AeroATL Greenway Plan

in association with
Aerotropolis Atlanta Alliance, Aerotropolis Atlanta CIDs,
and the Atlanta Regional Commission

September 2018

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Aerotropolis ATLANTA
COMMUNITY IMPROVEMENT DISTRICTS

SIZEMORE GROUP
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AeroATL
Greenway Plan

in association with our Local Funding Partners:

Aerotropolis Atlanta Alliance
Aerotropolis Atlanta CIDs
Atlanta Regional Commission
City of College Park
City of East Point
City of Hapeville
City of Forest Park
City of South Fulton
Clayton County
Fulton County
Hartsfield-Jackson Atlanta International Airport

September 2018

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Jonathan Tuley - *Senior Principal Planner, Land Use*

Jared Lombard - *Senior Principal Planner*

Robert Herrig - *Community Planner*

Byron Rushing - *Bicycle and Pedestrian Program Manager*

Credits

Local Partners Team*

Aerotropolis Atlanta CIDs

Aerotropolis Atlanta Alliance

Clayton County

Fulton County

Hartsfield-Jackson Atlanta International Airport

City of College Park

City of East Point

City of Forest Park

City of Hapeville

City of Riverdale

City of South Fulton

**The Local Partners Team is made up of representatives from relevant state, regional, and city level departments/entities responsible for land use planning, transportation, grants, housing stocks, land owners, business owners, and community leaders. This group includes individuals who are knowledgeable about the study area's issues and opportunities, experts in related fields, and are vital to the implementation of the final plan.*

Consultant Team

LEAD FIRM: URBAN DESIGN, PLANNING and PROJECT MANAGEMENT

SIZEMORE GROUP

Bill De St. Aubin, AIA, LEED AP - *Principal-in-Charge*

Deanna Murphy, AICP - *Project Manager & Lead Planner*

Chirag Date, MCRP - *Project Planner*

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LANDSCAPE ARCHITECTURE

Perez Planning + Design

Carlos Perez - *Founder*

LANDSCAPE ARCHITECTURE

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CIVIL ENGINEERING

Vaughn & Melton

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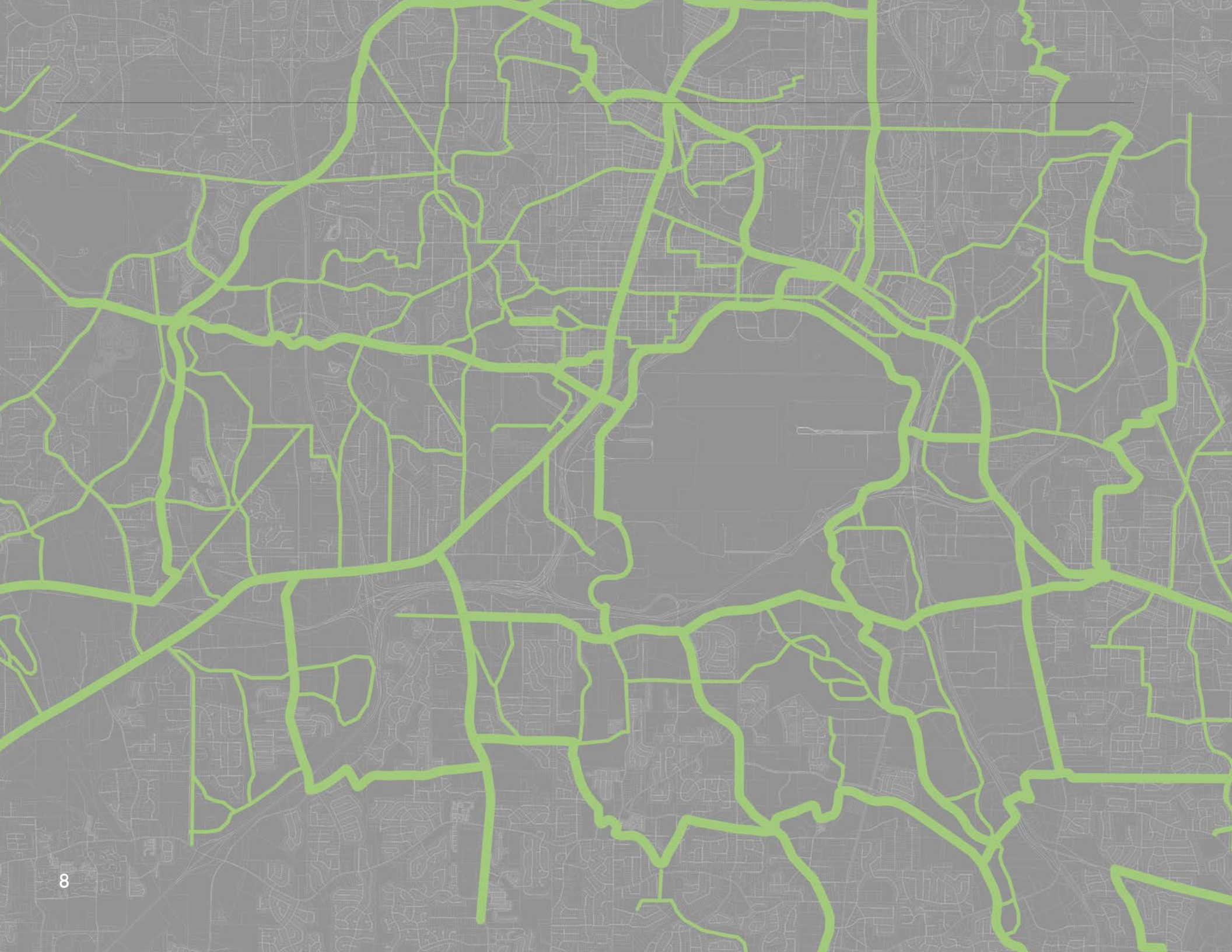
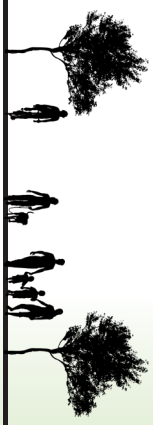




Executive Summary

Executive Summary

The AeroATL Greenway Plan is led by the Aerotropolis Atlanta Alliance (Alliance) and the Aerotropolis Atlanta AACIDs (CIDs). This project is funded by the Atlanta Regional Commission (ARC) under a 2017 grant, with matching support from the Alliance, the CIDs, Hartsfield-Jackson Atlanta International Airport (H-JAIA), East Point, College Park, Hapeville, Forest Park, Fulton County, and Clayton County. Sizemore Group was retained by the Alliance and the CID to lead the master planning process on this project.

The AeroATL Greenway Plan provides a visionary framework for trail connectivity across the Aerotropolis region. The study area includes H-JAIA and the surrounding cities of East Point, Hapeville, Forest Park, College Park, South Fulton and portions of Fulton County and Clayton County, totaling approximately 48,000 acres.

This study integrates previous plans and initiatives and incorporates the current needs and opportunities identified by local representatives of the cities and counties listed above, key stakeholders, and the general public. The result is a true multi-modal network that will provide area residents, visitors, and workers with safe and enjoyable connectivity around the world's busiest airport.

Study Area and Context

The Alliance leverages the proximity of Hartsfield-Jackson Atlanta International Airport (H-JAIA) to target strategic development and expansion of industries and businesses in the airport area to improve the economic conditions of the region.

In 2016, the Alliance completed the Aerotropolis Atlanta Blueprint Plan. This plan was the first step in creating a comprehensive vision for the Aerotropolis Atlanta area. A key recommendation of the plan was a regional greenway trail network that connects surrounding communities to H-JAIA.

The AeroATL Greenway Plan supports the ability to bike to school or jobs, walk to downtown restaurants and shops, and—most uniquely—bike directly to the airport for a trip or to simply watch the planes.

Building from the Blueprint Plan, this study represents an approach to connecting the Aerotropolis communities with an integrated, comprehensive bike/pedestrian trail system that provides access between job centers, everyday services, and the region's cultural and natural assets.

For residents, this plan supports the ability to bike to school or jobs, walk to downtown restaurants and shops, and—most uniquely—bike directly to the airport for a trip or to simply watch the planes. For travelers, this network allows them to experience the unique character of the local communities during a layover and provides another connection to downtown. Ultimately, the vision of the The AeroATL Greenway plan is to improve the quality of life, health, and economic growth of the Aerotropolis region.

AeroATL Greenway Process

This plan made use of existing conditions analysis and previous studies and plans to prepare a comprehensive trail network.

To create a truly community-supported plan, stakeholder and community input was obtained during interviews and through an online survey that reached over 600 respondents, and at three public meetings, including formal presentations, open house sessions, and a trail demonstration project.

Additionally, a Local Partners Team was convened at four strategic opportunities to guide the plan's development. The Local Partners Team consisted of representatives from each jurisdiction within the study area, as well as community activists.

AeroATL Greenway Recommendations

The recommendations address community goals and opportunities including:

- Connect communities to area amenities and everyday services,
- Connect to and loop around Hartsfield-Jackson Atlanta International Airport (H-JAIA),
- Enhance economic development opportunities in Aerotropolis downtowns and future development sites,
- Create a system that is unique to south metro Atlanta.

To translate these goals into a physical trail framework, the plan proposed opportunities at two scales: regional and local.

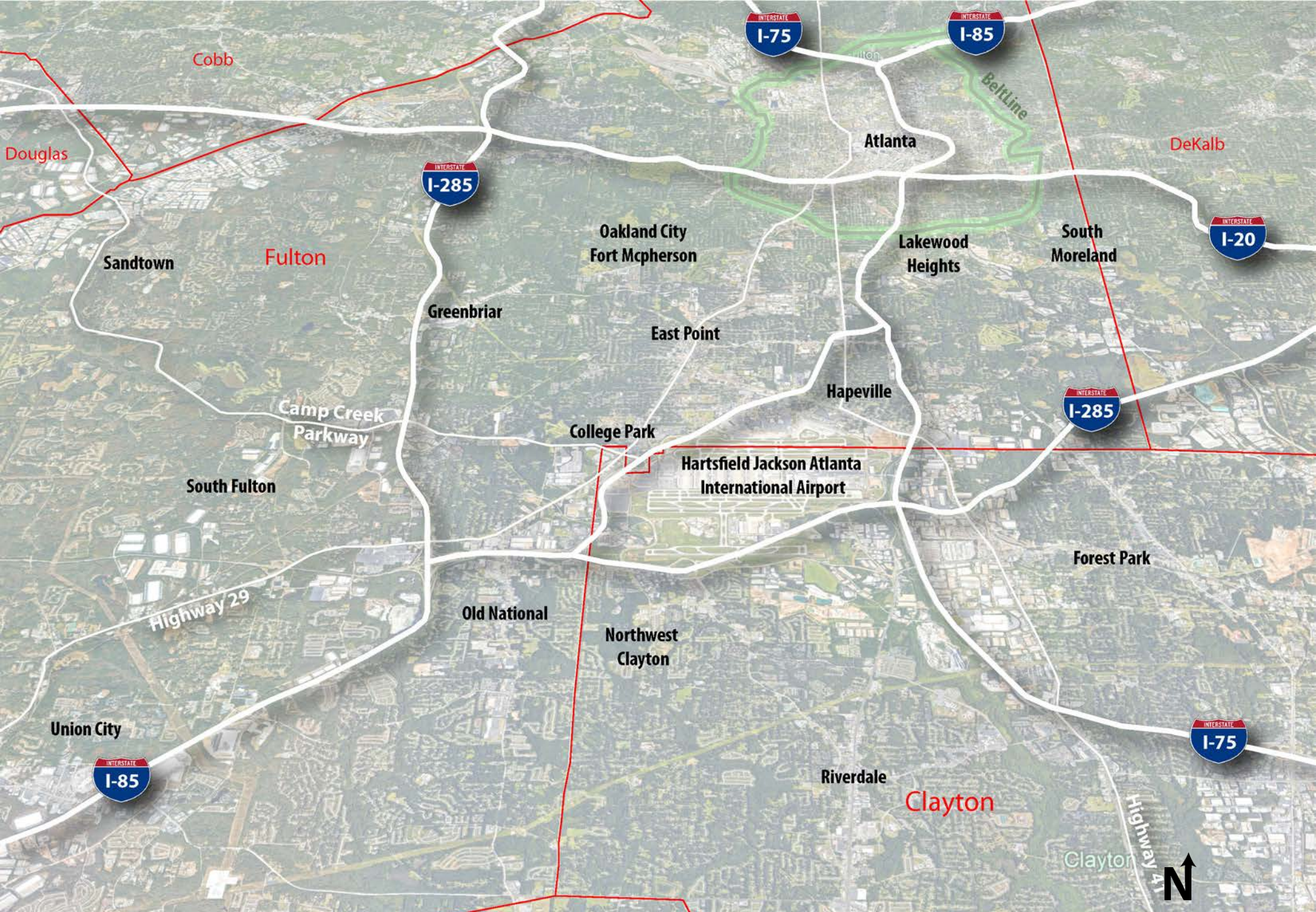


Figure 1: AeroATL Greenway Plan study area:: Bird's Eye View

Regional Framework: Regional connections prioritize safe routes and crossings at major infrastructure, such as interstates, streams and bridges. The connections identified address the goals of connecting to and around H-JAIA, connecting the Aerotropolis downtowns, and connecting community amenities, such as parks and schools. Refer to **Figure 2** on page 13.

1. Airport Loop: A secure, 15 mile trail circling the airport, the Airport Loop is an iconic opportunity to connect communities, orient visitors, and restore legibility to a complex transit hub. The trail provides an opportunity for the community to access the airport via bike or on foot, and for airport visitors to get out and stretch their legs or visit the area downtowns during a long layover. Pocket parks can provide airplane viewing platforms and aviation-themed playgrounds.

2. Connecting Downtowns: The Downtown Loop creates access to the Aerotropolis downtowns and key redevelopment sites, including East Point, College Park, Hapeville, Forest Park, Airport City, the GICC, Mountain View, Old National Highway, and Phoenix Boulevard. By providing better connectivity to these downtowns, the trail forms a framework for economic growth.

3. Outer Ring: This secondary loop connects local amenities, including parks, schools, retail and community centers.

4. Regional Spokes: The spokes complete the trail "wheel" by providing regional connections from the airport core outward to regional corridors and existing trail systems, such as the Atlanta BeltLine.

Local Network: To infill the gaps and create a truly comprehensive network, a system of local trails were identified. The Local Network provides a more refined system connecting residents to schools, parks, retail centers, and more.

In all, this comprehensive trail system includes over 350 miles of trails.

Priority Trails

Local Partners and stakeholders helped identify priority trails in their communities, as indicated in **Figure 3** on page 15. Labeled trails on this map are the first priorities expressed by Local Partners, or potential "model miles." Unlabeled segments should be considered as second and third phases in creating a comprehensive, connected priority trail system. Following are the priority trails as determined by each jurisdiction:

CITY OF EAST POINT

Priority trail areas for the City of East Point were drawn from the East Point PATH Trail System Master Plan, and include trails along Main Street (EP-2 to 7), adjacent to the Wagon Works (EP-8 and 9), and the Sumner Park trail that connects the Park to Tri-Cities High School (EP-1).

CITY OF HAPEVILLE

Key trails in the City of Hapeville, as identified by Local Partners include Virginia Avenue (HV-1 & 2) and South Central Avenue/Porsche Avenue (HV-3 & 4).

CITY OF FOREST PARK

Local Partners from the City of Forest Park identified rail adjacent trails on Main Street (FP-1, 2, and 8), to Fort Gillem (FP-3 and 4), to Hendrix Elementary School (FP-5 to 7) and trails connecting Fountain Elementary School, Starr Park and downtown (FP-9 and 10).

CLAYTON COUNTY

Clayton County's priority trail follow the Flint River headwaters (CC-1 to CC-13) to enhance connectivity and highlight an underutilized natural resource.

CITY OF SOUTH FULTON & FULTON COUNTY

Local Partners from the City of South Fulton identified trails along Camp Creek Parkway (SF.FC-1 and 2), Butner Road (FC-1), Welcome All Road (SF. FC-3), and Roosevelt Highway as priority trails (SF-FC-4 to 7).

CITY OF COLLEGE PARK

The City of College Park prioritized trail connectivity from the GICC to Airport City to Main Street (CP-7 & 8), as well as Lakeshore Drive (CP-5 & 6) and the Herschel Road/Dodson Connector (CP-1 to 4).

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT (H-JAIA)

The full Airport Loop (AL-1 to 6) is identified as the priority trail for H-JAIA. This trail follows Loop Road, encircling the airport.

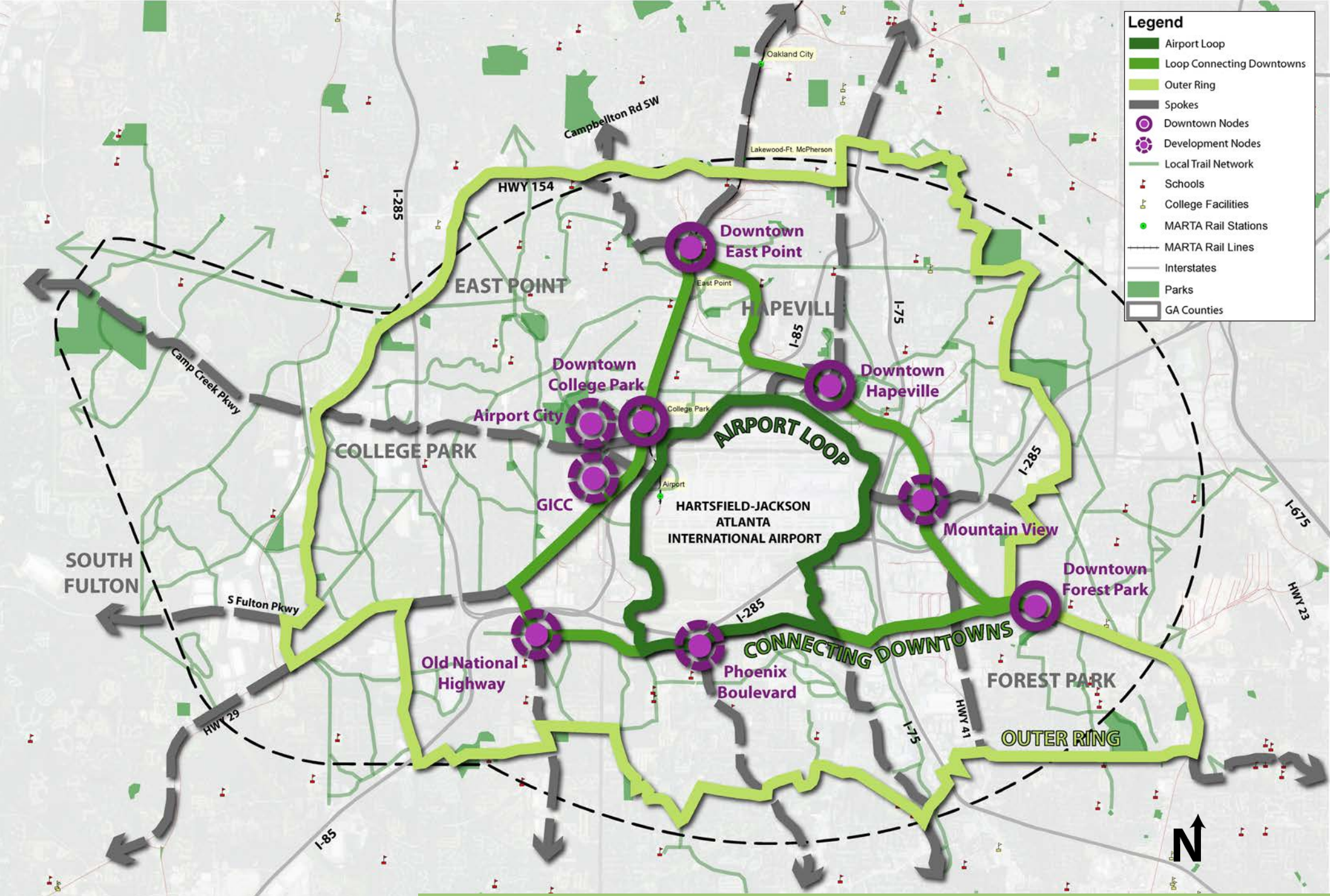


Figure 2: Regional Framework: Wheels and Spokes Concept
This study connects the Aerotropolis communities with an integrated, comprehensive bike/pedestrian trail system that provides access between job centers, everyday services, and the region's cultural and natural assets.

A total of 59 priority trails identified through valuable input from Local Partners and community stakeholders.

Trails were broken down into comprehensive segments, as identified in **Figure 3**, based on several factors.

- A change in trail typology (example: from a multi-use trail to a shared road) in response to changing road/land conditions
- Manageable implementation cost
- Jurisdictional boundaries

Ultimately, trail segments allow each jurisdiction to phase their overall trail network to be built over time and as funding becomes available.

Each of these trail segments has been detailed at a planning level to identify the trail typology and associated cost.

Priority Trails
SF.FC-1: Wolf Creek Trail
SF.FC-2: Camp Creek Parkway Trail
SF.FC-3: Welcome All Trail
SF.FC-4: Roosevelt Highway Trail
SF.FC-5: Roosevelt Highway Trail
SF.FC-6: Roosevelt Highway Trail
SF.FC-7: Roosevelt Highway Trail
FC-1: Butner Road Trail
FP-1: Forest Parkway-Fort Gillem Trail
FP-2: Forest Parkway-Fort Gillem Trail
FP-3: Forest Parkway-Fort Gillem Trail
FP-4: Forest Parkway-Fort Gillem Trail
FP-5: Hendrix Elementary-Starr Park Trail
FP-6: Hendrix Elementary-Starr Park Trail
FP-7: Hendrix Elementary-Starr Park Trail
FP-8: Hendrix Elementary-Starr Park Trail
FP-9: Starr Park-Fountain Park School Trail
FP-10: Starr Park-Fountain Park School Trail
CC-1: Flint River Trail Connection
CC-2: Flint River Trail Connection
CC-3: Flint River Trail Connection
CC-4: Flint River Trail Connection
CC-5: Flint River Trail Connection
CC-6: Flint River Trail Connection
CC-7: Flint River Trail Connection
CC-8: Flint River Trail Connection
CC-9: Flint River Trail Connection
CC-10: Flint River Trail Connection
CC-11: Flint River Trail Connection
CC-12: Flint River Trail Connection
CC-13: Flint River Trail Connection

Priority Trails
CP-1: Herschel Road/Dodson Connector
CP-2: Herschel Road/Dodson Connector
CP-3: Herschel Road/Dodson Connector
CP-4: Herschel Road/Dodson Connector
CP-5: Lakeshor Drive Bike Trail
CP-6: Lakeshore Drive Bike Trail
CP-7: East Main Street Connection
CP-8: East Main Street Connection
CP-9: Airport City Connector
HV-1: Virginia Ave.-Downtown Connection
HV-2: Virginia Ave.-Downtown Connection
HV-3: Porsche Avenue
HV-4: Porsche Avenue
EP-1: Sumner Park to Tri-Cities
EP-2: East Main Street Connection
EP-3: Main Street Connection
EP-4: Main Street Connection
EP-5: Main Street Connection
EP-6: Main Street Connection
EP-7: Main Street Connection
EP-8: Wagon Works to Downtown
EP-9: Wagon Works to Downtown
AL-1: Airport Loop-North
AL-2: Airport Loop-North
AL-3: Airport Loop-North
AL-4: Airport Loop-North
AL-5: Airport Loop-North
AL-6: Airport Loop-North

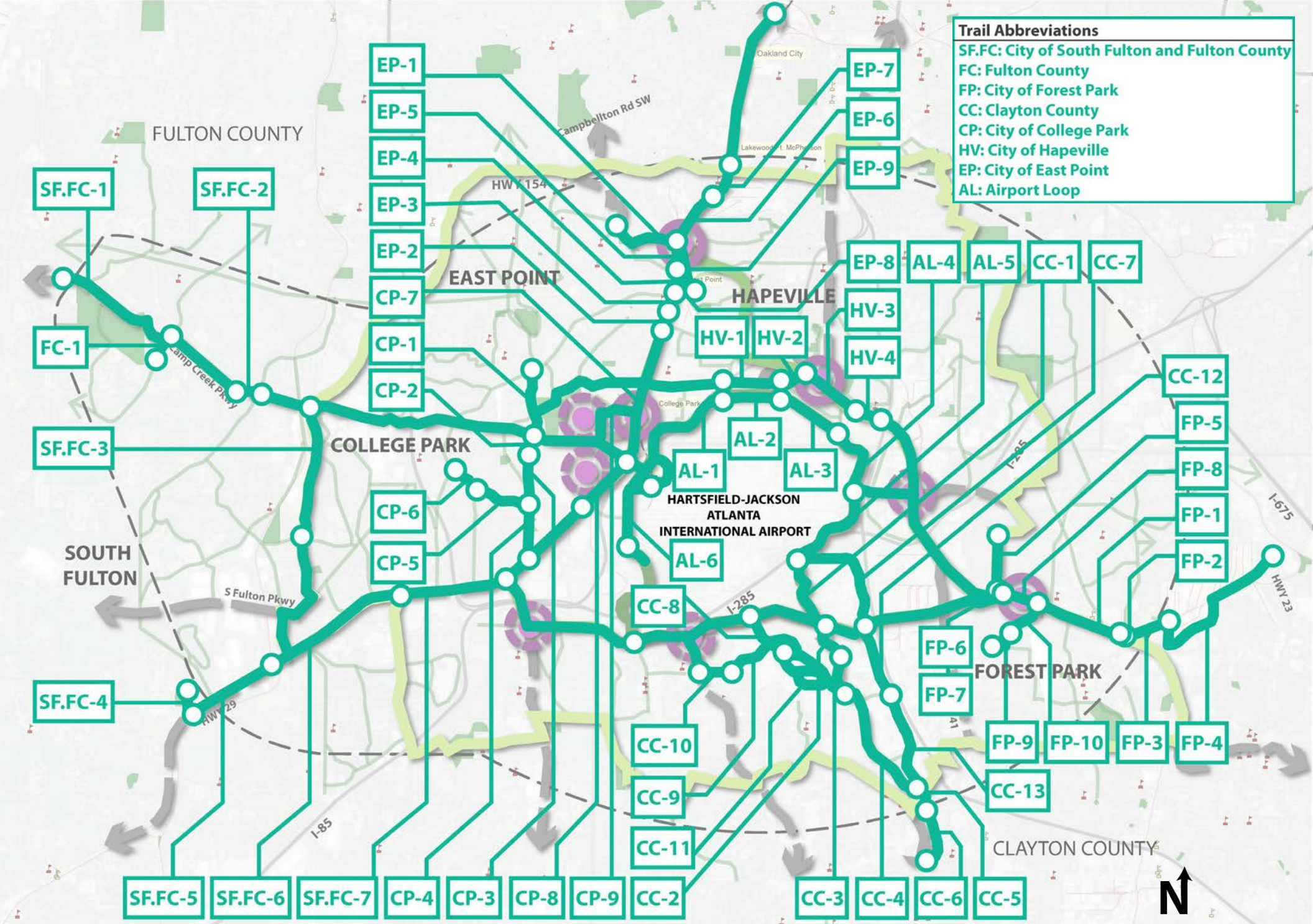


Figure 3: Priority Trail Network

Model Miles

To identify the model mile, the priority trail network, as described on the previous page, was passed through a ranking system. The ranking system prioritized trails based on the following goals:

- Goal 1: Connects residences, employment, services, retail, transit, recreation destinations, and trails
- Goal 2: Provides a Direct Connection
- Goal 3: Provides a Safe Connection
- Goal 4: Provides a Comfortable Connection
- Goal 5: Provides an Attractive Connection
- Goal 6: Ease of Implementation

Trail segments that ranked highly in the above categories were identified as our Model Miles. The Model Miles for each jurisdiction are in **Figure 4** on the following page.

EAST POINT

The identified Model Mile for East Point is the Sumner Park connection from Harris Park/Tri-Cities High School (US 29) along Norman Berry Drive and Headland Drive. This is proposed as a roadway adjacent multi-use trail approximately 1.35 miles in length. The City is currently underway with the construction document phase of this model mile. Construction is anticipated to be complete by the summer of 2019.

FOREST PARK

The identified Model Mile for Forest Park is the Starr Park-Fountain Elementary connection from Forest Parkway to Fountain Elementary along Lake Drive and West Street. The Lake Drive section is proposed as a two-way cycle track and the West Street section as a neighborhood greenway or shared road. This trail segment extends approximately 1 mile.

CLAYTON COUNTY

The identified Model Mile for Clayton County is the Flint River adjacent multi-purpose trail that connects the Loop Road trail to Forest Parkway. This trail segment extends approximately 1.2 miles.

HAPEVILLE

The identified Model Mile for Hapeville is a roadway adjacent multi-purpose trail along South Central Avenue/Porsche Avenue, from Virginia Avenue to Sunset Avenue. This trail segment is approximately 1 mile in length.

