LAST MILE CONNECTIVITY STUDY

Draft Report

Prepared for

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EXECUTIVE SUMMARY

The Perimeter area is a premier destination in the Atlanta region, serving as a major hub of employment, retail development, and a growing residential population. Located just north of Atlanta at the intersection of three cities, two counties, and two highways, with access to four Metropolitan Atlanta Rapid Transit Authority (MARTA) rail stations, this activity center draws daily commuters from long distances as well as from the neighboring cities of Brookhaven, Dunwoody, and Sandy Springs.

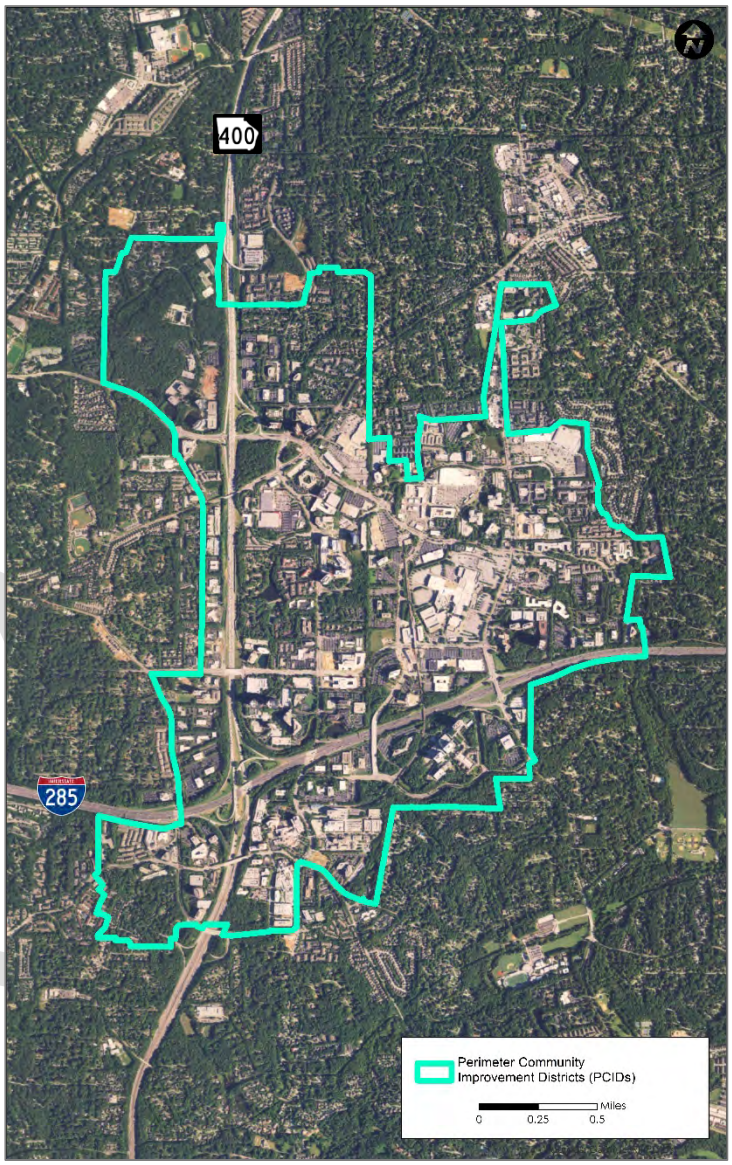


FIGURE ES-1. AERIAL VIEW OF PERIMETER COMMUNITY IMPROVEMENT DISTRICTS (PCIDS)

As the area continues to add jobs and housing opportunities, transportation and access are becoming increasingly important issues for Perimeter and the surrounding communities. For this reason, the cities of Brookhaven, Dunwoody, and Sandy Springs and the Perimeter Community Improvement Districts (PCIDs) partnered to conduct a study of last mile connectivity. Notably, last mile connectivity is a critical need, given the variety and number of forms of transportation offered within the Perimeter area. Last mile connectivity addresses the connections between activity centers or transit stops and stations and final destinations such as residences, offices, and retail areas. Rather than measure a specific distance, the first or last "mile" of a trip refers to the initial or final leg of a journey between home and a given destination. Making safe, comfortable trips between destinations and transit as well as connections to the nearby downtowns/activity centers of Brookhaven, Dunwoody, and Sandy Springs is critical to maintaining and enhancing the economic competitiveness and livability of the area.

There are a number of reasons for conducting this type of study in this area. Perhaps chief among them are two main objectives: to provide safe, comfortable non-automobile options for short-distance trips within the Perimeter area; and to make it easier and more convenient for people to take advantage of existing transit service for travel between the Perimeter area and other destinations.

Through a process of information-gathering, reconciliation of the results of previous planning efforts, and identification of gaps, this study offers a cohesive menu of recommendations for improving last mile connectivity and increasing transit usage. It includes including specific infrastructure investments, policy recommendations, and additional studies as well as strategies that can be pursued to support and complement last mile connectivity. One primary task of this study is to develop a consolidated project list to guide multimodal investment in the Perimeter area. Each recommendation related to last mile connectivity in previous plans and studies conducted by or for the project partners underwent a thorough review to determine whether it should be part of the consolidated project list. Some recommendations were determined to no longer have community support. Others were no longer viable due to land use and development patterns that had changed since the approval of the plan or study. These projects were removed from consideration. Following this process, each project was analyzed in relation to other recommendations in the study area. Within the boundaries of the PCIDs, there were some instances with multiple projects along the same corridor that did not complement each other, due to disparities in facility type or termini. In addition, at municipal boundaries, there was often some disconnect between planned improvements among the cities. These project inconsistencies were reconciled in the refinement of the project list. Upon an examination of all the projects in the study area, it was also determined that there were "gaps" in coverage, or places where facilities were lacking, and there were no identified projects to address connectivity needs. In these areas, recommendations were made to fill these gaps in order to provide consistent last mile connectivity across the study area.

The resulting consolidated list of projects represents an ambitious but comprehensive set of projects the cities of Brookhaven, Dunwoody, and Sandy Springs and the PCIDs can consider as part of future development and planning initiatives. In addition, the report includes strategies that can be pursued to support last mile connectivity and development of safe, comfortable biking and walking facilities and routes. The project list (Appendix A) includes previously planned projects as well as new project recommendations.

The project list is sorted into tiers by timeframe and includes a general description of each project, along with information about potential challenges to the projects, probable costs, and the source plan from which the project originated.

Recommendations and strategies are intended to cultivate the conditions that will encourage alternative modes of travel within the study area as well as to make it easier and to encourage people to take advantage of services already provided by partner agencies, such as MARTA, GRTA, and private shuttle operators. Specific projects include filling sidewalk gaps, applying complete street treatments to key corridors, adding wayfinding, and redesigning MARTA rail stations to be more people-friendly and intuitive.

A summary list of recommendations is provided below.

Recommendations
Construct or fill sidewalk gaps on portions of Glenridge Dr, Glenlake Pkwy, and along the south side of Abernathy Rd near GA 400
Work with property owners to encourage filling of sidewalk gaps on Concourse Pkwy
Install bicycle lanes on Peachtree Dunwoody Rd in Sandy Springs
Design and construct a multi-use path along Glenlake Pkwy and Glenridge Dr
Apply additional complete street treatments on several corridors throughout the Perimeter area, including portions of: • Glenridge Dr in Sandy Springs • Mt. Vernon Hwy in Sandy Springs (two locations) • Mt. Vernon Rd in Dunwoody • Johnson Ferry Rd in Sandy Springs (two locations) • Peachtree Dunwoody Rd in Sandy Springs
Identify opportunities to incorporate bicycle and pedestrian improvements into local street projects
Design and construct a pedestrian bridge between North Springs MARTA Station and Glenlake Pkwy
Develop and implement a branded wayfinding program and guidelines throughout Perimeter, with elements targeted at both pedestrians and motorists
Conduct corridor studies to determine future capacity and complete street needs on Abernathy Rd and Glenridge Dr/Glenlake Pkwy
Implement operational improvements on Johnson Ferry Rd in Brookhaven
Implement context-sensitive corridor improvements on Windsor Parkway in Sandy Springs
Explore transit connection between Brookhaven/Oglethorpe MARTA Station and Perimeter area
Establish policies to guide operation of ridesharing or ride-hailing services to ensure efficient operation within the Perimeter area
Work with major employers and large-scale developments to encourage their use of private shuttle services and consider opportunities to standardize or streamline elements of their operation
Conduct a feasibility study to explore an additional east-west transit connection between Sandy Springs MARTA station and City Springs
Explore opportunities to install queue jumpers for transit vehicles along Hammond Dr
Install transit signal priority (TSP) on signals along Hammond Dr that are compatible with MARTA technology
Establish and implement guidelines to create active streets that encourage walking and biking
Establish standards for bicycle and pedestrian facilities that make it easier and more comfortable to use transit
Establish priorities for density, mix of uses, and the urban form of new development to support transit and other alternative modes of travel in appropriate locations
Adopt and apply standards for transit shelters, regardless of agency, and participate in the regional bus stop signage program to standardize sign design and information and provide real-time bus information displays at shelters
Provide dedicated transit lanes on key corridor segments within the Perimeter area, during peak morning and afternoon hours at a minimum
Expand dedicated transit lanes on key corridor segments within Perimeter to connect south to Johnson Ferry Rd and west along Barfield Rd to expand access to more major employers
Implement transit signal priority along key corridors and identify locations to install queue jumpers at critical intersections to allow transit vehicles to pass personal vehicles

1. INTRODUCTION

For people who use transit services, trips do not simply begin or end when they get on or off a bus or train. Trips begin or end with a walk, bike ride, or car trip from home to the station, or from the station to their destination. These connecting trips before or after transit, the "last mile," are often critical links and essential to making transit a viable, convenient choice. These trips can be challenging depending on the surrounding environment and infrastructure. With a rise in vehicular traffic and congestion across many parts of the country, local governments and transit agencies are looking to implement strategies and projects that improve the first and last mile connections to transit services in order to provide a more seamless, convenient travel experience and encourage or attract more riders.

The Perimeter area is a destination in the Atlanta region for jobs and retail with a growing residential population. It is located at the intersection of three cities, two counties, and two highways, with access to four MARTA rail stations. This activity center, just north of Atlanta, draws daily commuters from long distances as well as from neighboring Brookhaven, Dunwoody, and Sandy Springs. Transportation and access are becoming increasingly critical issues facing Perimeter and the surrounding communities. There is a substantial disconnect in last mile connectivity in the heart of the Perimeter area and between Perimeter and the nearby downtowns/activity centers of Brookhaven, Dunwoody, and Sandy Springs.

The Perimeter area, already home to more than 5,000 companies, including several Fortune 500 companies, is growing at a tremendous rate. New developments such as State Farm, Mercedes-Benz and other high-density commercial, residential and mixed-use developments continue to make it an exciting time to live, work, and play in the Perimeter area. All of this growth, however, will place additional strain on the already-congested roadways in the area. Given this growth, it is essential to make sure the Perimeter area has biking, walking, and transit options to keep people moving, and maintain its status as a desirable destination for workers, residents, and visitors.

Transportation, and particularly non-automobile transportation, will play a critical role in the Perimeter area's ability to maintain and strengthen its position as a premier urban market for residents, businesses, and visitors. According to data from the 2011-2015 American Community Survey 5-year estimates, within the Atlanta-Sandy Springs-Roswell Metro Area, 78 percent of all workers over the age of 16 drive alone to work while only three percent use public transportation. This equates to about two million people driving alone to work within the Atlanta/Sandy Springs/Roswell area.

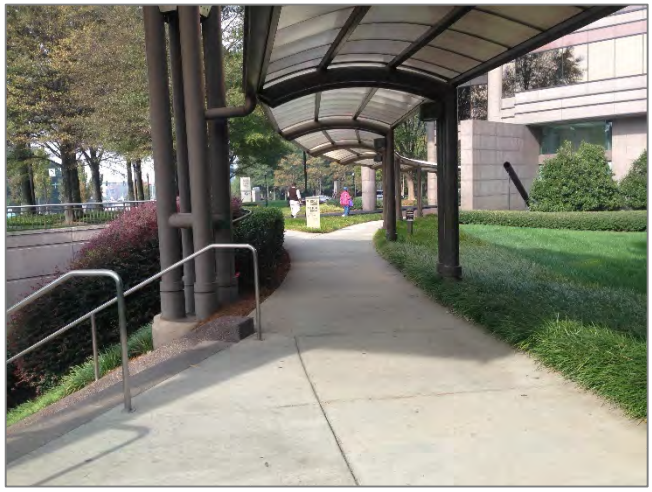


FIGURE 1. COVERED WALKWAY BETWEEN SANDY SPRINGS MARTA STATION AND NORTHPARK OFFICE COMPLEX

It was within this context that, in 2016, the Cities of Sandy Springs, Brookhaven, and Dunwoody, in collaboration with the Perimeter Community Improvement Districts (PCIDs), initiated a study of last mile connectivity within and around the Perimeter area. The *Last Mile Connectivity Study* (the Study) is intended to provide a clear vision to address multi-modal transportation needs in the Perimeter area. The purpose of the study is to produce a consolidated program of investments in bicycle, pedestrian, trail, and roadway facilities, and to explore future transit opportunities to make it easier, safer, and more comfortable for people to

get around the Perimeter area. The study is concentrated on the area within the boundaries of the PCIDs, but also considers connections between activity centers in Brookhaven, Dunwoody, and Sandy Springs and the PCIDs. The study area is shown in Figure 2.

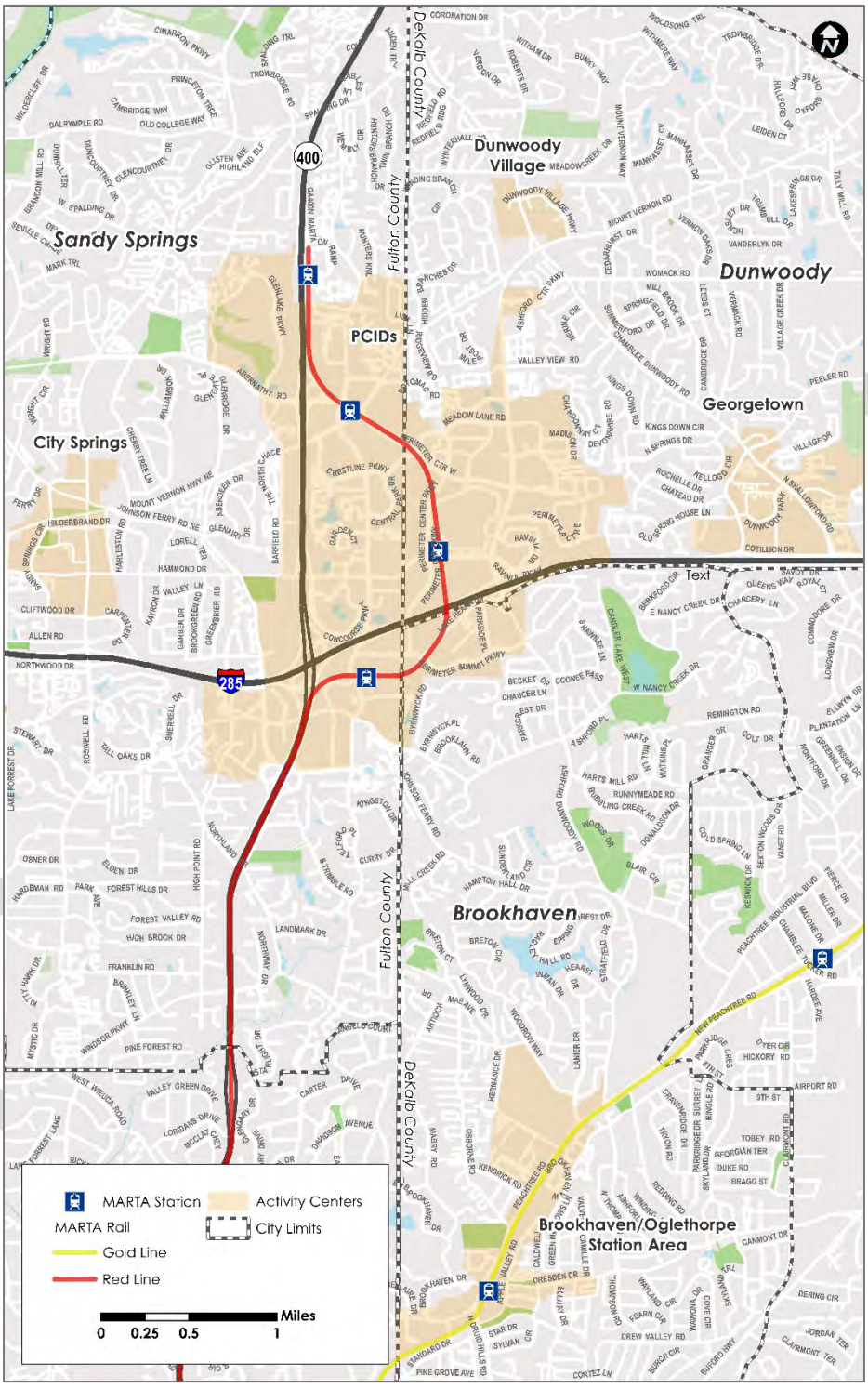


FIGURE 2. STUDY AREA

The goal of this study is to offer a network of safe, easy, and convenient opportunities for people to walk, bike, or take transit within the Perimeter area, helping residents, employees, and visitors complete short trips or the last mile of longer trips on foot, bike, or via local transit service. This may be accomplished through the introduction of new infrastructure or services and also by making it easier for people to take advantage of existing infrastructure and services.

Primary objectives of the study include:

- Review existing plans and studies to identify prior projects, initiatives, and programs related to last mile connectivity
- Identify gaps and areas of overlap between and among previously planned or programmed projects
- Develop a vision for introducing new transit service into the Perimeter area
- Develop recommendations for new projects and programs to further enhance last mile connectivity by filling gaps between existing, planned, and programmed projects, services, and facilities

The Perimeter area has been growing at a tremendous rate in recent years and it is anticipated that this trend will continue. Numerous residential and commercial developments are under way and more are anticipated in the near future. Improvements to last mile connectivity can help alleviate congestion and provide viable travel alternatives to personal vehicles for workers, residents, and visitors. In turn, enhanced bicycle and pedestrian facilities can improve community health and well-being by making it easier for people to choose active transportation modes and make healthier choices with regard to how they get around. Furthermore, given the interest among companies and employees in walkable, livable communities, investing in last mile connectivity can help ensure the economic competitiveness of the area by maintaining it as a desirable destination for workers, residents, and visitors.

FIGURE 3. VIEW OF DUNWOODY MARTA STATION SEEN FROM HAMMOND DR

The study is primarily focused on multi-modal connections and the transportation network within the Perimeter area, but also looked at opportunities to facilitate better connectivity between the Perimeter area and nearby activity centers in each of the three participating cities: Brookhaven, Dunwoody, and Sandy Springs. Definitions of last mile connectivity and descriptions of types of connectivity are discussed in Section 2A.

This study sought to provide a consolidated list of projects and programs in which each city and the PCIDs can invest to enhance last mile connectivity. The project list, a component of this study (see Appendix A) includes projects and programs that have already been identified in previously accepted or adopted plans and studies as well as newly identified opportunities to enhance connections or fill gaps between

existing and planned projects. The program of investments - which spans several categories, including pedestrian, bicycle, trail/path, roadway, and transit - is grouped by timeframe and includes additional information about the potential challenges of a given project, high-level cost estimates, and the source of the project.

Rather than be prescriptive about an exact set of recommendations to implement in a specific order, the aim of this study was to provide a consolidated list of projects and recommendations that the project partners can implement according to their own priorities and as resources become available. The project team recognizes that priorities may shift depending upon available resources, ability to coordinate or tap into an upcoming project, and the evolving needs and preferences of community members and elected officials. For that reason, this study includes a range of strategies and projects that can be implemented over time. This report is intended to be a living document that should be revisited and updated periodically over time. The consolidated project list can and should be reviewed from time to time to ensure the projects are still relevant and remain priorities for the future.

This report includes a summary of the study team's process and methodology, an overview of existing conditions, inputs, and previous plans. For each modal system (pedestrian, bicycle, roadway, and transit), the report summarizes existing facilities, discusses identified gaps and areas of overlap, and includes recommended projects and strategies. The report offers a range of recommendations grouped by timeframe, including new sidewalks, new bicycle facilities, corridor studies, and strategies to leverage existing services and facilities, such as wayfinding, parking management, and transit station enhancements.

2. BACKGROUND

This section is intended to help provide a general understanding of the concept of last mile connectivity and how it was defined and considered for the purposes of the *Last Mile Connectivity Study* as well as a general description of the location of the study area.

A. DEFINING LAST MILE CONNECTIVITY

Last mile connectivity addresses the connections between activity centers or transit stops and stations, and final destinations such as residences, offices, and retail areas. Rather than measure a specific distance, the first or last "mile" of a trip refers to the initial or final leg of a journey between home and a given destination. For example, if a commuter uses an express bus service to get to work, the "last mile" of that trip would be the distance between where the bus drops the commuter off and his or her office. It could also refer to the trip made between a mall and the nearest transit station, which shoppers use to get to the mall. First and last mile connections are generally made in one or more ways, including but not limited to:

- Walking
- Biking
- Private automobile
- Shared automobile or short-term rentals (e.g. ZipCar)
- Shuttles
- Bus
- Private rideshare or ride-hailing services (e.g. Uber, Lyft)

These modes get transit riders between transit service and their origins or destinations. Transit providers such as MARTA and the Georgia Regional Transportation Authority (GRTA) provide service for the longest part of the journey via rail and local and regional buses. Generally, it has been left up to individual travelers to get themselves to and from transit stops, but over the past few decades, public agencies and employers have been increasingly willing to assist in providing connections and encouraging people to use public transportation. These services may be offered in the form of shuttles, private rideshare, bikeshare, or others. In addition to transportation services, another way to enhance and improve last mile connectivity is by investing in infrastructure that makes it easier, safer, and more comfortable for travelers to access transit.

FIGURE 4. COMPONENTS OF LAST MILE CONNECTIVITY

B. STUDY AREA

The area examined for the *Last Mile Connectivity Study* includes the PCIDs, which lies within portions of the Cities of Sandy Springs, Dunwoody, and Brookhaven, as described above. The boundaries of the PCIDs lie primarily north of I-285 and east of GA 400, but straddle both highways. The study area also

includes the activity centers of City Springs (Sandy Springs), Dunwoody Village, Georgetown (Dunwoody), and the Brookhaven/Oglethorpe (MARTA) Station area (Brookhaven) as illustrated in Figure 2.

The study area is anchored by the PCIDs, an active business district with major office complexes, significant commercial and retail development, mixed uses, and some residential uses. The areas outside of the PCIDs are more suburban in character, with some nodes of activity in limited areas. Given the relatively dispersed nature of the study area outside of the PCIDs and the current alignments of transit service, it became clear that in order to make it easier for people to take advantage of existing transit services, the study would need to look at both short-distance trips within the PCIDs, but also ways to make it easier for people to travel between outlying activity centers and the Perimeter area. To that end, the project team took a two-pronged approach to examining connectivity. One component focused on short-distance, true "last mile" connections within the PCIDs. The second component looked at longer-distance connections between the PCIDs and outlying activity centers, or nodes, in Brookhaven (Brookhaven/Oglethorpe MARTA Station area), Dunwoody (Georgetown area, and to a lesser extent, Dunwoody Village), and Sandy Springs (City Springs). The team defined these two types of connectivity as follows, as illustrated in Figure 5:

- **Node connectivity** – providing direct access between nodes or activity centers (including transit stations) to facilitate movement of people and connect mixed-use activity centers
- **Last mile connectivity** – getting people effectively between origins/destinations and the nearest transit stop/station, or facilitating connections between multiple nearby destinations

Ultimately, the goal is to provide people with choices other than a personal automobile for completing short-distance trips within the study area, whether on their own as independent errands or as links at the beginning or end of longer journeys, and to make it easier for people to take advantage of existing transit service.

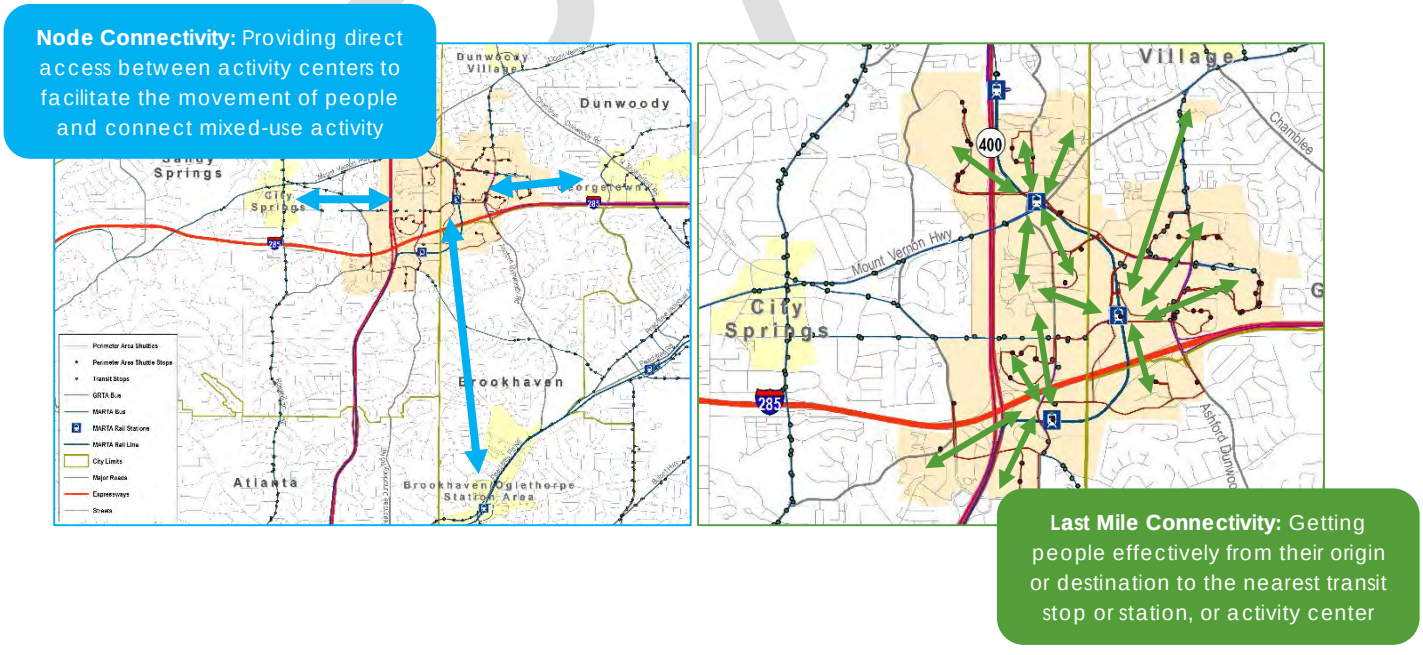


FIGURE 5. ILLUSTRATIONS OF NODE CONNECTIVITY (LEFT) AND LAST MILE CONNECTIVITY (RIGHT)

Node connectivity focuses on **getting people between outlying activity centers and the PCIDs**. Because the distance between nodes is longer, the team focused on improving connections for modes that are appropriate for longer-distance trips, such as shared vehicles, transit, and for some travelers, bicycles. Rather than consider all the many potential ways to travel between the PCIDs and activity centers, the team identified several key corridors that serve as direct routes between these areas. These are listed in Table 1. These corridors were examined not only for the purposes of identifying previously planned and programmed projects, but also for identifying gaps and potential new connections that may be established in the future. Improvements to node connectivity may be provided in the form of improved transit amenities, protected bicycle facilities, incentives or amenities to encourage carpooling, parking management, and safe or convenient access to transit service from neighborhoods or in outlying activity centers.

TABLE 1. KEY CORRIDORS FOR NODE CONNECTIVITY WITHIN STUDY AREA

Corridor	Location
Abernathy Rd	Sandy Springs
Ashford Dunwoody Rd	Brookhaven, Dunwoody
Chamblee Dunwoody Rd	Brookhaven, Dunwoody
Glenridge Connector / Glenridge Dr	Sandy Springs
Hammond Dr	Dunwoody, Sandy Springs
Johnson Ferry Rd	Brookhaven, Sandy Springs
Mount Vernon Rd/Hwy	Dunwoody, Sandy Springs
Peachtree Dunwoody Rd	Brookhaven, Dunwoody
Windsor Pkwy	Brookhaven, Sandy Springs

The focus of **last mile connectivity** is primarily on **linking origins or destinations and transit service,** but also making it easier for anyone to complete any short-distance trip within the PCIDs using alternatives to personal automobiles. These connections may be improved with such services or infrastructure as high-amenity pedestrian facilities, low-stress bicycle facilities, and improved transit circulation. Facilities that improve last mile connectivity may include wide sidewalks, safe pedestrian crossings, direct connections between buildings and sidewalks, shared-use paths, bicycle lanes, private rideshare services, short-term carshare or car rental, and to some extent, local circulating transit service, like shuttles. Other improvements may include wayfinding, bike parking, short-term bike rental or bikeshare.

3. STUDY PROCESS/METHODOLOGY

The study team took a simple, yet thorough approach to the *Last Mile Connectivity Study*. The process included a review of previously approved plans and studies within each jurisdiction (the three cities and PCIDs), from neighboring jurisdictions, and regional plans. The process also consisted of mapping existing facilities and services, mapping planned and programmed projects, identifying gaps and areas of overlap between projects, and identifying new projects and recommendations to fill those gaps. The team then consolidated the projects into a unified project list and identified possible sources of funding, criteria to help prioritize projects in the future, benefits, and probable costs. This section provides a synopsis of each step in the process.

A. PRIOR PLANS AND STUDIES

The team began by assembling a list of more than 60 studies and plans that had been previously approved by the cities or PCIDs and reviewed a subset of those plans to compile a list of projects, initiatives, recommendations, strategies, and programs related to last mile connectivity. The list of plans and studies to be reviewed was vetted and confirmed by representatives of each city and the PCIDs. The subset of plans to be reviewed included those completed in the past ten years produced by and for each city, the PCIDs, DeKalb County, Fulton County, and regional plans. It should be noted that a number of plans were still underway at the time that this review was conducted. A list of the studies and plans reviewed is shown in Error! Reference source not found..

In order to establish a pool of potential last mile connectivity projects, the team reviewed each of the plans to identify bicycle and pedestrian, roadway, and transit projects as well as other efforts that would enhance or promote last mile connectivity. These included new segments of sidewalk, multi-use paths and trails, new or extended segments of roadway, widenings, and intersection improvements that incorporate pedestrian facilities. The team also included projects that would improve or enhance access to public transportation, such as improvements to bus or rail station areas as well as projects that would initiate new transportation services (such as additional service along express bus routes). Short-, mid-, and long-term projects were included so as to maximize the pool of potential projects for inclusion in the consolidated, unified project list. The initial review yielded more than 600 bicycle, sidewalk, trail/path, roadway, and transit projects, including 230 projects containing multi-use paths, 230 sidewalk projects, 131 bicycle projects, 67 roadway projects, and 89 transit projects (not mutually exclusive). Many of these projects were short segments of proposed sidewalk or multi-use trail and would later be combined and/consolidated to create bigger projects that align with other project limits.

B. PROJECT LIST

The team assembled a master database of all identified projects with as much relevant information as was available about each project, including but not limited to identification numbers, the municipality where the project would be constructed, limits of projects, descriptions, implementation timeframe, ranking or priority, and estimated cost, etc. Where possible, information about status and project details were also captured.

During the course of the project compilation, several key themes emerged. There is strong interest among all jurisdictions in bicycle facilities, creating better connections between existing streets, developing or expanding multi-use or shared-use paths, and in expanding pedestrian facilities.

TABLE 2. LIST OF STUDIES REVIEWED

Jurisdiction	Name	Year
Brookhaven	Brookhaven-Peachtree LCI 5-year Update	2011
Brookhaven	Brookhaven-Oglethorpe MARTA Station Charrette Report	2013
Brookhaven	Comprehensive Transportation Plan	2014
Brookhaven	Comprehensive Parks and Recreation Master Plan	2014
Brookhaven	Bicycle, Pedestrian, and Trail Plan	2016
Brookhaven	Transit Connector Feasibility Study	2016
Brookhaven	Ashford Dunwoody Road Corridor Study	(ongoing)
Brookhaven	Comprehensive Plan 2034 – Community Work Program	2014 (amended 2016)
Dunwoody	Dunwoody Comprehensive Transportation Plan	2011
Dunwoody	Dunwoody Village Master Plan	2011
Dunwoody	Georgetown/North Shallowford Master Plan	2011
Dunwoody	Dunwoody Sustainability Plan	2014
Dunwoody	Dunwoody Pedestrian Safety Action Plan	2014
Dunwoody	Dunwoody Comprehensive Land Use Plan - Five-Year Update (2015-2035)	2015
Dunwoody	Peachtree Corners-Dunwoody Winters Chapel Road Area Study	2015
Sandy Springs	Sandy Springs MARTA Station Area Plan (LCI Implementation Study)	2003
Sandy Springs	Connecting Sandy Springs (Report and Appendices)	2005
Sandy Springs	Transportation Master Plan	2008
Sandy Springs	Community Development Block Grant Consolidated Plan	2008
Sandy Springs	Economic Development Plan	2011
Sandy Springs	City Center Master Plan	2012
Sandy Springs	Livable Sandy Springs Plan (LCI study) 10-Year Update (and City Center Master Plan)	2013
Sandy Springs	Roswell Road Corridor Livable Centers Initiative Study (LCI) 5 Year Update	2013
Sandy Springs	Bicycle, Pedestrian, and Trail Implementation Plan	2014
Sandy Springs	Sidewalk Master Plan Network	2016
Sandy Springs /Dunwoody	Hammond Drive Corridor Study	2016
Sandy Springs	The Next Ten Comprehensive Plan Update	(ongoing)
PCIDs	Perimeter Focus: Envisioning a New Atlanta Center (LCI) Perimeter @ The Center -Future Focus, 10-year LCI Update	2011
PCIDs	Dunwoody MARTA Connectivity Improvements	2011
PCIDs	Commuter Trail System Master Plan	2012
PCIDs	Perimeter Circulator Implementation Study	2012
PCIDs	Perimeter Park @Dunwoody MARTA Station Master Plan	2014
PCIDs	Bicycle Implementation Strategy	2016
PCIDs	Perimeter Public Space Standards Updated Public Space Standards	2016
Regional	North Fulton Comprehensive Transportation Plan	2010
Regional	ARC Regional Transit Committee Work Program (2014-2016)	2013
Regional	DeKalb Comprehensive Transportation Plan	2014
Regional	Connect 400 - Georgia 400 Transit Initiative	2015
Regional	GRTA Direct Xpress Service Plan	2015
Regional	Regional Transportation Plan (The Atlanta Region's Plan)	2016
Regional	Walk Bike Thrive! (Atlanta regional bicycle and pedestrian plan)	2016
Regional	Atlanta Managed Lane Implemenation Plan	2016
Regional	Revive 285	(ongoing)

Next, the team systematically reviewed these to identify overlapping geographic boundaries, projects that may have been superseded by subsequent plans and projects, and instances in which multiple variations of a project were included in several different plans. At this time, the team also began to identify and update the status of each project, differentiating between projects that have already been constructed, those that are in the design, preliminary engineering, or planning stages, and those that are in the construction phase. Because the boundaries of the study were somewhat fluid (including within the PCIDs, connections to PCIDs, and between activity centers), the team focused on key corridors and the area within relatively close proximity to the PCIDs. Specifically, the team incorporated projects:

- Along major corridors connecting outlying activity centers to the PCIDs
- Along key corridors connecting to each activity center
- Within the activity centers (including the PCIDs)

Projects that were determined to be more than a few miles outside the PCIDs boundary or that were solely focused on operational improvements were omitted during this phase. The team used roughly the following roads as the general limits of the area in which to capture planned and programmed projects:

- Spalding Dr on the north
- Chamblee Dunwoody Rd and the Brookhaven/Chamblee Border on the east
- Peachtree Rd, Mabry Rd, Windsor Pkwy, Northland Dr, and Glenridge Dr on the south
- Lake Forrest Dr on the west

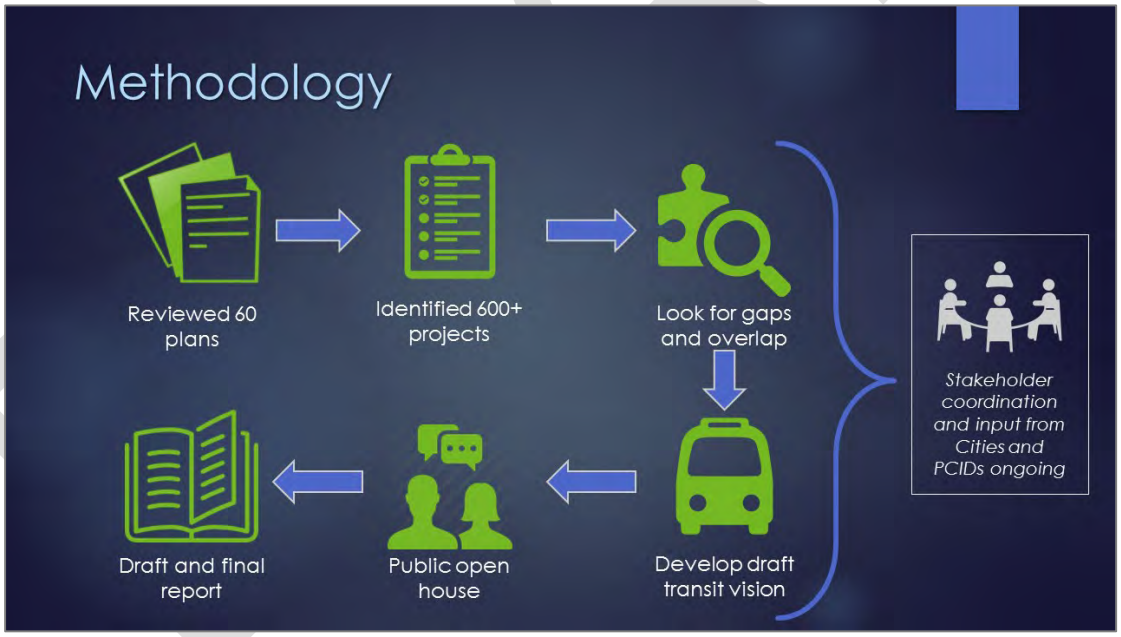


FIGURE 6. PROJECT METHODOLOGY

The team created maps, grouping projects by corridor and sub-area, to help facilitate discussions about overlapping project boundaries, project status, and priorities during work sessions with each jurisdiction. This process of updating and refining the project list continued throughout the course of the study as new information became available.

C. MAPPING EXISTING FACILITIES/SERVICES AND PREVIOUSLY PLANNED/PROGRAMMED PROJECTS

In order to identify gaps and help inform new recommendations, the team obtained Geographic Information System (GIS) data from each jurisdiction and mapped the existing sidewalk, bicycle facilities, trails/paths, roads, and transit service.

As the inventory of previously planned projects was refined, the team mapped confirmed projects. Where possible, the team utilized existing GIS data generated during previous studies. Where such data was not available, the team drew the projects in GIS, verifying extents with information contained within the source plan or study, online maps, and with project partners. Projects were color coded according to facility type and overlaid on the maps of existing facilities and services.

These maps were used to help further refine areas of overlap and gaps between existing, planned, and programmed facilities or projects. In turn, this information was used to help develop recommendations for filling gaps and facilitating connections to existing and future transit and multi-modal infrastructure.

D. TRANSPORTATION PROVIDER COORDINATION

To help inform the transit vision and development of new recommendations for improving last mile connectivity, the project team met with and conducted telephone interviews with representatives of transportation agencies and employer shuttle operators/service providers. Interviews were conducted with shuttle providers as follows:

- Lakeside Shuttle: interview with Crocker Partners (property manager) – October 17, 2016
- Perimeter-Glenlake Shuttle: interview with American Coach Lines (shuttle operator) – October 18, 2016
- Central Park Shuttle: interview with CBRE (property manager) – October 20, 2016

Members of the project team met in-person with GRTA staff on October 21, 2016 and with representatives of MARTA's Planning Division on December 15, 2016. In each of the interviews with transit providers and operators, the project team covered a number of topics related to general logistics and service characteristics as well as opportunities for and challenges to providing improved service within the study area.

Throughout the discussions with transit service providers, several recurring themes emerged. Most notably, providers indicated that traffic congestion in the afternoon peak period has detrimental effects on transit service in the area. Many providers noted that this congestion impacts the ability to ingress and egress commercial and office campuses and lengthens the amount of time it takes to complete a route, thus limiting route frequencies. One shuttle provider identified dedicated bus lanes as a potential opportunity for addressing this issue. Additionally, multiple providers noted the importance of filling in sidewalk gaps to adequately serve last-mile connections for riders traveling to final destinations. While GRTA noted that it recently started providing real-time information to passengers, none of the shuttle providers indicated that they offer a similar service. One provider of shuttle service indicated that there is strong interest among passengers for real-time information; however, the provider was not sure that the costs of implementing this service would be justified. Finally, a chief consideration for many of the providers and their users was an efficient interface with MARTA bus and rail stations. For the shuttles, this means ensuring that their riders have convenient, intuitive connections to MARTA bus and rail stations. For GRTA, this means limiting the duration and number of transfers required for riders to reach final destinations.

There are numerous opportunities for the jurisdictions to coordinate with MARTA to improve travel time and enhance transit service in the Perimeter area. MARTA is interested in pursuing opportunities for transit

signal priority (TSP) along major corridors, including those within the study area. New transit infrastructure, such as bus lanes and queue jumpers, which allow buses to bypass traffic at intersections, could have significant impacts on bus travel time and reliability. Coordinating with local municipalities would allow MARTA and the jurisdictions to pursue multiple funding sources for such projects. It will be important for each of the jurisdictions to continue to coordinate with MARTA as it pursues rolling out recommendations from its recently completed comprehensive operations analysis (COA).

E. STAKEHOLDER AND PUBLIC ENGAGEMENT

Throughout the course of the study, the project team worked closely with representatives of the participating jurisdictions – the project partners. The team facilitated work sessions with each partner jurisdiction individually and a joint work session that involved all participating partners. These sessions provided opportunities to obtain input, feedback, and clarification on previously planned projects, draft recommendations, and the transit vision.

In addition, the team gave briefings to the City Councils and PCIDs Board in late 2016 and early 2017 to provide an update on the study and present draft findings and recommendations. To solicit public input on the draft recommendations, the team facilitated a Public Open House meeting on January 26, 2017 at 400 Northpark in Sandy Springs. Finally, the team presented the final draft of the study to each of the three City Councils and the PCIDs Board in February and March of 2017. These presentations focused on the recommendations and public feedback received during and following the open house. Additional details about these public and stakeholder engagement activities is provided in Section 5.

4. EXISTING CONDITIONS

This section provides an overview of the demographic characteristics and the existing landscape of transportation infrastructure and services available within the study area. Given the unique composition of the study area with multiple overlapping geopolitical boundaries, some data presented in this section has been compiled from multiple data sources and synthesized.

A. OVERVIEW

The study area (shown in Figure 2) is located in north Metro Atlanta. It spans portions of three cities (Brookhaven, Dunwoody, and Sandy Springs), two counties (Fulton and DeKalb), and includes the Perimeter Community Improvement Districts (PCIDs). The study area is partly within the Atlanta-Sandy Springs-Roswell Metro Area, as designated by the U.S. Census. Perimeter Center, or the Perimeter area, is so-known for its location along the I-285 loop around Metro Atlanta, called "The Perimeter." The Perimeter area, indicated by the boundaries of the PCIDs, is roughly four square miles and straddles both GA 400 and I-285.

The PCIDs are self-taxing business districts established in 2001 to supplement and enhance government services and facilities within the District. The PCIDs are a combined community improvement district (CID), comprised of Central (DeKalb) and Fulton Perimeter Community Improvement Districts, and use property taxes to help accelerate transportation and infrastructure improvement projects.[1] The PCIDs utilizes property taxes from commercial properties within the District to provide services and facilities related to:

- Street and road construction and maintenance, including curbs, sidewalks, street lights, and traffic control devices
- Public transportation, including but not limited to services intended to reduce volume of traffic and encourage non-solo trips
- Stormwater and sewage collection and disposal
- Water distribution
- Parks and recreation

The PCIDs use these funds to leverage additional funding to pay for infrastructure and other improvements, working in collaboration with the cities of Brookhaven, Dunwoody, and Sandy Springs.

The Perimeter area is one of the largest business districts in the southeastern United States. It is the largest office market in Metro Atlanta and one of the region's biggest employment centers. In general, it is home to numerous corporate offices, retail, dining, and hospitality establishments as well as some medium and high-density mixed use and residential development. It is estimated that there are more than 123,000 employees and 29 million square feet of office space within Perimeter Center. More than 5,000 companies call the Perimeter area home, including numerous Fortune 500 companies, such as First Data Corporation, Newell Brands, State Farm Insurance, and UPS. Other major employment centers in the study area include Executive Park, Perimeter Summit, and Ashford Green. The area is also home to Perimeter Mall, one of the largest malls in Georgia, and has the highest concentration of medical facilities in Metro Atlanta. Perimeter is home to Emory St. Joseph's Hospital of Atlanta, Northside Hospital, and Children's Healthcare of Atlanta at Scottish Rite.

While commuting is a major focus of last mile connectivity, commuting trips to and from work comprise only a small proportion of total trips made in a given day. Commuting, in U.S. statistics, does not include

[1] Perimeter Community Improvement Districts website, http://perimetercid.org/about/

trips to school by students, workers attending business meetings, trips made to provide services to clients, or travel by people who travel as an essential part of their jobs, such as taxi, bus, or truck drivers. In fact, according to data from the National Household Travel Survey (NHTS), commuting constitutes just 16 percent of person trips and approximately 19 percent of person miles traveled and travel time overall.[2] Other household or resident travel makes up the majority of vehicle miles traveled.

Nationally, over the past ten years, roughly 76 percent of workers drive alone to and from work. This is consistent with statistics for the Atlanta-Sandy Springs-Roswell Metro Area. Across the country, between 2005 and 2015, carpooling decreased as a percentage of travel modes, while public transportation and working at home have increased slightly. Together they still only comprise about 10 percent of all workers. Walking and biking, meanwhile, have remained relatively steady at about three percent and 0.6 percent respectively. Many people commute into and out of the Perimeter area every weekday, and these trips represent a substantial portion of all travel within the Perimeter area, but this study also considers trips made outside of typical peak-hour periods.

The majority of the land uses within the boundaries of PCIDs are commercial, office, and hotel. There are also some pockets of residential development within the PCIDs and mixed use developments that contain residential components. Similarly, the activity centers within the study area – City Springs, Dunwoody Village, Georgetown, and the Brookhaven-Oglethorpe Station area – are also a mix of uses, including commercial, office, retail, and multi-family. In contrast, the areas between the PCIDs and activity centers are largely single family with a few parcels of institutional uses and a few multi-family residential parcels.

B. EMPLOYERS AND EMPLOYMENT DENSITY

Many companies are choosing to relocate to the Perimeter area because of the concentration of amenities, accessibility to public transportation, and proximity to Atlanta and area highways. In the past few years, two large corporations have announced plans to relocate their headquarters to the Perimeter area. State Farm Insurance Company, which already has employees in Perimeter Center, is constructing a new office building on 17 acres along Hammond Dr in Dunwoody. It is anticipated that State Farm will have approximately 6,500 employees on-site once the building is fully operational. Mercedes-Benz is also relocating its North American headquarters to the area and is building an office complex on 12 acres at Abernathy Rd near GA 400. It is estimated that the facility will employ approximately 600 employees.

In addition to the new State Farm and Mercedes-Benz developments, there are a number of pending redevelopment or new developments that have been approved and are in some phase of planning, design, or construction. These include a number of commercial and mixed use projects. The locations of the top 50 employers within the PCIDs are shown in Figure 7. As is visible from the map in Figure 8, many of the new development projects are located within close proximity of a MARTA rail station.

[2] Commuting in America 2013: The National Report on Commuting Patterns and Trends (January, 2015). AASHTO, http://traveltrends.transportation.org/

TABLE 3. TOP EMPLOYERS WITH 300 OR MORE EMPLOYEES

Employer	Est. Number of Employees
State Farm Insurance	6,500
Northside Hospital – Atlanta	5,000
IBM / IBM Internet Security Systems	3,950
Scottish Rite Children's Hospital	3,000
Intercontinental Hotels Group	2,800
Cox Enterprises Inc	2,005
Emory St Joseph Hospital	2,000
United Parcel Service (UPS)	1,678
AirWatch	1,400
Newell Rubbermaid, Inc	1,000
First Data Corp	1,000
Cox Communications Inc	826
Cox Automotive Inc	771
Jas Forwarding USA Inc	700
Mercedes Benz USA	600
Visiting Nurse Health System	600
Nordstrom	450
Convergent Resources Inc	445
Crawford & Co	434
Macy's	411
Global Payments Inc	410
Document Technologies Inc	400
Ventyx	378
Atlanta Journal-Constitution	337
Arby's Restaurant Group Inc	330
Allconnect Inc	315
Axiall Corp	300
BCD Travel	300
Elavon Inc	300
Costco	300
Hanover Insurance Co	300
Noble Systems Corp	300
Southeastern Data Corp Inc	300

(SOURCE: PCIDS, 2015)

1. State Farm
2. Northside Hospital-Atlanta
3. IBM / IBM Internet Security Systems
4. Scottish Rite Children's Hospital
5. Cox Enterprises Inc
6. Emory St Joseph Hospital
7. United Parcel Svc Inc
8. Intercontinental Hotels Group
9. AirWatch
10. Newell Rubbermaid Inc
11. First Data Corp
12. Cox Communications Inc
13. Cox Automotive Inc
14. Jas Forwarding USA Inc
15. Mercedes Benz USA
16. Visiting Nurse Health System
17. Nordstrom
18. Convergent Resources Inc
19. Crawford & Co
20. Macy's
21. Global Payments Inc
22. Document Technologies Inc
23. Ventyx
24. Atlanta Journal-Constitution
25. Arby's Restaurant Group Inc
26. Allconnect Inc
27. Axiall Corp
28. BCD Travel
29. Elavon Inc
30. Costco
31. Hanover Insurance Co
32. Noble Systems Corp
33. Southeastern Data Corp Inc
34. Krystal Co
35. Marriott-Perimeter Center
36. URS Corp
37. Internap Corp
38. Crowne Plaza-Atlanta Perimeter
39. Byers Engineering Co
40. Morrison Management Specists
41. Intersect Group
42. Equity Loans
43. CBS
44. Christian Alcohol & Drug Rehab
45. Hilton-Atlanta Perimeter Sts
46. Home Depot
47. Q100 Radio
48. SAP America Inc
49. Systel Of Delaware
50. Concourse Athletic Club

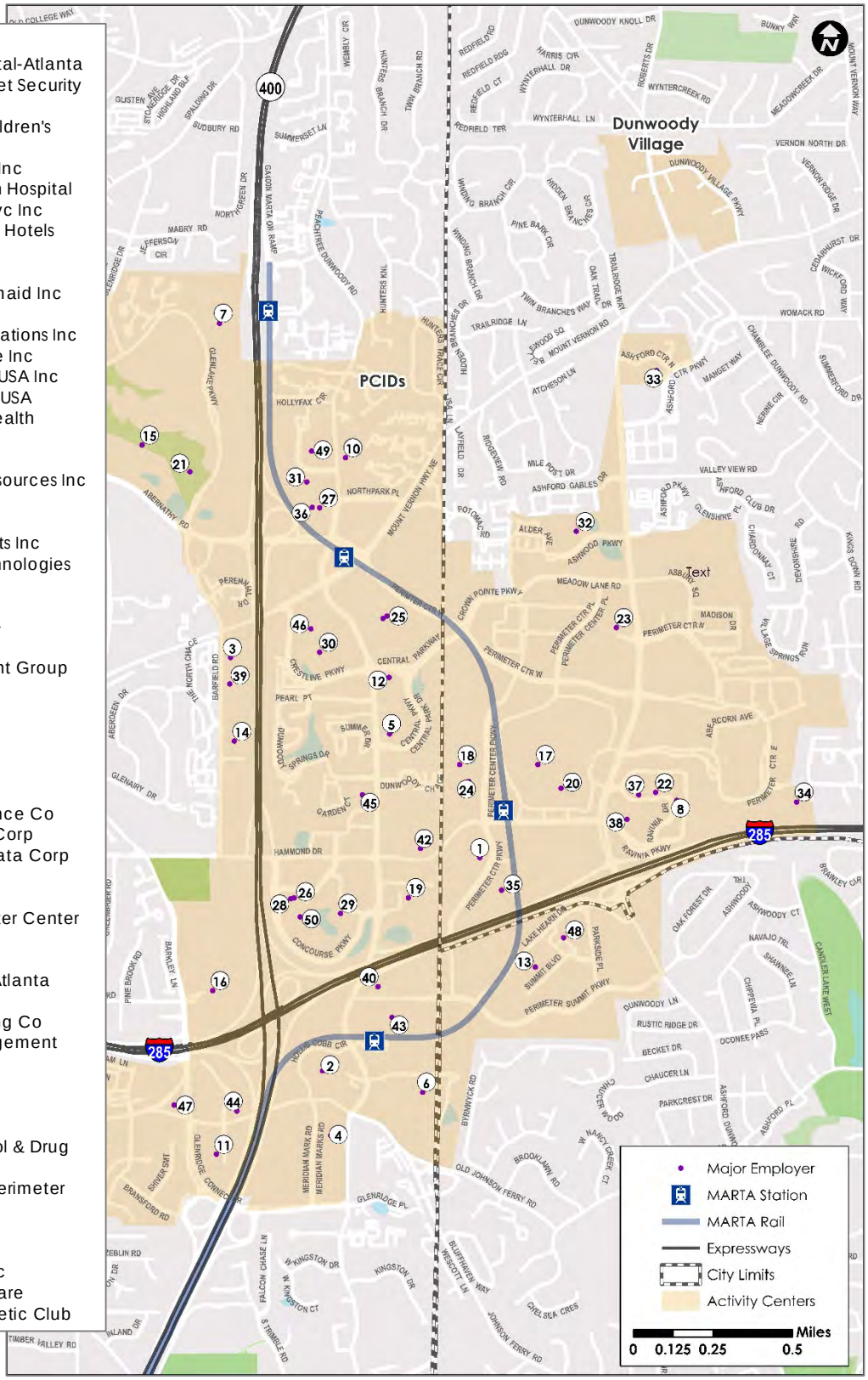


FIGURE 7. LOCATIONS OF TOP 50 EMPLOYERS WITHIN PCIDS (SOURCE: PCIDS, 2015)

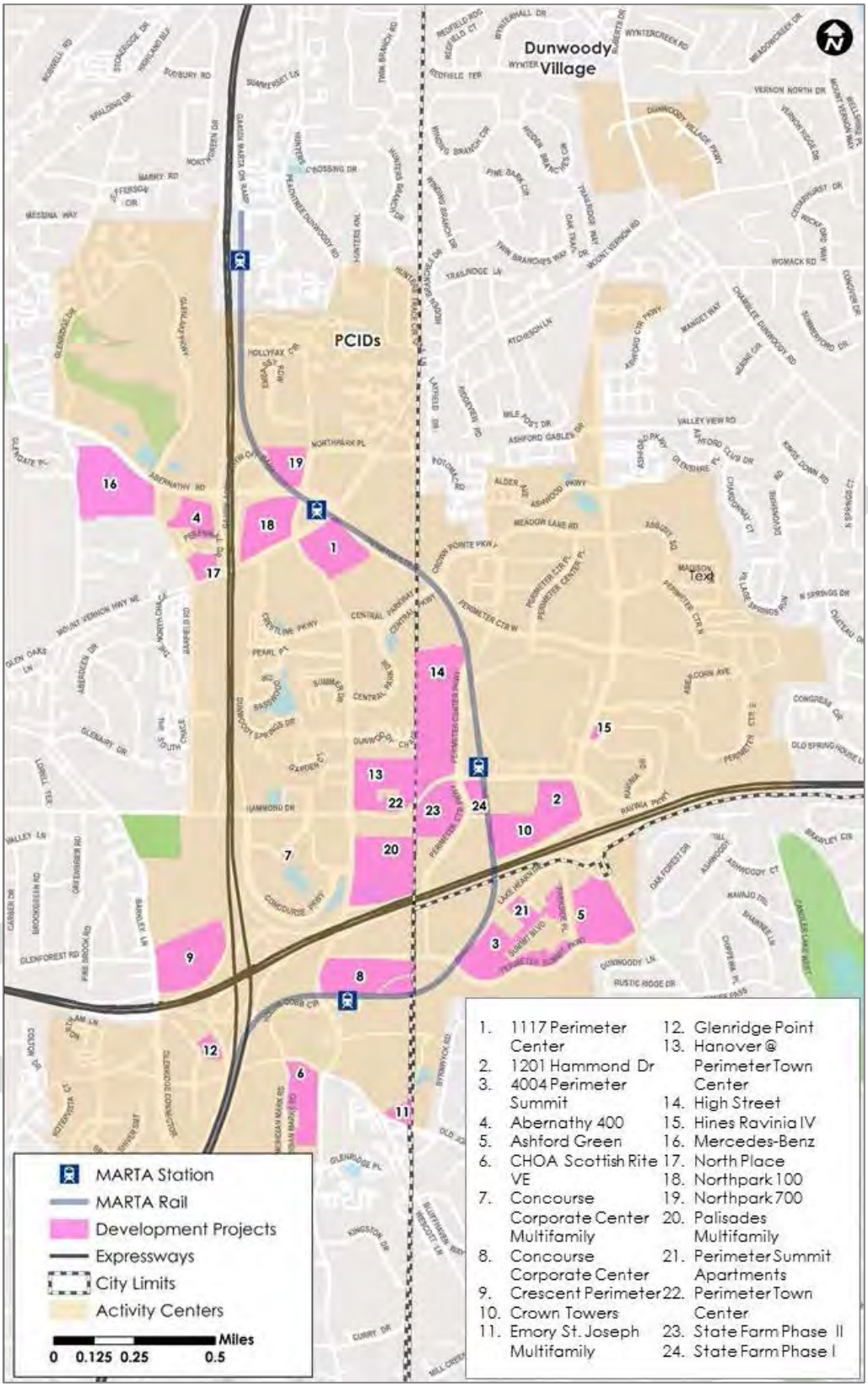


FIGURE 8. PROPOSED AND PLANNED DEVELOPMENT PROJECTS WITHIN PCIDS (SOURCE: PCIDS, BROOKHAVEN, AS OF MAY 2016)

Employment and residential density are both factors in transit service feasibility. An assessment of employment density is shown in Figure 9 and is based on the number of all jobs (part-time and full-time) reported in the 2015 Longitudinal Employer Household Dynamics (LEHD) data. Areas shaded with darker shades of blue denote locations with higher employment densities. As anticipated, the PCIDs area had the highest density of employment by far within the study area, with an especially high concentration of jobs around the hospital complex and Medical Center MARTA Station. The core PCIDs area has a minimum of 9,500 jobs per square mile. Outside of the PCIDs area, the area around the Brookhaven/Oglethorpe MARTA Station, City Springs - a new center point for the City of Sandy Springs, and the Georgetown area have somewhat higher densities of employment opportunities, each containing between 2,400 to 9,500 jobs per square mile. Portions of Dunwoody Village also fall into this category. These areas are potentially transit supportive if a connection can be made between these dense areas of employment and the locations where employees live.

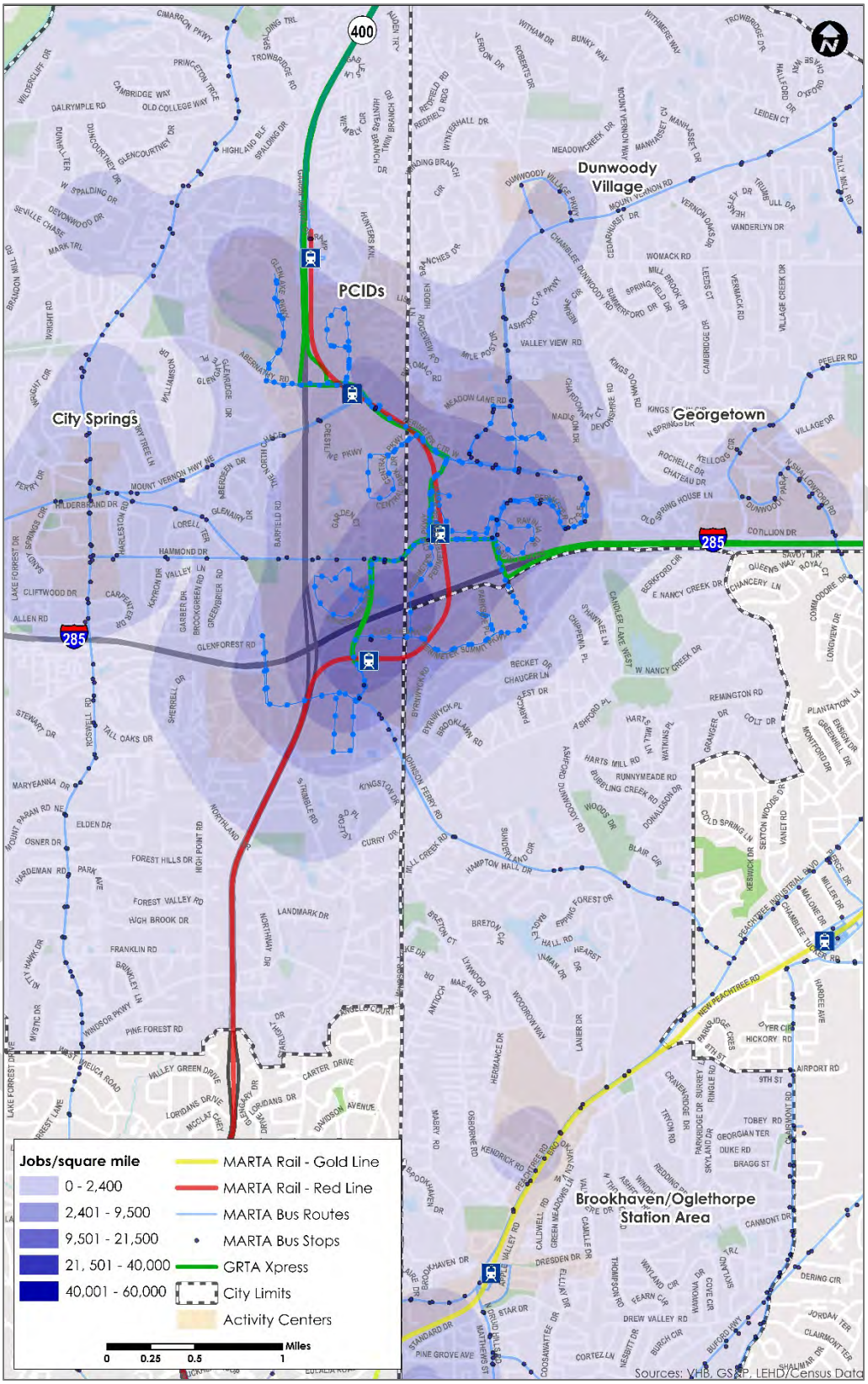


FIGURE 9. EMPLOYMENT DENSITY
(SOURCE: LEHD, US CENSUS, 2015)

C. POPULATION AND RESIDENTIAL DENSITY

Collectively, the three cities within the study area are home to nearly 200,000 people according to population estimates from the 2011-2015 American Community Survey (ACS):

- Brookhaven: 50,812
- Dunwoody: 47,727
- Sandy Springs: 100,691

According to the ACS, these represent slight increases over estimates for the preceding three years, including roughly a seven percent increase for Brookhaven, a two percent increase in Dunwoody, and a four percent increase in Sandy Springs since 2013. It is anticipated that populations in all three cities will continue to grow, as has been the case throughout Metro Atlanta over the past few years. According to the U.S. Census Bureau, the region grew by just under two percent between 2014 and 2015 and estimates indicate that over the five-year-period from 2010 to 2015, population in Sandy Springs increased at a faster pace (roughly 12 percent) than in Brookhaven or Dunwoody (both roughly six percent).

The populations of these cities are relatively dispersed, with pockets of moderately concentrated residential housing scattered across each city, as shown in Figure 10. Among the three cities, Brookhaven has the greatest concentration of residents, with approximately 6,700 people square mile, followed by Dunwoody with 3,700 and Sandy Springs with 2,700. There are several residential developments already within Perimeter Center, including but not limited to those along Hammond Dr between Peachtree Dunwoody Rd and Perimeter Summit Pkwy, and Dunwoody Chace just north of that area. Future developments, including Palisades, High Street, and Lakeside will also contribute residential units to the area.

The Institute of Transportation Engineers (ITE) produces household density threshold guidelines for transit demand. For example, ITE recommends densities of four to five households per acre to support buses with headways of 60 minutes. Using these guidelines as well as household densities obtained from the Atlanta Regional Commission's (ARC) 2020 projections, each of the traffic analysis zones (TAZ) within the study area was assessed. Figure 10 shows each of the TAZs with the type of transit recommended in ITE's guidelines. Areas shaded in pink denote locations that can support buses every 30 minutes and areas shaded in orange identify locations that can support buses every 60 minutes. Based on the ITE guidelines of residential density alone, there are few areas within the study area that can support buses at least every 30 minutes to 60 minutes. Within the study area, the locations with the highest residential density include the portion of Sandy Springs just south of I-285, northeast of the intersection of Abernathy Rd and Roswell Rd, the area surrounding North Springs MARTA rail station, and the northwest corner of Dunwoody.

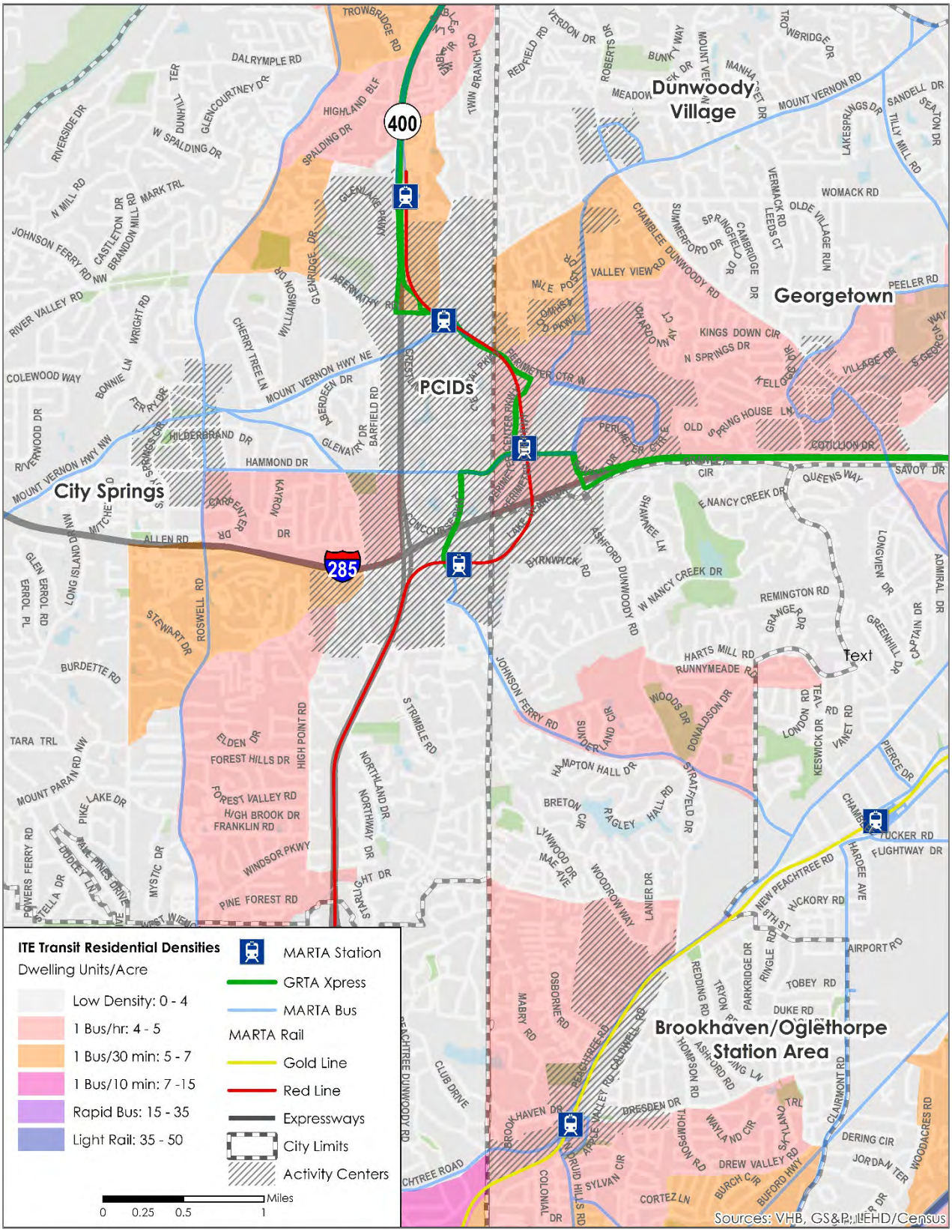


FIGURE 10. RESIDENTIAL DENSITY WITHIN THE STUDY AREA (SOURCE: ARC 2020 DATA)

D. 2013 Perimeter Travel Survey Results

In 2013, the PCIDs, in coordination with ARC, conducted transportation surveys of residents, employees, and visitors. This effort included a mail home travel survey of residents, intercept surveys at major Perimeter employment centers, and intercept surveys at three MARTA Stations (Medical Center, Dunwoody, and Sandy Springs). Data from these surveys were compiled to understand and assess transportation services within Perimeter.

Several questions directly asked participants about factors affecting their decisions to take transit in Perimeter and if they would in the future. When asked what are the most important factors for deciding to take a local circulator, the top two responses were "short wait times" and "get to destination quickly" as shown in Figure 11. Local circulator was included in the question because of the current employer-sponsored small bus circulators in service and at the time, there were discussions of potential consolidation or addition of a new circulator.

The top two responses indicated a focus on time savings, which is difficult for a circulator to deliver, particularly during congested peak periods in the mornings and afternoons. However, one of the benefits of employer shuttles over a consolidated circulator route is the directness of service. The design of major office campuses in Perimeter in most cases include long walks to the front doors that face away from the streets making it difficult for pedestrians to access. The employer shuttles provide direct service to the front door without making any other stops. Therefore, if consolidated, any riders whose stop is not first, would have to spend additional time on-board. The third most frequent response was "low fare." A consolidated shuttle, even if it had a small fare, would be hard pressed to beat free shuttles provided by employers and building owners.

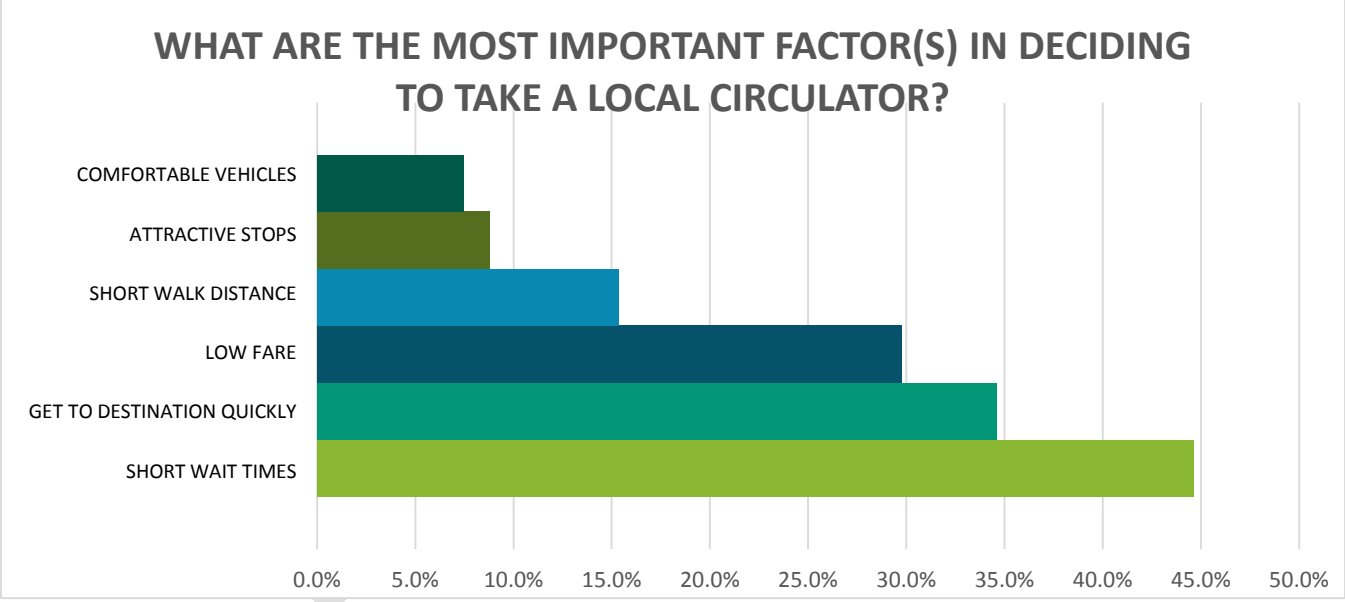


*Figure 11. Local Circulator Factors**

**Note, participants were able to select more than one important factor, therefore percentages do not add up to 100%*

Respondents to the survey were asked how likely they would be to use various types of transit or pedestrian facilities. As shown in Figure 12, just under 25 percent of participants stated they would use a free shuttle, approximately 30 percent said they would be likely or very likely to use pedestrian facilities, and almost 45 percent stated they would likely or very likely use rapid bus services. While rapid bus service was the

most likely transit mode participants stated they might use, it is important to note that over 50 percent of participants stated they are neutral or would be unlikely to use any of these modes at all.

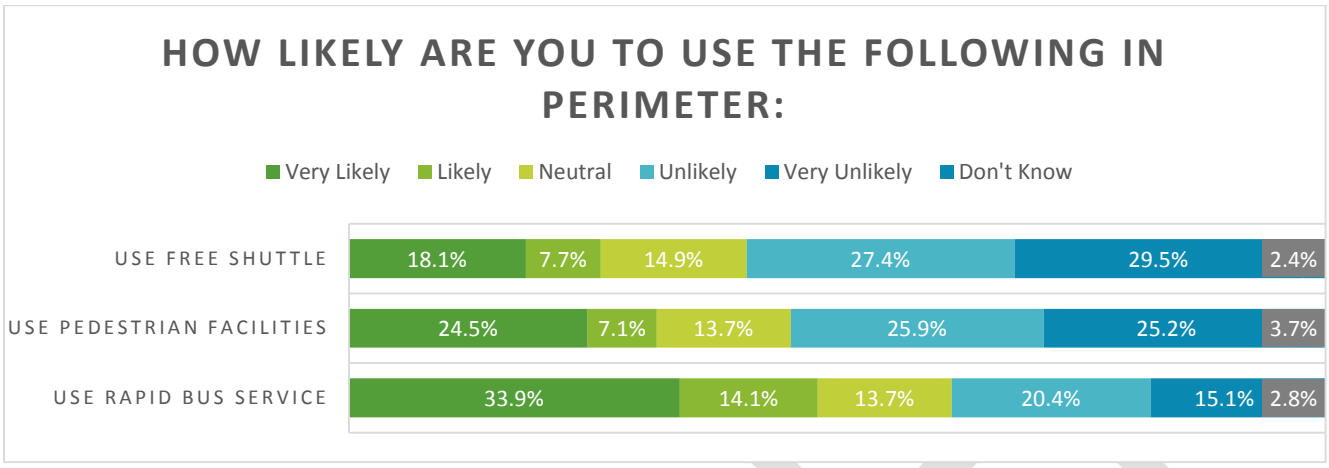


FIGURE 12. LIKELINESS TO USE FACILITIES OR SERVICES IN PERIMETER

Transit circulating within Perimeter is mostly applicable to people who live in Perimeter or commute via an alternative mode to Perimeter and need that last mile connection from MARTA stations or GRTA stops. While there are transit services currently providing connections to Perimeter, it is important to note that they do not match well with existing travel patterns to the Perimeter area. MARTA provides services mostly to the south, while GRTA currently provides limited express service from Cumming to the north and from West Conyers to the southeast. However, areas such as Gwinnett County and Cobb County did not have direct transit service to the Perimeter area at the time of the survey, which may have affected participants' responses. Plans are in development for two new GRTA routes to the Perimeter area, from East Cobb County and from Gwinnett County (see Section 4.G for more details). For employees residing in such areas, a last mile connection via shuttle, pedestrian facilities, or rapid service, is unlikely without regional transit service connecting them to Perimeter. Consequently, increasing the overall mode share in Perimeter would require coordinating with other transit agencies (i.e., CobbLinc and Gwinnett County Transit) to provide service to areas that are currently not served.

E. EXISTING BICYCLE AND PEDESTRIAN NETWORK

The Perimeter area has a variety of non-motorized transportation options to serve residents, employees, and visitors. The PCIDs and Cities of Brookhaven, Dunwoody, and Sandy Springs have made significant investments in bicycle and pedestrian infrastructure in recent years. Each city within the study area has an existing, yet fragmented, network of sidewalk. Within the boundaries of the PCIDs, sidewalk coverage is fairly complete, with sidewalk provided on both sides of most roads and even within some commercial campuses. In total, it is estimated there are over 35 miles of sidewalks within the PCIDs. Outside of the boundaries of the PCIDs, sidewalk coverage is sparser and concentrated primarily on major roads leading into and out of the various activity centers, such as Mt. Vernon Rd, Roswell Rd, Ashford Dunwoody Rd, Peachtree Dunwoody Rd, Chamblee Dunwoody Rd, and Johnson Ferry Rd. Several smaller connector streets, such as Glenridge Dr, Windsor Pkwy, West Nancy Creek Dr, and Womack Rd are also fairly well covered by sidewalk. There is a significant gap in sidewalk along the residential portion of Hammond Dr within the City of Sandy Springs, west of Glenridge Dr. Sidewalk is also lacking in many residential

neighborhoods and on some private roads within office complexes, making connections to the existing network difficult. Additionally, some existing segments of sidewalk do not meet current design standards, such as on Johnson Ferry Rd near the medical complexes. Figure 14 shows existing sidewalk within the study area.

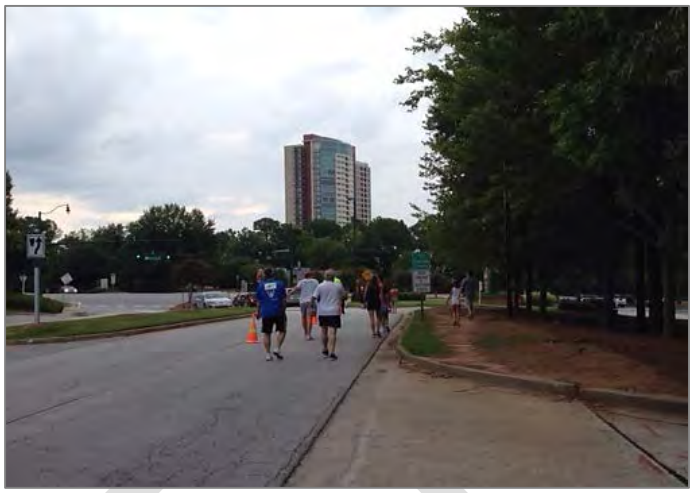


FIGURE 13. LACK OF SIDEWALK ALONG CENTRAL PKWY (CREDIT: K. WESCOTT)

Georgia law generally prohibits riding a bicycle on the sidewalk (Section 40-6-144 Georgia Code); however, the code provides local municipalities the flexibility to make it legal for children under the age of 12 to operate bicycles on sidewalks. Each City within the study area has a different approach to bicycles on sidewalks: the cities of Dunwoody and Sandy Springs allow broader use of sidewalk than specified by the Georgia Code and Brookhaven allows children under age 12 to ride bikes on sidewalks. (For additional details on bicycle traffic laws, refer to the Georgia Code or the PCIDs *Bicycle Implementation Strategy)*.

