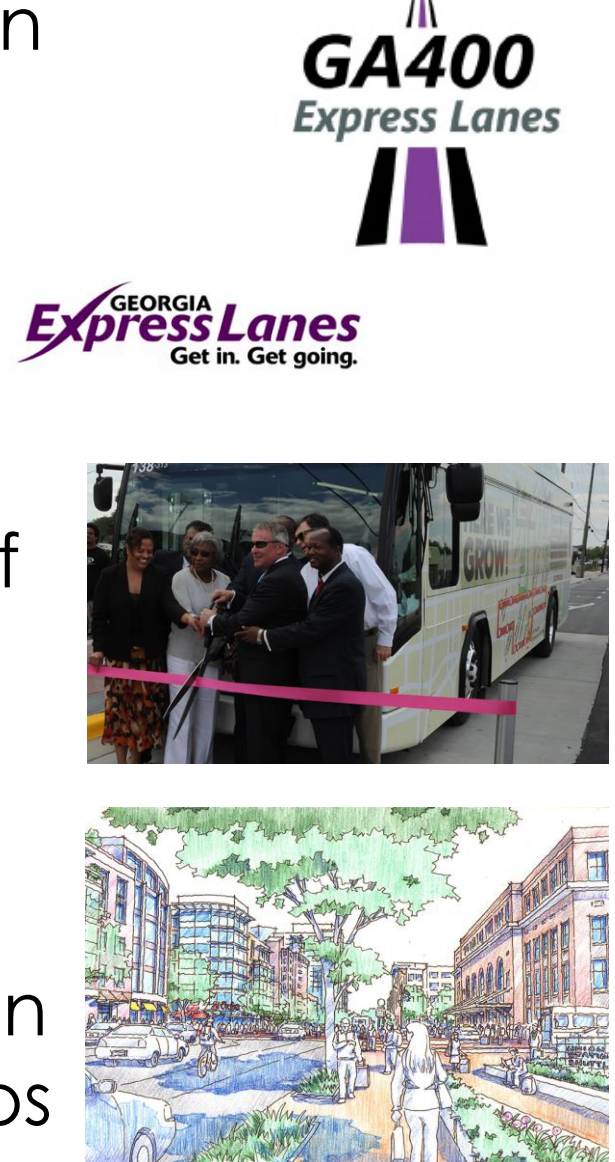
Mid Term Transit Projects

- Transit Intersection Improvements
- Peak Hour Arterial Bus Lanes

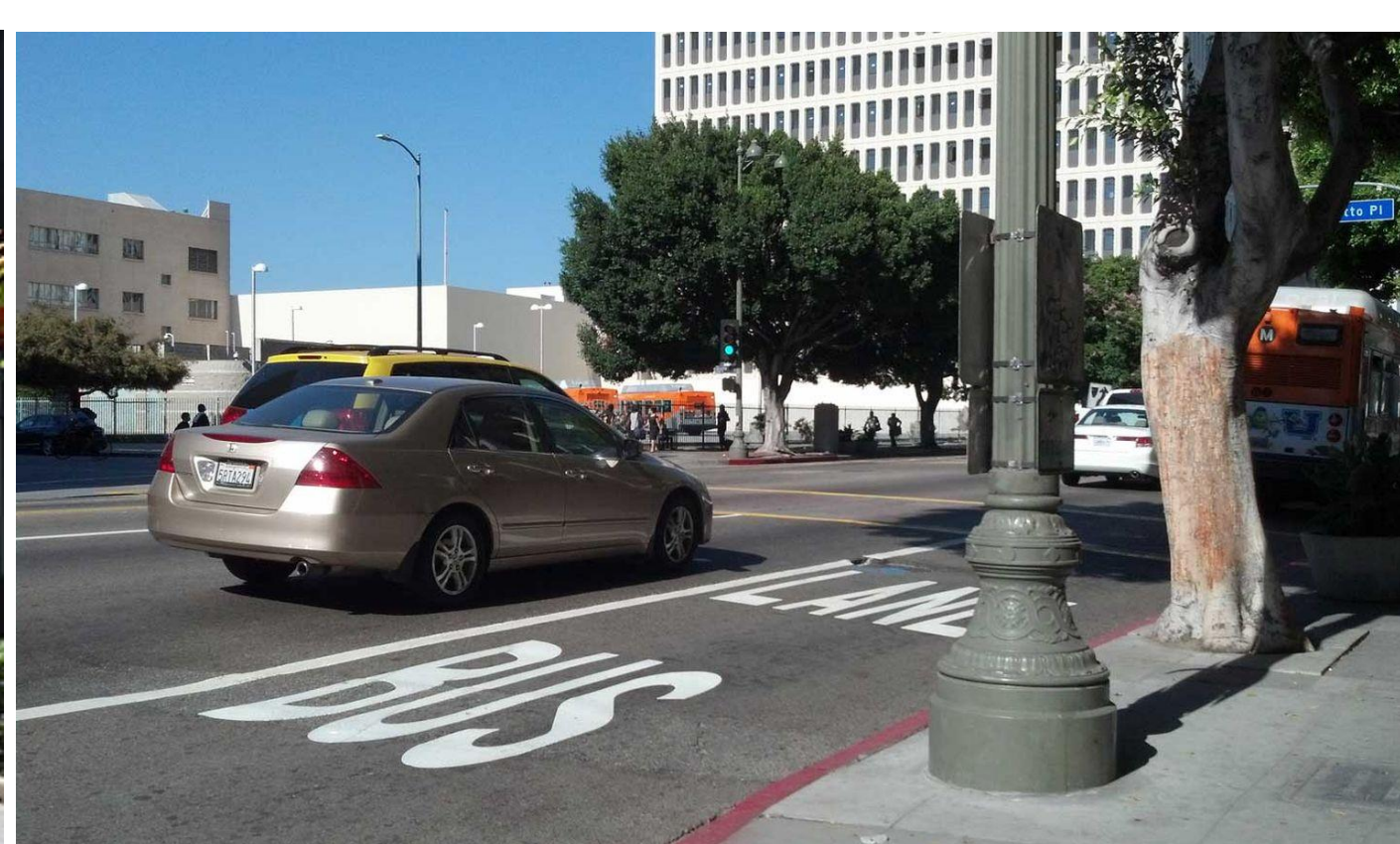


Long Term Transit Projects

- Coordination with Managed Lanes Project
- Expansion of Arterial Bus Lanes
- Land Use & Urban Design of Local Hubs



Lymmo BRT Shelter/Bus (Orlando, FL)



Bus Lane (Atlanta, GA)



Proposed Urban BRT Corridor (New York, NY)