SOUTH FULTON & FULTON COUNTY

The identified Model Mile for the City of South Fulton is the Wolf Creek Trail connection. This connection extends from Enon Road to Butner Road and connects to the existing Camp Creek Trail. This will be a river adjacent multi-purpose trail totalling approximately 1.6 miles.

COLLEGE PARK

The identified Model Mile for College Park is the Airport City Connector, which will connect from the GICC, through Airport City, and into Downtown College Park. As Airport City master plans are currently being developed, this trail could not be further detailed within this study. This study recommends that the trail design be a key component in the development plans of Airport City. A secondary Model Mile for College Park, of which is further studied within this report, is the Herschel Road/Dodson Connector, which connects Camp Creek Parkway to Washington Road, along Herschel Road. This roadway adjacent trail and greenway is approximately 0.8 miles in length.

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT (H-JAIA)

The identified Model Mile for the Airport connects Charles Grant Parkway to Atlanta Avenue along Loop Road. This roadway adjacent multi-purpose trail segment is 1.4 miles in length.

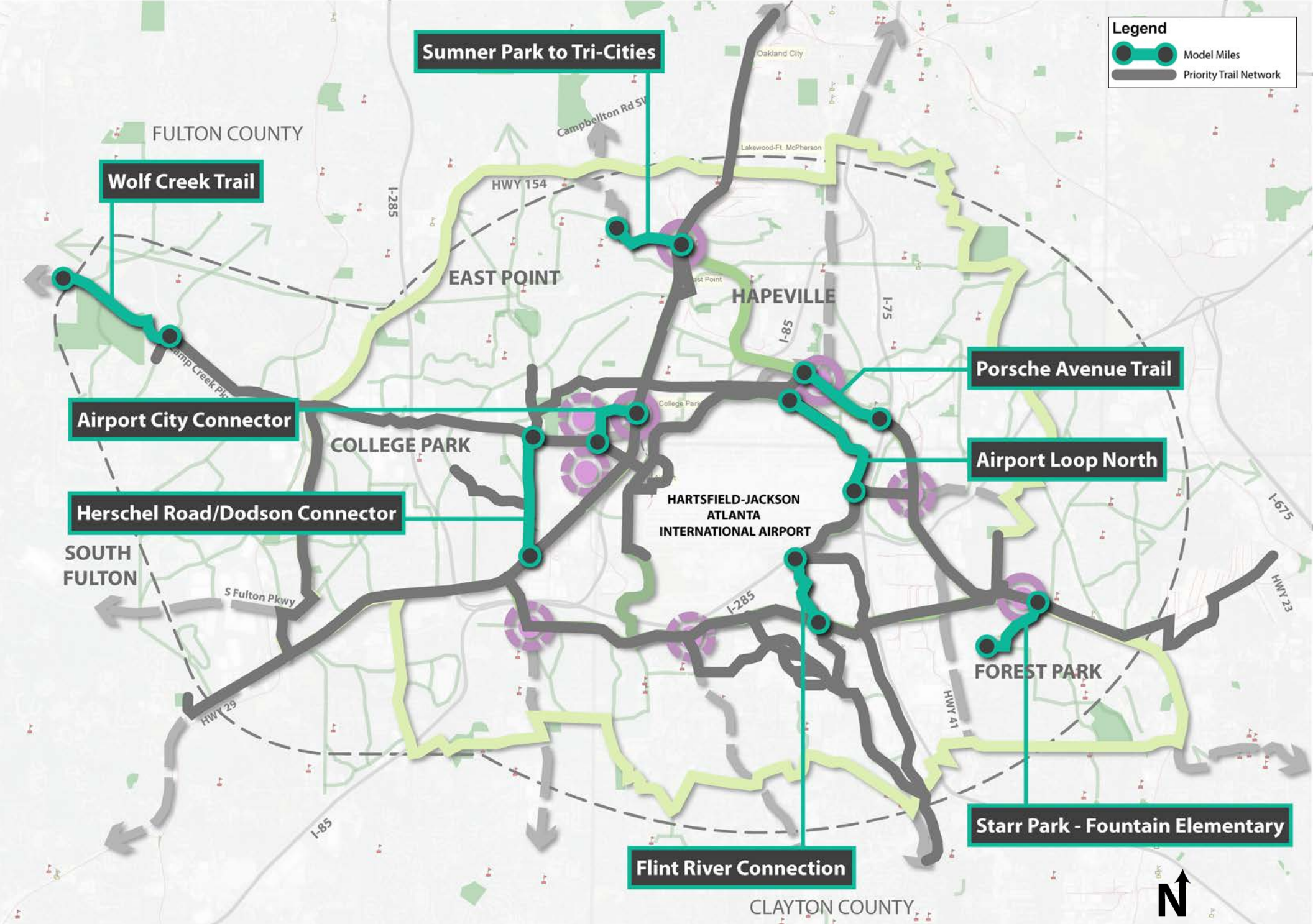
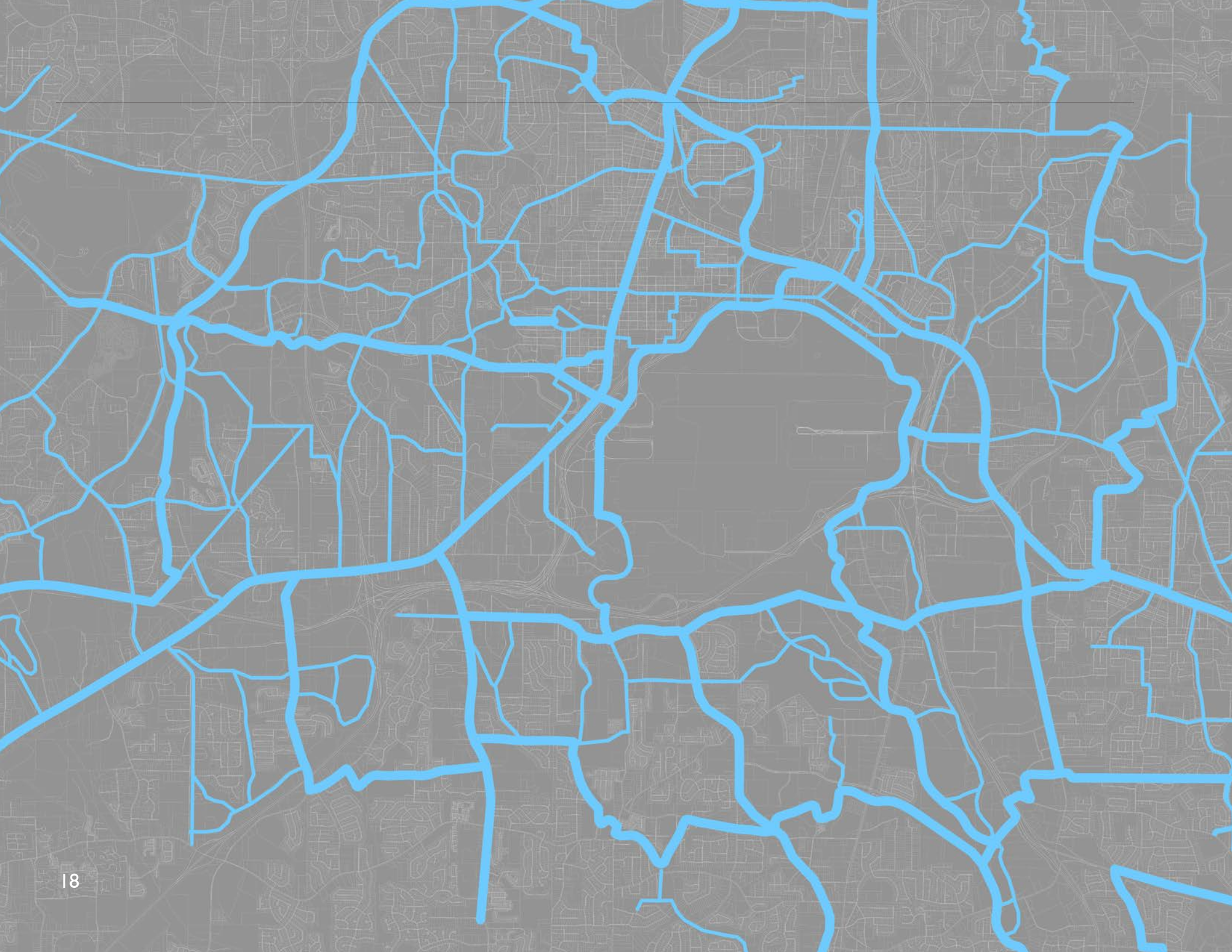
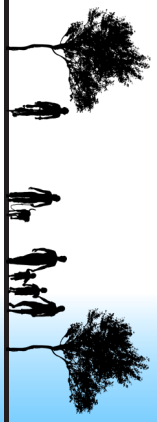


Figure 4: Model Miles





Introduction

1.0 Introduction

The AeroATL Greenway Plan is led by the Aerotropolis Atlanta Alliance (Alliance) and the Aerotropolis Atlanta CIDs (CIDs). This project is funded by the Atlanta Regional Commission (ARC) under a 2017 grant, with matching support from the Alliance, the CIDs, Hartsfield-Jackson Atlanta International Airport (H-JAIA), East Point, College Park, Hapeville, Forest Park, Fulton County, and Clayton County. Sizemore Group was selected to lead this master planning effort.

In 2016, the Alliance completed the Aerotropolis Atlanta Blueprint Plan. This plan created a comprehensive vision for the Aerotropolis Atlanta area. A key recommendation of the plan was a regional greenway trail network that connects surrounding communities to H-JAIA.

Building from the Blueprint Plan, this study aims to create a greenway system that provides the Aerotropolis communities with an integrated, comprehensive bike/pedestrian trail system that improves the quality of life, health, connectivity, and economic growth of the Aerotropolis region.

1.1 Aerotropolis Atlanta Alliance and Aerotropolis Atlanta Community Improvement Districts (CIDs)

Aerotropolis Atlanta is multi-jurisdictional district that leverages the economic power of Hartsfield-Jackson Atlanta International Airport, the world's busiest airport. Aerotropolis Atlanta creates a new vision for metro Atlanta's south side. The goal is to transform the airport vicinity into a world-class Aerotropolis by stimulating investment and strengthening public coordination for the benefit of all airport-area stakeholders. This transformative effort is led by the Aerotropolis Atlanta Alliance and the Aerotropolis Atlanta CIDs.

The Aerotropolis Atlanta Alliance, formed in 2014, is a 501c(6) Public/Private Partnership organization comprised of business and community leaders working to make the Aerotropolis Atlanta a world class destination for business, connectivity, and quality of life. The Alliance led the 2016 Aerotropolis Atlanta Blueprint Plan process which recommended this greenway study.

The Aerotropolis Atlanta CIDs includes both the Airport West and Airport South CIDs. The CIDs, working closely with the Alliance, aims to "create an economically strong, safe, attractive and vibrant community surrounding the world's most-traveled passenger airport. They are a catalyst for infrastructure enhancement through new investments, project planning, resource management and partnership development. They seek to raise the collective value of our community's commercial properties while making the CIDs a destination for new businesses, residents and visitors."

CIDs are a locally controlled, quasi-governmental entity that gain revenue from self-imposed and self-regulated property taxes on non-residential properties. The CIDs reinvest this revenue into the district for beautification, public safety, and infrastructure projects, such as trail enhancements as described within this report.

VISION

A comprehensive and inviting trail network that contributes to the quality of life and economic vitality of Aerotropolis communities by giving residents, employees, and visitors safe, direct, and enjoyable options for getting around the airport area.

1.2 Study Area Context

The study area for the AeroATL Greenway Plan includes approximately 48,000 acres surrounding Hartsfield-Jackson Atlanta International Airport. The study area includes H-JAIA, the cities of East Point, Hapeville, Forest Park, College Park, and a portion of the City of South Fulton, along with portions of Clayton County and Fulton County.

The airport is at the center of this study, both physically and conceptually. This plan creates a trail network that allows people on foot and bike to access the vibrant activity at the center of the Aerotropolis, whether it's for air travel, job opportunities, or plane watching. The concept of biking from a city center directly to a flight may be new in Atlanta, but it is a proven attraction at

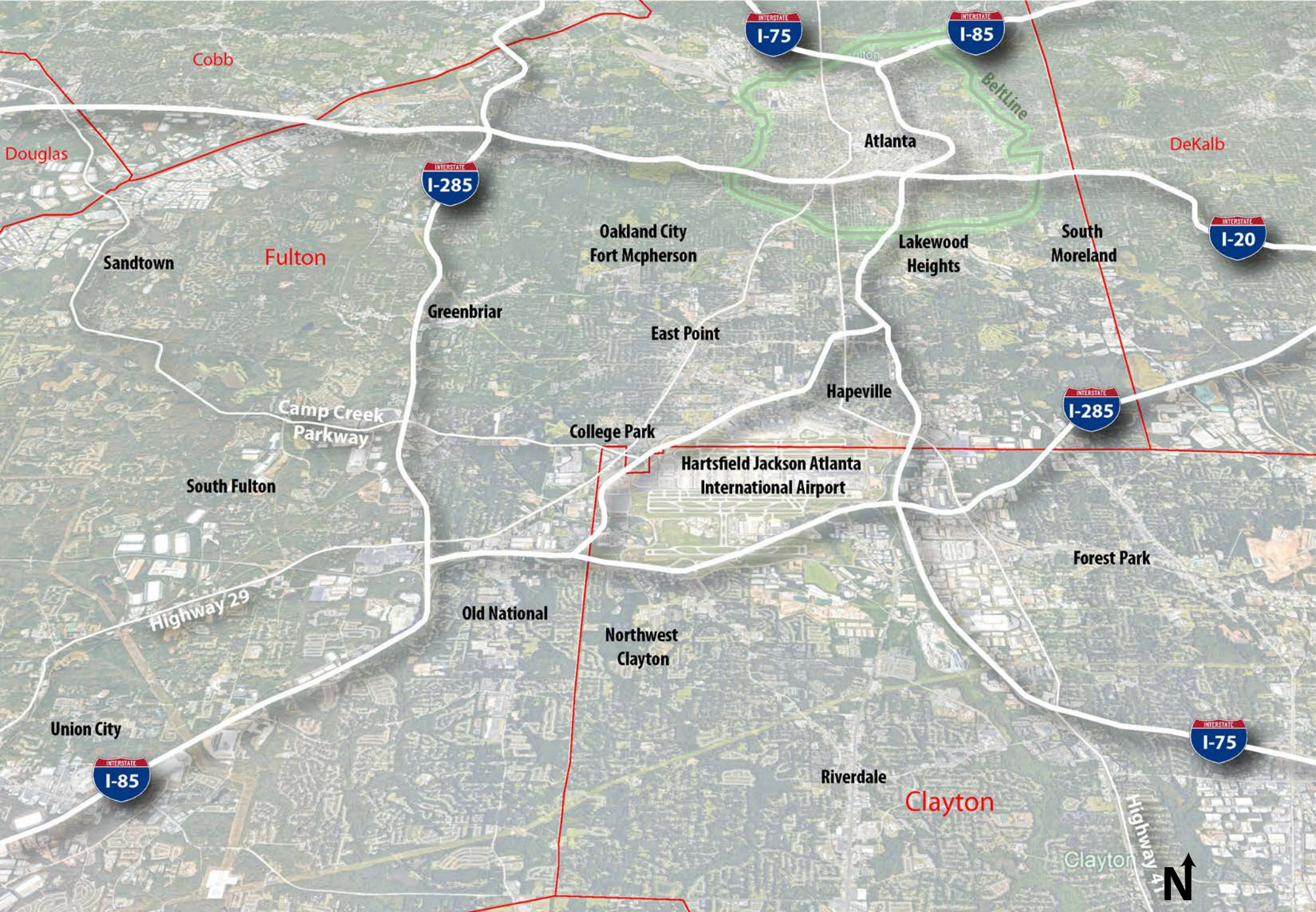


Figure 1.1b: AeroATL Greenway Plan study area:: Bird's Eye View

major airports around the world. Thoughtfully applied to the world's busiest airport and the growing communities that surround it, such connectivity has the potential to transform the entire Aerotropolis region.

This plan aims to connect several key elements in the study area including the airport; downtown districts, including downtown East Point, College Park, Hapeville, and Forest Park; community assets and amenities, including parks, existing trails, schools, shopping destinations and community centers; business districts, including Duke Business Park, Delta and Porsche Headquarters, the Tradeport Area and Phoenix Boulevard; and key redevelopment sites, such as College Park's Airport City and Mountain View.

1.3 Why Trails and Greenways?

Trails and greenways provide a wide array of benefits to the communities they serve. Some of these benefits are presented through case studies in section 2.6 of the study. While they are commonly recognized for their recreational benefits, providing places for people to walk and ride bikes, they have the power to impact and affect much more, including:

Economic Growth: Trails and greenways have provided economic revitalization to communities across the world, attracting businesses to locate near this amenity, increasing access and foot traffic to retail/entertainment districts, and opportunities for tourism by attracting visitors to the area.

Transportation/Connectivity: Trails and greenways can provide an alternative to congested and heavily traveled roadways and provide an option for those without cars to get around safely and efficiently. Connecting trail systems to transit provides multi-modal options. Imagine the added benefit of a trail linked directly to air travel.

Physical Health: Trails that connect people to places they want to go, can instill exercise into daily routines and more simply provide a place to get out and walk or ride. As health benefits are tied so directly to trails, this study incorporates health analysis in section 2.5. This analysis identifies obesity, heart disease and diabetes as leading health concerns in the study area. At the root of these diseases is inactivity which trails can help address directly.

Mental Health: Trails and greenways provide opportunities for physical activity, which has proven to have a positive impact on improved mental health. Additionally, mental health benefits can be found in the meditative quality of engaging with nature and the social engagement that can be found in interactions with community members along trails.

Community Pride and Identity: Trails and greenways provide a unique amenity for communities to celebrate, host events, and create identity with signage, art, and cultural and historic markers.

Environment: Natural trails and greenways have the added benefit of creating linear connections between habitats, protecting plant and animal species. Additionally, they provide the benefit of wetland protection/preservation and enhanced air and water quality.

1.4 The Process

This eight month planning process included analysis of existing conditions, inventory of opportunities and challenges, trail plan development, and an intensive community engagement process.

ANALYSIS

Key analysis included land conditions—topography and hydrology, existing community amenities and opportunities, redevelopment potential, land use and zoning, health, and transportation.

Existing trail master plans and build segments were studied and incorporated.

MASTER PLAN DEVELOPMENT

Our team worked closely with the community and stakeholders to develop a master trail network, which includes over 350 miles of trails. Model miles were identified through discussions with community representatives and filtered through a thorough ranking system. Additionally, recommended policies and funding strategies were identified to help guide implementation.

COMMUNITY INVOLVEMENT

An extensive community involvement program was designed and undertaken with the goal of involving all stakeholders in the study process. Through this effort, a community supported vision for the trail network was identified. The program involved Local Partners meetings, stakeholder interviews, a community survey, visioning sessions, design workshops and open houses.

This collaborative effort was an integral part of gaining consensus and support from the various stakeholders in the community.

Below is a summary of project goals identified through the community process.

Destinations

1. Connect communities to:
   - Employment centers
   - Hotels
   - Businesses
   - Community amenities
   - Entertainment
   - Transit stops
   - Airport
   - Mountain bike trails
   - History
   - Morrow's path system
2. Connect to the BeltLine

Network Configuration

3. Create a multi-use trail loop around the Airport
4. Create a trail loop connecting communities
5. Create radial "spoke" connections between loops

Amenities and Typologies

6. Use protected and multi-use trail typologies over on-road options
7. Install lighting and security on trails
8. Trail amenities: restrooms, water fountains, trash cans, benches, playgrounds, pocket parks, Wi-Fi, wayfinding, call boxes

1.5 Previous Studies and Plans

This report takes into consideration previous plans and studies in and around the study area. By recognizing areas of concern and recommendations identified by these studies and incorporating them into the final plan, as appropriate; this study proposes a holistic vision for connectivity and development in the area. Below is a list of relevant previous studies:

The Aerotropolis Atlanta Blueprint (2016)

Prepared by the Aerotropolis Atlanta Alliance and the Atlanta Regional Commission, the Aerotropolis Atlanta Blueprint took inventory of the existing conditions around the Hartsfield-Jackson Atlanta International Airport and provided a vision to guide future economic development efforts by the Aerotropolis Atlanta Alliance and other individual agencies and coalitions in the area with the world's busiest airport at its center.

The report provided guiding principles and goals for the area along with development and transportation recommendations. The report, which led to The AeroATL Greenway Plan as a supplemental study under Atlanta Regional Commission funding, identified key areas in the Aerotropolis region. These include "Airport City" near the GICC, the "Corporate Crescent" which includes a business district anchored by corporate headquarters like Delta and Porsche around the north side of the airport, "International Gateway" which is the area east of the airport, adjacent to the International Terminal, and "Cargo City" to the south. The report also identified opportunities for building and strengthening connections between neighboring cities, job centers, neighborhoods, and the airport. As part of its Action Plan, The Blueprint Plan recommended a Greenway Corridor study for the area, under its "Land Use and Urban Form" section. The Green Corridor Concept Map provided in Figure 1.4a on the following page provided a base framework to build from. This map shows connection potential around the airport and moving radially outwards into the surrounding communities.

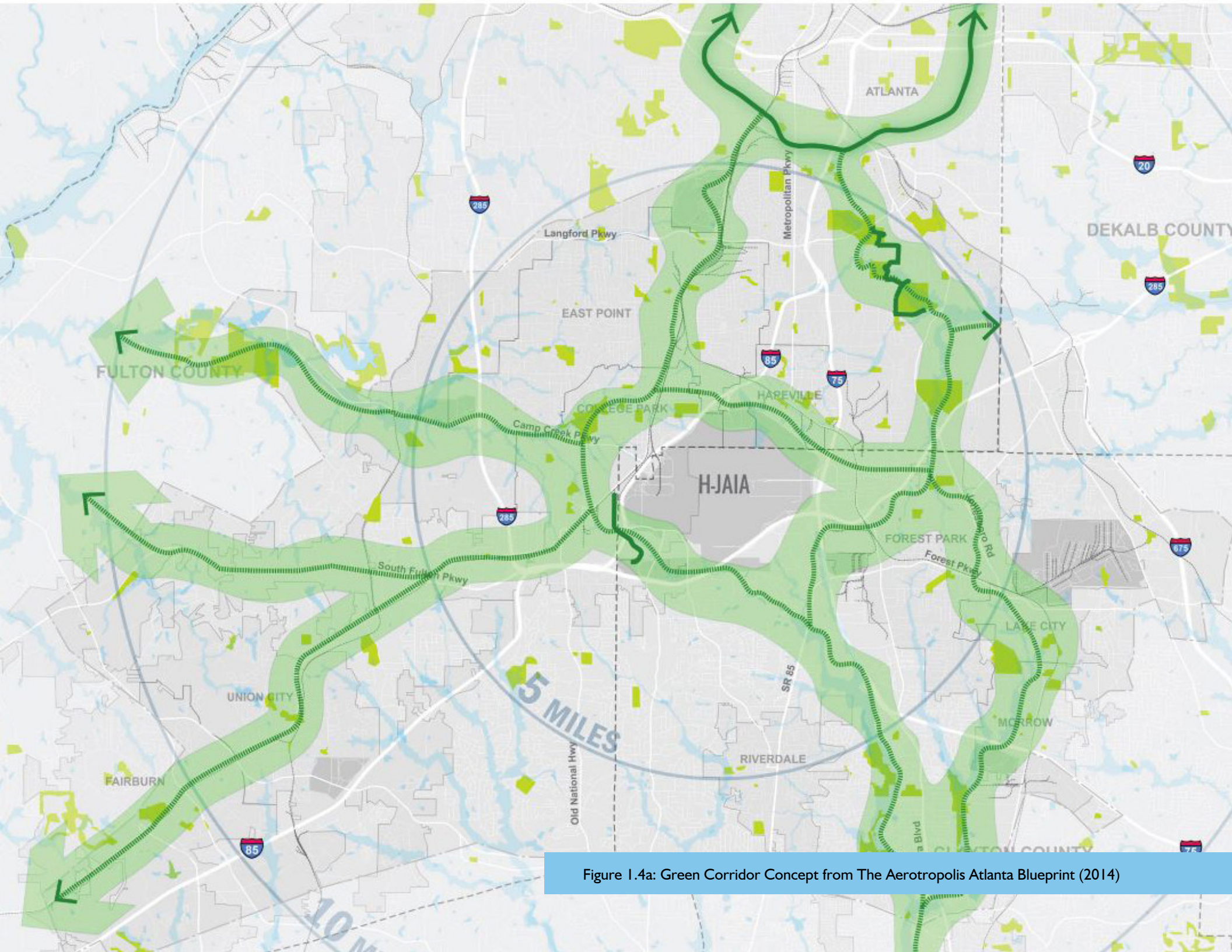


Figure 1.4a: Green Corridor Concept from The Aerotropolis Atlanta Blueprint (2014)

East Point PATH: City of East Point Trail System Master Plan & Implementation Strategy (2016)

This trail master plan report for the City of East Point provided a comprehensive trail framework for the area, dividing the trails into segments and creating implementation priorities.

The East Point PATH Trail System provides trail typologies with specific sections and signage for the proposed trail master plan. The master plan has 16 segments which connect several amenities in the city such as parks, schools, commercial areas, and downtown with the residences.

As part of its Implementation Plan, the report prioritizes four key segments and provides the rationale behind the selection. The segment from Sumner Park to the Tri-Cities High School is currently moving forward into design as the city's model mile.

Section 4.4 of this study supports the Model Mile identified for the City of East Point in this 2016 report.

East Point Downtown Corridor Vision Plan (2017)

This document provides the streetscape design plan for East Point's city center. The plan identifies traffic calming and road diet strategies for both Main Street and East Point Street. It identifies a multi-use trail along Main Street adjoining the MARTA station. The plan creates buffered sidewalks and parallel parking on one side of the road along East Point Street. Both streets remain one-way. This document complements the PATH trail plan in an attempt to make the East Point city center more pedestrian friendly.

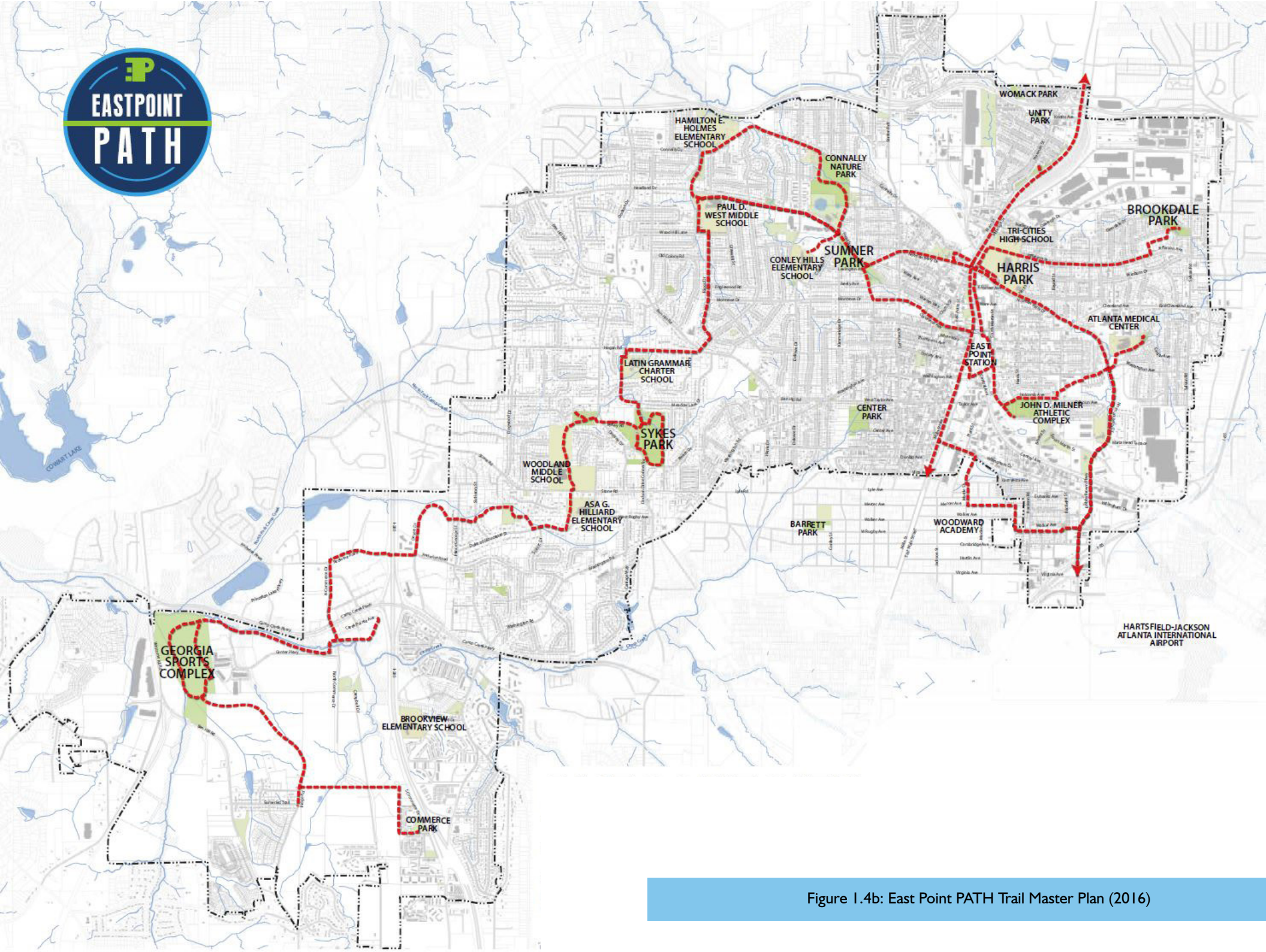


Figure 1.4b: East Point PATH Trail Master Plan (2016)

Atlanta Regional Commission Bike-Pedestrian Plan – Walk, Bike, Thrive! (2016)

This Atlanta metro area-wide bike and pedestrian plan was published by Atlanta Regional Commission. This document provides an overview of the connection strategy for the metro area and delves deeper into providing trail typologies and concepts.