Within the boundaries of the PCIDs, there are more than ten miles of bike lanes. Figure 15 shows the locations of existing bicycle facilities, including bike lanes, shared shoulders, and multi-use paths or trails. The predominant facility type within the City of Sandy Springs is the sidepath, which are provided on several roads in and around City Springs, including portions of Mt. Vernon Hwy, Johnson Ferry Rd, Roswell Rd, and Lake Forrest Dr. Existing bicycle lanes are mainly concentrated within the Dunwoody portion of the PCIDs, on the roads surrounding Perimeter Mall, including Perimeter Center West, Perimeter Center East, Perimeter Center Pkwy, Perimeter Center Pl, and Meadow Ln. Buffered bike lanes, which provide more separation from vehicular traffic than typical on-street bike lanes, are present on several roads, such as Perimeter Center East and Perimeter Center Place. Bike lanes are also present on a portion of Barfield Rd, between Hammond Dr and Mt. Vernon Hwy in Sandy Springs and on Perimeter Summit Pkwy and a portion of Ashford Dunwoody Rd in Brookhaven. There is a gap between existing bike lanes along Mt. Vernon Rd between the Dunwoody-Sandy Springs city limits and Perimeter Center West. Several shared shoulders or "sharrows" are present on key corridors in Sandy Springs, such as Mt. Vernon Hwy, Lake Forrest Dr south of I-285, and a section of Johnson Ferry Rd. In Brookhaven, shared shoulders are provided on parts of Johnson Ferry Rd and Dresden Dr among others.

Currently, there are two dedicated multi-use trails within the study area: Dunwoody Trailway in Dunwoody and Nancy Creek Trail in Brookhaven. The Dunwoody Trailway begins in Brook Run Park and ends at Georgetown Park at Chamblee Dunwoody Rd. Nancy Creek Trail originates near Keswick Park in Chamblee, on Durden Rd and connects Blackburn Park with Murphey Candler Park, traveling along Ashford Dunwoody Rd between Blackburn Park and West Nancy Creek Dr. The Abernathy Greenway Park in Sandy Springs, between Brandon Mill Rd and Wright Rd, features includes a lighted trail. Several future multi-use paths or trails are planned for the area, including an expansion of the PATH 400 trail, which are discussed in more detail in Section C.

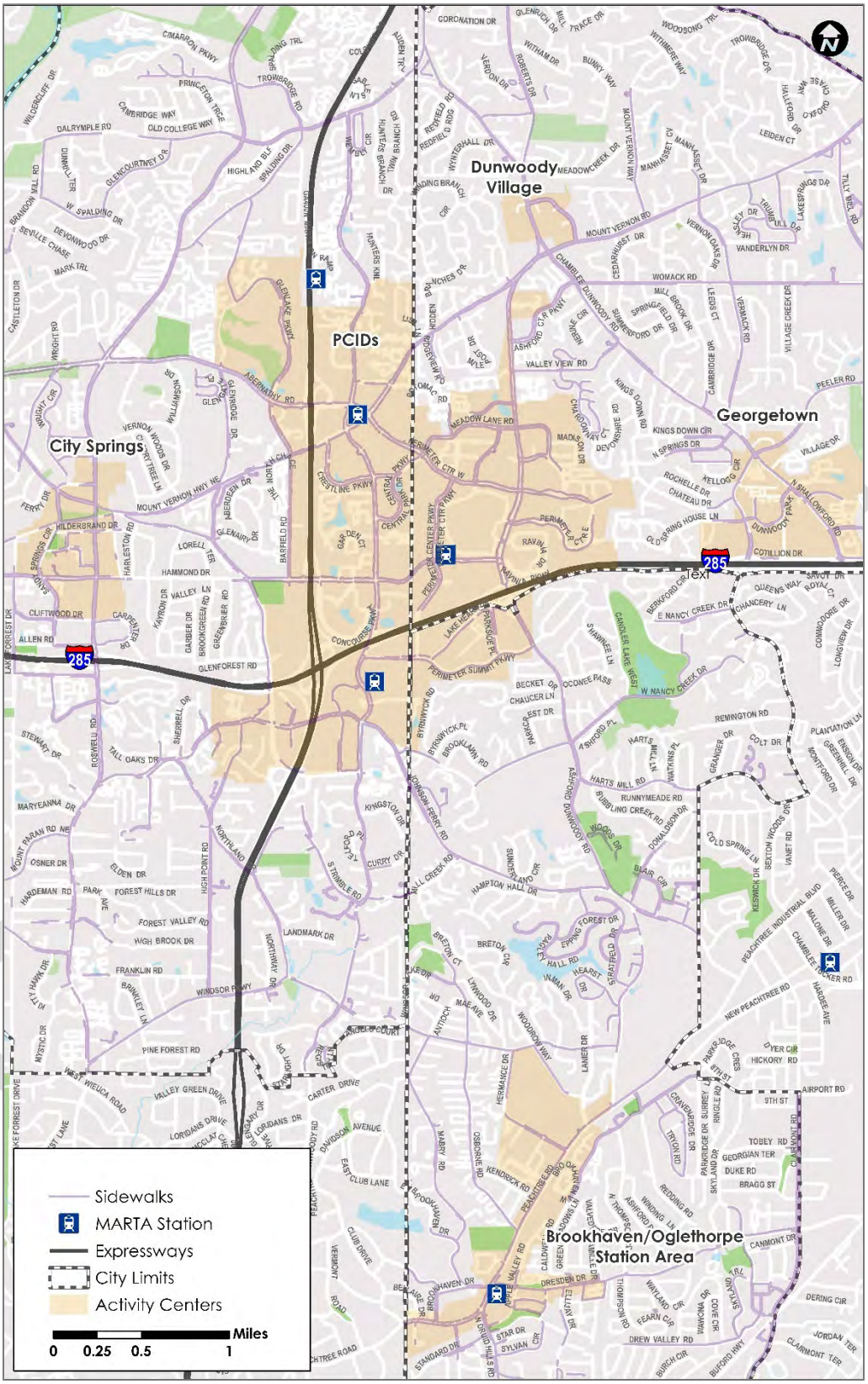


FIGURE 14. EXISTING SIDEWALK WITHIN THE STUDY AREA
(SOURCE: BROOKHAVEN, DUNWOODY, SANDY SPRINGS, ARC)

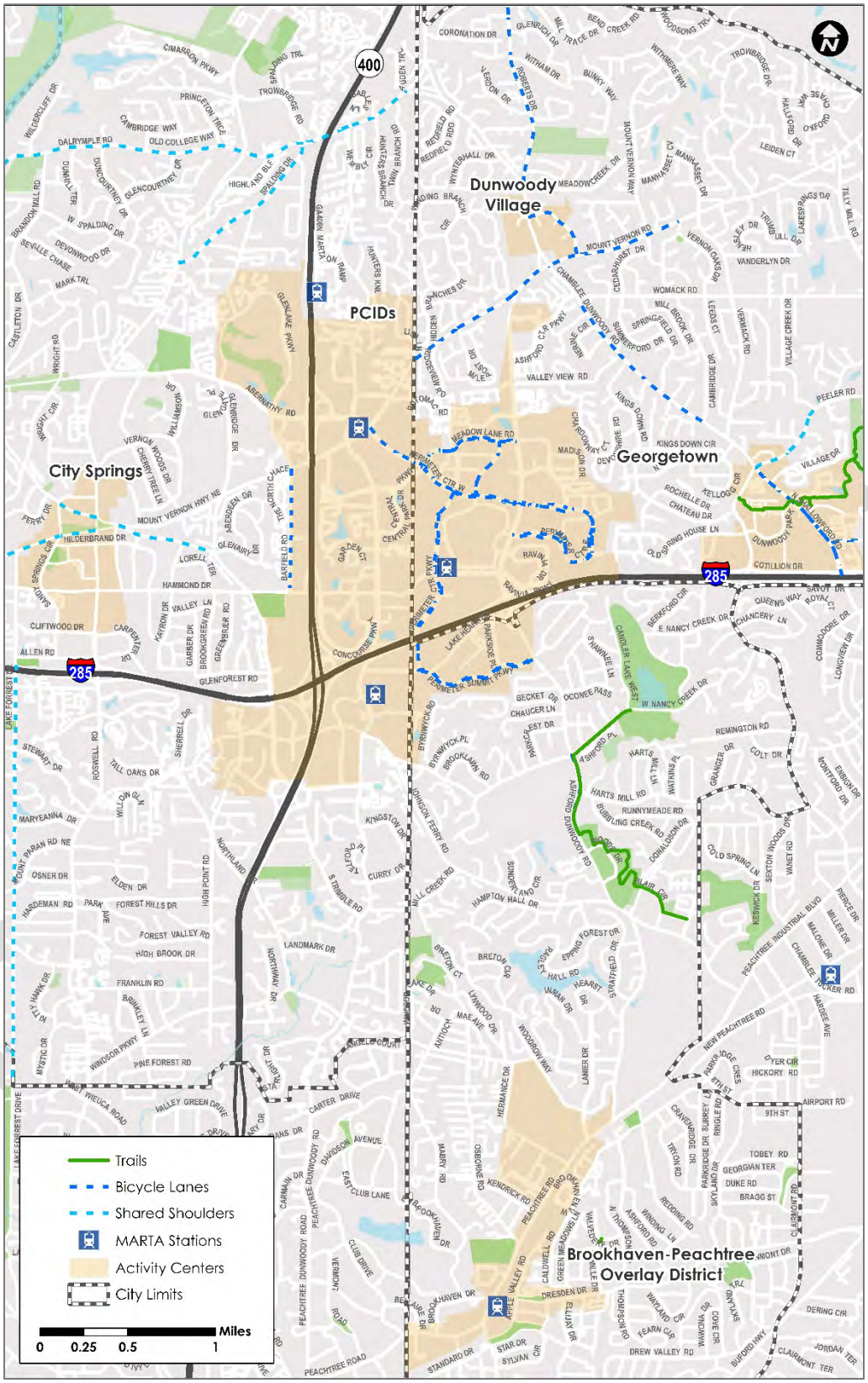


FIGURE 15. EXISTING BICYCLE FACILITIES AND MULTI-USE PATHS OR TRAILS (SOURCE: BROOKHAVEN, DUNWOODY, SANDY SPRINGS, PCIDS, ARC)

Despite the fragmented nature of the active transportation network, the cities and PCIDs continue to invest in and make strides in constructing facilities such as walking paths, trails, and bike lanes, and that is one reason this *Last Mile Connectivity Study* is being undertaken. There is substantial demand for non-motorized travel within the area. Recent research and travel data point to trends that indicate that bicycling is an important component of creating a desirable market for commercial, retail, and residential development. There is strong evidence that companies are making conscious decisions to locate in places that offer employees a variety of commute options. In fact, State Farm repeatedly cited proximity to transit as one of the key reasons for building new hubs and relocating to certain sites, including Perimeter Center, where the company will be adjacent to MARTA's Dunwoody Station. In Tempe, AZ and Richardson, TX, State Farm's new facilities are within walking distance of light rail stations. Employers and employees are increasingly indicating preferences for living and working in areas that offer convenient access to a variety of entertainment and housing options.

Building upon these trends, in 2012, the PCIDs commissioned a *Commuter Trail Master Plan* that aimed to facilitate connections between MARTA rail stations and workplaces within the Perimeter area. As part of that study, the project team analyzed concentrations of job sites in relation to the location of MARTA stations to identify desirable or likely paths that might be traveled between the rail stations and workplaces. Figure 16 shows these desirable or likely paths. High density nodes, such as around Concourse, State Farm, and Ravinia, in close proximity to the Dunwoody MARTA Station create opportunities for many non-motorized trips. The area around Dunwoody MARTA Station exhibits the highest concentration of demand for trips to employment sites, followed by areas along Glenridge Dr, the hospital complex, and by pockets or hot spots scattered throughout the area. Recreational amenities, such as the Nancy Creek Trail and the Dunwoody Trailway and the forthcoming PATH 400 trail and Perimeter Park @ Dunwoody Station, also generate demand for bicycle and pedestrian facilities and connections between them.

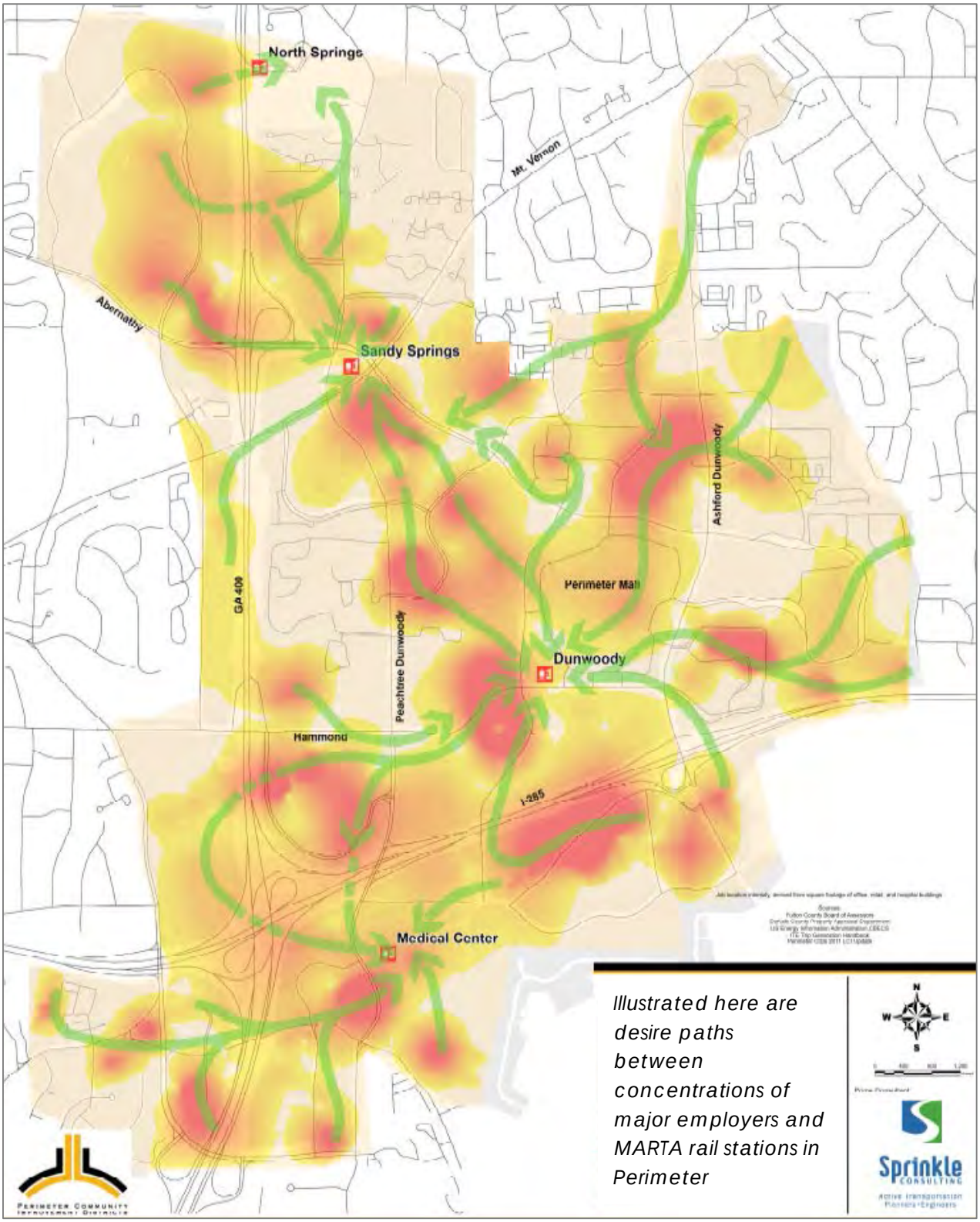


FIGURE 16. LIKELY OR DESIRABLE PATHS BETWEEN EMPLOYERS AND TRANSIT
(SOURCE: FULTON COUNTY BOARD OF ASSESSORS, DEKALB COUNTY PROPERTY APPRAISAL DEPT., US ENERGY INFORMATION ADMINISTRATION, CBECS, ITE TRIP GENERATION HANDBOOK, PCIDS 2011 LCI UPDATE)

F. EXISTING ROADWAY NETWORK

The roadway network within and around PCIDs is widely varied – roads vary in terms of the number of lanes, the width, and speed limits. Several key corridors have medians present, including Ashford Dunwoody Rd, Perimeter Center East and West, and portions of Hammond Dr, Abernathy Rd and Glenridge Dr among others. Posted speed limits generally range from 35 miles per hour (mph) to 45 mph, and in school zones, speed limits are restricted to 25 mph during certain hours.

The study area is bisected by two major highways: Interstate 285 (I-285), which runs east-west through the study area, and State Route 400 (GA 400), which is the major north-south highway that connects the Perimeter area to the City of Atlanta. GA 400 also provides access to I-75 and I-85 and to destinations north of the study area. In accordance with guidance from the Federal Highway Administration (FHWA), all roads are assigned a functional classification based upon the role they play in moving vehicles through the roadway network. Functional classification also provides context about a road based upon the expectations about roadway design, speed, capacity, and relationship to existing and future development. There are three classes of roadways: arterials, collectors, and local roads. All streets and highways are grouped into these three classes, and there are sub-categories, which are determined based upon a number of factors and characteristics. All three classifications of roads are present within the study areas, although most roads are classified as minor arterials, as shown in Table 4.

TABLE 4. FUNCTIONAL CLASSIFICATION OF KEY CORRIDORS

Corridor	Functional Classification
Abernathy Rd	Urban Principal Arterial
Ashford Dunwoody Rd	Urban Minor Arterial
Chamblee Dunwoody Rd	Urban Minor Arterial
Glenridge Connector / Glenridge Dr	Urban Minor Arterial
Hammond Dr	Urban Minor Arterial
Johnson Ferry Rd	Major Collector in Sandy Springs, Minor Arterial in Brookhaven
Mount Vernon Rd/Hwy	Major Collector east of Roswell Rd, Minor Arterial west of Roswell Rd
Peachtree Dunwoody Rd	Urban Minor Arterial
Windsor Pkwy	Major Collector

The key roads considered as part of this study are generally city streets. Most intersections within the boundaries of the PCIDs are equipped with pedestrian signals and stamped asphalt crosswalks. Outside of the PCIDs, key intersections also generally include crosswalks and pedestrian signals, but this varies throughout the study area. To provide some context for the types of roads that characterize the Perimeter area, below are general descriptions of key segments of roads based upon data obtained from the Georgia Department of Transportation (GDOT).

Abernathy Road – The portion of Abernathy Rd within the Perimeter area has between four and six lanes. It is widest near the on and off ramps to GA 400. The speed limit west of Roswell Rd is 35 miles per hour (mph) and changes to 45 mph east of Roswell Rd. Sidewalk is present in some segments. It is divided by a median composed of concrete and, in some locations, grass. A bike lane is present on portions of Abernathy Rd, west of Cherry Tree Ln.

Ashford Dunwoody Road – The portion of Ashford Dunwoody Rd within Dunwoody (closest to the Perimeter area) has a speed limit of 45 mph. In Dunwoody, it has anywhere from four lanes, near Mt. Vernon Rd, to ten lanes near the Perimeter Mall. Sidewalk is present in some segments and most segments between Ashford Center North and I-285 have a planted median divider. South of I-285, in Brookhaven, the speed limit changes to 40 mph and the road transitions from six to two lanes south of Perimeter Summit Pkwy. Ashford Dunwoody Rd has no median within Brookhaven and bike lanes and sharrows are present in the vicinity of Blackburn Park.

Chamblee Dunwoody Road – Chamblee Dunwoody Rd within Dunwoody is an undivided road with a speed limit of 35 mph. Sidewalk is generally present on one side of the road or the other. It is mainly a two- or three-lane road, except near I-285, where additional turn lanes are provided.

Glenridge Drive – The portion of Glenridge Dr north of I-285 has a speed limit of 35 mph. It generally has sidewalk present on one side of the road and has two or four lanes. Portions of the road are divided by a concrete median. Between Johnson Ferry Rd and Roswell Rd, Glenridge Dr is similar, with a speed limit of 35 mph, two to four lanes with some additional turn lanes and striped median dividers in some locations.

Hammond Drive – Hammond Dr spans both Sandy Springs and Dunwoody and changes dramatically from one end of the road to the other. The speed limit is 35 mph. Sidewalks are generally present on both sides of the road within the PCIDs. The width of the road varies greatly, from two lanes west of Glenridge Dr to nine lanes on the bridge over GA 400. Parts of the road have a concrete median in the middle. In Dunwoody, most of the median is landscaped.

Johnson Ferry Road – Johnson Ferry Rd between Old Johnson Ferry Rd and Glenridge Dr has a speed limit of 35 mph. Sidewalk is present in some segments of the road, which has between four and six lanes. West of Glenridge Dr, Johnson Ferry Rd continues as primarily a two-lane, undivided road with some turn lanes and a speed limit of 35 mph through City Springs.

Mount Vernon Highway/Mount Vernon Road – Mt. Vernon Hwy within the City of Sandy Springs has a posted speed limit of 35 mph. It has between two and six lanes. Between Crestline Pkwy and Northpark Pl, there is a planted median. Segments of the western portion of the road do not have sidewalks, while the portion east of GA 400 has sidewalk on one side of the road or the other. East of Northpark Pl, near the border between Sandy Springs and Dunwoody, Mt. Vernon Hwy becomes Mt. Vernon Rd. Within Dunwoody, Mt. Vernon Rd has a speed limit of 35 mph and bike lanes on both sides of the road. It is mainly a two-lane road but widens near Ashford Dunwoody Rd.

Peachtree Dunwoody Road – Peachtree Dunwoody Rd from Abernathy Rd to Glenridge Connector is mainly a divided road with a narrow concrete or planted median. The posted speed limit is 35 mph. It has between four and seven lanes, and sidewalk is generally present. South of Glenridge Connector, Peachtree Dunwoody Rd narrows to two lanes and is primarily residential.

In general, roads in and around the Perimeter area are characterized by high-volume traffic. The number of vehicles traveling on a given road varies widely, ranging anywhere from 12,400 vehicles per day on Mt. Vernon Hwy near Peachtree Dunwoody Rd to 49,000 on Ashford Dunwoody Rd in front of Perimeter Mall. Average annual daily traffic (AADT) volumes for the year 2015 as reported by GDOT are provided for select key corridors and are listed in Table 5.

TABLE 5. AVERAGE DAILY TRAFFIC VOLUMES ON SELECT KEY CORRIDORS

Key Corridor	Closest Cross-Street	AADT
Abernathy Rd	Glenridge Dr	33,100
Ashford Dunwoody Rd	Perimeter Summit Pkwy	18,900
Chamblee Dunwoody Rd	Kings Down Rd (south of Womack Rd)	16,000
Glenridge Dr	Glenridge Connector	20,700
Hammond Dr	Glenridge Dr	28,400
Johnson Ferry Rd	Old Johnson Ferry Rd	15,600
Mt. Vernon Hwy	Perimeter Center West	26,000
Perimeter Center W	Perimeter Center Pkwy	28,500
Peachtree Dunwoody Rd	Dunwoody Springs Dr	25,500

(SOURCE: GDOT, 2015)

G. EXISTING TRANSIT SERVICES IN STUDY AREA

Perimeter is served by two regional transit agencies: the Metropolitan Atlanta Rapid Transit Authority (MARTA) and Georgia Regional Transportation Authority (GRTA). Additionally, several privately operated local shuttles provide access to major employers and hospitals in Perimeter from the MARTA rail stations. This section provides an overview of the existing and planned services for each of these entities. Figure 17 shows a map of transit service in the area.

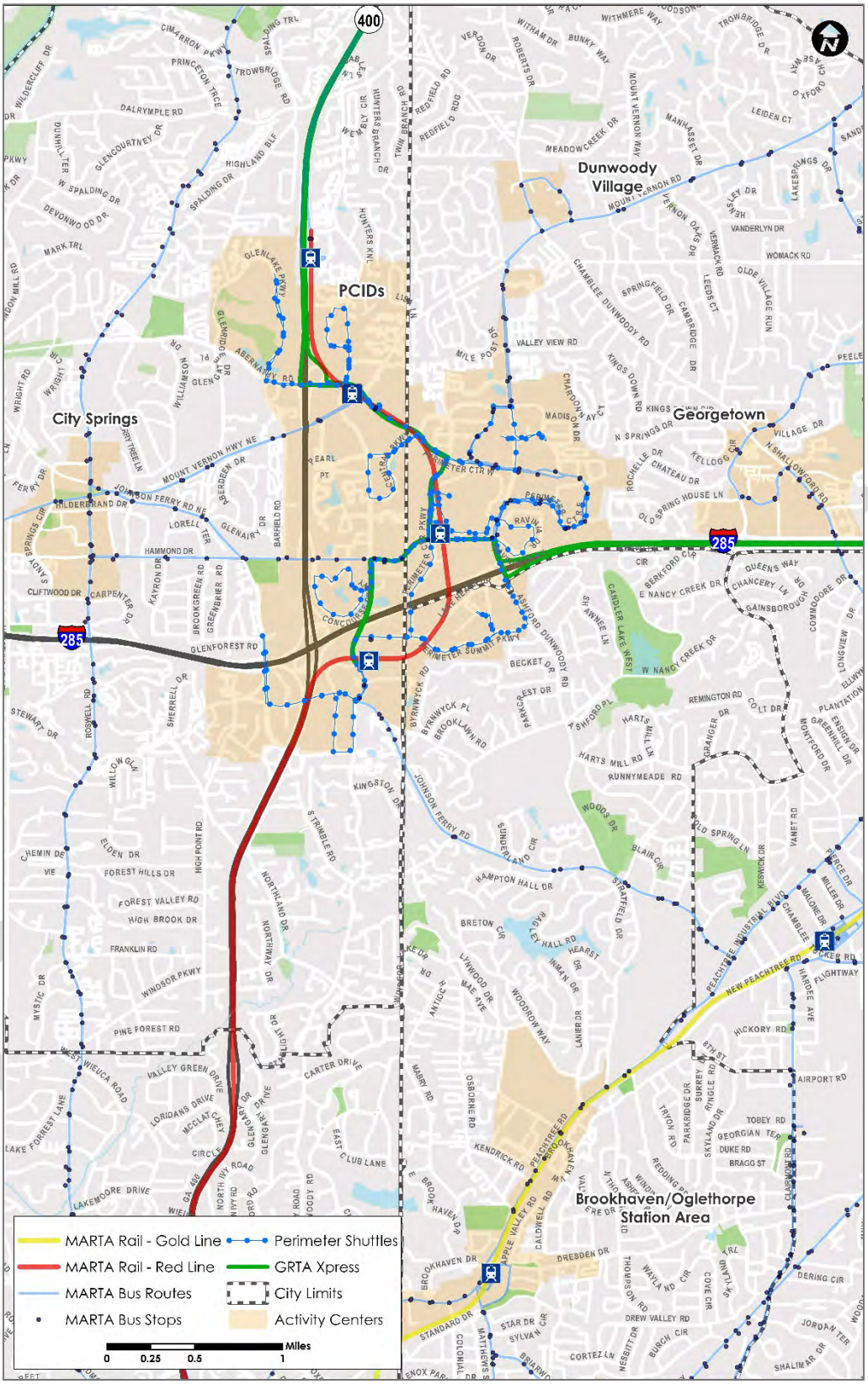


FIGURE 17. EXISTING TRANSIT
(SOURCE: ARC, PCIDS)

MARTA

MARTA is the regional rail and local bus provider for Fulton, DeKalb, and Clayton Counties, which includes the cities of Brookhaven, Dunwoody, and Sandy Springs. There are three rail stations inside the PCIDs boundaries: Dunwoody, Medical Center, and Sandy Springs. Additionally, the North Springs station is located less than a mile to the north of the PCIDs boundaries. Five local MARTA bus routes provide connectivity within the tri-city study area.

- MARTA Route 5 provides a connection between Perimeter and City Springs, with service from Dunwoody MARTA rail station west along Hammond Dr, northwest along Glenridge Dr, and then south along Roswell Rd into Buckhead. Weekday headways range from 15 to 20 minutes during the day and peak hours. (Note: MARTA plans to increase the frequency of buses on this route to every 15 minutes).
- MARTA Route 87 provides a direct connection between City Springs and Perimeter with service from Dunwoody MARTA rail station west along Hammond Dr and then north along Roswell Rd. Weekday headways range from 15 to 20 minutes during the day and peak hours.
- MARTA Route 148 provides connectivity from Perimeter to City Springs with service from Sandy Springs MARTA rail station southwest along Mt. Vernon Rd through City Springs and continuing west to Powers Ferry Rd/Northside Dr. Weekday service is provided during peak hours every 60 minutes.
- MARTA Route 25 provides connectivity from the Brookhaven/Oglethorpe MARTA Station to Perimeter with service north along Peachtree Rd and then northwest along Johnson Ferry Rd to the Medical Center MARTA rail station. Weekday service operates approximately every 45 minutes during the day, including during peak periods.
- MARTA Route 150 provides connectivity between Perimeter and Dunwoody Village as well as local circulation throughout the Perimeter area with service from Dunwoody MARTA rail station east along Hammond Dr, north along Ashford Dunwoody Rd, east and looping around Perimeter Center East, north along Perimeter Center Place, north along Ashford Dunwoody Rd, and northeast along Mt. Vernon Rd through Dunwoody Village. Weekday service ranges from 30 to 45 minutes during the day and peak periods.

In 2015 MARTA completed a *Comprehensive Operations Analysis (COA)* in which all routes were analyzed and evaluated for efficiency and coverage. The recommendations from the COA include multiple types of transit service, including local bus, arterial rapid bus, and circulator service. The recommendations within the study area include all of these service types.

Routes 25 and 150 will generally continue as local service with buses provided every 30 to 90 minutes. The general alignment of these routes is expected to remain the same. Local circulator services are short, circuitous routes that provide access to MARTA rail stations and improve last mile circulation and connectivity. There is generally one recommended for Perimeter, but no specific routing decisions have been made.

Arterial rapid bus service will provide buses at least every 15 minutes and will leverage transit signal priority, queue jumpers, and bus lanes where applicable. These arterial rapid bus routes will serve as core routes throughout the MARTA system. The COA recommends stops spaced approximately every ¼ to 1/3-mile to help maintain frequent service. Within the study area, arterial rapid bus service is planned for Roswell Rd and Hammond Dr, where service is currently provided by routes 5 and 87 respectively. The COA recommendations for rapid bus service for route 5 propose an increase in frequency from the current base service every 15 to 20 minutes to a proposed base of at least every 15 minutes. Proposed

recommendations for route 87 call for an increase in service frequency from the current base of one bus every 20 to 25 minutes to a base of at least every 15 minutes, and every 10 minutes during peak periods. Arterial rapid bus route alignments have not been finalized, but the segment of Hammond Dr from Roswell to Dunwoody Station will be included. Information about additional planned and proposed service is provided in Section 6.E.1.

GRTA

GRTA is a statewide agency that works to reduce congestion and improve mobility throughout the state. One of GRTA's programs is the commuter bus service, *Xpress*. *Xpress* provides peak hour commuter service from outlying suburban areas into the Perimeter area, Downtown Atlanta, Midtown Atlanta, and Buckhead. This service operates directionally during weekday peak commuting hours in coach buses throughout the region.

GRTA completed a COA in 2015 and rolled out service changes on September 6, 2016. This included a revised route to the Perimeter area, increasing the total number of routes serving Perimeter to two.

- Route 401 [New] provides service from Cumming into Perimeter with stops at the Sandy Springs MARTA rail station, Perimeter Center Pkwy North, Perimeter Center Pkwy Office North, Dunwoody MARTA rail station, Peachtree Dunwoody Concourse, and Medical Center MARTA rail station. This route formerly served only the North Springs MARTA Station. There are three inbound trips and three outbound trips each weekday.
- Route 428 provides service from West Conyers and Panola Rd along I-285 into Perimeter with stops at Dunwoody MARTA rail station,

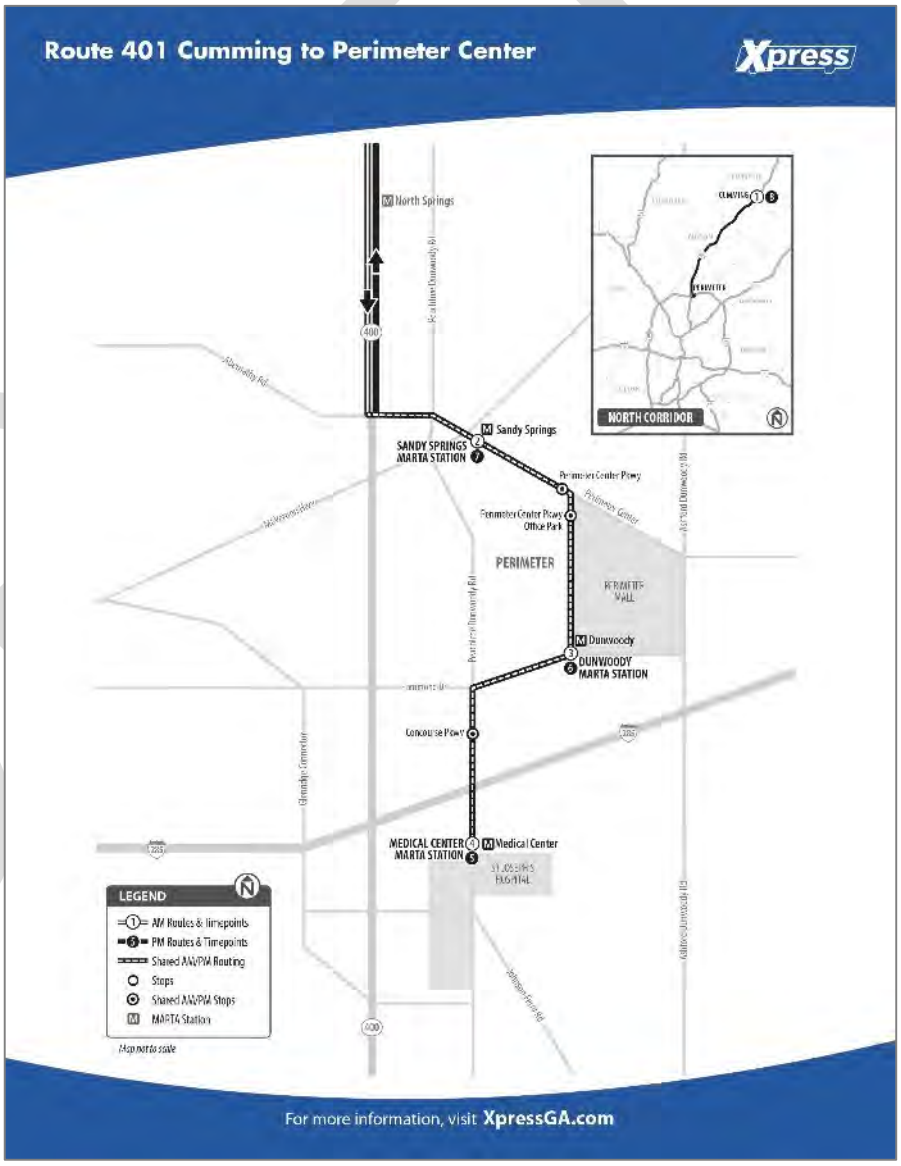


FIGURE 18. MAP OF GRTA XPRESS ROUTE 401 THROUGH PERIMETER

Peachtree Dunwoody Concourse, and Medical Center MARTA rail station. There are four inbound trips and four outbound trips each weekday.

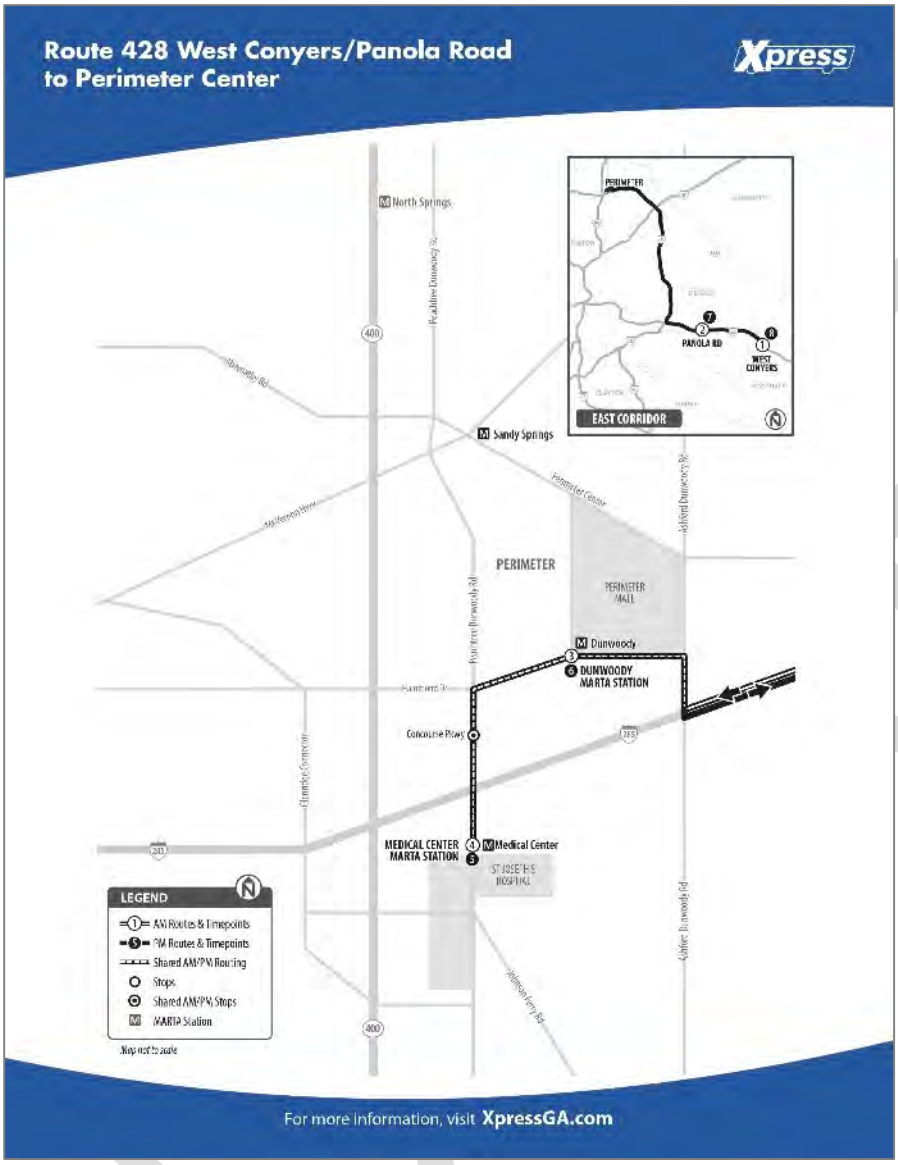


FIGURE 19. MAP OF GRTA XPRESS ROUTE 428 THROUGH PERIMETER

Each of these routes travel to multiple destinations within the Perimeter area to provide access throughout the area, as shown in Figure 18 and Figure 19, including to multiple MARTA rail stations. Additionally, GRTA *Xpress* has two new routes planned for Perimeter in 2017: one from Kennesaw in Cobb County to Perimeter and one from Sugarloaf Mills in Gwinnett County to the Perimeter area. These new routes will provide alternative transportation options for commuters and visitors from those areas who currently have no direct form of transit to access Perimeter. These new routes will also increase the number of people requiring last mile connectivity to circulate around Perimeter once they arrive.

The major issue for GRTA *Xpress* service in Perimeter is keeping to the schedule while circulating. The GRTA *Xpress* buses get caught in congested traffic, which reduces schedule reliability.

Local Shuttles

Private shuttle service is offered by many area hotels, hospitals, companies, and office parks. Hotel shuttles tend to serve employees as well as guests staying at the hotels, whereas hospitals and companies limit service to tenants and their guests doing business with companies in the complex. Some companies have partnered to pool resources and work directly with a third party shuttle operator.

Within the PCIDs area, there are 13 shuttles that are part of the Perimeter Connects program, a partnership with PCIDs and the Perimeter Business Alliance. All but one of the shuttles provides service to a MARTA rail station, with one of the Cox shuttles connecting remote parking to the offices. Shuttles are provided and

operated by private companies that pool resources and pay to offer this service to tenants, employees, and their guests. Shuttle routes are shown in Figure 20.

These shuttles are free to those working in or visiting the offices they serve. Identification is not required for boarding because visitors are allowed to use the shuttles. Based on interviews with providers, no specific incidents were raised because of the open boarding policies.

The employer shuttle services are generally offered during morning and afternoon peak commute periods, approximately between 6:30 AM and 10:00 AM and between 3:30 PM and 6:30 PM Monday through Friday. The frequency of service varies depending on the shuttle operator and employer needs. Most shuttles run every 20 to 30 minutes; however, some operate more or less frequently. The Cox Enterprises shuttle circulates continuously throughout the day between 6:45 AM and 6:45 PM, making stops at multiple office buildings and the Sandy Springs MARTA Station. The Concourse Shuttle operates three shuttle services Monday through Friday: the first daytime shuttle runs from 6:40 AM to 5:20 PM; the second daytime shuttle runs from 6:20 AM to 3:50 PM; and the evening shuttle operates between 6:30 PM and 11:45 PM. On Saturdays the Concourse Shuttle operates from 7:00 AM to 6:35 PM.

The major issue with employer shuttles is keeping to a schedule during congested peak hours. Therefore, the shuttles do not have specific schedules, but rather provide constant circulation between their specified office location and MARTA rail station. Each shuttle provides service approximately every 15 to 30 minutes based on their distance from the rail station and congestion.

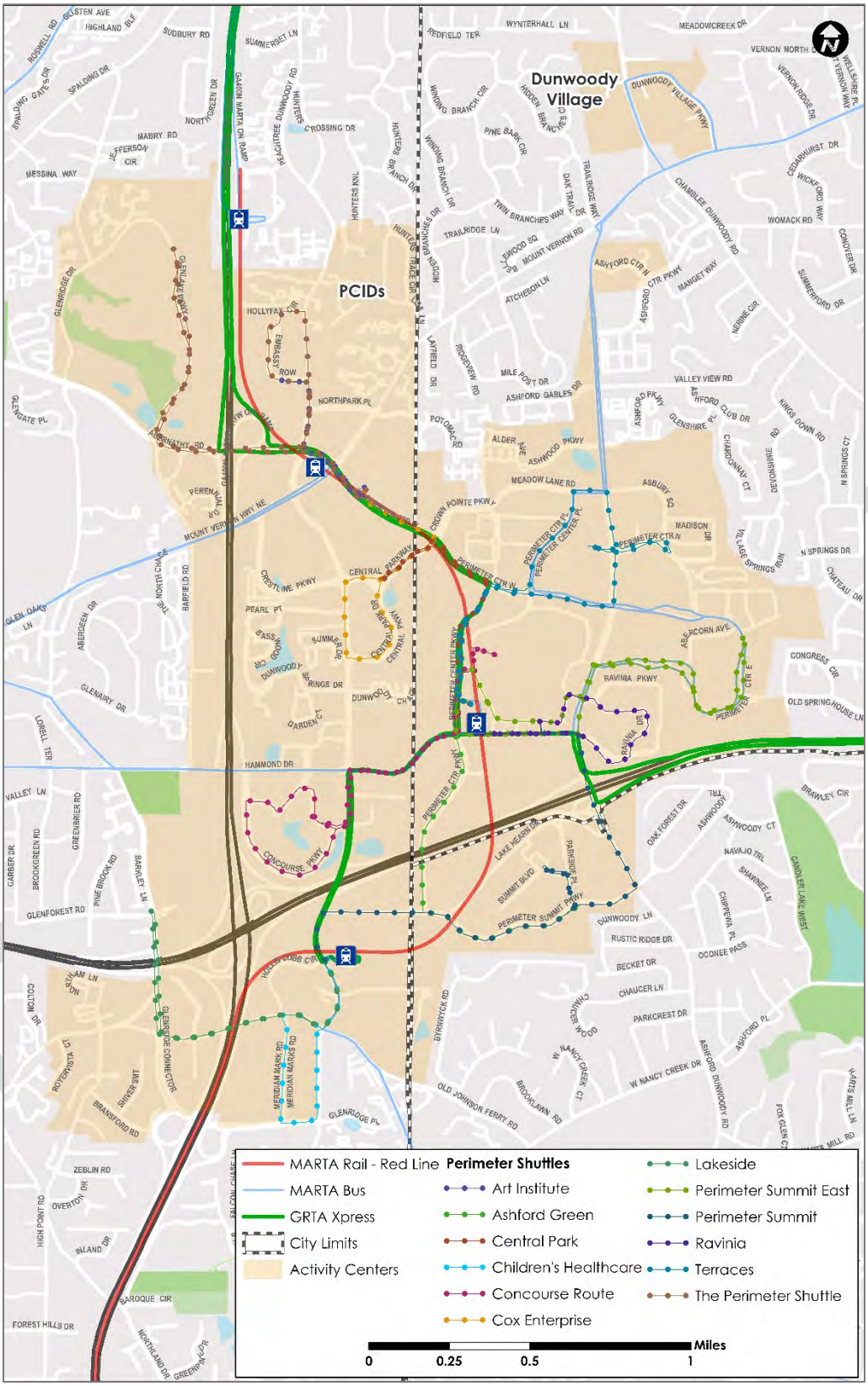


FIGURE 20. TRANSIT SERVICE WITHIN PCIDS
(SOURCE: ARC, PCIDS, PERIMETERCONNECTS)

5. STAKEHOLDER COORDINATION AND PUBLIC OUTREACH

A. SUMMARY OF PUBLIC OPEN HOUSE AND PUBLIC COMMENTS

On January 26, 2017, the project team facilitated a Public Open House at 400 Northpark (1000 Abernathy Rd NE) to provide an overview of the study and to get feedback on findings and draft recommendations. Sixty (60) people attended, including individual citizens and representatives of commercial property owners or managers, employers, government agencies, the Perimeter Community Improvement Districts, homeowners' associations, bicycle and pedestrian advocacy groups, and area hospitals. Three identical overview presentations were given during the session and display boards were set up for attendees to review. Copies of the handouts, displays, and overview presentation are included in Appendix D.

FIGURE 21. ATTENDEES TALK WITH THE CONSULTANT PROJECT MANAGER DURING THE PUBLIC OPEN HOUSE ON JANUARY 26, 2017

Attendees were asked to provide comments about their highest and lowest priorities with regard to last mile connectivity. Following the Open House, materials were placed on the websites of each of the participating cities, including the comment forms. Comments were accepted via mail or email for a one-week period following the session.

B. COMMUNITY FEEDBACK ON PRIORITIES

Overall, the study and its findings and recommendations were well-received by attendees, and feedback was generally positive. Attendees provided feedback in the form of written comments about their highest and lowest priorities with regard to last mile connectivity. In general, high priorities include **additional or more robust transit service**, **safety** – especially for pedestrians and regarding vehicle speeds - and shared-use or multi-use paths. Other people expressed preferences for **filling gaps in sidewalks**, **separating bicycles and pedestrians from the roadway**, **reducing or better enforcing vehicle speed limits**, **bike lockers at MARTA stations**, providing **continuous connections** from one point to another, and providing **priority lanes for transit vehicles** during peak hours. Many people indicated

FIGURE 22. ATTENDEES REVIEW ONE OF THE DISPLAYS ABOUT BICYCLE AND PEDESTRIAN FACILITIES DURING THE PUBLIC OPEN HOUSE

location- or facility-specific priorities, and some commented on overall strategies, such as creating walkable corridors of businesses and destinations rather than continuing car-centric development patterns.

Discussions also reflected the need for future projects to consider factors such as road design, ability to secure funding, and the realities of the physical environment, such as topography and heat or sun during the summer months. In general, people were supportive of the idea of transit-only lanes within the Perimeter area and of investing in better connections to create a continuous network of bicycle and pedestrian facilities. Comments on attendees' **highest priorities** are shown below, grouped roughly by topic or subject.

Sidewalk/Pedestrian Facilities

- 8-ft wide sidewalk/bike routes to keep bikes off the streets – it is a waste of money to put in sidewalks that are so narrow; there are obstructions in the sidewalks, including telephone poles
- Sidewalks coming out of the neighborhoods, e.g. Brandon Mill Rd
- Sidewalks on major roads
- Wider sidewalks allowing for better pedestrian and bike traffic
- Mid-block ped crossing islands

Connections between Bicycle and Pedestrian Facilities

- Complete sidewalks/multi-use paths connected
- Improve quality of sidewalk/path connectivity - it is a patchwork of sidewalks and paths and crosswalks
- Connecting bike/ped network - too fragmented right now
- Ped/bike connections, separate from the street and safe to use

Bicycle Facilities

- Bike lanes on Mt. Vernon before considering Abernathy
- A safe bike lane down Windsor Pkwy to Town Brookhaven – the left turn on Hermance by bike is dangerous
- Bike lanes on Dresden Dr between Thompson Rd and Clairmont Rd
- Bike lockers at Brookhaven MARTA Station
- Prioritize bike use
- Protected bicycle lanes
- Keep bikes and pedestrians separate – this is dangerous - follow NACTO guidelines
- Bike parking and showers at buildings

Safety and Speed

- Roads need to be designed to limit speed of cars; speed limit signs don't work
- Better enforcement and zero tolerance speed zones
- Safer for pedestrians at major intersections, including Abernathy Rd and Roswell Rd, Hammond Dr and several roads
- Safety should be a priority - did not hear anything on improvements of sidewalk safety
- Traffic calming throughout PCID
- Reduce speed limits to 30 MPH max throughout PCIDs

Shared-Use or Multi-Use Paths

- Path development
- Pedestrian and bike-friendly walking paths that connect fully from point A to point B
- Connect the west side or Roswell Rd to Perimeter area via Hammond Dr or near I-285 with PATH400 or similar trail

Transit Service / Facilities

- Connections to MARTA via pedestrian access or buses (MARTA station enhancements)
- Improved public transport options into perimeter with hours conducive to ridership
- Improved MARTA frequency during peak periods
- Small MARTA stations midway between the 4-mile distances of existing stations
- Access to Brookhaven station from the north without forcing cars to turn onto Dresden
- GRTA bus from Alpharetta to accommodate healthcare workers schedules - 6a-7:30p
- BRT / transit priority
- Bus rapid transit/personalized transit
- Bus priority and bus lanes
- Shuttle and bus priority lanes during peak hours
- In Sandy Springs Perimeter area - if buses and shuttles are answer, need to change negative attitude toward using them. Sexier bus designs and stops, more frequent stops, better information and communication to riders, bus priority lanes, limit stops to 1/2 mile (walkable limit), create multiple choices for riders at any given location, and color code shuttle loop buses for easy recognition
- Arterial transit:
    - From City Center and along Mt. Vernon and Hammond Dr
    - Along Hammond Dr to Perimeter Mall MARTA Station
    - From City Springs to Sandy Springs MARTA Station
- Circulator or more frequent bus service west of City Springs in particular, River Valley Rd/Riverside/Heards Ferry Rd
- Public shuttles/circulator with regular schedule connecting to City Springs, Dunwoody Village, Georgetown, Brookhaven
- Transit - with complexes and new construction going up, getting people out of cars is paramount; truly surprised not to hear about street cars
- Rideshare service (e.g. Uber/Lyft) partnerships at MARTA rail stations
- MARTA Stations are not welcoming; they are "cement tombs" and ought to be designed for humans and protected from the elements

Roadway Projects

- Hammond Dr widening

Other

- Get feedback from existing users
- Solutions that are short-term, easy-to-implement such as signal priority, etc.
- Bridging city boundaries
- Street trees
- Showers at work so walking there in summer is socially acceptable

- Cohesion between cities; it is a buy-in between all four entities
- First implement policies and laws to discourage single occupancy privately owned motor vehicles to park and drive at will to PCIDs destinations
- Low hanging fruit should include restriping existing lanes today, don't wait until repaving
- Reduce vehicle miles driven/CO2 emissions
- Zoning is not a friend of last mile connectivity because there is seemingly no rhyme or reason for clustering of destinations; each development plans separately
- The Beltline shows that placing businesses along a pedestrian corridor works better than trying to connect car-centric offices and shops
- Further options for elderly (rideshare, etc.)

In addition to feedback about high priorities, attendees were asked to indicate what types of projects or investments they **do not consider to be high priorities**. Overall, fewer people provided feedback on low priorities, but among those who did, there was a mix of opinions ranging from a preference to invest in pedestrian facilities or transit before bike facilities, focusing on efforts other than transit, and projects that do not relate directly to the provision of facilities, such as wayfinding and partnerships with carsharing services. Several people also wrote to register their opposition to the multi-use path along the Nancy Creek creekbed near Remington Rd. They cited its proximity to residential properties (back yards) and other nearby options for people on bike or on foot to connect with PATH400 and Brook Run Path using Harts Mill and West Nancy Creek as reasons for their opposition.

6. Overall Vision and Unified Master Plan

A. Overview

The purpose of this study is to provide a clear vision for future transportation needs in the Perimeter market, identify a consolidated program of transportation investments, and explore existing and future transit opportunities. Over the past several years, the PCIDs and Cities of Sandy Springs, Dunwoody, and Brookhaven have undertaken numerous studies with transportation components, including comprehensive transportation plans; bicycle, pedestrian, trail and greenway plans; parks plans; transit studies; comprehensive plans; subarea master plans; and Livable Centers Initiative (LCI) Studies[3], among others. Each of these studies reflect the individual jurisdictions' transportation needs and priorities, and recommend investments to achieve a specific vision for the area. In order to develop a unified master plan for last mile connectivity in the study area, the first step was to establish consensus around a vision and series of related goals and objectives. The vision, goals, and objectives of the *Last Mile Connectivity Study* are discussed further in the following section.

The vision, goals, and objectives served as a framework for the development of the consolidated project list.

B. Vision and Goals

The vision and goals of the *Last Mile Connectivity Study* were developed in close coordination with the project partners and reflect a shared approach towards improving last mile mobility in the study area. They combine and borrow elements from previous plans and studies in each jurisdiction and represent general consensus around the future vision for the Perimeter area among project partners.

Throughout discussions and activities over the course of the study, it became clear that one of the critical needs is to ensure that the Perimeter area can be one in which residents, employees, and visitors have choices in how they get around. Project partners believe it is important to make it easy, convenient, and safe for people to walk, bike, or take transit while traveling to, from, or within the Perimeter area, to make alternative modes more viable, and reduce dependence on single-occupancy vehicle trips. Another critical need is to foster better connectivity among key origins and destinations, such as transit stations and stops, workplaces, retail developments, health and educational facilities, and open spaces. Reducing car trips and increasing opportunities for biking and walking can help reduce traffic congestion, improve public health, and enhance the natural environment. These improvements will help the Perimeter area and neighboring communities continue to attract residents, businesses, and institutions, contributing to the overall economic, social, and environmental sustainability of the area and furthering the overall goal of becoming the Southeast's premier livable center.

The overall vision for last mile connectivity within the study area is as follows:

> ***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 Perimeter area, helping it thrive as a desirable place to work, live, and visit and sustaining the Perimeter into the future.***

[3] The Atlanta Regional Commission's "Livable Centers Initiative (LCI) is a program that awards planning grants on a competitive basis to local governments and nonprofit organizations to prepare and implement plans for the enhancement of existing centers and corridors consistent with regional development policies, and also provides transportation infrastructure funding for projects identified in the LCI plans." (*Source: Atlanta Regional Commission*)

The vision and goals of this study will be achieved over time through development and implementation of strategies and specific objectives or projects contained within this report. The goals of the *Last Mile Connectivity Study* are to:

- **Improve mobility** by managing vehicular traffic in a way that reduces congestion, improves flow, balances local and regional travel patterns, and makes it easy for people to integrate alternatives to automobile transportation (by foot, bike, or via transit). Mobility will be improved both for "last mile" trips between activity centers and destinations within the Perimeter area as well as short trips within the Perimeter area, by leveraging available multimodal transportation services and encouraging development patterns that emphasizes connectivity and human-scaled development.
- Ensure that residents, employees, and visitors to the Perimeter area have **convenient access** to **area and regional transit services**.
- Ensure that pedestrians, bicyclists, and transit users have **safe connections** between transit services and destinations within the Perimeter area.
- Provide **multimodal transportation choices** for people to travel within the Perimeter area, so that people can travel around easily without having to use a personal vehicle. These modes include walking, bicycling, and transit.
- **Enhance connectivity** between neighborhoods, workplaces, commercial areas, health and educational facilities, and open spaces, and **create a built environment that fosters connections between buildings and the street or sidewalk**.
- **Enhance the economic competiveness** of the Perimeter area by providing a range of transportation options, making the area more attractive to business and employees.
- Identify **corridors** within the Perimeter area **that can support high capacity transit services** to help facilitate last mile connectivity in the future.
- **Prioritize** transportation **programs, projects, and improvements** that **complement or enhance** the unique **characteristics and assets** of the Perimeter business district and surrounding areas.
- **Enhance the sense of place and quality of life** within the Perimeter area by providing a transportation system that encourages active living, human interaction, and enjoyment of assets in the Perimeter area.

The goals for the *Last Mile Connectivity Study* are accompanied by suggested objectives and measures of success. The objectives and measures are provided in Appendix E. The cities and PCIDs should coordinate to establish baseline measures and set specific targets for the future. Note that some of the performance measures will require ongoing interagency coordination among the cities and with transit providers, including MARTA, GRTA, and shuttle operators. The plans and budgets of the cities and agencies will directly impact how and when these objectives are met and may require the cities and PCIDs to revise the measures as the plans and budgets evolve.

C. BICYCLE AND PEDESTRIAN PLAN: SIDEWALKS, TRAILS, MULTI-USE PATHS, AND BICYCLE FACILITIES

As discussed previously, the Cities and PCIDs recognize the importance of providing bicycle and pedestrian facilities for residents, workers, and visitors; in recent years, they have implemented a number of bicycle and pedestrian improvements, including sharrows, bicycle lanes, wide sidewalks, crosswalks, multi-use paths, trails, and mid-block crossings. Each of the cities and the PCIDs has a defined strategy for implementing additional bicycle and pedestrian facilities on corridors as well as off-road alignments. The extent of multimodal facilities identified in the Cities' and PCIDs' plans and studies is evidence of the jurisdictions' continuing commitment to invest in alternate modes of transportation. The challenge lies in refining and reframing hundreds of identified bicycle and pedestrian projects into a consolidated project list. The project team, in coordination with the cities and PCIDs, thoroughly reviewed each project to ensure it (a) met the vision and goals of the *Last Mile Connectivity Study* and (b) worked seamlessly with other identified projects to create a seamless multimodal network. This process is described in this section.

I. PLANNED AND PROGRAMMED PROJECTS

The first step in developing a consolidated project list was to identify recommendations related to last mile connectivity in previous plans and studies from the cities and PCIDs. In coordination with the project partners, each of these projects underwent a thorough review process for consideration in the consolidated project list. Some recommendations were determined to no longer have community support. Others were no longer viable due to land use and development patterns that had changed since the approval of the plan or study. These projects were removed from consideration. The remaining projects were added to the project list as planned and programmed projects.

Sandy Springs

The majority of Sandy Springs' bicycle and pedestrian projects come from the *Bicycle, Pedestrian, and Trail Implementation Plan* and the *City Center Master Plan*. The *Bicycle, Pedestrian, and Trail Implementation Plan* identifies specific bicycle and pedestrian improvements, including sidepaths, bicycle lanes, and other facilities on each major corridor in the city as well as a proposed system of multi-use trails. The *City Center Master Plan* recommends improvements in the City Springs area to foster a more walkable and bikeable environment. The recommendations include a variety of complete streets and new multimodal connections, to be implemented with the redevelopment of the area surrounding City Springs. Additional projects on the list include bicycle and pedestrian improvements associated with a planned widening of Hammond Dr and bicycle and pedestrian improvements on Mt. Vernon Hwy and Johnson Ferry Rd in conjunction with a project that will install two roundabouts at the intersection. Several of these projects are "programmed," or have dedicated funding for one of more project phases, which include preliminary engineering, right-of-way acquisition, environmental study, and construction. This funding is from a variety of sources, including Sandy Springs' transportation special-purpose local-option sales tax (TSPLOST) and state and federal funds from the Georgia Department of Transportation (GDOT) and ARC.

Dunwoody

The Dunwoody *Comprehensive Transportation Plan* (CTP), *Georgetown Master Plan*, and *Dunwoody Village Master Plan* have provided guidance for transportation investment in Dunwoody. The CTP provides a range of transportation improvements across the city, while the Dunwoody Village and Georgetown *Master Plans* focus on creating walkable and bikeable environments in the respective sub-areas. A number of these projects have already been implemented, and others have been assigned funding and are actively moving forward as programmed projects. Within the study area, Dunwoody's

planned and programmed projects focus on improving the Chamblee Dunwoody Rd corridor as well as corridors that connect to the Perimeter area, including Mt. Vernon Hwy, Ashford Center Pkwy, and Valley View Rd. Dunwoody is also interested in examining better connectivity to the Perimeter area in the vicinity of Georgetown.

Brookhaven

The *Brookhaven Bicycle, Pedestrian, and Trail Plan* (2016) is the city's primary guidance for investment in bicycle and pedestrian facilities. The plan establishes several short-term, mid-term, and long-term recommendations for walking and biking arterials, collector roads, and local streets as well as a long-term vision for a trail system. The city has also undertaken studies for specific corridors and sub-areas. The *Ashford Dunwoody Corridor Study* identifies multimodal improvements for the extent of the road between Peachtree Road and the northern city limit near I-285. There are also active planning efforts surrounding the Brookhaven/Oglethorpe MARTA Station, where an LCI Study is recommending a number of multimodal improvements to Peachtree Rd, Dresden Dr, and N. Druid Hills Rd. The refined recommendations from these studies are included in the consolidated project list. The programmed, or currently funded, bicycle and pedestrian improvements in Brookhaven are on the Peachtree Rd corridor.

Perimeter Community Improvement Districts (PCIDs)

The *Commuter Trails Master Plan* has identified multimodal improvements for the Perimeter area. The plan includes 15 miles of potential commuter pathways, which include a combination of sidepaths and bicycle lanes along arterials and collector roads, and off-road connections between major destinations such as office complexes and retail developments. Since the adoption of the plan, the PCIDs have considered adopting guidance from the National Association of City Transportation Officials (NACTO) *Urban Bikeway Design Guide* (2014), which recommends providing separation for bicycle and pedestrian facilities, particularly in more urban contexts. For this reason, the consolidated project list includes the off-road commuter trails and an adapted version of the projects adjacent to roadways that reflects a more complete streets approach. Instead of sidepaths, the consolidated project list recommends separated bicycle and pedestrian facilities along with streetscape and lighting improvements.

These adaptions are already reflected in projects that are moving forward. There are two programmed projects on Ashford Dunwoody Rd and Peachtree Dunwoody Rd that will include cycle tracks and wide sidewalks. There is also a substantial bicycle and pedestrian project along the block formed by Peachtree Dunwoody Rd, Hammond Dr, Perimeter Center Pkwy, and Lake Hearn Dr that will include a combination of cycle tracks, wide sidewalks, and streetscape and lighting improvements.

II. Identification of Gaps and Inconsistencies

The next step in the refinement of the project list was to analyze each planned and programmed project in relation to other recommendations in the study area. Within the PCIDs area, there were some instances with multiple projects along the same corridor that did not complement each other due to disparities in facility type or termini. In addition, at municipal boundaries, there was often some disconnect between planned improvements among the cities. The consolidated project list reflects the refinements of the projects. The resulting set of planned and programmed bicycle and pedestrian projects are shown in Figure 23, Figure 24, and Figure 25. These are also included in the consolidated project list in Appendix A.

Upon an examination of all the projects in the study area, it was also determined that there were "gaps" in coverage, or places where facilities were lacking and there were no identified projects to address

connectivity needs. In these areas, recommendations were made to fill these gaps in order to provide consistent last mile connectivity across the study area. Gaps were identified on the following corridors:

- Abernathy Rd from GA 400 entrance ramp to Peachtree Dunwoody Road
- Glenridge Dr from I-285 ramp to Hammond Drive
- Peachtree Dunwoody Rd from Glenridge Connector to Atlanta city limits
- Concourse Pkwy (private road) from Peachtree Dunwoody Rd to the Concourse Athletic Club

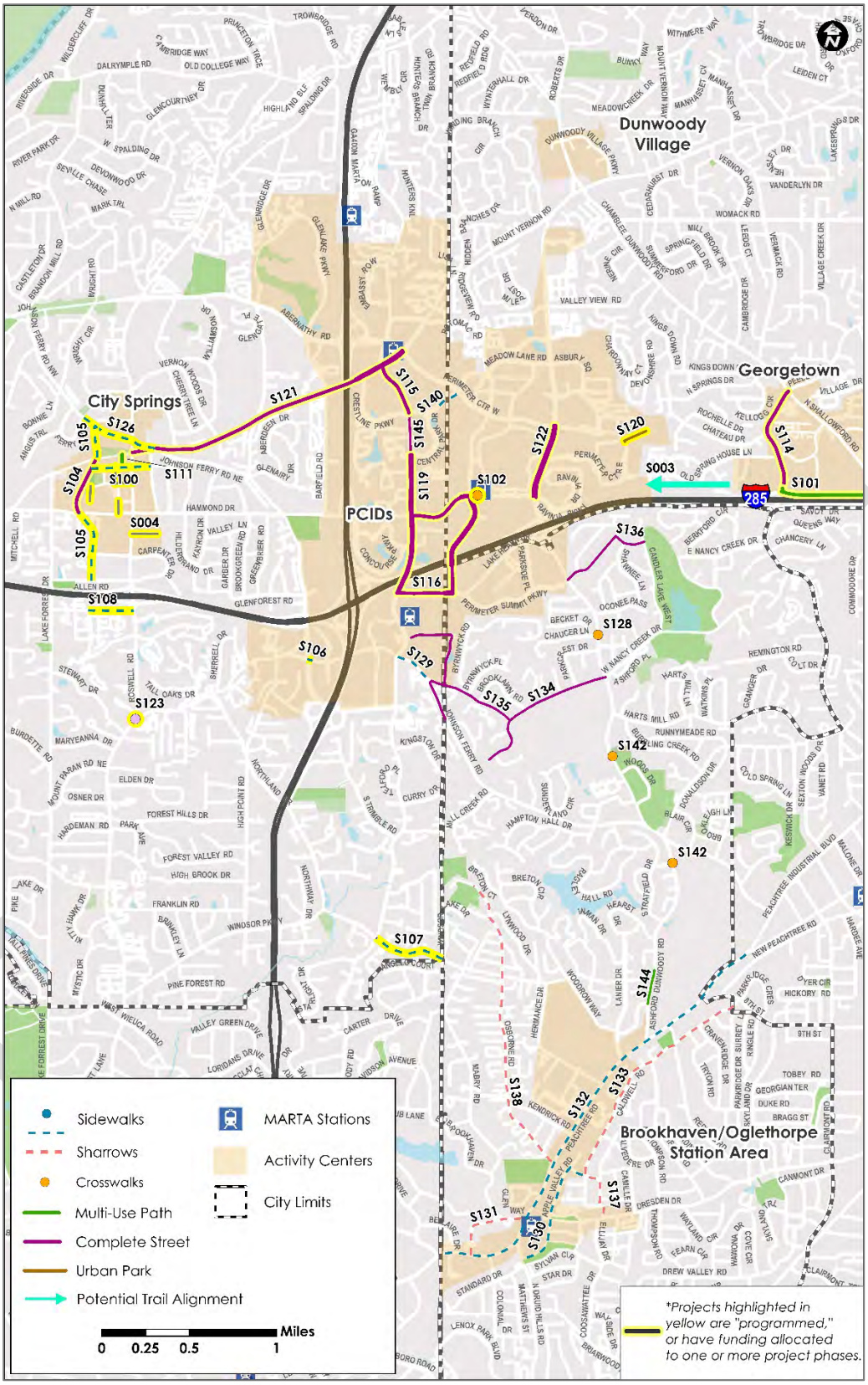


FIGURE 23. PLANNED AND PROGRAMMED BICYCLE AND PEDESTRIAN PROJECTS (SHORT-TERM)

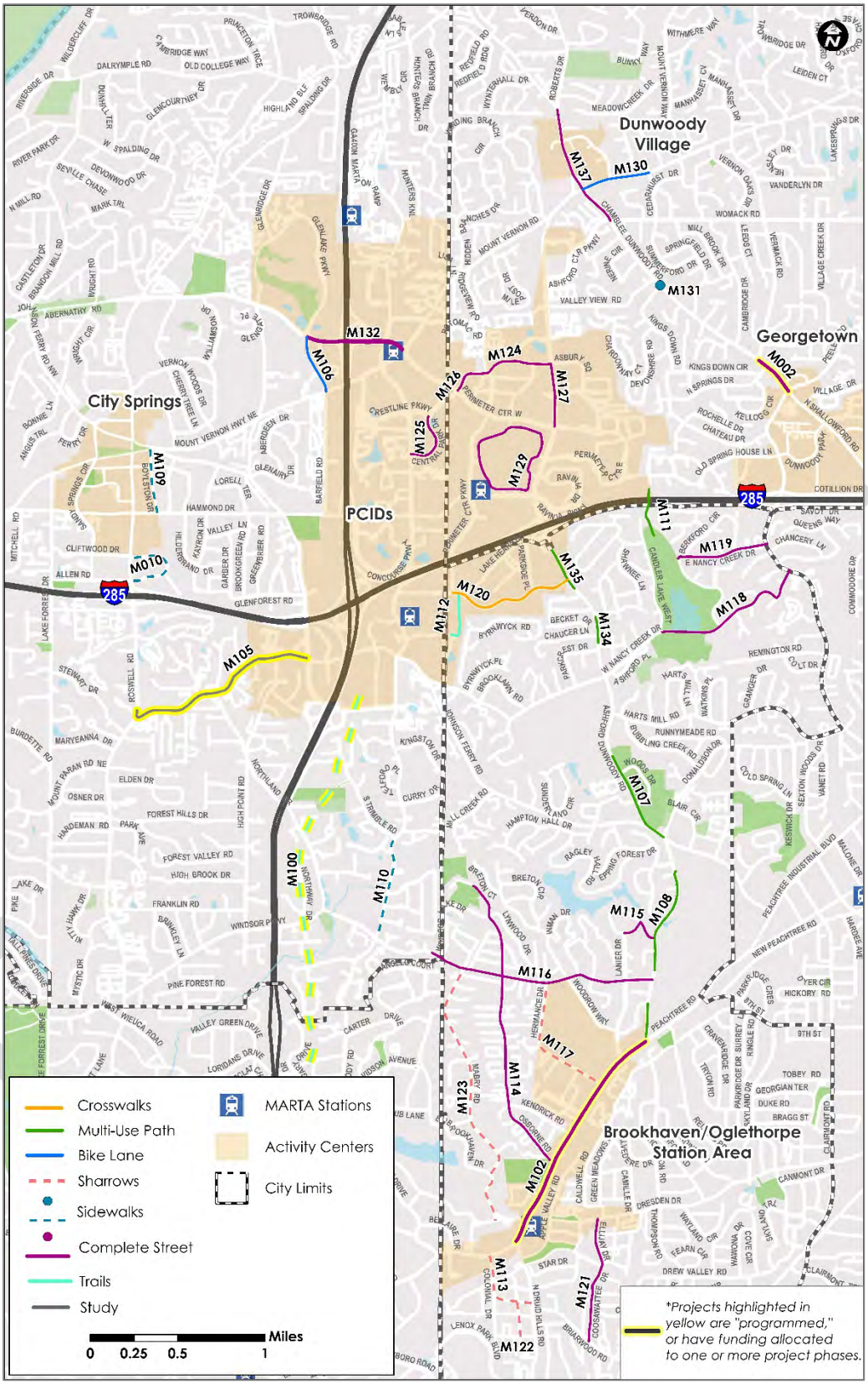


FIGURE 24. PLANNED AND PROGRAMMED BICYCLE AND PEDESTRIAN PROJECTS (MID-TERM)

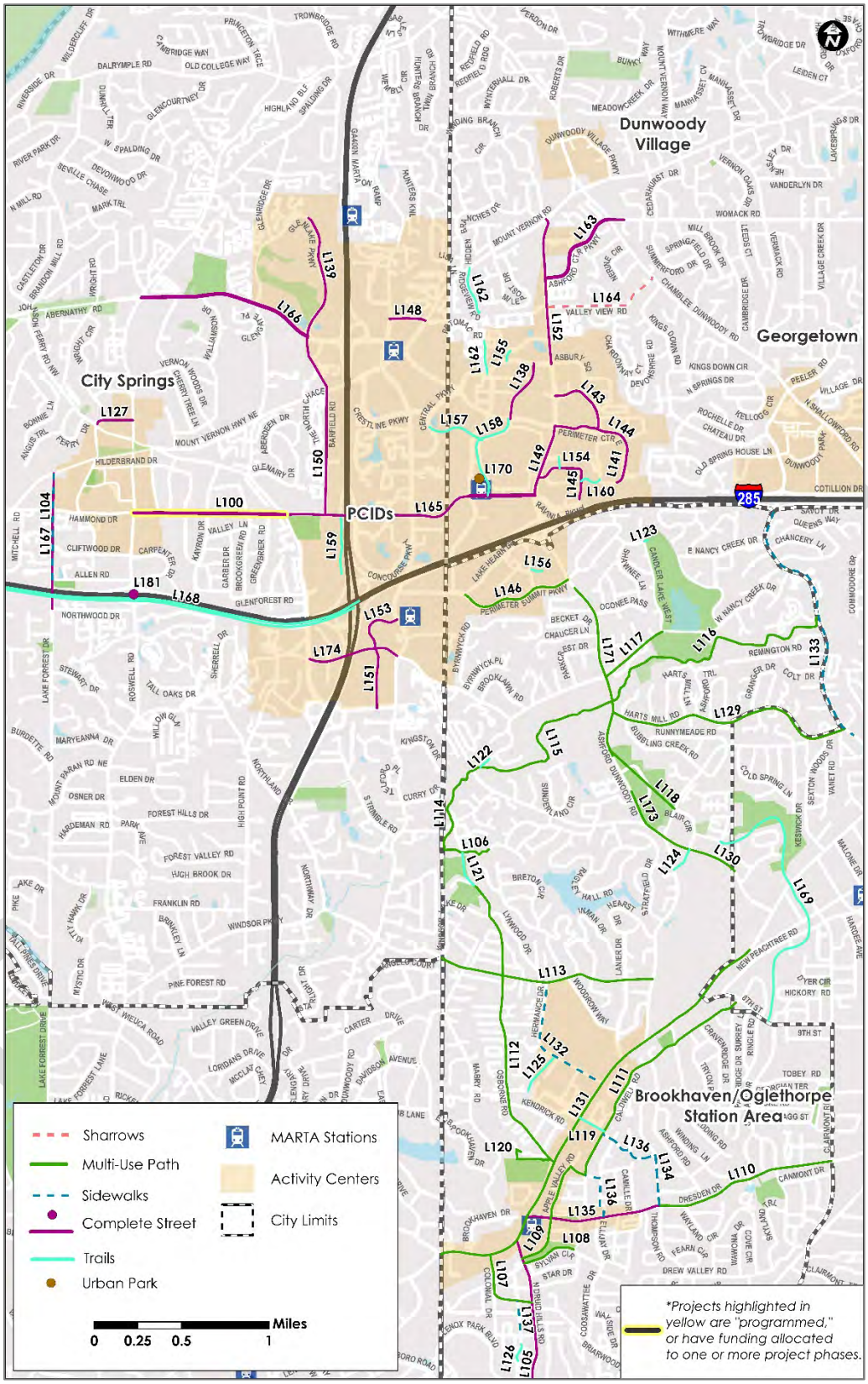


FIGURE 25. PLANNED AND PROGRAMMED BICYCLE AND PEDESTRIAN PROJECTS (LONG-TERM)

III. Recommendations to Fill Gaps and Complement Transit

In order to ensure seamless bicycle and pedestrian coverage in the study area, the project team has recommended the addition of the following projects to the consolidated project list. These projects address gaps in the bicycle and pedestrian network, where no facilities have been planned, as well as adaptations of existing projects to better facilitate last mile connectivity in the study area.

Recommended bicycle and pedestrian projects are shown in Figure 26 and Tables 6 through 8 grouped by priority tier. Several of the short-term projects have been designated as "quick wins" and represent projects that are relatively low-cost with high impact that can quickly improve last mile connectivity in the area. These projects are denoted by an asterisk (*).

Table 6. Short-term Recommended Bicycle and Pedestrian Projects to Fill Gaps

Project ID	Project Name	Description	Jurisdiction(s)	Limits	Timeframe
S166	Glenridge Drive/Glenlake Parkway sidewalks	Fill sidewalk gaps on both side of road on Glenridge Dr and Glenlake Pkwy	Sandy Springs	Abernathy Rd to entrance of 50 Glenlake office bldg.	Short*
S167	Abernathy Road sidewalks	Construct sidewalk on south side of Abernathy Rd	Sandy Springs	GA 400 entrance ramp to Peachtree Dunwoody Rd	Short*
S168	Concourse Parkway sidewalks	Concourse Pkwy is a private road. Coordinate with property owner to encourage filling sidewalk gaps on both sides of Concourse Pkwy between Peachtree Dunwoody Rd and Concourse Athletic Club	Sandy Springs (private road)	Peachtree Dunwoody Rd to Hammond Dr	Short*
S169	MARTA Station Enhancements	Initiate planning process, in collaboration with MARTA, to identify and design enhancements to rail stations to improve pedestrian accessibility, internal circulation, and connections to surrounding sites and facilities, as well as lighting, facades, and public art	Brookhaven, Dunwoody, Sandy Springs and PCIDs	MARTA rail stations with PCIDs: Dunwoody, Medical Center, and Sandy Springs	Short*
S170	Wayfinding Program	Develop and implement branded wayfinding guidelines and program for the Perimeter area at two scales: pedestrian-scale to guide people on foot and cyclists, and vehicular-scale to guide motorists on a broader scale throughout PCIDs	Dunwoody, Sandy Springs, PCIDs	PCIDs boundaries	Short*

SHORT-TERM RECOMMENDATIONS (CONTINUED)

Project ID	Project Name	Description	Jurisdiction(s)	Limits	Timeframe
S154	Abernathy Road Corridor Study	Corridor study for Abernathy Rd, from Roswell Rd to Mt. Vernon Rd, to determine future capacity and complete street needs. Will integrate with Abernathy Road DDI (in conjunction with GDOT I-285/GA 400 interchange project).	Sandy Springs	Corridor Study for Abernathy Rd from Roswell Rd to Mt. Vernon Rd	Short
S155	Glenridge Drive sidewalks	Fill sidewalk gaps on east side of the road	Sandy Springs	I-285 ramp to Hammond Drive	Short
S156	Glenridge Drive/Glenridge Connector Corridor Study	Corridor study to study complete street treatments on Glenridge Drive	Sandy Springs	Hammond Dr to Peachtree Dunwoody Rd	Short
S157	Complete Street on Johnson Ferry Road	Design and construct complete street treatments along Johnson Ferry Rd	Sandy Springs	Glenridge Conn to Brookhaven city limits	Short
S158	Peachtree Dunwoody Rd Bike/Ped Facilities	Design and construct complete street treatments along Peachtree Dunwoody Dr from Glenridge Conn to Lake Hearn Dr to tie into trail north of this area on Peachtree Dunwoody Rd	Sandy Springs	Glenridge Connector to Lake Hearn Dr	Short

TABLE 7. MID-TERM RECOMMENDED BICYCLE AND PEDESTRIAN PROJECTS TO FILL GAPS

Project ID	Project Name	Description	Jurisdiction(s)	Limits	Timeframe
M138	Complete Street on Johnson Ferry Road	Design and construct complete street treatments along Johnson Ferry Rd	Sandy Springs	Abernathy Rd to Hammond Dr	Mid
M139	Glenlake Parkway / Glenridge Drive Multi-Use Path	Design and construct a multi-use path	Sandy Springs	UPS to Abernathy Rd, via Glenlake Pkwy and Glenridge Pkwy	Mid
M140	Mount Vernon Highway Bike/Ped Facilities	Apply complete street treatments from Sandy Springs MARTA Station to Dunwoody city limits	Sandy Springs	Abernathy Rd to Dunwoody city limits	Mid

TABLE 8. LONG-TERM RECOMMENDED BICYCLE AND PEDESTRIAN PROJECTS TO FILL GAPS

Project ID	Project Name	Description	Jurisdiction(s)	Limits	Timeframe
L185	Complete Street on Glenridge Drive	Restriping and complete street on Glenridge Dr from Roswell Rd to Johnson Ferry Rd/Glenridge Connector	Sandy Springs	Roswell Rd to Johnson Ferry Rd/Glenridge Conn	Long
L186	Mount Vernon Highway Bike/Ped Facilities	Apply complete street treatments from Long Island Dr to Roswell Rd	Sandy Springs	Long Island Drive to Roswell Rd	Long
L187	Peachtree Dunwoody Rd Bike/Ped Facilities	Apply complete street treatments from Spalding Dr to Mt. Vernon Hwy	Sandy Springs	Spalding Dr to Mt. Vernon Hwy	Long
L189	Bicycle Lanes on Peachtree Dunwoody Rd	Bicycle lanes on Peachtree Dunwoody Rd from Glenridge Connector southward to city limits	Sandy Springs	Glenridge Connector to Atlanta city limits	Long
L190	Additional bike/ped facilities on local street connections	Identify opportunities for additional bike/ped facilities on local street connections	Brookhaven, Dunwoody, Sandy Springs	N/A	Long
L191	Pedestrian bridge between North Springs MARTA Station and Glenlake Parkway	Construct pedestrian bridge between North Springs MARTA Station and Glenlake Pkwy	Sandy Springs	North Springs MARTA Station to Glenlake Pkwy	Long

The consolidated project list includes numerous bicycle, pedestrian, and trail projects that contribute to a cohesive multimodal network that fosters last mile connectivity. These projects cover a wide range of treatments, from sidewalks to complete streets. See Appendix A for a full list of bicycle and pedestrian projects.

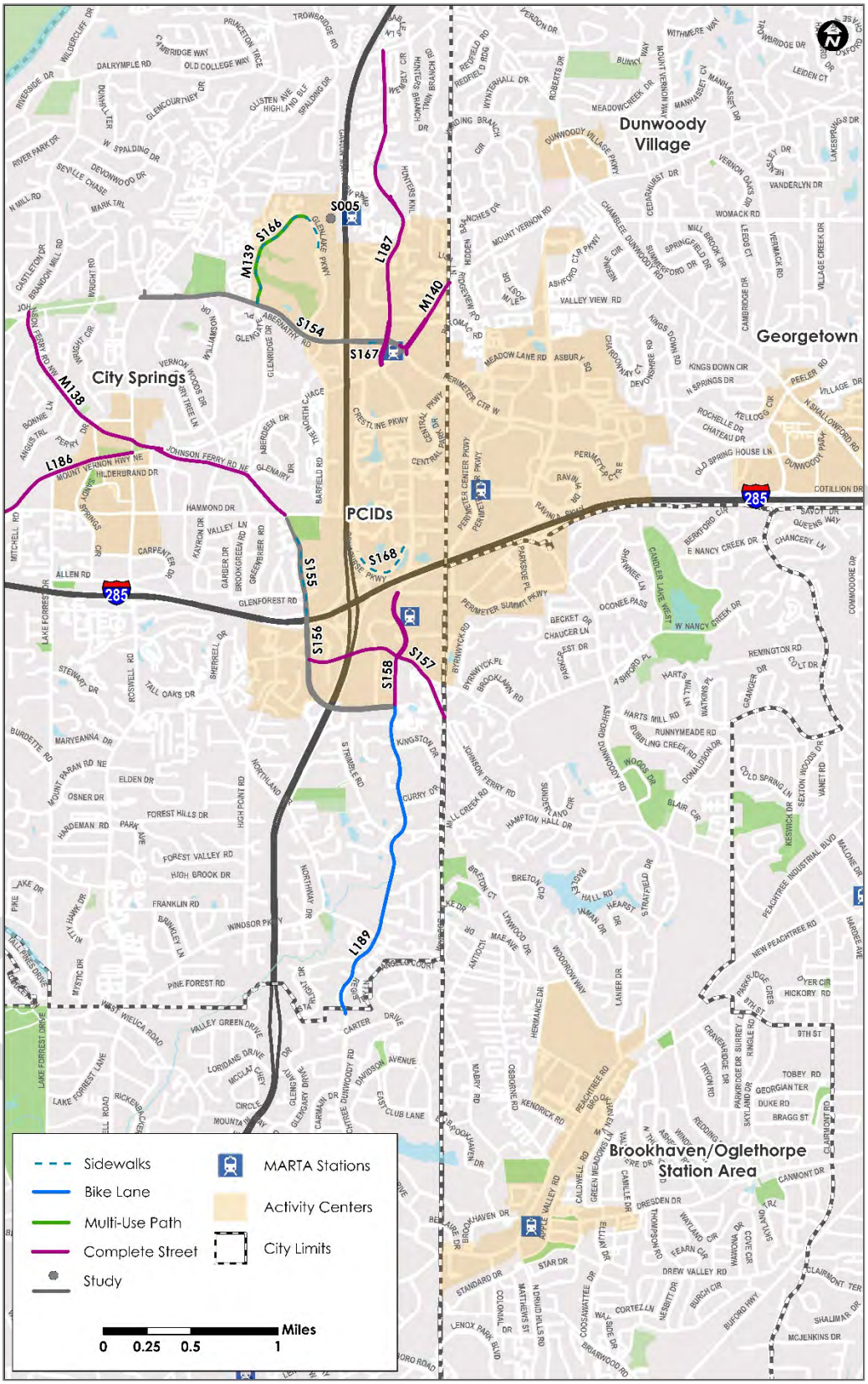


FIGURE 26. NEW BICYCLE AND PEDESTRIAN PROJECT RECOMMENDATIONS

IV. Bicycle and Pedestrian Network Strategies

In addition to the project recommendations, the Cities and PCIDs should implement the following strategies to foster last mile connectivity for the bicycle and pedestrian network.

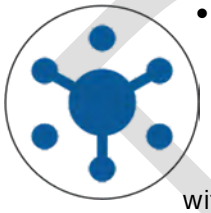
Enhance Pedestrian Facilities at Major Origins and Destinations

- Enhance pedestrian facilities and circulation at major origins and destinations, including transit stations, office complexes, hospitals, and large retail developments.
- Some of the MARTA Stations in the study area have confusing layouts and are not well-connected to the adjacent destinations and the existing bicycle and pedestrian network. The Cities and PCIDs should coordinate with MARTA to improve circulation in and around the MARTA Stations.
- One challenge in the study area is the prevalence of large office complexes, which typically feature large parking lots and lack of multimodal facilities on the property, and in some cases, are located on private roads. The Cities and PCIDs should coordinate with the property owners to provide walking and biking facilities on private roads and roads internal to the office complexes. The jurisdictions should also coordinate with property owners to create safe and convenient direct paths connecting roadways and building access points.

Implement Programs and facilities to Encourage Bicycle Usage in the Perimeter Area

- The PCIDs *Bicycle Implementation Strategy* outlines several strategies for encouraging bicycle usage. The cities should adopt these strategies within the PCIDs area and consider implementing similar programs and facilities in their activity centers.
- Provide supportive equipment and facilities such as bicycle racks and repair stands.
- Work with major employers to implement employer incentive programs to encourage cycling to work.
- Sponsor bicycle safety campaigns to teach cyclists and motorists how to safely interact on the roads.

Foster an Interconnected Network of Bicycle Routes



- In coordination with adjacent jurisdictions, examine the feasibility for a regional "greenbelt" of trails connecting Sandy Springs, Dunwoody, Brookhaven, Chamblee, and Roswell. A conceptual map of this strategy is shown in Figure 27.
- The Peachtree Gateway Partnership, formed in 2016, is a coalition of government and business leaders from Brookhaven, Chamblee, Doraville, and Dunwoody tasked with enhancing and promoting the area. One of the improvements the organization is considering is a multi-use trail network spanning the four cities. Sandy Springs and PCIDs should consider partnering with the organization, either formally or informally, to develop a framework for a multi-use trail network that connects the jurisdictions.

FIGURE 27. CONCEPTUAL DIAGRAM OF PERIMETER AREA GREENBELT (SOURCE: ESRI)

D. ROADWAY PLAN

While the aim of last mile connectivity is to connect people to transit hubs and major destinations by alternate modes of transportation, the roadway network plays a vital role. On a regional basis, there are numerous expressway and interchange improvements planned and underway that will help make the Perimeter area more accessible to the rest of the Atlanta region. In anticipation of new development in the Perimeter area, there are also new roadway alignments proposed that will allow for more direct connections for workplaces and other destinations. In addition, there are a number of intersection and operational improvements that aim to improve mobility without expanding capacity. It is vital to consider how all of these improvements will impact mobility in the study area and the opportunities that exist to provide safe, comfortable multimodal facilities and services in conjunction with the roadway improvements.

In the development of the consolidated project list, the project team undertook an analysis of the roadway network similar to that of the bicycle and pedestrian network. The primary difference in the two analyses was that several of the identified roadway projects are being planned and implemented by GDOT and fall out of the jurisdiction of the cities and PCIDs. While there were fewer projects to coordinate and analyze for gaps and inconsistencies, the scope and magnitude of some of the projects make it all the more critical for the cities and PCIDs to ensure last mile connectivity in the study area.

I. PLANNED AND PROGRAMMED PROJECTS

Regional

In 2006, GDOT and the Georgia Regional Transportation Authority launched the Revive285 Top End project to examine solutions to alleviate congestion on I-285 between I-75 in Cobb County and I-85 in DeKalb County. This multi-year study culminated in a number of projects, phased from short- to long-term, that have been adopted into GDOT's and ARC's Transportation Improvement Programs. These projects include interchange reconstructions, the addition of auxiliary lanes, and other operational improvements to the I-285 top end. In the study area, there is one programmed project from the Revive285 effort - the reconstruction of the interchange at GA 400 and I-285. The project, which will include new flyover ramps and collector-distributor lanes, will extend from west of Roswell Road to east of Ashford Dunwoody Road along I-285 and from the Glenridge Connector to Spalding Drive on GA 400. The project is currently underway; GDOT is currently performing pre-construction work, including lane closures on local roads, I-285, and GA 400.

In 2013, GDOT initiated the Managed Lane Implementation Plan (MLIP) to explore how demand management could improve mobility on interstates in the Atlanta region. The study considered a number of scenarios by which interstates could be dynamically priced, providing incentives for travelers to carpool or take express buses, particularly during the congested peak periods. Some recommendations from the MLIP, including managed lanes on I-85 through Gwinnett County and I-75 through Henry County, have already been implemented, with several additional projects identified for the Atlanta region. Within the study area, managed lanes are being advanced along both I-285 and GA 400.

Local

The combination of the mix of land uses and increased growth and development has made local mobility a major challenge in the area. Interstates and arterials are often congested during the peak period, and collector and local roads have had to bear the brunt of cut-through traffic, spillover congestion, and speeding vehicles. Because right-of-way is fairly constrained in the study area, the cities and PCIDs have placed increased focus on advanced traffic management systems (ATMS), which aim to improve mobility

through the use of coordinated traffic signals, traveler information systems, and other technological applications. The cities and PCIDs have also placed priority on operational improvements at intersections and corridors that bottleneck during peak periods. The cities and PCIDs have also proposed some new roadway alignments to improve east-west connectivity adjacent to I-285. While these new roadways are relatively small in scale, they have been strategically placed to serve new developments such as the State Farm headquarters and growing activity centers, including City Springs and Georgetown. By developing these as complete streets, these new roadways will help to build-out the multimodal network in the Perimeter area.

II. IDENTIFICATION OF GAPS AND INCONSISTENCIES

As shown in Figure 28, the roadway network is well built-out in the study area. As a result, the project team did not find any gaps in planned or programmed projects, nor did it identify any inconsistencies among planned projects. For example, in places where there may be opportunities for better connectivity among surface streets, project partners have already initiated projects to connect roads, as is the case with planned projects in City Springs and the East-West Connector and Westside Connector projects in Sandy Springs and Dunwoody. The project team did identify additional opportunities for operational improvements to enhance last mile connectivity. These are discussed in the following section.

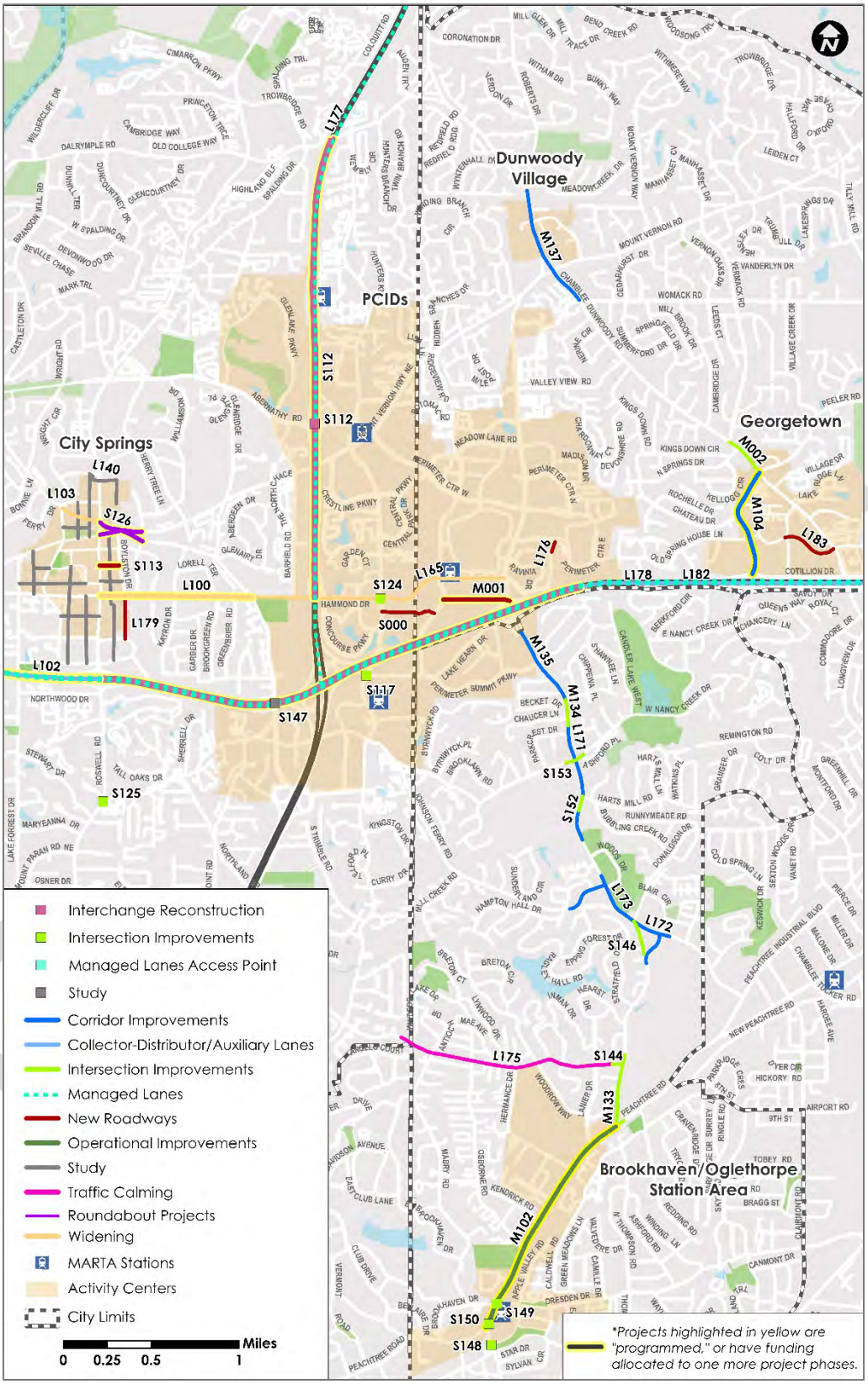


FIGURE 28. PLANNED AND PROGRAMMED ROADWAY PROJECTS

III. Recommendations to Fill Gaps and Complement Transit

In addition to previously planned and programmed projects, the following corridors have been recommended for operational improvements to enhance last mile connectivity. These are shown in Figure 29.

Table 9. Recommended Roadway Projects to Fill Gaps

Project Name	Description	Jurisdiction(s)	Limits	Timeframe
Johnson Ferry Road Operational Improvements	Design and construct operational improvements on Johnson Ferry Rd	Brookhaven	Ashford Dunwoody Rd to the Sandy Springs/Brookhaven city limits	Mid
Windsor Parkway Corridor Improvements	Context-sensitive roadway improvements on Windsor Pkwy	Sandy Springs	Peachtree Dunwoody Rd to Sandy Springs/Brookhaven city limits	Long

The consolidated project list includes these recommended gap-filling projects along with a mix of regional and local roadway projects that enhance connectivity, improve traffic operations, and implement demand management strategies in the study area. All roadway projects contribute to a cohesive multimodal network that fosters last mile connectivity. See the consolidated project list in Appendix A for a full list of roadway projects.

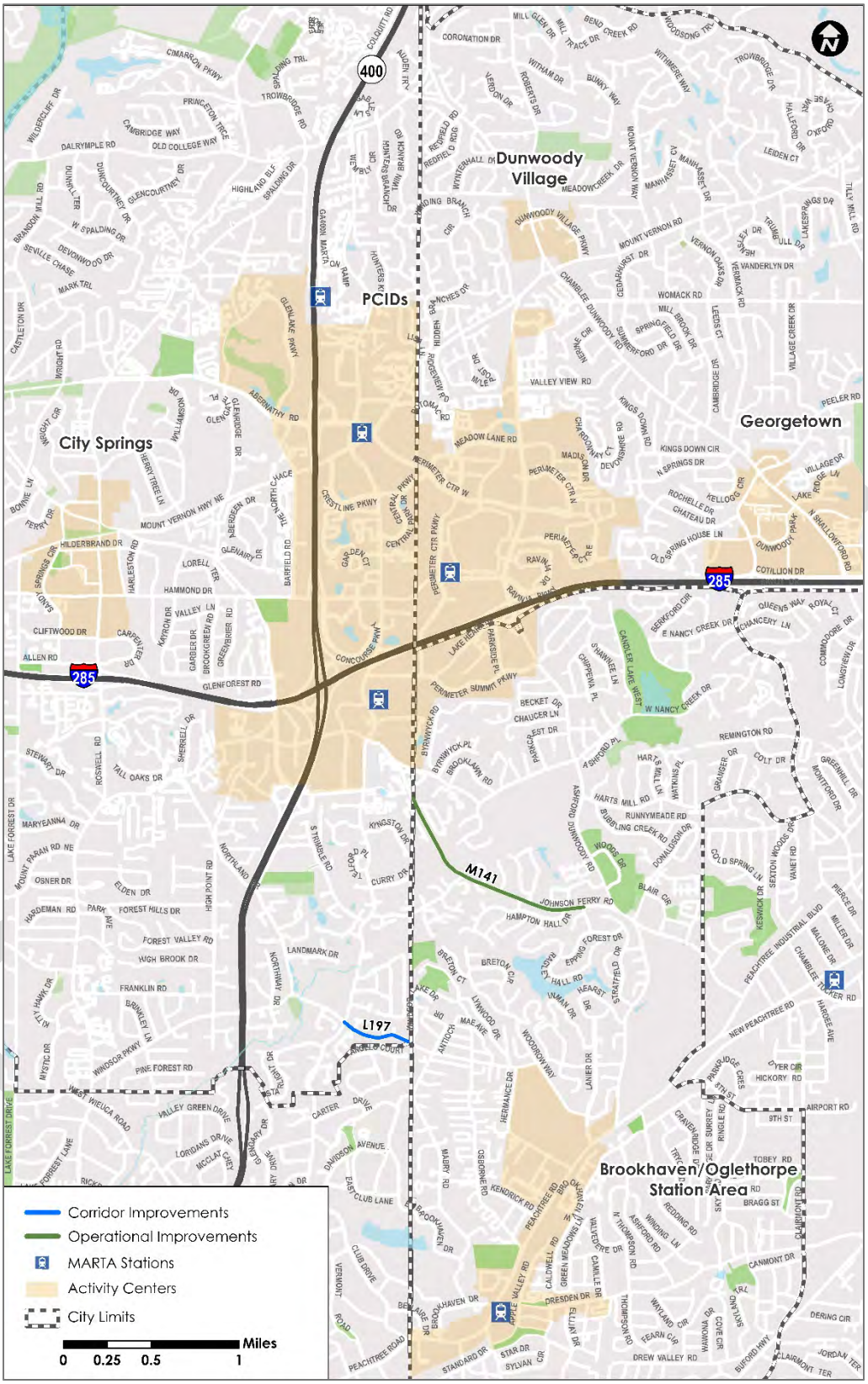


FIGURE 29. NEW ROADWAY PROJECT RECOMMENDATIONS

IV. ROADWAY NETWORK STRATEGIES

In addition to the project recommendations, the Cities and PCIDs should implement the following strategies to foster last mile connectivity for the roadway network.

Coordinate Roadway Improvements with Bicycle, Pedestrian, and Transit Projects

Design and implement roadway improvements in coordination with existing and planned bicycle, pedestrian, and transit projects. Dedicate sufficient right-of-way to accommodate multimodal improvements that may be implemented in the future, such as cycle tracks, multi-use paths, bus pull-outs, or transit-only lanes.

Standards Suitable to Transit Vehicles

Along key transit corridors and at accompanying intersections, adopt standards for lane widths and turning radii to ensure that transit vehicles can safely and efficiently travel through the area.

Encourage Carsharing

Coordinate with private carsharing services to place a dedicated number of vehicles at MARTA rail stations, employer campuses, large retail destinations, and other major destinations within the Perimeter area for easy access by customers.

Adhere to Established Standards

Within the boundaries of the PCIDs, ensure roadway facilities are constructed in conformance with the PCIDs' *Public Space Standards*, which provide specific design guidance for unique classifications of roadways in the Perimeter area. These standards are currently under development. Note: private streets for public use should be encouraged to follow the guidelines provided in the Public Space Standards to the extent possible.

Encourage Satellite Parking

During design for the managed lane system for GA 400 and I-285, examine potential locations for satellite parking lots near the managed lane exits. Coordinate with local and regional transit providers to provide shuttles between the satellite parking lots and the Perimeter area.

E. TRANSIT PLAN AND VISION

I. OVERVIEW OF PREVIOUSLY PLANNED TRANSIT PROJECTS AND SERVICE

Over the course of the past several years, a number of plans and studies have been undertaken to examine opportunities to expand existing or introduce new types of transit service into the Perimeter area. These include, but are not limited to, the Sandy Springs *City Center Master Plan* (2012), *The Next Ten* (2016), and the *Perimeter Circulator Implementation* report (2012). These studies identified key destinations to link together and took into consideration the relative success of privately operated shuttle services. At the outset of the *Last Mile Connectivity Study*, the project team identified several planned transit projects in these and other plans. In essence, they recommended a network of new circulator routes and/or identified corridors on which transit service should be implemented in the future, independently of services offered by MARTA or GRTA. Many of these planned projects were removed from the project list for this study based upon discussions with project partners, because they were determined to be no longer relevant, no longer feasible, or no longer a priority for the project partner(s) involved.

A handful of previously planned transit projects are included for additional consideration in the future, and this study also reflects the programmed projects that are already in various stages of implementation. These include the two new GRTA routes into Perimeter from Cobb and Gwinnett Counties and the arterial rapid transit (ART) that MARTA will begin offering along Hammond Dr. It is anticipated that GRTA will roll out the new routes sometime in 2017. In addition, there have been several studies that recommended some type of transit service between City Springs and the Sandy Springs MARTA station. While a precise service recommendation has not been advanced, it is included in the *Last Mile Connectivity Study* as a project that should be examined more closely in the form of a feasibility study. Figure 30 shows previously planned and programmed services considered.

In addition, there are longer-term plans for potential changes transit service in the Perimeter area, as recommended in MARTA's COA. These proposed changes include adjustments to route 150, including combining it with portions of other routes and providing service to Georgia Perimeter College, Chamblee Dunwoody/Shallowford area, and to the Dunwoody and Chamblee MARTA Stations. The recommendations propose an increase in service from every 30 to 45 minutes to every 30 minutes. The COA also proposes a new community circulator route (Route 350) that would provide locally focused service in Dunwoody every 15 minutes. A specific alignment has not yet been determined. Both of the proposed service changes were envisioned for implementation in a mid-term timeframe (phase two in the COA) and will require additional planning and coordination. MARTA and the local jurisdictions should continue to communicate and coordinate as these and other proposed services move forward.

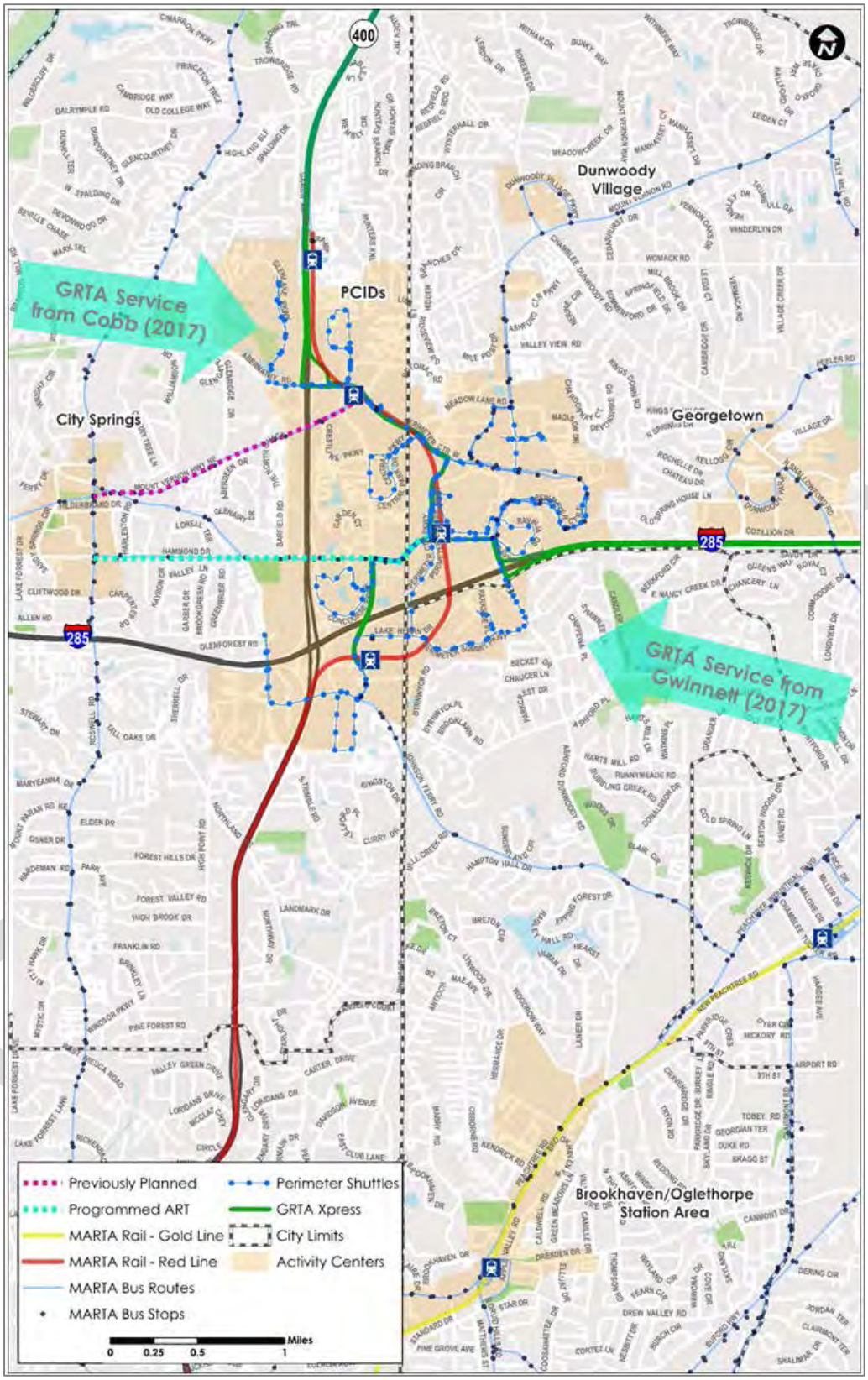


FIGURE 30. PREVIOUSLY PLANNED AND PROGRAMMED TRANSIT SERVICE
(SOURCE: ARC, BROOKHAVEN, DUNWOODY, GRTA, MARTA, PCIDS, SANDY SPRINGS)

II. TRANSIT GAPS AND NEEDS ASSESSMENT

Based on the existing conditions assessment provided, this section identifies transit connectivity gaps and service needs. As discussed earlier in the report, there are two primary types of connectivity – node connectivity (activity center to activity center) and last mile (getting people between origins/destinations and transit or activity centers). Working within this framework, the study identified two types of transit gaps within the study area: gaps in last mile connections to transit and gaps connecting the activity centers of each City and the PCIDs.

Activity Center Connectivity Gaps and Needs

In addition to the assessment of the existing demographics and land uses, the trips currently made between the three cities of Sandy Springs, Dunwoody, and Brookhaven were examined. The team analyzed trip information taken from the 2013 PCIDs survey. This data includes all trips recorded by survey participants with a terminus falling within one of the three cities. Key takeaways include:

- Overall, the vast majority of trips between these three connecting cities is driving, with few recorded survey participants making trips by walking, biking, or taking transit.
- While there are a number of trips between Brookhaven and Perimeter, many of these trips are from further south than the Brookhaven MARTA Station and may not have easy access to it.
- There was only one trip from Dunwoody Village, but a larger number of trips from the Georgetown neighborhood and parts of Dunwoody directly east of Perimeter.
- There were only two trips made between City Springs and Perimeter. However, it is anticipated that this number will grow with the planned development and new apartments within the designated City Springs area.

A high level analysis of weekday MARTA bus boarding and alighting data from August 2016 to December 2016[4] within the Perimeter area illustrates general ridership patterns along Perimeter area bus routes. The highest concentrations of people alighting buses during a typical weekday are at North Springs MARTA Station, followed by Dunwoody MARTA Station. The data also points to ridership in clusters along Roswell Road around intersections with concentrations of retail, City services, and the North Springs High School. The two intersections with the highest number of bus ridership outside of MARTA stations are the intersections of Johnson Ferry Rd, Roswell Rd. and Mt. Vernon Hwy., Hammond Dr and Roswell Rd., and Roswell Rd just south of I-285 near the Prado Shopping Center and the two apartment complexes across the street from the shopping center. The data also show small numbers of riders alighting along Hammond Dr, mainly east of GA 400 and near Peachtree Dunwoody Rd. Route 148 has low ridership west of City Springs and there are few alightings on Route 150 where it circulates through Perimeter.

While the data point to riders boarding and alighting at City Springs locations, they do not provide an indication of the origins or destinations of these trips, so it is difficult to decipher whether people are using bus service to connect City Springs to retail, services, and jobs in Perimeter, access the rail system, or another connection. It is also important to note that City Springs is the transfer location for any riders wishing to travel from a portion of Roswell Road south of Hammond Drive to somewhere along the corridor north of Mount Vernon Highway and vice versa. Without origin-destination data, this may be another contributing factor to the boarding and alighting numbers in City Springs.

There is a general need for alternative transportation modes to connect the activity centers within these three cities to Perimeter, particularly as they diversify in use and add residential density. From Brookhaven,

[4] Data compiled by City of Sandy Springs

the only direct bus service accesses Medical Center, which is south of I-285 and difficult to connect to the rest of Perimeter via walking or biking. There were no train trips between Brookhaven and Perimeter. In conversations with MARTA, it was noted that it is quicker to take the MARTA rail service from Brookhaven south to Lindbergh and transfer north to Dunwoody Station than to provide this connection directly via a local bus because of congestion. If potential riders are unaware of the time savings or unsure of how to transfer, there may be a need for education about the opportunity to make this connection via MARTA rail.

Between Dunwoody and the Perimeter area, there is local bus service to Dunwoody Village, but no direct transit service east into Georgetown and surrounding neighborhoods. One of the issues is that there is no direct roadway connection, aside from I-285. The neighborhood streets that connect to Chamblee Dunwoody Rd do not connect with the roads from the Perimeter campuses off of Ashford Dunwoody Rd. This limits potential transit access as well as access for pedestrians and bicyclists.

The small number of trips between City Springs in Sandy Springs and Perimeter counted in the survey data is potentially due to the small number of residential units within the City Springs area at the time the survey was conducted. Sandy Springs is planning a multi-family housing development in the area, which may increase the need for that trip. It is also important to note that neither of the trips between City Springs and Perimeter utilized transit, despite the existence of two local MARTA bus routes that provide this connection with an overall average one bus every 20 to 30 minutes between them. It is also important to consider the range of multi-family housing and retail/services along Roswell Rd as ridership generators for Routes 5 and 87. As shown in the high-level boarding and alighting data, bus stops close to residential uses as well as commercial uses tend to have more people getting on and off of buses but do not indicate origins and destinations. Future development in the City Springs area may increase the need for the direct connection between City Springs and Perimeter. However, a more detailed assessment of the travel needs of this local connection between City Springs and PCIDs is needed to determine whether the need is for access to jobs, retail, and services in Perimeter, access to the rail system, or a mix of both.

Overall, the major needs to connect activity centers within the study area to the Perimeter area include both direct physical or service connections as well as supportive policies and information that can affect mode choice for people making trips that are between two and four miles.

Last Mile Connectivity Gaps and Needs

Critical to the success of a well-functioning transit system is the provision of “last mile” connections, or the transportation connections between public transit stations and final user destinations. As shown in Figure 17, there are a number of existing services that provide these critical connections within the study area. Among these are 13 employer-sponsored shuttles, each serving in the range of 150 to 1,000 riders per week, and MARTA Route 150, which circulates throughout Perimeter.

However, as evident in a recent survey of MARTA users in the study area, a number of gaps in last-mile connectivity still remain. The results of the survey show that more than half of users surveyed at MARTA stations deemed their trip to/from the station “difficult” or “very difficult” despite existing sidewalks and/or shuttles. Results of the survey are illustrated in Figure 32.

Upon examination of the data, a few issues have been noted. First, the lack of pedestrian and bicycle connectivity is a major impediment to last-mile connectivity for transit users. Although there are sidewalks along many major roadways in the PCIDs area, the large size of the blocks and limited entrances to major campuses increase trip times for pedestrians and bicyclists. Increasing direct pedestrian connectivity through major campuses and blocks may reduce difficulty for individuals completing the last mile of their

trip by reducing the distance, and amount of time, one has to walk or bike to reach their destination. Examples of the large block patterns within PCIDs is show in Figure 31.

FIGURE 31. EXAMPLES OF LARGE-BLOCK AND CAMPUS-STYLE DEVELOPMENT PATTERNS

Access from the MARTA Stations and GRTA *Xpress* route stops to the final destination is critical for travelers to choose transit as their transportation mode. While MARTA and GRTA may be able to get people into Perimeter, if they cannot make that last connection, it could affect their mode choice. Therefore, it is important to improve access from the rail stations and GRTA *Xpress* stops to the office campuses and retail destinations throughout Perimeter.

While the Sandy Springs and Dunwoody MARTA rail stations have pedestrian access to Perimeter in all directions, North Springs MARTA rail station is cut off by GA 400. The highway limits access to the employment and residential areas west of GA 400 despite their proximity to the rail station. In Medical Center there is pedestrian access to the hospitals in the area, but reaching other destinations along Perimeter Summit Pkwy is more difficult and not direct.

One of the major issues described by all transit providers is congestion. Along with personal vehicles, transit buses also get caught in the morning and evening peak periods in Perimeter. This increases travel time and reduces reliability of scheduling, thus making transit less appealing to choice riders and lengthening trip times for captive riders. There is a need to improve transit circulation within Perimeter to increase reliability, reduce travel time for transit, and improve overall circulation, particularly during peak periods. This would enhance transit access within Perimeter for those arriving via alternative modes. Improving the last mile connection between stations and stops and the retail and office destinations also makes transit a potential choice for more of those commuting to and visiting Perimeter.

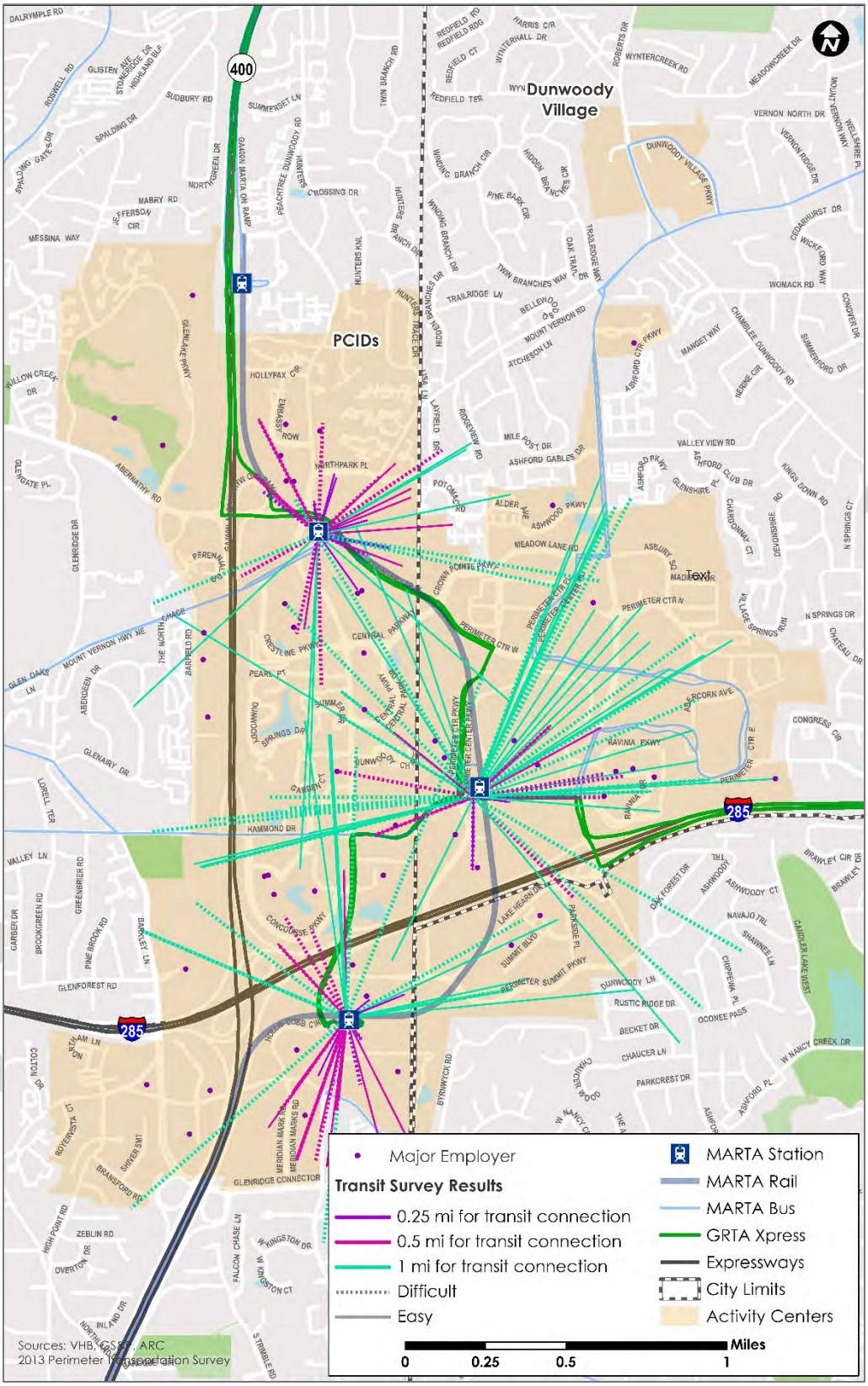


FIGURE 32. LAST MILE CONNECTIVITY GAPS AND CONNECTIONS (SOURCE: ARC, 2013 PERIMETER TRANSPORTATION SURVEY)

III. FUTURE INTER-PERIMETER TRANSIT VISION

This transit vision provides recommendations to make two separate types of transit connections: those that connect activity centers within the study area, and those that improve circulation and mobility within the Perimeter area.

Node Transit Connectivity

Considerations

To address the major connectivity needs connecting the nodes of City Springs, Brookhaven/Oglethorpe MARTA Station area, the Dunwoody Georgetown neighborhood to Perimeter, various roadways and potential transit alignments were discussed.

City Springs: Both Hammond Dr and Mt Vernon Rd were considered. Transit connecting City Springs to the Sandy Springs MARTA station via Mt Vernon Rd has been discussed in multiple forms in previous studies, including as part of a circulator or as rapid transit. While there are mixed uses at both ends, the corridor has low density residential along it between nodes. Hammond Dr provides a similar direct connection to the Dunwoody MARTA rail station. Currently, there are two fixed MARTA bus routes providing this connection. One benefit of connecting to the Dunwoody Station is that the majority of rail riders coming from Sandy Springs will head south. The current *Hammond Drive Corridor Study* and plans for widening make this a viable option for a faster connection between City Springs and MARTA rail.

Brookhaven/Oglethorpe Station Area: Peachtree Dunwoody Rd and Ashford Dunwoody Rd both make this connection. Peachtree Dunwoody Rd from Peachtree Rd north is largely single family residential with no nodes or activity centers of mixed uses until reaching the MARTA Medical Center rail station. This corridor is also outside of the Brookhaven city limits. Ashford Dunwoody Rd provides a direct connection between the Brookhaven/Oglethorpe Station Area and Perimeter within city limits. It also provides access to the activity node at the intersection with Johnson Ferry Rd where there is slightly more residential density and retail as well as proximity to senior living residences. Ashford Dunwoody Rd is also the site of several multi-family residential developments, Blackburn Park, the Ashford/Cowart Family YMCA, Marist School, Montgomery Elementary School, and provides access to the Nancy Creek Trail.

Dunwoody Georgetown Neighborhood: Currently, to get from Chamblee Dunwoody Rd in Georgetown to Perimeter, the only existing direct connections are via I-285 and heading north to Dunwoody Village to turn south on Mt. Vernon Rd. The local streets in Georgetown do not connect to the local campus streets of offices that back up to the neighborhood. Neither of these are preferable for transit because of the lack of directness and congestion. In the long-term, the City may want to explore possible alternative mode connections between Georgetown and Perimeter.

Recommendations

There are two major barriers facing transit along these corridors: congestion and low residential density. Assessment of these alternatives was done through a workshop with representatives from Sandy Springs, Dunwoody, Brookhaven and PCIDs. This workshop was supplemented by individual conversations to ensure that the recommendations were consistent with and supportive of local plans and priorities. Based on this collaboration with project partners, the following projects are recommended. (Note: these projects are also included in the project list contained in Appendix A).

TABLE 10. NODE CONNECTION PROJECTS

Project ID	Project Name	Description	Jurisdiction(s)	Limits	Timeframe
S165	Hammond Drive Transit-Supportive Infrastructure	Install Transit Signal Priority on signals along Hammond Dr that are compatible with MARTA technology	Sandy Springs, Dunwoody, PCIDs	Hammond Dr from Roswell Rd to Peachtree Dunwoody Rd	Short
M144	Hammond Drive Queue Jumper Intersection	Explore opportunities at major intersections along Hammond Dr to install queue jumpers for any transit along the corridor to make use of	Sandy Springs	Hammond Dr from Roswell Rd to city limit	Mid
M143	Brookhaven to PCIDs Transit Connection	Bus connection between Brookhaven MARTA rail station to Perimeter mall and surrounding employment	Brookhaven, Dunwoody, PCIDs	Peachtree Rd from North Druid Hills to Ashford Dunwoody Rd. Ashford Dunwoody Rd from Peachtree Rd to Perimeter Center	Mid
L184	East-West Transit Connection between City Springs and Perimeter	Transit connection and supporting infrastructure between Sandy Springs MARTA Station and City Springs	Sandy Springs, PCIDs	Feasibility study required to determine alignment	Long

The highest priority is transit supportive infrastructure along Hammond Dr. It is anticipated that MARTA will roll out its new arterial rapid transit service along Hammond Dr within the next two years. Transit signal priority and modifications to the roadway configuration, such as queue jumper lanes, require close coordination with Sandy Springs to see the improvements in travel time and schedule reliability that will benefit Sandy Springs residents, employees, and visitors. General design guidance from the National Association of City Transportation Officials (NACTO) is provided below for reference.

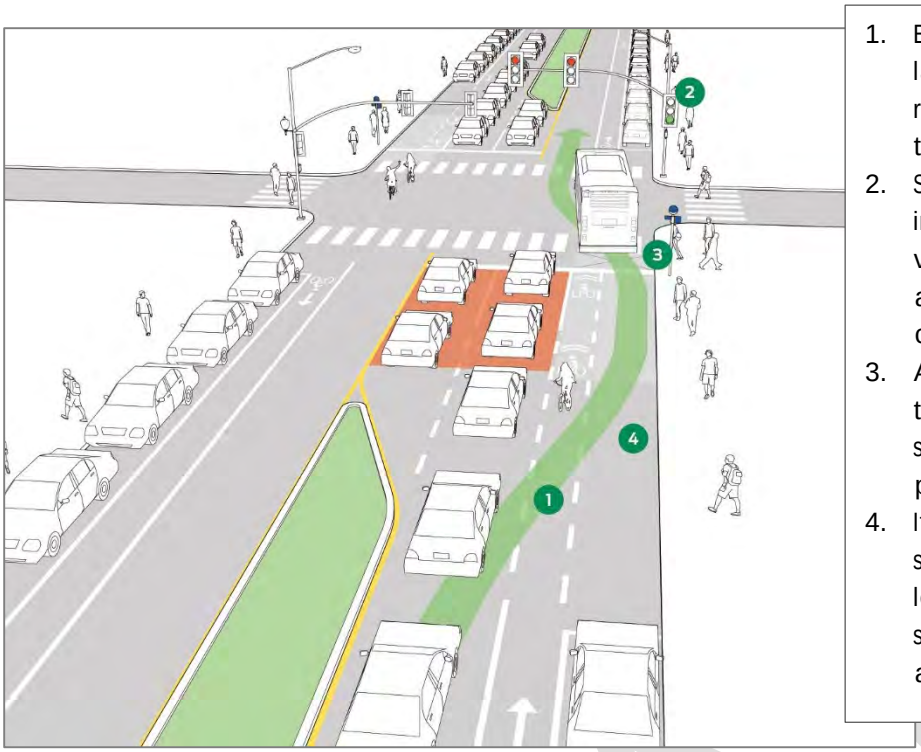


FIGURE 33. ILLUSTRATION OF NACTO QUEUE JUMPER DESIGN GUIDANCE (SOURCE: NACTO TRANSIT STREET DESIGN GUIDE)

The direct connection between Brookhaven and PCIDs is slated for a medium term priority for two main reasons. The first is that a train trip from Brookhaven/Oglethorpe Station to Dunwoody Station is faster than riding a local, fixed route bus along Ashford Dunwoody Rd. The second is that the current Route 25 structure provides a direct connection between senior housing and the hospitals south of I-285. As the need grows for this movement and the opportunity to upgrade signals to include transit signal priority becomes available, transit along this corridor becomes more viable with travel time savings technology. Until then, education about the travel time via MARTA rail between Brookhaven and Dunwoody Stations for those that live, work, and shop within the vicinity of the Brookhaven MARTA rail station is recommended.

Currently, there is no direct, physical connection between the Dunwoody Georgetown neighborhood and Perimeter. Vehicles must drive north to come back south along Mt. Vernon Rd or use I-285. This physical gap also exists for pedestrians and bicyclists. In the future, an alternatives analysis study that takes all three of these modes into account is recommended to identify the best connection for the existing neighborhoods and bordering office campuses.

Transit along Mt. Vernon Rd has been a project identified in previous studies as a circulator, local bus, and bus rapid transit with dedicated bus lanes. Based on the preliminary screening of trips from the City Springs area to the Sandy Springs MARTA rail station and surrounding area, the land uses along Mt. Vernon Rd, and the commitment MARTA has made to Hammond Dr, it is recommended that some form of transit along Mt. Vernon be explored as a long term improvement. This study would include which transit mode(s) are appropriate. As density and development increases and there is more of a demand to reach destinations along that corridor, an additional study to more specifically quantify transit demand is recommended. The benefit of coordinating with MARTA on Hammond Dr is that Sandy Springs does not have to be concerned with implementing new services, but can implement technology and intersection

projects that will support improved travel times for MARTA buses and any other future transit along the corridor to provide a direct connection from developing City Springs to a MARTA rail station.

Last Mile Transit Connectivity

Considerations

To address the needs identified for improved circulation and last mile connectivity in Perimeter, multiple transportation modes, technologies, and alignments were considered. During a workshop with representatives from Sandy Springs, Brookhaven, Dunwoody, and PCIDs, the following ideas and potential alternatives were discussed and vetted:

- Elevated transit connecting MARTA rail stations directly into major office buildings, hospitals, and Perimeter Mall;
- A consolidated shuttle to circulate during peak hours and lunch between major office locations, Perimeter Mall, and retail/restaurants within Perimeter;
- Dedicated bus lanes along major roadway segments in Perimeter to allow existing transit to circulate with faster and more reliable travel times;
- Transit signal priority at major bottleneck signals for transit in the area;
- Managed arterial lanes along major arterials in Perimeter where use would be restricted to high occupancy vehicles, transit vehicles, and/or private rideshare or carsharing services;
- Implementing connected vehicle technology, such as cameras and sensors to act as an area where connected vehicles would be encouraged and have use of restricted arterial lanes; and
- Partnerships with private rideshare or ride-hailing companies for last mile connections from MARTA rail stations.

Based on input from the workshop, coordination, and meetings with staff and officials from each City and PCIDs, the focus for circulation and last mile connectivity was rapid transit. To provide this service, three modes were considered:

- Automated Guideway Transit (AGT): operates on elevated rails with large vehicles in a fixed route
- Personal Rapid Transit (PRT): operates on a grade separated roadway with small autonomous pods to provide direct connections between all stations instead of traveling in a fixed route[5]
- Bus Rapid Transit (BRT): buses that operate in designated, separate lanes.

The additional cost for elevated infrastructure required for the AGT and PRT transit modes is significant. Costs for operating also must be considered. Given that there is not currently a provider in Perimeter who would be operating these modes, it would be up to Perimeter and municipalities to manage operation and maintenance. Dedicated bus lanes for BRT could be done in coordination with existing transit services. By contributing to the capital costs, local municipalities in Perimeter would improve mobility, but not be responsible for operating the services. Existing, planned, and future routes for MARTA, GRTA, and private shuttles would have access to the lanes and be responsible for the services and daily operations as well as vehicle maintenance.

[5] Currently, there are no revenue operating examples of PRT in the United States. London Heathrow Airport has begun exploring this mode using small pods to connect two nodes. In Morgantown, WV, the personal rapid transit/people mover system uses small pod vehicles and has the ability to stop only when requested. However, during peak hours, this operates as a fixed route people mover.

FIGURE 34. RAPID TRANSIT MODES CONSIDERED

The right-of-way (ROW) requirements are similar for the PRT and AGT in that piers are required throughout Perimeter to support the elevate guideway. This would require working with parcel owners to identify areas where piers would be needed and how they could fit in with existing developments. This would also require close coordination with the business community about the potential of bringing elevated transit directly into buildings. However, with BRT, fitting the improvements within the existing ROW could be achieved by widening the roadway or, in some areas, reallocating medians, turning lanes, and/or bicycle lanes towards the dedicated bus lanes. The maintenance of these roadways would be comparable to existing roadway maintenance once installed.

Recommendations

Considering the existing and planned transit available within Perimeter as well as capital and operating costs, **the recommendation for improving circulation within Perimeter is dedicated bus lanes on key corridor segments within Perimeter, at least during peak morning and afternoon hours.** Through further study, these lanes could be warranted all day Monday through Friday, or throughout the entire week. After analyzing the potential alternatives and transit modes, it was determined that implementation of dedicated bus lanes and transit signal priority will result in benefits of both alternatives. Transit will be able to operate separately from general traffic, technology in signals will be utilized to maximize existing infrastructure, and Sandy Springs, Dunwoody, Brookhaven, and PCIDs will not be responsible for operating any new transit. These lanes will improve existing transit and support future service as well.

All transit will have access to these lanes, including MARTA buses, GRTA buses, and employer shuttles. These lanes will allow the existing transit options to provide better travel times and more reliable schedules, particularly during peak congestion in the mornings and evenings. The following figure shows the recommended dedicated bus lanes as well as existing and planned transit services that would make use of the lanes. There are two tiers of dedicated bus lanes that denote priority.

- **Tier 1:** The highest priority segments for bus lanes are lanes that provide connectivity through Perimeter and focus on the areas surrounding the MARTA rail stations, mall, major office campuses,

and connecting across I-285. This also includes segments connecting to the interstates for GRTA *Xpress* buses and where future managed lanes ramps may be.

- **Tier 2:** The second tier or implementation priority expands the dedicated bus lanes to connect south to Johnson Ferry and west along Barfield Rd to expand access to more major employers.

Benefits of these bus lanes include the following:

- Employer shuttles will be able to operate more quickly, increasing capacity and keeping in place the free rides and direct service these riders expect.
- GRTA *Xpress* routes will be able to circulate through Perimeter more easily, improving reliability and travel time.
- Existing local MARTA routes will be able to take advantage to act as another last mile connection for riders.
- The planned MARTA arterial rapid transit along Hammond Dr will be able to take advantage of the lanes.
- The existence of multiple operators in the area means that Sandy Springs, Dunwoody, and PCIDs will not be responsible for operating costs.
- Maintenance costs will remain comparable to existing costs for the road segments with the bus lanes.

Potential barriers to implementation include:

- The need for multiple cities and agencies to work together will require continuous coordination for the detailed planning studies, acquisition of funds, design and construction, and enforcement of the lanes.
- Detailed analysis of available right-of-way (ROW) may require reconfiguration or even widening of the identified roadway segments in some areas, which could increase capital costs.

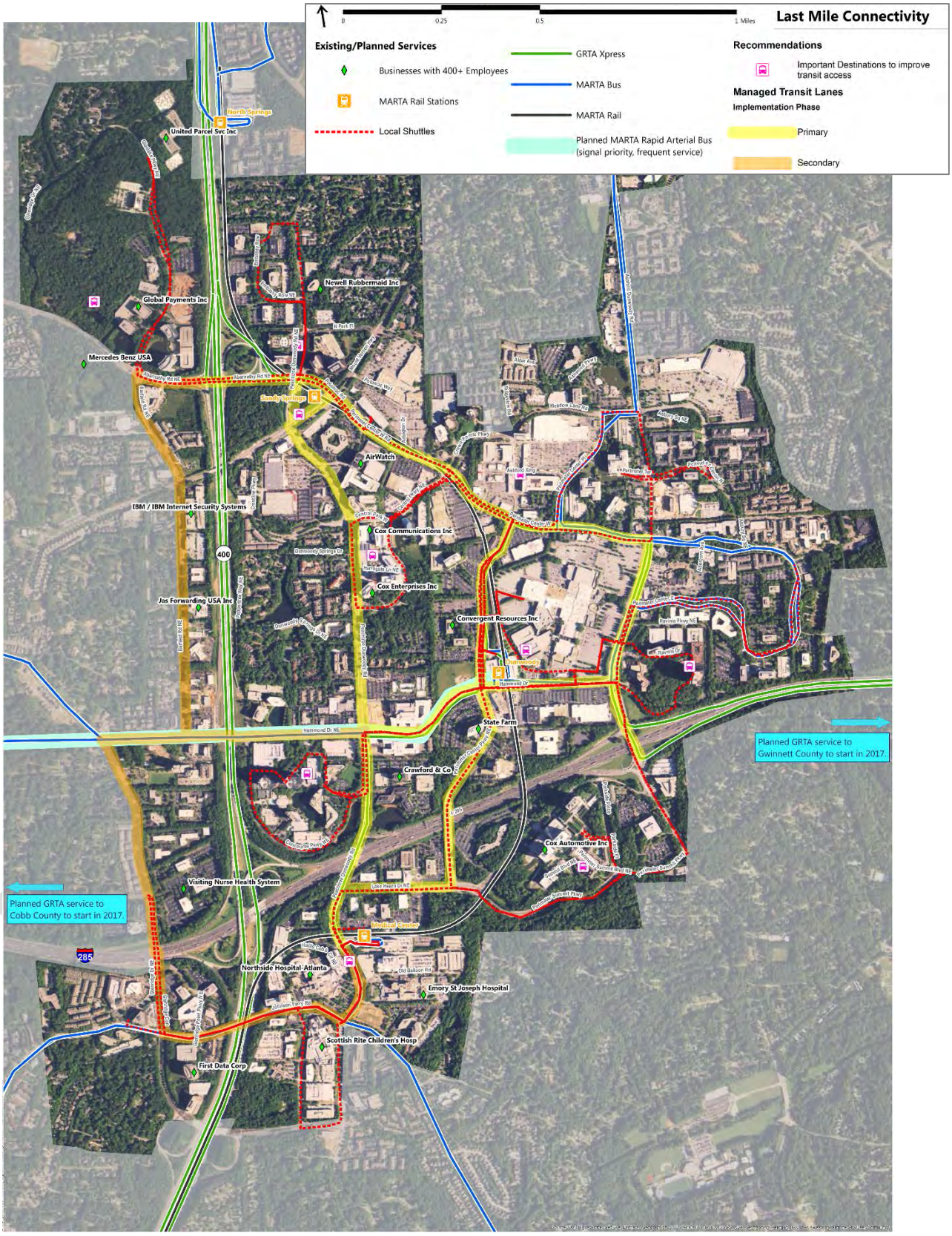


FIGURE 35. TRANSIT LAST MILE CONNECTIVITY RECOMMENDATIONS

To carry these dedicated lanes through to installation from the preliminary visioning step of this study, the following actions are necessary:

- Detailed Planning and Operational Study, including:
  - Evaluation of ROW and pavement widths
  - Evaluation of potential cross sections, examples include:
    - Taking ROW from bike lanes and medians to create a bike/bus lane
    - Taking ROW from general traffic
    - Widening roadways to include bus lanes and bike lanes
    - Barrier separation or striping separation
  - Traffic impact evaluation based on the preferred cross section alternative
  - Selection of enforcement of dedicated bus lanes (i.e. 24/7, Monday through Friday all day, Monday through Friday during AM and PM peak hours only, others)
  - Detailed costs estimate for design and construction
- Coordination between Sandy Springs, Dunwoody, PCIDs, parcel owners with frontage along Tier 1 segments, MARTA, and GRTA to identify joint funding opportunities.
- Design and construction
- Marketing plan for rollout of new dedicated bus lanes to reduce confusion for drivers in general traffic when the lanes open.

The goal of last mile connectivity is to circulate people and connect them from rail and bus stations to their final destination quickly and effectively. MARTA rail and GRTA *Xpress* provide that connection from Atlanta, Cumming, and West Conyers. The new GRTA *Xpress* routes from Kennesaw and Sugarloaf Mills will provide a new population with the option of taking transit to Perimeter and more potential employees and visitors who need to get from those services to their final destination. These dedicated bus lanes will improve travel time and schedule reliability for existing services and may draw in new transit services and riders to improve their overall travel time and or lower commuting costs.

IV. TRANSIT SUPPORTIVE STRATEGIES

Transit cannot be successful on its own. There are many factors that affect the ridership, including the physical characteristics of the service area, but also the behavior of locals and how transportation decisions are made. This section includes short and long term strategies for PCIDs, Sandy Springs, Dunwoody, and Brookhaven to consider. These strategies would not only support greater usage of transit in the dedicated bus lanes circulating Perimeter, but also affect connections between the nodes of Perimeter and local activity centers within the three cities. Some of these strategies are included as specific projects in the project list to increase the likelihood of implementation.

Short-Term

Short-term transit supportive strategies are lower in cost and require a reduced amount of time to implement. Project partners should work together to implement the following strategies, as appropriate, preferably collectively or simultaneously. These strategies are focused on the Perimeter activity center to support transit and efficient circulation of people throughout the area.

Standardize Transit Stop Amenities

Standardizing stops and amenities within Perimeter, particularly shelters and signage, will make it easier for new transit riders and potential future transit riders in the area to be able to identify where they can board transit and find information. Amenities to standardize throughout the area include:

- Standard shelters throughout, regardless of transit agency served.
- Participate in the regional bus stop signage program in which ARC is standardizing bus stop sign designs and information, especially for stops serving multiple agencies.
- Real-time bus information display boards at shelters, MARTA rail stations, and on a mobile application.[6]

Transit-Supportive Technology and Infrastructure

In addition to dedicated bus lanes, other technology and infrastructure can help transit vehicles reduce travel time and schedule reliability. These are lower in cost than dedicated bus lanes and can be implemented at intersections or critical bottlenecks along corridors with a wide variability in caused delay. To address this, agencies can implement:

- Transit Signal Priority (TSP), which includes sensors on traffic signals and in transit vehicles that communicate to reduce the wait time transit vehicles have at traffic signals.
- Queue jumpers, which are a type of intersection that have a short, separate lane that allows transit vehicles to bypass traffic to the intersection stop bar and proceed ahead of general traffic.

Improve Walkability and Bikeability Throughout

Walkability and bikeability is a critical last connection from transit to the origin and final destination for travelers. Essentially, this entails providing supportive infrastructure between transit stops and the front doors of offices, retail, and employment locations. This type of supportive infrastructure and amenities include:

- Wider sidewalk minimums.
- Trees, pedestrian lighting at night, and shading requirements over sidewalks to make it easier to walk in the heat.
- Sidewalk standards internal to developing parcels that provide direct pedestrian and bicycle connections to the front door to buildings.
- Include bicycle standards in new developments and recommended amenities for major employment including:
    - Bicycle parking
    - Showers
    - Bicycle repair stations

Facilities and amenities should be developed in conformance with PCIDs' *Public Space Standards* and other guidelines as applicable.

[6] ARC hosts the OneBusAway mobile application – a free, open source application that includes real-time information for MARTA, CCT, and GRTA. If the data are available for shuttles, they can also be included.

Coordinate and Create Policies Regarding Rideshare Services

Private transportation providers are another key component of the efficient circulation of people around Perimeter. These strategies help influence travelers' decisions to use taxis and ridesharing or "ride hailing" services, such as *Lyft* or *Uber*, instead of driving themselves and regulate the pick-up/drop-off process to avoid its contribution to congestion.

- Promote and encourage taxis and rideshare services, particularly those that allow riders to pool trips and travel together in a single vehicle.
- Consider establishing formal agreements with rideshare service providers to subsidize a portion of rides that begin, end, or do both using a private transportation provider.
- Implement curb control policies – in the future, managing curbs could include identifying areas where taxi or ridshshare service drivers will be allowed to pick-up and drop-off riders. Future developments may have to designate pick-up and drop-off areas.

Encourage and Support Private Shuttles

Private shuttles for office campuses and major employers are an important direct link from MARTA rail stations and GRTA *Xpress* to final destinations. Working with these providers to implement standards of service for the ability to use the dedicated bus lanes will make these services more consistent. Examples include:

- Minimum hours of service
- The production of real-time data for publication on a mobile application

Long-Term

Long term transit-supportive strategies require long range planning and bringing many stakeholders to the table to discuss the future and vision of the urban design and transportation options. With PCIDs, Sandy Springs, Dunwoody, Brookhaven, major employers, office campuses, hospitals, and locals at the table, the following strategies should be discussed and decisions should be made as to how best to apply each strategy.

Land Use and Urban Form Vision and Coordination

As demand for space grows in Perimeter with the associated growth in jobs and housing, it will be important for all stakeholders to come together to set priorities for density, uses, and the urban form of new developments. Potential strategies that encourage use of alternative modes and make it easier for transit riders, pedestrians, and bicyclists to access homes, retail, and employment in the area are:

- Providing direct connections between the residential and office/retail uses, such as direct sidewalks, pedestrian bridges, and walkways through major campuses.
- Set thresholds for employment and residential density both within and outside of the activity center. This will focus the development around the areas with access to the MARTA rail stations, GRTA *Xpress,* and dedicated bus lanes. As the density grows outside of this area, expansions of the transit services will have to be in line with the direction of expanding urban area.

Parking Management Policies

The availability of convenient, low cost parking is a significant factor for travelers when selecting their mode of transportation. As new transit alternatives come on line to provide commuting services into Perimeter, parking is a way to have commuters consider the full costs of their travel options. A recent report published by Smart Growth America, *Empty Spaces,*[7] demonstrates how much less parking transit-oriented development needs than standard engineering guidelines might suggest. Policies include:

- Require employers in the area to provide the same subsidies for transit as they do for parking (i.e. free parking, means employers will also provide the option for free transit passes).
- Provide incentives for employees to live closer to work so that they do not have to drive.
- Require a portion of the cost of parking be passed on to users.
- Provide incentives for employees who live near MARTA rail or GRTA *Xpress* services to use those services instead of driving.

Foster Active Streets

Active streets require more than a sidewalk or multiuse path. To encourage use by pedestrians and bicyclists, it is also important to have trees and shade as well as direct access to employment and retail. Incorporating these things into the desired cross sections of streets in Perimeter will help make active transportation a more viable option and allow transit users a more direct connection to where they are going. This includes:

- Wider minimum sidewalks
- Requirements for trees and shade
- Smaller minimum setback for new developments and direct access to the street instead of having the front door internal to campuses
- Benches at required intervals
- Provide dedicated space for bicyclists where the right-of-way is available

In summary, the combination of new lanes for transit will improve circulation for multiple transit operators, but overall last mile connectivity requires additional efforts towards transit supportive policies and strategies. Together, the availability of faster service, education, amenities, costs, and development policies can make transit operate more efficiently and impact how commuters and visitors make their travel mode decisions.

[7] https://smartgrowthamerica.org/introducing-empty-spaces-new-research-parking-five-tods/

7. Implementation and Next Steps

One of the critical components of any planning process is implementation of recommendations and strategies included within a plan. As discussed in the introduction to this report, it was the intent of the project team to make this a "living plan" that can be adapted and adjusted according to shifting needs and priorities of the cities and PCIDs over time. This section provides guidance on prioritizing projects and developing capital projects.

A. Considerations for Developing Capital Project Lists and Prioritizing Projects

Successful fixed-route transit services rely on direct alignments along or adjacent to higher-density corridors, and it may not be practical or cost-effective to expand coverage or increase frequency of service to increase ridership. Other efforts may be needed to improve first and last mile connections. The convenience or efficacy of first and last mile trips largely depends on three main factors:

- **Distance** – the distance a transit rider must travel between transit service locations and their origins and/or destinations

  A general rule of thumb is that people are willing to walk a ¼-mile to local bus stops and a ½-mile to a rail or rapid transit station. However, in some cases, many people are willing to walk up to a mile or more on bike, if the conditions are conducive to safe, comfortable trips. It may be easier to think of these distances in terms of the amount of time it takes an average person to walk, rather than linear distance. An average person can walk a mile on flat, well-maintained surfaces in about 17 to 20 minutes. (One thing to bear in mind is that these distances represent the actual distance a person walks, along a designated route or path, which may follow an indirect route based upon existing infrastructure, not a straight line from point A to point B).

- **Modal integration** – the ease (or difficulty) of combining multiple modes, such as biking, walking, or ridesharing, with transit trips

  To facilitate convenient, comfortable last mile connectivity, it is essential to ensure that people can easily transfer from one mode to another and make seamless transitions between trips. For example, an incentive to someone riding a bicycle would be to have bike racks at all transit stations and on transit vehicles as well as at office and residential buildings, so that person could easily ride a bike from home, get on a bus, and then ride a bike to his/her final destination. Other types of modal integration revolve around safe, comfortable facilities immediately surrounding transit stations or stops, including but not limited to direct sidewalk connections, benches, shelters, lighting, and shade trees, and dedicated parking for short-term rental or carshare vehicles, so that people can easily access a vehicle to travel to their final destinations quickly.

- **Network quality** – the physical conditions or qualities of the infrastructure and routes between origins, destinations, and transit service

  Beyond physical access and connections, effective last mile connectivity strategies depend upon high-quality facilities and routes that make trips safe and comfortable for travelers. Factors that make for safe and comfortable routes may include such elements as level sidewalk, relatively even topography, well-maintained concrete or asphalt, lighting, shade trees, or covered walkways. In Georgia, shade is an especially important consideration given the warm climate and high temperatures that persist during a long portion of the year.

Based on the three key last mile factors listed above, the following criteria are suggested for consideration when determining which projects are most appropriate for implementation at a given time. As each city and the PCIDs moves forward with identifying capital projects and programs to pursue, these criteria may be helpful in identifying priority projects. ***Note****: these are suggestions only; each jurisdiction individually or working in collaboration should determine their own mechanism for prioritizing projects based upon available resources, forthcoming construction schedule, etc.*

- **Proximity to existing transit** – This could be rated as high/medium/low priority based upon distance or walk time
    - High = within ¼ mile of rail station or 5 to 7-minute walk time
    - Med = within ¾ mile of rail station or 7 to 10-minute walk time
    - Low = more than 1 mile from rail station or 20+ minute walk time
- **Topography and grade** – In general, according to the FHWA, running grades on shared use paths should not exceed five percent, and the most gradual slope possible should be used at all times
    - High = Level grade
    - Med = Moderate grade
    - Low = Steep grade
- **Potential impacts to adjacent property** – Depending upon the surrounding area, some project locations may be in close proximity to nearby commercial or residential property, which may or may not be an issue, depending upon the specific context
    - High = No likely impacts
    - Med = Potential limited impacts
    - Low = Likely impacts
- **Multi-modal integration –** The more opportunities a traveler has to use and easily transition from one mode to another, the more likely he/she is to take advantage of existing facilities and infrastructure
    - High = Provides access to three or more modes of travel
    - Med = Provides access to two modes
    - Low = Provides access to one mode
- **Ability to coordinate with other capital projects –** There are numerous benefits from being able to incorporate last mile connectivity improvement projects with other construction projects, such as repaving, roadway maintenance, intersection improvements, and new development
    - High = Able to fold into existing for planned near-term project
    - Med = Unable to fold into existing or planned project
- **Complexity of project** – The more complex a project is, the more it may be subject to delays in the approval or construction process, and there may be a higher risk of exceeding planned budgets. Project complexity may be a composite criteria comprised of numerous factors, such as the nature and type of project, the location (especially if in an environmentally sensitive area), and the number of agencies involved.
    - High = Low level of complexity
    - Med = Moderate complexity
    - Low = High level of complexity
- **Eligibility for outside funding –** There are pros and cons to seeking outside funding for any project. Sometimes outside funding is seen as an advantage, whereas in other cases, it may add to the complexity of a project. Depending upon local resources and preferences, each jurisdiction should consider how they wish to evaluate eligibility for outside funding.

B. Potential Funding Sources for Last Mile Connectivity Projects

In order to carry out improvements to last mile connectivity throughout the study area, it is anticipated that the cities and PCIDs will utilize a combination of funds from various sources. In addition to local capital programs, funding partners may include GDOT, ARC, DeKalb and/or Fulton County (as applicable), and other outside sources. Private funding may also be an option for some projects, such as those associated with major new or redevelopments. In addition, cities and the PCIDs may choose to pursue funding from philanthropic or other organizations that provide funding for bicycle, pedestrian, and related projects.

Appendix F provides a brief overview of potential opportunities to fund last mile connectivity projects in the future. Because of the changing nature of government at all levels, legislation and program requirements should be carefully reviewed before pursuing any funding opportunity to check for project eligibility and other criteria.

C. Next Steps

As made evident by recent activity around the topic of last mile connectivity around Metro Atlanta, there is momentum behind opportunities to improve conditions for biking, walking, and transit usage. To take advantage of this momentum and keep the *Last Mile Connectivity Study* moving forward, there are several steps that the cities and PCIDs can take. These are briefly described below.

- Identify funding for "quick-win" projects and begin the implementation process, working with potential partners as needed.
- Each project partner (cities and PCIDs) should prioritize projects within its own jurisdiction and develop a short-term implementation plan for projects in the next two years. This process should be revisited each year to ensure priority projects continue to align with larger citywide goals and objectives and available resources.
- Collect data to establish baseline measures and identify targets for last mile connectivity goals to measure progress over time.
- Project partners should coordinate to prioritize inter-jurisdictional projects and develop implementation plans as appropriate.
- Review the project list on an annual basis to update the status and descriptions of projects as needed to assist with implementation.

8. APPENDICES

A. CONSOLIDATED PROJECT LIST

How to Read the Project List: Below are explanations of the categories included in the project list to help understand how it is organized. The list is sorted first by tiers equivalent to timeframe (short, mid, long) with "quick wins" (denoted by *) at the top, and then by status: new (green fill), planned (no fill), programmed (yellow fill).

- **Identification Number:** Denoted with S, M, or L, corresponding to short, long, and mid-term projects, respectively. There is also a numerical value, which is simply an identifier and not indicative of any project priority. (e.g. L100)
- **Municipality:** Combination of one or more of the cities that partnered in the study (Sandy Springs, Brookhaven, Dunwoody). [1] denotes the projects originated from the PCIDs.
- **Project Name**
- **Modal Subsystem:** Indicates whether the project falls into one or more of the following modal types – Multi-Use Path, Sidewalk, Bicycle, Roadway, Transit, or Other.
- **Project Limits**
- **Project Description**
- **Status:** Indicates the project phase – planned (listed in a previous plan or study), programmed (with funding or one more phases), or new (project recommended as part of the *Last Mile Connectivity Study*).
- **Estimated Total Cost:** Where available, programmed projects have been assigned with appropriate costs. For new and planned projects, costs were gleaned from previous studies or calculated from a number of sources, including ARC's Planning Level Cost Estimation Tool.
- **Timeframe:** Projects are grouped into tiers representing short-term, mid-term, and long-term timeframes. It should be noted that in many cases, projects included in the list originated from other studies or plans and that these plans did not adhere to the same timeframe breakdown or planning horizon. Attempts were made to ensure consistency where possible, but some projects may have shifted categories as compared to the source plan.
    - **Tier 1: Short-term (0-3 years)**
      Short-term projects are defined as those that should be implemented in a 0-to-3-year time period. Among the short-term projects, there are a number of projects that qualify as "quick wins," or low-cost projects that will have a significant impact on last mile connectivity. Those highlighted with an asterisk (*) are quick-win projects.
    - **Tier 2: Mid-Term**
      Mid-term projects are defined as those that should be implemented in a timeframe shortly after the short-term period. For the purposes of this study, the team considered mid-term to be approximately within three to ten years.
    - **Tier 3: Long-Term**
      Long-term projects are defined as those that should be implemented in timeframe of ten or more years. These projects are generally larger in scope, typically covering a longer extent and/or requiring greater investment in bicycle and pedestrian facilities.
- **Potential Challenges:** The cities and PCIDs will consider potential challenges during prioritization of these projects. The potential challenges include right-of-way constraints, topography, interagency coordination, and proximity to residential areas.
    - **Right-of-Way Constraints –** Right-of-way may be constrained where the existing facility is immediately adjacent to private property. The process and expense of acquiring right-of-way may create challenges for some projects.
    - **Topography –** Topography was considered a potential challenge primarily for bicycle and pedestrian projects. According to the *GDOT Pedestrian and Streetscape Guide*[8] and *FHWA Best Practices Guide, Designing Sidewalks and Trails for Access*[9], grades greater than 5 percent can be difficult to traverse for users with disabilities. Projects with an average grade of 5 percent or greater have been categorized as high challenges (H), and projects with an average grade of 2.5 to 5 percent have been categorized as medium challenges (M). Projects with grades below 2.5 percent have been designated as low challenges (L). Where topography challenges are not applicable (such as for roadway and transit projects), this has been denoted by "N/A."
    - **Interagency Coordination –** Projects that span multiple jurisdictions or abut jurisdictional lines may benefit from coordination amongst multiple agencies. All projects within the PCIDs boundary were marked as well to indicate that the PCIDs and appropriate city should coordinate to implement the project. In addition, projects along state roads or interstate highways. as well as transit projects, were marked as likely needing interagency coordination.
    - **Proximity to Residential Areas –** When projects are implemented near residential areas, extra oversight is required to minimize impacts such as noise and air quality and to mitigate potential temporary loss of access for the community. For this reason, projects that lie within 50-100 feet of residential area were noted as posing potential challenges.
- **Source Plan:** Where applicable, the source of the project was noted. Note that during the refinement of the project list, some projects changed termini or facility type from the original project description.