The report included an assessment of regional travel patterns and existing conditions, public participation and priority topics, and recommendations.

Part I, Assessment of Regional Travel Patterns and Existing Conditions, looked at community profiles, existing available connections for transit and trails, communities willingness or use of bike paths and trails, and safety and mobility concerns. The section also analyzed the regional trails in the area and provided a map of the documented trail connections.

The recommendations section provided a Regional Trail System Concept for the entire metro area with a diagram identifying existing, identified and potential expansion opportunities. Topics such as traffic safety, mobility, air quality, access to walkability and transit, walking and biking network were looked at. The section provided immediate next steps for ARC to undertake and available policies for local stakeholders to utilize.

The report also has two supplemental documents:

Envisioning a Regional Trail Network is a feasibility report that accompanied the main report and identified qualitative and quantitative benefits of the new network.

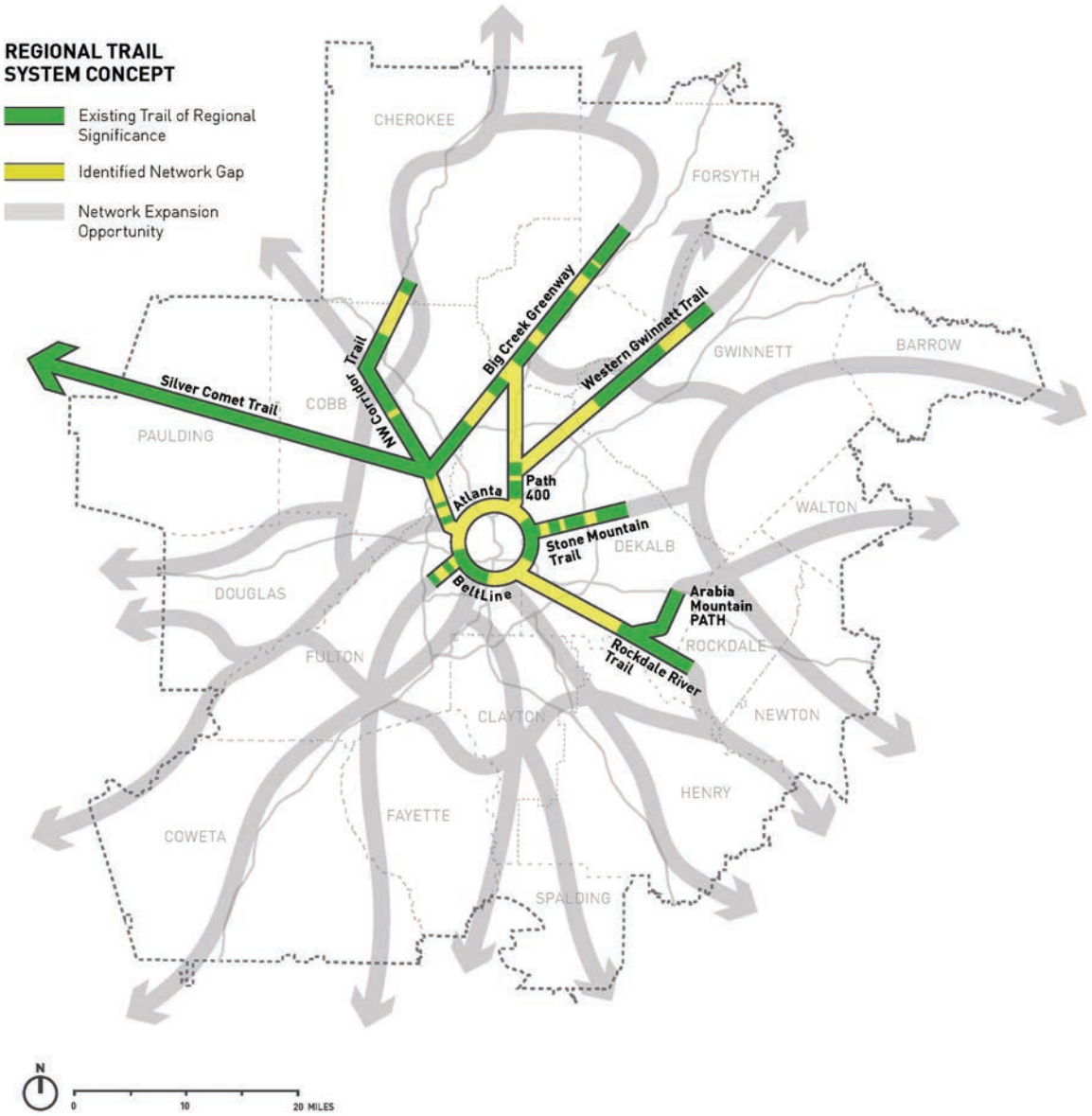
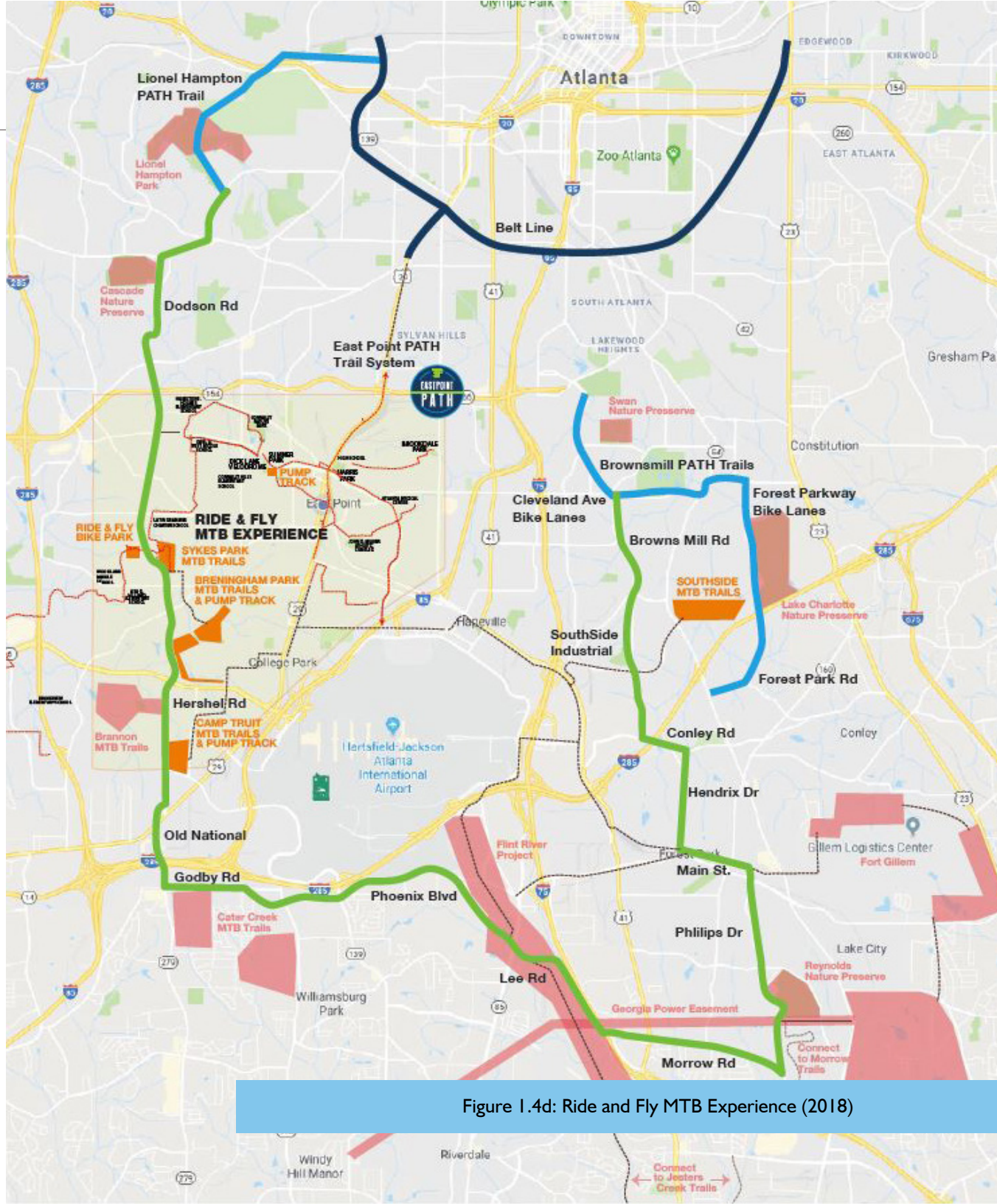


Figure 1.4c: Atlanta Regional Commission Bike-Pedestrian Plan (2016)

The Bike to Ride supplement was an idea book which includes implementation and design strategies that can be adopted by an entity to improve bicycling access to transit.

MTB Atlanta Ride & Fly (2018)

MTB Atlanta is the Metro Atlanta Chapter of Southern Off-Road Bicycle Association (SORBA). This local, non-profit organization is affiliated with the International Mountain Bicycling Association (IMBA). The Atlanta Ride and Fly plan suggests a network of off-road trails in the Aerotropolis area that are connected by existing trails or shall be connected by proposed connections. The planned trails are to connect 1 to 7 acres of park land with 17+ miles of off-road trails.



Proposed Greenway Connection Legend

- MTB Atlanta - Ride & Fly MTB Experience
- Potential MTB/PATH Expansion Projects
- Atlanta Beltline
- PATH Foundation Trails
- East Point PATH Master Plan
- Proposed City connections (PATH/ Bike Lanes)
- MTB Atlanta Proposed Aerotropolis CID Greenway PATH

Figure 1.4d: Ride and Fly MTB Experience (2018)

Clayton Connects: Clayton County's Greenway Trail Master Plan (2015)

This report took inventory of the existing conditions in the Clayton County area to propose a regional trail master plan that connects existing trails, major destinations in the county, parks and linear green corridors to existing amenities.

The report divided Clayton County into four districts for the sake of master planning. Each section dedicated to the four districts listed the trail segments recommended and the proposed construction cost. This report proposes trails to Forest Park, College Park, and along the Flint River.

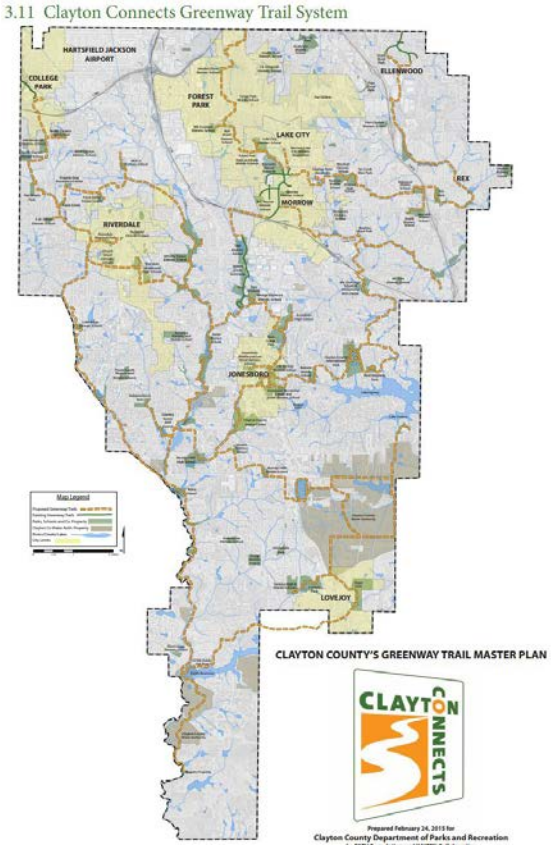


Figure 1.4e: Clayton Connects (2015)

The report also provided trail signage standards, amenities, and construction details.

Hartsfield-Jackson Atlanta International Airport: Master Plan (2015)

Building from the development program that resulted in the Central Passenger Terminal Complex in 1980, the City of Atlanta and the Department of Aviation prepared a master plan for future expansion of Hartsfield-Jackson Atlanta International Airport in 2015.

The master plan took inventory of the existing conditions of the airport, looked at aviation activity forecasts, and facility requirements. Based on this analysis and data collection, the report looked at alternative development options before finalizing a development plan for the airport.

Recommendations included sustainability solutions such as retrofitting fixtures, lights, modifications to the existing airfield, terminals and gateways, provision of new employee parking decks, and cargo expansion.

As a long range development recommendation, the master plan looked at building a sixth runway midfield (between the two existing southernmost runways). This necessitates some land acquisition and demolition on the southeast side of the airport.

The South Fulton Comprehensive Transportation Plan (CTP) for Fulton County: Recommendations Report (2013)

This report prepared in 2013 provided a comprehensive transportation plan for unincorporated South Fulton County along with seven municipalities in the area, including East Point, College Park, Hapeville, Fairburn, Union City, Palmetto, and Chattahoochee Hills. The report provided a list of short-, mid-, and long-range projects in the area. While most of these recommendations were intersection improvements or roadway operations, there were some that were relevant to the AeroATL Greenway Plan, including recommendations that touch upon pedestrian safety and crossings for Camp Creek Parkway, Old National Highway, Virginia Avenue, Riverdale Road, and East Point Main Street.

The CTP also looked at transit recommendations for the area along with beautification recommendations. Some of the bicycle and pedestrian short term projects were:

- Striped bike lane on Riverdale Road from Roosevelt Highway to Flat Shoals Road.
- Multi-use trails along Cascade Road from Atlanta city limits to the intersection with Fulton Industrial Boulevard and New Hope Road from Cascade Road to Campbellton Road.
- A multi-use trail along Main Street from downtown East Point to Lakewood MARTA Station.
- A multi-use trail along Old National Highway from Flat Shoals to SR 138.
- Crosswalk improvements at East Point Main Street/SR 14 and White Way.
- Crosswalk improvements at East Point Main Street and Dorsey Avenue.
- Old National and I-285 interchange.
- Roosevelt Highway/ Broad Street improvements from Smith Street to SR 138.

Some of the mid-term bicycle and pedestrian project recommendations included:

- 4' bike lanes on the entire length of Roosevelt Highway, Cedar Grove from South Fulton Parkway to Rivertown, and Senoia Road from West Broad Street to SR 74.
- A multi-use trail on South Fulton and Camp Creek Parkway.

MARTA extension from East Point to Hapeville to the "Southern Crescent Multimodal Center" was part of the long term transit recommendations for the area.

Cycle Atlanta: Phase 1.0 study (2013)

This report is a supplement to the Connect Atlanta Plan and it looks at bicycle connections in the core area of Atlanta. The proposed high-quality bicycle network is divided into five corridors which are all located inside the BeltLine boundary, the idea being to connect to the BetlLine.

Each corridor plan provides recommendations for bike lanes, shared lanes, multi-use trails, buffered lanes, and/or cycle tracks.

The report endeavor also led to creation of the CycleAtlanta app that collects data from people who bike in the city. This helps in identifying important routes and links.

South Fulton County Greenway Trail Master Plan (2009)

Fulton County's 2025 Comprehensive Plan recommended the creation of a long-range vision plan for a greenway trail system for unincorporated Fulton County. The South Fulton Greenway Trail Master Plan was a result of that recommendation.

The plan proposes a network of off-road trails and greenway trails that will ultimately serve transportation and recreation needs in the area. The trail master plan divided the area into six segments or subareas for the purpose of detail documentation and analysis. The trail master framework provided for plans in Cedar Grove, Cliftondale, Wolf Creek, Welcome All, Buffington Road, Sandtown and Old National areas. Connecting parks, schools, and community amenities was the main objective.

Each segment section identified places of interest that the trail connects, the approximate length, recommended width, and potential obstacles.

Cleveland Avenue Corridor study: Master Plan (2005)

This planning study, initiated by the South Fulton Medical Center (SFMC) in 2005, looked at part of Cleveland Avenue from the East Point's main city center (MARTA station) to Metropolitan Parkway SW (HWY 41) to provide short- and long-term development and revitalization goals for the community.

Some of the relevant goals identified by this study were to improve the aesthetic and experiential quality of the corridor, improving the pedestrian environment, creating a sense of identity and boundary for sub-areas, increase usable greenspace/parks and improve links in the corridor.

The master plan for the corridor provides a trail system that makes use of the existing stream and right-of-way along the corridor. The area around the medical campus incorporates the trail system as it travels around the proposed expansion of the campus. The Cleveland Avenue Corridor makes use of bike lanes (protected and otherwise) to provide efficient connections.

Livable Centers Initiative Studies

City of College Park

College Park Activity Center Livable Centers Initiative (LCI) (2008)

The City of College Park received LCI funds from Atlanta Regional Commission to create a transit-oriented, pedestrian friendly development plan for the historic downtown area in 2008.

The study identified three main nodes including the downtown node near the MARTA station and four gateways to the community. The Virginia Avenue Corridor (Virginia Neighborhood Node) was identified as a potential commercial and retail connection. The report includes three recommended bicycle projects:

- Rugby Avenue Historic Bike Path - Main Street to Washington Road - Class III Bike Path
- East Area Bike Path - East Harvard Avenue, Jefferson Avenue, Temple Avenue, and Adams Street
- East to West Connecting Trail - Harvard Avenue/Main Street to the Golf Course.

The report also includes landscape and streetscape recommendations along with quiet zones at railroad crossings, and street amenities.

College Park Transit Oriented Development (TOD) Plan and Market Feasibility Study (2011)

This report proposes a phased approach to transit oriented development (TOD) in the College Park downtown area. The report took inventory of previous studies and existing market conditions to create three development concepts for the area. The three concepts provided a mix of retail/commercial, residential, hotel, and office uses and appropriate structured and surface parking needs.

A greenspace/open plaza area was proposed next to the MARTA station as a point of focus for the TOD.

LCI 5 Year Update: College Park Activity Center (2012)

This LCI update documented progress and accomplishment on the projects undertaken as part of the implementation plan for the original LCI.

College Park LCI Investment Policies study (2017)

This study was conducted after The Aerotropolis Atlanta Blueprint Plan was released in the previous year. The report aims at providing development guidelines for a 170-acre city-owned property south and west of Downtown College park called "Gateway Center" in the report. The aim of the study is to attract developers and channel the growth efficiently.

The conceptual plan in the study divides the area into seven sectors and plans in detail for each of them. The GICC forms a major anchor point for this area. Mixed use office and residential are proposed near the center and retail, residential and commercial uses are proposed further west.

The pedestrian and bicycle trail map provided in the report shows the existing/proposed trails from the previous plans such as the Historic Downtown Connector, Phoenix Trail, Roosevelt Highway Trail, and Brady Trail. The map also shows a Global Gateway Connector Trail that goes around the GICC connecting the main street with Highway 29.

The Historic Downtown Connector and the Brady network provide essential connections to the existing school and the neighboring residential communities.

City of East Point

City of East Point LCI (2004)

Atlanta Regional Commission provided LCI funds to the City of East Point in 2004 to develop a vision plan for the city. The planning effort included community engagement, existing conditions analysis, development concepts and an implementation plan.

The design schemes proposed bike/pedestrian connectivity along West Cleveland Avenue and Irene Kidd Parkway and proposed turning Main Street into a two way street. Infill redevelopment was proposed and aimed at framing Main Street and West Cleveland Avenue as main downtown corridors. A civic center is proposed at West Cleveland Avenue and East Point Street. Catalytic projects included mixed-use infill in the Central Business District, redevelopment of the Tri-Cities Plaza, and brownfield redevelopment in Lawrence Street District.

The transportation map for the study recommended a thoroughfare greenway along Main Street and Semmes Street with east west connections on Ware Avenue and West Taylor Avenue. The map also recommended a community greenway along Lawrence Street.

City of East Point LCI 5-Year Implementation Plan Update (2009)

This LCI update documented progress on the projects undertaken as part of the implementation plan for the original LCI along with zoning, land use and transportation project accomplishments and adopted strategies.

City of East Point LCI Main Street Corridor TOD Plan (2011)

In 2011, the City of East Point received LCI funding for a transit oriented development plan along the Main Street corridor. The study divided the area into six districts to preserve the character and guide appropriate development. The area near Lawrence Street was identified as a technology and research district. A historic character district was identified near Main Street alongside a historic warehouse district. The report recommended greenspace near Main Street to enhance community amenities and attract infill development.

City of Forest Park

City of Forest Park LCI (2001)

The 2001 ARC-funded Forest Park LCI study focuses on development opportunity due to the proposed Atlanta to Macon commuter rail line. The 292-acre study area includes a proposed rail station and Forest Park's Main Street district. The LCI study provides pedestrian and bicycle connectivity recommendations, including a trail along the railroad right-of-way connecting Forest Park to the Airport and bike connectivity to the proposed rail station along major routes, such as Forest Parkway and Main Street.

City of Forest Park LCI 5-Year Plan Update (2006)

This LCI update documented progress on the projects undertaken as part of the implementation plan for the original LCI including zoning, land use and transportation project accomplishments and adopted strategies.

City of Forest Park LCI 10-Year Plan Update (2011)

This 2011 LCI update expanded the study area to include the State Farmers Market. The plan provides an update on projects undertaken as part of the implementation plan for the original and 5-year update studies including zoning, land use and transportation project accomplishments and adopted strategies. Major accomplishments include the downtown streetscape project, acquisition of land for the future commuter rail station, and zoning updates.

Starr Park Master Plan (underway)

The City of Forest Park is currently, at the time of this report, developing a master plan for Starr Park. Starr Park is Forest Park's largest park at 18 acres. It's location adjacent to downtown Forest Park to the north and Fountain Elementary School to the south, make it a central community gathering space with potential to connect these area amenities with trails, bicycle lanes, and sidewalks.

City of Hapeville

Virginia Park: City of Hapeville LCI study (2001)

For the 2001 ARC-funded LCI study, the City of Hapeville developed a vision for Old Second Ward (currently Virginia Park). The recommendations proposed updates to land use and zoning, along with transportation projects. Relevant projects include:

- Streetscape improvements and bike lanes along Virginia Avenue.
- Streetscape improvements along South Central Avenue, Rainey Avenue, and International Blvd.

The report recommended adoption of a bike and pedestrian network policy to develop connections in the city.

Hapeville - Virginia Park LCI Study: 5-Year Implementation Plan Update (2006)

This LCI update documented progress on the projects adopted in the 2001 LCI and new projects underway since the 2001 study.

Hapeville Main Street Town Center LCI study (2005)

The City of Hapeville received LCI funding in 2005 to prepare a master plan for the entire city. The study area, however, excluded the Virginia Park neighborhood, as it had been the focus of the 2001 LCI.

As part of the framework plan, the report identified North and South Central Avenue, Dogwood Drive, King Arnold Street, Virginia Avenue, and Atlanta Avenue for streetscape improvements. The framework plan also identified business and neighborhood centers along with possible gateway nodes.

The study proposed a long-term development concept for the Dearborn Plaza to include a mix of retail, civic, commercial and residential uses. A downtown concept plan envisioned a mixed use development west of the Dearborn Plaza, across the street from the Wells Fargo offices.

The report provided a proposed bicycle network that included bicycle lanes, on-street bicycle routes and multi-use trail locations. An on-street bicycle route was proposed along North Central Avenue and Old Jonesboro Road. A bicycle lane was proposed along Dogwood Drive while the multi-use trail was proposed along King Arnold Street and connecting Parkway Drive through the park.

Hapeville Town Center LCI: 5-Year Update Evaluation and Appraisal Report (2010)

This 5-year update looks at the original LCIs for Virginia Park and Town Center and reports the progress and statuses of recommended projects.

City of Hapeville Bicycle and Pedestrian Plan (2012)

The Bicycle and Pedestrian Plan for the City of Hapeville refined the recommendations put forth in the Hapeville Town Center LCI study of 2005. The report touched upon four major areas in connectivity planning: intra-city connectivity, regional connectivity, use of "share the road" routes, and ADA improvements.

The report looked at sidewalk conditions in the city and potential for trails in local parks.

Sidewalk and two way bicycle facilities were proposed along Dogwood Drive. Bicycle lanes (on both sides of the street) were proposed along King Arnold Street. Shared lanes or "sharrows" (called "share the road" routes in the report) were proposed along North Central Avenue, Airport Road, around Master Park through the neighborhood, and along Old Jonesboro Road including some other minor streets.

Plan Hapeville 2025: Comprehensive Plan (2005)

This Comprehensive Plan report provided documentation and assessment of existing conditions in the city. The components collected and assessed include demographics, survey input, existing housing stock, market

trends, transportation projects and aspirations, connectivity and community facilities.

The transportation section of the report provided a write-up on the previous LCIs that planned and proposed bicycle and pedestrian connectivity. The document also provided a short-term work program for the city and documented status and updates of the projects underway.

City of Hapeville Comprehensive Plan/LCI Study Update (2017)

City of Hapeville received LCI funding from Atlanta Regional Commission in 2016 for a joint LCI Update and Comprehensive Plan Update.

The document took inventory of the existing demographic, geographic and market conditions along with a community participation process to gauge the community needs and aspirations.

The study proposed five redevelopment nodes in the City, two of which were gateway nodes and one of which was the historic downtown node. A proposed land use and zoning map were provided to guide the zoning changes in these areas.

The report also provided a comprehensive trail/path network map for Hapeville that proposed for linkages along Airport Loop Road, North Central Avenue, Old Jonesboro Road, Virginia Avenue, King Arnold Street and other minor streets.

The Virginia Avenue node was treated as a key gateway node on the west side as it connects to East Point and College Park.

Northwest Clayton

Northwest Clayton LCI Plan (2004)

This LCI study sponsored by Clayton County and the Atlanta Regional Commission looked at the area in North Clayton from Godby Road to Flat Shoals Road and from the Fulton County line to to the Cherry Hills Redevelopment. The effects of the airport's fifth runway on the northern portion of the LCI study area was one of the main concerns addressed by the LCI.

The pedestrian and bike network plan for the LCI proposed connections to the Northcutt Elementary School and North Clayton Middle School and High School. The bike-pedestrian connections made use of an off-road network behind the schools.

Northwest Clayton LCI 5-Year Update (2011)

This 5-year update acted as a evaluation and appraisal report for the original 2004 LCI. The report documented complete and pending tasks proposed in the original LCI. Some of the completed items were required changes in zoning, adoption of Northwest Clayton TAD, and adoption of the county-wide parks and trail master plan in 2008.

Northeast Clayton

Southlake Mall and Mixed Use District LCI (2011)

The Southlake Mall and Mixed Use District LCI study was approved in 2011. This study was funded by the Atlanta Regional Commission for the City of Morrow.

The report proposed a framework plan for the LCI study area which concentrated on retrofit and redevelopment, civic realm and livability enhancements, and connectivity.

As part of connectivity, the framework plan proposed a multi-use trail connection around the mall, a loop connecting the Reynolds Nature Preserve (north of the mall) and the identified mixed use node along North Lee Street.

The report identified two districts in the study area namely Town Center District (with the mall and area around Southlake Parkway), and a mixed use district at the intersection of Morrow Road and North Lee Street.

City of Mountain View LCI (2014)

Clayton County along with its partners conducted this LCI study for the strategically well-located Mountain View area, east of the H-JAIA. The area under consideration has a significant amount of developable land and sits in close proximity to the airport's international terminal.

The study looked at practical and aspirational concepts for the area. The plan proposed a mixed use commercial node with a museum and a hotel near the airport's international terminal entrance (Charles W. Grant Parkway). East of Highway 41, the plan proposed a transit station site, a regional activity center and potential for a global office distribution.

A multi-use path was proposed along the relocated Old Dixie Road and Conley Road.

Old National Highway

Old National Highway Transit Oriented Development LCI study (2004)

This Transit Oriented Development LCI study was undertaken by Fulton County and City of College Park in January 2004. The LCI study concentrated solely on Old National Highway. For the purpose of this study the highway was divided into three nodes. The first node consisted of the area between I-285 and Old Sullivan Road, the second node concentrated around the intersection of Old National Highway and Godby Road, and the third node concentrated around the intersection of Old National Highway and Flat Shoals Road to the south.

The study took inventory of the existing land uses around the corridor and suggested potential changes in zoning and future land use. The study also recognized potential design opportunities and developable vacant land around the corridor.