[8] GDOT Pedestrian and Streetscape Guide. September 2003. http://www.dot.ga.gov/PartnerSmart/DesignManuals/TrafficOps/GDOT%20Pedestrian%20and%20Streetscape%20Guide.pdf
[9] FHWA Best Practices Guide, Designing Sidewalks and Trails for Access. December 2016. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/

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Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
S129	Sandy Springs[1]	**Johnson Ferry Road Sidewalks**		X					Peachtree Dunwoody Rd to Old Johnson Ferry Rd	Fill sidewalk gaps on southbound side of road	Planned	$194,700 - may need to re-cost estimate	Short*	X	M	X	X	Bicycle, Pedestrian and Trail Implementation Plan	
S135	Brookhaven[1]	**Old Johnson Ferry Road/Saint Joseph Hospital Sidewalks and Sharrows**		X	X				Nancy Creek Dr to Peachtree Dunwoody Rd	Extend and complete sidewalks, add sharrows	Planned	$ 540,000	Short*	X	L	X	X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
S141	Dunwoody[1]	**Perimeter Center East (NB) Sidewalk**		X					Lincoln Pkwy to Perimeter Center Lofts	Construct sidewalk for a distance of approximately 300 ft.	Planned	$12,949 (CST only)	Short*		L	X		Commuter Trail Master Plan	
S140	Sandy Springs, Dunwoody[1]	**Central Parkway (EB) Sidewalk**		X					7000 Central Pkwy to Perimeter Center West	Construct sidewalk along Central Pkwy (750 ft).	Planned	$32,372 (CST only)	Short*		L	X		Commuter Trail Master Plan	
S170	Sandy Springs, Dunwoody[1]	**Wayfinding Program**						X	Within PCIDs area	Develop and implement branded wayfinding guidelines and program for the Perimeter area at two scales: pedestrian-scale to guide people on foot and cyclists (with a focus around MARTA rail stations, the mall, parks, and the hospitals), and vehicular-scale to guide motorists on a broader scale throughout PCIDs (to direct people to key sites and destinations such as the mall, hospitals, etc.)	New	$2,500,000 (guidelines and design, $150k-$200k; fabrication and installation $2-2.5m)	Short*	N/A	L	X	N/A	Last Mile Connectivity Study	
S169	Sandy Springs, Dunwoody[1]	**MARTA Station Enhancements**					X		Stations within PCIDs: Dunwoody, Sandy Springs, and Medical Center MARTA Station	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, as well as lighting, facades, and incorporation of public art. Include possible funding sources and capital project list to guide construction.	New	$ 12,125,000	Short*	N/A	L	X	N/A	Last Mile Connectivity Study	
S166	Sandy Springs[1]	**Glenridge Drive / Glenlake Parkway Sidewalks**		X					Abernathy Rd to entrance of 50 Glenlake office building	Fill sidewalk gaps on both side of road on Glenridge Dr and Glenlake Pkwy	New	$ 851,000	Short*	X	L	X		Last Mile Connectivity Study	
S167	Sandy Springs[1]	**Abernathy Road Sidewalks**		X					GA 400 entrance ramp to Peachtree Dunwoody Rd	Construct sidewalks on south side of road	New	$ 70,000	Short*		L	X		Last Mile Connectivity Study	
S168	Sandy Springs[1]	**Concourse Parkway Sidewalks**		X					Peachtree Dunwoody Rd to Hammond Dr	Concourse Pkwy is a private road. Coordinate with property owner to encourage filling sidewalk gaps on both sides of Concourse Pkwy between Peachtree Dunwoody Rd and the Concourse Athletic Club.	New	$ 293,000	Short*		L	X		Last Mile Connectivity Study	
S100	Sandy Springs	**Hilderbrand Drive Streetscape**		X				X	Hilderbrand Dr	Design and construct sidewalks and streetscape on Hilderbrand Dr.	Programmed	$ 100,000	Short	X	L		X	City Center Master Plan	

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S104	Sandy Springs	**Sandy Springs Circle Improvements, Phase 2**	X	X		X		X	Hammond Dr to Mt. Vernon Hwy	The project will construct curb and gutter, 12-ft wide multi-purpose path, 6-ft wide landscape/furniture zone, 6-ft wide concrete ADA compliant sidewalks and a 10-ft wide tree/utility strip on the west side of the road. It will also construct curb and gutter, 10-ft sidewalk, and wall within this strip in various locations on the east side. Adjacent to Heritage Green Park, the sidewalk will be 8 feet. Canopy street trees and light fixtures with brick panels will be located on both sides of the road. The existing four lane roadway will be modified to provide two 11-ft wide travel lanes, a 10-ft median/left turn lane, and an 8-ft wide parking lane.	Programmed	$ 6,689,456	Short	X	M			Sandy Spring Capital Improvement Program	FN-275 / PI#0010385
S105	Sandy Springs	**Sandy Springs Circle Sidewalks, Phase 1**		X				X	Mt. Vernon Hwy to Johnson Ferry Rd	The project will construct sidewalks and streetscape in conjunction with the City Springs development	Programmed	$ 755,000	Short		L			Sandy Springs Capital Improvement Program	
S106	Sandy Springs[1]	**Johnson Ferry Road Sidewalks**		X					Glenridge Connector to exit southwest at Wells Fargo Site	Construct sidewalks on Johnson Ferry Rd from Glenridge Connector to Ex. SW at Wells Fargo Site	Programmed	$ 600,750	Short		L	X		Sandy Springs FY 2016 Capital Sidewalk Program, Sidewalk Master Plan	
S107	Sandy Springs	**Windsor Parkway Sidewalks**		X					Peachtree Dunwoody Rd to Brookhaven City Limits	Construct sidewalks on Windsor Pkwy from Peachtree Dunwoody Rd to Brookhaven city limits	Programmed	$ 481,250	Short	X	L	X	X	Sandy Springs FY 2016 Capital Sidewalk Program, Sidewalk Master Plan	
S108	Sandy Springs	**Northwood Drive Sidewalks**		X					Kingsport Dr to Roswell Rd	Construct sidewalks on Northwood Dr from Kingsport Dr to Roswell Rd	Programmed	$ 250,950	Short	X	L		X	Sandy Springs FY 2016 Capital Sidewalk Program, Sidewalk Master Plan	
S110	Sandy Springs	**Johnson Ferry Road Sidewalks**		X					Sandy Springs Cir to Roswell Rd	Add sidewalks on the north side of the road between Sandy Springs Circle and Roswell Rd	Programmed	$ 1,080,000	Short		M			City of Sandy Springs	
S111	Sandy Springs	**Multi-Use Path in City Springs**	X						Hilderbrand Dr to Mt. Vernon Hwy	Design and construct new multi-use path connection between Hilderbrand Dr and Mt. Vernon Hwy.	Programmed	$ 355,000	Short	X	L			City of Sandy Springs	

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Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
S112	Multiple	**I-285/GA 400 Interchange Reconstruction**	X	X	X	X			I-285 from west of Roswell Rd to east of Ashford Dunwoody Rd and GA 400 from Glenridge Conn to Spalding Dr	Reconstruct the GA 400/I-285 interchange. The project will improve 4.3 miles of I-285 from west of Roswell Rd to east of Ashford Dunwoody Rd and 6.2 miles of SR 400 from Glenridge Connector to Spalding Dr. Includes collector distributor (CD) lanes on GA 400 from Hammond Dr to north of Spalding Dr, and new interchange at Abernathy Rd. The project adds two CD lanes (plus auxiliary lanes) on SR 400 NB and SB from I-285 to Spalding Dr. The existing north facing ramps at the Hammond Dr Half Diamond interchange will be modified to access proposed CD lanes. The project will reconstruct the Abernathy Rd interchange and will construct a new interchange at Mt. Vernon Hwy and GA 400. Mt. Vernon at GA 400 will be widened to 4 lanes and will include on-street bike lanes and sidewalks. These interchanges will be designed not to preclude construction of managed lanes on GA 400 in the future.	Programmed	$ 800,000,000	Short	X	N/A	X		RTP Project List	PI#721850- and PI#0000784
S113	Sandy Springs	**Denmark Drive Connector Street**				X			Roswell Rd to Boylston Dr	The project will design and construct a new local street to City Center streetscape standards extending between Roswell Rd and Boylston Dr, south of Hilderbrand.	Programmed	$ 5,100,000	Short	X	N/A			City of Sandy Springs	
S102	Dunwoody[1]	**Hammond Drive mid-block crossing**		X					Hammond Dr in front of Dunwoody MARTA Station	Proposed project is to increase pedestrian safety across Hammond Dr by providing a signalized crosswalk near the Dunwoody MARTA station. The project will also revamp the pedestrian entrance of the Dunwoody MARTA station along Hammond Dr.	Programmed	$ 400,000	Short		L	X		PCIDs	
S101	Dunwoody	**Cotillion Drive Multi-Use Path**	X						North side of Cotillion Dr between N. Shallowford Rd and Chamblee Dunwoody Rd	Construct multi-use path on north side of Cotillion Dr between N. Shallowford Rd and Chamblee Dunwoody Rd	Programmed	$ 1,700,000	Short		L			City of Dunwoody	
S115	Sandy Springs[1]	**Peachtree Dunwoody Road Bicycle and Pedestrian Improvements**		X	X			X	Central Pkwy to Mount Vernon Rd	Construct separated bicycle and pedestrian facilities on the west side of road, with design to complement that of the multi-use path to the south on Peachtree Dunwoody Rd (currently in design).	Programmed (in concept)	$1,551,500 (CST only)	Short		L	X		Commuter Trail Master Plan	

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													Potential Challenges					
Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
S116	Sandy Springs[1]	**Peachtree Dunwoody Road at Lake Hearn Drive Intersection Improvements**		X	X	X		X	Peachtree Dunwoody Road at Lake Hearn Drive, as well as portions of Hammond Drive and Ashford Dunwoody Road	Project currently in design phase, and concept is being rescoped. Project includes the block formed by Lake Hearn, Peachtree Dunwoody, Hammond Dr, and Perimeter Center Pkwy. The project includes correcting the deficiencies and improving the operation and safety of the intersection of Peachtree Dunwoody Rd and Lake Hearn Dr, which may include lengthening the left turn lane and the addition of a right turn lane, both on the westbound approach. Project will include operational improvements at I-285 and Peachtree Dunwoody Rd; short-term improvements on Hammond Dr between Peachtree Dunwoody Rd and Ashford Dunwoody Rd (such as sharrows, and filling gaps in ped facilities); landscaping, brick wall, or other minimal improvements on Perimeter Center Pkwy (as State Farm is already making other improvements as part of development); and on Lake Hearn Dr, project will include more striping for bike lanes and curb/median modifications to complete the Complete Street project, with the two-lane portion of Lake Hearn Dr to be widened to 4 lanes along with bike/ped accommodations.	Programmed (in concept)	$ 5,616,985	Short		L	X		PCIDs	DK-440 / PI#0015070
S114	Dunwoody	**Chamblee Dunwoody Road Georgetown Gateway Project**	X	X		X			From Cotillion Dr to Peeler Rd	Add multi-use trails, sidewalks, and a two-way center turn lane on Chamblee Dunwoody Rd from Cotillion Dr to Peeler Rd. Part of a larger project that includes a roundabout at Chamblee Dunwoody Rd and Peeler Rd.	Programmed (in concept)	$ 8,000,000	Short	X	L			City of Dunwoody	
S119	Sandy Springs[1]	**Peachtree Dunwoody Road Bicycle and Pedestrian Improvements**		X	X			X	Hammond Dr to Crestline Parkway	Construct separated bicycle and pedestrian facilities on west side of road.	Programmed (in design)	$1,653,150 (CST only)	Short		L	X		PCIDs	DK-418 / PI#0012876
S121	Sandy Springs[1]	**Mount Vernon Highway Bicycle and Pedestrian Facilities**	X	X	X			X	Roswell Rd to Abernathy Rd	Apply complete street treatments, including multi-use path, from City Springs to Sandy Springs MARTA Station at Abernathy Rd.	Programmed (in design)	$ 11,000,000	Short		M	X		Sandy Springs TSPLOST Project List	
S124	Perimeter	**Perimeter Activity Center - ITS Upgrades and System Expansion / Congestion reduction and traffic flow improvements**				X			Multiple locations	ATMS upgrades for multi-jurisdictional RTOP including equipment upgrades, signal upgrades, conversion of video to loop detection. Includes additional NB left turn lane on Peachtree Dunwoody Rd at Hammond Dr	Programmed (in design)	$ 2,080,369	Short	N/A	N/A	X	N/A	RTP Project List, GDOT	DK-427 (formerly FN-284) / PI#0012631

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Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
S125	Sandy Springs	**Roswell Road at Glenridge Drive Intersection Improvements**		X		X			Roswell Rd at Glenridge Dr	The project will realign the intersection of Roswell Rd and Glenridge Dr, upgrade signal equipment, and add sidewalks and curb ramps.	Programmed (in design)	$ 2,586,960	Short		L	X		Sandy Springs Capital Improvement Program	PI#0013194
S122	Dunwoody[1]	**Ashford Dunwoody Road Bicycle and Pedestrian Improvements**		X	X			X	Hammond Dr/Ravinia Pkwy to Perimeter Center West	Add separated bicycle and pedestrian facilities on the west side of the corridor and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor.	Programmed (in design)	$1,150,250 (CST only)	Short		L	X		Commuter Trail Master Plan	
S120	Dunwoody[1]	**Perimeter Center East Park**						X	Perimeter Center East	Park on Perimeter Center East with accompanying pedestrian bridge that extends to Georgetown area	Programmed (in design)	$ 2,500,000	Short	X	L	X	X	Dunwoody Parks and Recreation Master Plan	
S126	Sandy Springs	**Johnson Ferry Road/Mount Vernon Highway Improvement Project**		X		X			From Roswell Rd to Hunting Creek Rd	Two roundabouts will be constructed at Johnson Ferry Rd and Mt. Vernon Hwy, along with sidewalks on both sides of the road.	Programmed (in ROW)	$ 21,627,651	Short	X	L		X	RTP Project List, Sandy Springs TSPLOST Project List	FN-221 / PI#751420-
S004	Sandy Springs	**City Springs Grid**	X	X	X	X		X	City Springs	Study feasibility for building out street grid for City Springs, including complete street elements on existing corridors and new roadway and bicycle/pedestrian connections. Will be done in conjunction with redevelopment of area.	Programmed (underway)	$ 70,000	Short	N/A	N/A		N/A	City Center Master Plan	
S128	Brookhaven	**Montgomery Elementary School Flashing Pedestrian Signal**		X		X			Ashford Dunwoody Rd and Montgomery Elementary School	Install flashing pedestrian crossing signal (RRFB) at the crosswalk at Chaucer Ln (entrance to Montgomery Elementary School).	Planned	$8,000-$10,000	Short		L			Ashford Dunwoody Road Corridor Study	
S130	Brookhaven	**Apple Valley Road Sidewalks**		X					North Druid Hills Rd to Caldwell Rd	Sidewalk to north/west	Planned	$ 540,000	Short	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
S131	Brookhaven	**Brookhaven Drive Sharrows**			X				Peachtree Rd to Peachtree Rd	Sharrows on Brookhaven Dr	Planned	$ 40,000	Short		L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
S132	Brookhaven	**Peachtree Road Sidewalks and Pedestrian Improvements**		X					Club Dr to New Peachtree Rd	Fill in sidewalk gaps	Planned	$ 140,000	Short		L	X		Brookhaven Bicycle, Pedestrian, and Trail Plan	
S133	Brookhaven	**Caldwell Road Sharrows**			X				Brookhaven eastern city limits (8th St) to East Osbourne Rd or Oaklawn Ave	Fill in sidewalk gaps, add sharrows	Planned	$ 130,000	Short		L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
S134	Brookhaven	**Nancy Creek Drive Sidewalks and Sharrows**		X	X				Ashford Dunwoody Rd to western terminus	Extend sidewalk, add sharrows	Planned	$ 510,000	Short	X	L		x	Brookhaven Bicycle, Pedestrian, and Trail Plan	
S136	Brookhaven	**Ashwoody Court/Ashwoody Trail Sidewalks and Sharrows**		X	X				Murphy Candler Park to Ashford Dunwoody Rd	Sidewalks and sharrows on Ashwoody Ct/Ashwoody Tr	Planned	$ 800,000	Short	X	L	X	X	Brookhaven Bicycle, Pedestrian, and Trail Plan	

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S137	Brookhaven	**East Osborne Road/Green Meadows Lane Sharrows**			X				Caldwell Rd to Dresden Dr	Sharrows on East Osborne Rd/Green Meadows Lane	Planned	$ 30,000	Short		L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
S138	Brookhaven	**Osborne Road Sharrows**			X				Peachtree Rd to northern terminus (Lynwood Park)	Sharrows on Osborne Rd	Planned	$ 50,000	Short		L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
S142	Brookhaven	**Kadleston Way and Nancy Creek Trail Upgrade Pedestrian Crossings**		X					At Kadleston Way, at Nancy Creek Trail/YMCA	Upgrade existing pedestrian crossings at two unsignalized locations across ADR to include refuge islands: Kadleston Way; and between the YMCA and Nancy Creek Trail at the north end of Blackburn Park.	Planned	$10,000-$12,000	Short		L			Ashford Dunwoody Road Corridor Study	
S144	Brookhaven	**Ashford Dunwoody Road at Windsor Pkwy Intersection Improvements**	X	X		X			Ashford Dunwoody Rd and Windsor Pkwy	Design and construct intersection improvements at Ashford Dunwoody Rd and Windsor Pkwy, including turn lanes. Consider as a design option, a standard, single-lane urban roundabout. If a roundabout is not the preferred option, install right turn lane on Windsor Pkwy, a left turn lane on NB Ashford Dunwoody Rd, and a traffic signal at the intersection. Include a left turn lane on NB Ashford Dunwoody Rd at St. Martin's. Construct pedestrian improvements at the intersection based upon the recommended typical cross-section for Segment 1.	Planned	$760,000-$910,000 (CST + contingency)	Short	X	L		X	Ashford Dunwoody Rd Corridor Study	
S145	Sandy Springs[1]	**Peachtree Dunwoody Road Bicycle and Pedestrian Facilities**		X	X			X	Central Park Drive to Crestline Pkwy	Complete Street - Add appropriate bicycle facilities, fill sidewalk gaps, and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$ 1,705,000	Short	X	L	X		Bicycle, Pedestrian, and Trail Implementation Plan	
S146	Brookhaven	**Ashford Dunwoody Road at Johnson Ferry Road and Donaldson Drive Intersection Improvements**		X		X			Ashford Dunwoody Rd from south of Kadleston Way to Johnson Ferry Rd	Design and construct an extension of the northbound right turn lane from south of Publix to Johnson Ferry Rd, and restripe existing lanes to create one dedicated left turn lane and one left/through/right turn lane. Install new overhead signs and pavement markings to indicate lane assignments and directional flow as appropriate. Install sidewalks along west side and fill sidewalk gaps on east side.	Planned	$665,000-$795,000 (CST + contingency)	Short	X	N/A			Ashford Dunwoody Rd Corridor Study	
S147	Sandy Springs	**Glenridge Drive and I-285 - Study for Intersection Improvements**				X		X	Glenridge Dr at I-285	Study the feasibility of making intersection improvements on Glenridge Dr at I-285, including expanding turning lane capacity.	Planned	$25,000 for study	Short	X	N/A	X		City of Sandy Springs	

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S148	Brookhaven	**N. Druid Hills Road at Apple Valley Road Intersection Improvements**				X			N. Druid Hills Rd at Apple Valley Rd	Carry the additional receiving lane on N. Druid Hills Rd to terminate as the existing eastbound left-turn lane on N. Druid Hills Rd at Briarwood Rd.	Planned	$ 400,000	Short	X	N/A	X	X	Brookhaven-Oglethorpe MARTA Station TOD DRI Traffic Study (DRI 2604)	
S149	Brookhaven	**Peachtree Road at Dresden Drive/Brookhaven Drive Intersection Improvements**				X			Peachtree Rd and Dresden Dr/Brookhaven Dr	-Construct an additional westbound right-turn lane on Dresden Dr, resulting in dual right-turn lanes onto Peachtree Rd. - Construct an eastbound left-turn lane on Brookhaven Dr. - Change the signal phasing to allow the dual right-turn lanes on Dresden Dr to run in both a permissive and overlap phase. - Convert the existing northbound right-turn lane on Peachtree Rd into a shared through and right-turn lane. - Construct an additional northbound receiving lane on Peachtree Rd north of the intersection.	Planned	$ 1,000,000	Short		N/A	X		Brookhaven-Oglethorpe MARTA Station TOD DRI Notice of Decision and Brookhaven-Oglethorpe MARTA Station TOD DRI Traffic Study	
S150	Brookhaven	**Peachtree Road at N. Druid Hills Road Intersection Improvements**				X			Peachtree Rd at N. Druid Hills Rd	- Construct an additional southbound left-turn lane on Peachtree Rd, resulting in dual left-turn lanes onto Peachtree Rd. - Reconfigure N. Druid Hills Rd lanes to receive the dual left-turn lanes from Peachtree Rd. - Restripe N. Druid Hills Rd to carry the additional receiving lane on N. Druid Hills Rd through the intersection at Apple Valley Rd to terminate as the existing eastbound left-turn lane on N. Druid Hills Rd at Briarwood Rd.	Planned	$ 1,000,000	Short		N/A	X		Brookhaven-Oglethorpe MARTA Station TOD DRI Notice of Decision and Brookhaven-Oglethorpe MARTA Station TOD DRI Traffic Study	
S143	Sandy Springs, Dunwoody, Brookhaven[1]	**Bikeshare Program**			X			X	PCIDs 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. The task force may consider conducting a feasibility study, a survey to gauge interest, and identify recommendations and next steps for implementing a bikeshare program, if one is determined to be viable.	Planned	N/A (staff time)	Short		N/A	X		PCIDs	
S152	Brookhaven	**Ashford Dunwoody Road at Harts Mill Rd Intersection Improvements**				X			Ashford Dunwoody Rd and Harts Mill Rd	Lengthen the left turn lane on northbound Ashford Dunwoody Rd approaching Harts Mill Rd / Marist School by restriping the existing two-way-left-turn-lane.	Planned	$3,000-$3,500 (CST + contingency)	Short		N/A			Ashford Dunwoody Rd Corridor Study	
S153	Brookhaven	**Ashford Dunwoody Road at W Nancy Creek Drive Intersection Improvements**				X			Ashford Dunwoody Rd and W Nancy Creek Dr	Design and construct left turn lanes on eastbound and westbound West Nancy Creek Dr at Ashford Dunwoody Rd, including turn lanes and signal upgrades.	Planned	$755,000-$910,000 (CST + contingency)	Short	X	N/A		X	Ashford Dunwoody Rd Corridor Study	

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Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
S000	Dunwoody	**East-West Connector**		X	X	X		X	Perimeter Center Pkwy to Peachtree Dunwoody Rd	New roadway between Perimeter Center Pkwy and Peachtree Dunwoody Rd	Planned	Developer funded	Short	X	M	X		City of Dunwoody	
L184	Sandy Springs	**East-West Transit Connection**					X		City Springs to Sandy Springs MARTA Station	Transit connection and supporting infrastructure.	Planned	Scoping Study Required to Determine Mode/Cost	Short	TBD	N/A	X	TBD	Transportation Master Plan, Next10, Sandy Springs City Center Master Plan, Perimeter Circulator Implementation	
S003	Dunwoody[1]	**Perimeter Center Greenway**	X						New greenway between Georgetown and Perimeter Center area	Construct new greenway between Georgetown and Perimeter Center area	Planned	$ 1,202,000	Short	X	H	X	X	Dunwoody Parks, Recreation and Open Space Master Plan	
S165	Sandy Springs, Dunwoody	**Hammond Drive Transit-Supportive Infrastructure**					X		Roswell Rd to Dunwoody MARTA Station	Install Transit Signal Priority on signals along Hammond Dr that are compatible with MARTA technology.	New	Up to $35,000 per intersection for TSP	Short	N/A	N/A		N/A	Last Mile Connectivity Study	
S164	Sandy Springs, Dunwoody, Brookhaven	**Transit-Supportive Technology and Infrastructure**					X		N/A	Implement transit signal priority along key corridors and identify locations to install queue jumpers at critical intersections to allow transit vehicles to pass personal vehicles. Install as resources become available.	New	TSP costs up to $35,000 per intersection. Queue jumper costs range from $100,000 per approach for restriping to $1 million for widening for the bus queue jumper lane	Short	X	N/A	X	TBD	Last Mile Connectivity Study	
S163	Sandy Springs, Dunwoody, Brookhaven	**Standardize Transit Stop Amenities**					X		N/A	Adopt and apply standards for transit shelters, regardless of agency, participate in the regional bus stop signage program to standardize sign design and information, and provide real-time bus information displays at all shelters, rail stations, and via the OneBusAway app	New	$20,000-$50,000 per shelter - Additional costs would be required to provide power and/or lighting and real-time boards to the shelters	Short	N/A	N/A	X	N/A	Last Mile Connectivity Study	
S161	Sandy Springs, Dunwoody, Brookhaven	**Engage and Support Private Shuttle Services**					X		N/A	Work with major employers, large-scale developments, and campuses to encourage their use of private shuttle services for tenants, employees, and visitors. Consider opportunities to standardize or streamline certain elements of operation such as hours of service and use of real-time data to make them more consistent and appealing to users.	New	N/A (staff time)	Short	N/A	N/A	X	N/A	Last Mile Connectivity Study	

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S160	Sandy Springs, Dunwoody, Brookhaven	**Coordinate and Establish Policies Regarding Ridesharing Services**				X	X		N/A	Establish policies to guide operation of ridesharing or ride-hailing services (i.e., Lyft, Uber, and taxis). This may include steps such as: formalizing agreements to subsidize a portion of rides that begin, end, or do both using a private rideshare or ride-hailing provider; implement curb control policies to manage where services are able to pick-up and drop-off passengers.	New	N/A (staff time)	Short	N/A	N/A	X	N/A	Last Mile Connectivity Study	
S154	Sandy Springs[1]	**Abernathy Road Corridor Study**	X	X	X	X	X	X	Corridor Study for Abernathy Rd from Roswell Rd to Mt. Vernon Rd	Corridor study for Abernathy Rd from Roswell Rd to Mt. Vernon Hwy, to determine future capacity and complete street needs. Will integrate study and recommendations with Abernathy Rd DDI (in conjunction with GDOT I-285/GA 400 interchange project).	New	$80,000 for study	Short	N/A	N/A	X	N/A	Last Mile Connectivity Study	
S155	Sandy Springs[1]	**Glenridge Drive Sidewalks**		X					I-285 ramp to Hammond Dr	Fill sidewalk gaps on east side of the road	New	$ 336,000	Short	X	L		X	Last Mile Connectivity Study	
S156	Sandy Springs[1]	**Glenridge Drive/Glenridge Connector Corridor Study**						X	Hammond Dr to Peachtree Dunwoody Rd	Corridor study for complete street treatments on Glenridge Dr	New	$90,000 for study	Short	N/A	L	X	N/A	Last Mile Connectivity Study	
S157	Sandy Springs[1]	**Johnson Ferry Road Complete Street**		X	X			X	Glenridge Conn to Brookhaven city limits	Design and construct complete street treatments along Johnson Ferry Rd	New	$ 1,705,000	Short	X	L	X	X	Last Mile Connectivity Study	
S158	Sandy Springs[1]	**Peachtree Dunwoody Road Bicycle and Pedestrian Facilities**		X	X			X	Glenridge Connector to Lake Hearn Dr	Design and construct complete street treatments along Peachtree Dunwoody Dr from Glenridge Conn to Lake Hearn Dr to tie into trail north of this area on Peachtree Dunwoody Rd	New	$ 1,705,000	Short	X	L	X		Last Mile Connectivity Study	
S159	Sandy Springs	**Mt. Vernon Highway Transit Feasibility Study**					X		City Springs to Sandy Springs MARTA Station	Conduct a feasibility study to determine the viability of an additional transit connection along Mt. Vernon between Sandy Springs MARTA Station and City Springs to supplement the service already offered by MARTA.	New	$50,000 for study	Short	N/A	N/A	X	N/A	Last Mile Connectivity Study	
S005	Sandy Springs[1]	**Feasibility Study for pedestrian bridge between North Springs MARTA Station and Glenlake Parkway**						X	North Springs MARTA Station to Glenlake Pkwy	Conduct feasibility study for construction of pedestrian bridge between North Springs MARTA Station and Glenlake Pkwy	New	$ 35,000	Short	X	L	X		Last Mile Connectivity Study	
M137	Dunwoody	**Chamblee Dunwoody Road Corridor Improvements**	X	X	X			X	Roberts Dr to Ashford Center Pkwy	Multi-use path to one side with narrower sidewalk on opposite side; potential landscaped median; landscaped buffer; access management plan; pedestrian crossing improvements; lighting	Programmed	$ 8,000,000	Mid	X	L			Dunwoody Village Master Plan (5-Year Action Plan), Dunwoody CTP (2011)	

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M001	Dunwoody	**Westside Connector**		X	X	X		X	Ashford Dunwoody Rd to Perimeter Center Pkwy	New roadway between Ashford Dunwoody Rd and Perimeter Center Pkwy with bike lanes and sidewalks. Current concept is to construct grade separated distributor ramp that will provide access between I-285 and Perimeter Center Pkwy. In addition, a multi-use trail will be incorporated to provide pedestrian connectivity between commercial developments within PCIDs area.	Programmed	$ 30,000,000	Mid	X	M	X		City of Dunwoody	
M100	Sandy Springs[1]	**PATH 400 Trail extension**	X						Loridans Dr to I-285	Connect Path 400 Trail from its terminus at Loridans Dr to I-285/SR400 interchange trail	Programmed (in design)	PE $800,000; CST $3,120,000	Mid	X	M	X	X	Bicycle, Pedestrian and Trail Implementation Plan; RTP Project List; Sandy Springs Capital Improvement Program	FN-304 / PI#0015023
M102	Brookhaven	**Peachtree Road Pedestrian and Streetscape Improvements**		X		X		X	North Druid Hills Rd to Ashford Dunwoody Rd	Install 1.38 miles of concrete sidewalk including curb cut ramps, ADA compliant driveways, and crosswalks. The proposed sidewalk has a nominal width of 10' with a 5' landscape zone between the back of curb and sidewalk. A 6' sidewalk width is proposed in areas with right-of-way restrictions. Additional improvements along the project corridor includes landscaping, benches, trash receptacles, bus shelters, and pedestrian/street lighting. Additional ADA compliant crossings across Peachtree Rd are proposed to facilitate pedestrian traffic seeking to access the northbound bus routes. (Project development will also examine the feasibility of a road diet and other safety and operational improvements to Peachtree Rd. The purpose of the road diet will be to allow for the construction of the wider sidewalk and landscape zone with minimal right-of-way and environmental impacts and to improve safety by reducing travel speeds, making the corridor more pedestrian and bicycle friendly.)	Programmed (in design)	$ 3,000,000	Mid		L	X		City of Brookhaven	
M010	Sandy Springs	**Carpenter Drive Sidewalks**		X					Allen Rd to Cliftwood Dr	Construct sidewalks on Carpenter Dr from Allen Rd to Cliftwood Dr	Planned	$ 1,074,825	Mid	X	L			Sandy Springs FY 2016 Capital Sidewalk Program, Sidewalk Master Plan	

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M002	Dunwoody	**Chamblee Dunwoody Road Intersection improvements**	X	X		X			Vermack Rd to N. Shallowford Rd	Intersection improvements and multimodal improvements on Chamblee Dunwoody Rd from Vermack Rd to North Shallowford Rd	Planned	$ 4,500,000	Mid	X	L		X	Dunwoody CTP (2011)	
M105	Sandy Springs	**Study for Complete Street on Glenridge Drive**						X	Roswell Rd to Johnson Ferry Rd	Study Complete Street and Restriping on Glenridge Dr from Roswell Rd to Johnson Ferry Rd	Planned	$ 40,000	Mid	N/A	N/A		N/A	Sandy Springs TSPLOST Project List	
M106	Sandy Springs[1]	**Barfield Road Buffered Bike Lanes**		X	X				Mt. Vernon Hwy to Abernathy Rd	Construct buffered bike lanes (0.34 mi)	Planned	$ 79,700	Mid		M	X		Bicycle, Pedestrian and Trail Implementation Plan	
M107	Brookhaven	**Johnson Ferry Road Multi-Use Path with Roadway Improvements at Blackburn Park**	X	X					Donaldson Dr to where Nancy Creek Trail enters Ashford Dunwoody Rd, near the north end of Blackburn Park	Design and construct improvements to achieve a combination of pedestrian improvements from Segment 2 and lane assignments from Segment 3, including a multi-use path on both sides of the road, narrower lanes, curb and gutter, and new sidewalk north of Cambridge Square.	Planned	$2,260,000 - $2,715,000	Mid	X	L			Ashford Dunwoody Road Corridor Study	
M108	Brookhaven	**Ashford Dunwoody Road Corridor Improvements**	X	X					From north of Windsor Pkwy to south of Johnson Ferry Rd	Design and construct improvements along ADR south of Johnson Ferry Rd as shown in the typical cross-section for Segment 1, including sidewalk on the west side of Ashford Dunwoody Rd, multi-use path on the east side of Ashford Dunwoody Rd, narrower travel lanes, and curb and gutter.	Planned	$1,810,000 - $2,175,000	Mid	X	L		X	Ashford Dunwoody Road Corridor Study	
M109	Sandy Springs	**Boylston Drive Sidewalks**		X					Hammond Dr to Mt Vernon Hwy	Construct sidewalk both sides of Boylston Dr (0.55 miles)	Planned	$ 512,300	Mid		M			Bicycle, Pedestrian and Trail Implementation Plan	
M110	Sandy Springs	**Peachtree Dunwoody Road Sidewalks**		X					Windsor Pkwy to South Trimble Rd	Construct sidewalk both sides (0.39 miles)	Planned	$ 367,200	Mid	X	M		X	Bicycle, Pedestrian and Trail Implementation Plan	
M111	Brookhaven	**North Fork Nancy Creek Multi-Use Trail**	X						Murphy Candler Park to northern city limit (I-285)	Multiuse path from Murphey Candler Park to northern city limit	Planned	$ 162,400	Mid	X	L	X	X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M112	Brookhaven[1]	**Perimeter-Medical Connector Trail Multi-Use Trail**	X						Saint Joseph's Hospital Atlanta to Lake Hearn Dr/Perimeter Center Pkwy	Multi-use path from Saint Joseph's Hospital Atlanta to Lake Hearn Dr/Perimeter Center Pkwy	Planned	$ 930,000	Mid	X	H	X		Brookhaven Bicycle, Pedestrian, and Trail Plan	
M113	Brookhaven	**Colonial Drive/Oglethorpe Avenue Sharrows**			X				Peachtree Rd to North Druid Hills Rd	Sharrows from Peachtree Rd to North Druid Hills Rd	Planned	$ 40,000	Mid		L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M114	Brookhaven	**Osborne Road Sidewalks and Sharrows**		X	X				Peachtree Rd to northern terminus (Lynwood Park)	Fill in sidewalk gaps, add sharrows	Planned	$ 530,000	Mid		L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	

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M115	Brookhaven	**Lanier Drive, Hearst Drive, and Humility Lane Sidewalks and Sharrows**		X	X				Peachtree Rd to Hearst Dr/Humility Ln	Add sidewalks and sharrows to Hearst Dr/Humility Lane. Add sidewalk to one side of road and replace sharrows with cycle track on the other side of Lanier Dr.	Planned	$ 650,000	Mid		M		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M116	Brookhaven	**Windsor Parkway Sidewalks and Sharrows**		X	X				Ashford Dunwoody Rd to Windsor Lake Dr	Fill in sidewalk gaps, add sharrows	Planned	$ 540,000	Mid		L	X	X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M117	Brookhaven	**Hermance Drive Sharrows**			X				Peachtree Rd to Windsor Pkwy	Sharrows on Hermance Dr	Planned	$ 530,000	Mid		L			Brookhaven Bicycle, Pedestrian, and Trail Plan	
M118	Brookhaven	**Nancy Creek Drive/Ashentree Drive Sidewalks and Sharrows**		X	X				Western limit of Murphey Candler Park to Chamblee Dunwoody Rd	Sidewalks and sharrows on Nancy Creek Dr/Ashentree Dr	Planned	$ 650,000	Mid	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M119	Brookhaven	**East Nancy Creek Drive Sidewalks and Sharrows**		X	X				Chamblee Dunwoody Rd to Murphy Candler Park	Fill in sidewalk gaps and extend sidewalk, add sharrows	Planned	$ 60,000	Mid	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M120	Brookhaven[1]	**Perimeter Summit Parkway Mid-Block Crossing at Offices**		X					Ashford Dunwoody Rd to Perimeter Center Pkwy/Lake Hearn Dr	Midblock crossing at offices	Planned	$ 40,000	Mid		L	X		Brookhaven Bicycle, Pedestrian, and Trail Plan	
M121	Brookhaven	**Ellijay Drive and Coosawattee Drive Sidewalks and Sharrows**		X	X				Dresden Dr to Briarwood Rd	Fill in sidewalk gaps, add sharrows, improve crossings	Planned	$ 490,000	Mid	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M122	Brookhaven	**Matthews Street Sharrows**			X				Colonial Dr to Oglethorpe Ave	Sharrows on Matthews St	Planned	$ 20,000	Mid		L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M123	Brookhaven	**Mabry Road Sharrows**			X				Brookhaven Dr to Windsor Pkwy	Complete sidewalks, add sharrows	Planned	$ 130,000	Mid	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
M125	Sandy Springs[1]	**Central Parkway Bicycle and Pedestrian Improvements**		X	X			X	Peachtree Dunwoody Rd to Central Pkwy	Complete Street - Add appropriate bicycle facilities and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$1,016,500 (CST only)	Mid		L	X		Commuter Trail Master Plan	
M131	Dunwoody	**Pedestrian improvements at Chamblee Dunwoody Road at Kings Down Road**		X					Chamblee Dunwoody Rd at Kings Down Rd	Pedestrian refuge island; reconstruct curb; install new sidewalk	Planned	$34,000-$46,000	Mid	X	L			Pedestrian Safety Action Plan	
M130	Dunwoody	**Mount Vernon Road Multi-Modal Improvements**			X	X	X	X	From Chamblee Dunwoody Rd to Wickford Way (2,000 ft)	On-street bicycle lanes; landscaped buffers; access management plan; lighting; landscaping; sheltered bus stops	Planned	$ 2,400,000	Mid		L		X	Dunwoody Village Master Plan (5-Year Action Plan)	

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M129	Dunwoody[1]	**Mall Loop Road Pedestrian Improvements**		X	X				Mall Loop Rd	This is a private road. City will coordinate with property owner to make bicycle and pedestrian improvements on Mall Loop Rd.	Planned	$ 1,657,000	Mid		L	X		Dunwoody MARTA Connectivity Improvements Final Report	
M127	Dunwoody[1]	**Ashford Dunwoody Bicycle and Pedestrian Improvements**		X	X			X	Perimeter Center West/East to Meadow Lane	Add separated bicycle and pedestrian facilities on the west side of the corridor and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor. Ensure that facilities complement the bicycle/pedestrian and streetscape design to the north on Ashford Dunwoody Rd (where project is in design).	Planned	$989,750 (CST only)	Mid		L	X		Commuter Trail Master Plan	
M126	Dunwoody[1]	**Crown Pointe Parkway Bicycle and Pedestrian Improvements**		X	X			X	Perimeter Center West to Old Perimeter Way	Complete Street - Upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$40,075 (CST only)	Mid		L	X		Commuter Trail Master Plan	
M132	Sandy Springs	**Abernathy Rd Bicycle and Pedestrian Facilities**		X	X			X	Barfield Rd to Mt Vernon Hwy	Apply complete street treatments on Abernathy Rd from Barfield Rd to Mt. Vernon Hwy	Planned	$ 1,084,300	Mid	X	L	X		Bicycle, Pedestrian and Trail Implementation Plan	
M133	Brookhaven	**Ashford Dunwoody Road at Peachtree Road Intersection Improvements**	X	X		X			From Peachtree Rd to Oglethorpe Dr	Design and construct intersection improvements at Peachtree Rd and Ashford Dunwoody Rd - Extend right turn lane on SB Ashford Dunwoody north to Oglethorpe Dr. Convert right turn lane from SB Ashford Dunwoody Rd to southbound Peachtree Rd into barrier-separated free-flow right turn lane. Install right turn lane on SB Peachtree Rd and increase turn radius in NE corner of intersection. Construct pedestrian improvements based upon recommended typical cross-section for Segment 1.	Planned	$1,770,000-$2,100,000 (CST + contingency)	Mid	X	L		X	Ashford Dunwoody Rd Corridor Study	
M134	Brookhaven	**Montgomery Elementary School Intersection Improvements**	X	X		X			North of Brenton Dr to Montgomery Elementary School exit	Design and construct intersection improvements at Montgomery Elementary School. Install a right turn lane on northbound ADR into the school entrance. Upgrade the existing traffic signal at the school exit and work with PTOP to optimize phasing/timing of the signal. Upgrade the pedestrian crossings at the school exit and at Chaucer Ln. to include refuge islands and install a wide sidewalk between the two school driveways.	Planned	$835,000-$1,000,000 (CST + contingency)	Mid		L			Ashford Dunwoody Rd Corridor Study	

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Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
M135	Brookhaven	**Ashford Dunwoody Road Intersection and Corridor Improvements**	X	X	X	X		X	South of Perimeter Summit Pkwy to Dunwoody city limits	Design and construct intersection improvements at Perimeter Summit Pkwy/Oak Forest Dr and ADR and recommendations based upon the typical section for Segment 4. Extend the right turn lane on southbound ADR, creating 2 through lanes and a right turn lane at both Ashford Green and Perimeter Summit Pkwy. Lengthen left turn lane on northbound ADR at Perimeter Summit Pkwy. Install 2nd through lane northbound ADR to match receiving lanes north of intersection. Install planted median with accommodations for left turns where appropriate from Perimeter Summit Pkwy/Oak Forest Dr to City Limits. Construct pedestrian improvements based upon recommended typical cross-section for Segment 4. Work with PTOP to optimize the signal.	Planned	$2,404,000-$2,450,000 (CST + contingency)	Mid	X	L	X		Ashford Dunwoody Rd Corridor Study	
M124	Dunwoody[1]	**Meadow Lane Road Bicycle and Pedestrian Improvements**		X				X	Old Perimeter Way to Ashford Dunwoody Rd	Complete Street - Upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$ 1,000,000	Mid		L	X		Commuter Trail Master Plan	
M142	Sandy Springs, Dunwoody, Brookhaven	**Tier 1 Transit Lanes**				X	X		N/A	Provide dedicated transit lanes on key corridor segments within the Perimeter, at least during peak morning and afternoon hours. Tier one focuses on segments that provide connectivity through Perimeter and surrounding the MARTA rail stations, Perimeter Mall, major office campuses, and connections across I-285.	New	Capital costs range from $500,000 per mile for restriping up to $5 million per mile for roadway widening or reallocation of median space. TSP along the bus lanes would cost up to $35,000 per intersection. No operating or vehicle costs would be required.	Mid	X	N/A	X	TBD	Last Mile Connectivity Study	
M138	Sandy Springs	**Johnson Ferry Road Complete Street**		X	X			X	Abernathy Rd to Hammond Dr	Design and construct complete street treatments along Johnson Ferry Rd	New	$ 1,705,000	Mid	X	L			Last Mile Connectivity Study	
M139	Sandy Springs[1]	**Glenlake Parkway/Glenridge Drive Multi-Use Path**	X	X	X				UPS to Abernathy Rd, via Glenlake Pkwy and Glenridge Pkwy	Design and construct a multi-use path.	New	$ 505,000	Mid		L	X		Last Mile Connectivity Study	
M140	Sandy Springs[1]	**Mount Vernon Highway Bike/Ped Facilities**		X	X			X	Abernathy Rd to Dunwoody city limits	Apply complete street treatments from Sandy Springs MARTA Station to Dunwoody city limits.	New	$ 1,705,000	Mid	X	L	X		Last Mile Connectivity Study	

Last Mile Connectivity Study - Consolidated Project List

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Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
M141	Brookhaven	**Johnson Ferry Road Operational Improvements**				X			Ashford Dunwoody Rd to western city limits (with Sandy Springs)	Operational improvements on Johnson Ferry Rd	New	$ 600,000	Mid	X	N/A		X	Last Mile Connectivity Study	
M143	Brookhaven	**Brookhaven-to-PCIDs Transit Connection**					X		Peachtree Rd from North Druid Hills Rd to Ashford Dunwoody Rd and Ashford Dunwoody Rd from Peachtree Rd to Perimeter Center	Bus Connection between Brookhaven MARTA rail station to Perimeter mall and surrounding employment, including transit signal priority (TSP)	New	Up to $35,000 per intersection for TSP	Mid	Depends upon alignment	N/A	X	Depends upon alignment	Last Mile Connectivity Study	
M144	Sandy Springs, Dunwoody	**Hammond Drive Queue Jumper Intersection Improvements**				X	X		Roswell Rd to Perimeter Center Pkwy	Explore opportunities at major intersections along Hammond Dr to install queue jumpers for use by any transit vehicles along the corridor	New	Queue jumper costs: $100,000 per approach for restriping to $1 million for widening to install bus queue jumper lane (based on length of approach that is .20 miles, using general bus lane guidelines)	Mid	X	N/A	X	N/A	Last Mile Connectivity Study	
L100	Sandy Springs	**Hammond Drive, Phase 1 Efficiency Improvements**		X	X	X	X		Roswell Rd to Glenridge Dr	Phase 1: Complete design for Hammond Dr to include 4 lanes with sidewalks, bicycle lanes, and transit lanes and acquire right-of-way. Will include operational improvements at Roswell Rd and Boylston Dr, which may include additional left or right turn lanes from Hammond Dr at these intersections.	Programmed	$16,000,000 (PE and ROW)	Long	X	L			Sandy Springs TSPLOST Project List	
L102	Multiple	**I-285 North Auxiliary Lane**				X			I-285 North (westbound direction) from US 19/Roswell Rd to Riverside Dr	Auxiliary lane in westbound direction (includes bridge replacement and ramp intersection improvements)	Programmed	$ 20,378,423	Long	X	N/A	X		RTP Project List	FN-AR-185
L103	Sandy Springs	**Johnson Ferry Road City Center Expansion**		X	X	X		X	Sandy Springs Cir to Mt Vernon Hwy	Expansion will be 5 lanes in width and will include Complete Street elements on north side of road (details to be determined). South side of road will have bicycle and pedestrian improvements in association with improvements to City Springs.	Planned	$ 1,232,110	Long	X	N/A			City Center Master Plan (2012)	
L104	Sandy Springs	**Lake Forrest Drive Sidewalks**		X					Allen Rd to Mt Vernon Hwy	Construct sidewalk - one side (0.46 miles)	Planned	$ 478,100	Long	X	H		X	Bicycle, Pedestrian and Trail Implementation Plan	
L105	Brookhaven	**North Druid Hills Road Sidewalks and Multi-Use Trail**	X	X					Curtis Dr to Apple Valley Rd	Fill gaps in sidewalks to west, expand sidewalk to multi-use path along east	Planned	$ 1,210,000	Long	X	L	X	X	Brookhaven Bicycle, Pedestrian, and Trail Plan	

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L106	Brookhaven	**Nancy Creek/Lynwood Park Multi-Use Path**	X						Between nearby and disconnected neighborhoods to Lynwood Park and other Nancy Creek projects	Multi-use path along creekbed, with neighborhood connections according to resident demand	Planned	$ 240,000	Long	X	M		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L107	Brookhaven	**Colonial Drive/Oglethorpe Avenue Multi-Use Trail**	X						Peachtree Rd to North Druid Hills Rd	Multi-use trail on Colonial Dr/Oglethorpe Ave	Planned	$ 640,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L108	Brookhaven	**Sylvan Circle Multi-Use Trail**	X						North Druid Hills Rd to Fernwood Circle	Add multi-use path in greenspace near Sylvan Circle, including access to Apple Valley Rd	Planned	$ 650,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L109	Brookhaven	**Apple Valley Road Multi-Use Trail**	X						North Druid Hills Rd to Caldwell Rd	Multi-use path to north/west	Planned	$ 1,390,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L110	Brookhaven	**Dresden Drive Multi-Use Trail**	X						Thompson Rd to Clairmont Rd	Fill in gaps and widen to multi-use path on south	Planned	$ 1,180,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L111	Brookhaven	**Caldwell Road Sidewalks and Multi-Use Trail**	X	X					Eastern city limits (8th Street) to East Osbourne Rd or Oaklawn Avenue	Multi-use trail to west/north	Planned	$ 1,780,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L112	Brookhaven	**Osborne Road Multi-Use Trail**	X						Peachtree Rd to northern terminus (Lynwood Park)	Widen sidewalk to multi-use trail	Planned	$ 1,310,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L113	Brookhaven	**Windsor Parkway Road Calming/Trail**	X			X			Ashford Dunwoody Rd to western city limits (Windsor Lake Dr)	Add road calming, add multi-use trail	Planned	$ 2,140,000	Long	X	L	X	X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L114	Brookhaven	**Nancy Creek Multi-Use Trail**	X						Lynwood Park to Johnson Ferry Rd	Multi-use path along creekbed, with neighborhood connections according to resident demand	Planned	$ 940,000	Long	X	M		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L115	Brookhaven	**Nancy Creek Multi-Use Trail**	X						Johnson Ferry Rd to Ashford Dunwoody Rd	Multi-use path along creekbed, with connections to nearby facilities	Planned	$ 1,550,000	Long	X	M		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L116	Brookhaven	**Nancy Creek Multi-Use Trail**	X						Ashford Dunwoody Rd to Chamblee Dunwoody Rd	Multi-use path along creekbed, with connections to nearby facilities	Planned	$ 2,090,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L117	Brookhaven	**Nancy Creek Drive Multi-Use Trail**	X						Ashford Dunwoody Rd to Murphy Candler Park	Improve/widen existing path on south side to full width	Planned	$ 410,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	

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L118	Brookhaven	**Blackburn Park Multi-Use Trail**	X						Blair Circle to Ashford Dunwoody Rd	Modify existing paths and/or add paths to create a more direct link between the two points	Planned	$ 510,000	Long		M			Brookhaven Bicycle, Pedestrian, and Trail Plan	
L119	Brookhaven	**Rail Overpass Multi-Use Trail**	X						Peachtree Rd to Caldwell Rd	Add multi-use path bridge over rail connection at Caldwell Rd with Town Center	Planned	$ 392,000	Long	X	M	X		Brookhaven Bicycle, Pedestrian, and Trail Plan	
L120	Brookhaven	**Brookhaven Park Multi-Use Trail**	X						Peachtree Rd/Osborne Rd to Brookgate Way and Brookhaven Park Place	Add path connecting park with cul-de-sacs	Planned	$ 230,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L121	Brookhaven	**Osborne Park Multi-Use Trail**	X						Nancy Creek to Osborne Rd	Multi-use path connecting to Nancy Creek	Planned	$ 210,000	Long	X	H		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L122	Brookhaven	**Nancy Creek Access Trail Multi-Use Trail**	X						West Nancy Creek Dr to Nancy Creek	Multi-use path connecting to Nancy Creek and adjacent cul-de-sacs	Planned	$ 100,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L123	Brookhaven	**Murphey Candler Park Connection Multi-Use Trail**	X						Ashwoody Court to Murphey Candler Park trail	New access point to Murphey Candler Park and multi-use path connecting to existing paths	Planned	$ 20,000	Long	X	H		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L124	Brookhaven	**Publix Connection Multi-Use Trail**	X						Ashford Dunwoody Rd to Blair Circle	Multi-use path on property line between golf course and Publix shopping center	Planned	$ 560,000	Long	X	L			Brookhaven Bicycle, Pedestrian, and Trail Plan	
L125	Brookhaven	**Oglethorpe Connection Multi-Use Trail**	X						Dorby Park Dr to Hermance Dr	Multi-use path on undeveloped parcel, then sharrows on street	Planned	$ 370,000	Long	X	M			Brookhaven Bicycle, Pedestrian, and Trail Plan	
L126	Brookhaven	**Matthews-Park Vista Connection Multi-Use Trail**	X						Cul-de-sac of Park Vista Dr to cul-de-sac of Matthews Street	Multi-use path from cul-de-sac of Park Vista Dr to cul-de-sac of Matthews Street	Planned	$ 340,000	Long	X	H		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L127	Sandy Springs	**Sandy Springs Circle Sidewalks**		X	X				Johnson Ferry Rd to Roswell Rd	Construct pedestrian and bicycle facilities on west side of road	Planned	$ 104,000	Long	X	L			City of Sandy Springs	
L129	Brookhaven	**Harts Mill Road Multi-Use Trail**	X						Ashford Dunwoody Rd to Chamblee Dunwoody Rd	Connect northern sidewalks	Planned	$ 2,060,000	Long	X	L		x	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L130	Brookhaven	**Johnson Ferry Road - Improve/Brand Trail**	X						Donaldson Dr to eastern city limits	Improve and brand existing multi-use path, coordinate with Chamblee to improve inter-city connectivity	Planned	$ 10,000	Long		L			Brookhaven Bicycle, Pedestrian, and Trail Plan	
L131	Brookhaven	**Peachtree Road Sidewalks and Pedestrian Improvements**	X						City limits to city limits (Club Dr to New Peachtree Rd)	Widen sidewalk to multi-use path to north	Planned	$ 510,000	Long		L	X		Brookhaven Bicycle, Pedestrian, and Trail Plan	

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L132	Brookhaven	**Hermance Drive Sidewalks**		X					Peachtree Rd to Windsor Pkwy	Fill in sidewalk gaps and improve sidewalk connections to school	Planned	$ 130,000	Long		L			Brookhaven Bicycle, Pedestrian, and Trail Plan	
L133	Brookhaven	**Chamblee Dunwoody Road Sidewalks**		X					I-285 interchange to eastern city limits (Harts Mill Rd)	Coordinate with Chamblee to improve and connect sidewalks	Planned	$ 1,140,000	Long		L			Brookhaven Bicycle, Pedestrian, and Trail Plan	
L134	Brookhaven	**Cheshire Way, Valvedere Drive, Thompson Road Sidewalks**		X					Caldwell Rd to Dresden Dr	Add sidewalk to west/south	Planned	$ 440,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L135	Brookhaven	**Dresden Drive - Widen Sidewalks and Add Bike Lanes**		X	X				Peachtree Rd to Thompson Rd	Wide sidewalks along south side, bike lanes (as width allows)	Planned	$ 1,280,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L136	Brookhaven	**East Osborne Road/Green Meadows Lane Sidewalks**		X					Caldwell Rd to Dresden Dr	Fill in sidewalk gaps	Planned	$ 200,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L137	Brookhaven	**Matthews Street Sidewalks**		X					Colonial Dr to Oglethorpe Avenue	Fill in sidewalk gaps	Planned	$ 140,000	Long	X	L		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L139	Sandy Springs[1]	**Glenlake Parkway Bicycle and Pedestrian Improvements**		X	X			X	Abernathy Rd to UPS	Complete Street - Add appropriate bicycle facilities and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$70,525 (CST only)	Long		L	X		Commuter Trail Master Plan	
L183	Dunwoody	**Peachford Road Extension**		X	X	X		X	Peachford Rd to Dunwoody Park	Extend Peachford Rd through Dunwoody Park to Dunwoody Park Rd and design as a complete street with sidewalk on both sides, two through lanes, landscaped buffer, bike lanes, and on-street parking	Planned	$ 7,400,000	Long	X	N/A		X	Georgetown / North Shallowford Master Plan	
L182	Multiple	**I-285 North Collector/Distributor Lanes**				X			I-285 North from Ashford Dunwoody Rd to SR 141/Peachtree Industrial Boulevard	Collector/distributor lanes	Planned	$ 128,900,000	Long	X	N/A	X		RTP Project List	DK-401 / PI#0013255
L146	Sandy Springs, Brookhaven[1]	**Perimeter Summit Parkway Bicycle and Pedestrian Improvements**		X	X			X	Perimeter Center Pkwy to Lake Hearn Dr	Complete Street - Add appropriate bicycle facilities, fill sidewalk gaps, and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$316,110 (CST only)	Long		L	X		Commuter Trail Master Plan	
L180	Brookhaven, Dunwoody	**I-285 North at Ashford Dunwoody Road Interchange Improvements**				X			I-285 North at Ashford Dunwoody Rd	Bridge replacement and interchange improvements	Planned	$ 302,000,000	Long	X	N/A	X		RTP Project List, DeKalb CTP	DK-400 / PI#714000-

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L148	Sandy Springs[1]	**N. Park Place Bicycle and Pedestrian Improvements**		X	X			X	Peachtree Dunwoody Rd to Mount Vernon Hwy	This is a private road. Coordinate with property owner to add appropriate bicycle facilities, fill sidewalk gaps, and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$556,400 (CST only)	Long		M	X		Commuter Trail Master Plan	
L178	Multiple	**I-285 North Managed Lanes and Collector/Distributor Lane Improvements**				X			From I-75 north to I-85 north	Construct CD lanes and managed lanes on I-285 north from I-75 to I-85.	Planned	$ 1,686,783,151	Long	X	N/A	X		RTP Project List	AR-ML-200 / PI#0001758
L150	Sandy Springs[1]	**Barfield Road Bicycle and Pedestrian Improvements**		X	X			X	Hammond Dr to Abernathy Rd	Complete Street - Add appropriate bicycle facilities and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor.	Planned	$1,971,475 (CST only)	Long		L	X		Commuter Trail Master Plan	
L151	Sandy Springs[1]	**Meridian Mark Bicycle and Pedestrian Improvements**		X	X			X	Glenridge Connector to Johnson Ferry Rd	Complete Street - Add appropriate bicycle facilities, fill sidewalk gaps, and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$944,275 (CST only)	Long	X	L	X		Commuter Trail Master Plan	
L177	Multiple	**GA 400 Managed Lanes**				X			From I-285 north to McFarland Rd	Project will construct two managed lanes in each direction along GA 400 between I-285N and McGinnis Ferry Rd, and one express lane in each direction along GA 400 between McGinnis Ferry Rd and McFarland Rd. Access points for the managed lanes are tentatively planned at Glenridge Connector, Mt. Vernon Rd, Spalding Dr, and I-285. Details will be determined as future coordination, design, and documentation activities are completed.	Planned	$ 788,000,000	Long	X	N/A	X		RTP Project List	AR-ML-300 / PI#0001757 and 0008445
L153	Sandy Springs[1]	**Hollis Cobb Bicycle and Pedestrian Improvements**		X	X			X	Johnson Ferry Rd to Pk Garage Dr	This is a private road. Coordinate with property owner to construct appropriate bicycle and pedestrian facilities along the corridor.	Planned	$845,300 (CST only)	Long		L	X		Commuter Trail Master Plan	
L176	Dunwoody	**New street connection between Ravinia Parkway and Perimeter Center East**				X			Between Ravinia Pkwy and Perimeter Center East	New two-lane roadway between Ravinia Pkwy and Perimeter Center East	Planned	$ 1,600,000	Long	X	N/A	X		Dunwoody CTP (2011)	
L170	Dunwoody[1]	**Perimeter Park at Dunwoody MARTA Station**						X	Dunwoody MARTA Station	Park at Dunwoody MARTA Station, to include plaza, playground and picnic area, 10" path, soft surface trail, and connections to future trails	Planned	$7 - 10 million	Long		L	X		PCIDs	

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L165	Sandy Springs, Dunwoody	**Hammond Drive Widening and Bicycle and Pedestrian Improvements**		X	X	X			Glenridge Dr to Ashford Dunwoody Rd	Widen Hammond Dr and apply bicycle and pedestrian improvements as follows. Rdway Improvements: From Glenridge Dr to west of GA 400, widen Hammond Dr to four 11' lanes with median of varying width. On bridge over GA 400, widen Hammond Dr to three 11' lanes in each direction with turning lanes and a 5' median. From east of GA 400 to High Street driveway, widen Hammond Dr to three 11' lanes in each direction with a 20' median. From High Street driveway to Ashford Dunwoody Rd, widen Hammond Dr to three 10' lanes in each direction with a 20' median. Bicycle and Pedestrian Improvements: From Glenridge Dr to west of bridge over GA 400 (Section A), there will 6-foot sidewalks on each side and 5' raised one-way cycle track on each side. On the GA 400 bridge (Section B), existing 5-foot sidewalks will be maintained, and there will be on-street bike lanes with appropriate transitions between the cycle tracks and the on-street bike lanes. From east of the bridge over GA 400 to the High Street driveway (Section C), the on-street bike lanes will transition back to the one-way cycle tracks each side. From the High Street Drway to Ashford Dunwoody Rd (Section D), there will be one-way cycle tracks and 8-foot sidewalks on each side of the road.	Planned	$ 60,000,000	Long	X	M	X		Hammond Drive Corridor Study	
L164	Dunwoody	**Valley View Road Sharrows**			x				Valley View Rd from Ashford Dunwoody Rd to Chamblee Dunwoody Rd	Sharrows on Valley View Rd	Planned	$ 1,600,000	Long		L	X	X	Dunwoody CTP (2011)	
L163	Dunwoody	**Ashford Center Parkway Complete Street**		X	X	X		X	Ashford Dunwoody Rd to Wickenby Ct	Complete street treatment including pedestrian crossing improvements using existing median as refuge; lighting; restriping to include bike lanes or wide outside lane with sharrows; median extension where feasible	Planned	$ 560,000	Long		L	X		Dunwoody CTP (2011)	
L159	Sandy Springs[1]	**Lakeside-Hammond Commuter Trail (Independent Alignment)**	X						NW corner of the GA 400/I-285 interchange to Hammond Dr	Multi-use trail between northwest corner of the GA 400/I-285 interchange and Hammond Dr. Consider amending development code to require developers to complete a portion of these trails as areas develop/redevelop.	Planned	$643,691 (CST only)	Long	X	M	X		Commuter Trail Master Plan	
L162	Dunwoody[1]	**Ridgeview Road (north) and Ridgeview Road (south) Paths**	X						Mount Vernon Rd to Meadow Lane/Crown Pointe Pkwy	New path connection between Ridgeview Rd (north) and Ridgeview Rd (south) to connect Mt. Vernon to Perimeter area	Planned	$ 1,100,000	Long	X	L	X	X	Dunwoody CTP (2011)	

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L160	Dunwoody[1]	**Ravinia East Commuter Trail (Independent Alignment)**	X						Ravinia Pkwy to Perimeter Center East	Multi-use trail between Ravinia Pkwy and Perimeter Center East. Consider amending development code to require developers to complete a portion of these trails as areas develop/redevelop.	Planned	$750,674 (CST only)	Long	X	M	X		Commuter Trail Master Plan	
L158	Dunwoody[1]	**Perimeter Mall West Side Commuter Trail (Independent Alignment)**	X						Hammond Dr to Perimeter Center West	Multi-use trail between Hammond Dr and Perimeter Center West. Consider amending development code to require developers to complete a portion of these trails as areas develop/redevelop.	Planned	$1,031,053 (CST only)	Long	X	L	X		Commuter Trail Master Plan	
L157	Sandy Springs, Dunwoody[1]	**Central-Mall Commuter Trail (Independent Alignment)**	X						Central Pkwy to Perimeter Center Pkwy	Multi-use trail between Central Pkwy to Perimeter Center Pkwy. Consider amending development code to require developers to complete a portion of these trails as areas develop/redevelop.	Planned	$512,934 (CST only)	Long	X	M	X		Commuter Trail Master Plan, Bicycle, Pedestrian and Trail Implementation Plan	
L156	Dunwoody[1]	**Ashford Green-Lake Hearn Commuter Trail (Independent Alignment)**	X						Parkside Place to Ashford Green	Multi-use trail between Parkside Place and Ashford Green. Consider amending development code to require developers to complete a portion of these trails as areas develop/redevelop.	Planned	$111,792 (CST only)	Long	X	H	X		Commuter Trail Master Plan	
L166	Sandy Springs[1]	**Abernathy Road Bicycle and Pedestrian Facilities**		X	X			X	Roswell Rd to Barfield Rd	Apply complete street treatments on Abernathy Rd from Roswell Rd to Barfield Rd	Planned	$ 2,099,400	Long	X	L	X		Bicycle, Pedestrian and Trail Implementation Plan	
L167	Sandy Springs	**Lake Forrest Drive Bicycle and Pedestrian Facilities**		X	X			X	Northwood Dr to Mt Vernon Hwy	Apply complete street treatments	Planned	$ 1,597,200	Long		H		X	Bicycle, Pedestrian and Trail Implementation Plan	
L168	Sandy Springs[1]	**I-285 Trail**	X						Northside Dr to SR 400	Construct multi-use trail (4.57 miles)	Planned	$ 9,410,500	Long		M	X		Bicycle, Pedestrian and Trail Implementation Plan	
L169	Brookhaven	**Nancy Creek Greenway (East)**	X						Roughly between Airport Rd and Keswick Park in Chamblee	Construct multi-use path	Planned	$ 985,296	Long	X			X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L155	Dunwoody[1]	**Ashford Parkway-Meadow Lane Commuter Trail (Independent Alignment)**	X						Meadow Lane to Ashford Pkwy	Multi-use trail between Meadow Lane and Ashford Pkwy. Consider amending development code to require developers to complete a portion of these trails as areas develop/redevelop.	Planned	$109,977 (CST only)	Long	X	M	X		Commuter Trail Master Plan	

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(3) [1] Denotes projects that have been initiated by PCIDs

														Potential Challenges					
Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
L171	Brookhaven	**Ashford Dunwoody Road Turn Lane and Pedestrian Improvements**	X	X		X			North of Johnson Ferry Rd to Perimeter Summit Pkwy/Oak Forest Dr	Design and construct improvements along ADR from north of Johnson Ferry Rd to Perimeter Summit Pkwy/Oak Forest Dr as shown in the typical cross-section for Segment 3. Narrow lanes and install center turn lane that becomes left turn lane where needed from north of West Nancy Creek Dr to Perimeter Summit Pkwy/Oak Forest Dr. Install multi-use path on the east side of ADR from West Nancy Creek Dr and sidewalk on the west side of ADR to the limit of MT-05, considering opportunities to reduce width of elements in residential areas.	Planned	$4,750,000-$5,700,000 (CST + contingency)	Long	X	N/A		X	Ashford Dunwoody Rd Corridor Study	
L172	Brookhaven	**Ashford Dunwoody Road Re-Alignment**	X	X		X			Ashford Dunwoody Rd at Johnson Ferry Rd/Donaldson Dr	Design and construct long-term improvements on Ashford Dunwoody Rd south of Johnson Ferry Rd. Realign Ashford Dunwoody Rd south of Kadleston Way between Oglethorpe Crossing (Publix) and Peachtree Golf Club and tie Ashford Dunwoody Rd into Blair Cir. Include 1 left turn lane and one left/thru/right lane on NB Ashford Dunwoody. Consider design and construction of median between Blair Cir and Donaldson Dr, including median openings to allow left turns where needed.	Planned	$3,280,000-$3,900,000 (CST + contingency)	Long	X	L			Ashford Dunwoody Rd Corridor Study	
L173	Brookhaven	**Johnson Ferry Road Re-Alignment**	X	X		X			West of Waddeston Way to Ashford Dunwoody Rd/Woods Dr	Design and construct long-term improvements on Johnson Ferry Rd west of Ashford Dunwoody Rd. Realign Johnson Ferry Rd west of Waddeston Way behind Cambridge Square and tie Johnson Ferry Rd into Ashford Dunwoody Rd at Woods Dr. Include 1 left/thru lane and 2 dedicated right turn lanes on EB Johnson Ferry Rd and 1 left turn lane on NB Ashford Dunwoody. Install a traffic signal at Woods Dr and remove the existing traffic signal at the Valero gas station. Consider design and construction of median between Woods Dr and Donaldson Dr, including median openings to allow left turns where needed.	Planned	$4,350,000-$5,230,000 (CST + contingency)	Long	X	L			Ashford Dunwoody Rd Corridor Study	
L174	Sandy Springs[1]	**Johnson Ferry Road Bicycle and Pedestrian Facilities**		X	X			X	Glenridge Dr to Peachtree Dunwoody Rd	Apply complete street treatments from Glenridge Dr to Peachtree Dunwoody Rd	Planned	$ 2,023,103	Long	X	L	X		Bicycle, Pedestrian and Trail Implementation Plan	

Last Mile Connectivity Study - Consolidated Project List

REVISED DRAFT 2/21/17 - For Review

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(3) [1] Denotes projects that have been initiated by PCIDs

														Potential Challenges					
Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
L175	Brookhaven	**Windsor Parkway Road Calming/Trail**	X			X			Ashford Dunwoody Rd to western city limits (Windsor Lake Dr)	Implement traffic calming measures along Windsor Pkwy between Ashford Dunwoody Rd and the western city limits and install multi-use trail	Planned	$ 2,140,000	Long		N/A		X	Brookhaven Bicycle, Pedestrian, and Trail Plan	
L154	Dunwoody[1]	**Ravinia North Commuter Trail (Independent Alignment)**	X						Ravinia Pkwy to Perimeter Center East	Multi-use trail between Ravinia Pkwy and Perimeter Center East. Consider amending development code to require developers to complete a portion of these trails as areas develop/redevelop.	Planned	$69,719 (CST only)	Long	X	L	X		Commuter Trail Master Plan	
L152	Dunwoody[1]	**Ashford Dunwoody Bicycle and Pedestrian Improvements**		X	X			X	Meadow Lane Road to Mount Vernon Road	Add separated bicycle and pedestrian facilities on the west side of the corridor and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor. Ensure that facilities complement the bicycle/pedestrian and streetscape design to the south on Ashford Dunwoody Rd (where project is in design adjacent to Perimeter Mall).	Planned	$2,359,350 (CST only)	Long		L	X		Commuter Trail Master Plan	
L149	Dunwoody, Brookhaven[1]	**Ashford Dunwoody Road Bicycle and Pedestrian Improvements**	X	X	X			X	Perimeter Summit Pkwy to Hammond Dr/Ravinia Pkwy	Add separated bicycle and pedestrian facilities on the west side of the corridor and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor. Ensure that facilities complement the bicycle/pedestrian and streetscape design to the north on Ashford Dunwoody Rd (where project is in design).	Planned	$1,465,900 (CST only)	Long		L	X		Commuter Trail Master Plan	
L179	Sandy Springs	**Boylston Drive Extension**		X	X	X			Hammond Dr to Carpenter Dr	Extend Boylston Dr south from Hammond Dr to Carpenter Dr to provide two through lanes with sidewalks and bike lanes	Planned	$ 4,800,000	Long	X	H			2008 Transportation Master Plan	
L147	Dunwoody[1]	**Perimeter Center West Bicycle and Pedestrian Improvements**		X	X			X	Perimeter Center Place to Ashford Dunwoody Rd	Fill sidewalk gaps, upgrade bicycle facilities, and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$716,900 (CST only)	Long		L	X		Commuter Trail Master Plan	
L181	Sandy Springs	**I-285 North at Roswell Road Complete Street and Interchange Improvements**		X	X	X			I-285 north at SR 9/Roswell Rd	Interchange and complete street improvements at I-285 and SR 9/Roswell Rd	Planned	$ 47,900,000	Long	X	N/A	X		RTP Project List	FN-AR-203
L145	Dunwoody[1]	**Ravinia Parkway (S) Bicycle and Pedestrian Improvements**		X	X			X	Entire length of Roadway, from Ashford Dunwoody Rd to Ashford Dunwoody Rd	This is a private road. Coordinate with property owner to add appropriate bicycle facilities, fill sidewalk gaps, and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor.	Planned	$1,947,400 (CST only)	Long		L	X		Commuter Trail Master Plan	

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Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
L144	Dunwoody[1]	**Perimeter Center E (N) Bicycle and Pedestrian Improvements**		X	X			X	Ashford Dunwoody Rd to Lincoln Pkwy	Complete Street - Upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$112,000 (CST only)	Long		L	X		Commuter Trail Master Plan	
L143	Dunwoody[1]	**Perimeter Center North Bicycle and Pedestrian Improvements**		X	X			X	Ashford Dunwoody Rd to Perimeter Center East	Complete Street - Add appropriate bicycle facilities, fill sidewalk gaps, and upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$1,621,050 (CST only)	Long		L	X		Commuter Trail Master Plan	
L141	Dunwoody[1]	**Perimeter Center E (S) Bicycle and Pedestrian Improvements**		X	X			X	Ashford Dunwoody Rd to Lincoln Pkwy	Complete Street - Upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$ 1,000,000	Long		L	X		Commuter Trail Master Plan	
L138	Dunwoody[1]	**Perimeter Center Place Bicycle and Pedestrian Improvements**		X	X			X	Perimeter Center West to Meadow Lane Rd	Complete Street - Upgrade streetscape along the road, to include pedestrian-scale lighting and branding of the corridor	Planned	$ 500,000	Long		L	X		Commuter Trail Master Plan	
L195	Sandy Springs, Dunwoody, Brookhaven	**Tier 2 Transit Lanes**				X	X		N/A	Expand dedicated transit lanes on key corridor segments within Perimeter to connect south to Johnson Ferry Rd and west along Barfield Rd to expand access to more major employers.	New	Capital costs range from $500,000/mile for restriping up to $5 million/mile for roadway widening or reallocation of median space. TSP along the bus lanes would cost up to $35,000 per intersection. No operating or vehicle costs would be required.	Long	X	N/A	X	TBD	Last Mile Connectivity Study	
L194	Sandy Springs, Dunwoody, Brookhaven	**Parking Management Policies**				X	X	X	N/A	Establish and enforce parking management policies that encourage use of alternative modes of transportation. This may include: requiring employers to provide the same subsidies for transit as they do for parking (free transit passes); providing incentives for employees to live closer to work; requiring a portion of the cost of parking to be passed on to users; and/or providing incentives for employees who live near MARTA rail or GRTA Xpress services to use them in lieu of driving.	New	N/A (staff time)	Long	N/A	N/A	X	N/A	Last Mile Connectivity Study	

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													Potential Challenges					
Project ID	Municipality	Project Name	Multi-Use Path	Sidewalk	Bicycle	Roadway	Transit	Other	Project Limits	Description	Status	Est. Total Cost	Timeframe	Right-of-Way Constraints	Topography (Accessibility)	Interagency Coordination	Proximity to Residential Areas	Source Plan/Study	ARC ID / GDOT PI
L193	Sandy Springs, Dunwoody, Brookhaven	**Land Use and Urban Form Vision and Coordination**						X	N/A	Establish priorities for density, mix of uses, and the urban form of new developments to support transit and other alternative modes of travel. This may involve: providing direct connections between residential and office/retail uses such as sidewalks, bridges, and walkways through campuses; setting thresholds for employment and residential density within and outside of activity centers.	New	N/A (staff time)	Long	N/A	N/A	X	N/A	Last Mile Connectivity Study	
L192	Sandy Springs, Dunwoody, Brookhaven	**Foster Active Streets**		X				X	N/A	Establish and implement guidelines to create active streets that encourage walking and cycling by setting standards for elements to be included within cross-sections of streets, such as wider sidewalks, street trees and shade elements, smaller minimum setbacks for new developments, benches and seating, and separated bicycle and walking paths if space is available.	New	N/A (staff time)	Long	N/A	N/A		N/A	Last Mile Connectivity Study	
L190	Sandy Springs, Dunwoody, Brookhaven	**Additional Bicycle and Pedestrian Facilities on Local Street Connections**		X	X				N/A	Identify opportunities for additional bike/ped facilities on local street connections	New	N/A	Long	N/A	N/A		N/A	Last Mile Connectivity Study	
L186	Sandy Springs	**Mount Vernon Highway Bicycle and Pedestrian Facilities**		X	X			X	Long Island Dr to Roswell Rd	Apply complete street treatments from Long Island Dr to Roswell Rd	New	$ 1,705,000	Long	X	L			Last Mile Connectivity Study	
L187	Sandy Springs[1]	**Peachtree Dunwoody Rd Bicycle and Pedestrian Facilities**		X	X			X	Spalding Dr to Mt. Vernon Hwy	Apply complete street treatments from Spalding Dr to Mt. Vernon Hwy	New	$ 1,705,000	Long		M	X	X	Last Mile Connectivity Study	
L189	Sandy Springs	**Peachtree Dunwoody Road Bicycle Lanes**			X				Glenridge Connector to Atlanta city limits	Bicycle lanes on Peachtree Dunwoody Rd from Glenridge Connector southward to city limits	New	$ 5,103,000	Long	X	M		X	Last Mile Connectivity Study	
L197	Sandy Springs	**Windsor Parkway Corridor Improvements**		X	X	X			Peachtree Dunwoody Rd to City Limits	Context-sensitive roadway improvements on Windsor Pkwy from Peachtree Dunwoody Rd to Sandy Springs/Brookhaven city limits	New	$ 400,000	Long	X	M		X	Last Mile Connectivity Study	

B. WORK SESSION SUMMARIES

MEMORANDUM

To: *Kristen Wescott, Sandy Springs Public Works Division*

From: *Gresham, Smith and Partners*

CC: Richard Meehan, Brookhaven Public Works; John Gurbal, Dunwoody Public Works; Jennifer Harper, PCIDs

Date: *October 7, 2016*

Staff Work Sessions to Review Draft Transit Vision and Draft Project List

On September 29 and September 30, 2016, the Last Mile Connectivity Study project team facilitated work sessions with representatives from each of the project partners, representing the four participating jurisdictions: the City of Brookhaven, the City of Dunwoody, the Perimeter Community Improvement Districts, and the City of Sandy Springs. The purpose of the work sessions was to: a) discuss project partners' ideas about the transit component of the study and get input about preliminary ideas for ways to introduce transit into the study area; and b) to review the draft list of last mile connectivity-related projects compiled from recent prior plans and studies authored or conducted by each jurisdiction. The work sessions were attended by dedicated project liaisons or project managers from each partner jurisdiction and representatives from the consultant team, including Gresham, Smith and Partners, VHB, and Sprinkle Consulting. Sign-in sheets from the work sessions are included in Appendix A.

The first part of each work session was devoted to discussing the preparation of a draft transit vision for the study area. The team presented information about demand for last mile connectivity and the distances transit users typically travel from MARTA rail stations to reach their final destinations and discussed corridors that may be suitable for potential future transit services. The team also presented information about types of transit technology that could potentially help serve the study area in the future, including vehicle types, estimated capital, operating, and vehicle costs.

During the second part of each work session, the project team presented a draft list of projects compiled from prior plans and studies within each jurisdiction and asked for information about the status of the projects, whether the projects merit incorporation into the unified master plan, and any projects that may have inadvertently been left of the list and need to be looked into.

The following sections contain summaries of the key points discussed during each work session. The project team has detailed notes on the specific feedback regarding additions, subtractions, and revisions to the project list. These have been left out of this summary for brevity.

Perimeter Community Improvement Districts

The work session with the Perimeter Community Improvement Districts (PCIDs) took place on September 29, 2016 from 9:30 AM to 11:30 AM at the PCIDs office at 500 Northpark.

Transit / Shuttle Services

Shuttle service is widely available in the Perimeter CIDs: 14 employer campuses offer shuttle service and most of the hotels offer shuttles. Mercedes will have a shuttle to the train stations and many of the employers west of GA 400 also have shuttles. It is difficult to get shuttles schedules down and the campus-style development patterns make it take longer to offer door-to-door service. There are several shuttles throughout PCIDs at lunch, but they are not well-utilized.

VHB conducted a survey for PCIDs a couple of years ago that reveals that only 20-25% of people surveyed (at MARTA stations and at home) would be likely to use a shuttle, even if it was free. There is not enough ridership demand according to data. According to the survey results, desirable characteristics of a shuttle service are that there are short wait times, that the trip to the final destination is quick, and that there is door-to-door service.

Shuttle service may not serve an overall transit need adequately at this time. It would be more valuable to first identify needs in terms of the gaps between existing services (bus, shuttles) and infrastructure (park-and-ride lots, sidewalks, trails) and then determine what best fills those gaps or meets those needs. It may be that a recommendation is for new employers or businesses that do not already have them offer shuttle service. Suggestions were offered about several possible approaches or next steps:

- Map the planned projects in phases to see how the network would develop over time.
- Show what options people have within the typical one-hour lunch window.
- Show population density, sidewalks, major employers, future development, existing transit and shuttle service.
- Lead with short-term solutions to address immediate needs first.
- Consider on-demand shuttle services.
- Speeding up shuttle service may require getting them out of traffic lanes. This may be accomplished through dedication of right-of-way from employers.
- Consider the target markets and develop solutions for them: commuters, lunchtime crowd, shoppers, etc.

Managed Lanes, Transit Lanes, High-Occupancy Vehicle Lanes

It is anticipated that managed lanes will play a critical role in getting people into and out of the Perimeter CIDs. Possible corridors to consider for priority access for high-occupancy vehicle (HOV) or managed lane projects may include Johnson Ferry Road, Ashford Dunwoody Road, and Peachtree Dunwoody Road. Consider planned or future widenings as opportunities for managed or transit lanes, or bike/transit lanes. It may be worth considering a new policy for transit lanes or HOV lanes on such corridors, perhaps during peak hours only.

Other Points

- Consider services and projects that would support transit, help move people instead of cars, and get people out of cars.
- Pull-off opportunities for buses and Uber
- Uber is not a viable last-mile option for day-to-day travel
- Employers can subsidize MARTA and GRTA
- There is a pending project on the eastbound on-ramp for I-285 from Ashford Dunwoody Road – PCIDs is in discussions with GDOT
- In the project list, differentiate between projects that are in design vs. planned or more aspirational
- Place emphasis on low-hanging fruit and overarching projects, such as wayfinding, branding of bus stops/shelters
- Include the recommendations from the Perimeter Bicycle Strategy

City of Sandy Springs

The work session with the City of Sandy Springs took place on September 29, 2016 from 1:00 PM to 3:00 PM at the City of Sandy Springs City Hall.

Transit / Shuttle Services

The group discussed the need for a so-called "landing spot" for people coming into Sandy Springs and the Perimeter area from outlying areas, such as East Cobb and Paulding from the managed lane system on area highways. It is likely that managed lane exits will be on Perimeter Center Parkway and in the Roswell Road vicinity. The idea could be to make a connection from Sandy Springs to PCIDs, via transit so that people may not have to travel all the way into PCIDs. While there are people who make these trips, it is unlikely, generally speaking, that they are willing to make an extra transfer along the route to their final destination, particularly with abundant parking available. Hammond Drive or City Springs may be good candidates for a "landing spot."

There is a potential opportunity to add shuttle service on Barfield Road. The City will be getting ridership numbers from Perimeter Connects. One of the challenges is trying to ascertain shuttle demand at different times of the day. Based on the survey results and anecdotal information, it seems their main function is to get people to and from work at the beginning and end of the day. There is a need for more east-west connectivity, especially as City Springs continues to develop. Hammond Drive and Mount Vernon Road are likely good opportunities to facilitate this connection, regardless of what type of service or facility it is. There has been a lot of talk about the Roswell Road corridor in the past, which is becoming a live-work-play area. Adding in transportation mobility could enhance economic development for Sandy Springs and the Perimeter CIDs. However, it is not clear yet if people are trying to get between Roswell Road and the core of the Perimeter area.

In the short-term it would be good to think about **amenities** that can make it easier to take transit, such as bike racks, bike lockers, showers and other things to make it more attractive to use alternative modes. One approach might be to identify the barriers to getting people out of their cars and then to include data or recommendations about changing behaviors and patterns. For example, abundant free parking is a key reason

people drive. At Atlantic Station the dedicated bus lane is underutilized because there is so much parking, most people drive there. Perhaps one direction would be to establish parking policies for commercial areas and charge for parking within a certain district.

In the long-term, one solution might be some type of people mover. Perhaps businesses or property owners could donate right-of-way and the City along with partners could offer a high-tech transit service. One challenge is getting people to think outside the box and not just fall back on what they know. It was suggested that a component of this effort is, at a high level, to tell stakeholders what conditions need to be in place in order to facilitate a robust transit system. This study can set the stage to get people thinking about what conditions are needed to support more a forward-thinking transportation network.

Some of those conditions may include land use recommendations and design policies that promote walking and density needed to support other forms of transportation. Hospitals have reportedly had a hard time recruiting staff due to a lack of housing nearby.

Other Modes/Facilities

Zagster – a bikesharing company – is in Alpharetta already and is trying to get into Sandy Springs. The general sense is that Sandy Springs is not yet ready for a bikesharing program, but perhaps that could work in the PCIDs. In fact, it is one of the recommendations in the Perimeter Bicycle Strategy.

Overarching Goals

- Reduce single-occupancy vehicles – there should be a number or percentage goal reduction.
- Get people out of their cars altogether – move people, not just cars.
- Reduce congestion.
- Removing barriers to use transit.
- Create safe, healthy, prosperous City/area.

City of Dunwoody

The work session with the City of Dunwoody took place on September 30, 2016 from 10:00 AM to 12:00 PM at the City of Dunwoody City Hall.

Transit / Shuttle Services

A road widening policy or strategy in the PCIDs will be important to transit, such as along the Hammond Drive corridor. This would present an opportunity to set aside lanes for transit or shared lanes. Perhaps this type of recommendation could be a policy within PCIDs; each time a road is widened, consideration ought to be given to incorporating transit lanes that could serve existing shuttles and future services, such as for BRT, which could easily accommodate bike lanes.

Signal priority is a good strategy for helping move transit vehicles and improving mobility. A project in Birmingham, for example, reduced travel times by 10-15 minutes, and improvements in travel time improve significantly when vehicles are in their own lane. Queue jumpers offer the most significant reductions in travel

time – a good example of this is on Memorial Drive (DeKalb County). It is important that the traffic signals within the area are able to handle transit signal priority in the future; if that capability is not already in place, it should be part of the short-term recommendations.

Connecting Dunwoody Locations to PCIDs

While Dunwoody Village is an important location within the City, it is an independent activity center with primarily single family residential developments that tends to attract older residents. Residents are unlikely to give up their personal cars. While there are some plans for more mixed use development and townhomes, the stronger demand to connect with PCIDs is probably from the Georgetown area, where there are more apartments. The Georgetown area is served by existing MARTA buses (the Route 103 serves Chamblee Dunwoody Road at Shallowford Road and the Chamblee rail station) but it is somewhat isolated from rail stations, and takes several transfers to get into the Perimeter CIDs. The collector/distributor lanes that are planned as part of Revive285 will be helpful in this regard.

An important component of this study could look at better ways for people to get around during their lunch hour. Bicycle facilities, bikeshare programs, better east-west connections, and more connections between train stations and surrounding development are likely good ways to facilitate this. More information is available in the Perimeter Center Overlay district about what is required, but this study should look at the Overlay guidelines and see how they can be improved, since they are being reworked.

Trails

There is a trail from Brook Run Park that travels through a new park below the Columns at Lakeridge development, and then runs west to Chamblee-Dunwoody Road. Another strip of trail runs along North Fork Nancy Creek and there are plans to buy property to the north, in the area where connections are tough.

Other Points

- It was suggested that as the study contemplates cost estimates, it may be helpful to consider incorporating the cost of utilities and drainage in addition to right-of-way costs.
- The City of Dunwoody is just getting started with its transportation plan update (Pond is working on that plan).
- The gateway to the City is along Chamblee Dunwoody Road.
- The City of Dunwoody would be interested in some sample survey questions about last mile connectivity as part of their SPLOST efforts.

City of Brookhaven

The potential route connections shown look good overall. There used to be bus service on Ashford Dunwoody Road, but it was removed when the Dunwoody rail station was constructed, assuming that more people would use the rail service. The problem is that from the Brookhaven-Oglethorpe station, riders must travel south and transfer in order to head north into the Perimeter CIDs. While there are some who do that, the average choice rider does not. There are discussions as part of the Ashford Dunwoody Corridor Study about future recommendations to accommodate some form of transit. The road is fairly constricted in terms of width - it

may be that large buses are not appropriate for that area, but as part of MARTA's future service changes, perhaps a smaller shuttle-style vehicle, or some service separate from MARTA could operate there. It would not be suitable for BRT. Some form of local service with few stops or enhanced service with signal priority or queue jumpers could potentially work. The east-west connections would be more appropriate on Johnson Ferry Road rather than Windsor Parkway or West Nancy Creek Drive. The demand along Ashford Dunwoody for connections into the Perimeter area is moderate and may increase. There is the potential for some of the older homes to densify into townhomes over time, perhaps in the area around I-285.

Connections to the PCIDs

There are more people coming into the transit-oriented development (TOD) area and many are working in the Perimeter CIDs. A more direct connection via transit service could relieve traffic congestion. There are several senior residential complexes in the area around Johnson Ferry Road and Ashford Dunwoody Road. This area may present a need for more medical and shopping-oriented service, rather than commuter-oriented. Town Brookhaven is becoming more of a destination – the restaurants and Costco are big draws.

Once people arrive in the PCIDs – either at the Mall or Dunwoody MARTA station – it would be nice if people had another way to get around, such as a circulator.

Other opportunities for better connections include:

- A funded project for sidewalks on Mill Creek and Evergreen Drive (an east-west connection) and it will tie into the Nancy Creek Trail near Lynwood Park (to the south).
- Connections from the Medical Center MARTA Station over to the flyover bridge
- The extension of Perimeter Center Parkway to Johnson Ferry Road is being studied with the hospitals (this is based on the original design for Glenridge Connector). Within Brookhaven it looks like possibly a two-lane road from Brookhaven city limits to Johnson Ferry Road, and then Sandy Springs would take it from there to Glenridge Connector.
- Possible connection from Murphey Candler Park to Ravinia, which could provide a good opportunity to connect into the Georgetown trail network Dunwoody

PCIDs Staff Work Session
September 29, 2016 9:30-11:30 AM

Last Mile Connectivity Study

Name	Agency	Email Address	Phone Number
NITHIN GOMEZ	GRESHAM SMITH PARTNERS	nithin-gomez@gspnet.com	678.518.3886
Erin Thoresen	GS+P	erin_Thoresen@gspnet.com	678-518-3881
Megha Young	GS&P	megha-young@gspnet.com	678-518-3657
Jennifer Harper	PCIDs		
Peyton Mcleod	Sprinkle Consulting	pmcleod@sprinkleconsulting.com	813.949.7449
Bruce Landis	Sprinkle	Landis@sprinkleconsulting.com	8884623514

Sandy Springs Work Session
~~Dunwoody Staff Work Session~~
~~September 30, 2016 1:00-3:00 PM~~
Sept. 29, 2016 1:00-3:00

Last Mile Connectivity Study

Name	Agency	Email Address	Phone Number
Nithin Gomez	Gresham Smith and Partners	nithin-gomez@gspnet.com	678.518.3826
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Megha Young	" "	megha-young@gspnet.com	678-518-3657
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Mille M. Alexander	COSS - CommDev	malexander@sandyspringsga.gov	404345.6970

Dunwoody Staff Work Session
September 30, 2016 10:00 AM - 12:00 PM

Last Mile Connectivity Study

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Megha Young	GS&P	megha-young@gspnet.com	678-518-3657
Mindy Sanders	City of Dunwoody	mindy.sanders@dunwoodyga.gov	678-382-6812

Brookhaven Staff Work Session
September 30, 2016 1:30-3:00 PM

Last Mile Connectivity Study

Name	Agency	Email Address	Phone Number
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SMITH AND
PARTNERS

Last Mile Connectivity – Transportation Planning Services

Joint Staff Work Session

November 2, 2016

9:00 AM – 11:00 AM EST

Location: Sandy Springs City Hall
Conference Room 5 – Glenridge Connector
7840 Roswell Rd, Sandy Springs, GA 30350

Meeting Notes

Action Items

1. Gresham, Smith and Partners (GS&P) will distribute the revised slides presented during the joint work session to all attendees via email.
2. Each City and the Perimeter Community Improvement Districts (PCIDs) will review the slides and provide written feedback to the project team by Thursday November 10, 2016.
3. GS&P will work with the Project Manager (PM) and coordinate with each jurisdiction to schedule briefings on the draft recommendations to each City Council and the PCIDs Board of Directors. It is anticipated that these presentations will take place in December 2016. The briefings will be short and focus on the draft recommendations.
4. GS&P will work with the PM to finalize the rest of the project schedule, including identifying a workable date for the Public Open House and final presentations to City Councils and the PCIDs Board.
5. The project team will continue to refine the project list and draft Unified Vision and Overall Master Plan.

Attendees

Representatives of each jurisdiction, including City of Sandy Springs, City of Brookhaven, City of Dunwoody, and the PCIDs were in attendance. See Appendix A for a copy of the sign-in sheet.

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Summary

On November 2, 2016, a joint work session was held for the Last Mile Connectivity Study. All project partners, including the Perimeter Community Improvement Districts (PCIDs) and the Cities of Sandy Springs, Dunwoody, and Brookhaven were represented at the meeting. Following introductions, members of the project team from Gresham, Smith and Partners (GS&P), VHB, and Sprinkle Consulting gave a presentation on the components of the Draft Unified Master Plan and Overall Vision, touching on each of the modal systems that comprise the Draft Unified Master Plan. Topics presented include:

- Overview, including a review of the overall vision and goals of the study and a discussion of the different types of connectivity being explored through the study, including between hubs or activity centers and last mile connections to or from destinations within those hubs or activity centers;
- Draft Transit Vision, including recommendations for connecting hubs and for circulation within the PCIDs;
- Draft Pedestrian, Bicycle, and Trail Plan, including existing infrastructure, planned and programmed projects, and draft strategies and recommendations for filling gaps and improving last mile connectivity;
- Draft Roadway Plan, including existing infrastructure, planned and programmed projects, and draft strategies and recommendations for filling gaps and improving last mile connectivity; and
- Next steps in the study process, including the schedule for upcoming activities.

The full presentation is provided in **Appendix B.**

Vision and Goals

Erin Thoresen (GS&P) reviewed the agenda for the joint work session and provided an overview of the revised draft vision for last mile connectivity in the study area. The vision was developed with input from the project partners during the initial project kickoff meeting and during subsequent work sessions with each jurisdiction. The vision focuses on creating a system of safe, easy, convenient transportation facilities that connects workplaces, commercial areas, open spaces, and other destinations to enhance the economic competitiveness of the Perimeter area, in an effort to help the area thrive and sustain long into the future.

Next, project goals were presented. The goals build upon and stem from the overall vision, and touch upon the following topics:

- Improve mobility;
- Make it easier for people to choose alternatives to automobiles for last mile trips;
- Offer a range of transportation modes;
- Ensure people have convenient access to transit services;
- Develop a built environment that enables walking and biking;
- Enhance economic competitiveness by making the area attractive to businesses and employees;
- Identify opportunities to support rapid or high capacity transit in the future;
- Enhance the sense of place and quality of life; and
- Prioritize transportation programs, projects, and improvements that complement or enhance the characteristics and assets of the study area.

Following a review of the goals, the team presented an overview of connectivity issues within the purview of the Last Mile Connectivity Study, drawing the distinction between “hub connectivity,” which facilitates movement of people between hubs or activity centers, and “last mile connectivity” which provides access between origins/destinations and the nearest transit stop or station. For the purpose of the study, hubs or activity centers within the study area include the PCIDs (Perimeter Center) area; City Springs in Sandy Springs; Georgetown and Dunwoody Village in Dunwoody; and the Brookhaven-Oglethorpe MARTA Station overlay district in Brookhaven.

Draft Transit Vision

Maggie Maddox (VHB) presented a draft of the transit vision, beginning with an overview of existing conditions and services within the study area. She showed maps illustrating residential density relative to ITE’s thresholds for transit, employment density and major employers within the study area, and existing transit service already available within the study area, including MARTA bus and rail service, GRTA Xpress bus service, and private shuttles. Future services being planned by MARTA and GRTA were also discussed, along with last mile trip patterns, and gaps in transit service between and within hubs. Finally, a series of near- and long-term recommendations for connecting hubs was presented,

followed by near-term recommendations and two alternatives for long-term transit options within the Perimeter area.

Discussion

Following the presentation, the project team asked the city and PCIDs representatives for their comments and reactions to the draft transit vision. The following is a summary of comments, grouped by topic:

A. MARTA
   - It would be good to understand the assumptions MARTA used when developing its Comprehensive Operational Analysis (COA). Which projections did MARTA utilize in the development of the COA? It is not clear whether the planned future service takes into account the planned future residential density within the area, such as in City Springs, for example.
   - It will be critical to coordinate with MARTA to explore and implement the transit vision, and to ill figure out how to implement new services.
   - We are eager to coordinate with MARTA on the transit vision.

B. Parking Management
   - Would like to see more information about what a parking management strategy for the area might look like and how it could work.
   - Sandy Springs believes that this is a crucial part of changing individual travel behavior.
   - Ideally, there will be less emphasis on the use of single-occupancy vehicles in the future.

C. Supporting Future Transit
   - The PCIDs goal is to enhance economic competitiveness – this vision should support commuters by addressing the AM and PM commutes.
   - The study and project partners should consider the impact of supporting transit to service local residents versus commuters into and out of the area. The circulator idea is good and would help elevate the status of the area, however, it does not meet the needs of the typical commuters into and out of the Perimeter area. We should think about a way to complement commuter needs, not a service at their expense. One way to better accommodate commuters may be to create a small district with remote parking.

- The project team should consider how recommendations for potential corridor improvements might incorporate transit-only lanes and how to frame such improvements in a way that communicates the value to residents as well as commuters.
- The goal of increasing economic competitiveness is the PCIDs major goal – to that end, we must address the morning and evening peak commute traffic and support commuters.
- We need to have better connectivity around the GA 400/I-285 quadrants. The Perimeter market is divided by GA 400 and I-285 – large physical barriers that are difficult to cross and may present challenges to future infrastructure.
- The City of Brookhaven will need to work with MARTA to explore the how best to implement new service on Ashford Dunwoody Road.
- Dunwoody likes the potential for east-west connections for bicycles and pedestrians between PCIDs and Georgetown, as well as the north-south connections between PCIDs and Brookhaven. In the short-term, connections between PCIDs and Georgetown might be best achieved through bicycle and pedestrian connections, and potentially by some type of transit in the long term. The area is highly residential and already developed.

D. Transit Connections
    - The potential for transit along Ashford Dunwoody Road should be accounted for in the Ashford Dunwoody Road Corridor Study.
    - The Hammond Drive Corridor Study should take a closer look at the lane configuration needed to implement transit along the roadway.
    - In general, the group likes the short-term recommendations and strategies presented, and likes the idea of working to enhance existing transit service.

E. Land Use and Development
    - It might paint a different picture for transit if we consider City of Sandy Springs projections for development rather than using ARC's figures.
    - The transit vision should inform future land plans and set a goal for jobs/housing balance in the area. If we continue the same land use patterns and ratio of jobs to housing, there will not be any capacity for a robust transit system in the future. If we don't aim for that and coordinate with the development community it will never happen.

- The project team will need to coordinate with project partners to reconcile how to incorporate jurisdiction-specific development data while retaining an overall analysis that applies to the entire study area.

F. Transit Modes

- We need to examine how we can support the transit technologies that people really want.
- We need to de-emphasize the use of the single-occupancy vehicles. This transit vision would be a good place to examine expanded use of electric scooters or electric bicycles, potentially for a pilot project. The Concourse development has a new bike share program, which was implemented in April 2016.
- A question was asked regarding whether the estimated costs presented for elevated transit include right-of-way and station infrastructure (elevators, escalators, etc.). *[The project team will clarify costs and what they include in upcoming presentations.]*
- The PCIDs area is divided by GA 400 and I-285. This makes the question of whether to implement at-grade vs. elevated transit system a major consideration. The pros and cons to elevated service should be presented as part of the study.
- Within the Perimeter area, it is difficult to travel between adjacent areas due to grade changes, the presence of features such as hedges and fences, and the land use patterns.

Draft Bicycle, Pedestrian, and Trail Plan

Chris Fellerhoff (Sprinkle Consulting) presented a draft of the bicycle, pedestrian and trail plan. He displayed the existing bicycle, pedestrian, and trail facilities, as well as planned and programmed facilities, and highlighted ½-1 mile buffers around rail stations and major roadways where investments should be prioritized. He presented suggested criteria to phase projects into near-term, mid-term, and long-term phases, and also recommended a schema for Cities to consider project priorities within each phase. He also presented bicycle, pedestrian, and trail policies that could be implemented in coordination with facility improvements. Finally, Chris presented a vision for a long-term trail network that would connect each City to the Perimeter area, and also encircle the entire study area by connections among the Cities.

Discussion

Following the presentation, the project team asked the city and PCIDs representatives for their comments and reactions to the draft bicycle and pedestrian plan. The following is a summary of comments:

- The segments of planned and programmed projects should be consolidated into viable projects.
- Sandy Springs likes the hub-to-hub connections shown on the long-term vision. Brookhaven has adopted a similar framework for the Nancy Creek Greenway Trail.
- The trail vision should consider connections to PATH 400, including the connection between Sandy Springs and Buckhead and the potential future extension northward within PCIDs.
- The hub-to-hub connections are good way to address potential residents' concerns, some of whom may see this study as only pertaining to workers/regional commuters in the Perimeter area. The hub-to-hub trail connections provide a transportation facility for people who live in Sandy Springs, Dunwoody, and Brookhaven and work in the Perimeter area.
- A question was asked regarding how the cities will evaluate the success of this plan. The suggested LOS measures from the Highway Capacity Manual may not be the best criteria to use – ideal LOS would be difficult to achieve in Sandy Springs, given the right-of-way constraints for implementing projects. The project team should spell out clear measures of success that the cities and PCIDs can track.
- Consider the recommended policies in the PCIDs' Bicycle Implementation Strategy. In order to remain economically competitive, we need to establish bike facilities and bike-supportive amenities and build that culture. Studies have shown that people want to work in offices where people bike, even if they don't choose to do so themselves. It is important to have good branding and a good image for the bike facilities as well.

Draft Roadway Plan

Megha Young, (GS&P) presented a draft of the roadway plan. She presented maps showing planned, programmed, and proposed projects, as well as "gap areas" that could potentially be addressed by the inclusion of additional projects. She also presented a series of roadway strategies that could be utilized in coordination with the transit vision and upcoming managed lane system on I-285 and GA 400. She

stated that once the transit vision has been confirmed, the study will recommend additional roadway improvement projects that support the transit vision by building upon the recommended strategies.

Discussion

Following the presentation, the project team asked the city and PCIDs representatives for their comments and reactions to the draft roadway plan. The following is a summary of comments:

- The Peachtree Road concept in Brookhaven is being extended from the MARTA Station to Ashford Dunwoody Road under the new LCI Plan.
- Dunwoody has a project in design on Chamblee Dunwoody Road, from Womack Road northward.
- It is important to demonstrate how roadway projects directly relate to Last Mile connections, including bicycle and pedestrian facilities.
- Examine the opportunity to reduce median widths on multi-lane roadways, to gain additional right-of-way for transit or bicycle/pedestrian facilities. Examples include Ashford Dunwoody Road in Dunwoody and Perimeter Summit West.

Next Steps

Following the presentation of the modal systems, there was a discussion of “next steps” in the study process. These include determining the dates for presenting the draft plan to each City Council; scheduling the public open house; submitting the draft report; and determining dates for the final presentations to each City Council. These additional comments were made with regards to the upcoming public open house:

- When presenting to the public, present the gaps and new recommendations, rather than covering the entire study process.
- As an alternative, have a station with more information on the study methodology, for the citizens who want to delve into the details.
- It will be important to emphasize that this study is not “starting from scratch,” but is leveraging existing, previously approved plans and studies to find additional ways to enhance connectivity between the three Cities and the PCIDs.

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The meeting adjourned at approximately 11:00 AM.

Joint Staff Work Session
November 2, 2016 9:00-11:00 AM

Last Mile Connectivity Study

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Design Services For The Built Environment
2325 Lakeview Parkway, Suite 300 / Alpharetta, Georgia 30009-7940 / Phone 770.754.0755 / www.gspnet.com

Appendix B: Slide Presentation

[See following pages]

Last Mile Connectivity Study

JOINT STAFF WORK SESSION

NOVEMBER 2, 2016

GS&P

vhb

Sprinkle Consulting
Active Transportation Planners · Engineers

Sandy Springs Georgia

Perimeter Community Improvement Districts

Brookhaven Georgia

Dunwoody
Smart people – Smart city

Agenda

- Overview
- Overall Vision & Goals
- Defining Connectivity Issues
- Components of the Draft Unified Master Plan & Overall Vision
  - Draft Transit Vision
  - Draft Pedestrian/Bike/Trail Plan
  - Draft Roadway Plan
- Next Steps
  - Schedule of Upcoming Activities

Overall Vision & Goals

Vision

- *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.*

Overall Vision & Goals

Goals

- Improve mobility by making it **easier for people to choose alternatives to automobiles** for **last mile trips** between transit and destinations within the PCIDs as well as for trips between PCIDs and activity centers
- Provide a **range of transportation modes** so people can make **last mile trips** on foot, bicycle, or transit.
- Ensure that residents, employees and visitors have **convenient access** to area and regional transit services.
- Provide **safe** facilities for pedestrians, bicyclists, and transit users.
- **Enhance last mile connectivity** between neighborhoods, workplaces, commercial areas, health and educational facilities, and open spaces by creating a **built environment that enables walking and biking**.

Overall Vision & Goals *(continued)*

Goals

- **Enhance the economic competitiveness** of the Perimeter area by making the area more attractive to businesses and employees through offering a range of convenient range of transportation options.
- Identify **corridors** within the Perimeter area that can **support rapid or high capacity transit** services to help facilitate last mile connectivity in the future.
- **Enhance the sense of place and quality of life** within the Perimeter area by providing a transportation system that fosters active living, human interaction, and enjoyment of assets.
- Prioritize transportation programs, projects, and improvements that **complement or enhance the unique characteristics and assets** of the Perimeter and surrounding areas.

Defining Connectivity Issues

Hub Connectivity: Providing direct access between hubs to facilitate the movement of people and connect mixed-use hubs*

- Rapid transit
  - Light Rail Service
  - Bus Rapid Transit (buses in separate ROW)
  - Enhanced Bus (signal priority)
- Bike/Walk
  - Separate, parallel multi-use paths
- Roadways
  - Direct street network
  - Appropriate capacity

+

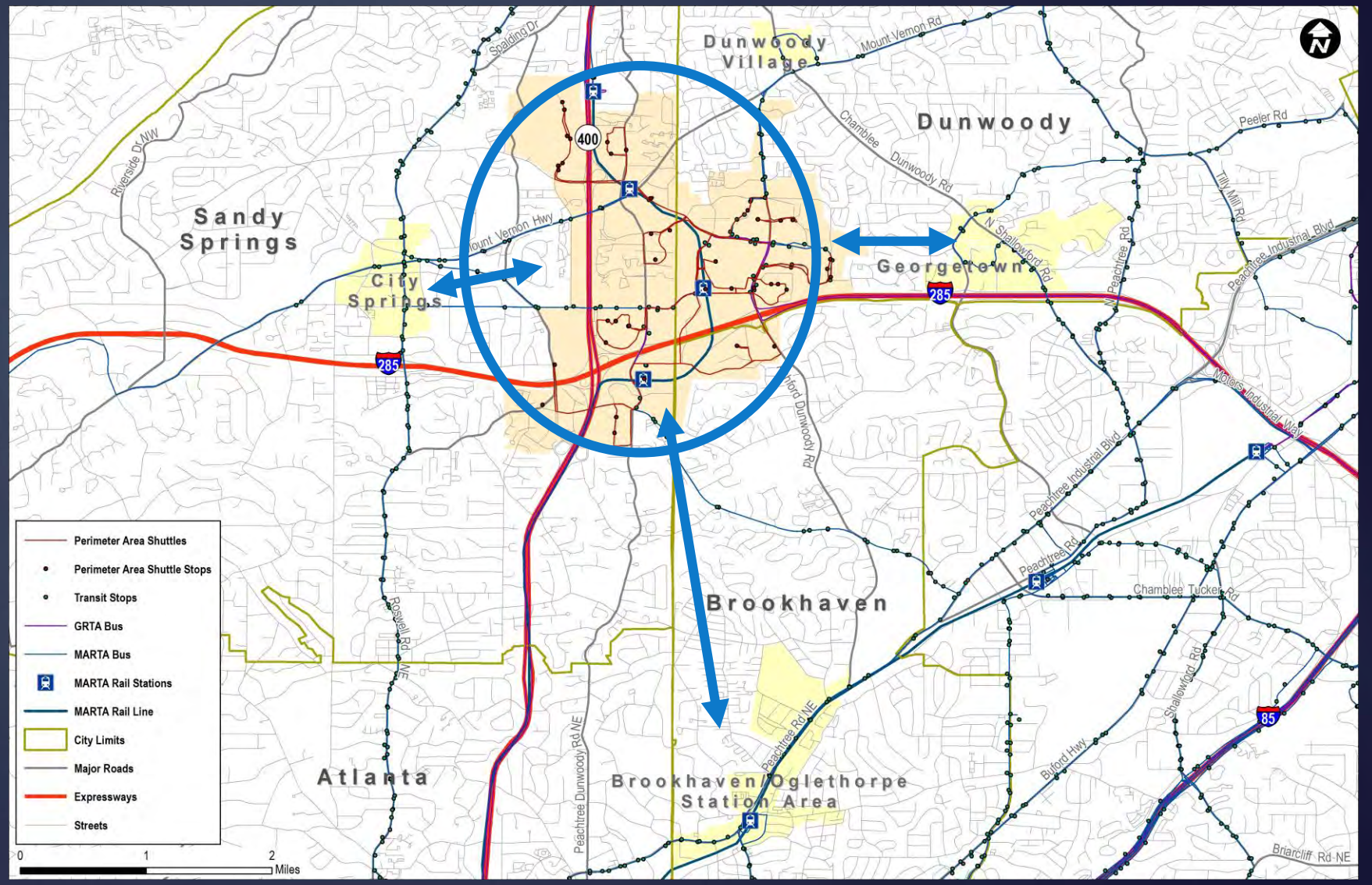
Last Mile Connectivity: Getting people effectively from their home/destination to the nearest transit stop/station

- Walking
  - ¼ - ½ mile to local bus
  - 1 mile to rail/rapid transit
- Biking
  - Safe paths
  - Available bike storage & amenities
- Localized transit vehicles
  - Circulators
  - Flex routes
- New technologies
  - Local PRT
  - Uber/Lyft
  - Autonomous Vehicles

**Hubs are activity centers and centralized areas or destinations, often generating a need for last mile connectivity. Within the study area, hubs include rail stations, the PCIDs, City Springs, Georgetown, and the Brookhaven/Oglethorpe station area.*

Last Mile Connectivity

- Focus on
  - Last mile connections within PCIDs boundaries
  - Hub connections between PCIDs and key activity centers, along key corridors



Draft Transit Vision

NEEDS & EXISTING CONDITIONS

Transit Vision Outline

- Defining Issues
- Needs & Existing Transit Services
- Hub Connectivity Recommendations
- Perimeter Circulation Recommendations
- Next Steps for PCIDs & Cities

Defining Connectivity to Transit

Hub Connectivity: Providing direct access between hubs to facilitate the movement of people and connect mixed-use hubs

+

Last Mile Connectivity: Getting people effectively from their home to the nearest transit stop/station/hub

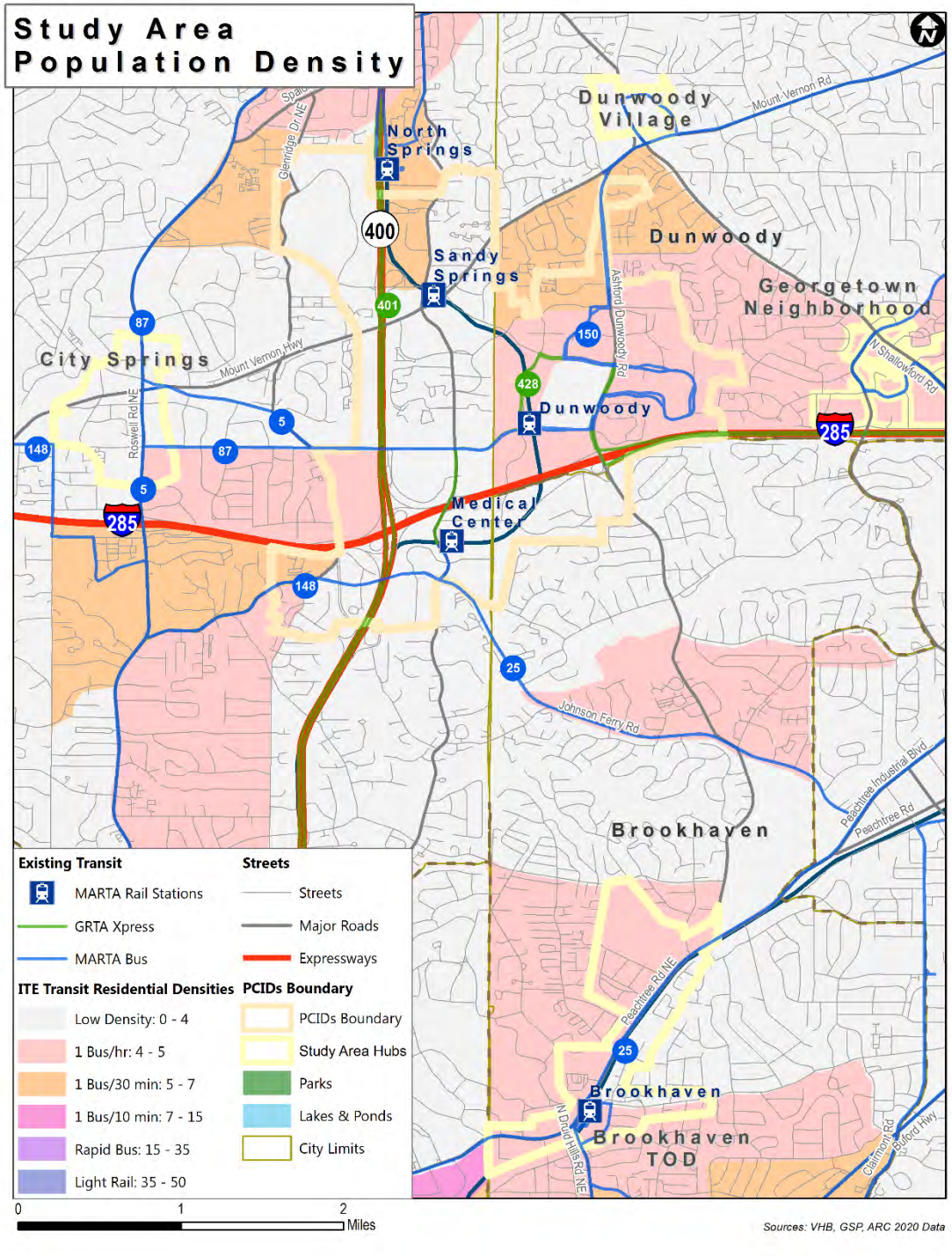
- Rapid transit
  - Light Rail Service
  - Bus Rapid Transit (buses in separate ROW)
  - Enhanced Bus (signal priority)
- Bike/Walk
  - Separate, parallel multi-use paths
- Roadways
  - Direct street network
  - Appropriate capacity

- Walking
  - ¼ - ½ mile to local bus
  - 1 mile to rail/rapid transit
- Biking
  - Safe paths
  - Available bike storage & amenities
- Localized transit vehicles
  - Circulators
  - Flex routes
- New technologies
  - Local PRT
  - Uber/Lyft
  - Autonomous Vehicles

Residential Density

- Within study area:
  - 1 bus per hour (pink)
  - 1 bus per 30 minutes (orange)
- Transit demand requires connection to both origin and destination

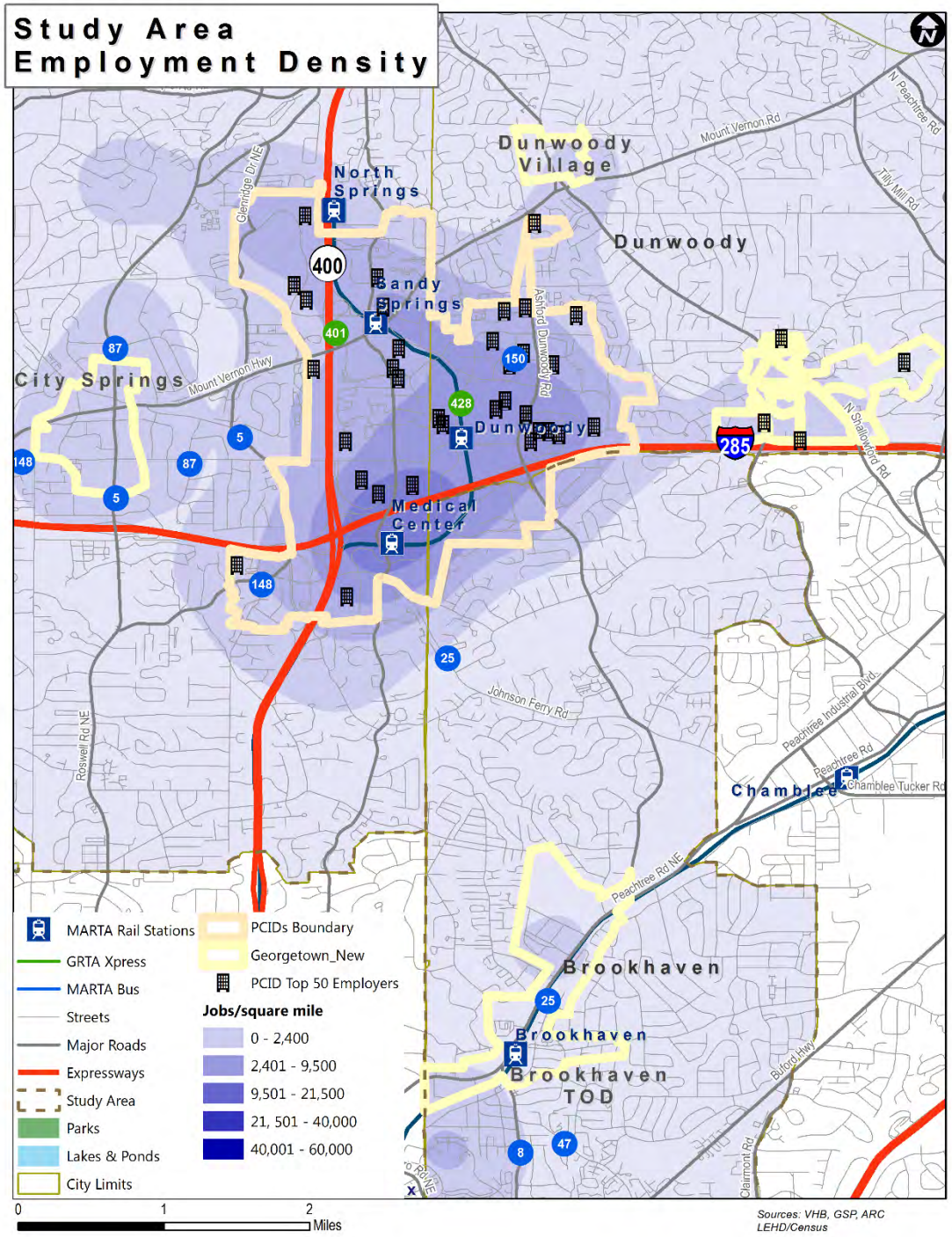
ARC 2020 TAZ projections, ITE Household Density Guidelines



Employment Density

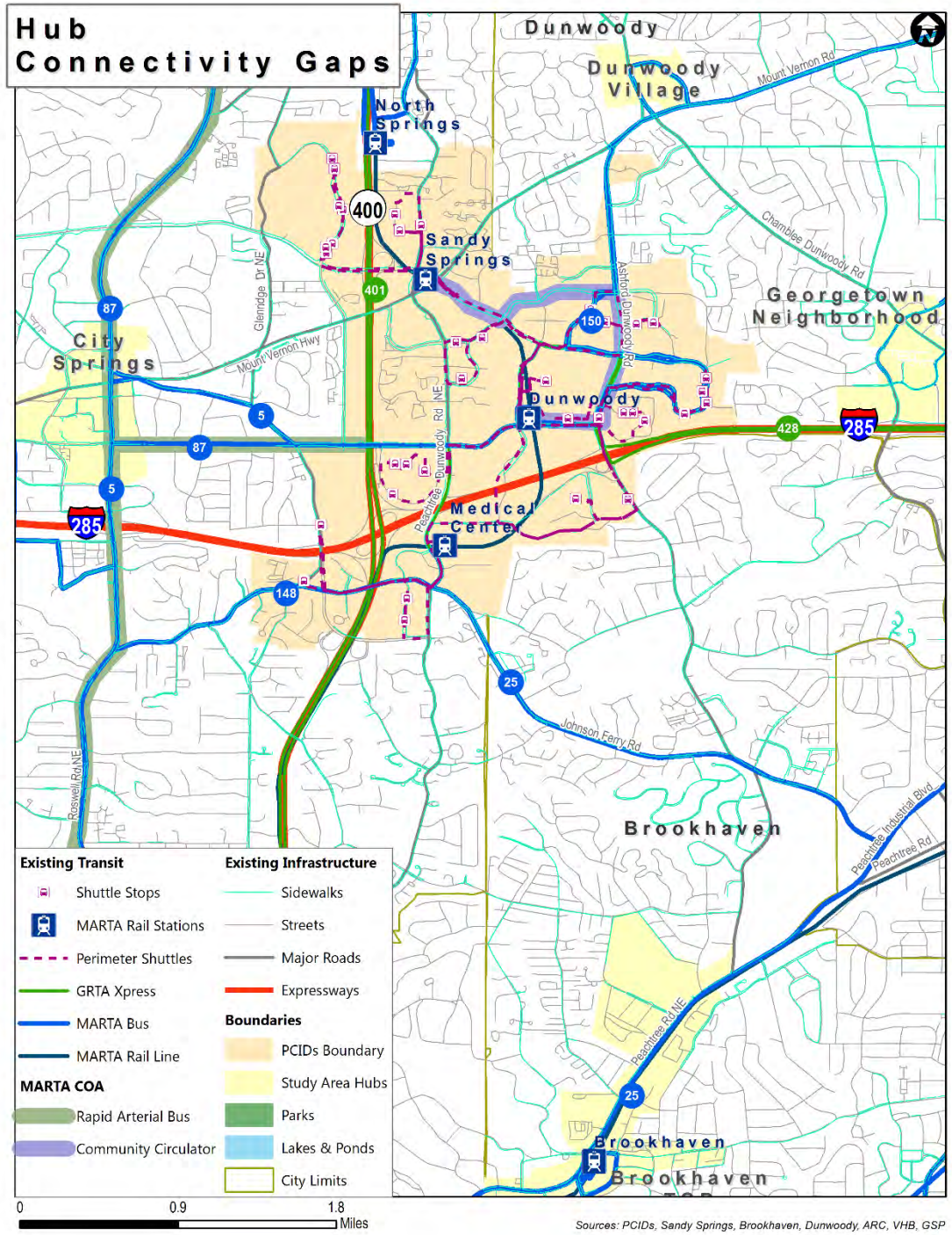
- PCIDs area has highest density
- City Springs, Brookhaven TOD area, Dunwoody Village and Georgetown are within second lowest tier of job density

Data from the LEHD 2014



Hub Connectivity: Transit Gaps

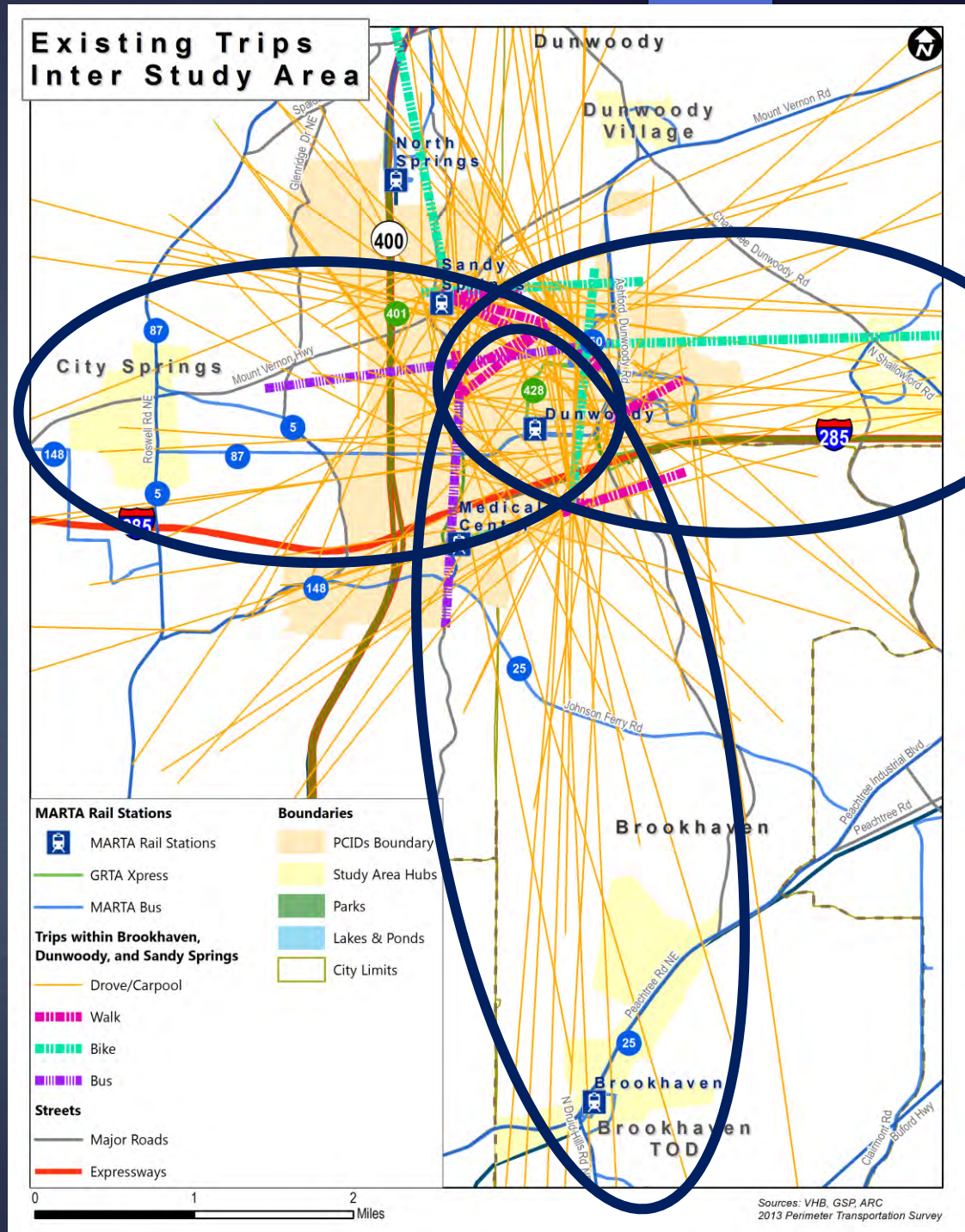
- Existing:
  - 5 MARTA rail stations
  - 2 MARTA bus routes between City Springs and Perimeter
  - 1 MARTA bus route between Brookhaven TOD and Medical Center
  - 2 GRTA Xpress routes from Cumming and Conyers to Perimeter
- Planned
  - GRTA: 2 new routes planned from Cobb (482) and Gwinnett (417)
  - MARTA: rapid arterial transit, community circulator, and supporting local service
- Gaps
  - No direct service from Brookhaven TOD to Perimeter along Ashford Dunwoody Road
  - No direct transit connection from Dunwoody's Georgetown area to Perimeter



Hub Connectivity: Current Trip Patterns

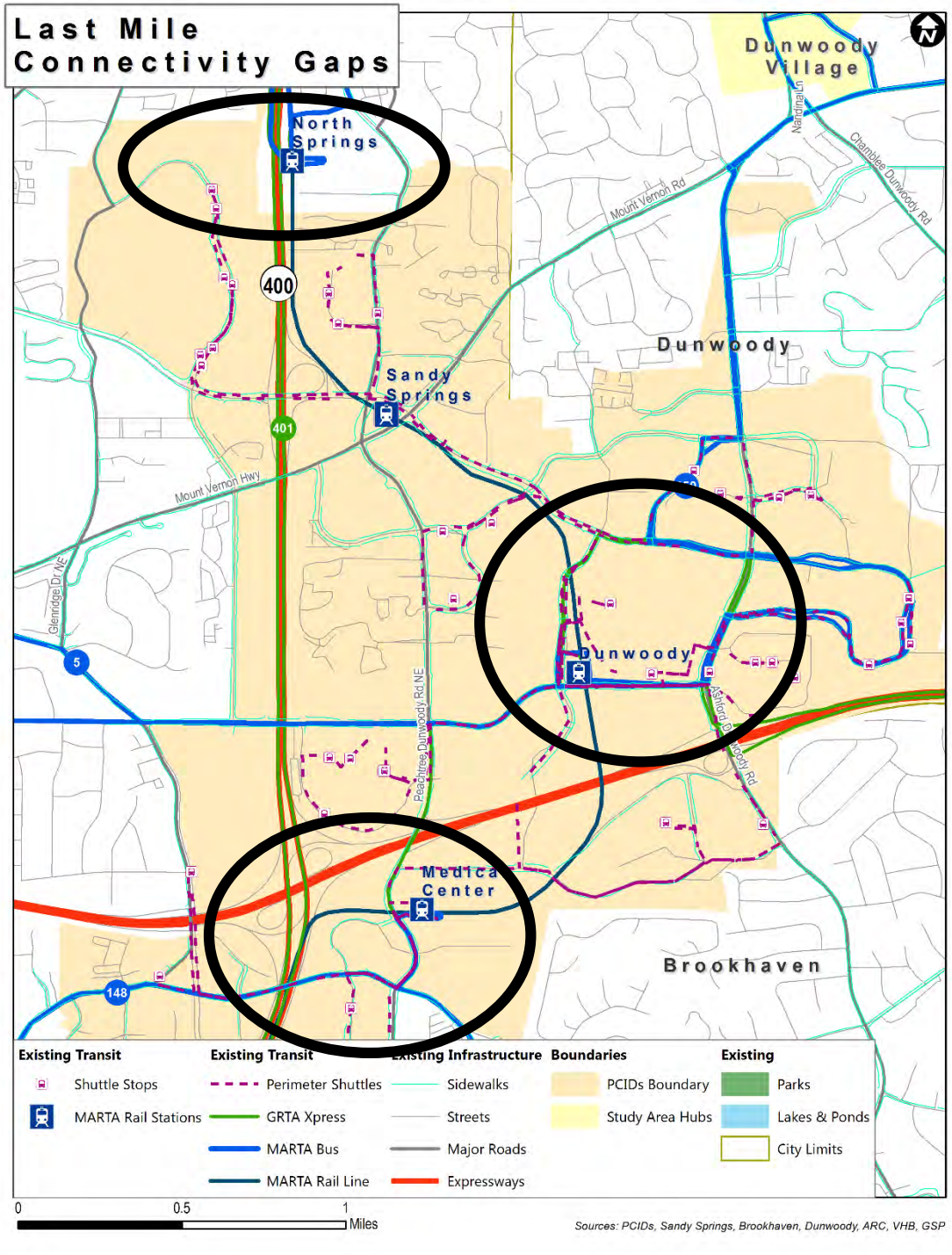
- Very few travelers made the trip between City Springs area and Perimeter
- Trips were made between Brookhaven and Perimeter
- Trips from Georgetown and eastern parts of Dunwoody were also made for commuting purposes into Perimeter

Source: 2013 PCIDs survey



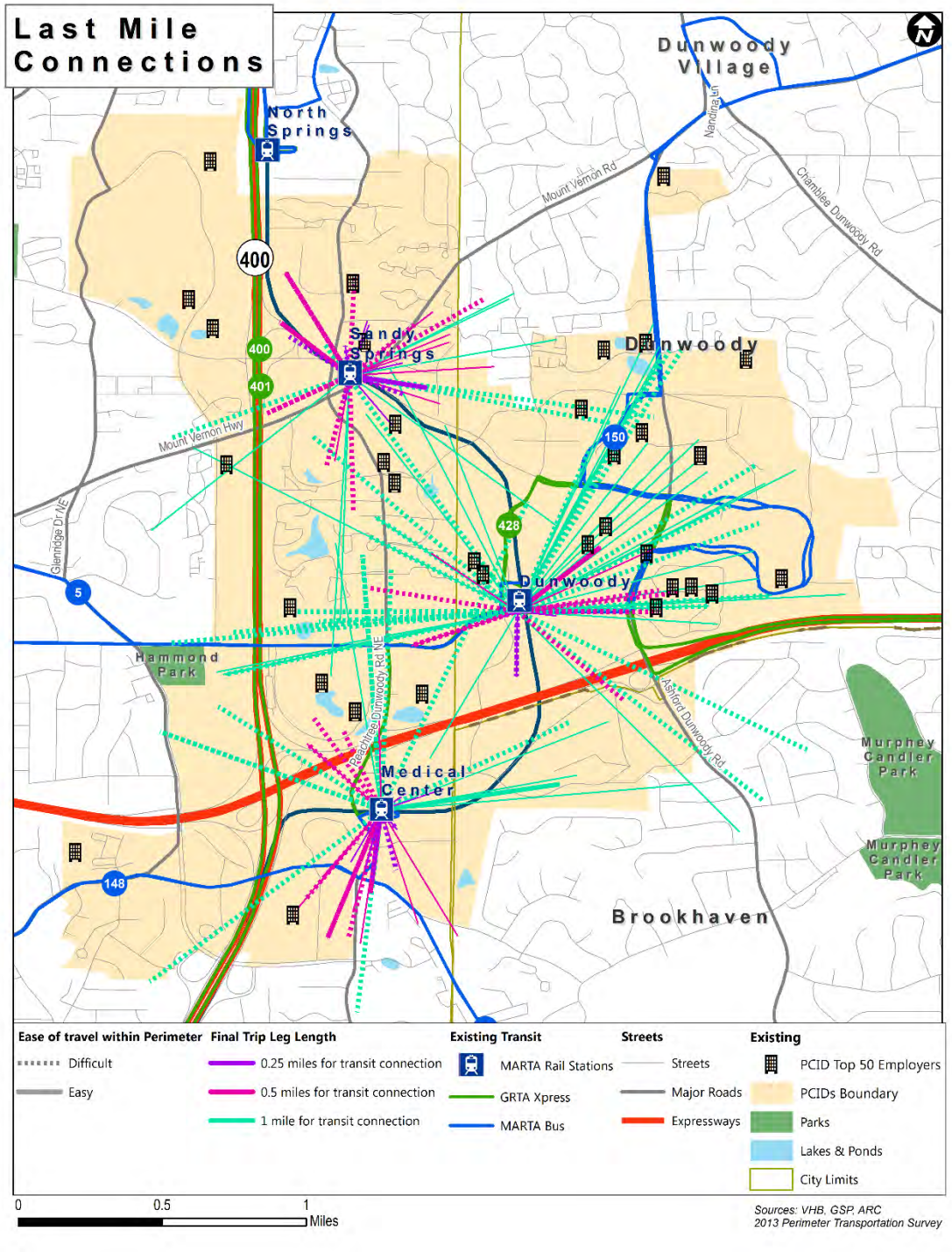
Perimeter Last Mile Connectivity Gaps

- Existing Connections
  - 13 employer shuttles (each serving 150-200 to 750-1,000 riders/week)
  - MARTA Route 150 circulating Perimeter
- Gaps
  - North Springs MARTA station configuration makes it difficult to walk/bike to/from Perimeter
  - Large blocks and campuses make trip times much longer for pedestrians
  - Large campuses increase trip time for bikes and pedestrians to access buildings



Perimeter Last Mile: Current Trip Patterns

- More than half surveyed at MARTA stations deemed their trip to/from the station "difficult" or "very difficult" despite existing sidewalks and/or shuttles



Source: 2013 PCIDs survey

Previously Planned Transit Projects

Near-Term

- Enhanced bus stops for existing transit service: shelters with trash cans, lighting, bus scheduled, and area directories
- Transit tracking technology integrated with smartphone apps and area message boards
- New kiss & ride lot across from Perimeter Mall at Dunwoody MARTA Station
- Priority signals for buses and transit vehicles
- Coordinate bus stop locations with MARTA

Long-Term

- I-285 North Corridor High Capacity Rail Service or Managed Lanes
- GA 400 Transit Initiative: BRT or Heavy Rail
- Establish convenient, distinctively branded transit service linking City Springs to MARTA rail service and nearby job and housing centers
- Multi-modal transit facility at I-285 in Georgetown, integrated with surrounding bicycle, pedestrian, vehicular, and local bus facilities
- Establish bike/busways within Perimeter on various roads

Draft Transit Vision

HUB CONNECTIVITY RECOMMENDATIONS

Near-Term Recommendations

Hammond Drive

Work with MARTA to implement arterial rapid transit recommendations along Hammond Drive.

Provide transit amenities (signal priority, shelters, real-time information boards) for riders

Ashford-Dunwoody Road

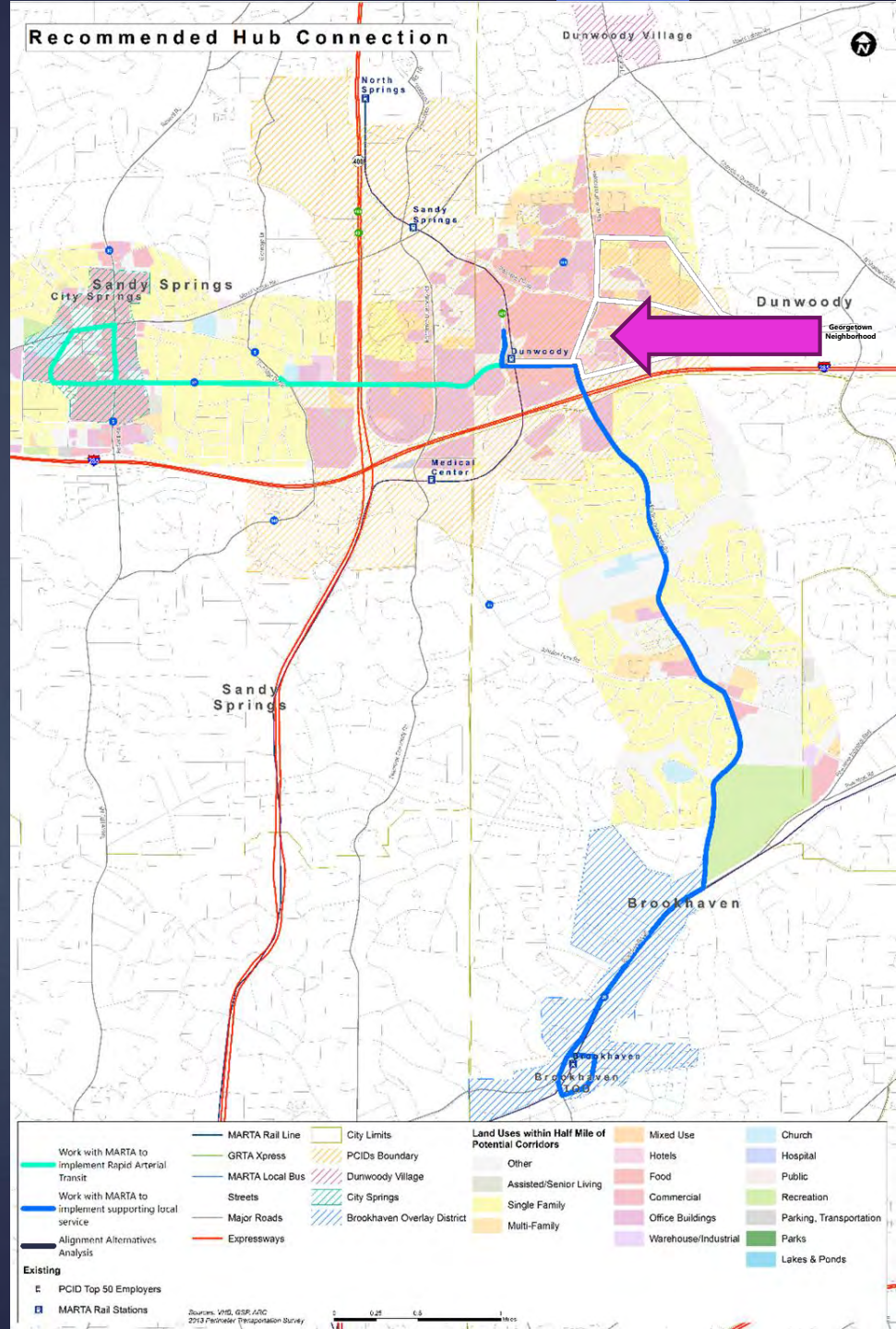
Work with MARTA to implement supporting local service and discuss alignment on Ashford-Dunwoody

Provide transit amenities (signal priority, shelters, real-time information boards) for riders

Georgetown Connection

Identify an alternative to connect Georgetown to Dunwoody MARTA Station
Potential alignments could include:

- Bus only roadway connection
- Bus/Bikeway
- New general roadway connection



Hub Connections: Near-Term Recommendations

Improve Amenities for Existing Transit Services

Clear Information & Wayfinding
Station Design
Shelters
Real-Time Information

Improve Travel Time for Existing Transit

Signal Priority
Intersection Queue-Jumpers

Improve Walkability around Transit Stops

Sidewalks
ADA-accessible Transit Stops

Partner with Existing Transit

Working with MARTA & GRTA

Hub Connections
Long-Term Recommendations

Change the Urban Design of Hubs

Increase Residential Density

Reduce Parking Requirements

Update Building Codes & Land Use Plans

Orient Developments towards Transit & Pedestrians/ Cyclists

Travel Demand Management (TDM)

Local TDM Education & Mobility Manager

Tri-City/PCIDs TDM Program

Coordinate with GA Commute Options and ARC

Make Transit Competitive with Driving along Major Travel Patterns

Transit in Separate ROW

Frequent Transit Service

Coordinate bike/pedestrian improvements to easily access rapid transit

A Range of Mobility Options

Uber/Lyft Partnership/Subsidies

Recruit Car sharing options (Zipcar, Car2Go)

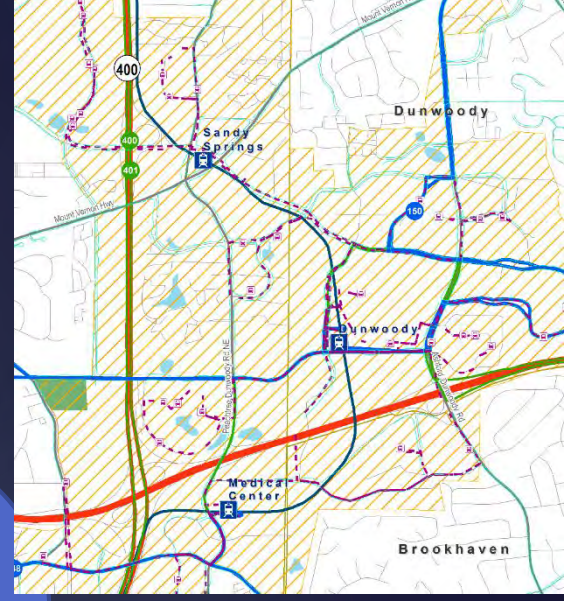
Planning Ahead for Autonomous Vehicles

Separate/Parallel Multi-Use Trails

Draft Transit Vision

PERIMETER LAST MILE RECOMMENDATIONS

Perimeter Last Mile: Near-Term Recommendations



Improve/ Standardize Amenities for Existing Transit

Clear Information & Wayfinding
Uniform Shelters
Real-Time Information

Improve Travel Time for Existing Transit

Signal Priority Intersection
Queue-Jumpers

Improve Walkability around Transit Stops

Sidewalks
ADA-accessible Transit Stops

Partner with Existing Alternative Transportation Modes

Uber/Lyft Partnerships

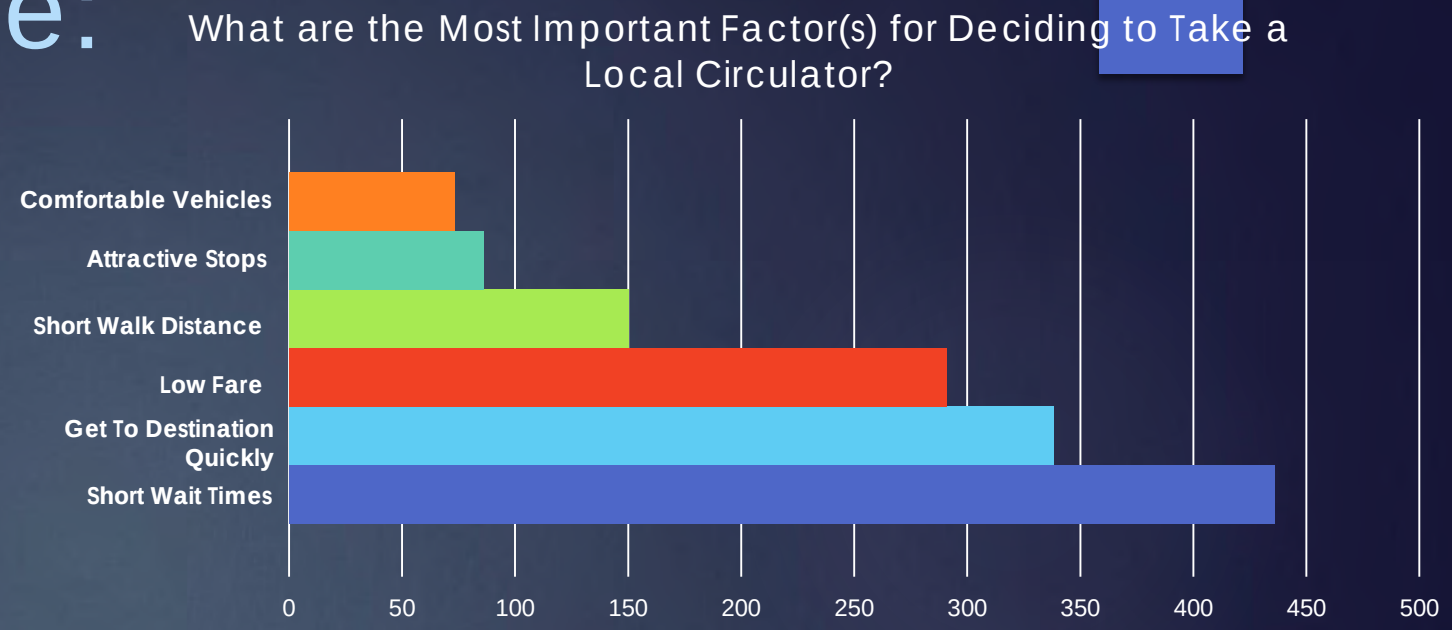
Continue to Encourage Direct Local Shuttles

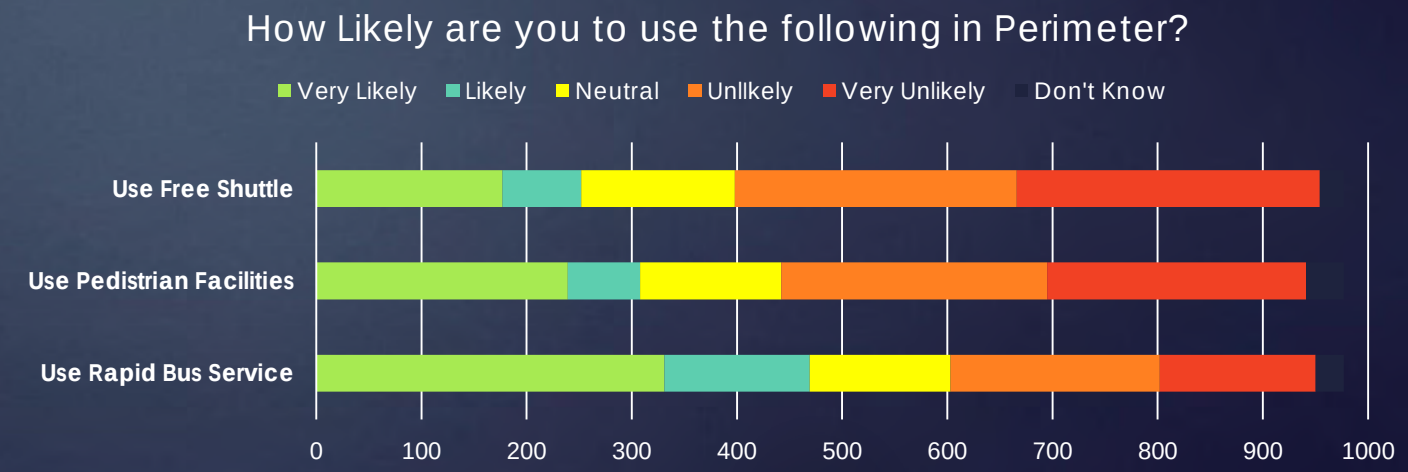
Employer/ Office Park Partnerships
Perimeter Connects

Perimeter Last Mile: Survey Results

- 2013 Survey conducted at office, retail, and restaurant locations throughout Perimeter

- **Major conclusion:** to entice people to use a circulation transit service, it has to compete with personal vehicles for wait and travel times

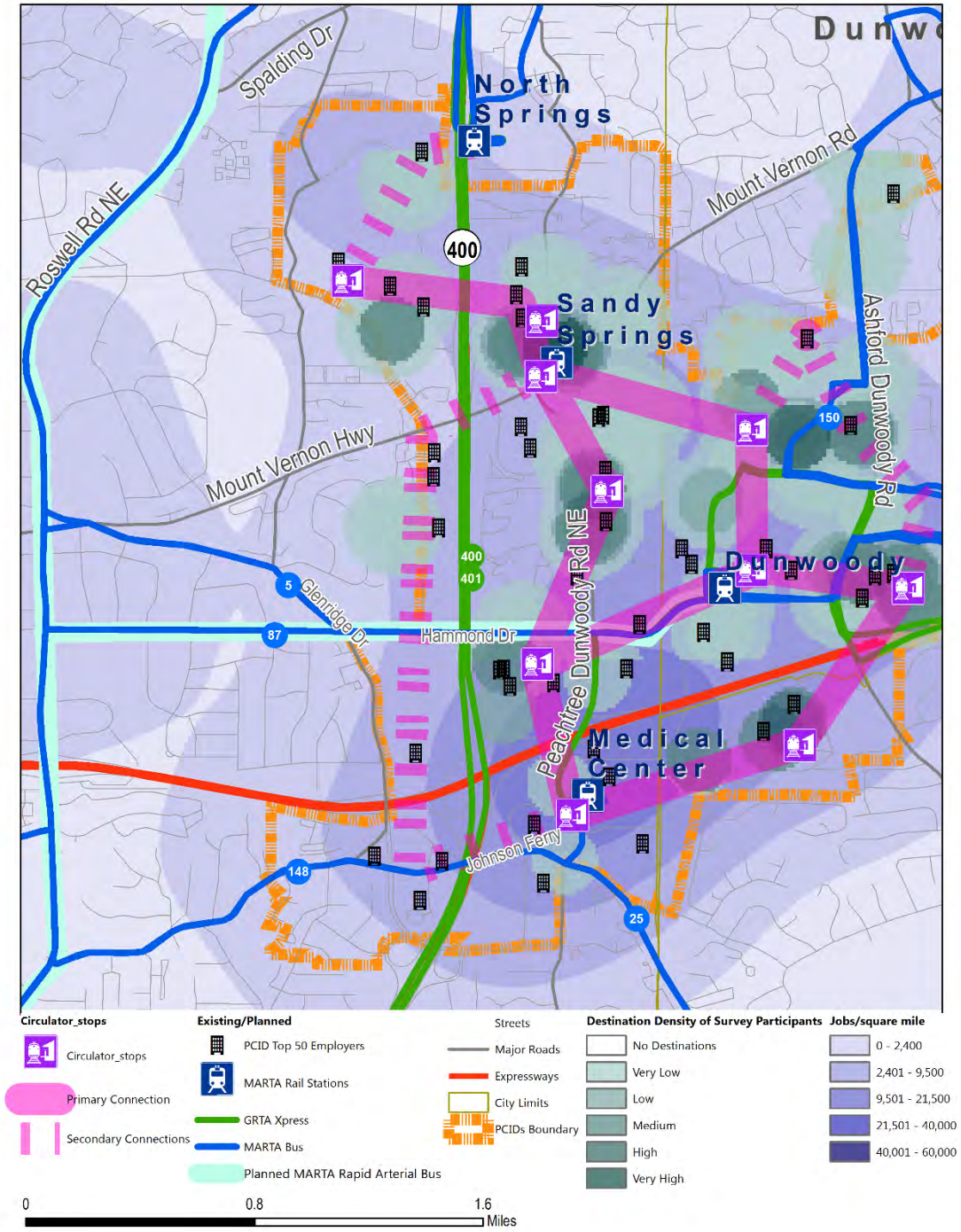




Perimeter Last Mile Long-Term Alt. 1: Rapid Transit

Provide a rapid transit option for circulating the Perimeter area that operates in a separate right-of-way from personal vehicles.

- Faster, more direct transit services
- Working with business campuses to provide transit directly to office buildings
- Connection to multiple MARTA stations allows riders to transfer where most convenient



Perimeter Last Mile
Alternative 1: Potential Modes

Automated Guideway Transit – operates in elevated right-of-way

Operating Costs: $150-$200/ revenue hour

Vehicle Costs: $5M-$10M/ vehicle

Capital Costs: $90 million/ mile

ROW: Elevated rail, ROW for supports, 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, ROW for supports, 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: $3-$15 million/ mile

ROW: Additional 12' per lane in each direction

Perimeter Last Mile Alternative 1: Strategies

Increase Residential & Employment Density

Thresholds Depend on Multiple Factors

Adjust Parking Requirements –

Restricted Districts, Reducing Off-Street Parking

Coordinate Land Use Policies to Achieve Mix of Uses

Commercial, Retail, Office, Residential

Establish Urban Form/Design to Foster Active Streets

Orient Buildings Toward Street, Walkable Blocks

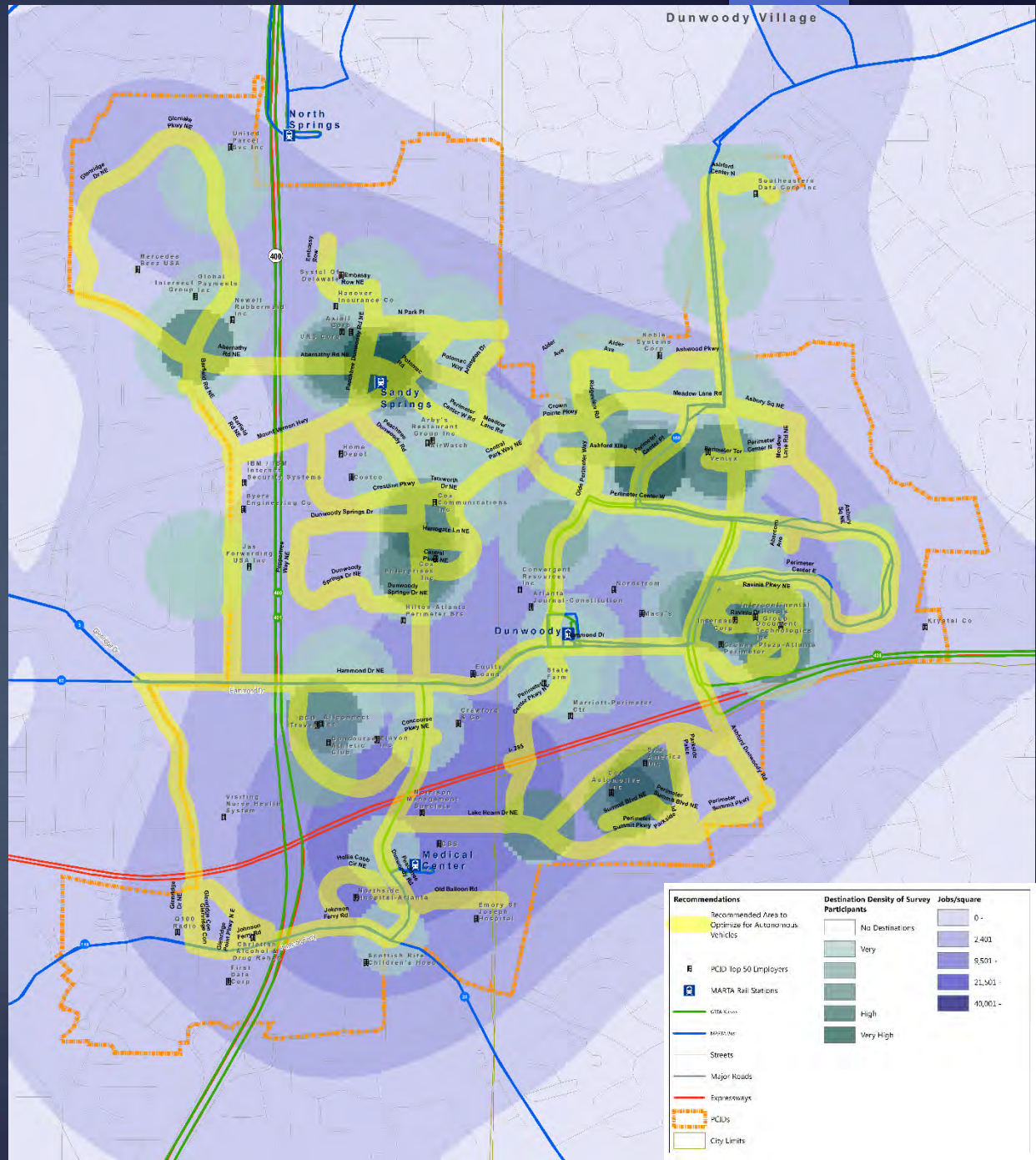
Safe, Comfortable Walking Environment

Sidewalks, Paths, Lighting, Benches, etc.