The report also proposed cycle tracks, bus service lanes, and traffic calming techniques to be implemented on the highway.

Old National Highway Transit Oriented Development LCI study: 5-Year Update (2008)

The five year update that followed the original 2004 LCI took inventory of projects completed post the original LCI and documented pending items.

City of Riverdale

The City of Riverdale LCI Town Center study (2006)

This LCI study for the City of Riverdale proposed a concept plan with three subareas: Upper Riverdale Enclave, Lamar Hutcheson Enclave, and the Riverdale Town Center.

Each subarea included various development steps including consolidation and redevelopment of parcels into developable land and multi-purpose connectivity.

A Riverdale Trail Plan was proposed which identified local bicycle and pedestrian friendly connection opportunities.

The Trail Plan proposed a bike and pedestrian network along Highway 85 from Adams Drive to the north to Highway 138 to the south. Portions of Valley Hill Road, Church Street, King Road and Lamar Hutcheson Parkway were also considered for the bike pedestrian network.

The plan also proposed a loop connection to the new proposed Riverdale Town Center. This loop connected the town center to the Flint River Greenway Trail which was proposed by Georgia Department of Transportation.

The City of Riverdale LCI Town Center study: 5-Year Update (2013)

This five year update looked at the status of the project list proposed in the original 2006 LCI. Several of the rezoning recommendations and the first phase of the new town center were complete.

Oakland City Fort Mac

Oakland City/Lakewood LCI (2004)

This LCI study adopted in 2004 identified several streets in the study area for primary and secondary streetscape improvements. Streets identified for primary streetscape improvements were Sylvan Road, Dill Avenuse, Campbellton Road, Metropolitan Parkway, Lee Street, Murphy Avenue, Deckner Avenue, and Astor Avenue NW.

The study also proposed greenway trails along Lee Street and Cahoon Street connecting Perkerson Park to the elementary school to the south. A greenway connection was also proposed along the abandoned railway line north of Avon Avenue.

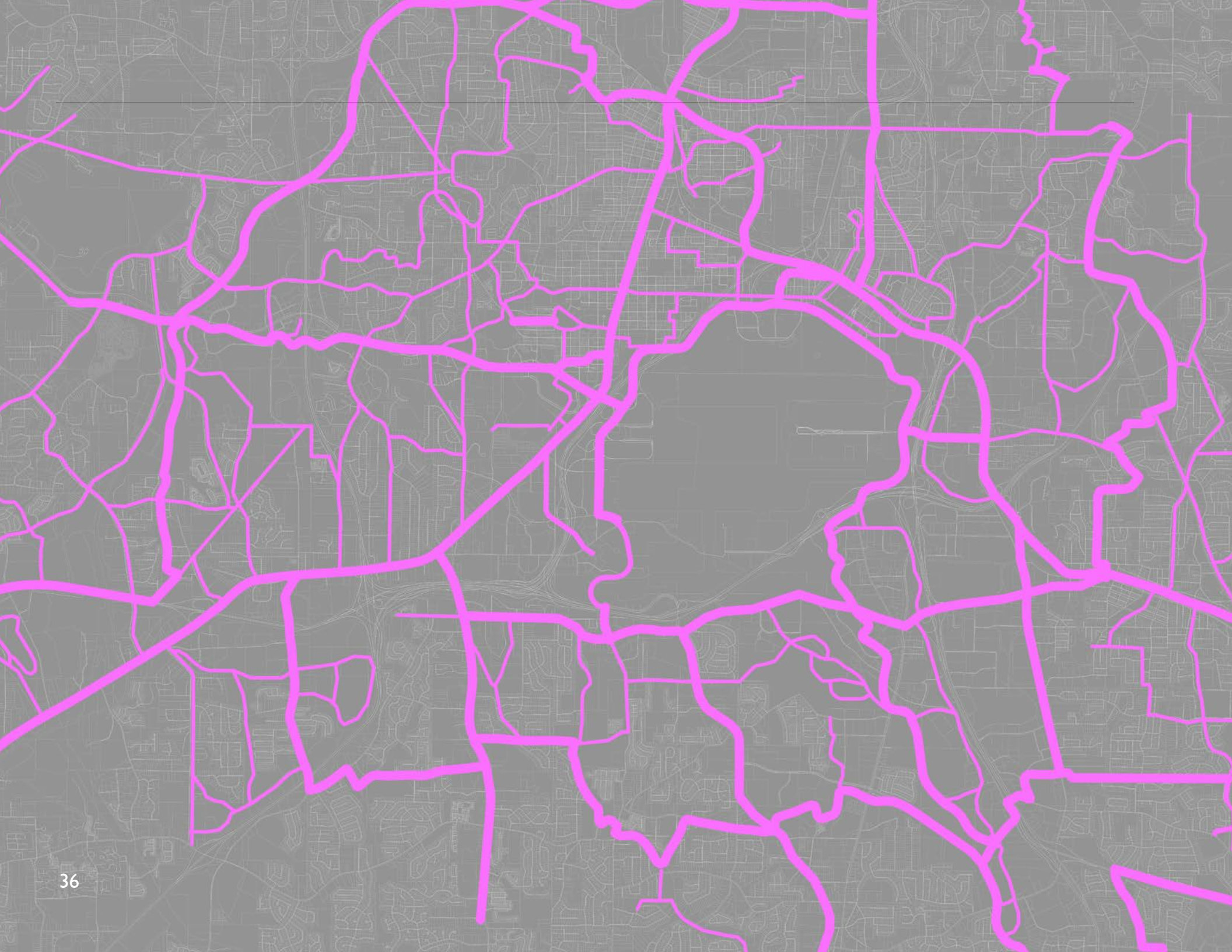
Oakland City/Lakewood LCI: 5-Year Update (2009)

This five year update to the 2004 LCI study documented the completed, on going, and pending projects from the implementation plan.

Oakland City Fort Mac LCI Plan (2016)

This LCI study included the Fort Mac area along with the original Oakland City area. The report documented the existing conditions and proposed a concept master plan for the study area.

The concept master plan identified three nodes in the area and proposed for potential development around the BeltLine node, the Oakland City node, and the Fort Mac node. The report also included streetscape improvements along Lee Street, Sylvan Road, Astor Avenue SW, and Victory Drive.



Facts and Analysis

2.0 Facts and Analysis

This section identifies existing study area conditions, including assets and opportunities, existing and planned trails, existing land use, zoning and land conditions, transportation conditions, a health assessment, and case studies.

The study area boundary includes cities that surround the airport, namely City of East Point, City of Hapeville, City of Forest Park, and City of College Park, along-with some portions of the City of South Fulton and Clayton County. The simple oval boundary is extended to the west to include key areas to connect to, including Camp Creek Parkway to Wolf Creek Amphitheater and South Fulton Parkway to include employment centers at Buffington Road and Mason Road.

2.1 Assets and Opportunities

Key assets and opportunities are identified in Figure 2.1a and include:

Schools

Because of the size of the study area, multiple school districts are included within the study boundary, including Fulton County, Clayton County, and DeKalb County.

Figure 2.1 identifies K-12 schools, marked with a red flag, and universities/colleges, marked with a yellow flag. Clayton State University is the largest institution in the area and sits just east of the study area.

Employment Centers

Employment centers are generally located in the center of the study area, clustered around Hartsfield-Jackson Atlanta International Airport (H-JAIA). The H-JAIA is the largest employer in the study area and much of the surrounding employment is directly related to airport uses and access. Tradeport, which sits just east of the airport, is home to several large distribution/warehouse facilities and airport-related office, including the Federal Aviation Administration. Delta's Headquarters is located just north of the airport and Porsche's North American Headquarters is situated north east of the airport, allowing for ease of access for international travelers.

The Georgia International Convention Center (GICC) provides conference and meeting space directly connected to H-JAIA.

Warehouse, distribution and associated office predominately make up the employment characteristics of the Aerotropolis area. Major employment districts of this kind include Sullivan Road, Buffington Road, Duke Business Park, Welcome All Road, and Phoenix Boulevard.

An active and emerging agriculture and food distribution center sits south of the airport, with the Forest Park Farmers' Market as the main anchor. Refrigerated distribution centers are located near the airport for quick access to airport cargo.

Employment centers are denoted with a peach color in Figure 2.1

Parks

There are approximately 35 parks located within the study area, including public golf courses, passive parks, sports fields, and nature preserves. The Wolf Creek Amphitheater and Park, Brown's Mill Golf Course, Starr Park, Reynold's Nature Preserve, Burdette Park, Welcome All Park, Georgia Soccer Park, the College Park Golf Course, Brenningham Park, Sykes Park, and Sumner Park are significant and active public greenspaces within the study area.

Parks are marked in green on Figure 2.1

Shopping Centers

Major shopping centers are located predominately in the northwest portion of the study area and include Greenbriar Mall and Camp Creek Marketplace. In the southeast portion of the study area, Forest Square Shopping Center and Southlake Mall are the major shopping districts.

Greenbriar Mall: Opened in 1965, this 680,000 square feet enclosed mall has more than one hundred stores and services including three anchor stores.

Camp Creek Marketplace: This retail shopping center has easy access and visibility from I-285 and draws a significant day-time population for lunch, shopping, and services. The shopping center includes approximately 720,000 square feet.

Southlake Mall: Owned by Bayer Properties, this enclosed mall serves the southeast region of the study area. The two story mall opened in 1976 and is home to approximately 120 stores including 3 anchor retailers. Total retail floor area for the Southlake Mall is approximately 1,010,000 square feet.

Forest Square Shopping Center: This shopping center, at Jonesboro Road and Forest Parkway, includes a Wholesale Food Outlet as the only major retail store with several local businesses and shops.

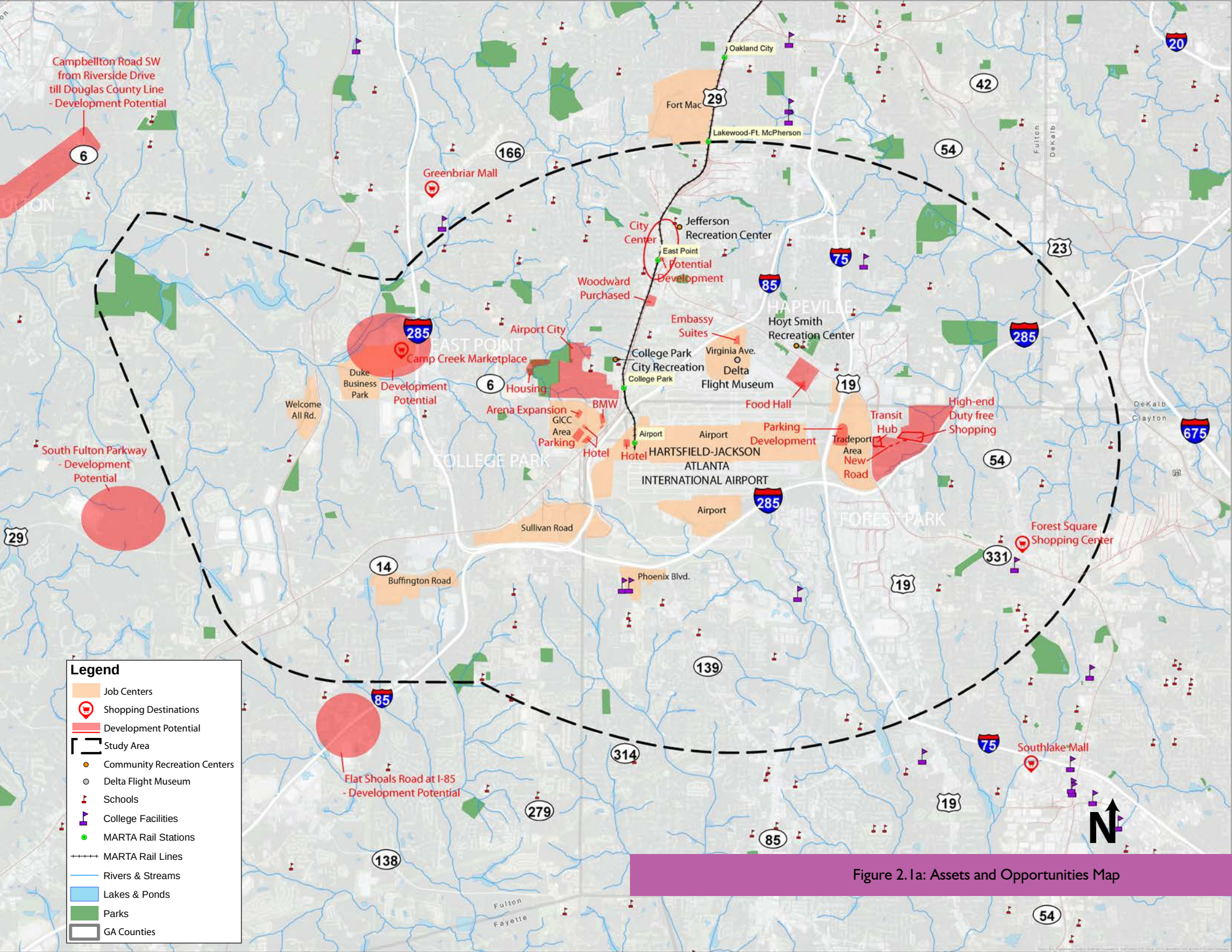


Figure 2.1a: Assets and Opportunities Map

Development Potential

Figure 2.1a also identifies development potential and opportunities in and around the study area. These areas were identified based on available information from various stakeholders shared through interviews and meetings. Key Development areas include:

- Downtown East Point has potential for infill development near the MARTA station and currently under-construction city center. The city would like to see this area grow into an active downtown.
- Mountain View: Situated just east of the H-JAIA international terminal, Mountain View includes hundreds of acres of undeveloped land ripe for growth.
- Airport City: The City of College Park is currently working with a master developer to create a mixed-use commercial district between Downtown and the GICC.
- Camp Creek: The area surrounding Camp Creek Marketplace has potential for growth. Building from the success of the Marketplace and access to the airport and interstates, this area could see new business districts and associated mix of uses.

2.2 Existing and Planned Trails

Existing Trails

The AeroATL Greenway Plan is unique in that it incorporates multiple existing trails in and around the study area. Figure 2.2a identifies the existing built trails in the region in light green. Below are the trails:

- Southtowne Trail: This multi-use trail connects Swan Preserve, Brown's Mill Golf Course and South Bend Park.
- Atlanta BeltLine: This ongoing rails-to-trails project will eventually create a 22-mile loop connecting Atlanta's intown neighborhoods. Portions of the trail north of this study area have been completed, while others are still being planned. The BeltLine Westside Trail opened in Spring 2018.
- Cascade Road: Figure 2.2a identifies the bike lanes along Cascade Road.
- Camp Creek Parkway: Figure 2.2a identifies the Camp Creek Trail running alongside Camp Creek Parkway, the Wolf Creek Trail near Wolf Creek Amphitheater, and Princeton Lakes Trail along Redwine Road.
- Phoenix Trail: The Phoenix Trail runs along an abandoned railway southwest of the airport. There is also an existing bike lane along Riverdale Road east of Phoenix Trail.
- Clayton County Trails: There is an existing network of trails in the City of Morrow that connect the community to the Reynolds Nature preserve and to Southlake Mall.
- College Park: A portion of the Brady Trail connects to the College Park Golf Course.

Planned Trails

Planned trails, from previous studies, were also identified to guide the trail planning process.

There are two trail systems that have been planned and are nearing construction. The Highway 29 trail in the City of Atlanta, has a majority of funding to implement this two-way cycle track from the City of Atlanta boundary north into downtown. The Atlanta BeltLine Southside Trail, similarly has been planned and land recently acquired. Funding and construction are pending.

Multiple LCI Plans, Greenway Plans, and Master Plans fall within the study area that identify potential trail connections. Following is a list of key relevant studies:

- The East Point PATH: City of East Point Trail System Master Plan & Implementation Strategy, prepared by the PATH Foundation and Kaizen Collaborative, delineates a trail network in the City of East Point. This plan was incorporated into recommendations within this report.
- The Clayton Connects Clayton County Greenway Trail Master Plan, prepared by the PATH Foundation and Kaizen Collaborative, identifies a trail system in Clayton County. The report divided Clayton County into several districts to plan the network in detail. The trails under districts 1 and 2 fall under the study area and were incorporated into this report.
- The College Park LCI Investment Policy Studies report, prepared by Atkins, proposes trails north of the airport in College Park. This plan documents the Brady Trail and connections to and around the GICC campus. These trail concepts were incorporated into this report.
- The Hapeville LCI Update, prepared by Sizemore Group, proposes a priority trail network for the City of Hapeville. The trail network connects the city to surrounding communities and provides an intra-city network. The trails also connect to other planned trails such as the Atlanta Beltline. This system was incorporated inot this report.
- South Fulton County Trail Master Plan: This plan provides trail connections for the communities of Old National, Welcome All, Cedar Grove, Clifton Dale, Wolf Creek, and Sandtown. This network was incorporated into this report.

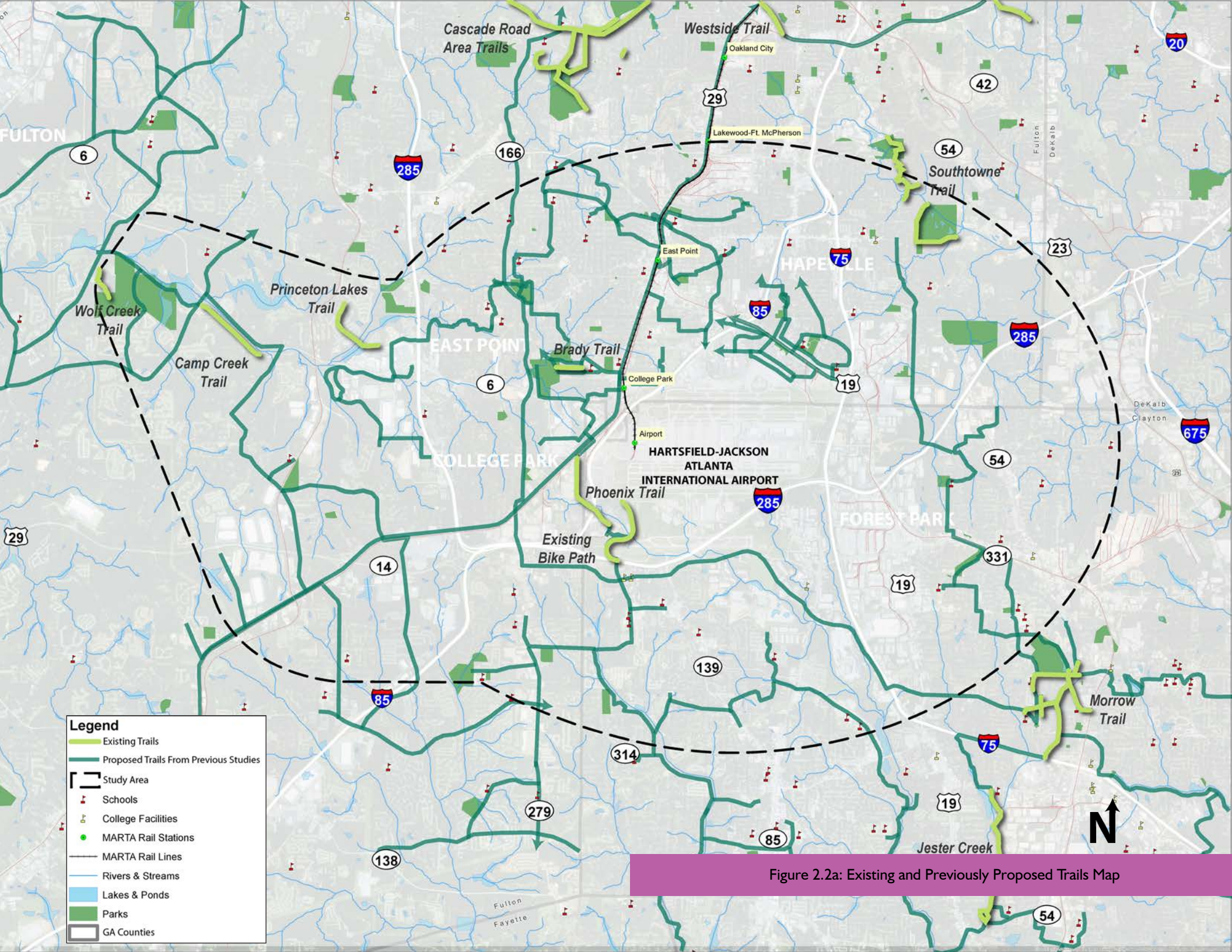


Figure 2.2a: Existing and Previously Proposed Trails Map

2.3 Land Use and Land Conditions

Existing Land Use

The AeroATL Greenway study area encompasses approximately 48,000 acres. The current land uses within the study area are predominately single family residential and commercial (Refer to Figure 2.3a).

Commercial

Figure 2.3c identifies the existing commercial areas in red and commercial vacant lots in dark red. A significant amount of commercial uses are concentrated along the main interstates and highways. The area consisting of the intersection of I-85 and I-285 and Camp Creek Parkway and I-285 have a significant amount of commercial parcels.

Areas along Highway 29 near East Point and College Park MARTA Stations and areas in Downtown Hapeville show smaller sized commercial parcels. These represent the local businesses, small shops, and offices in the area.

Areas around the Camp Creek Parkway and I-285 intersection show large number of vacant commercial land as well. This indicates the potential of future growth in the area.

Office

Office, as identified in blue is scattered throughout the study area, with few large concentrations of office districts. The "Corporate Crescent" north of the airport, does show a larger concentration of office.

Residential

A majority of the land in the study area is residential and sits behind the commercially lined major corridors. Most of this residential is single family. There are some multifamily/apartment homes distributed near the intersection of Camp Creek Parkway and I-285, and along Highway 41 in Clayton County. A significant amount of apartment homes are present to the south of the airport.

There is a considerable amount of vacant residential land along Camp Creek Parkway in South Fulton, concentrated around the Wolf Creek Amphitheater.

Public/Institutional

Instituational/Public use includes schools and public facilities. Major public facilities include the H-JAIA and the GICC

Parks/Recreation/Conservation

Parks, recreation, and conservation land is located throughout the study area as each community has several greenspace facilities. The Wolf Creek Amphitheater and Park, Brown's Mill Golf Course, Starr Park, Reynold's Nature Preserve, Burdette Park, Welcome All Park, Georgia Soccer Park, the College Park Golf Course, Brenningham Park, Sykes Park, and Sumner Park are significant and active public greenspaces within the study area.

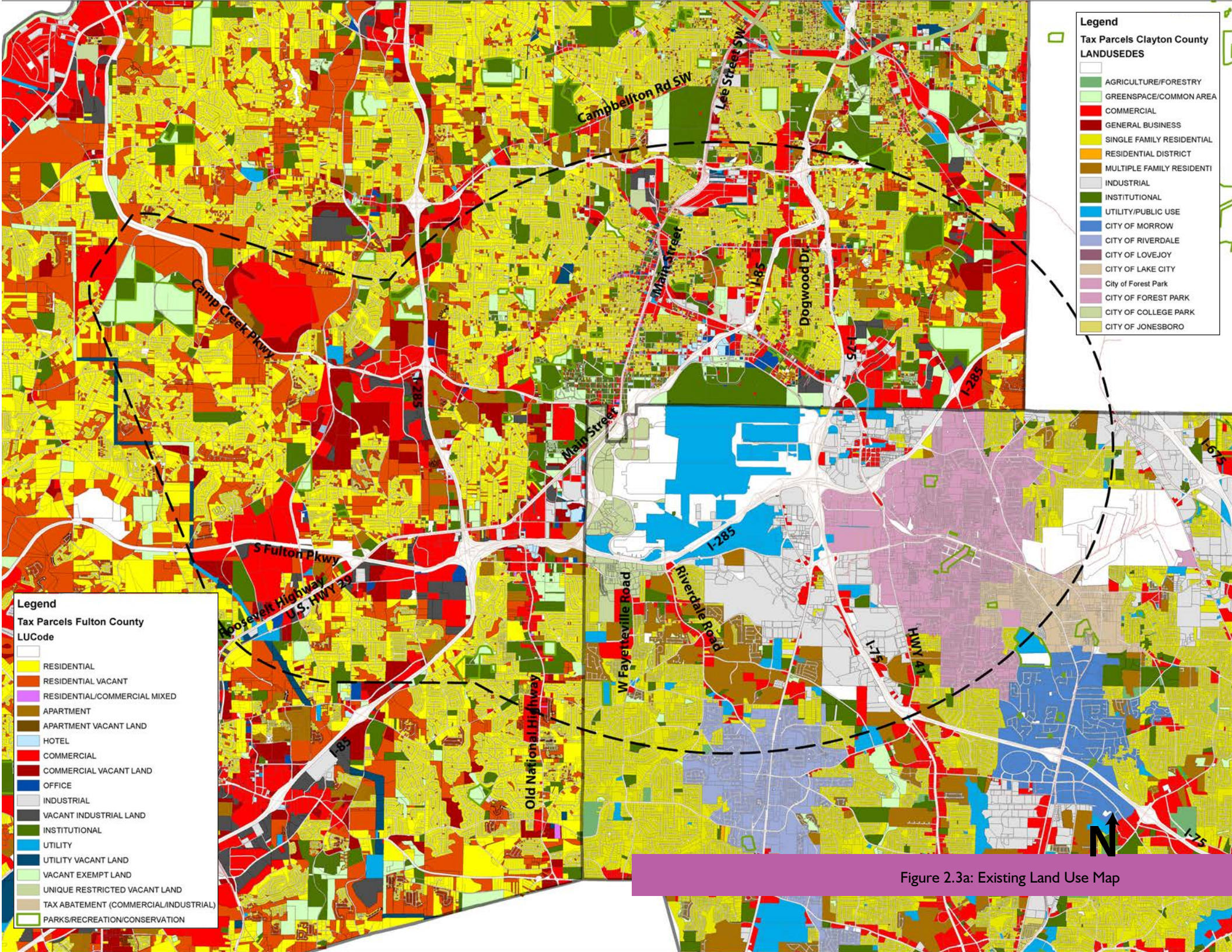


Figure 2.3a: Existing Land Use Map

Existing Zoning

Figure 2.3b provides a map of the currently adopted zoning categories within the AeroATL Greenway Plan study area.

The zoning categories closely follow the land uses in Figure 2.3a. There is a significant amount of commercially zoned land along major interstates and highways. Figure 2.3b also highlights the industrial zones in the region. There is a large amount of industrial land south and southeast of the Airport, along intersections of I-285 and I-85, and along South Fulton and Camp Creek Parkway. The majority of land east of the airport is zoned as light industrial, unlike the remaining industrial land in Clayton County, which is zoned as heavy industrial.

A significant amount of the tax exempt land—including public/institutional and parks—is scattered throughout the area.

Each jurisdiction has unique urban design regulations incorporated into zoning codes. Standards include site development standards, building orientation, natural features, lighting and signage, sidewalks, parking and spatial relationships. A unified trail standard should be considered in all area zoning regulations to develop a consistent look and feel for the AeroATL Greenway Plan. Further policies are proposed in the Implementation Section of this report.

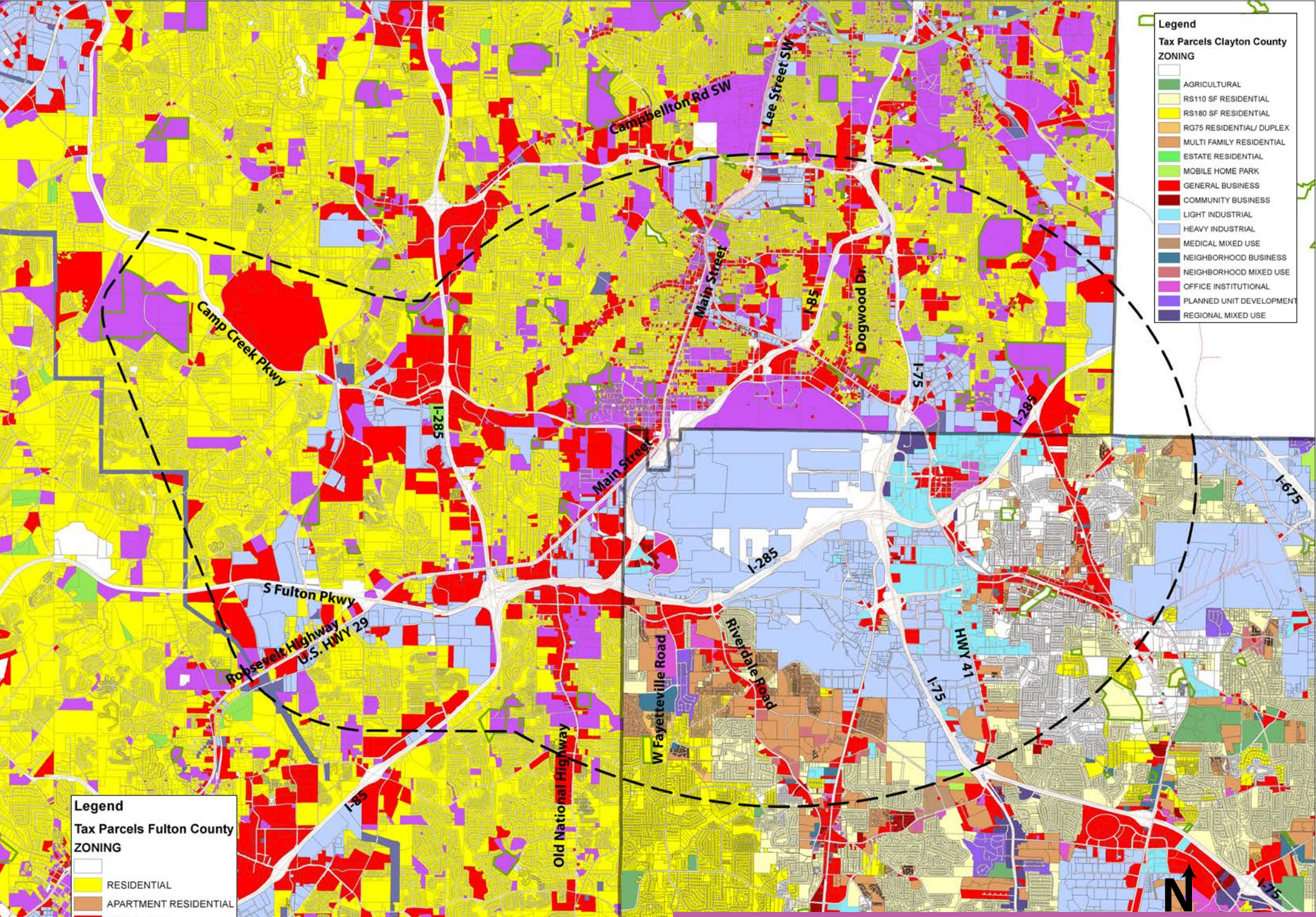


Figure 2.3b: Existing Zoning Map

Vacancy Map

The majority of vacant land parcels are residential use. A majority of the commercial vacant parcels are close to the main highways and Camp Creek Parkway/I-285 intersection. Figure 2.3c highlights existing vacancies within the study area

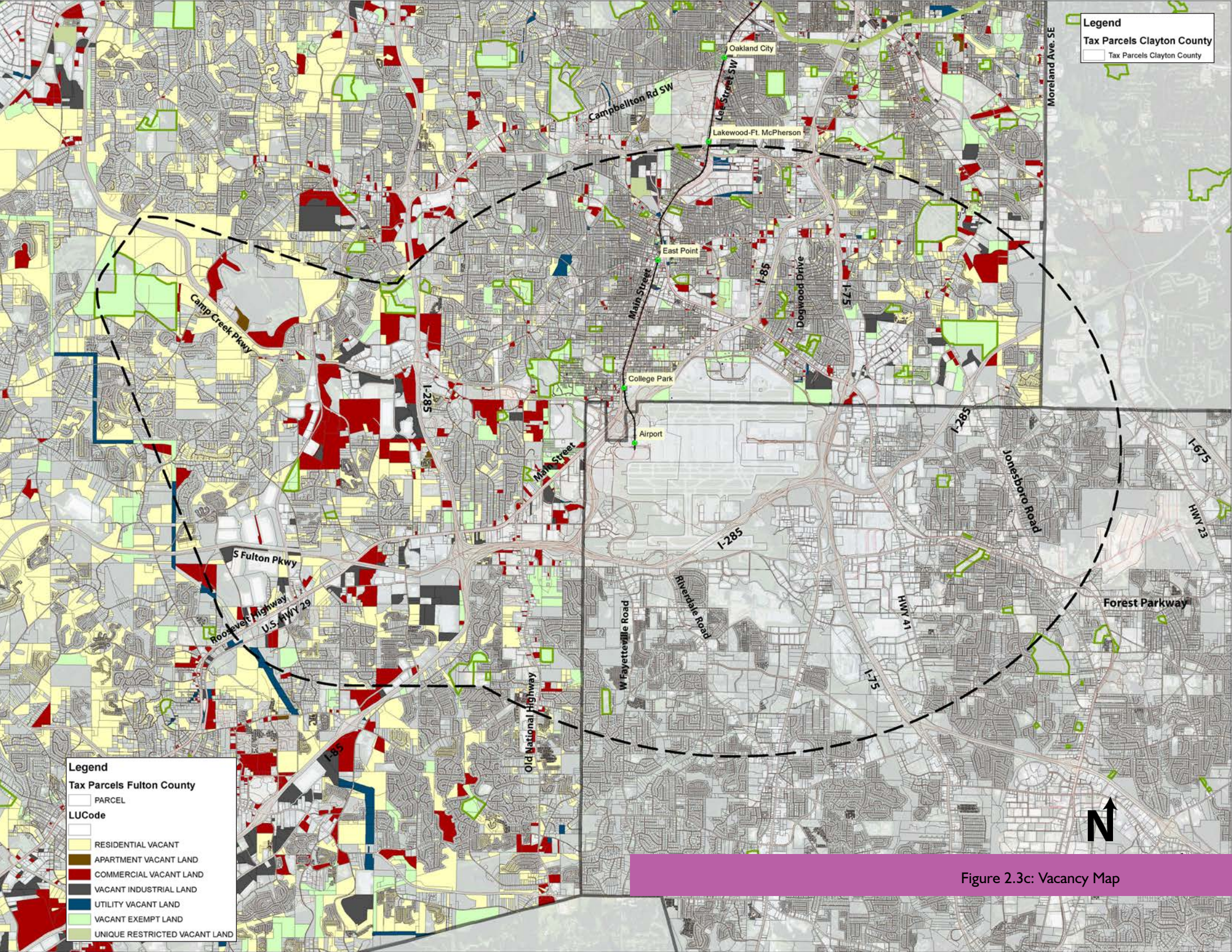


Figure 2.3c: Vacancy Map

Land Conditions

Water Resources

Figure 2.3d provides a map of hydrology within the study area. According to GIS data, there is one major floodplain that crosses the study area. The City of College Park and a portion of the airport sit within this 100-year floodplain

The study area includes Atlanta's three main watersheds—this is where the Chattahoochee, Flint, and South River watersheds come together. The headwaters of both the Flint River and South River begin in East Point, just north of the airport, and flow outward radially from it. The Flint River eventually joins the Chattahoochee River to flow into the Gulf of Mexico, the South River joins the Ocmulgee River on its way to the Atlantic Ocean.

Camp Creek and South Utoy Creek flow northwest to join the Chattahoochee River. The Flint River, Georgia's second longest river, flows for nearly 2 miles through culverts under the airport. It is joined by its tributaries Sullivan Creek and Mud Creek just south of the airport and later, by Morning Creek near Jonesboro.

The South River flows east from East Point into Southeast Atlanta, joined by Clayton County tributaries Poole Creek and Conley Creek on its way into DeKalb County.

Floodplain Zones Description:

ZONE A: An area inundated by 100-year flooding, for which no BFEs have been established.

ZONE AE: An area inundated by 100-year flooding, for which BFEs have been determined.

ZONE X500: An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 100-year flooding.

BFEs: Base Flood Elevation is the computed elevation to which floodwater is anticipated to rise during the base flood. BFEs are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles. The BFE is the regulatory requirement for the elevation or flood-proofing of structures. The relationship between the BFE and a structure's elevation determines the flood insurance premium.

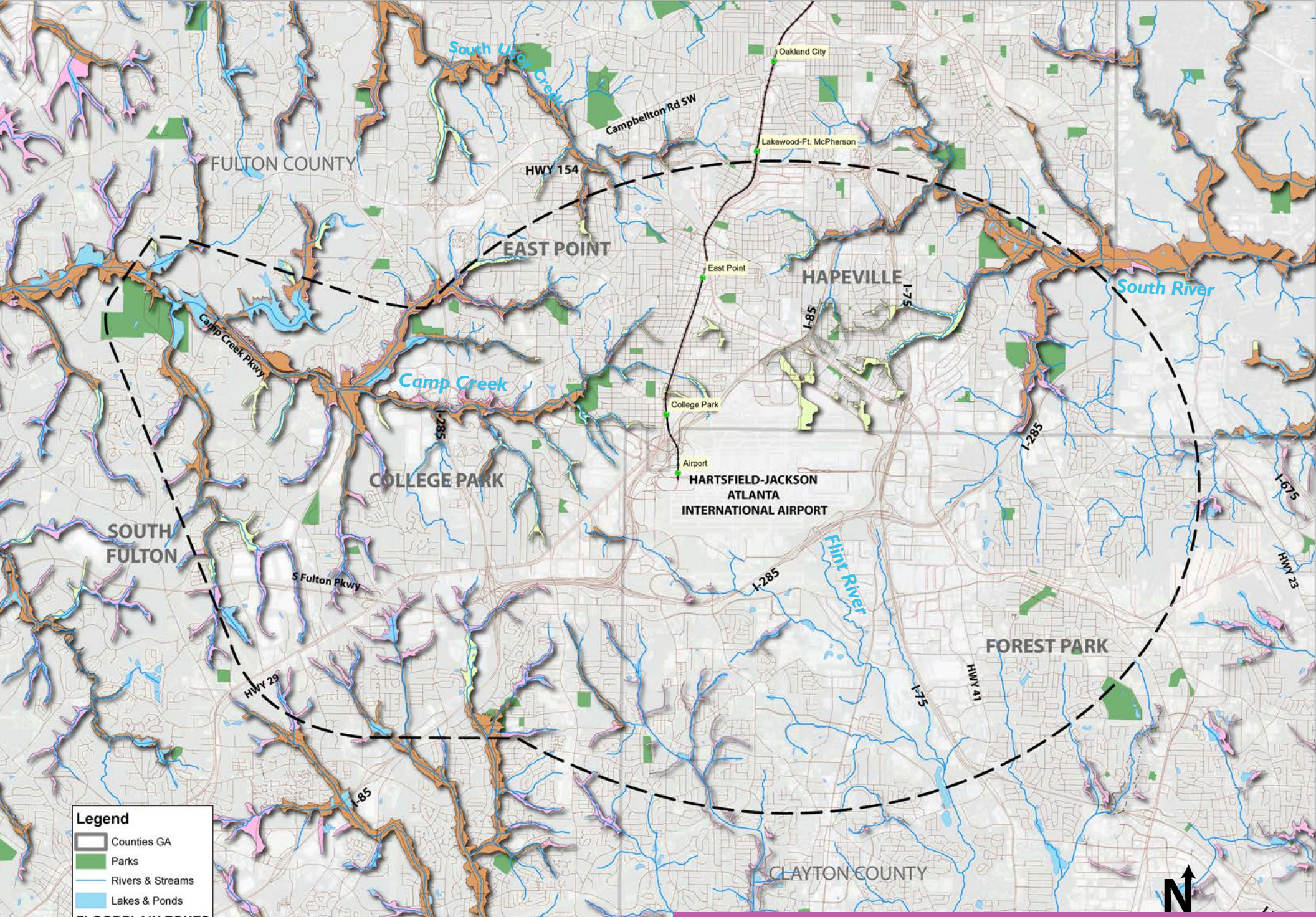


Figure 2.3d: Hydrology Map

Land Cover

Land cover maps show how much of a region is covered by forests, wetlands, impervious surfaces, urban development, agriculture, and other land and water types.

Figure 2.3e illustrates existing land cover in the region. The majority of the land in the study area is considered commercial and industrial. Areas of Downtown Hapeville and East Point illustrate significant amounts of commercial along their historic core.

A significant amount of forested land is present along Camp Creek Parkway and portions of I-285 east of the airport. Three major quarries are present to the south of the airport, two of which are situated along the Flint River.

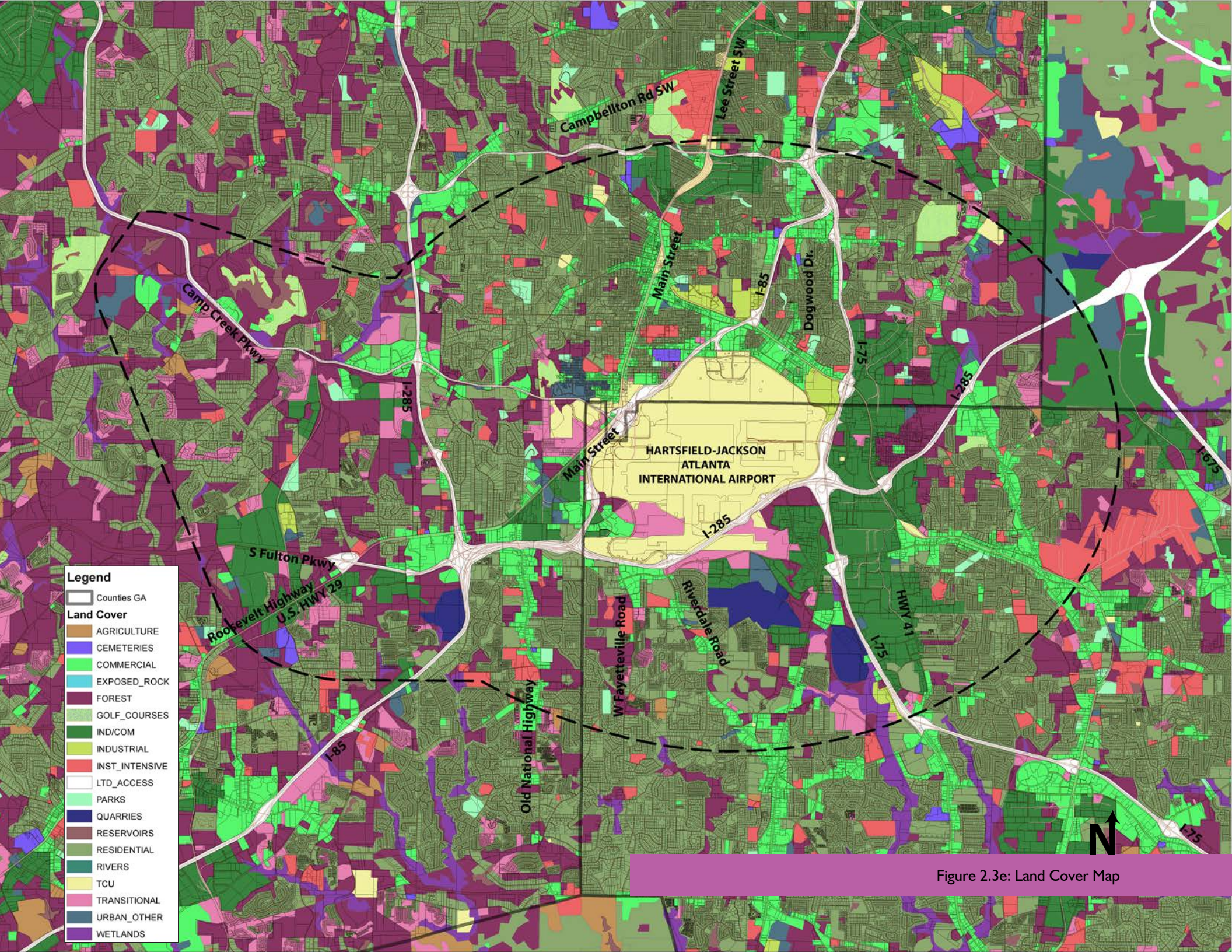


Figure 2.3e: Land Cover Map

2.4 Transportation

This section provides an overview of the existing transportation network and facilities in and around the study area.

Existing Transportation Network

The AeroATL Greenway Plan study area contains a diverse set of transportation facilities that range from on-road bicycle lanes, off-road bicycle trails, roadways, rail, bus transit, heavy rail transit, and Hartsfield-Jackson Atlanta International Airport(H-JAIA).

INTERSTATES

Interstates create wide barriers within communities which can be impossible for cyclists and pedestrians to traverse. Three interstates cross the study area - I-285, I-85, and I-75. The study area includes the most southern portions of I-285, which travels north/south in Fulton County, west of H-JAIA, then travels east-west from southwest of H-JAIA, through Clayton and DeKalb Counties. I-85 travels North/Southwest through the study area, and passes along the northwest boundary of H-JAIA. I-75 travels north/south in the eastern half of the study area.

LOCAL ROADS

The study area contains several US and state routes traveling through the area. These non-interstate routes have been categorized in two groups that describe the direction of primary travel for each roadway – North/South and East/West.

North/South arterial routes

- US 29 (Main Street/Roosevelt Highway)
- US 19/41 (Metropolitan Parkway SW/North Central Avenue/Tara Boulevard)
- SR 54 (Jonesboro Road SE)
- SR 139 (Riverdale Road)
- SR 279 (Old National Highway)
- SR 85
- SR 160 (Thurman Road)
- US 23 (Moreland Avenue)

East/West arterial routes

- SR 6 (Camp Creek Parkway)
- SR 14 (South Fulton Parkway)
- SR 331 (Forest Parkway)
- SR 154/SR 166 (Arthur B. Langford Jr. Parkway)

Legend Description:

Designated On Road Bike Facility, unimproved: Category under Metro Atlanta Bicycle Inventory referring to paved shoulder and shared travel lanes.

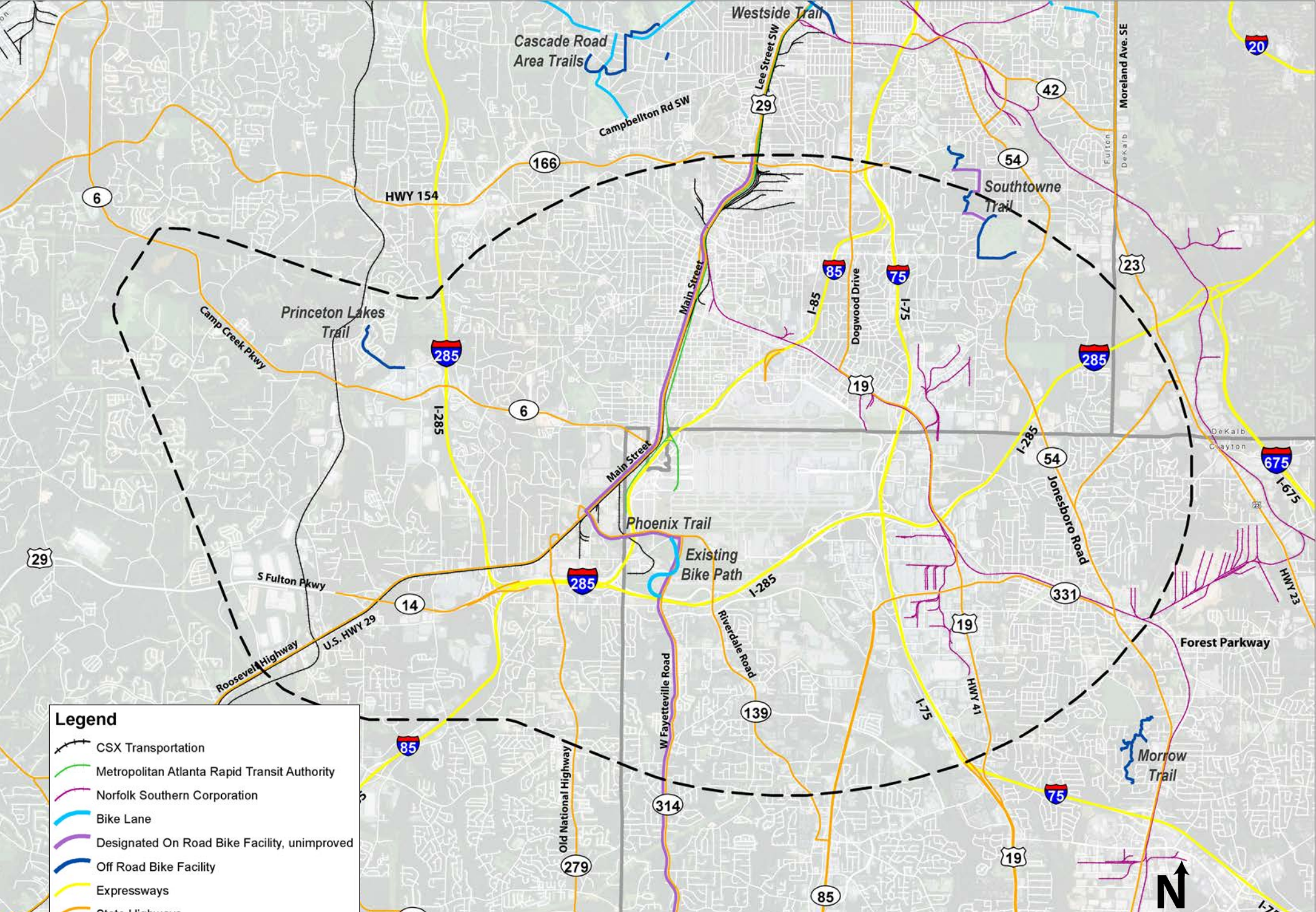


Figure 2.4a: Existing Transportation Network

Bicycle and Pedestrian Facilities

The AeroATL study area has few existing facilities dedicated to bicycle and pedestrian movement such as bicycle lanes and trails. The most significant facilities are US 29 (Main Street) and SR 314 (W Fayetteville Road), which are designated as on-road bicycle facilities.

The H-JAIA will soon provide more bicycle amenities, via 100 bike parking spaces at the currently under-construction ATL West Parking Deck which sits adjacent to the Sky Train Station. This location is also being considered to host a bike sharing facility.

Legend Description:

Designated On Road Bike Facility, unimproved: Category under Metro Atlanta Bicycle Inventory referring to paved shoulder and shared travel lanes.

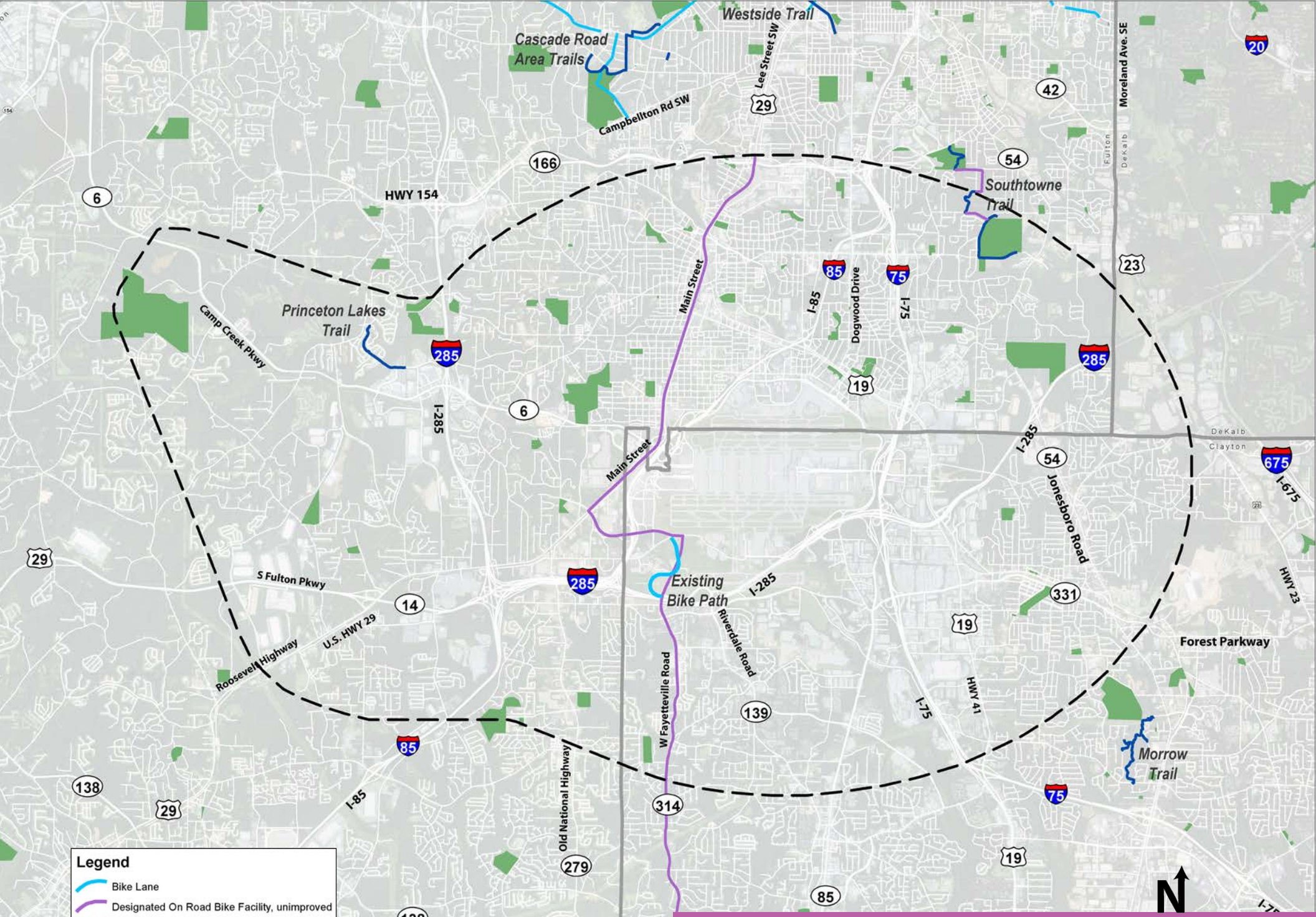


Figure 2.4b: Pedestrian and Bicycle Facilities

Bicycle and Pedestrian Crashes

Between January 1, 2013 and December 31, 2016, the study area had a total of 251 crashes involving cyclists and pedestrians combined, with 166 of the crashes with injuries and 21 with fatalities. Out of the total number of crashes in the study area, 35 incidents or 14 percent involved bicycles, while crashes involving pedestrians totaled 216 incidents or 86 percent of all crashes. Three corridors, each with MARTA bus service, stood out for having high concentrations of crashes involving pedestrians and cyclists.

Located in the southwest segment of the study area, the SR 279 (Old National Highway) contained the highest concentration of crashes for pedestrians and cyclists. The SR 279 (Old National Highway) corridor contains sidewalk facilities on both sides of the roadway, but have a limited number of marked crossings across the roadway. Fulton County recently added marked crossings to help alleviate this concern. Safety is still a concern, however, as pedestrians are still crossing in non-designated areas.

In the northern portion of the study area, the Cleveland Avenue SW corridor has many pedestrian crashes, specifically the segment between I-75 and I-85. This segment had many MARTA bus stops located along the corridor, and has marked pedestrian crossings that protect pedestrians crossing the street, but the crossing are not signalized crossings.

In the southern segment and directly south of Hartsfield-Jackson International Airport, the SR 139 (Riverdale Road) corridor had many pedestrian crashes along the corridor. Like the SR 279 (Old National Highway) corridor, SR 139 (Riverdale Road) is serviced by MARTA bus, but has a limited number of marked crossings across the roadway to access the MARTA bus stops across the roadway.

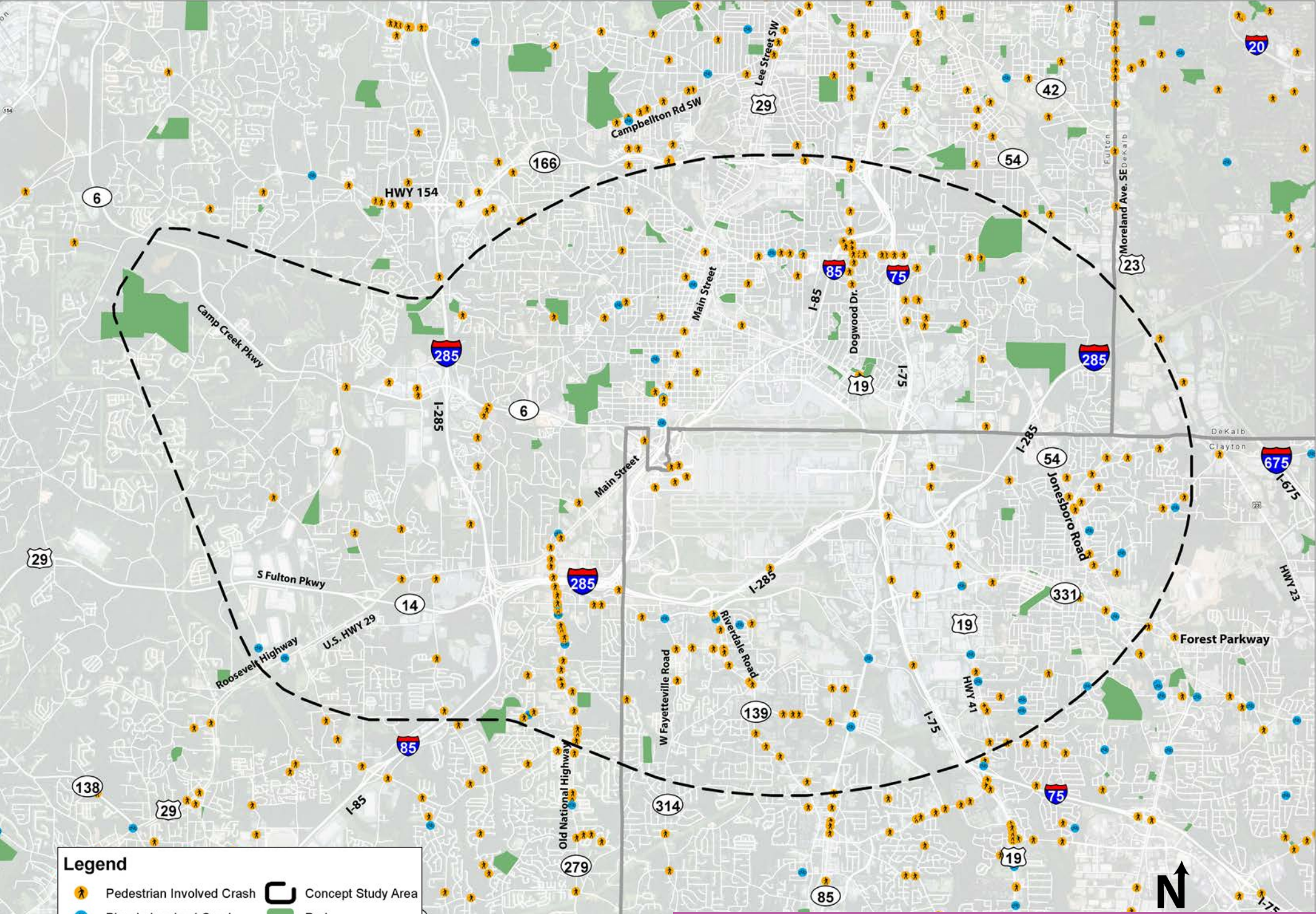


Figure 2.4c: Pedestrian and Bicycle Crashes

Transit Service

Access to transit stations and bus stops is an important connection to each mode of transportation. People are typically willing to walk up to one-half mile (about a ten-minute walk) to and from transit stops/stations. Making sure there is safe and reliable infrastructure in place for cyclists and pedestrians to travel to a transit station and bus stop is key in creating a safe and reliable travel environment to each mode.