Perimeter Last Mile Long-Term Alt. 2: Leverage Technology & Infrastructure

Designate an area with limited access to leverage existing roadway infrastructure

- Leverage existing roadway network
- Allows visitors and employees to park once, remotely and have easy access around Perimeter
- Door-to-door service for Lyft/ Uber/autonomous vehicles within area
- Autonomous vehicles have designated ROW for improved travel time and convenience



Perimeter Last Mile Alternative 2: Strategies

Engage cities, researchers, and autonomous vehicle developers

As infrastructure codes for vehicles are developed, implement them throughout the identified area

Restrict Access to the area and leverage off-site parking

Examine the viability of dedicated lanes and/or roads to autonomous vehicles

Engage Uber/lyft who are developing autonomous fleets

Transit Vision
Next Steps

- Hub Connections
  - Pursue Near-Term recommendations to improve transit-supportive infrastructure
  - Coordinate with MARTA on COA transit implementation
    - Hammond Drive
    - Ashford Dunwoody Road
  - Georgetown connection study

- Perimeter Circulation
  - Pursue Near-Term recommendations to improve transit-supportive infrastructure
  - More detailed study is needed to select alternative/mode for circulation

Draft Pedestrian/Bike/Trail Plan

Pedestrian/Bike/Trail Plan Outline

- Defining Connectivity
- Existing Ped/Bike/Trail Facilities
- Programmed and Planned Ped/Bike/Trail
  - Implementation Criteria
  - Prioritization Criteria
  - Low Hanging Fruit
- Gaps Beyond Existing/Planned Projects
- Near-/Long-Term Recommendations
- Next Steps

Defining **Pedestrian** Connectivity

Last Mile Connectivity: Getting people effectively from their home/destination to the nearest transit stop/station/hub

+

Hub Connectivity: Providing direct access between hubs to facilitate the movement of people and connect mixed-use hubs

- High-amenity sidewalk environments within Hubs and **at intervals (transit stops or ½ mile)** along primary connecting corridors
  - Streetscape Standards
    - Seating
    - Shade
    - Aesthetic template
  - Space for Social/Commercial Interaction
    - Nodal Points
  - Wayfinding/Transit Status
  - If using Highway Capacity Manual (HCM) Ped LOS- B or better

- Provide full coverage along full length of connecting corridor **and** on all streets of any class within ½ mile of primary connecting corridor
- If using HCM Ped LOS- C or better

Defining **Bicycle** Connectivity

Last Mile Connectivity: Getting people effectively from their home/destination to the nearest transit stop/station/hub

- Low-stress bike connections within Hubs
  - Arterials/Collectors within hubs
    - On-street bike facilities **AND**
    - Trails/Pathways/Separated Bikeways
  - Either/or on secondary streets within hubs
  - If using HCM Bike LOS- B or better
- End-of-Trip-Facilities

+

Hub Connectivity: Providing direct access between hubs to facilitate the movement of people and connect mixed-use hubs

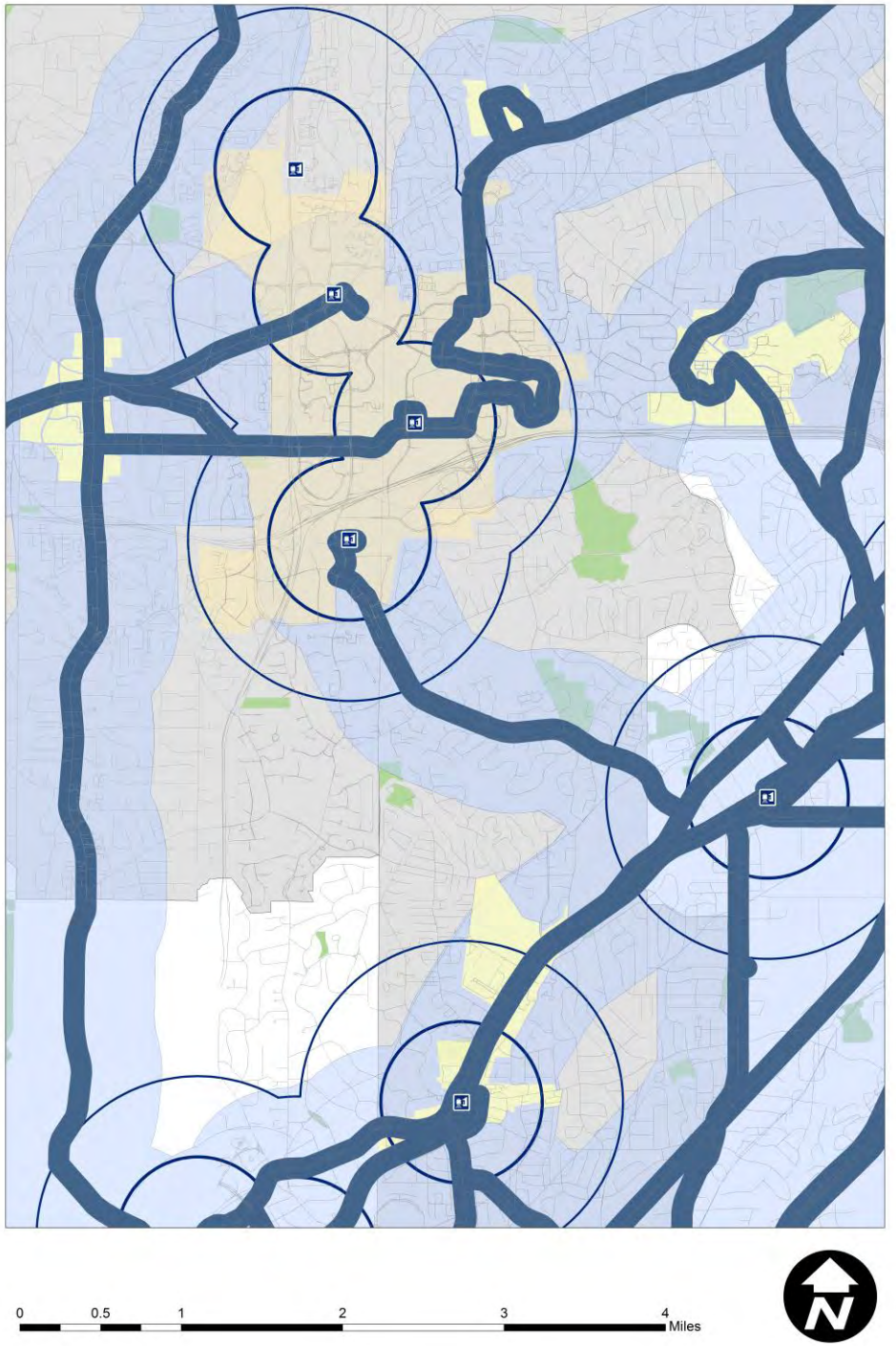
- A primary low-stress link between each hub and PCIDs; around perimeter of all hubs
  - Independent trail **OR**
  - Separated bikeway **and** high amenity pedestrian facility along roadway
- Inclusion of on-street facilities on connecting corridors
- Local Street Connections to Hub Loop Links
- On-street bike facilities on connecting corridors
- If using HCM Bike LOS- C or better

Draft Pedestrian/Bike/Trail Plan

EXISTING SERVICE AND FACILITIES

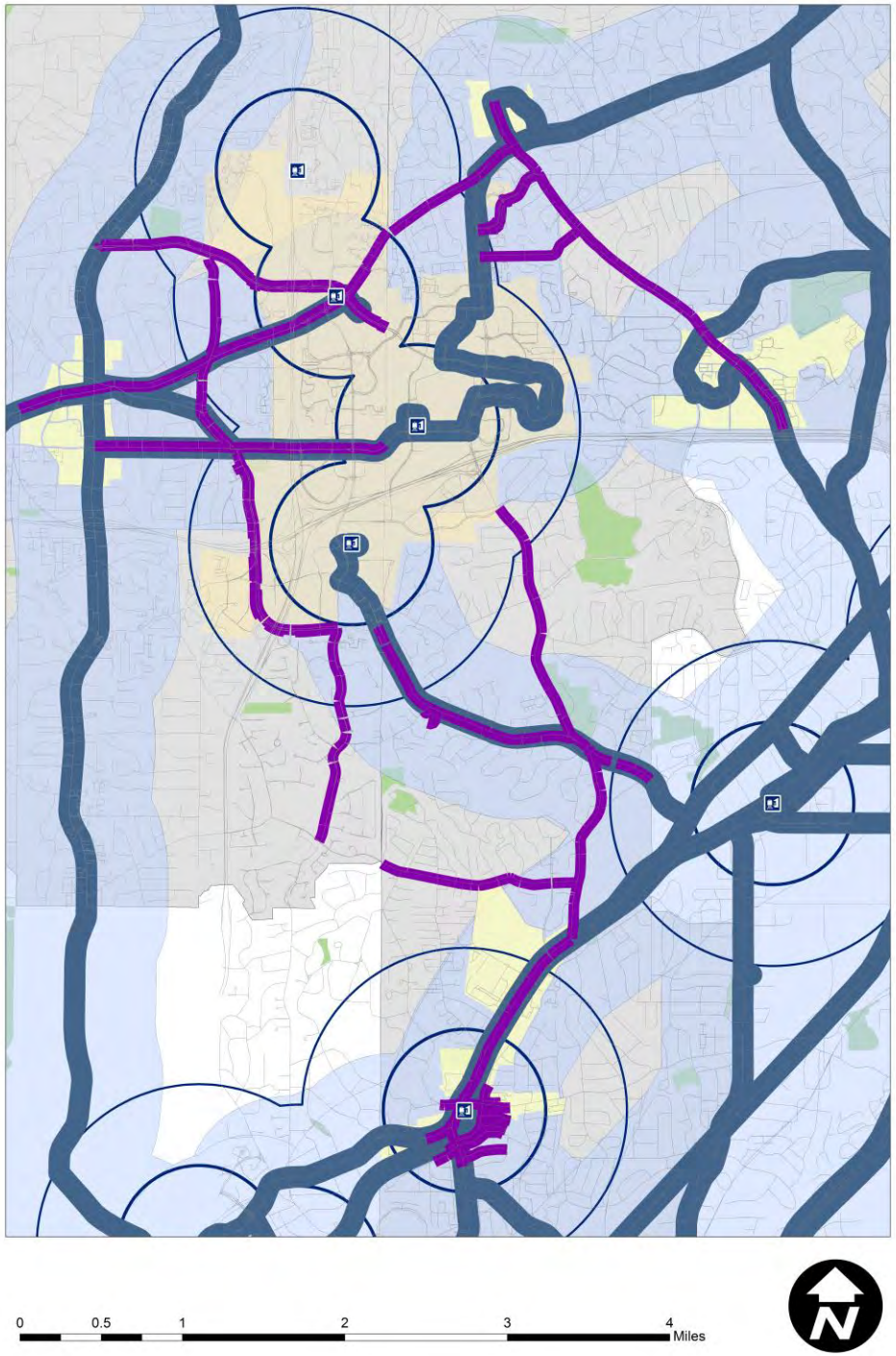
Existing Service: Rail Stations & Buffers

- Small blue circle = ½ mile buffer around rail stations
- Larger blue circle = 1 mile buffer around rail stations
- Dark blue lines = local MARTA bus routes
- Light blue corridors = ½ mile buffers around bus routes



Existing Service: Other Key Corridors

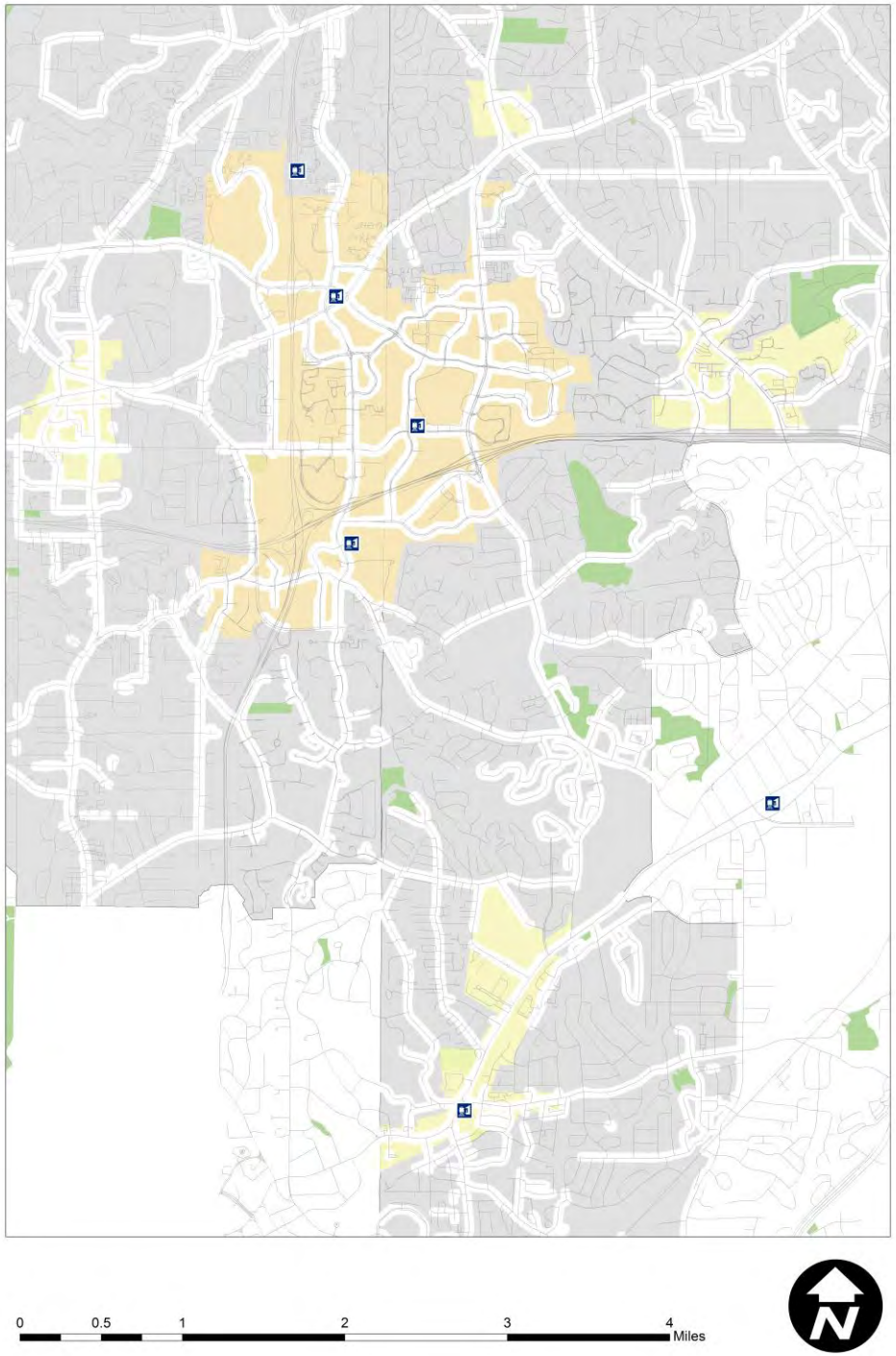
- Purple lines = key corridors identified during previous work sessions
- Represent connectors between/adjacent to and opportunities to connect hubs and activity centers
  - Peachtree Road & around Brookhaven MARTA station
  - Johnson Ferry Road
  - Windsor Parkway
  - Ashford Dunwoody Road
  - Peachtree Dunwoody Road
  - Hammond Drive
  - Glenridge Drive / Glenridge Connector
  - Mount Vernon Road
  - Abernathy Road
  - Perimeter Center West
  - Chamblee Dunwoody Road



Existing Facilities: **Pedestrian**

- Hubs
- Existing Sidewalk

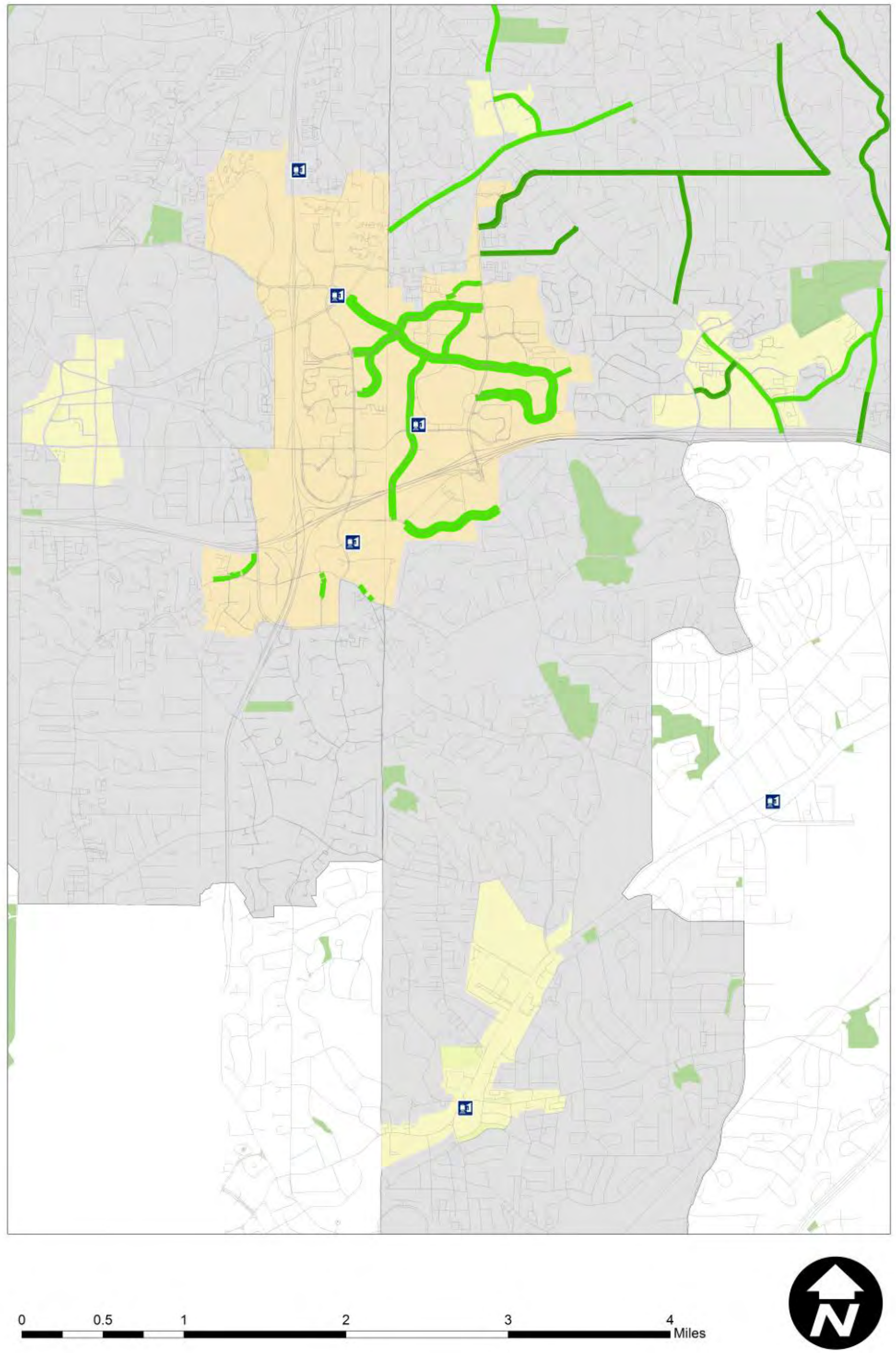
- Key corridors in PCIDs well covered by sidewalk
- Forms large block pattern
- Opportunities for infill on smaller roads to facilitate connections to key corridors
- No direct connections between Georgetown and PCIDs
- Few connections between Sandy Springs and Brookhaven and PCIDs



Existing Facilities: **Bike**

- Hubs
- Existing On-street Designated Bike Facility
- Existing Bike Route

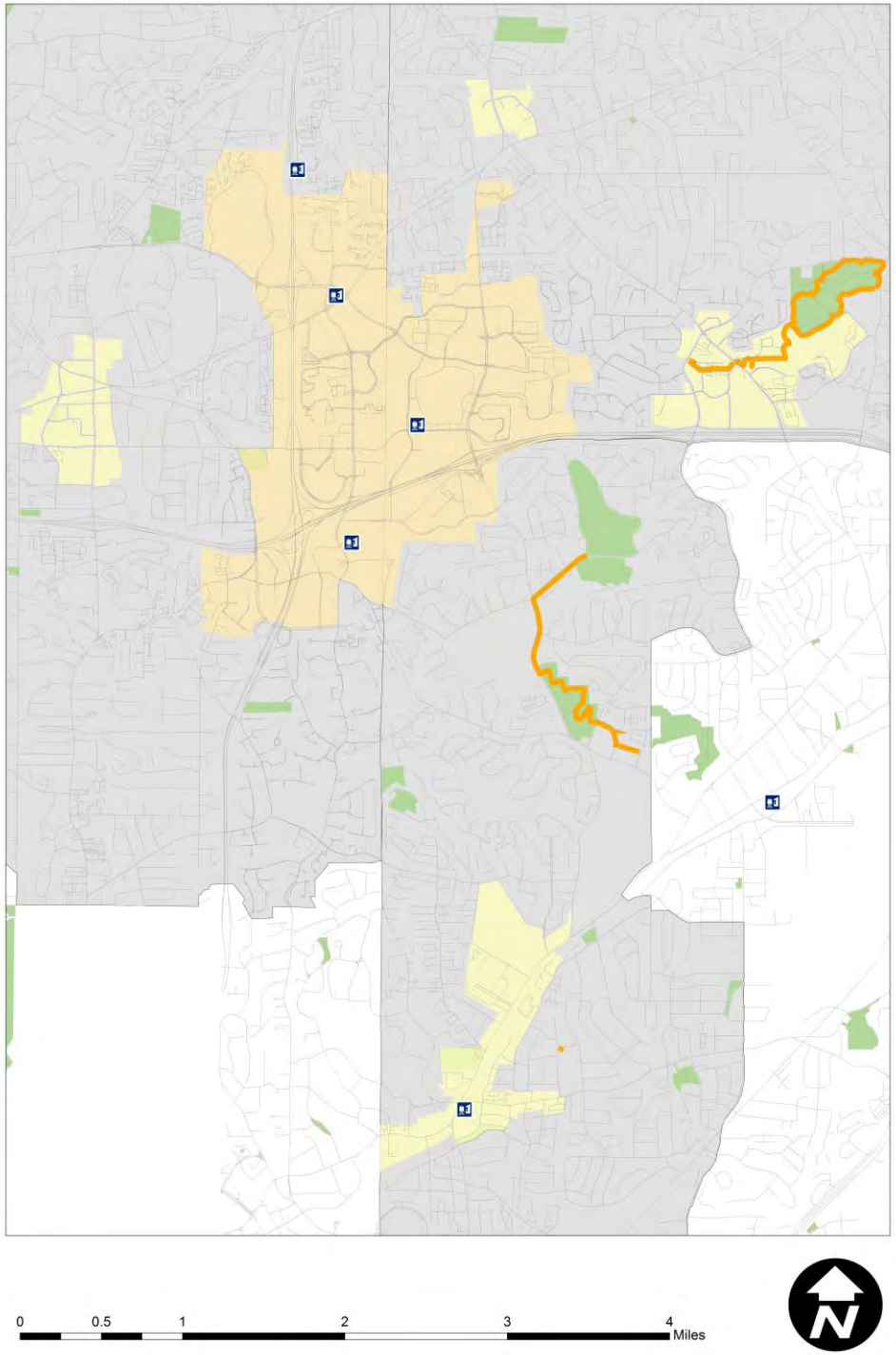
- On-street bike facilities mainly present in PCIDs with some in Georgetown area
- Opportunities to connect
- Opportunities to fill in west side of PCIDs, to connect other hubs



Existing Facilities: **Trail**

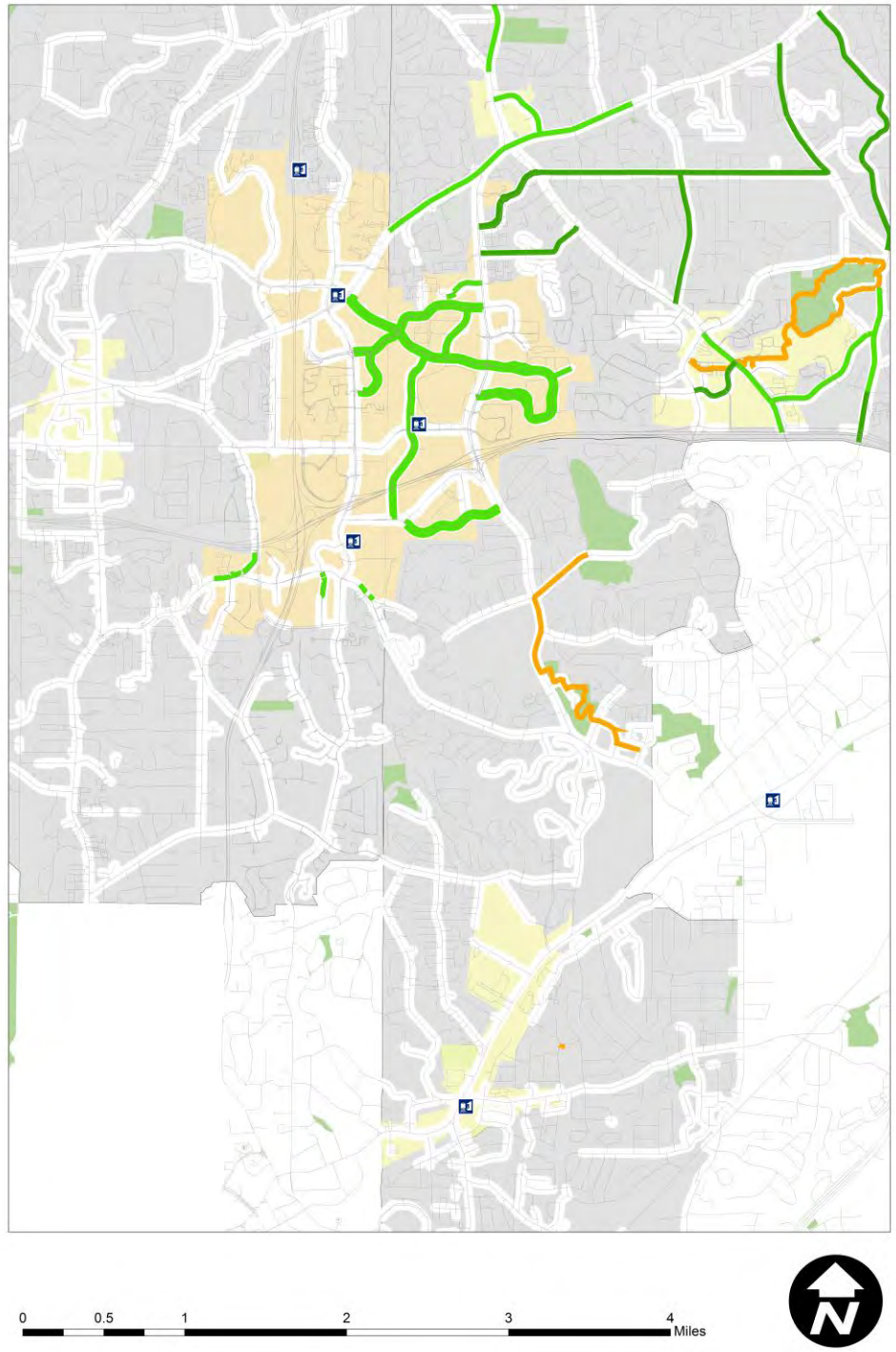
Hubs
Existing Trail

- Few trails present within hubs
- Opportunities to connect with dedicated trails



Existing Facilities: **All**

- Hubs
- Existing Sidewalk
- Existing On-street Designated Bike Facility
- Existing Bike Route
- Existing Trail



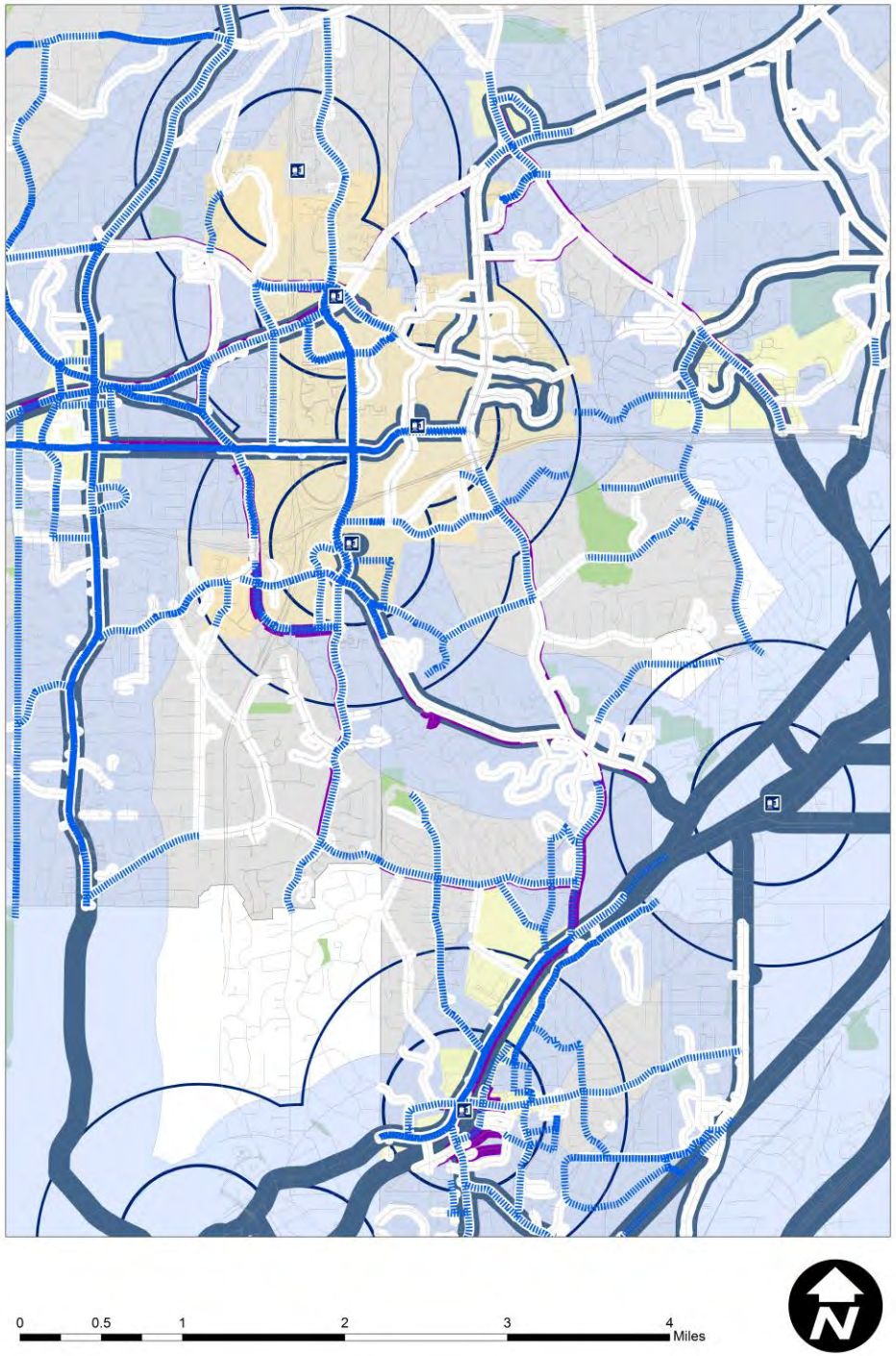
Draft Pedestrian/Bike/Trail Plan

PLANNED/PROGRAMMED PROJECTS

Planned/Programmed: **Pedestrian**

- Hubs
- Bus Route Buffers
- Existing Sidewalk
- Planned/Programmed Pedestrian Facility

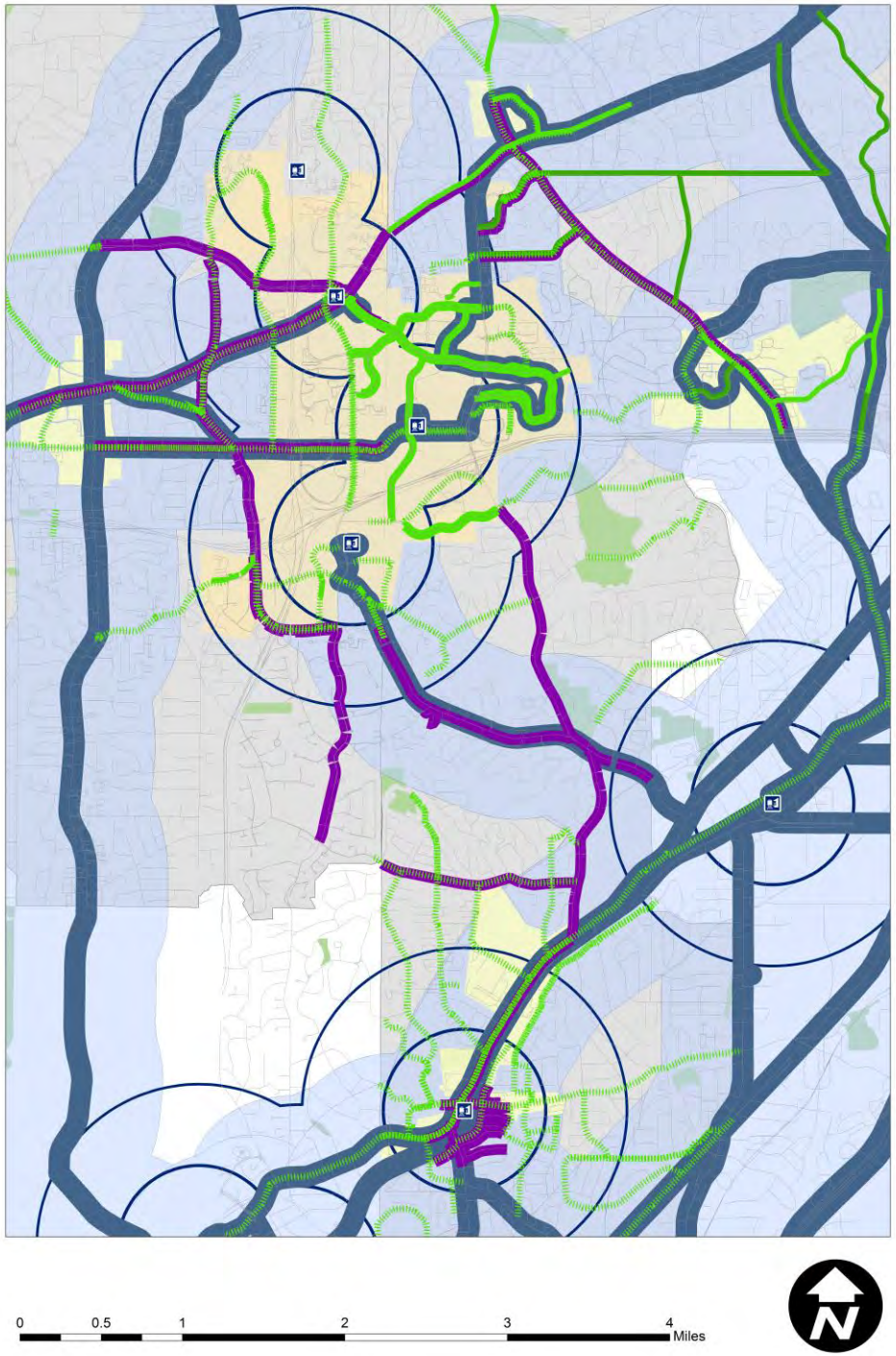
- Planned and programmed projects provide connections:
  - Between Georgetown and PCIDs
  - To Murphey Candler Park
  - Near hospitals and Medical Center Station
  - Along south end of Ashford Dunwoody Road
  - Around Brookhaven/Oglethorpe MARTA Station, south of Peachtree Road
- Opportunities to fill in large blocks, campuses, provide connections to key corridors



Planned/ Programmed: **Bike**

- Hubs
- Bus Route Buffers
- Existing On-street Designated Bike Facility
- Existing Bike Route
- Planned/Programmed Bike Project

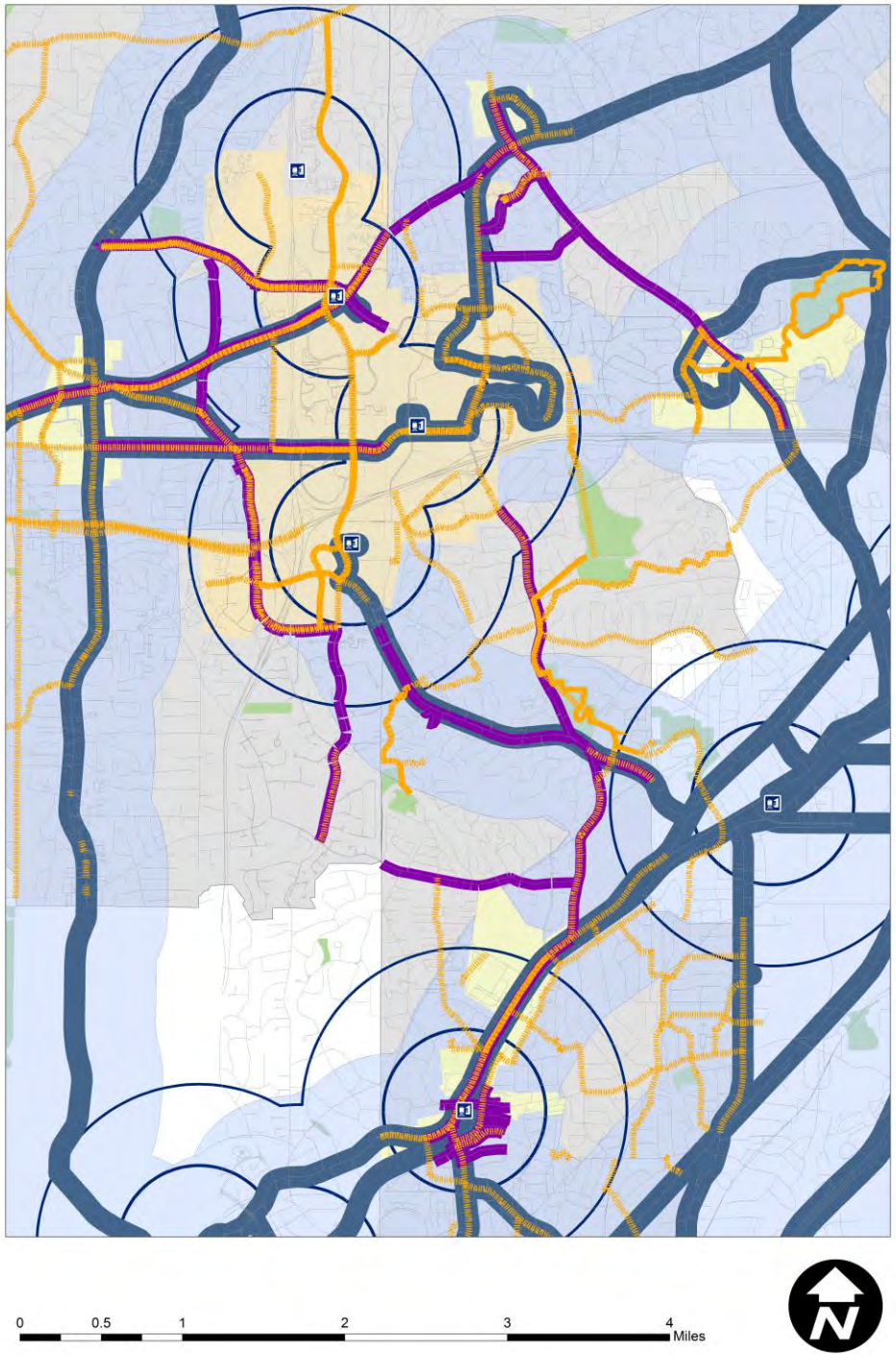
- Proposed project begin to fill in PCIDs, facilitate connections to other hubs
- Bike facilities near most MARTA rail stations, except North Springs
  - Medical Center not well connected
- Disconnect between Perimeter area and Brookhaven MARTA station area



Planned/Programmed: **Trail**

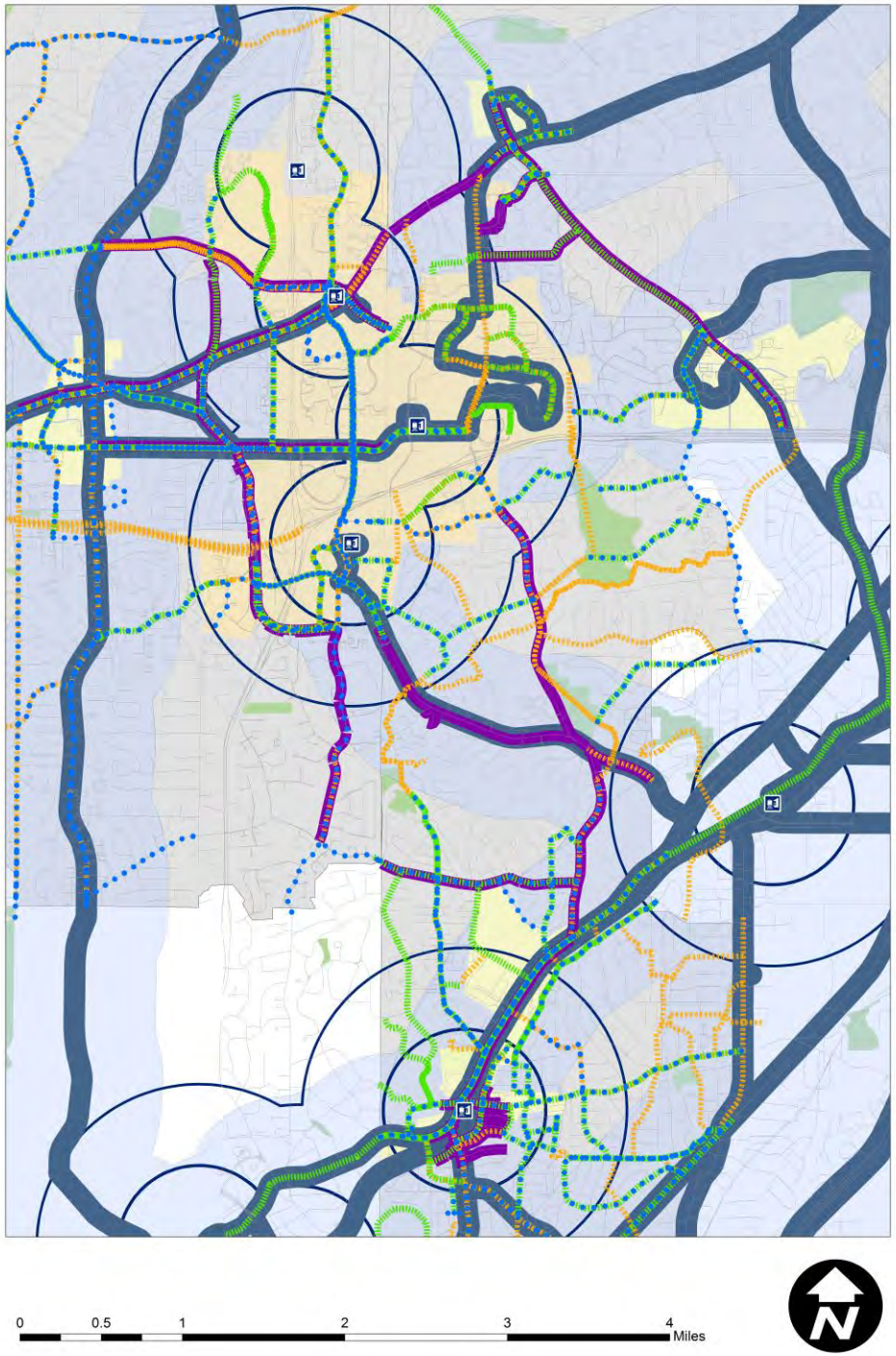
- Hubs
- Bus Route Buffers
- Existing Trail
- Planned/Programmed Trail

- Proposed projects lead to better connectivity
- Planned/programmed trails connect to all MARTA Stations except North Springs
- Planned/programmed trails along many bus routes
- Few opportunities to connect across I-285



Planned/Programmed: **All**

- Hubs
- Bus Route Buffers
- Planned/Programmed Ped Facility
- Planned/Programmed Trail
- Planned/Programmed Bike Facility



Implementation Criteria

	Near-Term: < 3 yrs	Mid-Term: 3-6 yrs	Long-Term: > 6 yrs
Ped	• Selected high priority sidewalks (high visibility) • Ped-only intersection projects (ramps or other ADA only) • Labeled "Near-Term" in parent plan priority	• High priority sidewalks Intersection projects that require coordination with roadway ops)	• Lower priority sidewalks
Bike	• Shared lane markings • Already tagged for implementation by 2019 • Labeled "short" in current timeframe field • Pre-screened bike lanes (on immediate resurface schedule, road diets approved by stakeholders) • Private Site Bike Friendly Consultations • Public Bike Parking /Pavilions	• Bike lanes on later resurface schedule • Pre-screened Cycle Tracks • Upper 50% of priority in parent plan • Labeled "mid" in current timeframe • Within a hub/primary corridor • Bike share	• Less certain cycle tracks (site/stakeholder complexity) • Lower 50% priority in parent plan
Trail	• Selected Priority Trails • Wayfinding System Development/ Pilot Kiosks	• High Priority (top 50% of parent plan)	• Lower Priority (lower 50% of parent plan)
Other	• Selected Priority Streetscape • Midblock Crossings (at grade) • Education/Encouragement Programs	• Streetscape projects • Grade separated midblock crossing	• (continue)- lower priority

Suggested Prioritization Criteria

	Proximity to Transit	Cost/Complexity	Locational
High	½ mile to MARTA Rail	Within right-of-way (ROW), minimal grade/drain, per mile cost applied to short length	Within identified Hub *(PCIDs, Georgetown, Dunwoody Village, Brookhaven/Oglethorpe TOD, City Springs)*
Med	1 mile to MARTA Rail	ROW/easement to be obtained (moderate), moderate grade/drain, per mile cost applied to med length	½ mile to Hub
Low	½ mile to Bus Stop	ROW extreme, extreme grade/drain, per mile cost applied to length	1 mile to Hub

"Low Hanging Fruit"

Pedestrian	Bicycle	Trail	Other
Sidewalks within Hubs	Shared Lane Markings (SLMs)	Select priority projects	Pilot kiosk
Sidewalks within ½ mile of MARTA Rail Station	Review resurfacing program for bike lane opportunities	Kickstart freeway crossing planning (overcome physical barriers)	Pilot pavilion
Improve circulation at MARTA Rail Stations			Wayfinding

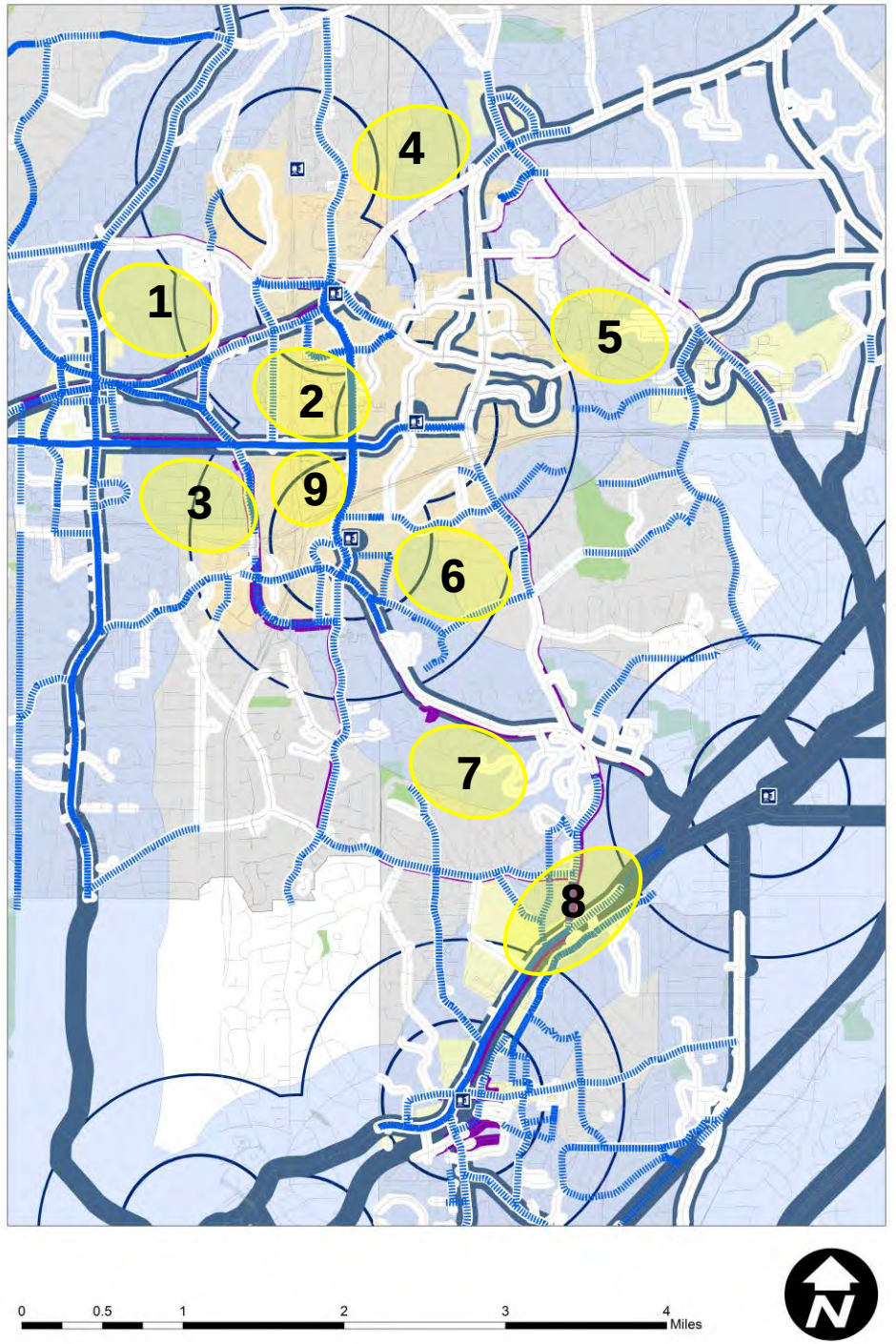
Examples of "Low Hanging Fruit"

- **Sidewalk**
  - Mount Vernon Hwy from Hammond Dr to Johnson Ferry Rd
  - Central Parkway from 7000 Central Pkwy to Perimeter Center West
  - Ashford Dunwoody Rd from Peachtree Rd (SR 141) to Windsor Pkwy
  - Johnson Ferry Rd Glenridge Connector to Ex. SW at Wells Fargo Site
- **Other Pedestrian Facilities**
  - Mid-Block Crossing on Hammond Drive at Dunwoody MARTA Station
  - Brookhaven MARTA Station pedestrian access improvements (construction in 2017)
- **Bike Facilities**
  - Bike Lanes Barfield Road from Hammond Dr to Mount Vernon Hwy
  - Sharrows on Osborne Rd from Peachtree Rd (SR 141) to Lynwood Park
- **Access and Wayfinding**
  - MARTA Station pedestrian accessibility improvements: internal circulation and connections to surrounding sites/facilities
  - Branded wayfinding program

Gaps Beyond Planned Projects: **Ped**

- Hubs
- Bus Route Buffers
- Gap Area
- Planned/Programmed Ped Facility
- Existing Sidewalk

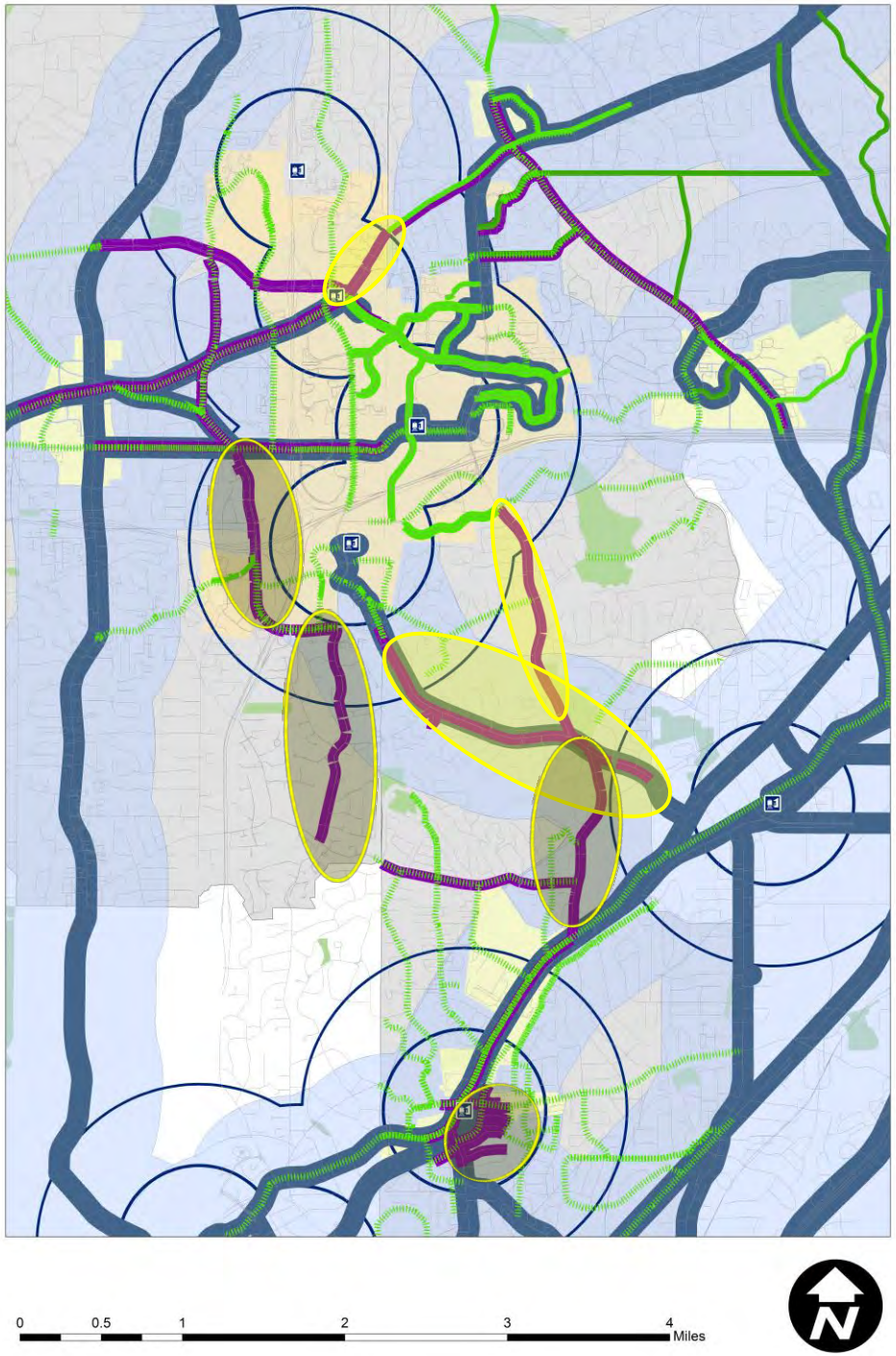
1. Roswell Rd to Glenridge
2. West of Peachtree Dunwoody, south of Mt. Vernon, Crestline Pkwy
3. South of Hammond Drive, west of Glenridge Conn.
4. North of Mt. Vernon, east of Peachtree Dunwoody
5. South of Chamblee Dunwoody, east of Perimeter Center E, north of I-285
6. Bound by Lake Hearn, Ashford Dunwoody, West Nancy Creek
7. South of Johnson Ferry, north of Windsor Parkway
8. North end of Brookhaven/Oglethorpe overlay area
9. Concourse Parkway



Gaps Beyond Planned Projects: **Bike**

- Gap Area
- Hubs
- Bus Route Buffers
- Existing On-street Designated Bike Facility
- Existing Bike Route
- Planned/Programmed Bike Project

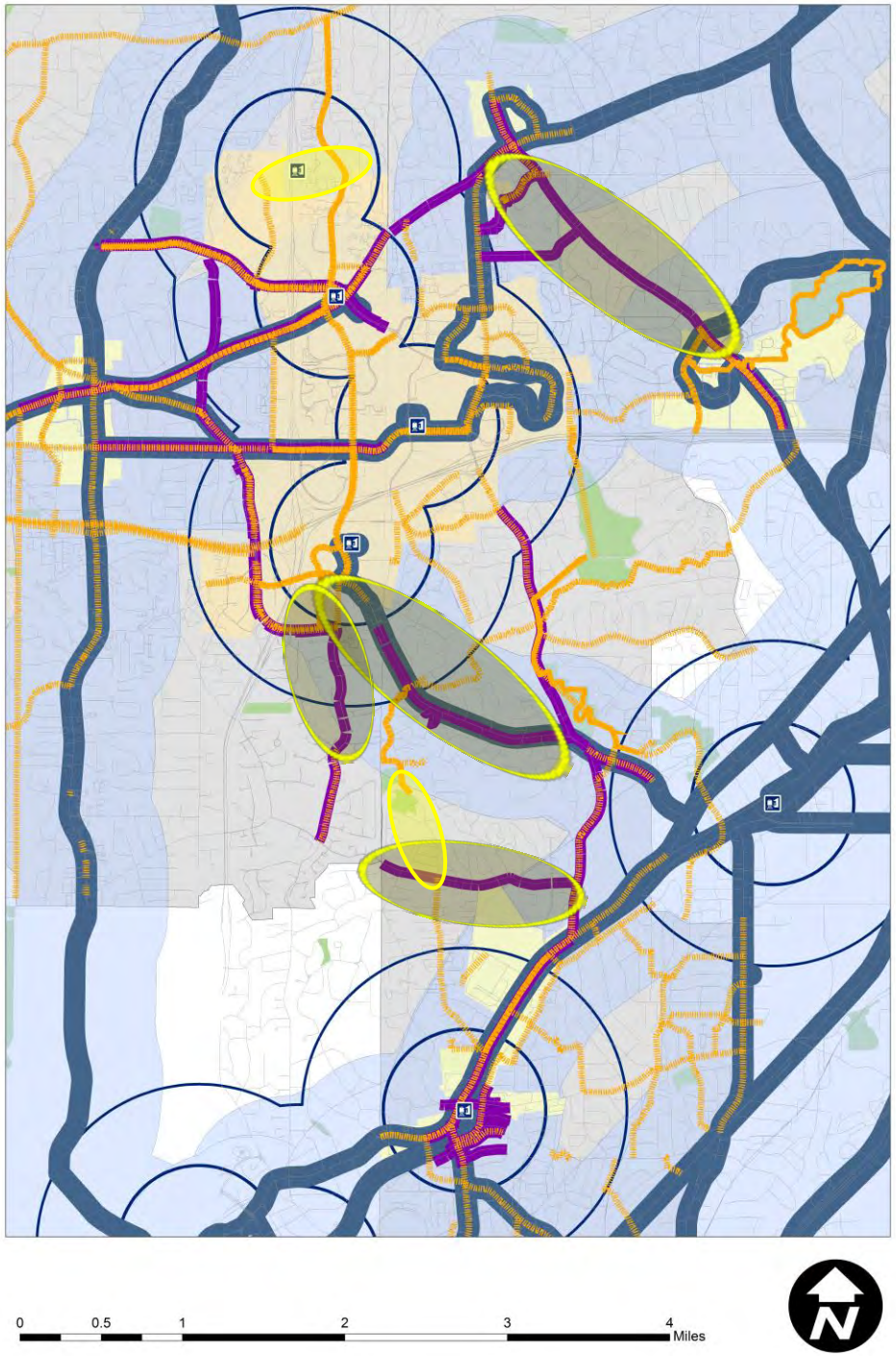
- Within Hubs and along Corridors
- Within appropriate buffers
  - Glenridge Drive/Connector
  - Peachtree Dunwoody
  - Johnson Ferry Road
  - Ashford Dunwoody Road
  - Around Brookhaven / Oglethorpe MARTA Station
  - Mount Vernon Road



Gaps Beyond Planned Projects: **Trail**

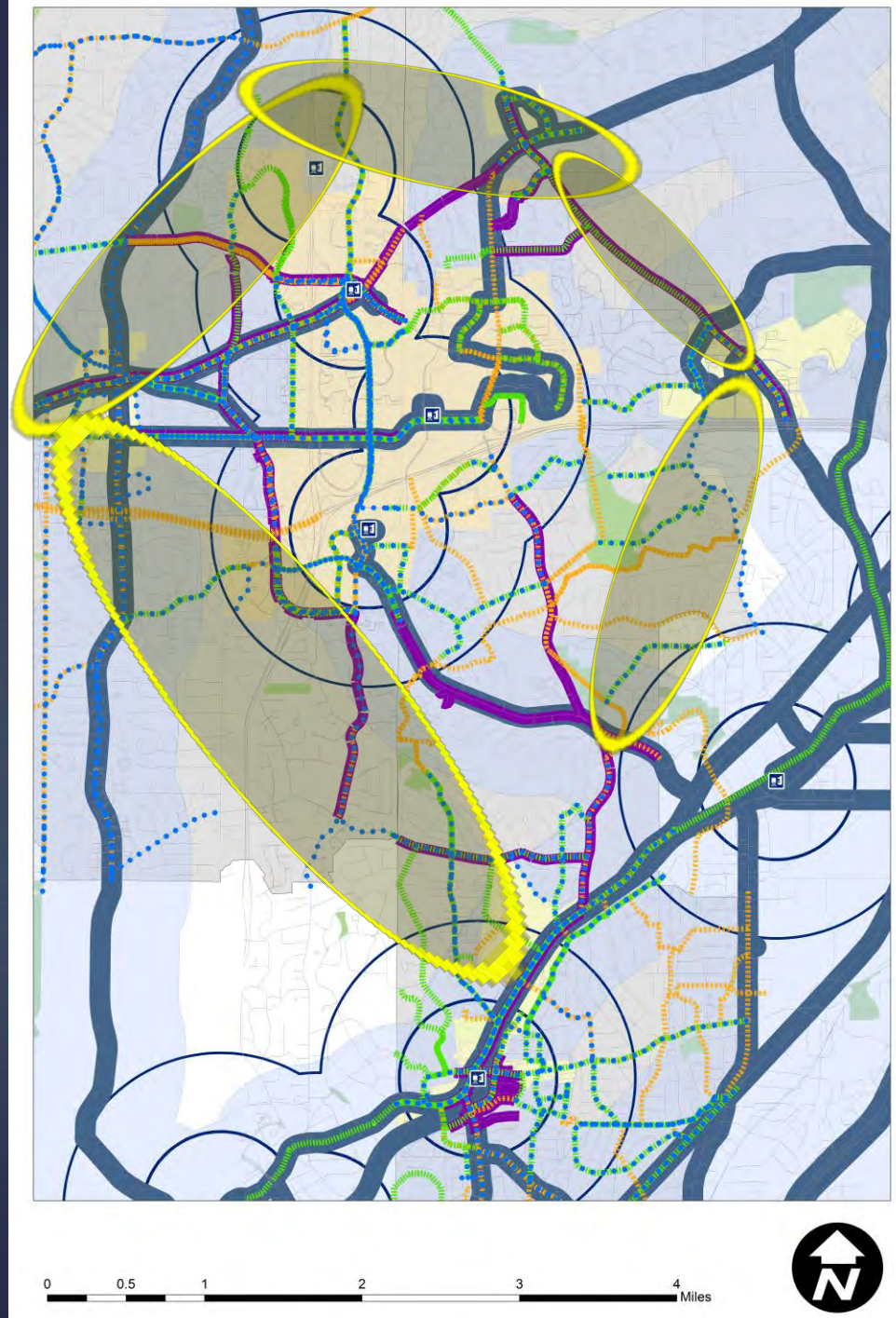
- Hubs
- Bus Route Buffers
- Existing Trail
- Planned/Programmed Trail
- Gap Area

- Within Hubs and along Corridors
- Within appropriate transit buffers
  - Johnson Ferry Road
  - Chamblee Dunwoody Road
  - Peachtree Dunwoody Road
  - Windsor Parkway
  - Around North Springs Station



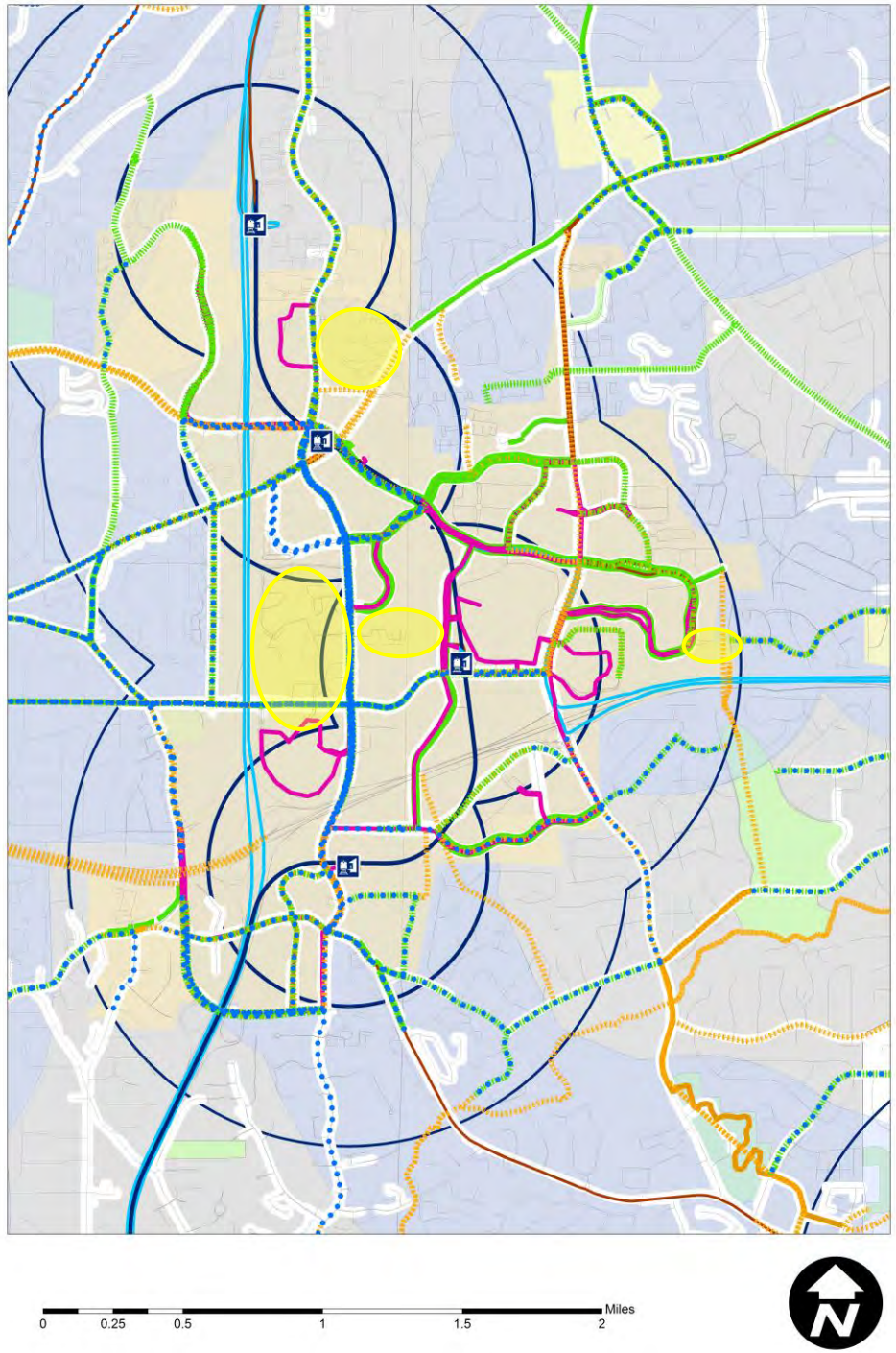
Gaps Beyond Planned Projects: **All**

- Hubs
- Bus Route Buffers
- Planned/Programmed Ped Facility
- Planned/Programmed Trail
- Planned/Programmed Bike Facility
- Gap Area



Gaps Beyond Planned Projects: **All Within PCIDs**

- MARTA Bus Route
- Shuttle Route
- GRTA Bus Route
- Existing Sidewalk
- Planned/Programmed Ped Facility
- Planned/Programmed Trail
- Planned/Programmed Bike Facility
- Gap Area



Draft Pedestrian/Bike/Trail Plan

NEAR-TERM RECOMMENDATIONS

Recommended Pedestrian Policies

- Develop design standards for high-amenity sidewalk environments **within Hubs** and **at intervals (transit stops or ½ mile)** along **primary connecting corridors** to include:
  - Streetscape Standards
    - Seating, Shade, Aesthetic template
  - Wide enough space for Social/Commercial Interaction at Nodal Points
  - Wayfinding/Transit Status (real-time information)
  - Aim for Highway Capacity Manual (HCM) Ped LOS- B or better
- Provide **full coverage** along **full length of connecting corridor and** on all **streets of any class within ½ mile of primary connecting corridor**
  - Aim for HCM Ped LOS- C or better

Recommended Bicycle Policies

- Develop design standards and policies for **low-stress bike facilities**
  - Include End-of-Trip-Facilities: bike repair stations, lockers, bike racks, etc.
- Provide low-stress bike facilities **within and between Hubs**:
  - **Arterials/Collectors** within hubs
    - On-street bike facilities **AND**
    - Trails/Pathways/Separated Bikeways
  - Either/or on **secondary streets within hubs**
  - Aim for HCM Bike LOS- B or better
- Provide a primary low-stress link between each hub and PCIDs and around perimeter of all hubs
  - Independent trail **OR** separated bikeway **and** high amenity pedestrian facility along roadway
- Provide on-street facilities on connecting corridors
- Provide local street connections to Hub loop links
- Aim for HCM Ped LOS- C or better

Near-Term Recommendations

Implement Low-Hanging Fruit

Sidewalks within ½ mile of rail stations and within ½ mile of connecting corridors

Encourage Sidewalks within Campuses

MARTA Station Circulation

Shared Lane Markings

Bike Lanes and Priority Trails

Wayfinding

Refine and Implement Planned Facilities

Refine and prioritize projects recommended in previous plans or studies

Implement Supporting Infrastructure and Programmatic Elements from Bicycle Implementation Strategy

Adopt similar strategy in other Hubs/Activity Centers

Adopt Standard Design Policies:

High Amenity Pedestrian Environment

Low Stress Bike Facilities

On-Street Facilities

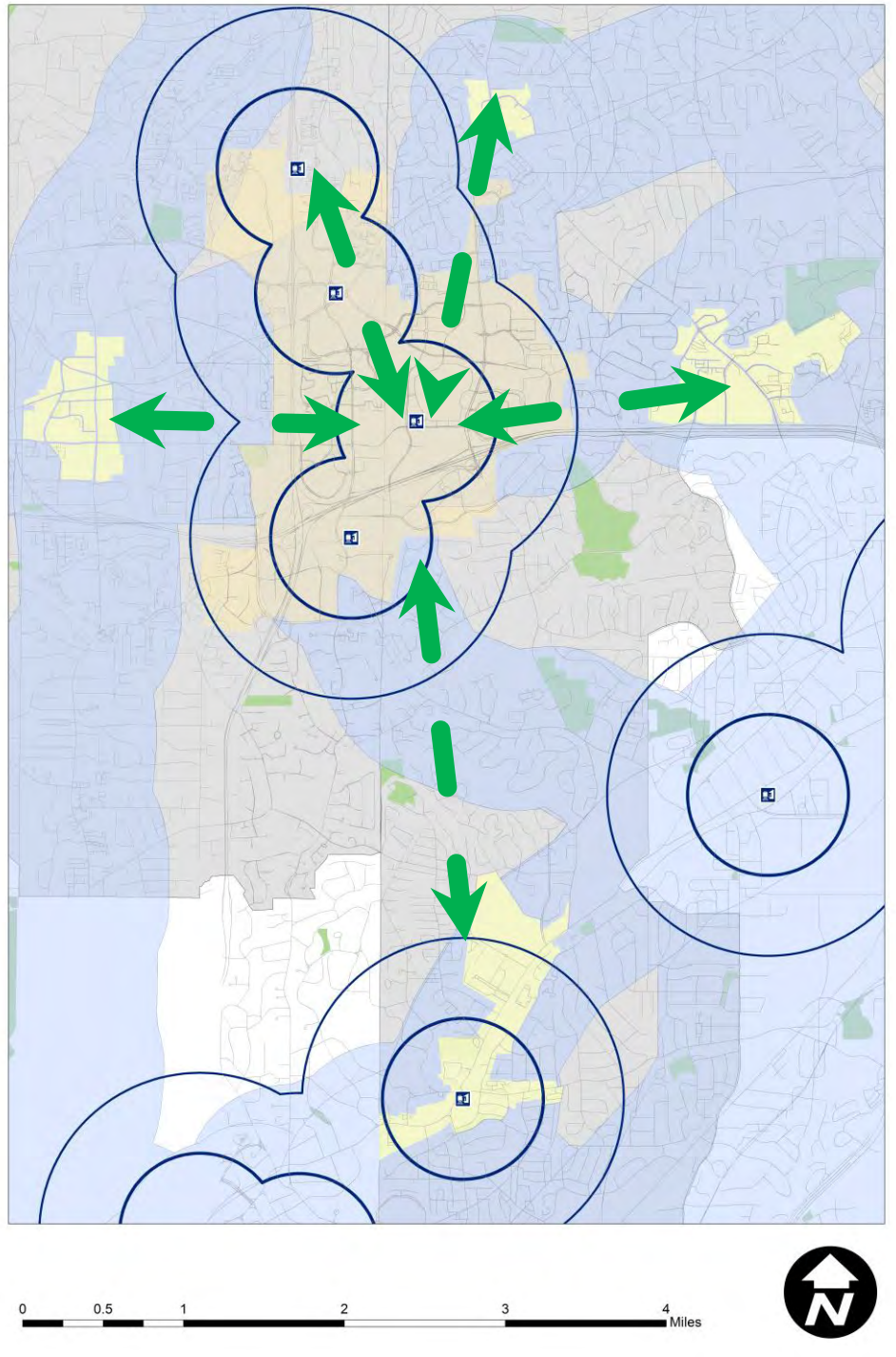
Encourage Private Property Owners to Provide Sidewalks/Paths

Draft Pedestrian/Bike/Trail Plan

LONG-TERM RECOMMENDATIONS

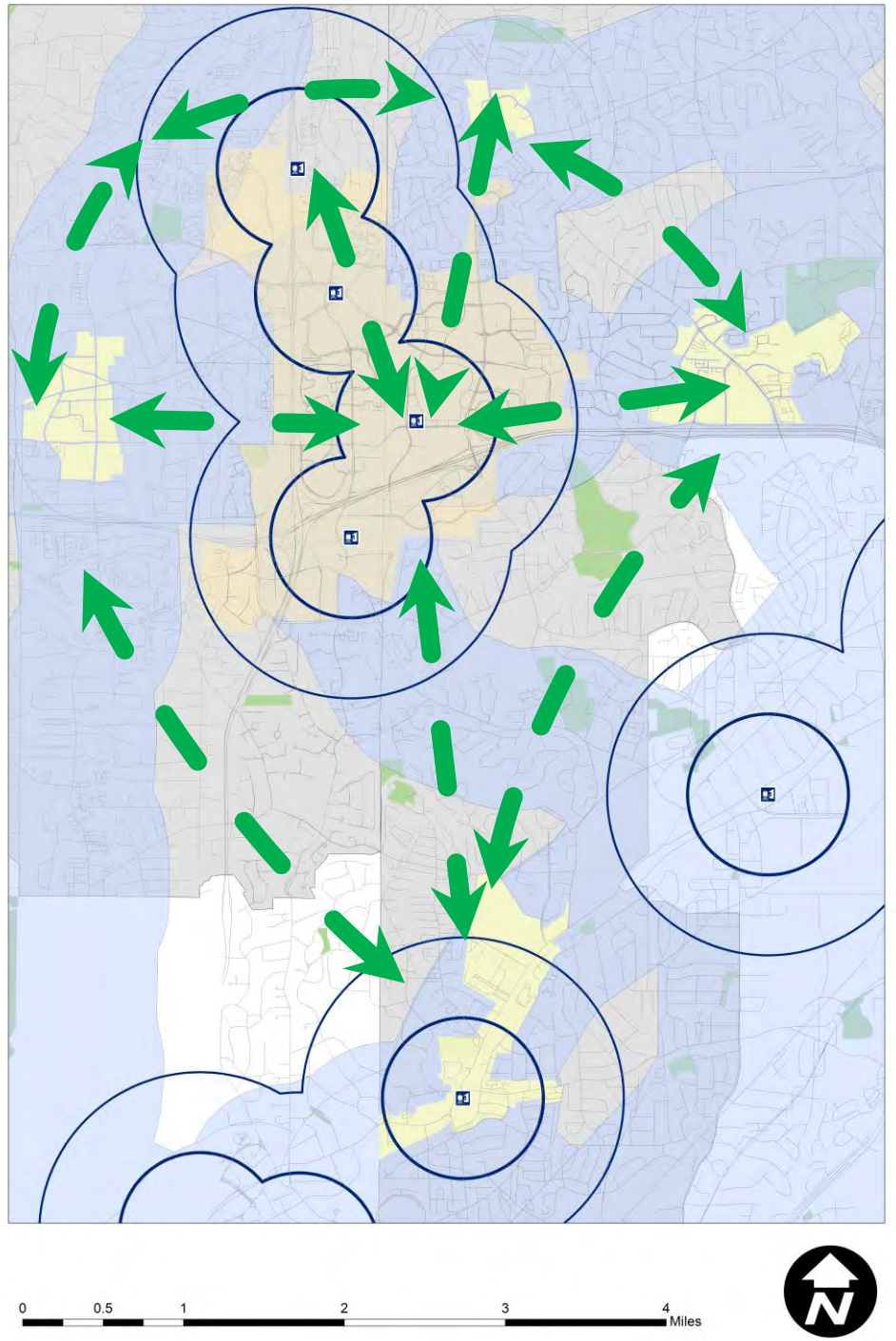
Hub Connections: Long-Term Recommendations

- Low stress bike connectivity between hubs and PCIDs
  - Fill sidewalk gaps within ½-mile to 1-mile of rail station and within ½ mile of bus routes



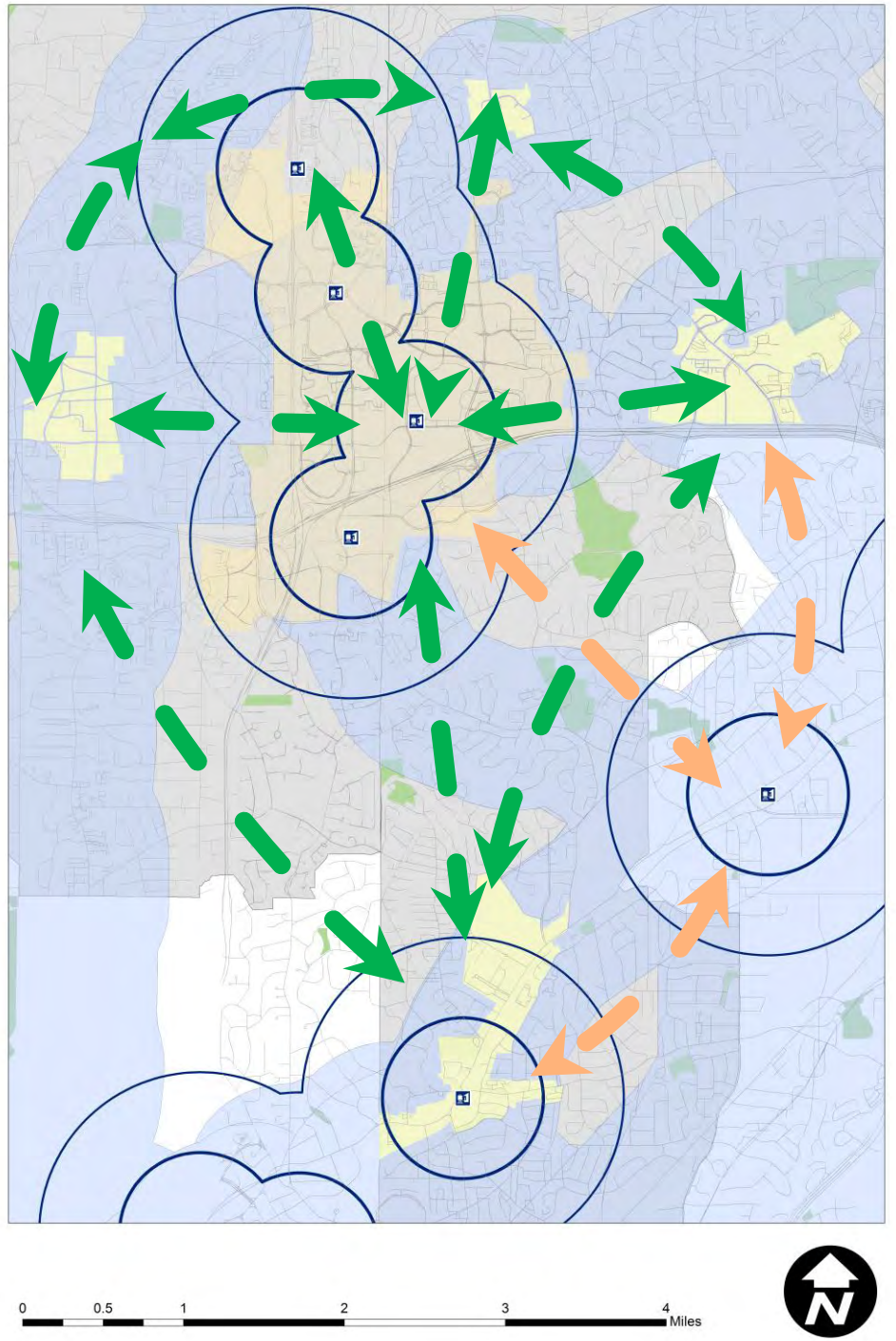
Hub Connections: Long-Term Recommendations

- Consider "green belt" around Perimeter area to connect hubs



Hub Connections: Long-Term Recommendations

- Consider Chamblee connections

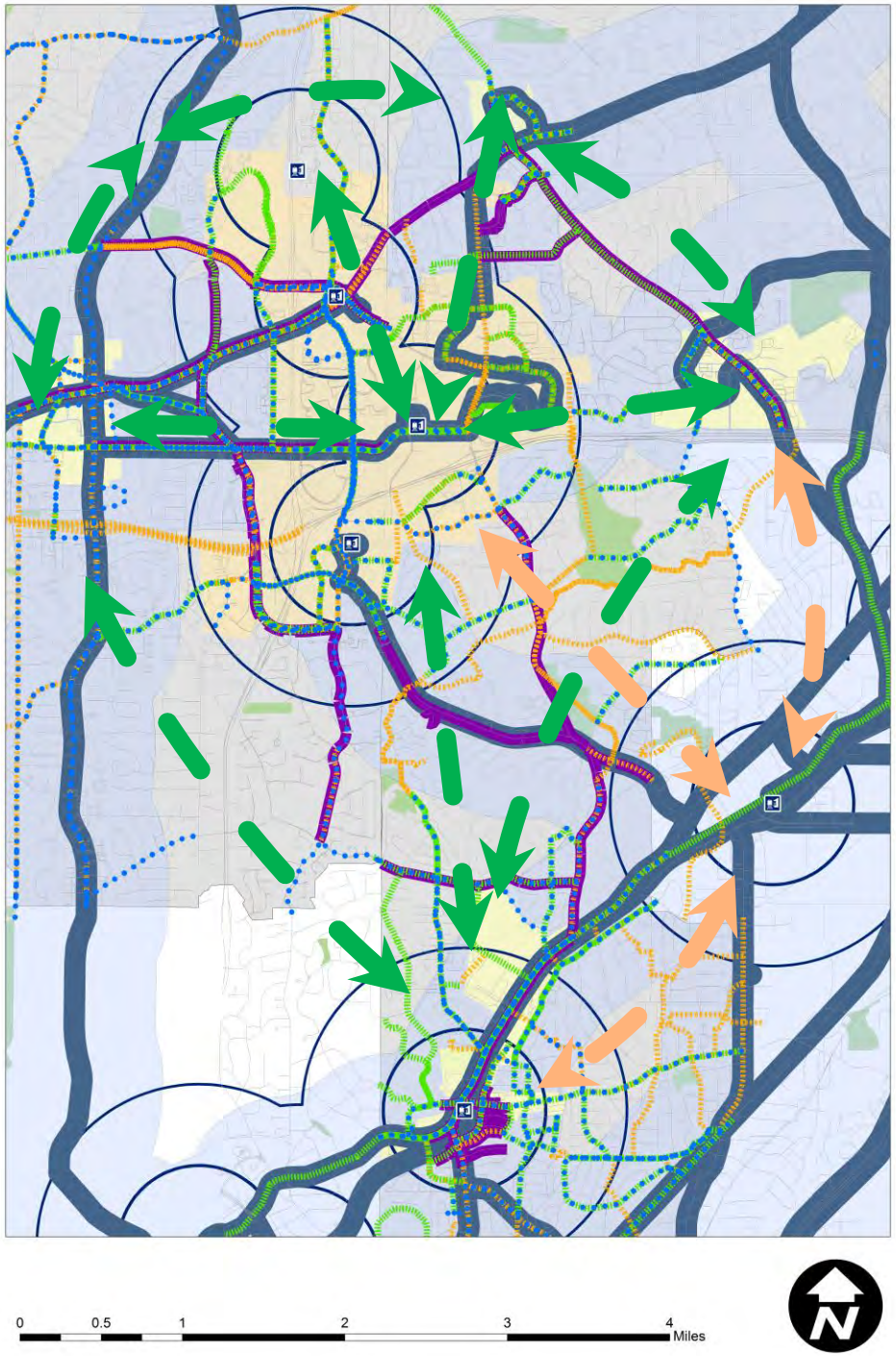


Hub Connections: Long-Term Recommendations

- Hubs
- Buffers
- Proposed Ped Facility
- Proposed Trail
- Proposed Bike Facility

Low stress bike connectivity between hubs and other hubs

Consider long-term connections to Chamblee



Next Steps

- Hub Connections and Last Mile Connectivity
  - Pursue "low hanging fruit" to gain momentum and public/stakeholder support
  - Refine and prioritize planned projects
  - Corridor studies in the style of Hammond Drive Corridor Study to consolidate and refine projects
  - Implementation Strategies for other hubs and Uniform Policy Development
  - Further study of specific inter-hub connection corridors/routes
    - Neighborhood Route Studies

Draft Roadway Plan

Roadway Plan Outline

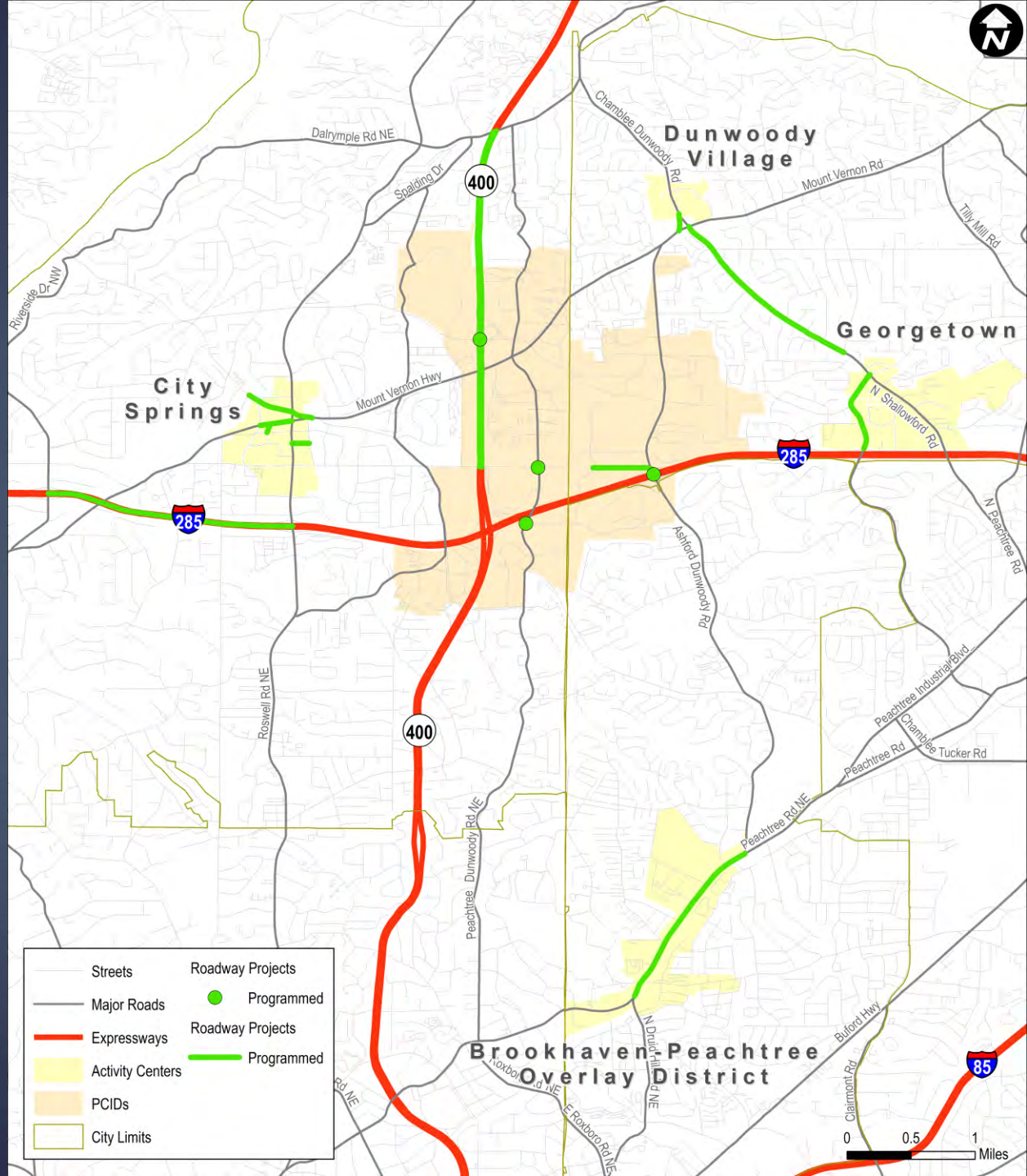
- Defining Connectivity
- Programmed Projects
- Planned and Proposed Projects
- New Recommendations
- Project Phasing
  - Near-Term
  - Mid-Term
  - Long-Term
- All Projects Together

How do Roadway Projects contribute to Last Mile Connectivity?