The AeroATL study area contains rail transit and bus transit service provided by MARTA, including four transit rail stations located at Atlanta Airport, College Park, East Point, and Lakewood-Fort McPherson. The latter three stations are all located along US 29 (Main Street).

The entire study area is serviced by MARTA bus, as MARTA bus transit includes 32 routes and 1,041 bus stops providing service to the study area. Many of the arterial roadways within the study area are served by MARTA bus service. Refer to Figure 2.4d for existing transit facilities in the study area.

Xpress Bus currently does not service the Aerotropolis area. There are plans to extend Xpress Bus services to the Aerotropolis area as a direct connection to the H-JAIA in the future.

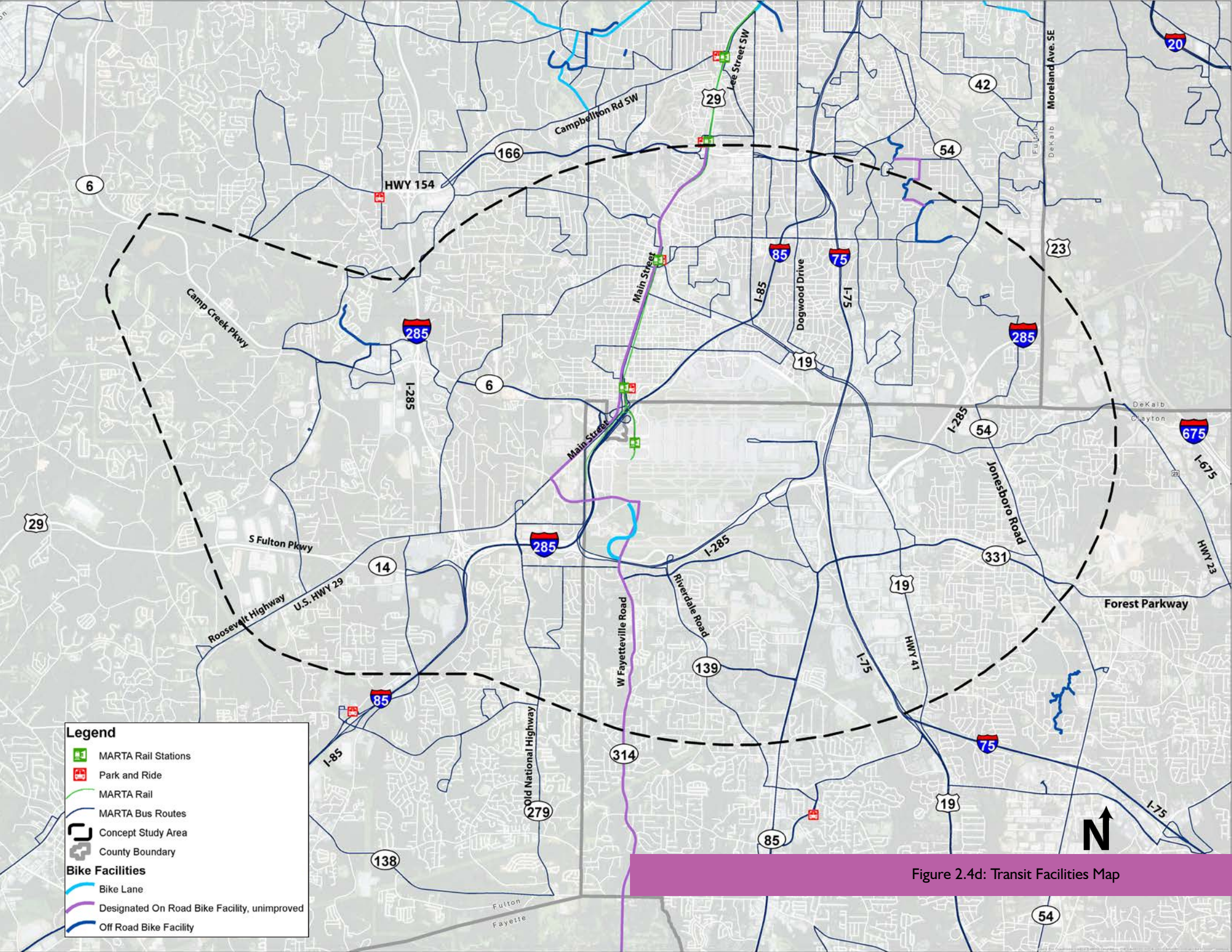


Figure 2.4d: Transit Facilities Map

Active Railroad

The AeroATL study area includes three Class I railroad corridors, one Norfolk Southern (NS) rail line, and two CSX rail corridors. One of the CSX corridors a shared corridor with MARTA rail. Each of the rail corridors have limited rail-roadway crossings.

The NS corridor travels from north and east of Hartsfield-Jackson Atlanta International Airport (H-JAIA), traveling adjacent to Central Avenue through Hapeville, Old Dixie Highway in Mountain View, and Forest Parkway in Forest Park. The NS corridor travels through the commercial districts of these communities and contains a narrow strip of grass between Central Avenue and the railroad.

The shared CSX and MARTA rail corridor travels along the US 29 (Main Street/Roosevelt Highway) corridor through East Point, College Park, and South Fulton. The shared CSX and MARTA rail corridor travels through the commercial districts of the communities and contains a narrow strip of grass between US 29 (Main Street) and the railroad, north of H-JAIA. The only CSX segment traveling south of the airport travels along US 29 (Roosevelt Highway) through South Fulton.

The CSX corridor along the western portion of the AeroATL study area travels north-south primarily through undeveloped areas and does not travel parallel to any roadway corridor except for Welcome All road briefly.

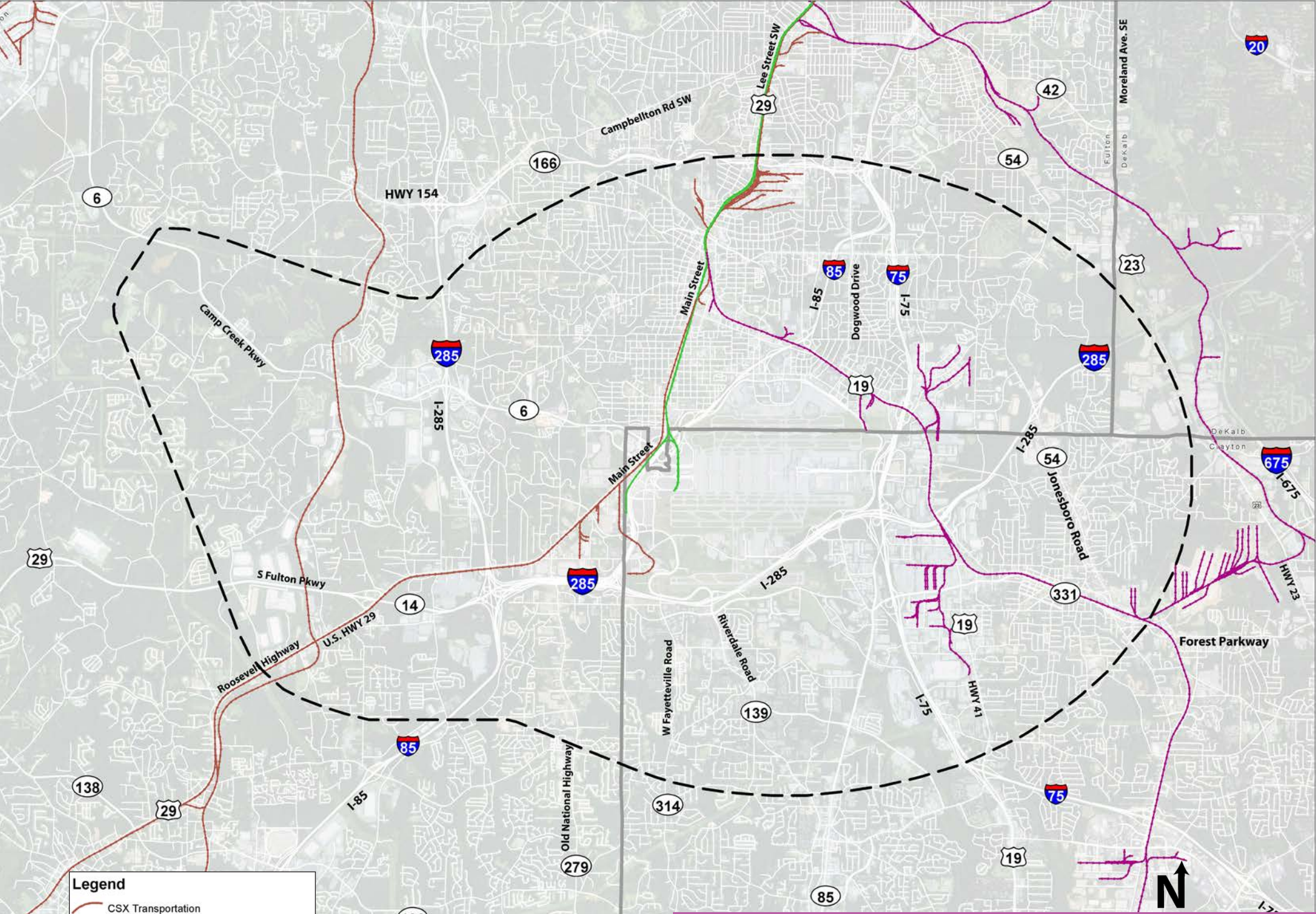


Figure 2.4e: Active Railroad Map

Travel Volumes and Number of Travel Lanes

Creating a safe travel environment for pedestrians and cyclists to cross roadways is key in connecting system segments. The width of the roadway can be measured by the number of travel lanes that a pedestrian or cyclists must traverse. The AeroATL study area consists of numerous arterial roadways accommodating a wide range of vehicle volumes that must be safely crossed by pedestrians and cyclists.

In the quadrant of the AeroATL study area west of I-285, arterial roadways include SR 6 (Camp Creek Parkway), SR 14 (South Fulton Parkway), and US 29 (Main Street/Roosevelt Highway). The SR 6 (Camp Creek Parkway) corridor west of the Princeton Lakes Parkway and Camp Creek Marketplace consists of four travel lanes, while segments at the commercial shopping areas of Princeton Lakes and Camp Creek Marketplace have five to six travel lanes. From I-285 east to the airport, SR 6 (Camp Creek Parkway) is four travel lanes. The SR 14 (South Fulton Parkway) maintains four travel lanes starting from the I-285/I-85 interchange as the corridor travels to the west of the AeroATL study area boundary. Traveling along the US 29 (Main Street/Roosevelt Highway) from the southwest of the AeroATL study area and south of South Fulton Parkway, the corridor is four lanes of travel, while it transitions to five travel lanes at the corridor's interchange with South Fulton Parkway. From north of the South Fulton Parkway interchange with US 29 (Main Street/Roosevelt Highway) to Riverdale Road, the corridor is reduced to two travel lanes.

The traffic volumes for the arterial roadways west of I-285 have some of the higher volumes of traffic, noting SR 6 and SR 14, as shown in Table 2.4.1. Both roadways, which serve as major east-west travel corridors, encompass segments that contain vehicle volumes over 38,200 daily.

Table 2.4.1: Roadway Travel Volumes and Number of Travel Lanes for Areas West of I-285

Annual Average Daily Traffic (AADT)	Roadway	Limits	Number of Travel Lanes
38,200 to 57,100	SR 6 (Camp Creek Parkway)	Butner Road to Welcome All Road	4
	SR 14 (South Fulton Parkway)	I-285/I-85 to Welcome All Road	4
25,600 to 38,200	SR 6 (Camp Creek Parkway)	Western boundary of AeroATL study area to Butner Road	4
	SR 6 (Camp Creek Parkway)	Welcome All Road to US 29 (Main Street)	4-5
17,100 to 25,600	SR 14 (South Fulton Parkway)	Western boundary of AeroATL study area to Welcome All Road	4
	US 29 (Main Street/Roosevelt Highway)	South Fulton Parkway to southwestern boundary of AeroATL study area	4
10,800 to 17,100	US 29 (Main Street/Roosevelt Highway)	South Fulton Parkway to I-285	2 to 5

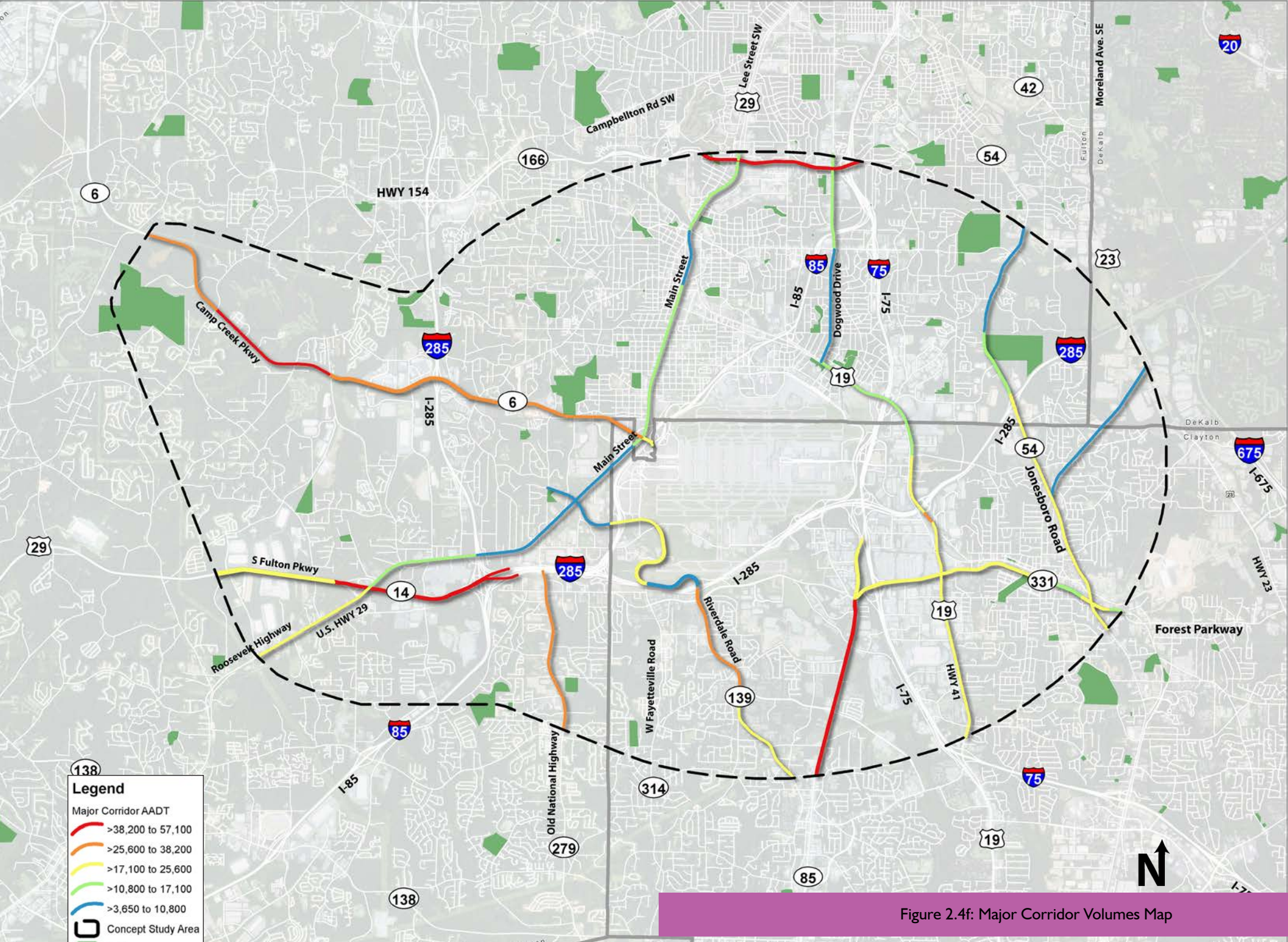


Figure 2.4f: Major Corridor Volumes Map

In the north central quadrant of the study area between I-285 and I-75, and north of the airport, the arterial roadways include Loop Road, US 29 (Main Street), US 41/19 (Metropolitan Parkway SW/North Central Avenue), and Norman Berry Drive. Loop Road, traveling around H-JAIA, is a four lane roadway. US 29 (Main Street) transitions between three and four travel lanes, except for a two-lane segment traveling through College Park, from SR 6 (Camp Creek Parkway) to the SR 154/ SR 166 (Arthur B. Langford Jr. Parkway) overpass. US 41/19 (Metropolitan Parkway SW/North Central Avenue) traveling through Hapeville is two travel lanes, and as the corridor approaches the intersection with Cleveland Avenue, it increases to four travel lanes. Norman Berry Drive has four lanes of travel.

The arterial roadways in the areas north of H-JAIA have low traffic volumes, compared to the rest of the study area, though some of the roadways still have up to four travel lanes. The only segment of roadway with higher traffic volumes is SR 154/SR 166 (Arthur B. Langford Jr. Parkway), though this is a limited access roadway and restricts cyclists and pedestrians. Refer to Table 2.4.2 for traffic volumes and travel lanes for all arterials for the area between I-285 and I-75.

Table 2.4.2: Roadway Travel Volumes and Number of Travel Lanes for Areas Between I-285 and I-75

Volumes	Roadway	Limits	Number of Travel Lanes
38,200 to 57,100	SR 154/SR 166 (Arthur B. Langford Jr. Parkway)	Entire span in AeroATL study area	4 to 5
10,800 to 17,100	US 29 (Main Street)	Gateway Boulevard to Irene Kidd Parkway	2 to 4
	US 29 (Main Street)	Norman Berry to northern boundary of AeroATL study area	4
	US 41/19 (North Central Avenue)	US 41/19 (Dogwood Drive) to Charles W. Grant Parkway	2 to 4
	US 41/19 (Metropolitan Parkway SW)	Macedonia Road to Cleveland Avenue	4
Under 10,800	US 29 (Main Street/Roosevelt Highway)	I-285 to Gateway Boulevard	2 to 4
	US 29 (Main Street)	Irene Kidd Parkway to Norman Berry	3 to 4
	US 41/19 (Metropolitan Parkway SW/Dogwood Drive)	US 41/19 (North Central Avenue) to Cleveland Avenue	2 to 4

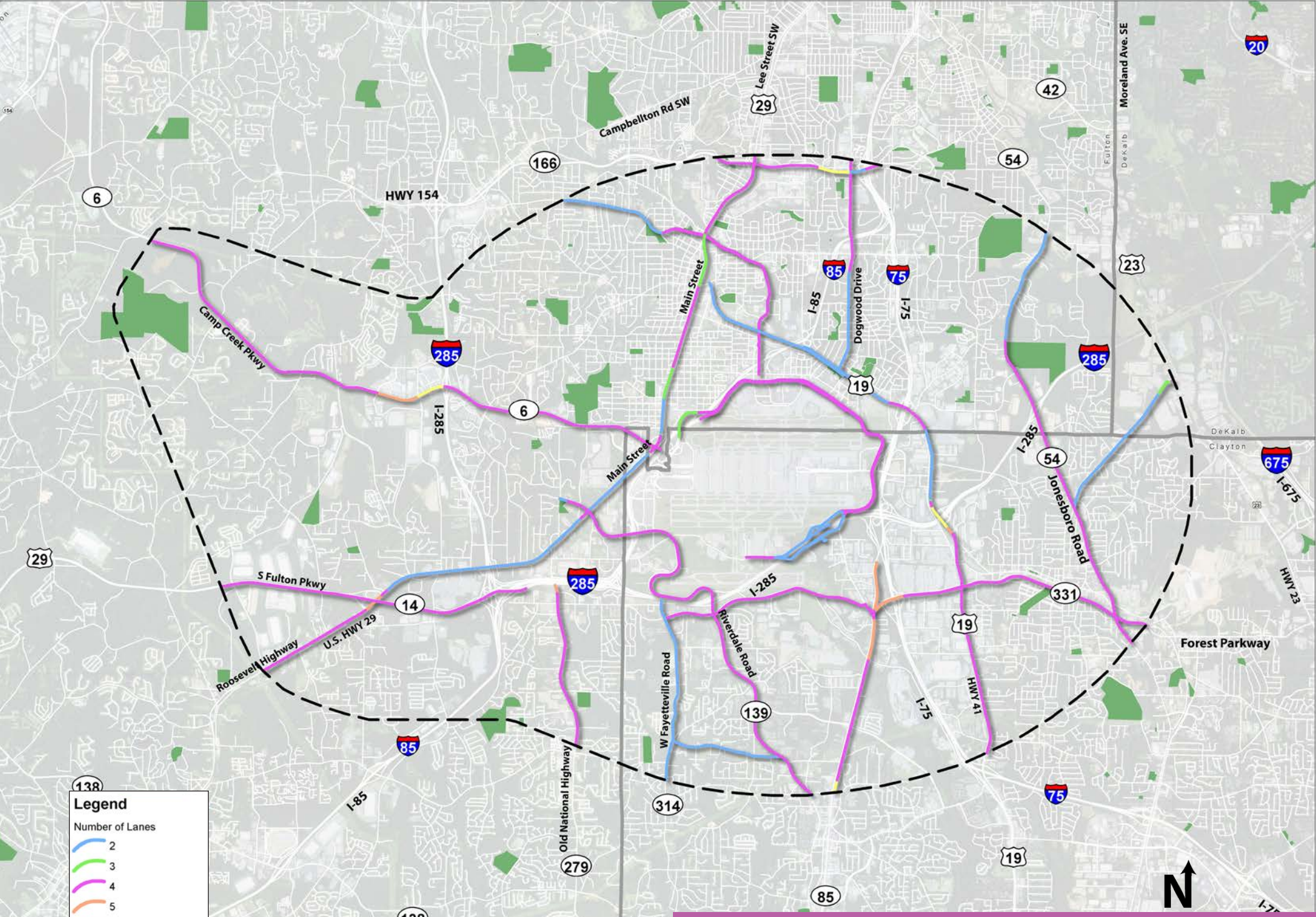


Figure 2.4g: Number of Lanes

For the study area east of I-75, the arterial roadways include SR 331, SR 54 and US 19/US 41. Serving as an important east-west roadway connection, SR 331 is primarily a four-lane roadway, except for the segment immediately west of the intersection with SR 85 to Frontage Road, this short segment is five travel lanes. Forest Parkway turns into Phoenix Boulevard between Riverdale Road and W. Fayetteville Road and is no longer SR 331. SR 54 is four travel lanes south of Macedonia Road SE, and two lanes south of Macedonia Road SE. US 19/US 41 is primarily four lanes of travel, excluding a segment between I-75 and I-285, which is two lanes.

The traffic volumes for the arterial roadways east of I-75 carry mid-level volumes of vehicles compared to the entire study area. These fluctuations in traffic volumes correspond with adjacent land uses to the roadway. Segments of SR 331 in Forest Park and SR 54 in Fulton County have lower volumes closer to more residential areas, while the segments of SR 331 and US 19/US 41 along the industrial and commercial areas have higher volumes. Refer to Table 2.4.3 for traffic volumes and travel lanes for all arterials for the area east of I-75.

Table 2.4.3: Roadway Travel Volumes and Number of Travel Lanes for Areas East of I-75

Volumes	Roadway	Limits	Number of Travel Lanes
25,600 to 38,200	US 19/US 41 (Old Dixie Road)	I-285 to Southpoint Drive	5 to 6
17,100 to 25,600	SR 85	I-285/I-85 to Forest Parkway	3 to 5
	SR 331 (Forest Parkway)	SR 85 to Ash Street	4 to 5
	SR 331 (Forest Parkway)	Jones Court to North Lake Drive	4
	US 19/US 41 (Old Dixie Road)	Charles W. Grant Parkway to I-285	2 to 6
	US 19/US 41 (Old Dixie Road)	Southpoint Drive to southern boundary of AeroATL study area	4 to 5
	SR 54 (Jonesboro Road SE)	I-285 to southeastern boundary of AeroATL study area	4
10,800 to 17,100	SR 331 (Forest Parkway)	Ash Street to Jones Court	4
	SR 54 (Jonesboro Road SE)	to I-285	2 to 4
Under 10,800 (3,650 to 10,800)	SR 54 (Jonesboro Road SE)	Northern boundary of AeroATL study area to Macedonia Road	2

The arterial roadways south of I-285 in Clayton County include SR 279, SR 139, SR 85, and SR 314. Old National Highway (SR 279) is four lanes from Godby Road intersection traveling south, and at the interchange with I-285, the corridor is five lanes of travel. Riverdale Road (SR 139) is four lanes of travel, while SR 314 (Fayetteville Road) is traveling two lanes. SR 85 contains five travel lanes north of Lee's Mill Road, and four travel lanes south of the intersection with Lee's Mill Road.

The traffic volumes for the arterial roadways south of I-285 have higher volume roadways as these arterials serve as major north-south roadways traveling between I-285 and into Clayton County. The three roadways, SR 279, SR 139, and SR 85 all carrying significant amounts of vehicles, without any segments handling less than 17,100 vehicles per day, as shown in Table 2.4.4.

Table 2.4.4: Roadway Travel Volumes and Number of Travel Lanes for Areas South of I-285 and West of I-75

Volumes	Roadway	Limits	Number of Travel Lanes
38,200 to 57,100	SR 85	Forest Parkway to southern boundary of AeroATL study area	4 to 6
25,600 to 38,200	SR 279 (Old National Highway)	I-285 to southern boundary of AeroATL study area	4 to 5
	SR 139 (Riverdale Road)	I-285 to Garden Walk Road	4
17,100 to 25,600	SR 139 (Riverdale Road)	I-85 to SR 314 (Fayetteville Road)	4
	SR 139 (Riverdale Road)	Garden Walk Road to southern boundary of AeroATL study area	4
	SR 85	I-285/I-85 to Forest Parkway	3 to 5

Traffic Incidents for Automobiles, Cyclists, and Pedestrians

Conflict points involving automobiles and cyclists or pedestrians are spread across the entire AeroATL study area. The three roadway corridors that stand out for the highest concentrations of incidents involving cyclists/pedestrians and automobiles within the AeroATL study area are SR 279 (Old National Highway), SR 139 (Riverdale Road), and Cleveland Avenue. Each corridor contains existing MARTA bus service along each side of the roadway, but the corridor has limited signalized, safe crossings for non-motorized travelers. The Cleveland Avenue corridor has existing MARTA service on both sides of the roadway and also has existing crossings for pedestrians, but the crossings do not contain lighting or a signal for pedestrians to cross safely across the roadway. Refer to Figure 2.4h illustrating these high concentrations of pedestrian incidents.

Legend Description:

High Crash Density: Darker the color, the higher the density of crashes.

Pedestrian Involved Crash: Crashes involving a pedestrian.

Bicycle Involved Crash: Crashes involving a cyclist.

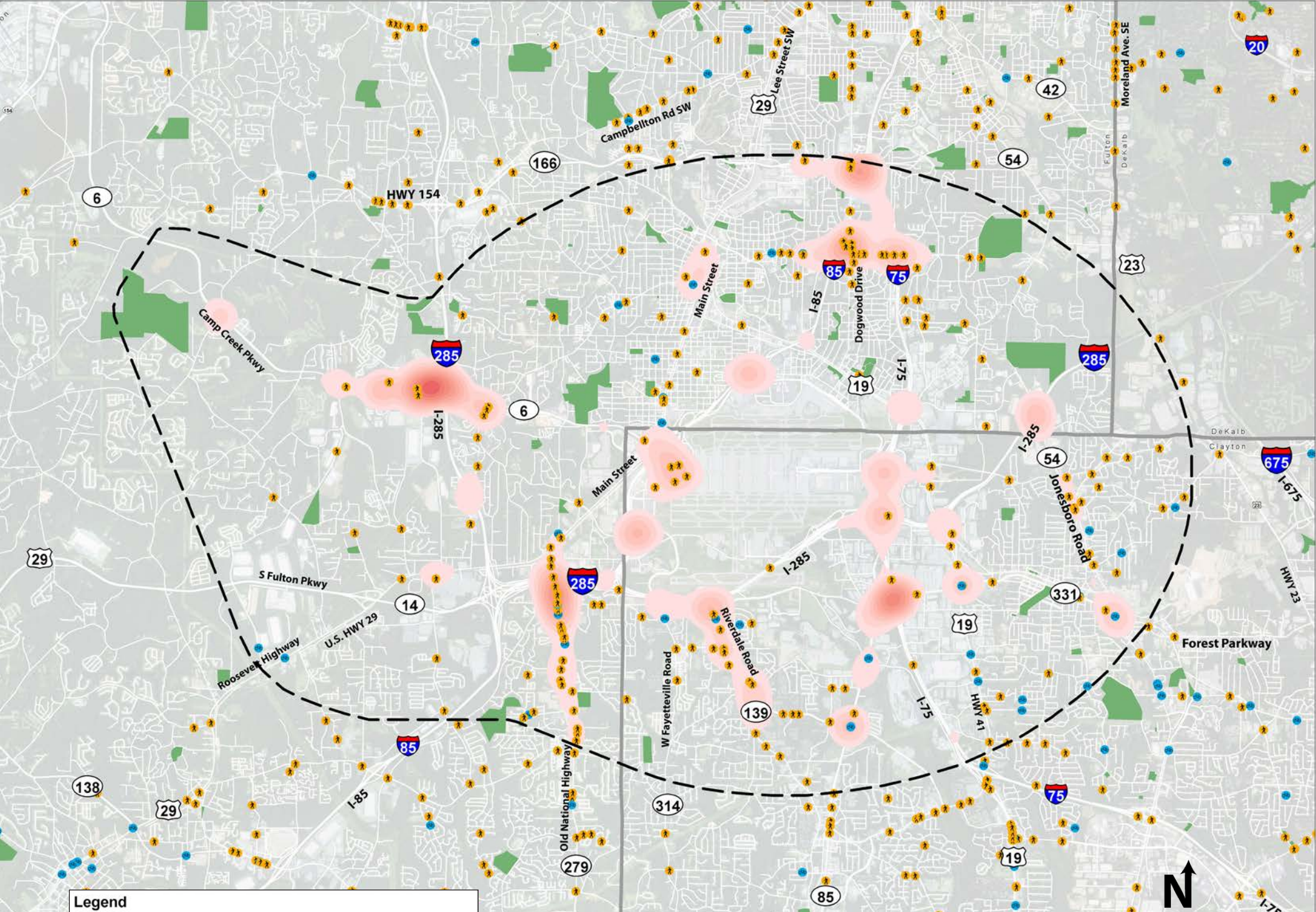


Figure 2.4h: Crash Heat Map for Traffic Incidents for Automobiles, Cyclists, and Pedestrians

2.5 Health

Introduction

According to the World Health Organization, health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Meaning health is holistic. It is made up of many interconnected components that must all be achieved individually in order to obtain overall health.

The goal of the Health Impact Assessment (HIA) for the AeroATL Greenway Plan is to evaluate the greenway through this holistic lens and identify factors and features beyond the greenway itself that influence individual and community health. Building the greenway is just the starting point in terms of how the trail will impact health in the surrounding neighborhoods.

A greenway in and of itself does not greatly alter health conditions. While people will walk and bike it, the real change occurs when it is connected to other destinations and easily accessible to the majority of those who use it. Changes must occur in the built environment and policy realm to entice more greenway users and optimize the investment in the greenway. These changes lead to behavioral changes by the population as utilization and frequency of use of the greenway increases. Over time, it is this behavioral change that leads to long-term positive health impacts.

This HIA attempts to identify the built environment and policy changes that can occur to incentivize behavioral change and, ultimately, the desired health impacts.

Figure 2.5a: Health Impact Assessment Method

Why a Health Impact Assessment?

A Health Impact Assessment (HIA) is used by health organizations and planners to review the health landscape and influencing factors that impact health for the community.

The HIA is a method of determining potential impacts on community health measures of a proposed plan, policy or project.

Health Impact Assessment Method

The following identify the steps involved in an HIA. Refer to Figure 2.5a.

1. **Screening:** Determine if a plan, project or policy would benefit from a health impact assessment

2. **Scoping:** Determine how to conduct an HIA, the data needed and the desired deliverables

   Since the HIA is not focused on a specific policy or project, the focus of the assessment would be population based and general to the priorities addressed by the community.

3. **Assessment:** As the main activity of the HIA this step establishes methods and data sources to determine likely impacts to a community

As the primary activity of the HIA, the assessment step was the most extensive and included an assessment that explored socio-demographic and health data which provides an understanding of potential determinants of health.

4. **Recommendations:** This step focuses on the findings and results from the assessment leading to recommendations

The HIA recommendations provide insight on where to focus trail connectivity in the Aerotropolis area, based on health and access needs.

5. **Reporting:** This phase is the written report of HIA, including this document

This HIA report details the purpose, approach, findings and recommendations for the Aerotropolis Greenway Plan.

6. **Monitoring:** An ongoing process to ensure recommendations are implemented and health impacts are assessed. There are many stakeholders involved in the HIA. It would be their responsibility to review, implement, and monitor progress of the recommendations and action steps.

Summary Recommendations

The public tends to fixate on access to care as part of our state and national conversation about health. Figure 2.5b illustrates the imbalance we have as a nation in investing in health-related initiatives. While much of our expenditures go to medical services, those services are not the main driver of what makes us healthy. Healthy behaviors and a healthy environment account for 70% of the influence.

The recommendations in this HIA report focuses on the following themes:

- Organizational Capacity
- Communications and Marketing
- Healthcare and Community Services
- Healthy Living through the Built Environment and Public Policy
- Economic Development and Stability

Recommendations were developed factoring in the community health outcome and analysis, community feedback and best practices related to improving health behaviors and outcomes.

What's Next?

Use the HIA to pursue funding

Findings and recommendations from this HIA report can be leveraged to pursue funding. Often funding organizations require evidence and plans to justify funding programs and strategies. Funding sources will

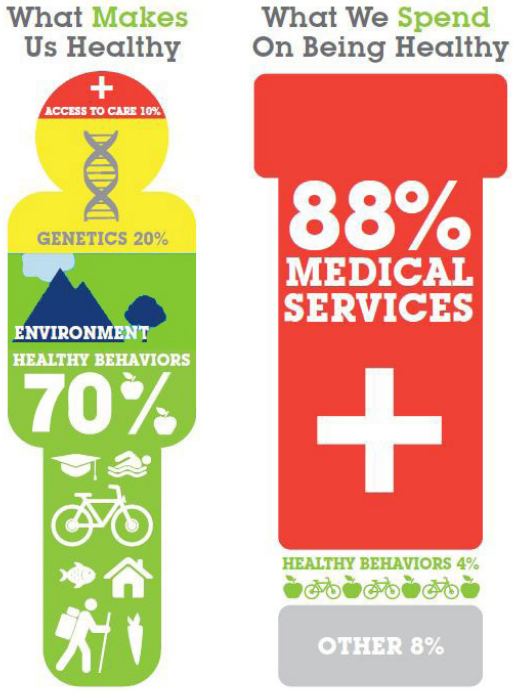


Figure 2.5b: Health-related Initiatives: Investment Imbalance

appreciate the deeper look at health impacts within this HIA and the importance of how greenways and trails can influence the existing community's overall health.

Engage the community

The HIA can be viewed as a starting point for conducting face-to-face neighborhood outreach and working with the community to determine which recommendations are most important to them.

Organize a Task Force or Coalition

The HIA report includes potential partners that may be instrumental to carrying out recommendations. The first recommendation outlined in this report is to convene a coalition of partners whose goal is to oversee, implement and monitor progress of these recommendations and action steps. The coalition may consider committees or a task forces to closely review and implement the recommendations.

Figure 2.5c: Community Engagement Session

Seven Dimensions of Wellness

Addressing health and wellness goes beyond physical health. Following are the seven dimensions of wellness. Refer to Figure 2.5d.

- Intellectual– Stimulating the mind with education and cultural activity.
- Spiritual– Allowing for self-reflection, mindfulness and meditation.
- Emotional- Being attentive to thoughts, feelings, and behaviors.
- Physical– Engaging in healthy behaviors, such as healthy eating, physical activity, and not smoking, and seeing a doctor regularly to monitor blood pressure, blood glucose and body mass index.
- Social– Developing meaningful relationships and quality communication.
- Environmental—Understanding that daily habits and actions can impact and harm environment.

New ideas and themes emerge when examining health through the lens of the Seven Dimensions of Wellness, as wellness is not just about physical health. This HIA report examines these wellness factors in order to develop a holistic understanding of the Aerotropolis community's wellness.

Area Demographics and Health Indicators

Social and economic demographics contribute to health status and health indicators, ultimately impacting health factors and quality of life. For example, there are known health disparities in health outcomes and low socioeconomic status, such as the risk of Type 2 Diabetes increases with those living in poverty. There are many factors that impact quality of life and length of life, including housing, employment and education.

Figure 2.5d: Seven Dimensions of Wellness

Demographics and Socioeconomic Status

This Aerotropolis Atlanta study area is home to roughly 240,000 residents. According to the American Community Survey, the racial makeup for the community is 76% Black, 15% White, 2% Asian and 7% of other and mixed races. Refer to Figure 2.5e for this section.

The state of Georgia has an unemployment rate of 5.7%, while the study area is around 6%, which are higher than the national rate of 5.2%. The average income in the study area is about $42,839, however median income is less than $35,000 which is less than the state and national median incomes of $51,037 and $55,332, respectively. The poverty rates for children, individuals and families are higher in the study area compared to the state. Refer to Figure 2.5g.

Further, the rate of individuals over the age of 25 years without a high school diploma, or equivalency is nearly two times higher in the study area than the national rate.

City/State	Black	Unemployment	Families at 200% FPL*	Children in Poverty	No High School Diploma	Housholds with No Motor Vehicles
East Point	78.30%	15.60%	51.50%	43.70%	23.40%	17.60%
Hapeville	46.10%	3.70%	47.20%	21%	6.50%	12.90%
College Park	78.70%	14.20%	60.20%	55.10%	16.60%	30.50%
Forest Park	40.90%	13.60%	65.10%	48.10%	28.10%	14%
South Fulton**	-	-	-	-	-	-
Aerotropolis Study Area	26.10%	6.00%	57.20%	73.40%	19.40%	18.40%
Georgia	30.90%	5.70%	38.80%	49.40%	14.60%	6.90%

* FPL = Federal Poverty Level
** data not available
Source: American Community Survey, NeighborhoodScout and Georgia Bureau of Investigation
Note: Census data from the American Community Survey is based in annual estimates

Figure 2.5e: Demographics and Socioeconomic Status

Income, as a social determinant of health, can be a predictor to health outcomes. Low income population groups are often at higher risk of chronic conditions, higher rate of having fair to poor health days and lower life expectancy. The Low Income map, Figure 2.5f, identifies the census tracts with a poverty rate of 20% or higher, or tracts with a median family income less than 80% of the median family income for the state or metropolitan area. Majority of the census tracts within the study area are in this Low-Income category.

Therefore, those that live in these areas are more likely to have chronic health conditions and poorer health outcomes, emphasizing the need to create healthy opportunities and access for this community, such as greenways and trails that connect to jobs, fresh food, and encourage a more active lifestyle.

Health Indicators and Status

County level data was assessed to determine general area health indicators. Health outcomes factor health behavior, such as diet, physical activity and tobacco

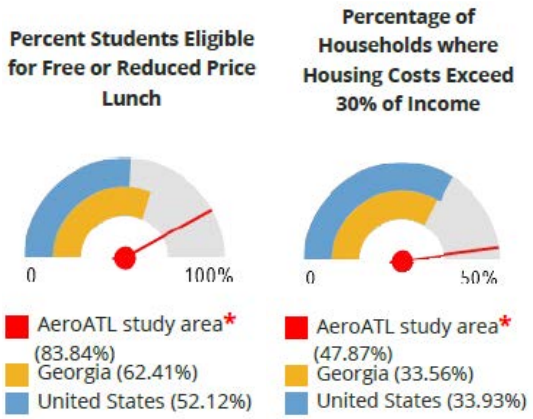


Figure 2.5e: Demographics and Socioeconomic Statistics

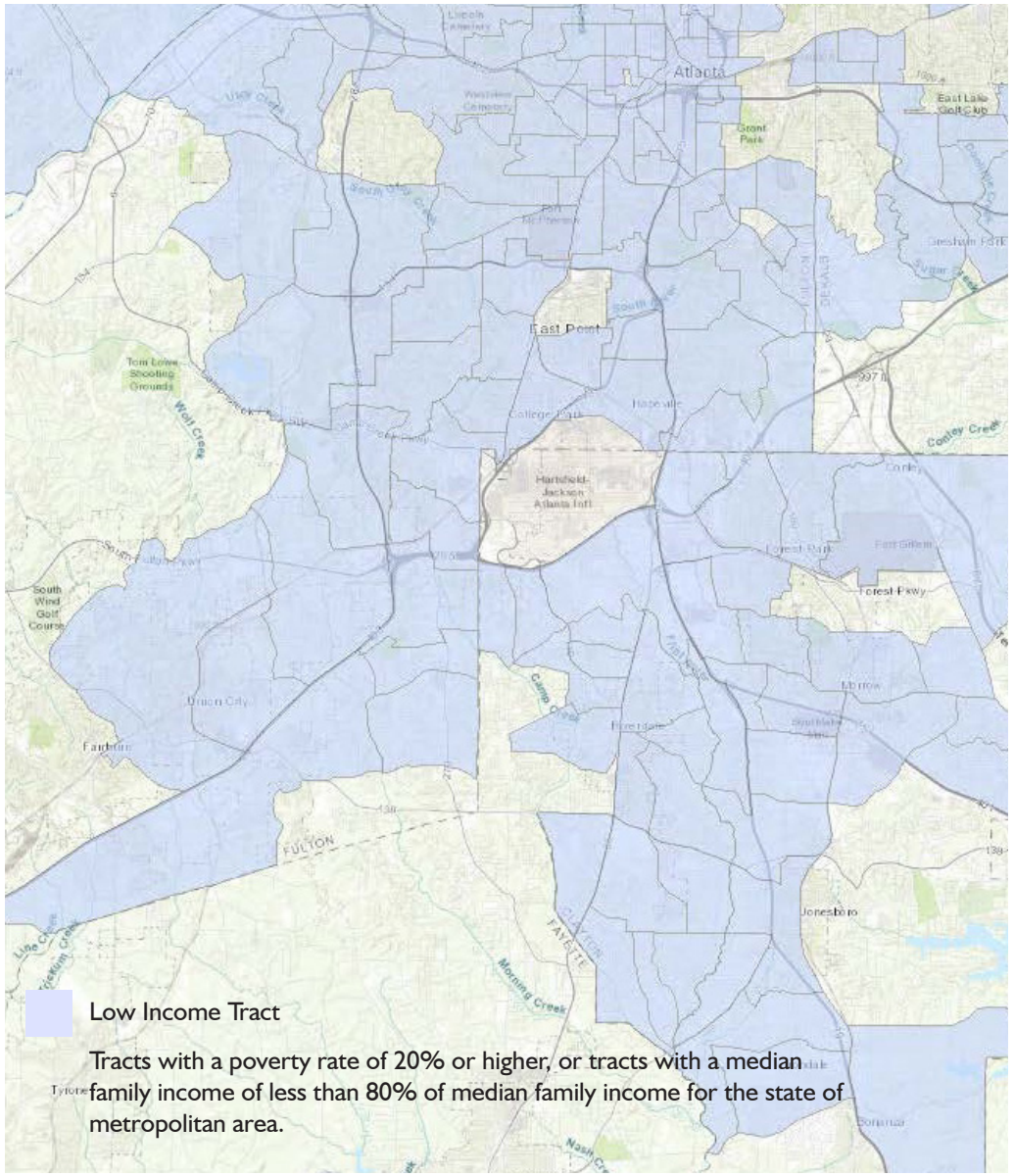


Figure 2.5f: Low Income Tract Map
Source: USDA Economic Research Service, ESRI

use, as well as mortality and morbidity rates, food security, and insurance coverage.

Health Status

The leading causes of death are largely attributed to behavior. Tobacco use, poor diet, and physical inactivity are risk factors for cancer, heart disease, diabetes and cerebrovascular disease (i.e. stroke). In Clayton County, more than a third of adults are obese, while in Fulton County, nearly a quarter of adults are obese. Obesity is a result of an imbalance of energy intake and expenditure, or poor diet and physical inactivity; and is a risk factor to Type 2 Diabetes, heart disease and stroke. Refer to Figure 2.5g.

The leading cause of death in the Aerotropolis area is heart disease. Refer to Figure 2.5h. Heart disease risk are attributed to diet, physical activity level and tobacco use. Based on health behavior indicators, the Clayton County population struggles with physical inactivity, inadequate fruit and vegetable consumption and obesity. In Clayton County, the rate of Type 2 Diabetes and hypertension are higher than the state's rates. Fulton County's data does not show a true representation of the health characteristics of the study area. South Fulton County and north Fulton County have significant disparities as it relates to heart disease and Diabetes.

Built Environment Indicators

The built environment can influence behavior by providing the opportunity to engage in healthy behaviors. Educating individuals to eat healthy or engage in physical activity do not translate to behavior change; the environment needs to support such behaviors.

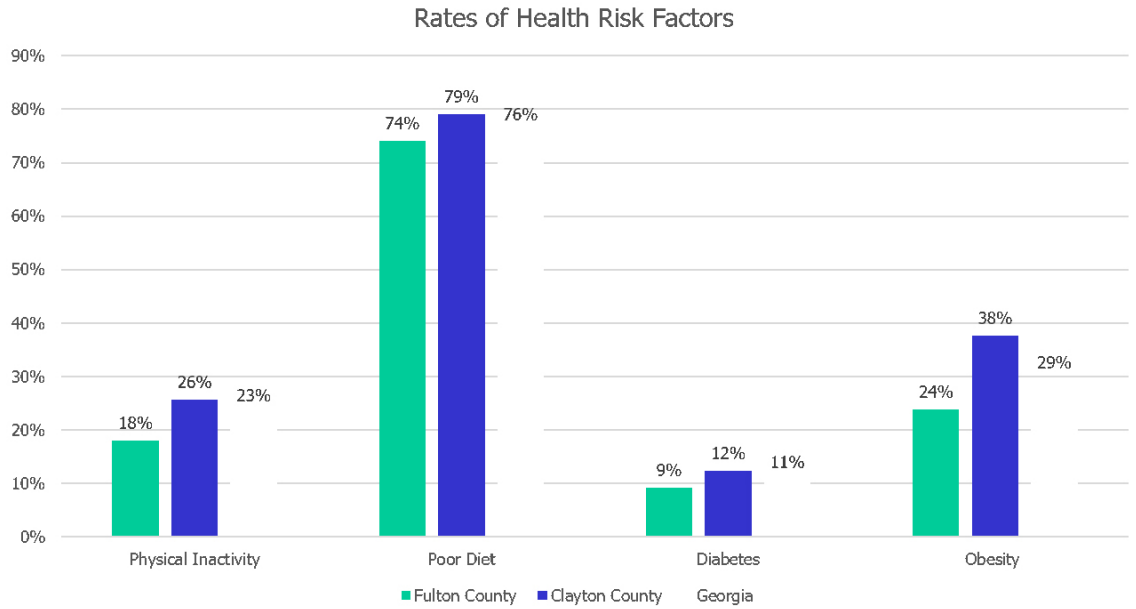


Figure 2.5g: Rates of Health Risk Factors
Source: University of Wisconsin Population Health Institute

Food Access

Food access and availability attribute to diet behavior. In the study area, 15 census tracts are in a USDA-defined Food Desert. Refer to Figure 2.5i. Further, the density of Fast Food restaurants is much higher in the study area than for the state and nation. Thus, the combination of low-income households, lack of grocery stores, and high density of fast food establishments foster an environment for poor diet.

Food deserts are defined by the United States Department of Agriculture as areas with a combination in which the majority of residents live more than 1-mile from a supermarket in an urban area. Residents living in food deserts are more likely to have poor diets due to more affordable energy-dense, or high caloric, foods from fast-food establishments, variety stores, such as a Dollar Store, and/or convenient stores. In addition, residents are more likely to acquire their food from local food pantries.

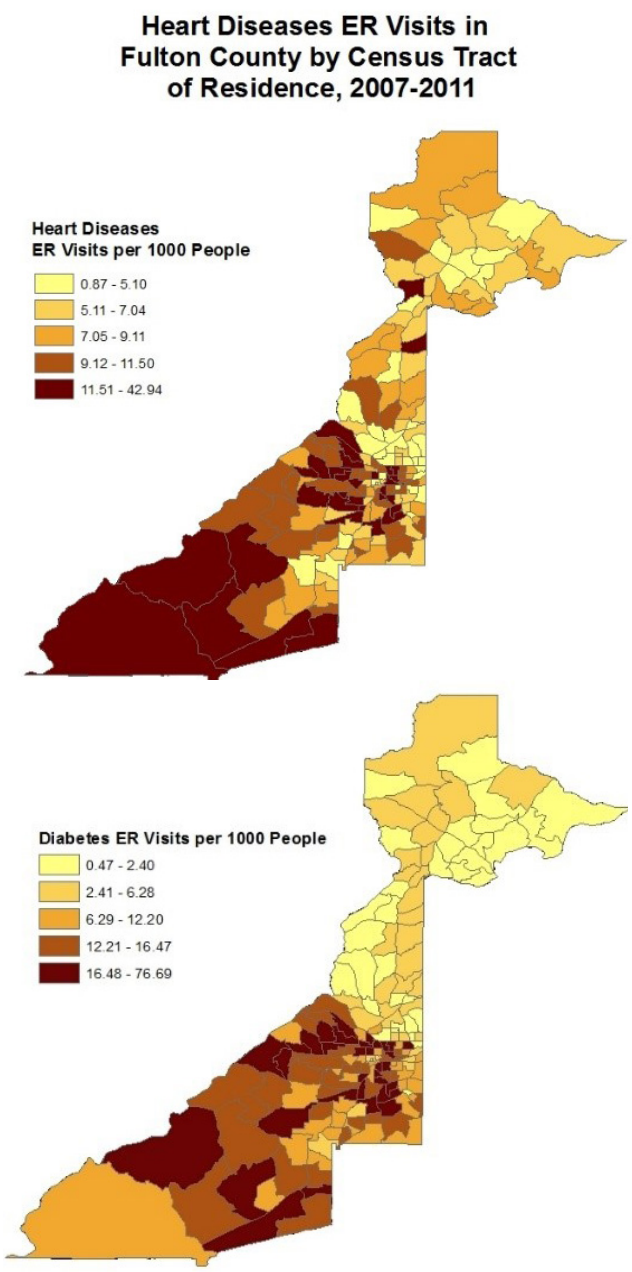


Figure 2.5h: Heart Diseases and Diabetes Statistics
Source: University of Wisconsin Population Health Institute

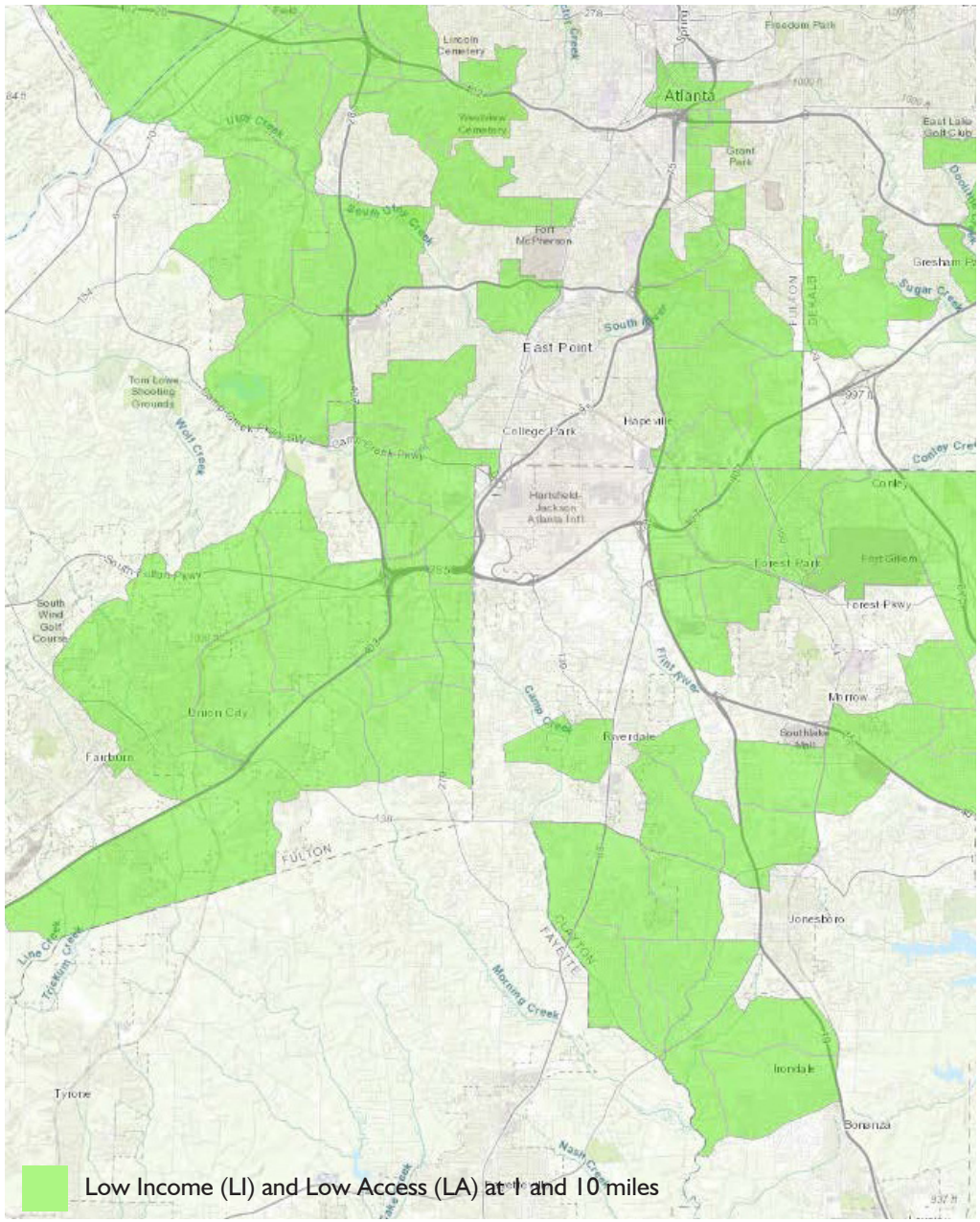


Figure 2.5i: Food Desert Map
Source: USDA Economic Research Service, ESRI

Similar to the risk of chronic diseases and poor health outcomes, residents living in food deserts also face the paradox of higher rate of overweight and obesity. This is typically due to the quality of foods (energy-dense) as oppose to the quantity of food.

This highlights the importance of connecting food desert residents to fresh food options, including grocers and farmers' markets.

Active Living

Violent crime contributes to the safety of the community and impacts the opportunity to engage in active living. The rate of violent crime offenses reported by law enforcement per 100,000 residents is much higher in the study area than the state. Violent crime includes homicide, rape, robbery, and aggravated assault. Refer to Figure 2.5j.

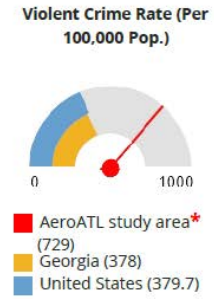
Over 18% of households in the study area do not have access to a vehicle. Thus, other modes of transportation are necessary. In the study area, about 12.4% of the residents use public transportation, which is much higher than the state's rate of 2%. Individuals who regularly use public transportation are more likely to meet the recommended amount of physical activity each week. Individuals average 10 minutes walking to a transit stop and another 10 minutes to their destination. When this behavior is done round-trip, individuals are meeting the physical activity recommendation.

Walking and bicycling are modes of active transportation that can contribute to an active lifestyle. The Built Environment can foster these healthy behaviors by ensuring infrastructure is safe and purposeful as modes of transportation. While there is no available data for the study area, the rate of pedestrian fatalities are higher in Fulton and Clayton Counties compared to the state and nation indicating that those that are walking and biking do not have safe facilities and access. Refer to Figure 2.5k.