- Intersection improvements that are designed and implemented in coordination with existing and planned bicycle/pedestrian facilities
- Recommending lane widths that will accommodate bus pull-outs and transit lanes on identified corridors
- Identifying dedicated transit lanes on identified transit corridors
- Operational improvements, widenings, and new alignments that contribute to mobility between activity centers and rail stations, and among activity centers
- Establishing satellite parking lots to provide a seamless connection with planned managed lane access points on GA 400 and I-285

Programmed

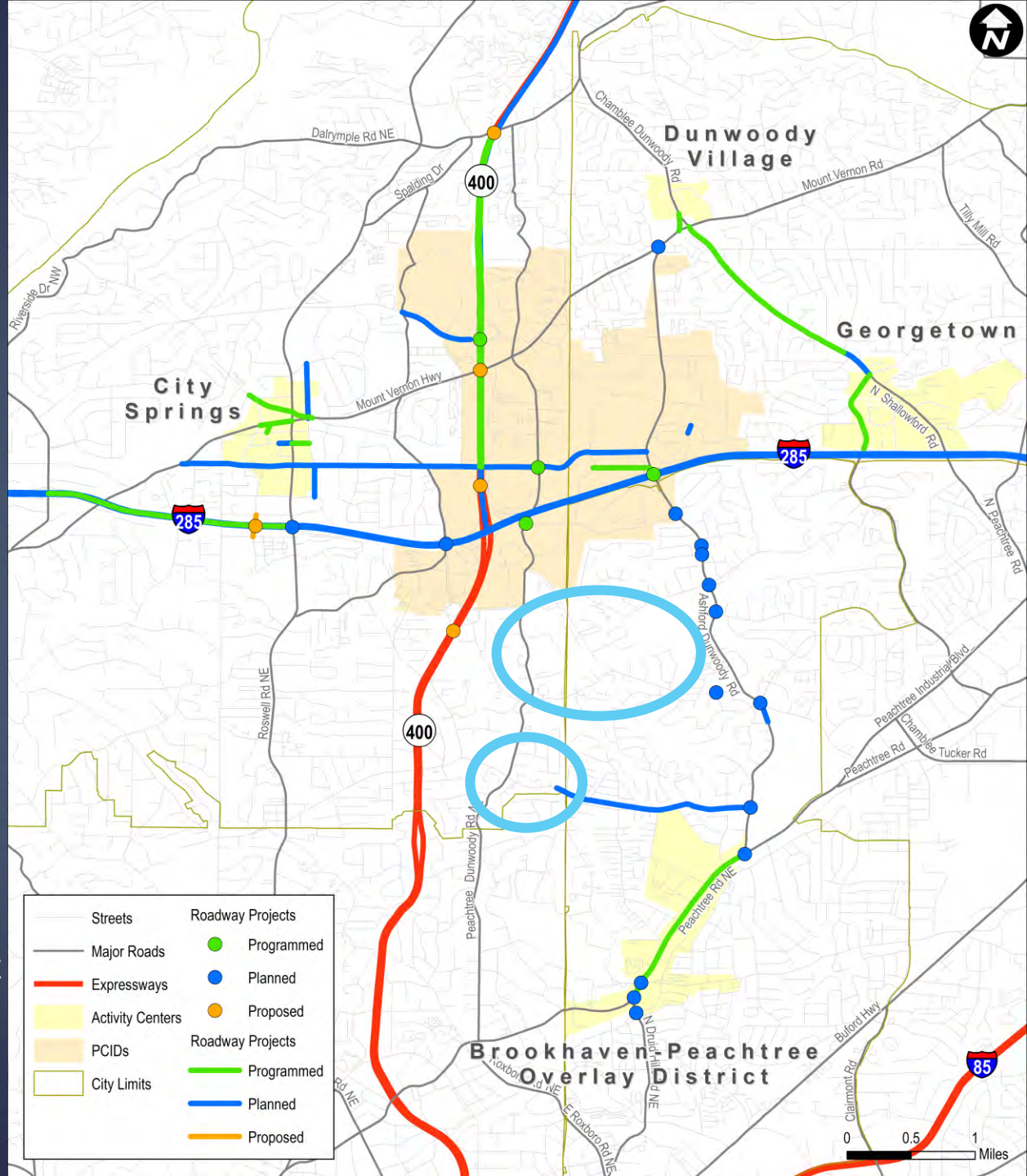
- Intersection Improvements
  - Add'l NB left turn lane on Peachtree Dunwoody Rd at Hammond Dr
  - Peachtree Dunwoody Rd at Lake Hearn Dr
  - Nandina Lane Reconfiguration
  - Interchange at Ashford Dunwoody & 285
- Widenings and New Alignments
  - East-West Connector
  - Johnson Ferry Rd/Mt. Vernon Hwy Roundabouts
  - Chamblee Dunwoody Rd
  - Boylston Dr Extension
  - Mt. Vernon Hwy/Blue Stone Rd Extension
  - 285 Auxiliary Lanes
  - GA 400 CD Lanes, including new interchange at Abernathy Rd



Programmed, **Planned and Proposed**

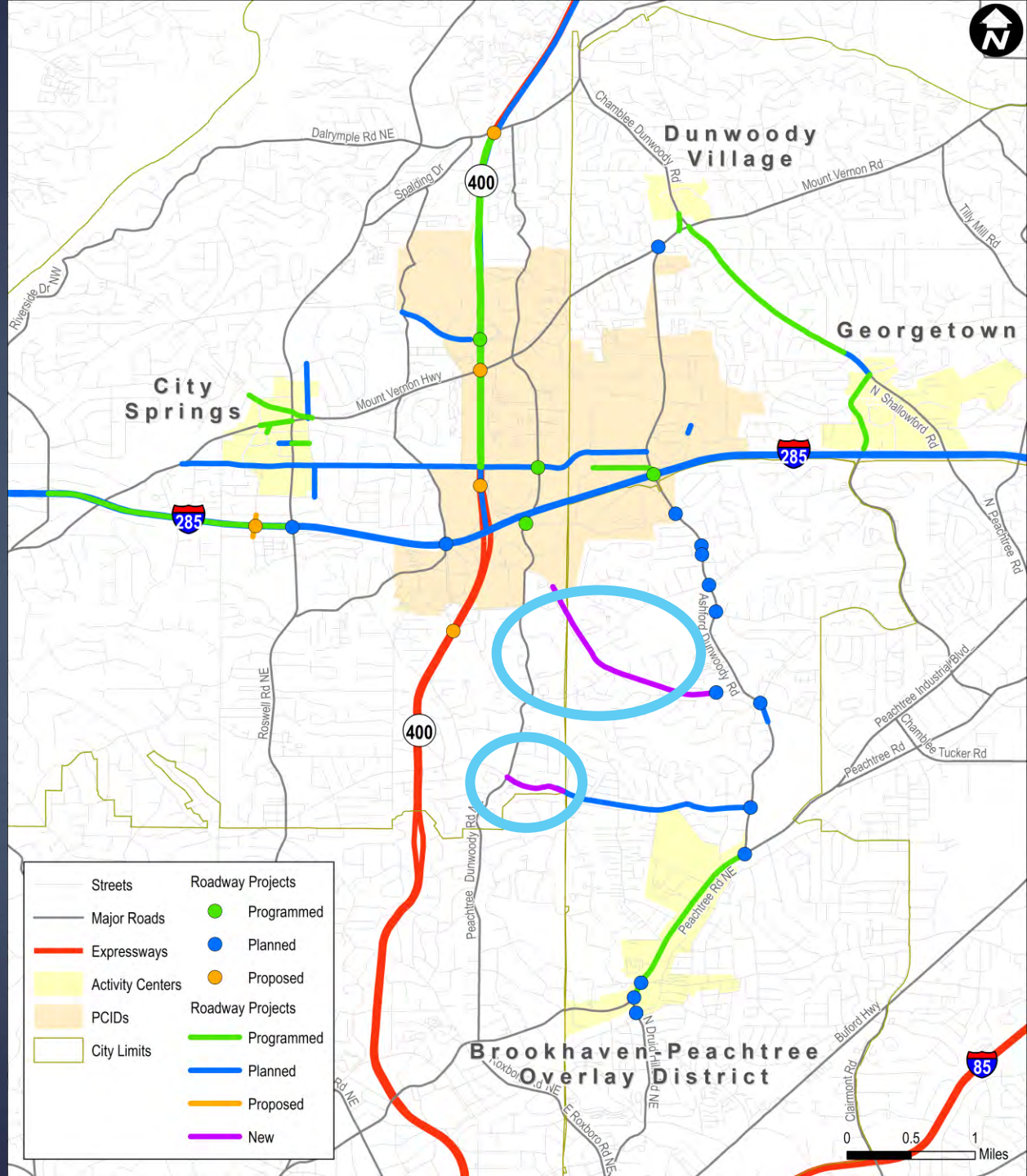
- Intersection Improvements
  - Ashford Dunwoody Rd
  - Brookhaven MARTA Station
  - Glenridge Dr at 285
  - Mt. Vernon at Ashford Dunwoody Rd
  - Revive285 – Roswell Rd
- Widening and New Alignments

- 285 Managed Lanes
- Hammond Dr
- Abernathy Rd
- Chamblee Dunwoody Rd
- Windsor Pkwy
- Boylston Dr Extension
- New street between Ravinia Pkwy & Perimeter Center East
- Sandy Springs Cir-Kingsport Dr Connector
- Managed Lane Connection at Sandy Springs Cir



Programmed, Planned, Proposed, and **New Recommendations**

- Operational improvements and multimodal facilities on Johnson Ferry Rd from Old Johnson Ferry Rd to Ashford Dunwoody Rd *(mid-term)*
- Extend Windsor Pkwy traffic calming in Brookhaven westward in Sandy Springs (to Peachtree Dunwoody Rd) *(long-term)*

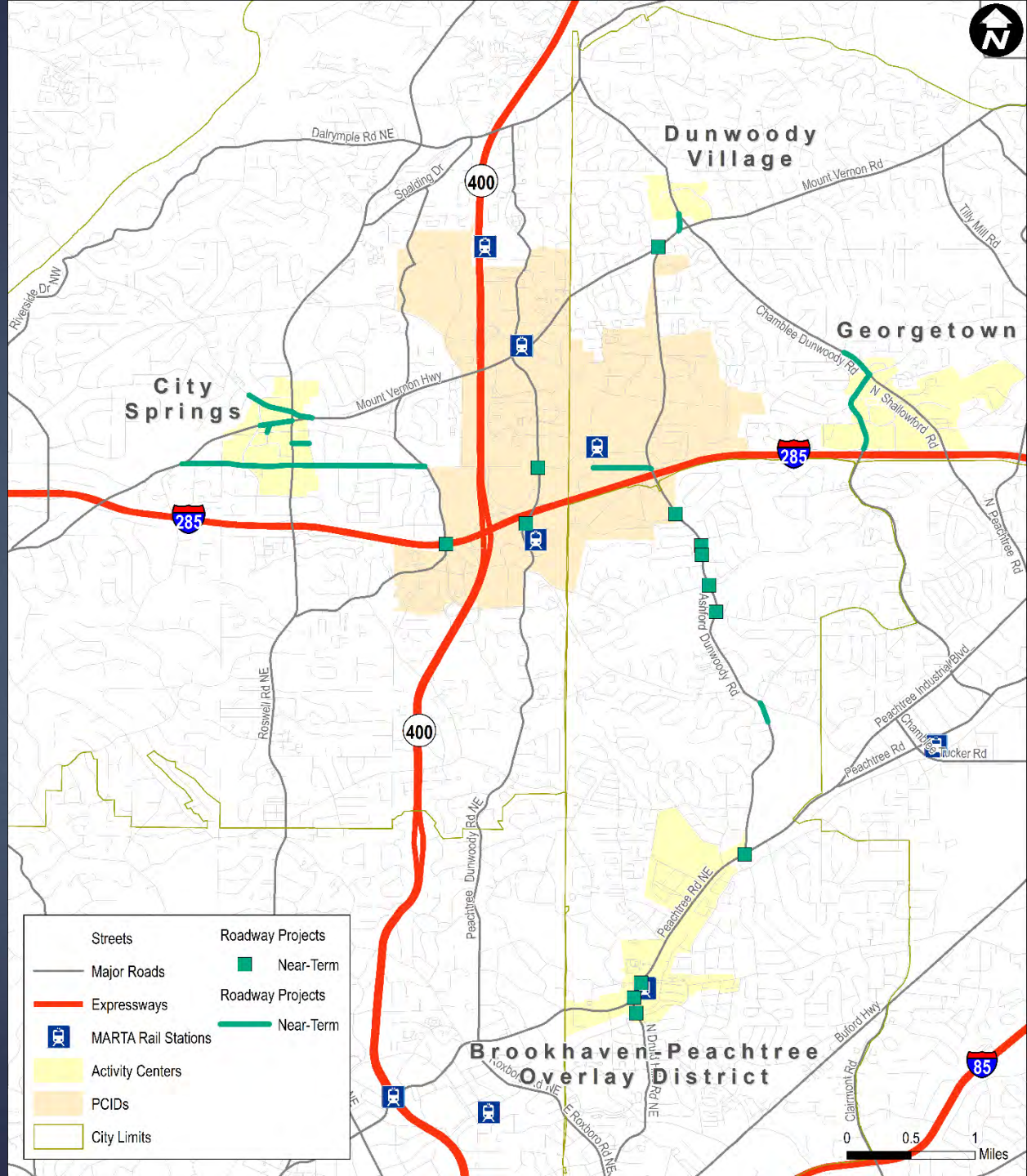


Project Phasing

Near-Term (<3 years)	Mid-Term (3-6 years)	Long-Term (>6 years)
Programmed projects with construction (CST) identified in 0-3 years	Programmed projects with CST identified in 3-6 years	Programmed projects with CST identified in 6-10 years
Intersection improvements	Operational improvements	Widenings
Operational improvements		New roadway alignments
		Major roadway redesign

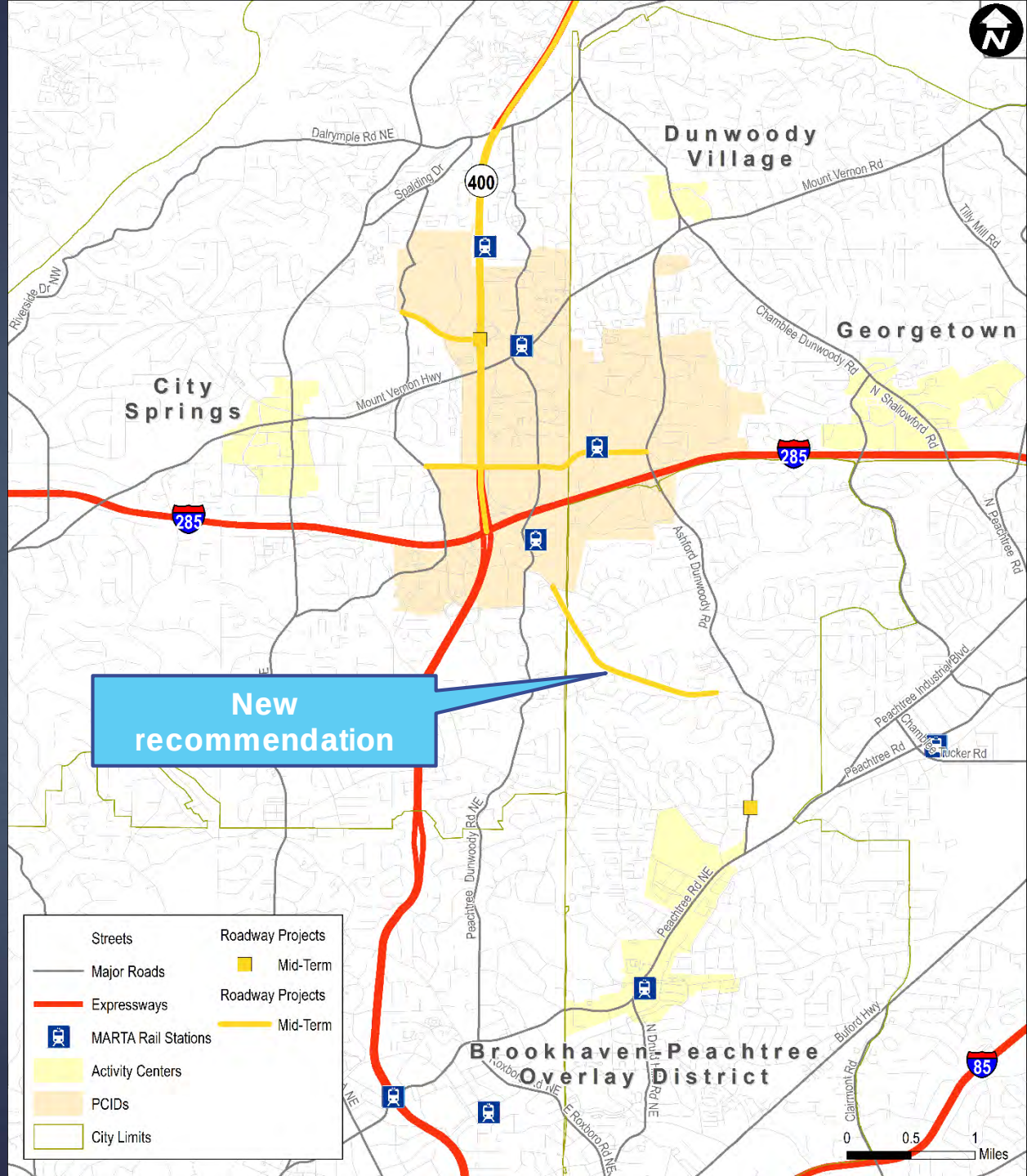
All Near-Term Projects
(<3 years)

- Intersection Improvements
  - Add'l NB left turn lane on Peachtree Dunwoody Rd at Hammond Dr
  - Peachtree Dunwoody Rd at Lake Hearn Dr
  - Glenridge Dr at 285
  - Ashford Dunwoody Rd (Brookhaven)
  - Brookhaven MARTA Station
  - Mt. Vernon Rd at Ashford Dunwoody Rd
  - Nandina Lane Reconfiguration
- Widenings and New Alignments
  - Chamblee Dunwoody Road
  - Hammond Dr Improvements
  - Johnson Ferry Rd/Mt. Vernon Hwy Roundabouts
  - Mt. Vernon Hwy/Blue Stone Rd Extension
  - Boylston Rd Extension
  - East-West Connector



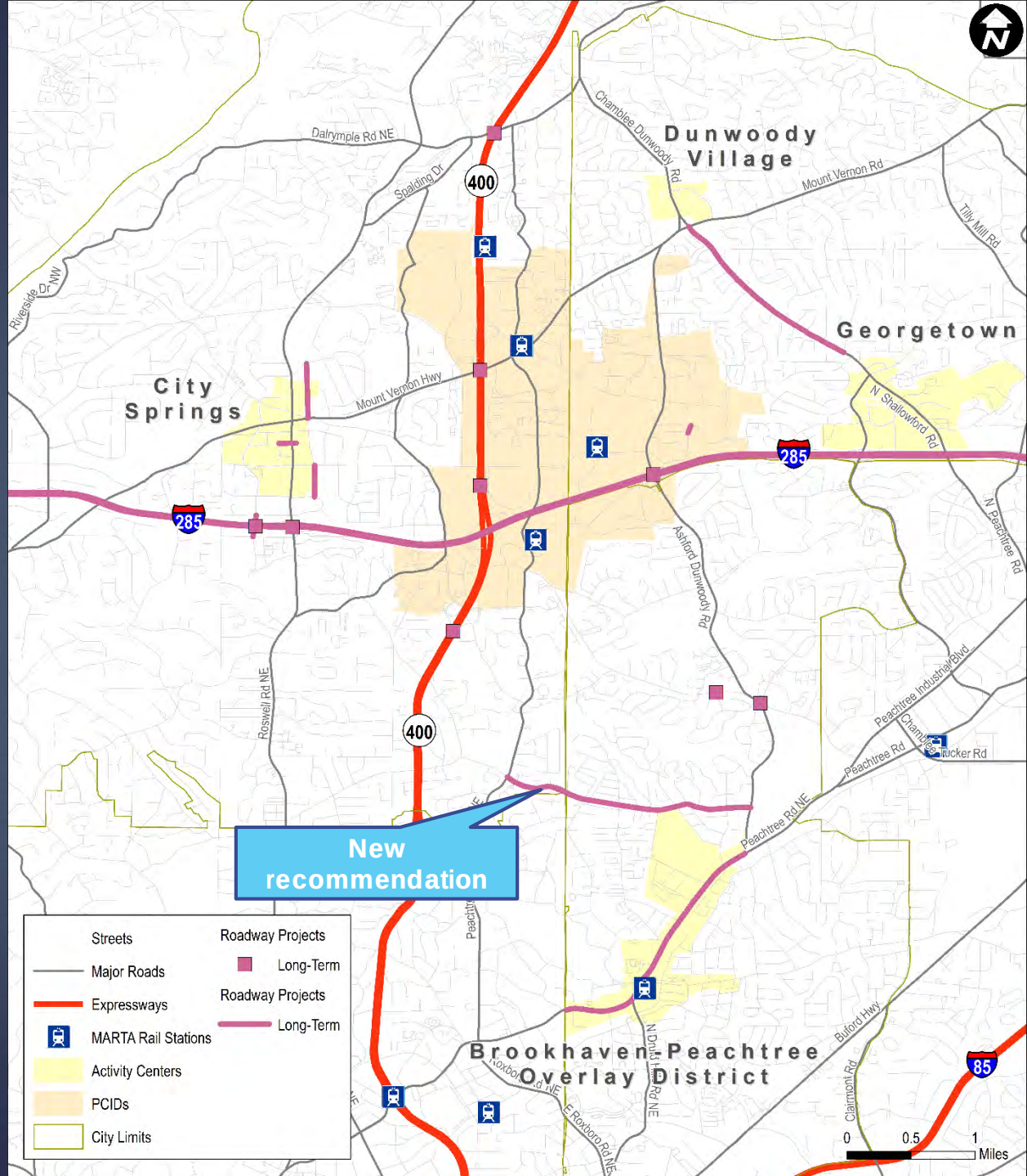
All Mid-Term Projects
(3-6 years)

- Intersection Improvements
  - Windsor Pkwy at Ashford Dunwoody Rd
- Widenings and New Alignments
  - GA 400 CD lanes and new interchange at Abernathy Rd
  - Abernathy Rd widening
  - Hammond Dr improvements (Glenridge Dr to Ashford Dunwoody Rd)
  - **Operational improvements and multimodal facilities on Johnson Ferry Rd**



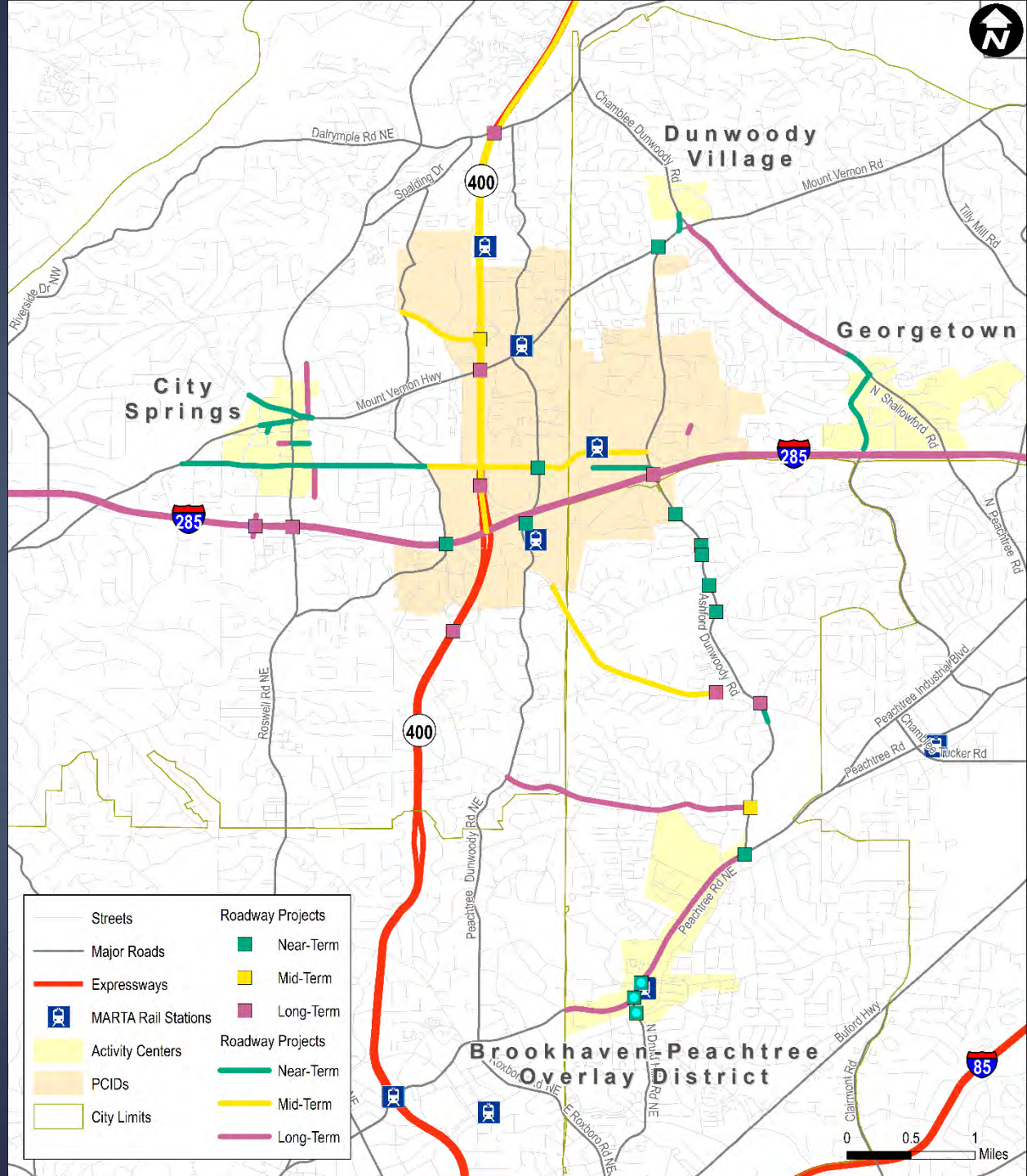
Long-Term Projects
(>6 years)

- Intersection Improvements
  - GA 400 Managed Lanes Access Points at Mt. Vernon Rd, Spalding Dr, and I-285
  - 285 Managed Lane Connection at Sandy Springs Circle
  - Interchange improvements at Roswell Rd and Ashford Dunwoody Rd (Revive285)
  - Realignment of Ashford Dunwoody Rd & Johnson Ferry Rd
- Widenings and New Alignments
  - 285 Managed Lanes
  - Include space for bike/pedestrian facilities on bridge over GA 400 on Mt. Vernon Hwy
  - New street between Ravinia Pkwy & Perimeter Center East
  - Extensions of Boylston Rd and Sandy Springs Pl
  - New roadway between Sandy Springs Pl and Boylston
  - **Windsor Pkwy traffic calming**



All Projects

- Better connections and improved operations between the activity centers and the Perimeter area
- Operational improvements within activity centers that make it easier to access bus stations and bike/ped facilities
- Long-term improvements along I-285 and GA 400 that facilitate better regional connections into the Perimeter area



Roadway Strategies

Adopt policy for all intersection improvements to be designed and implemented in coordination with existing and planned bike/ped facilities on adjacent roadways.

Examine potential locations for satellite park and ride lots in conjunction with managed lane exits.

Consider policy to dedicate ROW to bus pull-outs along key corridors.

Consider adopting a lane width policy to accommodate transit-only lanes along key corridors.

Coordinate with services such as ZipCar and Car2Go to place a dedicated number of vehicles at MARTA stations, major developments, and major employer campuses.

Once transit vision has been confirmed, the study will recommend additional roadway improvements that support the transit vision by building upon the strategies listed above.

Next Steps

Upcoming Activities

- Need your **approval and/or feedback** as soon as possible to develop draft report and prepare for Public Open House
- Continue to Develop Final Draft Project List
  - Using feedback and input on the parts of the Unified Master Plan from today, the team will **revise the list of projects** and fill in information such as **probable costs**, **potential challenges**, etc. to create the final project list
- Tentative Presentations of Draft Plan & Recommendations to PCIDs Board and City Councils
- Public Open House
  - Present draft recommendations, solicit input
- Prepare Draft Report for Review by Project Partners

C. TRANSPORTATION PROVIDER INTERVIEWS

MEMORANDUM

To: *Kristen Wescott, Sandy Springs Public Works Division*

From: *Gresham, Smith and Partners in partnership with VHB and Sprinkle Consulting*

CC*: Richard Meehan, Brookhaven Public Works; John Gurbal, Dunwoody Public Works; Jennifer Harper, PCIDs*

Date: *January 30, 2017*

RE: Summary of Outreach to Transportation Providers

OVERVIEW

As part of the Last Mile Study, the project team conducted outreach to organizations that provide or operate transit services in the Perimeter area. These organizations include private employer shuttle services as well as two public transit services operated by the Georgia Regional Transportation Authority (GRTA) and the Metropolitan Atlanta Rapid Transit Authority (MARTA). Numerous employers in the Perimeter area operate private shuttles between their campuses and MARTA rail stations, intended for use solely by their employees. GRTA operates express bus service into and out of the Perimeter area during morning and afternoon peak hours on weekdays. MARTA operates service via heavy rail and local buses, which operate seven days a week. The project team conducted interviews via telephone with three representative of private shuttle providers and met in person with representatives of GRTA and MARTA.

This memo summarizes input and feedback gathered during these interviews.

Transportation Providers Consulted

Perimeter Connects, the transportation demand management organization operated by the Perimeter Community Improvements Districts (PCIDs), provided the project team with contact information for private employer shuttle services. The project team contacted a number of companies that offer shuttles to their employees as well as some operators of shuttle services, and arranged interviews with representatives of three providers. The project team will reach out to the other providers to present the transit vision and study recommendations.

The following individuals were interviewed via telephone by project team members:

- Erin O'Connell, Crocker Partners (Property Manager), provider of **Lakeside Shuttle** - October 17, 2016

- Eric Cox, American Coach Lines/CoachUSA, operator of **Perimeter Shuttle** and **Cox Shuttles** - October 18, 2016
- Kita Parker, CBRE (Property Manager), provider of **7000 Central Parkway Shuttle** - October 20, 2016

The project team met in-person with GRTA staff, including Laura F. Beall, AICP, Program Manager; Matt Markham, Director of External Affairs; and Dionne Pittman, Transit Operations Director, on October 21, 2016. The project team also met with Don Williams, Assistant Director of Planning and Glen Waters, planning and scheduling, from MARTA on December 15, 2016.

Summary of Input

In each of the interviews with transit providers and operators, the project team covered a number of topics related to general logistics and service characteristics as well as opportunities for and challenges to providing improved service. Summarized findings from discussions with each of these providers are highlighted below.

Lakeside Shuttle

Crocker Partners, LLC is the property manager at One/Three Glenlake. Shuttle service is offered to tenants and their guests between the campus and Medical Center MARTA station.

Logistics and Service

- The shuttle makes its loop only once every 30 minutes in the afternoon because of traffic congestion.
- The service uses one large passenger van-sized vehicle, which accommodates 15-20 people.
- The provider does not collect ridership data; however, they estimate ridership at 170-210 passengers per week.
- The service is offered by the property manager to tenants of the property and their guests, generally employees and visitors of businesses with offices in the buildings.
- The shuttle picks up outside of Building E, and passengers wait inside the lobby. Building E is not connected to the other buildings.

Challenges

- The service is offered because there is not a MARTA bus stop or rail station within close proximity. The nearest bus stop is on Johnson Ferry Road, about ½ mile to the south.
- The biggest challenge for the shuttle drivers is exiting the complex onto Glenridge Drive. The shuttle often turns right onto Glenridge Drive and travels via Hammond Drive because the left turn out of the complex is often blocked and the signal does not allow sufficient time to turn left.
- The traffic and signal timing associated with the nearby I-285 entrance, located just to the south, also presents a challenge.
- Apartments are currently being constructed on the property, on land that was previously dedicated to a parking lot. Once the apartment buildings are built, the shuttle provider anticipates that it will become more difficult for their vehicles to circulate.

Opportunities

- The vehicles pull into the campus, rather than stopping on Glenridge Drive, for passenger loading and unloading.
- The transit vision proposes the installation of dedicated bus lanes on Glenridge Drive, which allow for better ease of travel for the Lakeside Shuttle. When the on-site apartments are completed in the next two years, it would be helpful if there were a MARTA bus stop located in close proximity to development to serve the residents, as well as the tenants and customers of the development.

Perimeter-Glenlake Shuttle and Cox Shuttles

Several companies have pooled resources to hire American Coach Lines to operate shuttle service between various office complexes and MARTA stations. American Coach Lines currently operates both the Perimeter-Glenlake Shuttle and two shuttles for employees of Cox, Inc. One of the Cox shuttles is to/from MARTA stations and the other is to/from remote parking lots.

Logistics and Service

- Perimeter-Glenlake Shuttle
    - The Perimeter-Glenlake Shuttle runs primarily during the morning (6:00-10:00 AM) and afternoon (3:30-7:00 PM) peak hours.
    - Participating partners include: Columbia Property Trust, Embassy Row, Highwoods Properties, Kaiser Permanente, Newell Rubbermaid, United Parcel Service, PCIDs, and Perimeter Connects.
    - The service uses one vehicle that runs its route every one-half hour.
    - Ridership is estimated to be 850 to 1,100 passengers per week.
    - The shuttle has a pick-up/drop-off point at the corner of Mt. Vernon Highway and Abernathy Road, opposite the Sandy Springs MARTA Station.
    - Stops include Sandy Springs MARTA Station, 6655 Peachtree-Dunwoody, Embassy Row, several destinations along Glenlake Parkway, and Kaiser Permanente.
- Cox Shuttle
    - The Cox Shuttle provides service to and from the Sandy Springs MARTA Station.
    - The service uses one vehicle and runs its route in about 15 to 20 minutes. It operates continuously throughout the day from 6:45 AM to 6:45 PM.
    - It is limited solely to employees of Cox Enterprises and has about 750-800 riders per week.
    - At the Sandy Springs MARTA Station, the Cox Shuttle picks up and drops off passengers at a designated shuttle area inside the parking deck.
    - The route shown on the online map provided by Perimeter Connects has incomplete route information. During off-peak hours, the Cox Shuttle also travels to the Dunwoody MARTA Station. Between 11:00 am and 3:00 pm, the shuttle also stops at additional Cox Enterprises offices at 3003 Glenlake Parkway and 7000 Central Park Drive.
- Cox Parking Shuttle
    - The Cox Parking Shuttle, which travels to the main Cox Enterprises parking deck, uses one vehicle and has a headway of 15 to 20 minutes.

    - The shuttle has carries an average of 800 to 900 riders per week.
- Drivers for both the Perimeter and Cox Shuttles record ridership and report the information to the employers.
- All three of these shuttles generally follow fixed routes and schedules. Because they are private services paid for by employee and employer contributions, any changes must be approved by employers, rather than go directly through American Coach Lines.

Challenges

- Comparatively, traffic congestion impacts the shuttle routes in the afternoon more than in the morning. The high volume of traffic on Hammond Drive between Peachtree Dunwoody Road and Perimeter Center Parkway and along Abernathy Road can slow travel time for the shuttles.

Opportunities

- The shuttle providers report that overall, services operate fairly efficiently, and riders generally seem satisfied with the services provided.
- There has been an ongoing discussion among PCIDs and local employers on potentially implementing one consolidated circulator service for the Perimeter area, or localized circulator service within and between Sandy Springs and Dunwoody. This has been unsuccessful in the past due to the desire of employers and employee riders to have direct service to their destination to minimize travel time.
- American Coach Lines is open to providing services to additional businesses and have coordinated with Perimeter Connects in the past regarding potential new clients. While American Coach Lines does coordinate some shuttle services through Perimeter Connects, they coordinate directly with businesses as well, who often pool resources (i.e., funding) to provide shuttle services for employees and visitors.

Central Park Shuttle

The Central Park shuttle is coordinated through CBRE and tenants of the building it manages at 7000 Central Park Drive for employees and their guests.

Logistics and Service

- Lanier Parking is contracted to operate the Central Park Shuttle that serves the CBRE office complex, located at 7000 Central Park Drive. The building is located near Cox Enterprises, which has its own shuttle; however, some Cox employees use the Central Park Shuttle.
- There are 800 to 1,000 employees in the office complex.
- The Central Park Shuttle is consistently full with a steady group of riders. The operator reports that there is almost always one or more rider(s) at the shuttle stop.
- The shuttle service is reserved for tenants and their guests, and each tenant contributes to funding for the shuttle. There have been no instances thus far of other riders (from other businesses in the area) attempting to board the shuttle.
- The shuttle vehicle picks up and drops off passengers in the parking lot of the Sandy Springs MARTA Station.

Challenges

- In the afternoon peak hours, especially between 5:30 and 6:00 PM, it is often difficult for the shuttle vehicles to exit the office complex property. The vehicles sometimes cut-through the Zoe's Kitchen property from Central Parkway to access Perimeter Center West.
- The sidewalks between the three buildings on the Cox Enterprises campus are difficult for pedestrians to navigate, and in some areas, are missing altogether. This makes it difficult for pedestrians to walk into or out of the property.

Opportunities

- Riders have expressed an interest in having real-time information provided by apps for their phones or by displays in the building lobby. It is not yet clear whether the costs of such services and amenities would be justified.
- The shuttle provider has received requests from riders to serve other MARTA stations, but for now the service remains as-is.

GRTA Service

Logistics

- GRTA just rolled out new service, which includes adjustments to routes serving the Perimeter area. Currently, Route 401 route travels to the Sandy Springs, Dunwoody, and Medical Center MARTA Stations. Route 428 travels to the Dunwoody and Medical Center Stations.
- GRTA recently implemented a system in which riders pay the transit fare in advance at the park-and-ride lots, in order to reduce passenger loading time. GRTA reports that this new system seems to be working well.
- Real-time data is now available on buses through RouteMatch software. GRTA owns the data and is able to use it for tracking vehicles and other processes. As this is a relatively new service, GRTA is still adjusting to and refining the new schedules and services in terms of logistics and technology.

Challenges

- There is no sidewalk on Concourse Parkway near the Palisades office park, which makes it difficult for people to travel this area on foot, limiting access to pick-up and drop-off points.
- The intersection of Lake Hearn Drive and Peachtree Dunwoody Road is difficult for the buses to navigate. This would be the preferred route for buses to travel, but the right turn lane from Lake Hearn Drive to Peachtree Dunwoody Road does not provide a sufficiently wide turn radius for the bus. There is a planned intersection improvement project at this intersection, which is anticipated to address this issue and would enable buses to travel this way.
- GRTA is exploring the possibility of taking buses out of the Dunwoody MARTA Station and offering on-street stops instead, as a way to speed up service.

- The buses are often not able to maintain their schedules in the afternoon because of traffic congestion in the Perimeter area.
- Buses that pull off to the side in the right-turn lane, adjacent to the MARTA Stations, often block traffic.

Opportunities

- GRTA aims to limit the number of transfers that riders have to make, as multiple transfers have been found to discourage ridership. GRTA once loaded and unloaded passengers only at the North Springs MARTA Station, located on the northern periphery of the Perimeter area, and has recently added service to more Perimeter area MARTA Stations, including Dunwoody, Sandy Springs, and Medical Center. As a result of this change, a majority of riders now have one fewer transfer than before.
- There are two new routes planned for next year (2017) from Gwinnett and Cobb Counties. One route will serve the Dunwoody, Sandy Springs, and Medical Center MARTA Stations, and one will only serve the Dunwoody Station. The details of these routes are still being finalized.
- GRTA and MARTA have been coordinating to ensure that there is sufficient capacity at the rail stations to accommodate the existing routes as well as the new routes.
- GRTA would like for major corridors to have bus pull-out areas to allow for safer loading and unloading, and keep the buses from blocking vehicle traffic. GRTA has been coordinating with the Cities and the Developments of Regional Impact (DRI) Program to incorporate these where possible in conjunction with major new developments.
- In planning for and implementing new service, as a commuter-oriented transit service, GRTA is primarily focusing on service to major job centers.
- GRTA and many other agencies are coordinating and planning for traffic pattern changes anticipated during the construction of the I-285/GA 400 project and for the new traffic patterns following the improvement. There is an opportunity to implement transportation demand management activities during construction to alleviate the anticipated increase in congestion.
- Regional parking options are another potential opportunity for the Perimeter area. GRTA has expressed an interest in one or more centralized parking decks for the Perimeter area, for consolidated pick-up and drop-off opportunities and to reduce the amount of space taken up by parking.

MARTA Service

Logistics

- MARTA currently operates four bus routes within the study area: Routes 5, 87, 25, and 150.
- MARTA recently completed a Comprehensive Operations Analysis (COA), which identified future transit routes and mode characteristics, including new services in the Perimeter area.

Challenges

- MARTA is interested in installing signal priority transmitters on buses throughout the system, but has no jurisdiction over traffic signals.

- Congestion in the Perimeter area makes it difficult to keep to fixed schedules on these routes, particularly during peak hours.
- Some intersections are difficult for operators to navigate, such as the intersection of Lake Hearn Drive and Perimeter Center Parkway.
- Construction of I-285/GA-400 interchange will affect current routes. MARTA is planning on rerouting Routes 5 and 87 during the project.
- Limitations of the street network in Dunwoody and neighborhood opposition have made it difficult to make an east-west route connection between Perimeter and the Georgetown neighborhood.
- The MARTA parking garage at the North Springs Station is currently at capacity. If there were an easy way for drivers to continue to the Sandy Springs MARTA station and utilize the station's garage, it would allow more commuters to utilize park-and-ride lots for MARTA services.
- Brookhaven is interested in implementing service along Ashford Dunwoody Road. MARTA expressed that the previous route along the corridor historically had low ridership. The senior population along that corridor needed access to medical services, so the route travels along Johnson Ferry to Medical Center Station. Despite the lack of direct bus connection, it is quicker to take the train from Brookhaven Station to Dunwoody Station.

Opportunities

- MARTA is considering changing Routes 5 and 87 to arterial rapid transit (ART), with Route 5 being a higher priority. The goal for ART is to have the same or better frequency as rail service (10 minutes in the peak period, 12-15 minutes in the mid-day, and 20 minutes at late night). The improvements to Route 87 would initially be a 15-minute headway ("frequent local route"). The ART routes will also integrate advanced features such as transit signal priority (TSP) and queue jumpers.
- All new MARTA vehicles will be equipped with TSP emitters and require coordination only with local jurisdictions in order to bring TSP online. Based on experience implementing TSP on Memorial Drive, MARTA now has standard procedures for implementing TSP and coordinating with local jurisdictions.
- MARTA is interested in pursuing joint funding opportunities through local special purpose location option sales taxes (SPLOST), the Atlanta Regional Commission (ARC), and federal grants in order to implement for TSP, queue jumpers, and intersection improvements for buses.
- MARTA is considering re-routing Route 25 from Johnson Ferry Road to Ashford Dunwoody Road – the route would follow Johnson Ferry Road west and then travel north on Ashford Dunwoody Road, then turn left on Perimeter Summit Parkway to reach the Medical Center Station. This would allow Route 25 to serve the commercial area at Ashford Dunwoody and Johnson Ferry Road, YMCA, Marist School, and other destinations north of Johnson Ferry Road. It would still not allow these riders to reach the heart of the Perimeter area, however.
- MARTA would like better ways to reach Dunwoody Village. Dunwoody says that it would be beneficial to outfit Perimeter Center East and West with TSP, to help Route 150 move more quickly to serve Dunwoody Village.
- In Sandy Springs, MARTA is planning TSP on Roswell Road, Hammond Drive, and Mt. Vernon Road, on Routes 5 and 87. Sandy Springs says that all the signals along Roswell Road and on arterials near the I-

285/GA 400 interchange have been upgraded to accommodate TSP, which covers all the MARTA bus routes in the area. Sandy Springs could explore the possibility to implement TSP as early as 2017.

- Sandy Springs says there is $10 million available for improvements on Mt. Vernon Highway, and that some of those funds could be used to create bus-only lanes between City Springs and the Sandy Springs Station. MARTA says that Mt. Vernon Road provides a quicker ride (less congestion), but the trade-off is that the Dunwoody Station is more centrally located to destinations than the Sandy Springs Station, requiring people to make one more trip to reach the mall and surrounding areas.
- Sandy Springs says that there is also the opportunity to create bus lanes on Hammond Drive, to reach the Sandy Springs Station.
- Sandy Springs could consider putting a queue jumper (or bus bypass lane) into the right lane at Hammond Drive and Peachtree Dunwoody Road.
- State Farm has requested MARTA to provide Park and Ride service from Johns Creek to the new complex in the Perimeter area (in Dunwoody). MARTA is examining ridership and demand to determine whether this is feasible. A vanpool may be a good option for this service, as the route can be more flexible for traffic congestion.

Summary of Key Themes

Throughout the discussions with transit service providers, several recurring themes became apparent to the project team. Most notably, providers indicated that traffic congestion in the afternoon peak has detrimental effects on transit service in the area. Many of the providers noted that this congestion impacts the ability to access and egress campuses and also lengthens the amount of time it takes to complete a route, thus limiting the route frequencies. One shuttle provider identified dedicated bus lanes as a potential opportunity for addressing this issue. Additionally, multiple providers noted the importance of filling in sidewalk gaps to adequately serve last-mile connections for riders accessing their destination. While GRTA noted that it recently started providing real-time information to passengers, none of the shuttle providers indicated that they offer a similar service. One provider of shuttle service indicated that there was a strong interest from riders for real-time information; however, the provider was not sure that the costs of implementing this service would be justified. Finally, a chief consideration for many of the providers and their users was an efficient interface with MARTA bus and rail stations. For the shuttles, this means ensuring that their riders have convenient connections to MARTA bus and rail stations. For GRTA, this means limiting the duration and number of transfers required for riders to reach their destination.

There are numerous opportunities for the jurisdictions to coordinate with MARTA to improve travel time and enhance transit service in the Perimeter area. MARTA is interested in pursuing TSP opportunities along major corridors, including those within the study area. New transit infrastructure, such as bus lanes and queue jumpers, could have significant impacts on bus travel time and reliability. Coordinating with local municipalities would allow MARTA and the jurisdictions to pursue multiple funding sources for such projects. An important recommendation for the final report will be continued coordination with MARTA as it pursues rolling out recommendations from its recently completed COA.

D. MATERIALS FROM PUBLIC OPEN HOUSE

LAST MILE CONNECTIVITY STUDY
Public Information Open House

January 26, 2017
400 Northpark, 1000 Abernathy Rd NE, Sandy Springs, GA 30328

WELCOME! Thank you for attending this Public Open House for the Last Mile Connectivity Study. We invite you to browse the maps and display boards that are set up around the room and talk with staff members who are available to answer questions and take in feedback.

Identical **presentations** will be given **at 6:15**, **6:45**, and **7:15 PM** to provide an overview of the study process. Before, after, and between presentations, feel free to view display materials and talk with staff. Please **make sure to fill out** the **comment form** to **tell us about your priorities** and **provide comments** on each set of recommendations.

How it Works:

1) Please sign in at the registration table and pick up a handout and comment form.

2) Identical presentations will be given at 6:15 PM, 6:45 PM, and 7:15 PM in the Dunwoody Conference Room down the hall. You are welcome to sit in on any of the presentations that fit your schedule.

3) Display boards are set up around the larger Georgia conference room. The boards provide an overview of the study and are grouped by mode: bicycle/pedestrian network; roadway network; and transit network. For each mode, displays show: a) existing facilities and services; b) projects included in previously approved plans and studies and/or in the process of being implemented; and c) recommendations to fill gaps between existing and planned facilities or projects. Some overarching recommendations that may be implemented throughout the study area are also presented.

4) As you view the displays, please fill out the comment form to indicate your priorities and provide general comments. The form asks about your highest and lowest priorities for last mile connectivity within the study area.

If you have questions, please feel free to ask any staff member or stop by the sign-in table, where someone can help connect you to a study team member.

SANDY SPRINGS GEORGIA Brookhaven GEORGIA Dunwoody Smart people – Smart city Perimeter Community Improvement Districts

Background Information

What is Last Mile Connectivity? Last Mile Connectivity addresses the connections between transit stops/stations or hubs, and final destinations such as residences, offices and retail areas. Last Mile Connectivity addresses multimodal connections within and between activity centers including Perimeter Center, providing people choices other than the automobile for shorter trips, or to connect and complete longer trips.

About the Study: The Cities of Sandy Springs, Brookhaven, and Dunwoody, and the Perimeter Community Improvement Districts (PCIDs) have partnered to conduct a study of Last Mile Connectivity in and around the Perimeter area. The study is intended to provide a clear vision for future multi-modal transportation in the Perimeter market. It will identify a consolidated program of investments in bicycle, pedestrian, trail, and roadway facilities, and explore existing and future transit opportunities. The goal is to offer a network of safe, easy, and convenient opportunities for people to complete short "last mile" trips on foot, bike, or via transit.

Key to Display Boards:

1	**Study Overview –** An introduction to the study, including purpose, explanation of last mile connectivity, list of project partners, and vision for last mile connectivity within the study area.

2-6	**Bicycle/Pedestrian Network –**
	• Existing pedestrian, bicycle, and transit facilities and services within the study area, including sidewalks, paths/trails, bike lanes, etc.
	• Programmed* and planned** bicycle/pedestrian projects.
	• Recommendations to fill gaps in the existing and programmed/planned bicycle/pedestrian network.
	  o Sidewalk, Bike Lanes, and Multi-Use Paths
	  o Complete Streets and Corridor Studies
	• Overarching recommendations and strategies to improve the bicycle/pedestrian network that are not location-specific.

7	**Roadway Network –** • Existing, programmed,* and planned** roadway projects; and recommendations to fill gaps in the existing and programmed/planned roadway network.
8-10	**Transit Network –** • Existing, programmed*, and planned** future transit facilities and services. • Overview of the process for developing the transit vision, including information on data analysis, alternatives analysis, coordinating with transportation providers, and identifying recommendations. • Transit network future recommendations with short-term, mid-term, and long-term potential projects to support future transit recommendations.

** Programmed projects are those with dedicated funding or in the design/construction phase.*
*** Planned projects are those that were included in a previous plan or study, but which do not yet have a funding source and/or have not advanced to the design or construction phase.*

For Additional Information:

For Brookhaven, please visit www.brookhavenga.gov.

For Dunwoody, please visit www.dunwoodyga.gov or email John.Gurbal@dunwoodyga.gov

For the PCIDs, please visit www.perimetercid.org.

For Sandy Springs, please visit www.sandyspringsga.gov or call 770-730-5600.

SANDY SPRINGS GEORGIA Brookhaven GEORGIA Dunwoody Smart people – Smart city PERIMETER COMMUNITY IMPROVEMENT DISTRICTS

Last Mile Connectivity Study

PUBLIC OPEN HOUSE

JANUARY 26, 2017

GS&P

vhb

Sprinkle CONSULTING
Active Transportation Planners Engineers

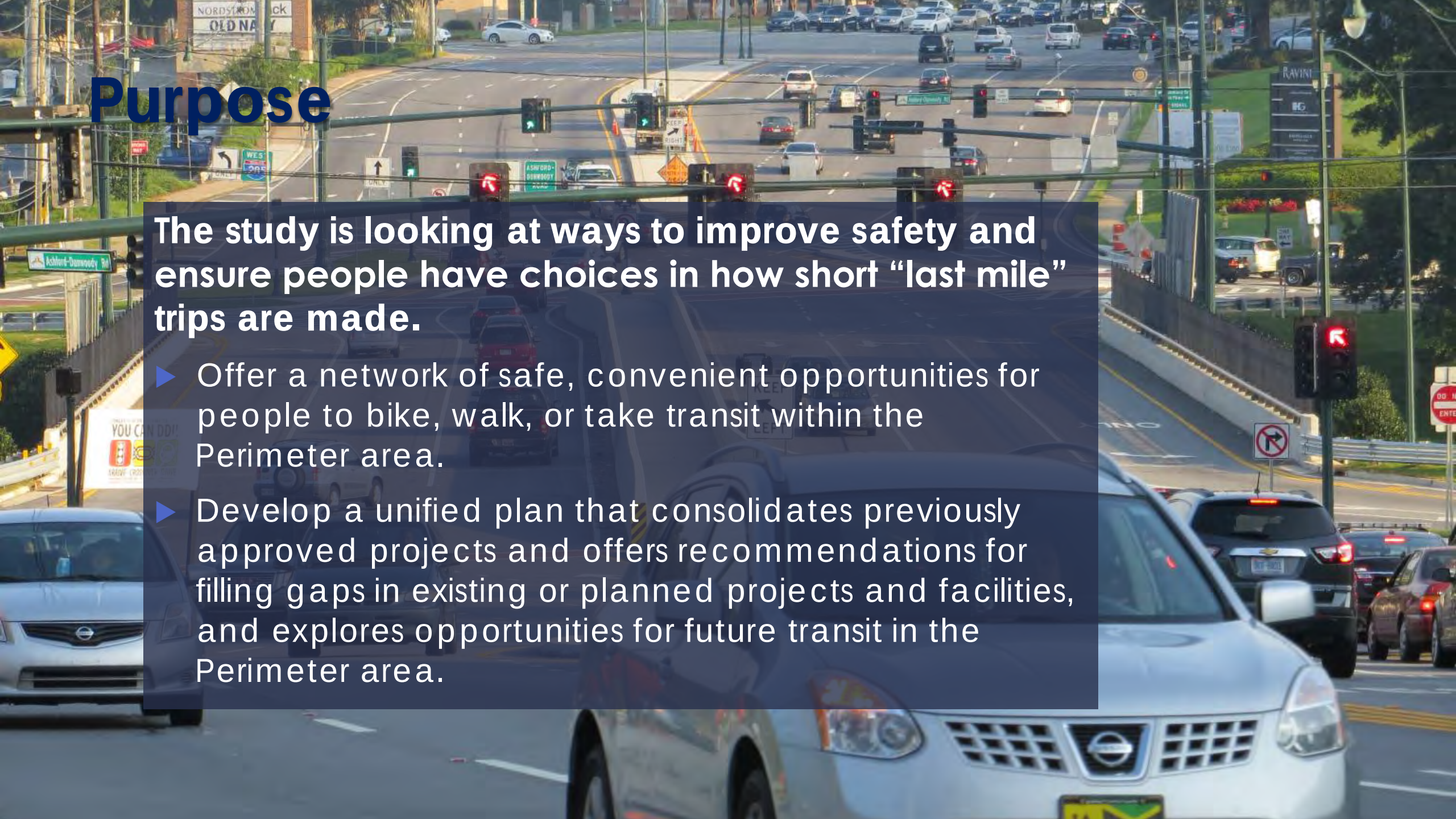
SANDY SPRINGS
GEORGIA

PERIMETER COMMUNITY IMPROVEMENT DISTRICTS

Brookhaven
GEORGIA

Dunwoody
Smart people – Smart city

Purpose

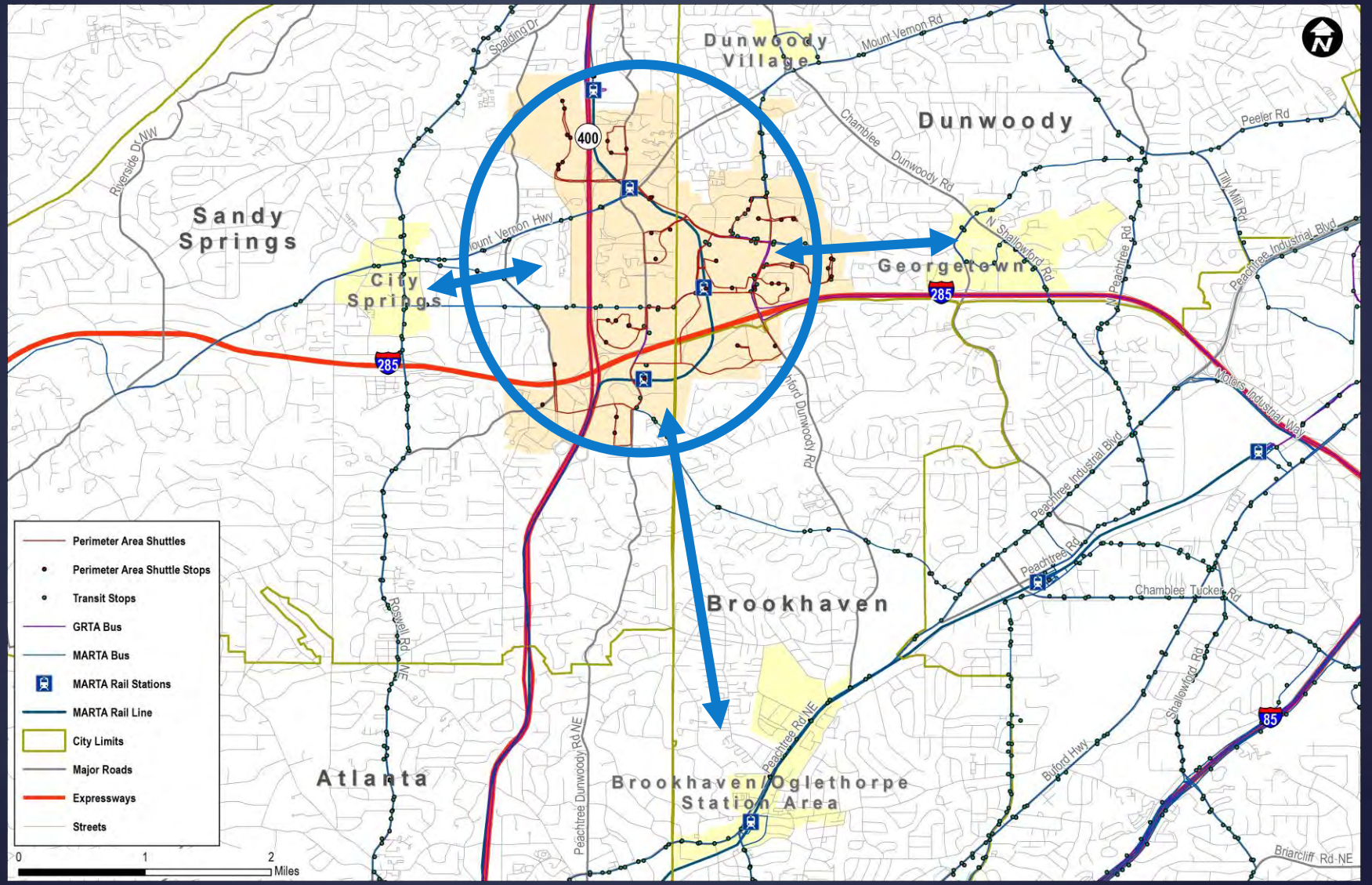


The study is looking at ways to improve safety and ensure people have choices in how short "last mile" trips are made.

- Offer a network of safe, convenient opportunities for people to bike, walk, or take transit within the Perimeter area.
- Develop a unified plan that consolidates previously approved projects and offers recommendations for filling gaps in existing or planned projects and facilities, and explores opportunities for future transit in the Perimeter area.

Project Partners

Study Area


Dunwoody Village
Dunwoody
Sandy Springs
City Springs
Georgetown
Brookhaven
Atlanta
Brookhaven/Oglethorpe Station Area
Spalding Dr
Mount Vernon Rd
Riverside Dr NW
Mount Vernon Hwy
Chamblee Dunwoody Rd
Peeler Rd
Tilly Mill Rd
N Shallowford Rd
Peachtree Industrial Blvd
Peachtree Rd
Meters Industrial Way
Ashford Dunwoody Rd
Roswell Rd NE
Peachtree Dunwoody Rd NE
Peachtree Rd NE
Chamblee Tucker Rd
Shallowford Rd
Buford Hwy
Briarcliff Rd NE
400
285
85
Perimeter Area Shuttles
Perimeter Area Shuttle Stops
Transit Stops
GRTA Bus
MARTA Bus
MARTA Rail Stations
MARTA Rail Line
City Limits
Major Roads
Expressways
Streets
0
1
2
Miles

What is Last Mile Connectivity?

- Addresses the connections between transit stops or hubs and origins or destinations such as residences, offices, and retail areas
- Addresses the multimodal connections within and between activity centers
- Gives people choices other than the automobile for shorter trips or to connect longer trips

Defining Connectivity

Node Connectivity: Providing direct access between hubs to facilitate the movement of people and connect mixed-use activity centers*

- Transit
  - Light Rail Service
  - Bus Rapid Transit (buses in separate right-of-way)
  - Enhanced Bus (signal priority)
- Bike/Walk
  - Separate, parallel multi-use paths
- Roadways
  - Direct street network
  - Appropriate capacity

+

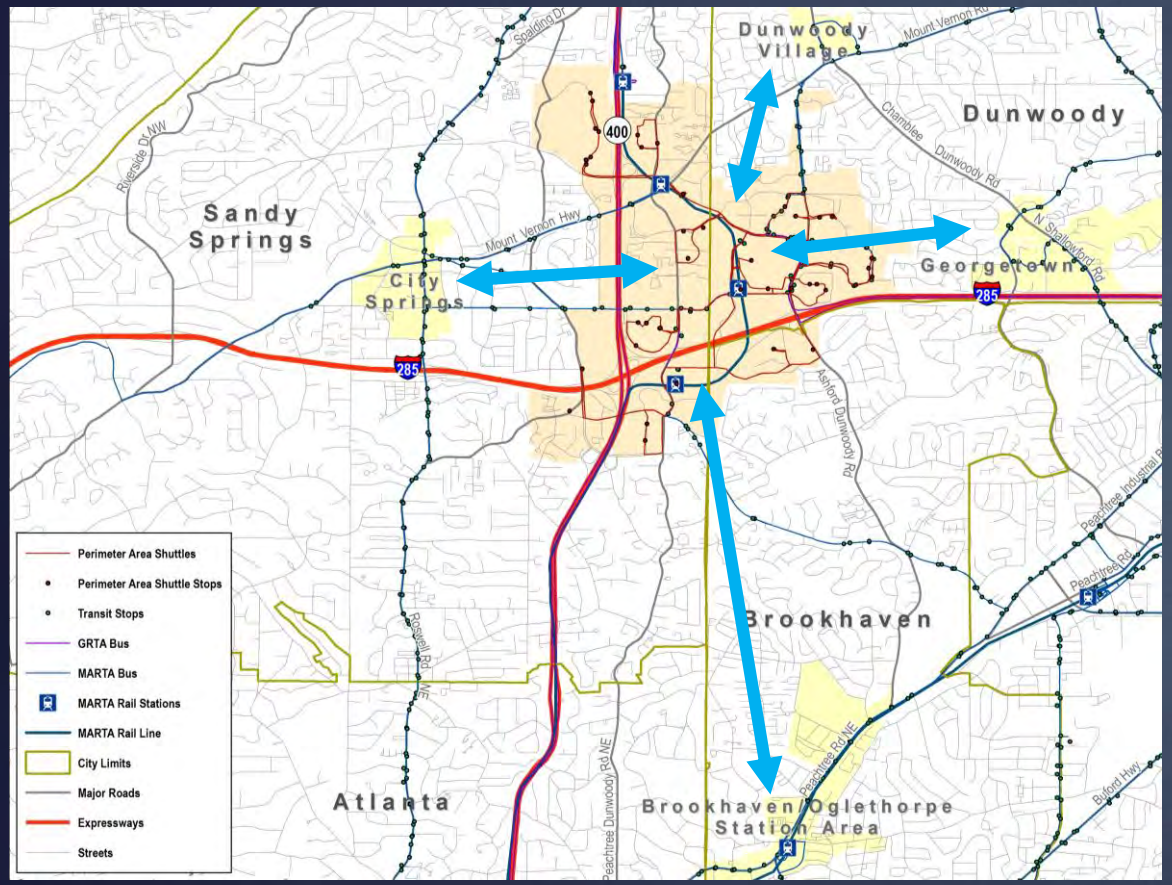
Last Mile Connectivity: Getting people effectively from their home/destination to the nearest transit stop/station

- Walking
  - Sidewalk within ¼ - ½ mile of local bus and within 1 mile of rail/rapid transit
  - Safe crossings, adequate width, lighting
- Biking
  - Safe paths
  - Bike storage & amenities
- Localized transit vehicles
  - Circulators
  - Flex routes
- New technologies
  - Local Personal Rapid Transit
  - Rideshare (Uber/Lyft)
  - Autonomous Vehicles

**Nodes are activity centers, which may include transit hubs or commercial districts, or destinations. Within the study area, hubs include rail stations, the PCIDs, City Springs, Dunwoody Village, Georgetown, and the Brookhaven/Oglethorpe station area.*

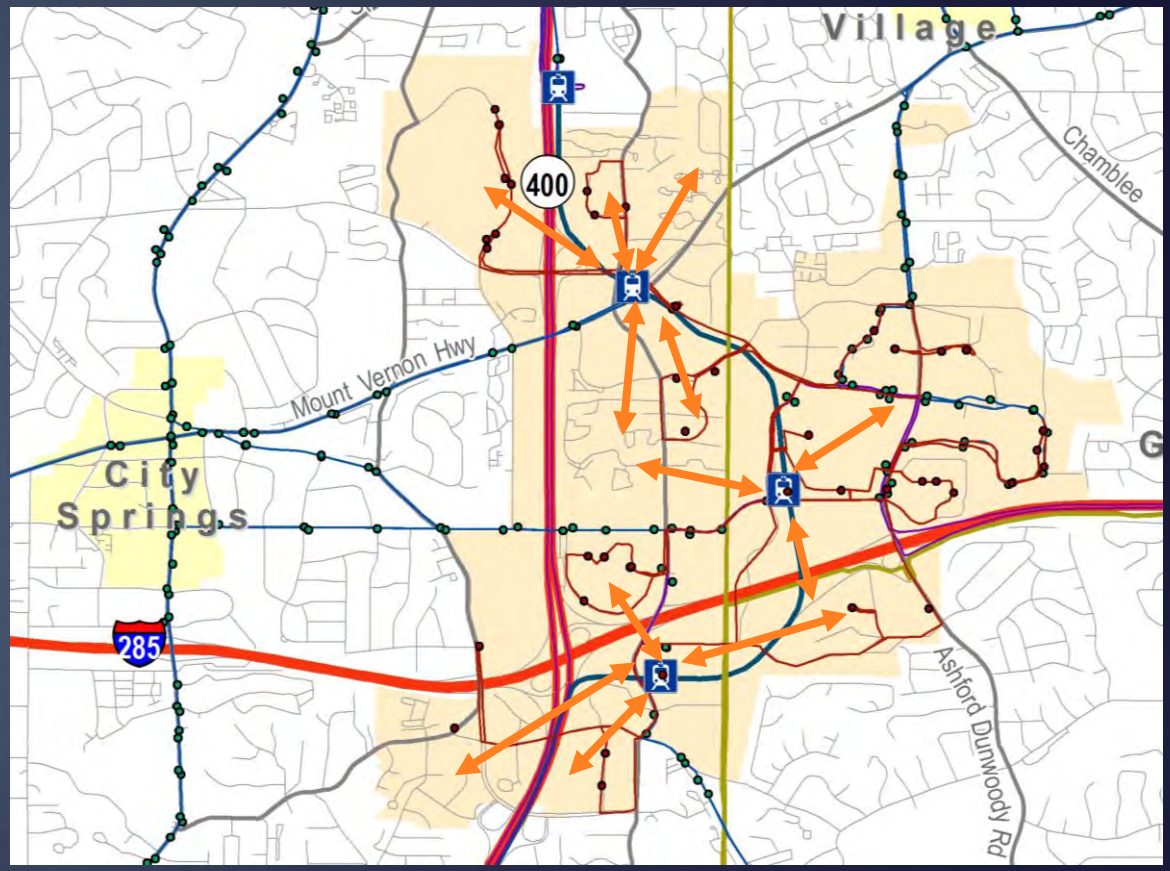
Types of Connectivity

Node Connectivity



- *Between PCIDs and activity centers*
- *On primary corridors and along a low-stress link around each hub and the PCIDs*

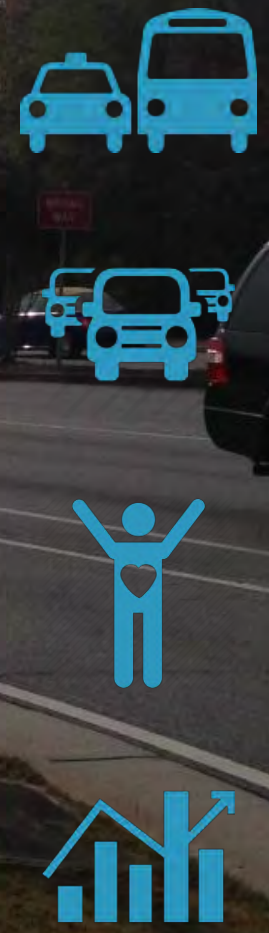
Last Mile Connectivity



- *Between home/destination and nearest transit stop, station or hub*
- *Within one mile of rail stations and within walking distance of bus stops*

Why is Last Mile Connectivity Important?

- Offer choices and options to workers, residents, and visitors other than personal vehicles
- Tremendous growth in the area, including commercial and some residential development
- Reduce congestion
- Provide opportunities for healthier lifestyles
- Maintain the area as desirable destination for workers, residents, and visitors
- Ensure economic competitiveness
- Provide safe and comfortable transportation options



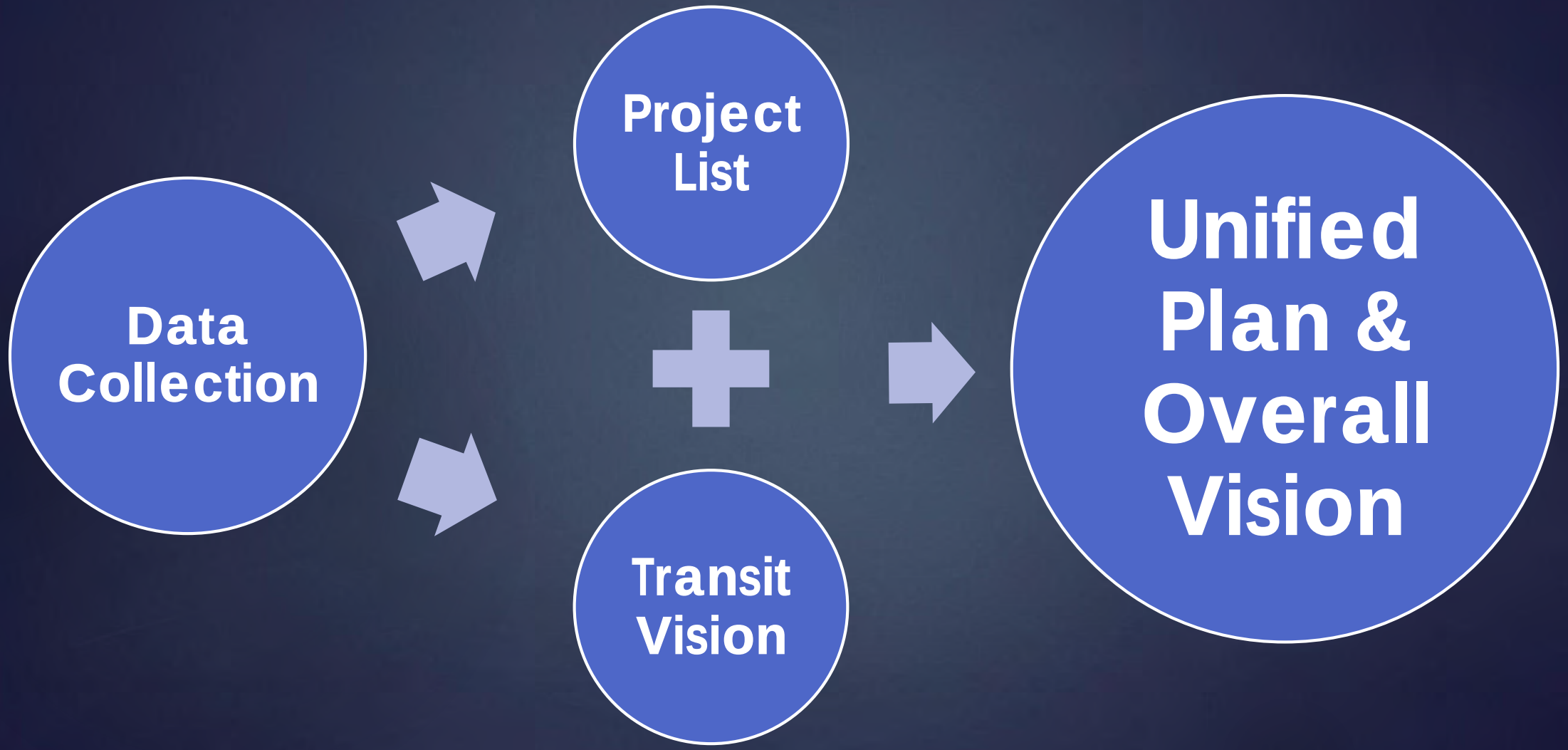
Vision for Last Mile Connectivity

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 Timeline

	2016					2017		
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Activities								
Data Collection	■	■						
Develop Transit Vision		■	■					
Develop Project List		■	■	■	■	■		
Consolidate into Unified Plan					■	■	■	■
Meetings								
Kickoff Meeting	X							
Work Sessions to Discuss Projects (x4)		X						
Transit Provider Interviews and Meetings			X	X	X			
Joint Work Session - Refined Project List & Draft Transit Vision				X				
Briefings to City Councils / Boards (x4)					X			
Public Information Open House						X		
Final Presentations to City Councils / Boards (x4)							X	X

Major Study Tasks



Methodology

Reviewed 60 plans

Identified 600+ projects

Look for gaps and overlap

Develop draft transit vision

Public open house

Draft and final report

Stakeholder coordination and input from Cities and PCIDs ongoing

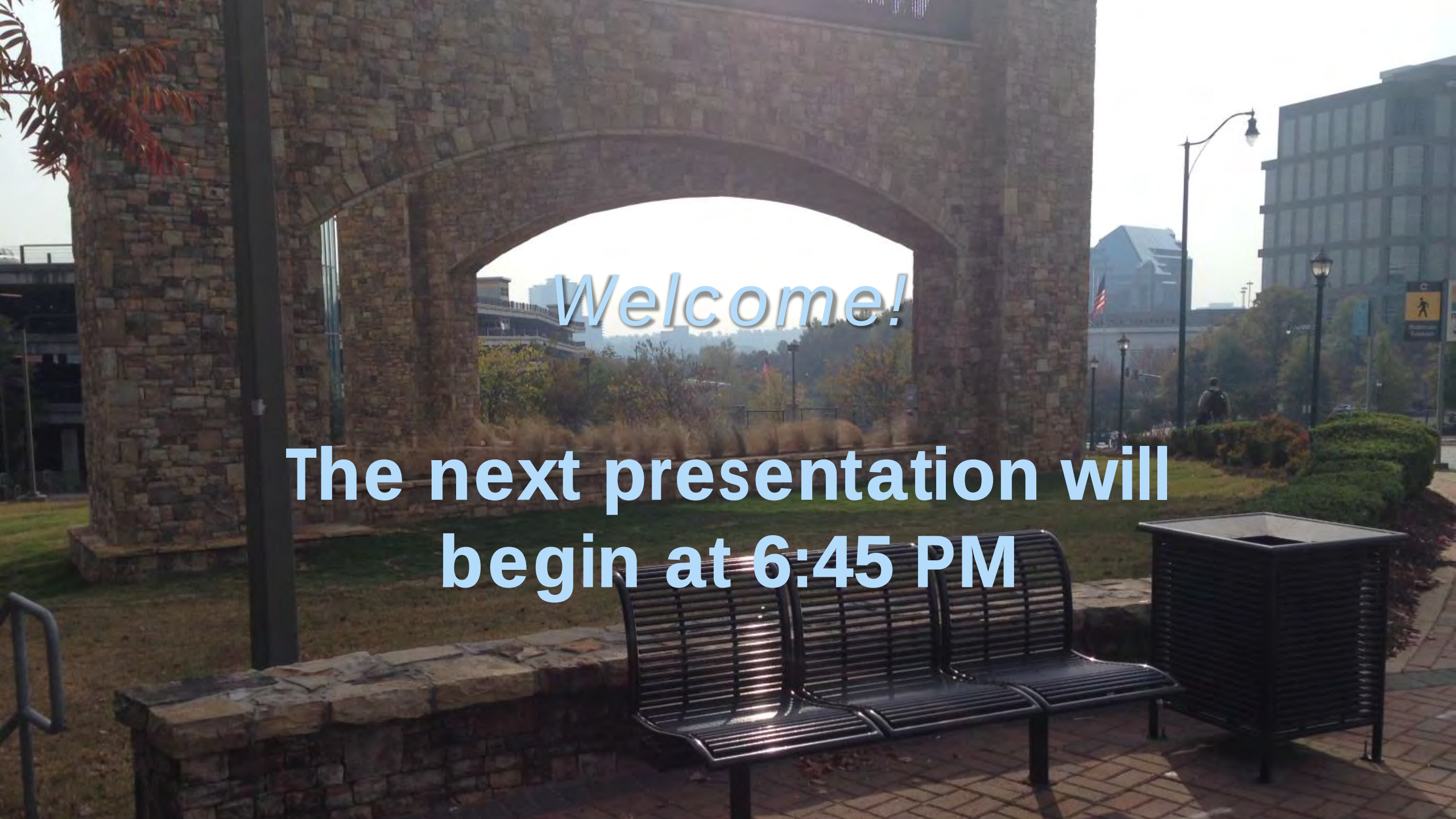
Outcomes

- Report that includes **ideas for investments** in **pedestrian**, **bicycle**, **roadway**, and **transit infrastructure** and **facilities**
  - Consolidated list of previously approved projects
  - Recommendations to fill gaps and reconcile overlaps
  - Identified quick and easy and/or lower cost projects to pursue in the near future
- Accompanying **strategies** and **policy recommendations**
- Suggestions for consideration in prioritizing future investments that support last mile connectivity
- Projects mapped in Geographic Information Systems (GIS)

Thank you for your time and interest!

- **Display boards** are set up around the room showing **existing facilities**, approved **planned and programmed future projects**, and **new recommendations**.
- Please **visit each station** and **talk with team members** stationed around the room. Feel free to **ask questions** as you review materials.
- Fill out the **comment card** to **tell us about your priorities** for last mile connectivity and share general comments.

For additional information, please visit www.sandyspringsga.gov or call 770-730-5600


Welcome!
The next presentation will begin at 6:45 PM

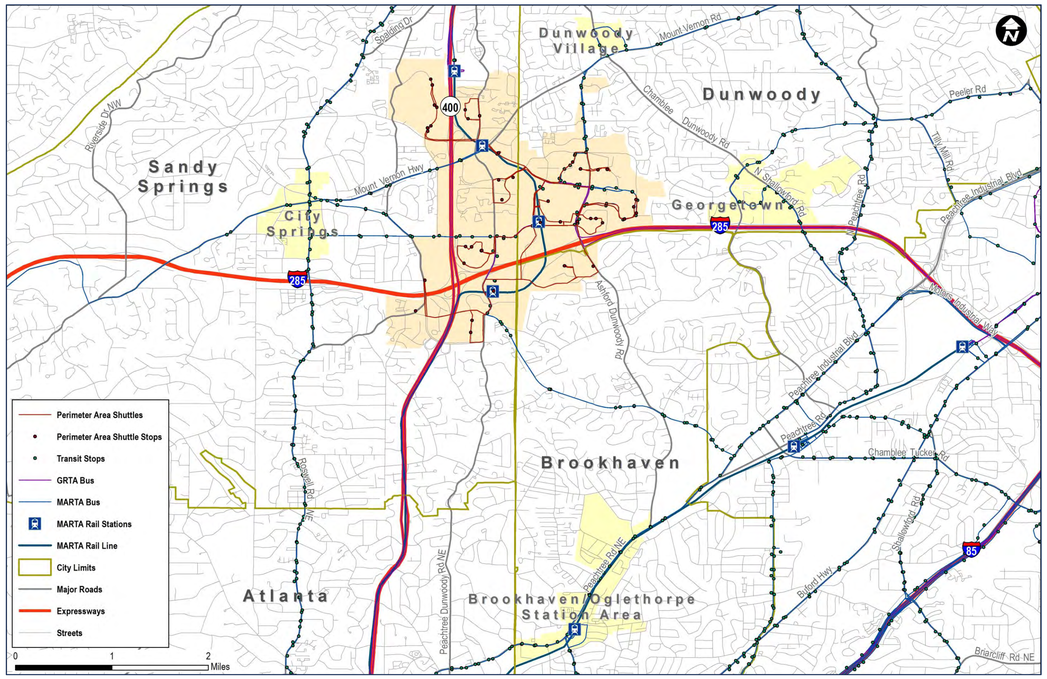

Welcome!
The next presentation will begin at 7:15 PM

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.



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

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.

ZipCars at the Brookhaven-Oglethorpe MARTA Station

Bike lane near the Sandy Springs MARTA Station

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."***

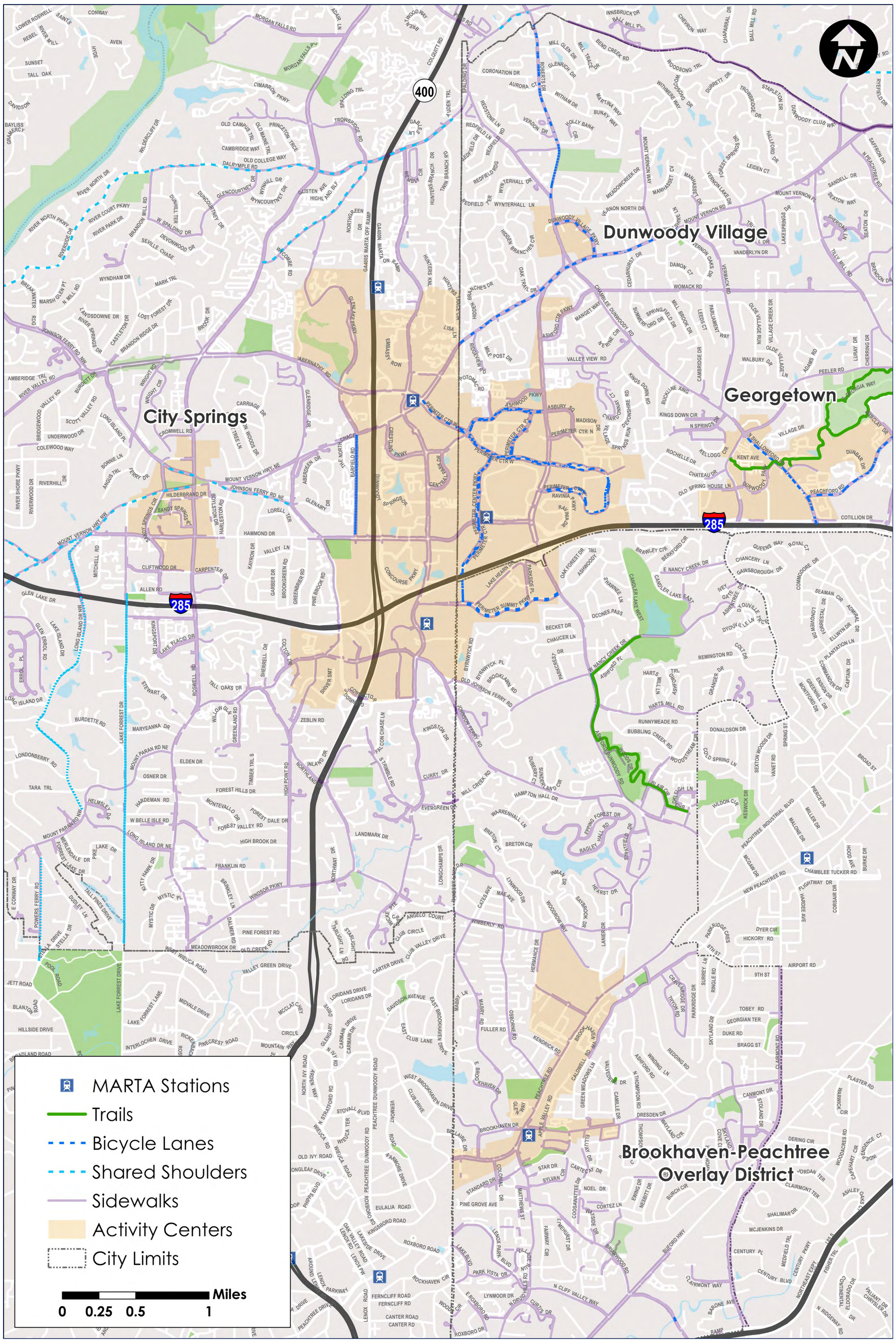
Project Partners

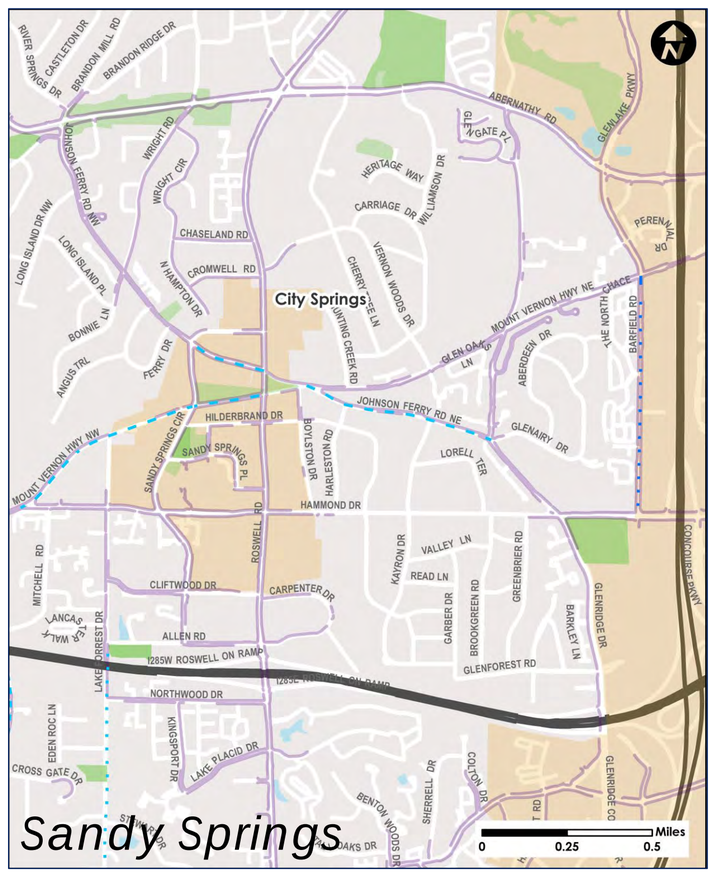
Sandy Springs
Dunwoody
Brookhaven
Perimeter Community Improvement Districts (PCIDs)

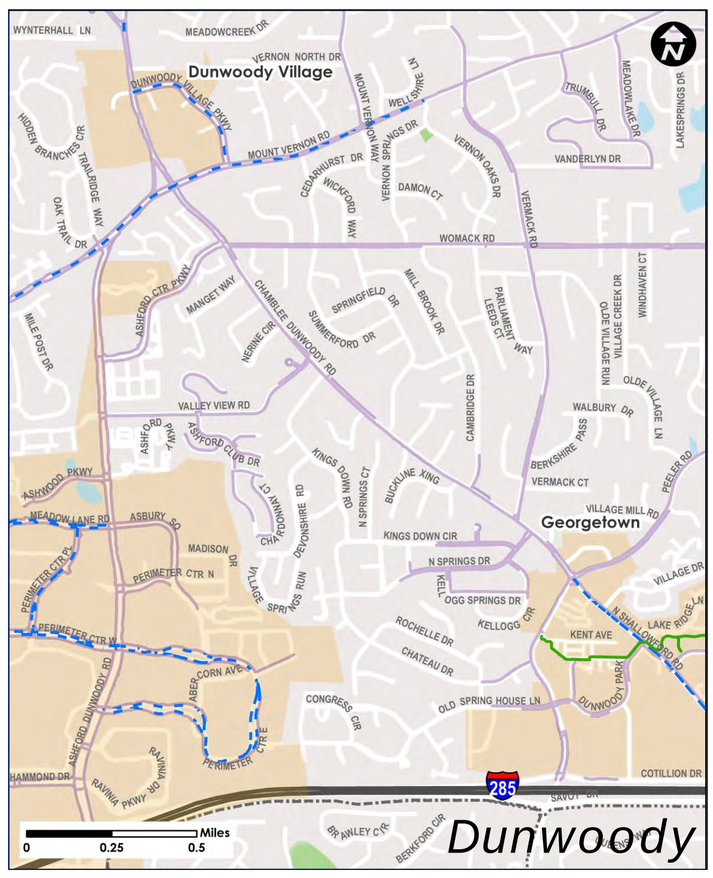
Last Mile Connectivity Study

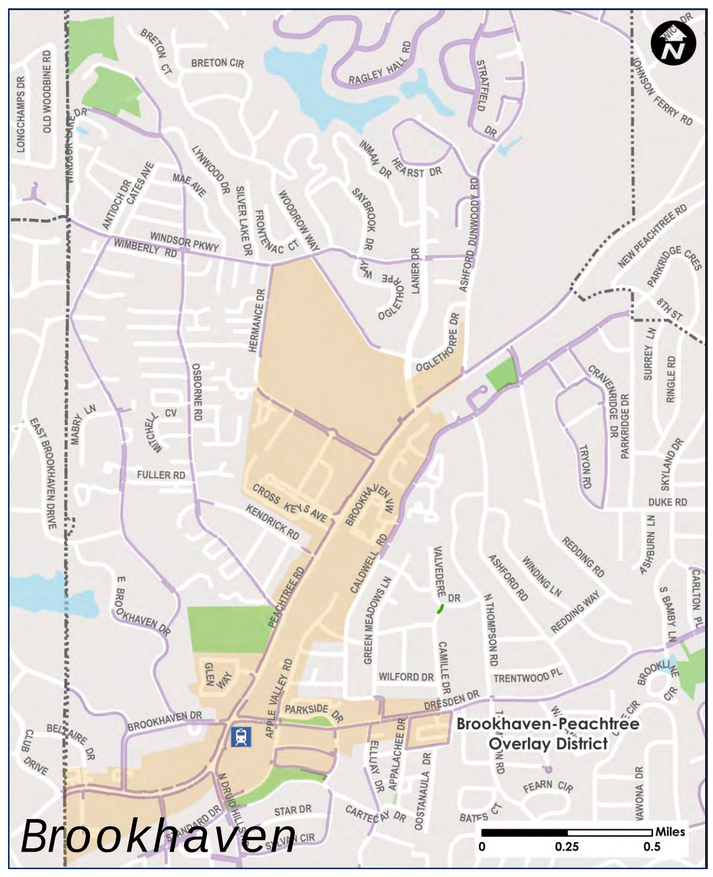
Bicycle and Pedestrian Network

Existing Facilities





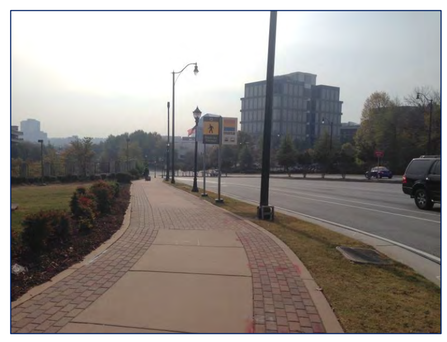




On-Street Bike Lane, Perimeter Center West

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

Typical Sidewalk, Mt. Vernon Rd

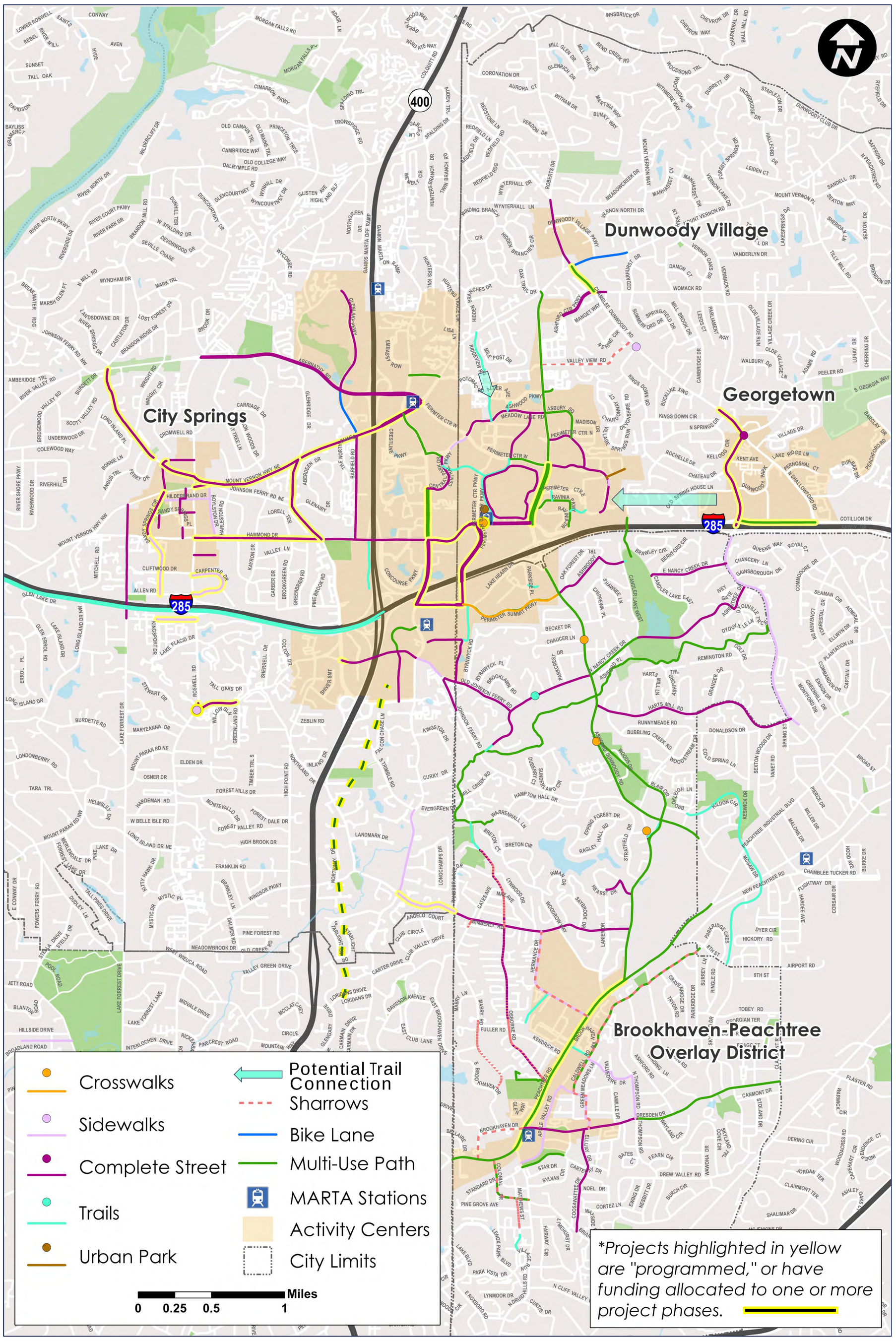


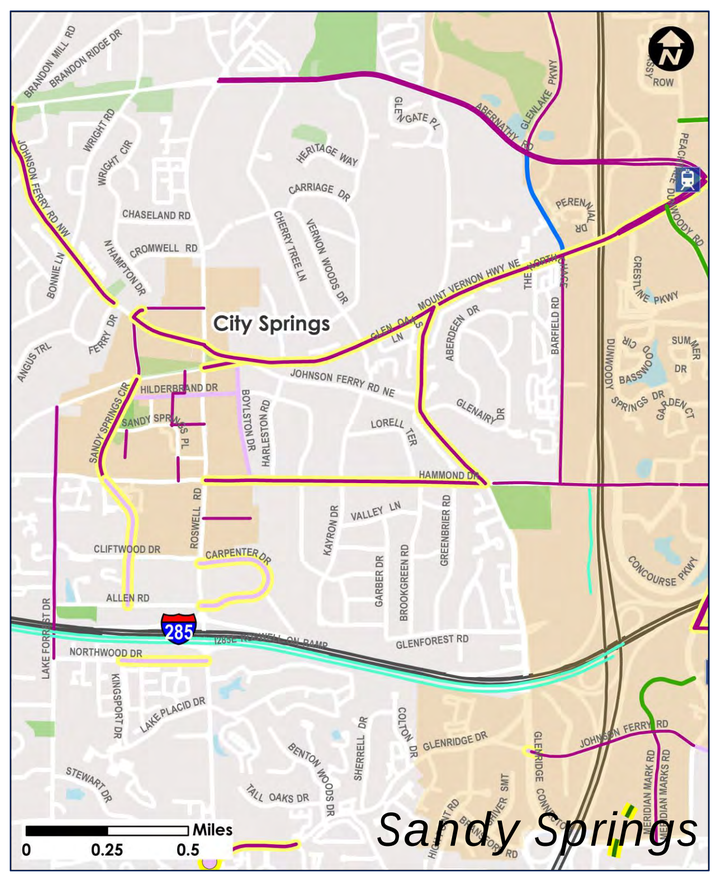
Wide Sidewalk, Perimeter Center West

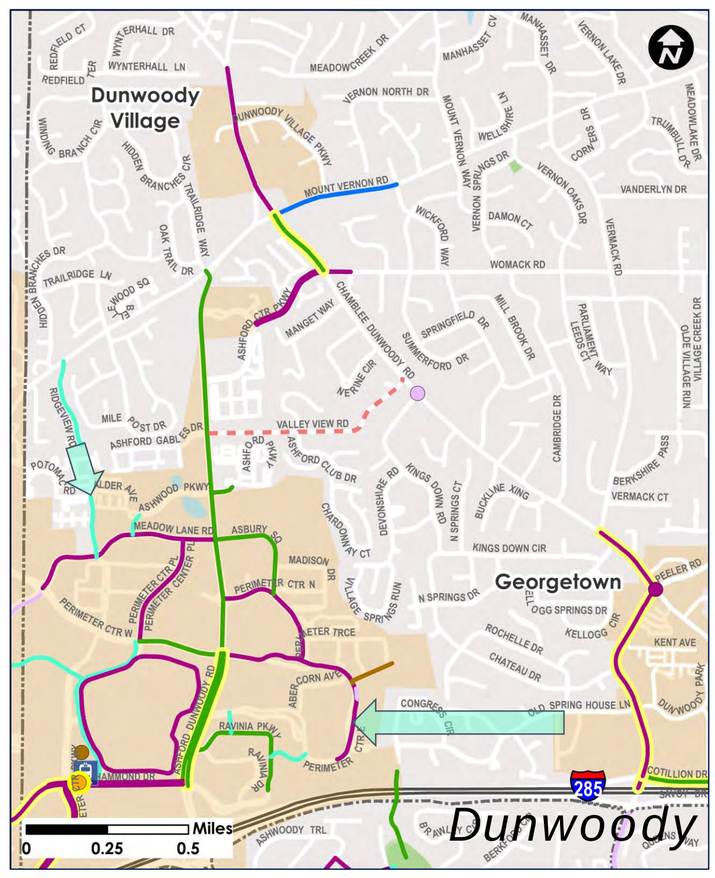
Last Mile Connectivity Study

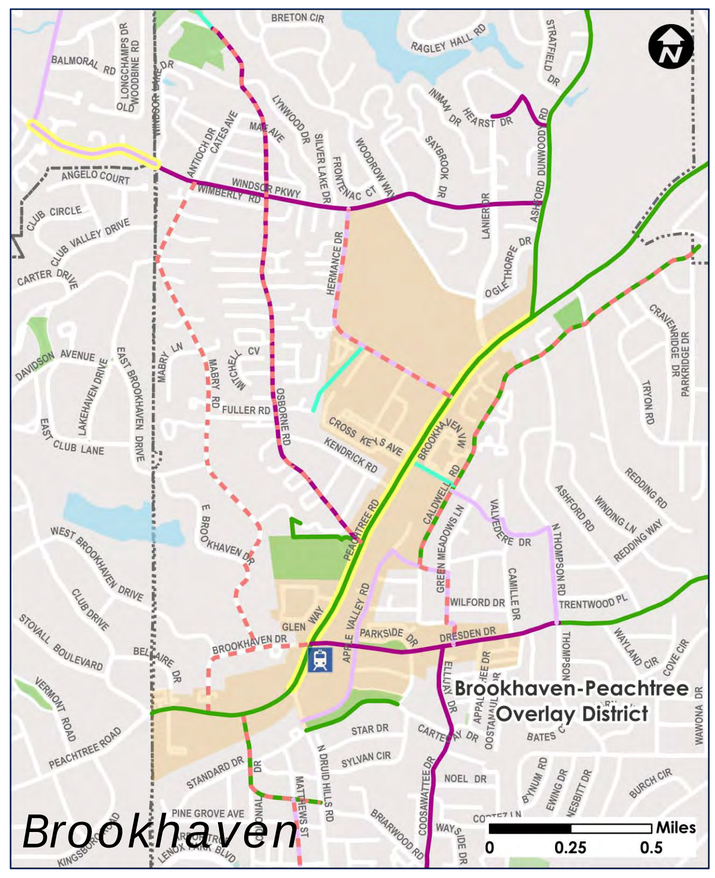
Bicycle and Pedestrian Network

Planned and Programmed Facilities



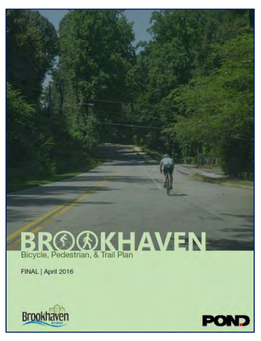


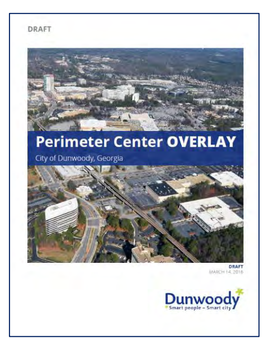


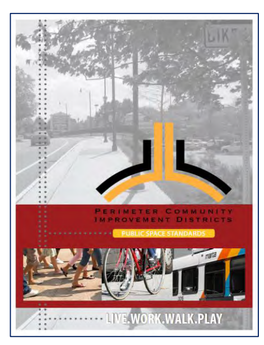


This map represents projects compiled from previous plans and studies already approved by the cities and/or PCIDs.

- *<u>Programmed</u> 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.*
- *<u>Planned</u> 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.*





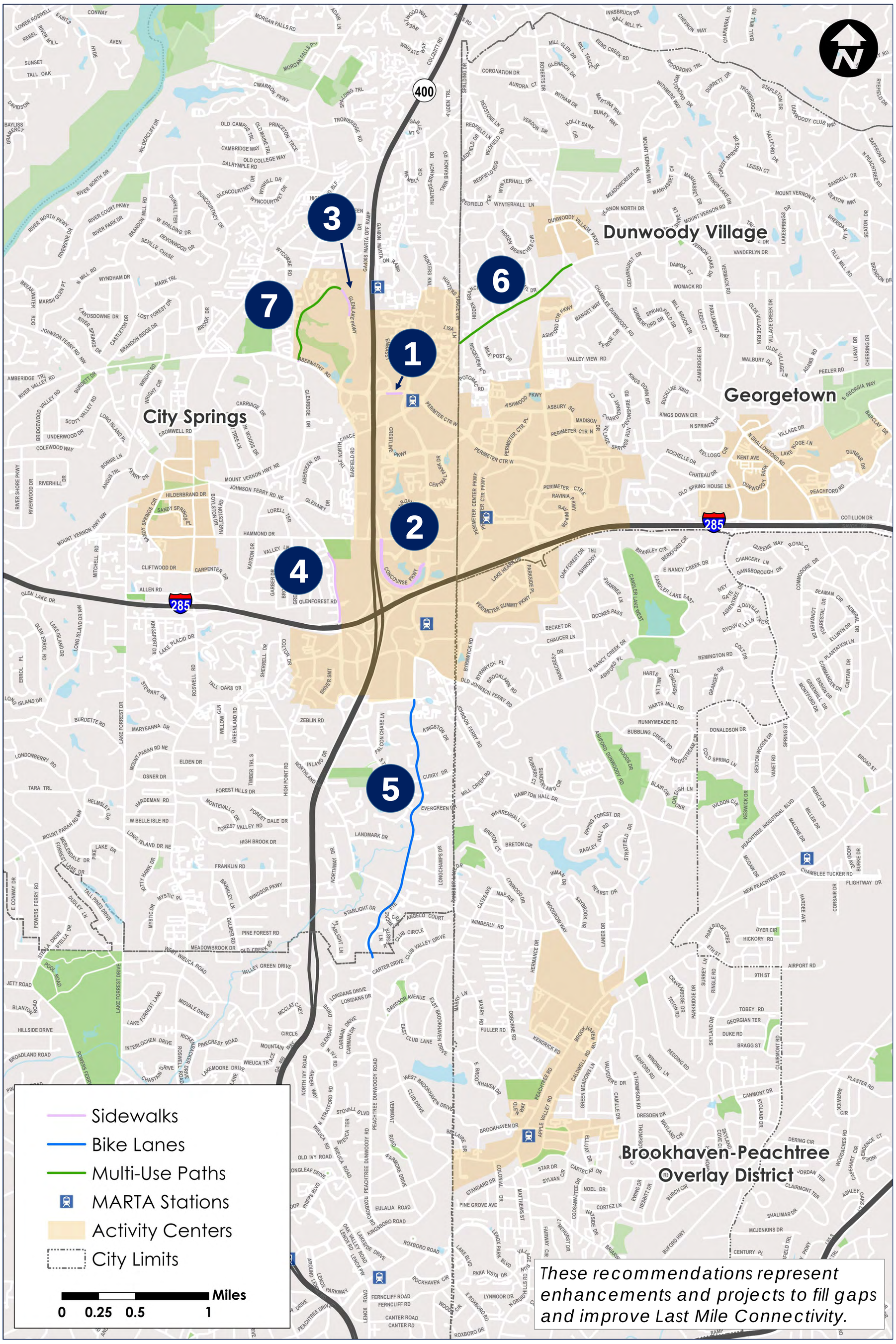


SANDY SPRINGS GEORGIA · Brookhaven GEORGIA · Dunwoody Smart people – Smart city · PERIMETER COMMUNITY IMPROVEMENT DISTRICTS

Last Mile Connectivity Study

Bicycle and Pedestrian Network

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



These recommendations represent enhancements and projects to fill gaps and improve Last Mile Connectivity.

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

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)*

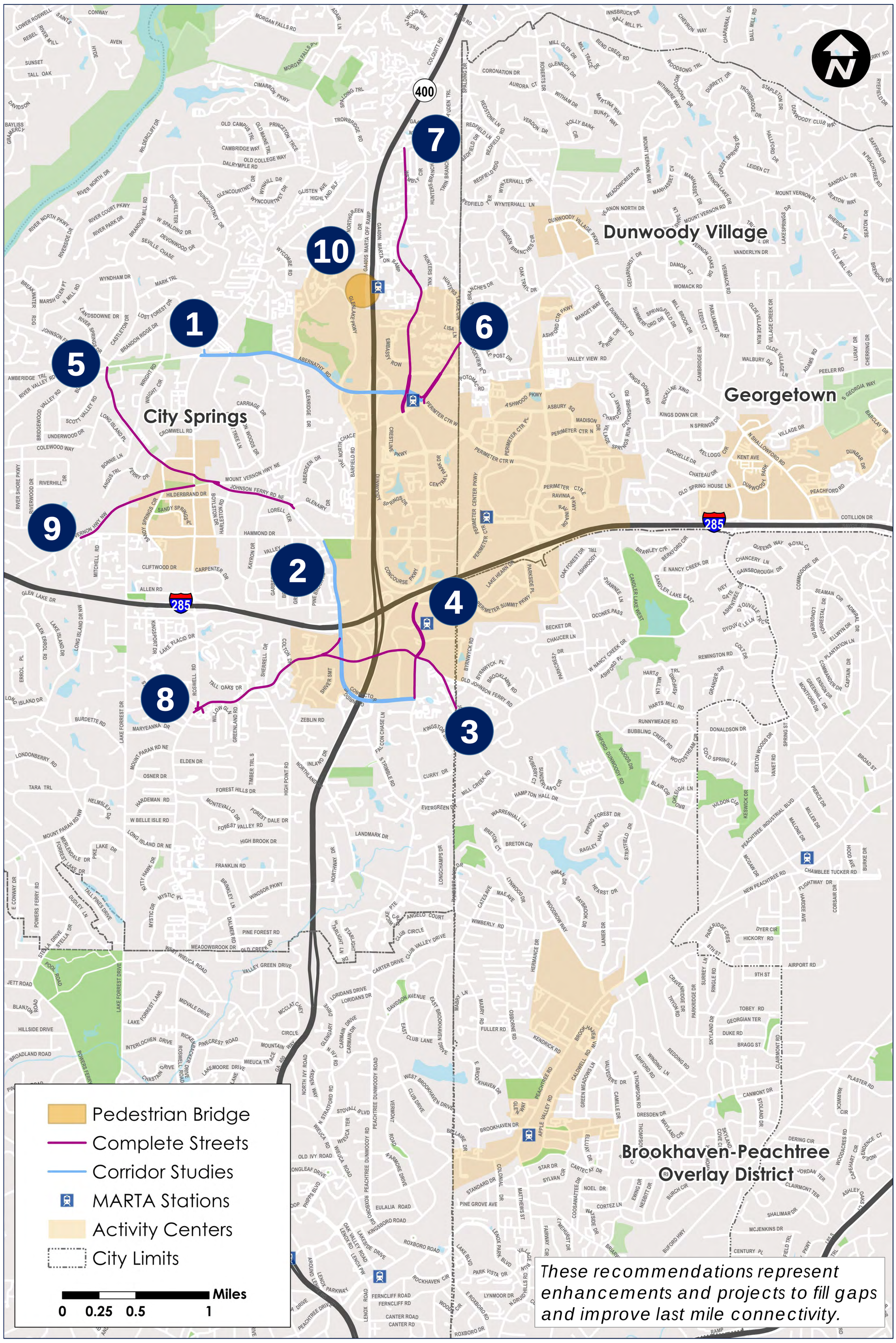
- *Improve mobility and safety*
- *Improve connectivity*
- *Encourage non-auto travel*
- *Improve connectivity in/around campuses*

PATH400 Trail (source: PATH Foundation)

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/Glenairy 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

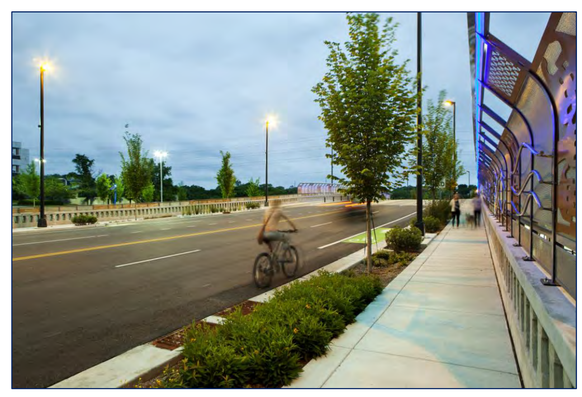
10. **Design and construct a pedestrian bridge between North Springs MARTA station and Glenlake Pkwy** *(long-term)*

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

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*



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

Last Mile Connectivity Study

Bicycle and Pedestrian Network

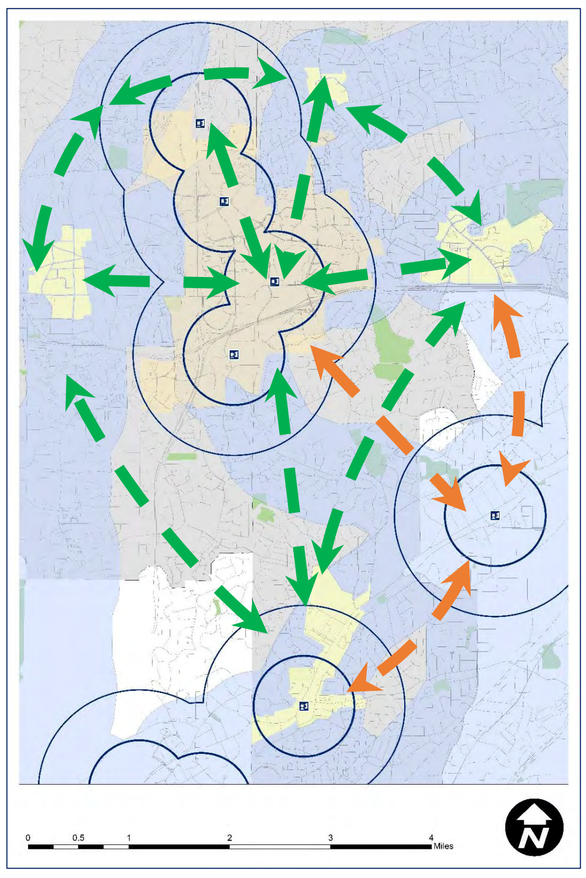
Overarching Recommendations

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/DanielLobo)

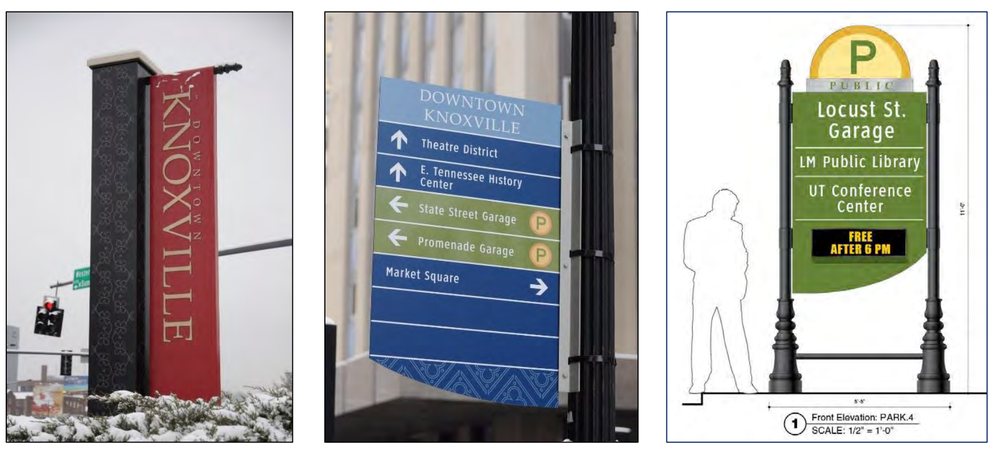
MARTA Rail Station Enhancements

- **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*

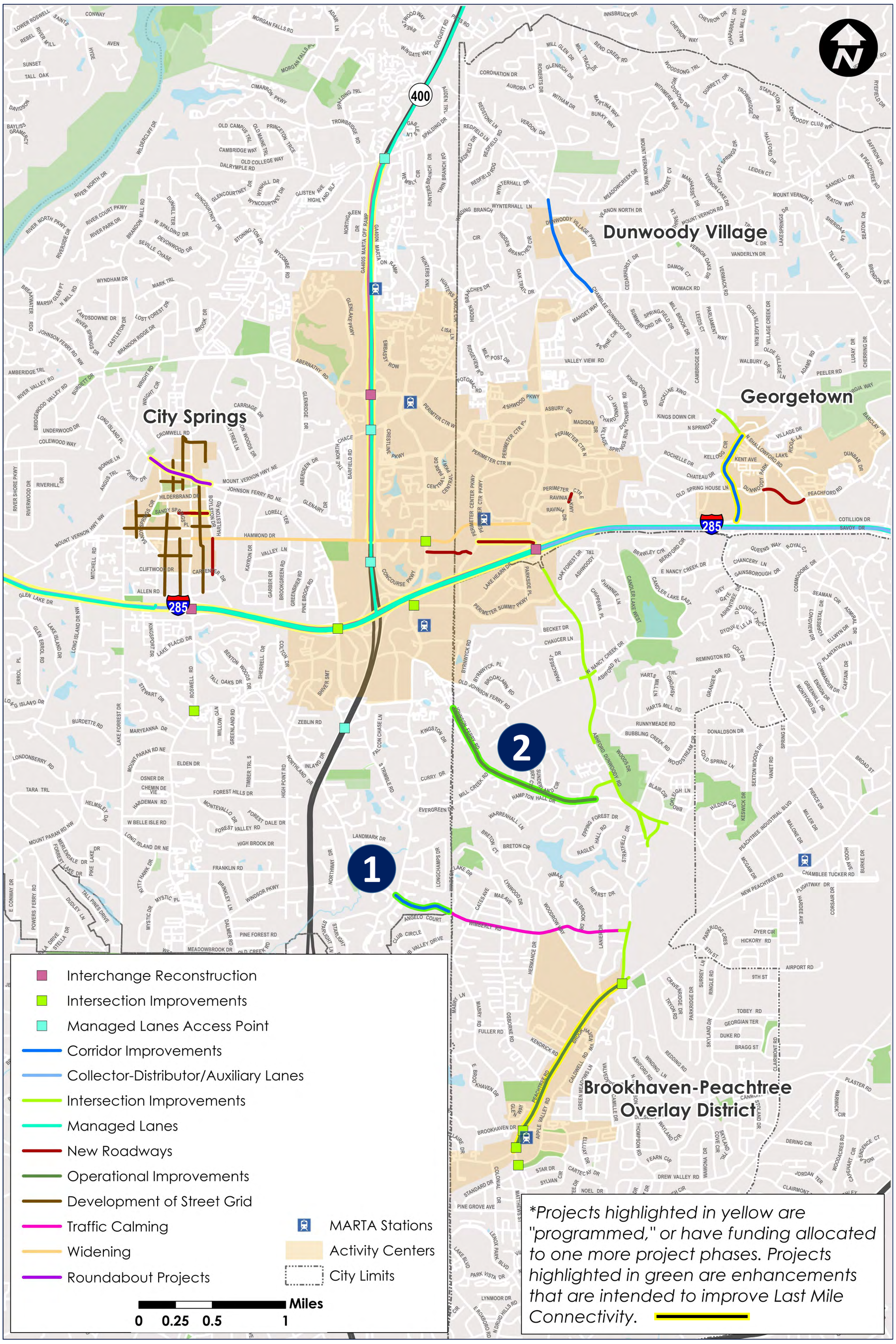


Examples of wayfinding signs in Knoxville, TN designed by GS&P

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*

**Projects highlighted in yellow are "programmed," or have funding allocated to one more project phases. Projects highlighted in green are enhancements that are intended to improve Last Mile Connectivity.*

Roadway Implementation Strategies

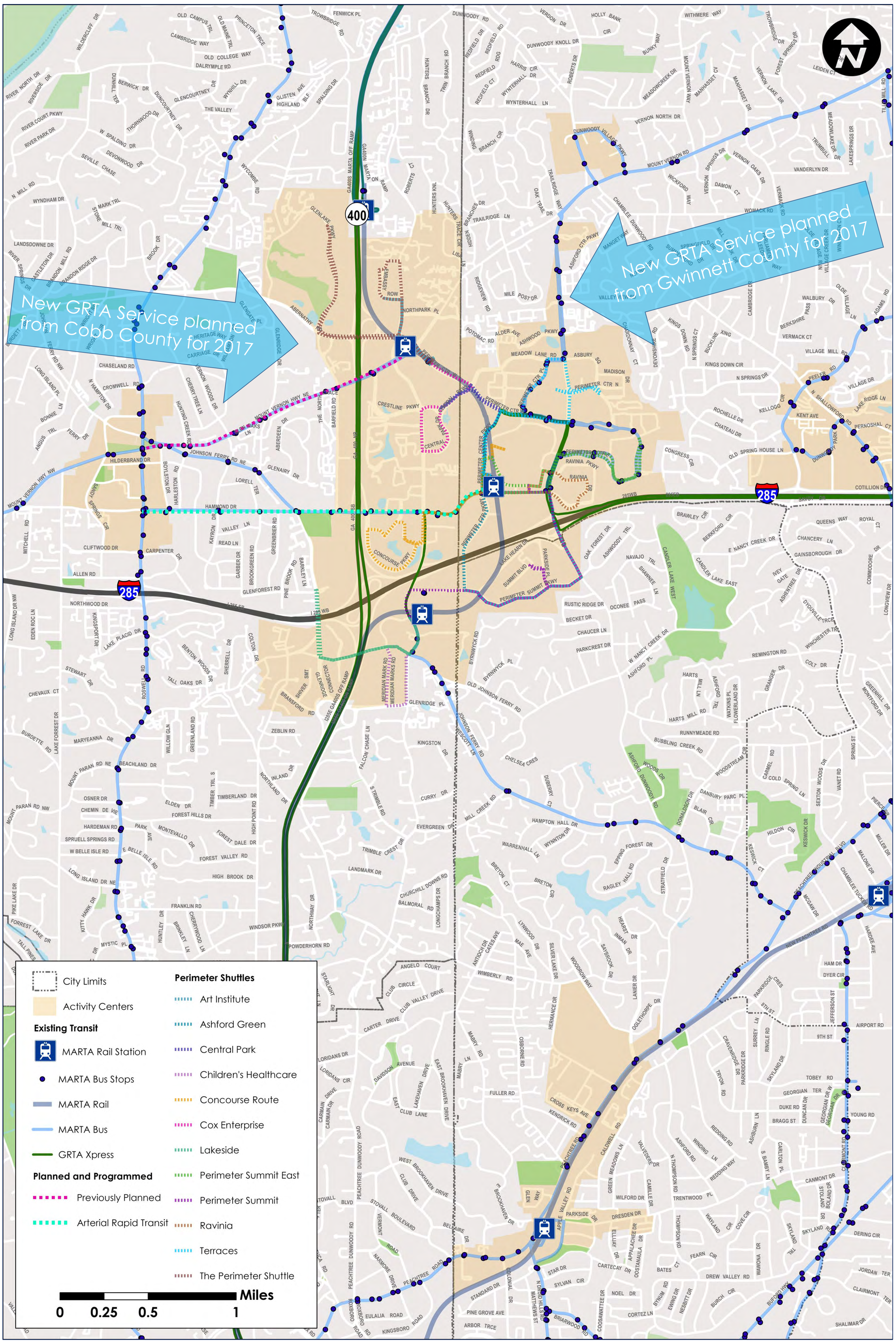
Strategies to support improvements to the roadway network that will support last mile connectivity.

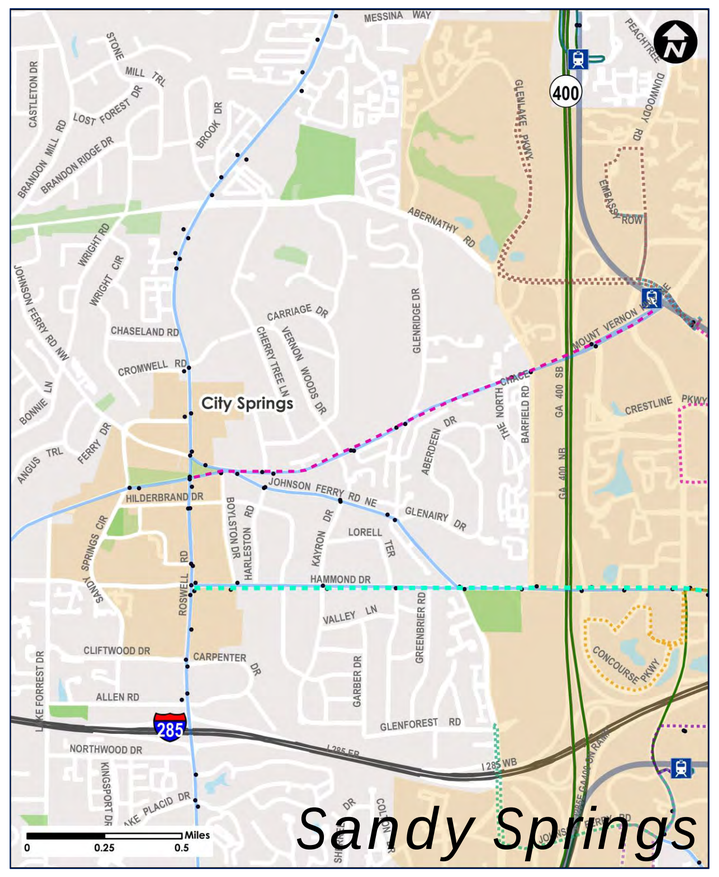
- Implement intersection improvements in coordination with existing and planned bicycle and pedestrian facilities.
- Explore satellite park-and-ride lots in conjunction with managed lane exits.
- Consider opportunities to provide dedicated right-of-way for bus pull-outs.
- Establish a consistent lane 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.

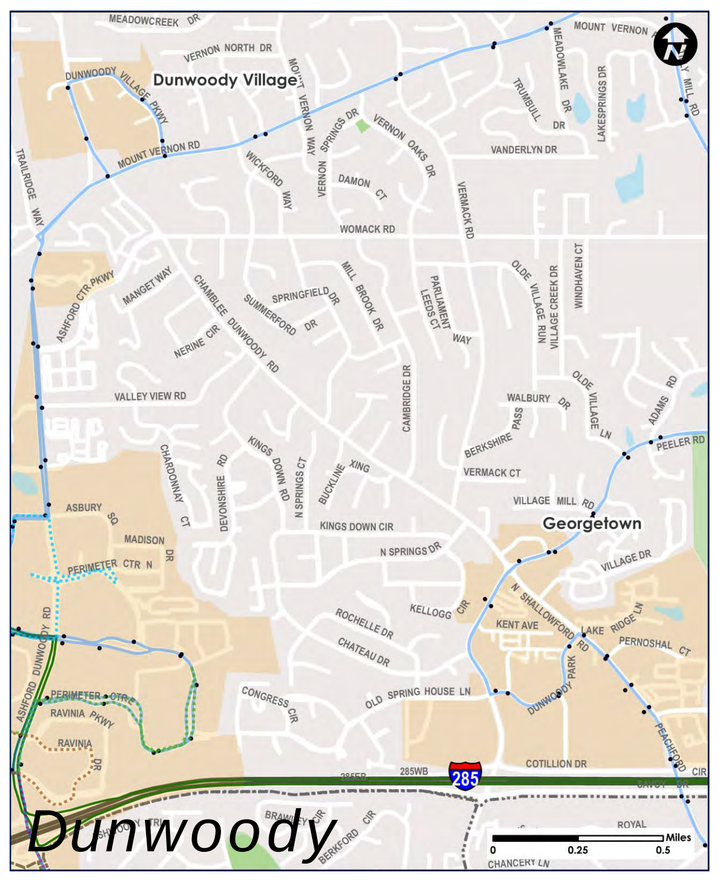
Last Mile Connectivity Study

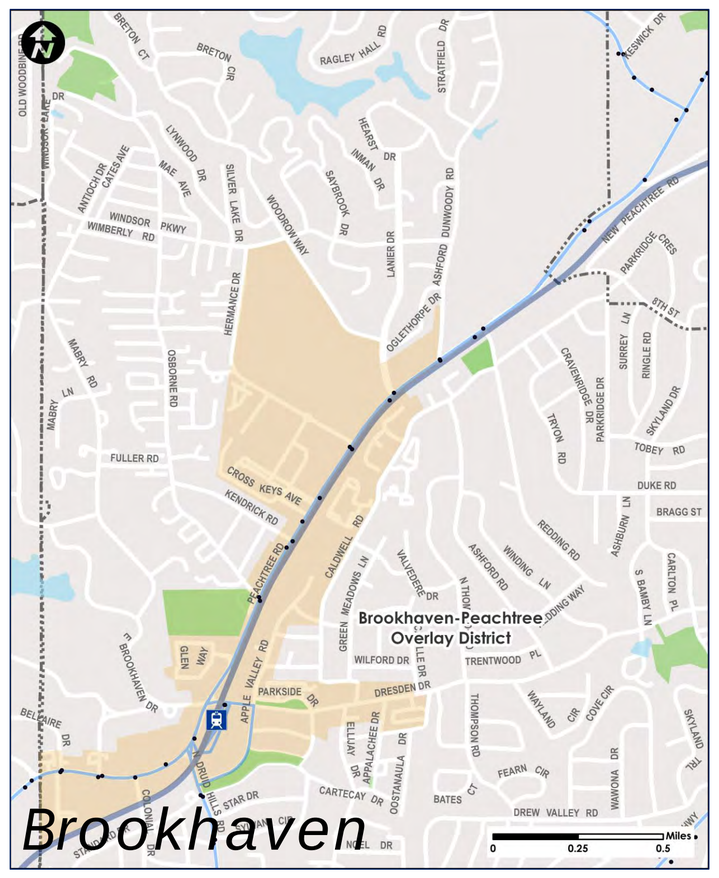
Transit Network

Existing, Programmed, and Planned Services







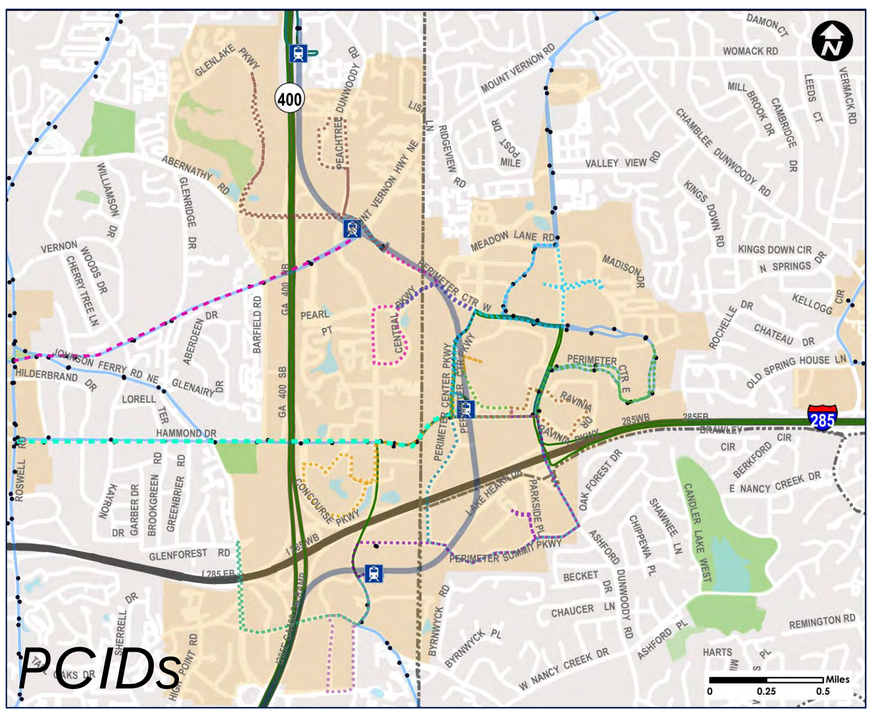


Previously Planned

- 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



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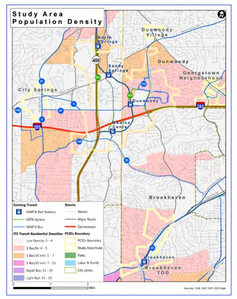
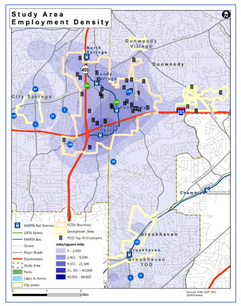
Last Mile Connectivity Study

Transit Vision Development Process

Demographic Analysis

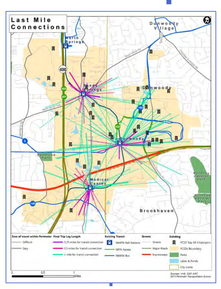




The density of both origins (homes) and destinations (work) were key inputs to identify critical connections.

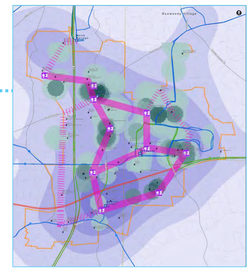
In addition, we analyzed land uses to identify non-work destinations for travelers.

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

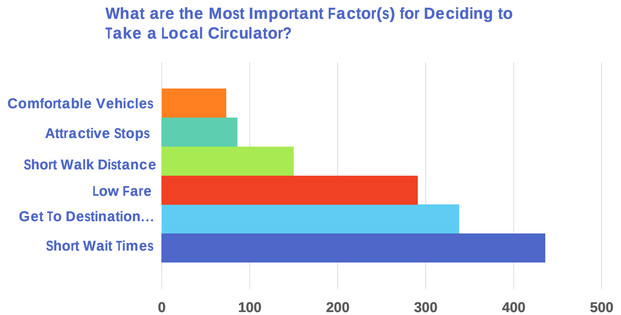
Transit-Supportive Strategies

- 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.

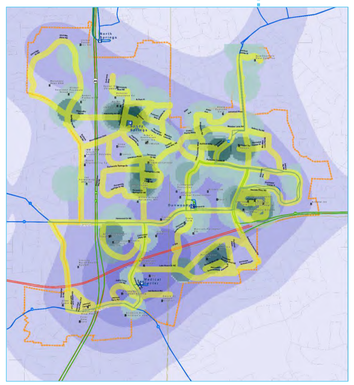
Data Collection & Analysis

Survey Data Analysis



Alternatives Analysis & Vetting

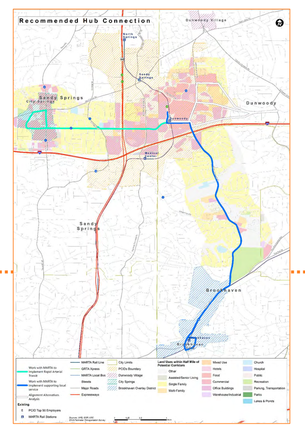
Alternative 2



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

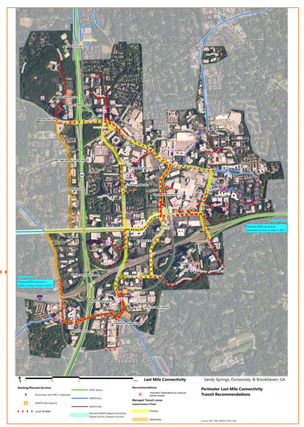
Coordinate with all local Transit Providers

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

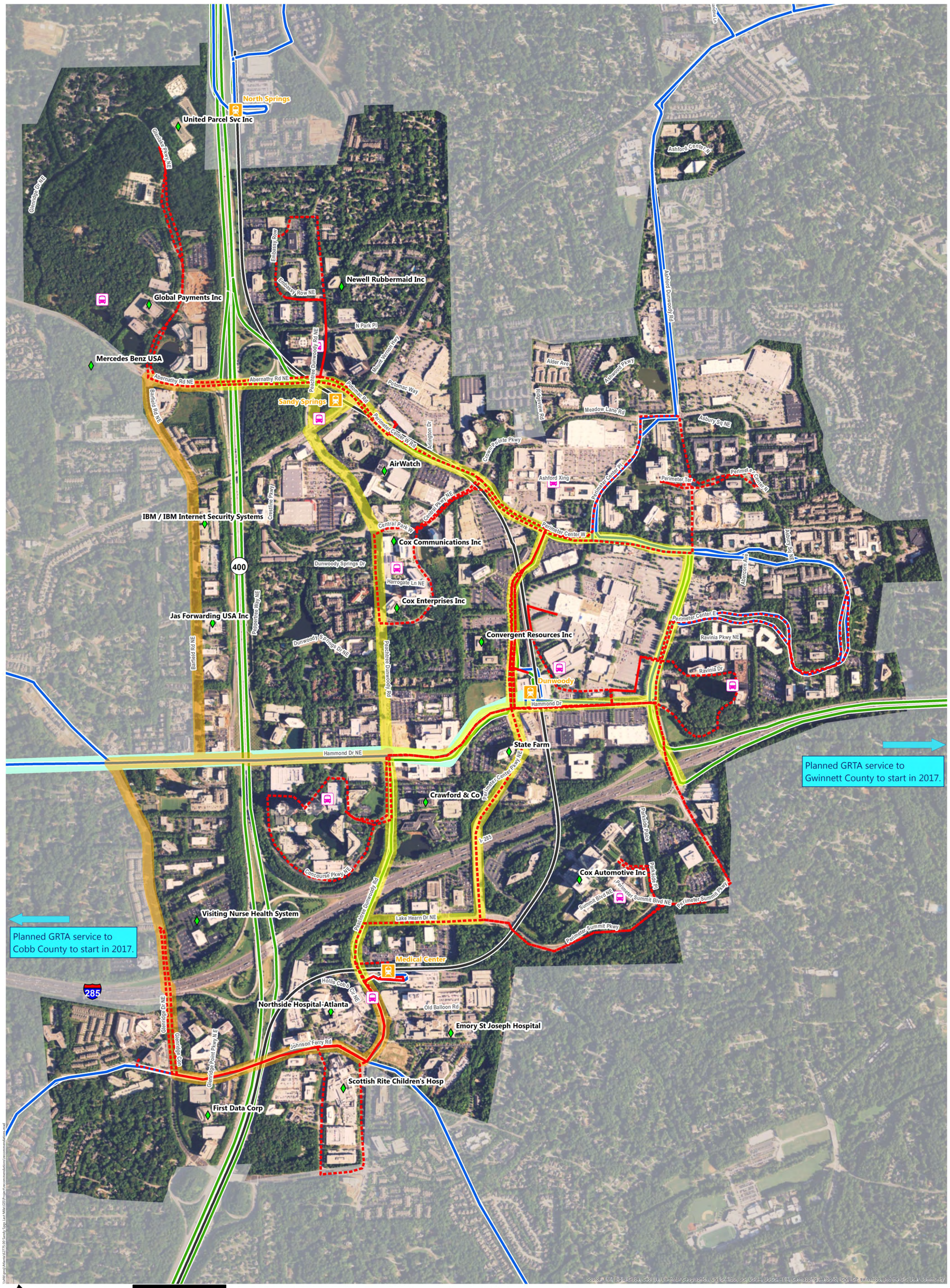


Peak-hour Transit Lanes: Lanes dedicated to transit in the Perimeter area would improve circulation for all agencies providing transportation services, including MARTA, GRTA, employer shuttles, and others.

Recommendations

Last Mile Connectivity Study

Transit Network Future Recommendations



Last Mile Connectivity | Sandy Springs, Dunwoody, & Brookhaven, GA

Existing/Planned Services

- Businesses with 400+ Employees
- MARTA Rail Stations
- Local Shuttles
- GRTA Xpress
- MARTA Bus
- MARTA Rail
- Planned MARTA Rapid Arterial Bus (signal priority, frequent service)

Recommendations

- Important Destinations to improve transit access

Managed Transit Lanes

Implementation Phase

- Primary
- Secondary

Perimeter Last Mile Connectivity Transit Recommendations

Sources: ARC, ESRI, MARTA, PCIDs, VHB

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

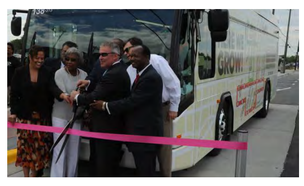
Long Term Transit Projects

- Coordination with Managed Lanes Project

GA400 Express Lanes

GEORGIA Express Lanes Get in. Get going.

- 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)

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LAST MILE CONNECTIVITY STUDY

Public Information Open House
January 26, 2017

Comment Form

Instructions: As you browse the maps and display boards that are set up around the room, please fill out this comment form to tell us about your priorities and provide comments on the materials presented.

Out of everything you've seen tonight, what are your three highest priorities for last mile connectivity?

1. _____

_____

2. _____

_____

3. _____

_____

Out of everything you've seen tonight, what are your three lowest priorities for last mile connectivity?

1. _____

_____

2. _____

_____

3. _____

_____

After the Open House, please submit this form via **mail** to:
Kristen Wescott, Public Works Division, City of Sandy Springs
7840 Roswell Road Bldg. 500, Sandy Springs, GA 30350

Or via email to KWescott@SandySpringsGA.gov

Comment forms will be accepted until Friday February 3, 2017.

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E. SUGGESTED OBJECTIVES AND MEASURES OF SUCCESS

Objectives and Suggested Measures

These objectives and suggested measures are provided to accompany the goals described in the body of the report. The cities and PCIDs should coordinate to establish baseline measures and set specific targets for the future. Note that some of the performance measures will require ongoing interagency coordination among the cities and with transit provides, including MARTA, GRTA, and shuttle operators. The plans and budgets of the cities and agencies will directly impact how and when these objectives are met and may require the cities and PCIDs to revise the measures as the plans and budgets evolve.

Objective	Suggested Measure(s)
1. Increase connectivity within the Perimeter area and to major activity centers, including (but not limited to): City Springs (Sandy Springs), Georgetown and Dunwoody Village (Dunwoody), and the Brookhaven/Oglethorpe MARTA Station area (Brookhaven).	
	a. Number of shuttle or transit service options
	b. Miles of bicycle paths, walking trails, sidewalks, or on-road bicycle facilities
2. Create a transportation network that can accommodate a 10 percent mode share for non-single occupancy vehicle trips.	
	a. Percentage of trips by people carpooling, biking, walking, and taking transit
3. Create a 100 percent walkable environment.	
	a. Percentage of gaps filled, by feet or miles
	b. Percentage of intersections with curb ramps and ADA compliant facilities
4. Ensure that people taking rail transit have options for biking, walking, or alternatives to driving in a vehicle once they arrive at a transit station.	
	a. Number of bike racks
	b. Number of sidewalk connections to roadway facilities adjacent to transit station
	c. Number of parking spaces dedicated to carsharing services (e.g. ZipCar)
5. Ensure that major employers in the study area are reasonably served by more than one form of transportation.	
	a. Provide at least one alternative to driving within ½ mile of major employers as identified by the PCIDs.
6. Ensure that anyone walking or riding a bike within ½ mile of a rail station can easily find their way to the station.	
	a. Increase in wayfinding/directional signage within a designated radius, such as 10-minute walk
7. Provide safe and comfortable areas for transit riders to wait for buses, trains, or other vehicles.	
	a. Number of benches / shelters at transit stops
	b. Presence of lighting at transit stops
	c. ADA-compliant features at transit stops, including platforms, shelters, etc.

Objective	Suggested Measure(s)
8. Enhance connections between existing buildings and sidewalks, paths, or parking lots.	
	a. Number of paths/walkways with trees or shade structures
	b. Establish design guidelines that require new buildings/developments to provide shaded/protected access to commuter facilities (i.e. trails, rail/bus station, etc.)
9. Increase the visibility of MARTA rail stations.	
	a. Number of branded directional signs
	b. Number of access points directly from sidewalks or parking lots
	c. Established design guidelines for station entrances
10. Make it convenient for people to use regional bus service by providing access to other modes at bus pick-up/drop-off locations.	
	a. Number or type of transportation mechanisms within a 5-minute walk of bus pick-up and drop-off locations
11. Provide opportunities for people to use a car as needed within the study area without having to own a personal vehicle.	
	a. Number of carsharing services (e.g. car2go) and peer-to-peer carsharing programs in the area
	b. Increase in number of transit stations or other major nodes of activity in the Perimeter area with parking spots dedicated to carsharing services
12. Increase connectivity across physical barriers that divide the study area (e.g. GA 400).	
	a. Number of bicycling, pedestrian, transit, or high-occupancy vehicle projects that cross physical barriers
	b. Miles of bicycle, sidewalk, transit, and/or high-occupancy vehicle facilities that cross physical barriers
13. Increase the share of commute trips taken on bicycle by 10 percent.	
	a. Number of bicycle parking spaces within PCIDs
	b. Number of bicycle repair stations within PCIDs
	c. Number of developments (residential or commercial) that provide showers or bike lockers
14. Provide continuous walking and bicycle facilities by eliminating gaps between bicycle lanes or paths within the study area.	
	a. Number of gaps in existing faciltiies
	b. Length of gaps (miles or feet) in existing faciltiies
15. Increase the number of people who bike recreationally to and within the study area.	
	a. Number of recreational trips taken on bikes
	b. Miles of recreational bike trips
16. Ensure that people traveling to/from regional destinations have access to the study area via future toll or managed lanes on area highways and major arterials.	
	a. Number of access points to/from future managed or toll lanes on I-285 or GA 400

Objective	Suggested Measure(s)
	b. Number of access points to/from future managed or toll lanes on major arterials within and around the Perimeter area

F. POTENTIAL FUNDING SOURCES

Local

There are several ways that local communities and municipalities can create revenue to fund and implement projects that enhance last mile connectivity. Among the most common are special bond issues, dedications of local sales taxes, and capital improvement programs, generally from public works, transportation, or parks and recreation agencies.

Transportation Special Purpose Local Option Sales Tax (TSPLOST)

Georgia's Transportation Funding Act of 2015 (HB 170) allows cities and counties to levy a fractional percentage (up to 1 percent) sales tax to be allocated to transportation purposes for a period of up to five years. At least 30 percent of TSPLOST revenue estimates must be used on projects identified in the Statewide Strategic Transportation Plan (SSTP). Funds raised may be used for "transportation purposes" defined in the bill as meaning roads, bridges, public transit, rails, airports, buses, and seaports, and "all accompanying infrastructure and services necessary to provide access to these transportation facilities..."[1] This means that operating and other noncapital expenses are an eligible use of funds for transportation purposes under the county-level SPLOST program.

Regional

LCI Transportation Program

ARC's Livable Centers Initiative (LCI) Transportation Program provides funds for transportation projects identified in LCI planning studies. The LCI program funds planning and implementation of strategies "to reduce traffic congestion and improve air quality by better connecting homes, shops, and offices." The ARC Board has allocated $500 million through the year 2040 for LCI projects. All of the project partners have participated in the LCI program in the past, and projects generated from those studies may be eligible for funding through the LCI Transportation Program.

Transportation Improvement Program

The Transportation Improvement Program (TIP) allocates federal funds for construction of the highest priority, short-term transportation projects in the Regional Transportation Plan (RTP). Federal, state, and local funds are approved for all significant transportation projects and programs within the 19-county Atlanta region. The Atlanta Regional Commission, as the designated Metropolitan Planning Organization (MPO) for the region, is responsible for developing and maintaining the TIP (and RTP) and for meeting federal requirements as part of the process.

National

Federal Funding for Bicycle and Pedestrian Projects

There are a number of federal programs and funds that can be used effectively to pay for improvements to the bicycle and pedestrian environment, including infrastructure, equipment, trail or path planning, development, and construction. Section 1404 of the Fixing America's Surface Transportation (FAST) Act requires federally funded projects on the National Highway System to consider access for other modes of transportation and provides flexibility in the design process to achieve this requirement. Below is a partial listing of some bicycle and pedestrian infrastructure projects that can be funded in whole or in part through federal programs, including Transportation Investment Generating Economic Recovery (TIGER),

[1] Companion legislation to HB 170, HB 106 (signed by the Governor May 12, 2015), clarifies components of TFA2015 related to county-level TSPLOSTs, including changing the date counties in regional transportation systems may begin the process of instituting a County TSPLOST to July 1, 2016 (http://www.legis.ga.gov/Legislation/20152016/153773.pdf).

Federal Transit Administration (FTA), Congestion Mitigation and Air Quality (CMAQ) Improvement Program, and Surface Transportation Block Grant (STBG), among others.

For additional information and details, see a report from FHWA (dated August 2016) on the use of federal funding for bicycle and pedestrian projects, which can be found at: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.pdf.

Potential Federal Funding for Last Mile Connectivity Projects

Project Type	Bicycle and Pedestrian Funding Opportunity			
	TIGER	FTA	CMAQ	STBG
Access enhancements to public transportation (includes benches, bus pads)	Y	Y	Y	Y
Bike racks on transit vehicles	Y	Y	Y	Y
Bus shelters and benches	Y	Y	Y	Y
Crosswalks (new or retrofit)	Y	Y	Y	Y
Curb cuts and ramps	Y	Y	Restrictions may apply	Y
Counting equipment	-	Y	-	Y
Streetscaping/landscaping	Y	Y	-	Y
Bicycle and pedestrian scale lighting (associated with bicycle/pedestrian project)	Y	Y	-	Y
Shared use paths / transportation trails	Y	Y	Restrictions may apply	Y
Signed bicycle or pedestrian routes	Y	Y	-	Y

Transportation Alternatives Program (TAP)

The FAST Act eliminated the MAP-21 Transportation Alternatives Program (TAP) and replaced it with a set-aside of Surface Transportation Block Grant (STBG) funding for transportation alternatives (TA). These funds include all projects and activities that were previously eligible under TAP, including small-scale transportation projects, such as bicycle and pedestrian facilities, recreational trails/paths, safe routes to schools projects, and others. Georgia's set-aside for FY 2016 was $6.67 million. Projects are funded through a competitive process.

Other/Non-Government

Businesses, non-profits, and philanthropic organizations often function as partners or award grants for projects and programs that meet their missions and objectives. These missions and objectives may be related to community and/or environmental health, economic development, recreation, and transportation, among others. Several organizations across the country are specifically invested in promoting bicycling and walking as viable forms of transportation. Below is a brief overview of a few potential partners that may also have funding opportunities worth considering.

People for Bikes

Since 1999, PeopleForBikes has provided 372 grants to non-profit organizations and local governments across the United States, totaling more than $3.1 million. The Community Grant Program funds important

projects that leverage federal funding and build momentum for bicycling in communities across the country. Projects have included bike paths, rail trails, bike parks, and large-scale bicycle advocacy efforts, among others. (www.peopleforbikes.org)

Alliance for Biking and Walking

The Alliance for Biking and Walking, in partnership with Advocacy Advance and the League of American Bicyclists, offers a program of Rapid Response Grants, which are awarded on a rolling basis to help state and local organizations take advantage of unexpected opportunities to win, increase, or preserve funding for biking and walking. Since 2011, the organization has reportedly helped grantees win $100 million in public funding for biking and walking. (www.bikewalkalliance.org)