This indicator reports the rate of violent crime offenses reported by law enforcement per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.

Report Area	Total Population	Violent Crimes	Violent Crime Rate (Per 100,000 Pop.)
AeroATL study area*	154,703	1,127	**729**
Clayton County, GA	266,166	1,534	**576.3**
Fulton County, GA	986,094	7,964	**807.6**
Georgia	9,832,423	37,160	378
United States	311,082,592	1,181,036	379.7

Note: This indicator is compared with the state average.
Data Source: Federal Bureau of Investigation, FBI Uniform Crime Reports. Additional analysis by the National Archive of Criminal Justice Data. Accessed via the Inter-university Consortium for Political and Social Research. 2012-14. Source geography: County



Values related to the study area are highlighted in the table.

Figure 2.5j: Violent Crime Rate Statistics

Healthcare Services and Access

According to the University of Wisconsin Population Health Institute, Clayton County is facing a shortage of dentists and primary care physicians. When compared to the state, Clayton has 1 dentist for every 3,680 residents, compared to 1,980 in Georgia. Further, there is only 1 primary care physician to 3,560 residents, compared to 1,520 in Georgia. This is an issue nation-wide but is problematic in this area. While there are nearby hospitals to address acute care issues, dentists and primary care physicians provide routine maintenance and preventive care, especially of chronic diseases. The lack of dentists and primary care physicians often lead to increase rates of acute, emergent healthcare needs, thus resulting to an increased utilization of emergency rooms at local hospitals. These non-emergent uses limit the quality of care management when there is limited access to primary care physicians.

The number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees is an indicator of quality of healthcare and access to healthcare providers. The number of preventable hospital stays in Clayton and Fulton Counties are much higher than the state's rate. According to County Health Rankings, "Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care."

Report Area	Total Population (2010)	Total Pedestrian Deaths, 2011-2015	Average Annual Deaths, Rate per 100,000 Pop.
AeroATL study area*	no data	39	no data
Clayton County, GA	259,424	38	**4.9**
Fulton County, GA	920,581	123	**4.5**
Georgia	9,687,653	950	3.3
United States	312,732,537	28,832	3.1
HP 2020 Target			**<= 1.3**

Note: This indicator is compared with the state average.
Data Source: US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System. 2011-2015. Source geography: County

Values related to the study area are highlighted in the table.

Figure 2.5k: Roadway Safety Statistics

Reporting

This Health Impact Assessment report can be used to inform decision-makers across sectors and guide policies and development across the Aerotropolis area, including:

- The report's findings may guide the development of messages for targeted audiences.
- Data from this report can be used as a baseline to measure future impact following the development of the AeroATL Greenway.
- Elements of this report can provide a framework for presentations to stakeholders as a way to garner support.

Recommendations and Monitoring

Organizational Capacity

The recommendations and action steps detailed in this report will require leveraging capacity from organizations and pursuing funding. However, this requires a coordinated and collaborative effort. This includes establishing a coalition or committee of cross-sector partners, aimed to review the recommendations, implement activities and monitor progress.

Communications/Marketing

The AeroATL Greenway Plan has the potential to be marketed, not just as a recreational amenity, but rather a health supported necessity for the community. Greenways offer an opportunity for users to engage in physical activity, through active recreation or active transportation to destinations (i.e. services and retail). Similarly, crafting messages that address the health benefits can assist in garnering support for this type of infrastructure investment.

Healthcare and Community Services

The lack of dentists, primary care providers and mental health services have placed a burden to current healthcare resources in the community. There are limited providers to meet the demand, therefore, healthcare providers need to leverage community partnerships to help meet the need for both mental and physical healthcare needs. In addition, health promotion programs can provide health education and opportunities to improve health risk behaviors to prevent chronic conditions.

Public and stakeholder input suggested a need to increase participation of early childhood education to support school readiness. When children are behind in school, they are more likely to have academic difficulties which impacts graduation rates.

Economic Development and Stability

Income and employment are determinants of health that impacts quality of life and wellness. Efforts to increase job skills and opportunities provide residents with a chance to improve income and job status. Community residents are looking for employment opportunities and to develop vocational skills. Residents seek opportunities that link skill development to successful job acquisition. There is a need for more jobs in the community. Strategies such as financial incentives and public-private partnerships can increase job opportunities in the community.

In addition to addressing income and employment challenges in the Study Area, this project has the potential to attract healthcare service delivery providers with its connection of the Airport and Atlanta via the proposed Greenway. Thus, this economic driver can attract needed providers to fill the healthcare shortages.

Healthy Living through the Built Environment and Public Policy

Environmental change and policy that support healthy living are sustainable approaches to impact population health and healthy behaviors. The built environment addresses housing, transportation and community planning. Walkable and connected communities to destinations support active living and healthy food access.

Specific Recommendations

Connect to Nearby Areas

A greenway system that connects to desirable destinations will ensure citizens are afforded access for recreational or utilitarian purposes, provide tourists ample opportunities to utilize the network and contribute to their activity and the local economy, and attract targeted users/customers to available adjunct features.

- Consider connections with other modes such as transit, carpools, or van-pools.
- Use nearby sidewalks, streets, or other trails to connect from neighborhood areas with greenways, functionally increasing the number of users living or working within a walking or biking distance of the greenway.
- Connect the greenway to river access points and provide adequate safe space to avoid conflicts between greenway users and waterway users.
- Consider connections to local economic hubs for customers and employees thereby promoting travel demand management strategies.

Collect Data

The actual health impacts of the greenway are only known once it is built and used over a long period of time. Working with healthcare organizations and other stakeholders to collect data on greenway users help bolster the findings of this HIA and make the case for future investments.

- Conduct an initial neighborhood walking, bicycling and health survey to better understand current conditions in the area pre-construction.
- Recruit volunteers through the city's pedestrian plan process to count existing use of study area area streets in close proximity to the greenway.
- Once built, begin collecting health-specific data on greenway users and do this on an annual basis.
- Count greenway users on a regular basis once it is constructed and consider installation of permanent counters at key access points.

Keep the Conversation Going

There is a diverse group of stakeholders in the Aerotropolis area who are interested in seeing the AeroATL Greenway through to completion. These groups have social, economic, cultural and health interests in helping ensure it succeeds.

Figure 2.5l: Environmental Stewardship

- Convene an annual forum on the greenway to monitor progress and understand other emerging initiatives in the area.
- Identify the various partnership roles each group stands to play in implementation of the greenway, including what each group stands to give versus gain through being a partner.
- Determine which of the recommendations is best suited for each group given it will take many of them to achieve the desired health outcomes.

Environmental Stewardship

Environmental stewardship is an important value amongst area residents and a clean, natural setting has documented positive impacts on human health. It also enhances the experience of the greenway user.

- Minimize space requirements for roadways and building setbacks.

- Provide or preserve green space between roadways and greenways, where possible.

- Develop sites along the greenway that capitalize on natural settings for users to sit, reflect, and enjoy a peaceful escape from the built environment. Refer to Figure 2.5l.

- Work with local schools, organizations such as the Boys and Girls Club, and others to institute greenway ecological education programs.

Promote Social Cohesion

Recognizing the intrinsic value greenways can have with respect to social interaction and health was also viewed as important for Aerotropolis residents. Social health includes promoting interaction among people, ensuring greenways contribute to quality of life, and providing a calming effect by giving users a sense of familiarity and ownership over greenways.

- Promote an "Adopt the Greenway" program for local citizens, social groups, or businesses to participate in to further promote a sense of local community.

- Utilize sections of the greenway as part of local organized walks/runs.

- Let local organizations, churches and youth groups know that using the greenways for social interaction purposes is encouraged.

Develop a Greenway Culture

To ensure that users of the greenways utilize the space safely, an understanding and education of

Figure 2.5m: Greenway Culture

common greenway situations and occurrences is needed through the promotion of a greenway culture:

- Establish greenway concepts such as language or terminology, basic communication protocols and etiquette.

- Account for unique needs of the community along the greenway, such as icon-based signage for non-English speaking users.

- Develop reminders, tips and rules of the greenways in the form of signage, web sites and presentations at various community events. Refer to Figure 2.5m.

- Include greenway topics during outreach campaigns such as bicycle rodeos in area schools.

Account for Maintenance Needs

Maintaining a greenway system is critical to protect personal safety and minimize hazards that may otherwise dissuade potential users.

- Ensure the greenway is clear, free of hazardous debris, and tripping hazards are eliminated soon after they appear.

- Users must know who to contact for maintenance concerns.

- There is an expectation that maintenance is continuous and consistent.

- Investigate and plant non-invasive, colorful or edible vegetation adding to greenway aesthetics that is proven not to uproot pavement and, requires little maintenance.

- Establish maintenance patrols, most likely using volunteers, to pick up litter, report significant issues to authorities, and document evolving or developing conditions which may be hazardous to users.

- Develop both maintenance standards and formal agreements for the long-term health of the greenways. Standards should contain technical specifications on mowing, weed abatement, pruning schedules, materials to be used in planting areas, and resurfacing standards.

- Maintenance agreements should formalize who is responsible for maintaining pathway surfaces and adjacent common areas, as well as trees and shrubs.

Ensure Safety for All Users

Safety is a prerequisite for users of greenways and a topic that resonates in multiple arenas. Safety should include keeping people safe from a criminal element, reducing hazardous conditions, ensuring there is not a fear about other greenway users, and designing and signing traffic/street interfaces that promote visibility and safe practices by users and motorists.

- Law enforcement should develop a bicycle patrol specific to the greenways and nearby adjacent streets with the intention of monitoring users, traffic activity, and providing a general presence.
- Enforcement and signage discouraging "speeding" by bicyclists and other wheeled users should be a focus.
- Launch a public safety campaign aimed at fundamentals of greenway use such as discouraging head phones, reminding dog owners of leash laws, encouraging mobile phone users to report problems, and other similar messages.
- Construct connecting micro-paths from adjacent roadways for access by emergency vehicles and patrols.
- Minimize remoteness of a greenway alignment to keep users within a relative safe distance of adjacent areas or streets to prevent pockets of hidden zones, both visually and aurally.
- In heavy use or remote areas, install bicycle and stroller repair stations.

Minimize Vehicular Interactions

Minimizing exposure to vehicular traffic is essential to a healthy, safe, and vibrant greenway system. This has to be balanced with access considerations and an understanding that many users will first access the greenway by driving to and parking their motor vehicle. Users have been found to utilize a greenway system much more regularly and for longer periods when they do not have to compete regularly with vehicles for space or time crossing intersections.

- When developing future roadway network plans, minimize planning heavily used corridors near existing or future greenway sections.
- Re-evaluate future design plans involving adjacent greenway corridor roadways for traffic calming measures to slow and steady traffic movements, particularly where greenways and roads intersect.
- Inform motorists and greenway users with clear signage and signals of approaching intersections, specifically atypical traffic patterns, or other potential conflicts with motorists.

Integrate Economic Considerations

Economic health can come in the form of equal access to daily needs such as food and employment, reduction of transportation costs, an increase in economic activity through public and private investment and attracting visitors to the area.

- Promote the greenway system to attract visitors, which provides an economic impact to nearby businesses and communities.
- Include transportation costs and household savings in public service announcements for the area greenways.
- Consider methods to promote nearby economic opportunities without degrading the quality of the greenway experience. This can be achieved through low impact advertisements or community bulletin boards.
- Include the greenway system as a promotional feature for recruiting new businesses to the area.
- Align policies to allow for "Trail-Oriented Development" in the form of mixed uses along the greenway.

Update Policies

Communities to consider policies that can support greenway implementation including:

- Strategies to forgive outstanding tax bills on vacant/abandoned properties
- Shared use opportunities with schools
- Reclaiming pavement assets
- Prioritize transportation planning toward active transportation
- Urban ag/urban farm-related policies to allow people to produce foods
- Strategies to retain residents/prevent gentrification through policies protecting

affordable and public housing

Funding Approaches

There are several strategies that can fund greenway infrastructure. In addition to construction, funds may support, gardens, wayfinding signage, benches, playgrounds, and promotion.

- Health: Greenways support healthy living through behavior change. Funding can come from health foundations or insurance plans (i.e. Blue Cross Blue Shield)

- Economic Development/Tourism: Greenways support economic development for the local commerce and greenways attract visitors from outside the area. Funding can come from local and regional economic development programs (i.e. Community Development Block Grant)

- Recreation: Greenways support active and passive recreation. Funding can come from sources that aim to support active and passive recreation (i.e. the state and federal recreation, trails and parks programs or the National Recreation and Park Association)

- Transportation: Greenways provide an alternative approach to transportation. Funding can come from state and federal programs support active transportation (i.e. Transportation Enhancement Program and Safe Routes to School)

- Environmental Protection: Greenways provide an opportunity to preserve nature and connect users to nature. Funding can come from programs aimed at protecting the environment

2.6 Case Studies

Blackstone Valley

The Blackstone River Bikeway is a New England bi-state linear park that will ultimately extend 48 miles from Providence, RI to Worcester, MA. Ten miles of the bikeway are currently open to the public, and once complete, it will serve as the region's premier multi-use recreational facility as well as an alternate mode of transportation for commuters. It will connect New England's second and third largest cities and serve a population of more than 1 million, linking many of the Valley's significant natural and historic features. Additionally, Blackstone River Valley Greenway is unique in that it is both a rail-to-trail and rail with trail project, in that it reclaims inactive rail lines for pedestrian use while running alongside and over existing rail lines.

CRJA-IBI Group collaborated with the project engineers on the design of a 3.75 mile multi-use trail segment of the bikeway on the historic Blackstone Valley Railroad right of way, extending from the Rhode Island state border into Millville, MA. The project includes restoration of 11 bridges, design of pedestrian connections, trailhead and parking design, view shed management, ecological restoration, public outreach and an historical landscape component.

The Blackstone River Heritage Corridor has national historic status as the birthplace of the American Industrial Revolution, marking the shift from Farm to Factory with the first water-powered mill in 1790 in Pawtucket, RI. Mill towns along the corridor, such as Millville, MA,

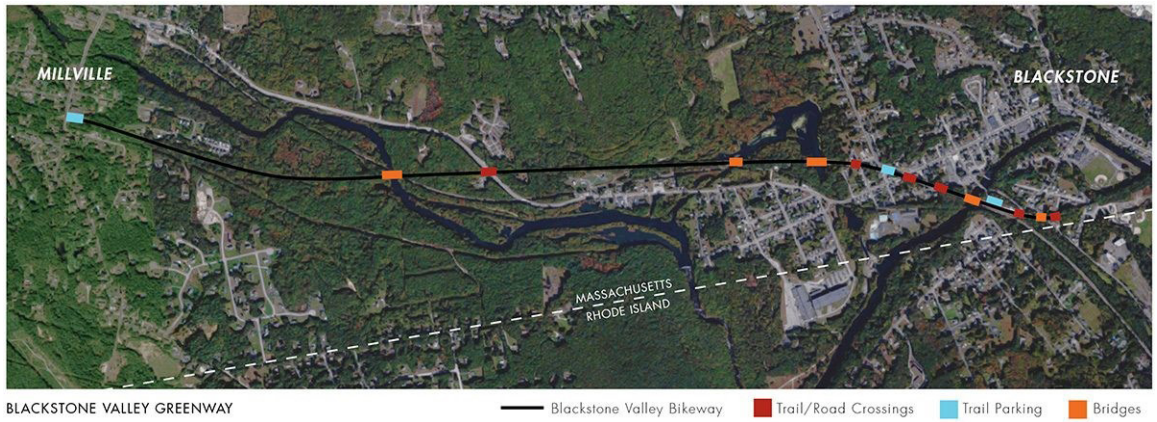


Figure 2.6a: Blackstone Valley Trail Map

Figure 2.6b: Trail Bridge

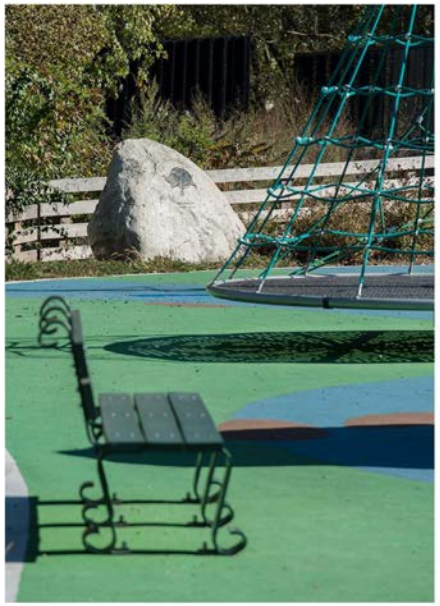


Figure 2.6c: Trail Furniture

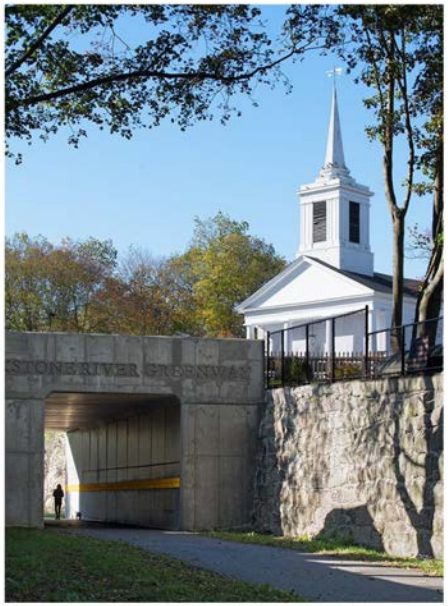


Figure 2.6d: Trail Underpass

Figure 2.6e: Pocket Park along Trail

are a reflection of that heritage. Transporting manufactured goods by horse-drawn cart along the corridor was quickly replaced by boat on the canal in the early 1800s, then by rail in 1835. Due to this mode of inexpensive rapid transit, commerce in the region prospered.

Today, however, it is the natural setting that dominates much of the corridor experience, especially in the Blackstone-Millville segment. Elevated high up on the former railroad berm, pedestrians and cyclists enjoy moving through second-growth woodland, with views over open fields, small mill villages, and the winding and rushing Blackstone River itself. Details, such as the logo of an oncoming train on the trail's granite entry posts, evoke the cultural history of the rail corridor, while native boulders engraved with flora and fauna, such as the Red-tailed Hawk, subtly inform users of the corridor's ecology. A map of the Blackstone River's meandering profile courses through the resilient surface of a children's playground, further reinforcing the sense of place.

The Blackstone-Millville segment passes by the dramatic Blackstone Gorge, one of the last wild stretches of the river. It also includes the equally dramatic Triad Bridge, a late 19th Century three-tiered bridge accommodating the intersection of 3 rail corridors, the lower of which is still active, and the upper of which was never completed. The tall stone abutments to the upper unbuilt tier remain as sentinels in the landscape through which the Blackstone River Bikeway passes on the middle tier. A wide diagonal band of gray "Plankstone" marks the path of the upper tier as it would have crossed above the Bikeway. Gathering spaces with

benches and planting occur at each end of the Triad Bridge to enable trail users to linger and enjoy the unique 19th century infrastructure, as well as the stunning views up and down the Blackstone River itself.

Phase II of the Blackstone-Millville segment, 0.4 miles, is currently underway, and will refurbish a pair of monumental granite railroad viaducts (one 3-arch and one 7-arch) that will restore another memorable example of historic railroad engineering for the benefit of generations to come. Ecological restoration and viewshed management are important components of the trail design.

Safety Design and Elements

Safety, as with any project, was a very crucial component to the design of the Blackstone River Valley Greenway. To provide a safe pedestrian corridor, it is extremely important to have unobstructed site lines that allow for optimal spatial awareness, smooth pavement to minimize potential accidents, and short distances between "bail-out" points that allow users to retire from the trail at their leisure. In addition to the aforementioned safety elements, group riding and "trail ambassador" initiatives have been established to encourage trail use and public safety in the absence of continuous police surveillance. The trail ambassadors are a group of volunteers who patrol the greenway, and are primarily made up of retired citizens and stay-at-home parents.

Group riding, smooth pavement, and bail-out points allow for safe use.

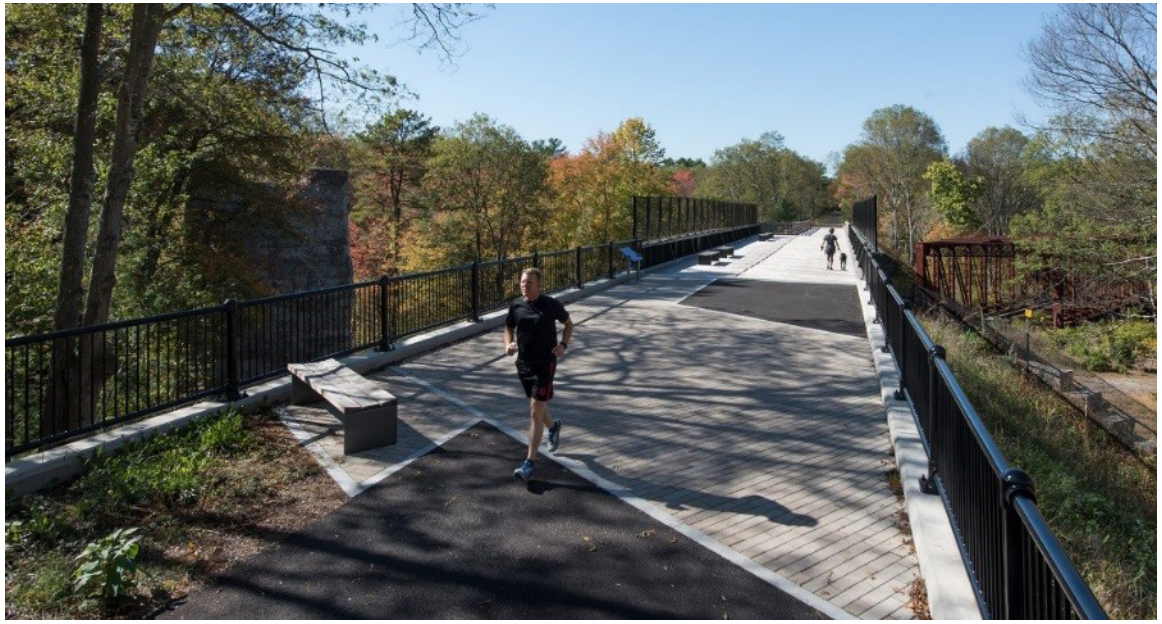


Figure 2.6f: Trail View: Design

Figure 2.6f: River Crossing

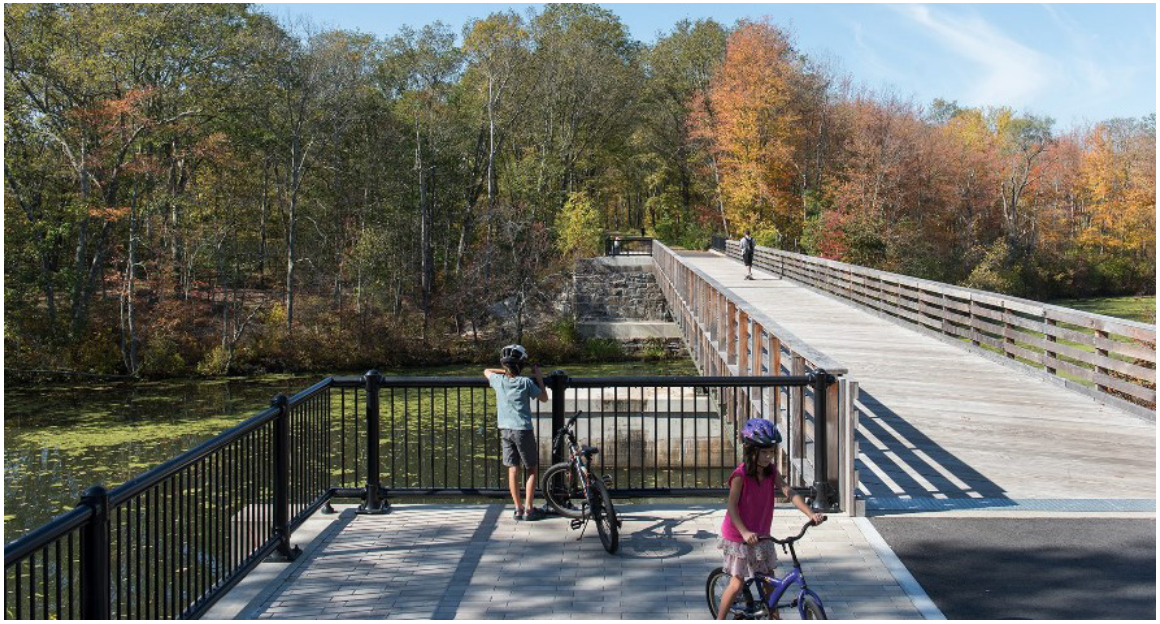


Figure 2.6g: Rest Area

Figure 2.6h: Bike Racks

Implementation Strategies and Funding

The Rails-to-Trails movement has not only created open space opportunities to connect communities with each other and with major centers of activity, but also enables users to connect with the area's history and natural environment in very tactile ways during their daily constitutionals. The Blackstone River Bikeway, is one such example. When completed, it will be a 48-mile rail trail stretching from Worcester, MA to Providence, RI through the Blackstone River Heritage Corridor. Approximately 20 miles of the trail are now open for public use. The first phase involved extensive repair and restoration of 8 bridges.

The Blackstone River Valley Greenway is owned and funded by the Massachusetts Department of Conservation, though it was initially funded through MassDOT. It also received funds through the American Recovery and Reinvestment Act (ARRA).

Impact on Community

The impact the Blackstone River Valley Greenway has had on its communities has been immense. The ribbon cutting for this 4 mile phase of the greenway was highly anticipated, as shown by the below attendees and guest speakers:

- Lt. Governor Karyn Polito, Commonwealth of Massachusetts
- State Senator Ryan C. Fattman, Commonwealth of Massachusetts
- State Representative Kevin J. Kuros, Commonwealth of Massachusetts
- Astrid Glynn, Rail and Transit Administrator, MassDOT
- Leo Roy, Commissioner, Massachusetts

The public was immediately using this trail when it opened. Given that there was not a greenway in the corridor before the project, ridership has increased dramatically. Trail users commented that the 4-mile stretch designed by CRJA was one of the nicest portions of the trail system, much due to the amenities and furnishings selected (seating areas with views, contemporary but rustic materials, bike racks, parking, native planting, granite entry signposts at trailheads, and a playground where the trail went through a town center).

Figure 2.6i: Opening Ceremony

Copenhagen, Denmark

Copenhagen, Denmark is renowned for being one of the most bicycle-friendly cities in the world. Nearly 45% of all work or school commutes are taken via bike, compared to 27% via public transport and 23% via automobile. Copenhagen's widespread bicycle network includes a mixture of dedicated bicycle lanes separated via curb, striped lanes, and a cycle "superhighway" that safely connects riders from Copenhagen to the town of Albertslund, 22km away. The cycle superhighway includes air pumps/fix-it stations, dedicated traffic lighting, and improved intersections, and in future phases will ultimately extend over 500km.

Additionally, Copenhagen's bike network extends through downtown and the surrounding communities to the Kastrup Airport, offering riders dedicated bike lanes that extend directly to the airport terminals with bike parking zones. The cycle track extending to Kastrup airport is completely separated from automotive traffic by vegetative buffers that include street trees, curbs, and guardrails. In addition to the buffer zone, the track's sophisticated design includes bi-directional lanes, painted intersections, and traffic signalization that is solely for bicycle circulation. Copenhagen's extensive bike network is an ideal precedent for AeroATL due to its immense ridership, innovative and safe integration with automotive transportation, and its inclusion of cycle tracks that connect communities surrounding a major international airport.

Figure 2.6j: Copenhagen Bike Track and Multi-Use Trail Examples

Lessons Learned

The population of Copenhagen cycled nearly 1.4 million km/day in 2016, with the bicycle being the transportation method of choice for nearly 41% of work and school commuters. A target has been set to increase bike ridership to over 50% by 2025, requiring reliance on automotive transport to reduce considerably in the next few years.

One of the major challenges associated with the increase in bicycle ridership is the limited availability of bike parking in Copenhagen. As of 2016, there were approximately 675,000 bicycles owned in Copenhagen, compared to only 54,000 parking spaces within the city. This is consistent at Kastrup airport with bicycle parking at terminals being a premium.

Safety Design and Elements

As the population of Copenhagen becomes less reliant on automobiles and more reliant on cycling as the preferred mode of transportation, cycling as a whole has become significantly safer. The risk of injury has dropped over 23% in the last decade, with only 150 injuries and 5 fatalities reported in 2016.

Initiatives such as the Safe Cycle City and the Vision Zero Traffic Plan are raising safety awareness, and ultimately hope to reduce the total number of cyclists injured by over 70% by 2025. Some additional design strategies to improve safety that have already been implemented are:

- Green Cycle Routes and Cycle tracks that continue all the way to the "stop line", creating a greater sense of security at intersections.

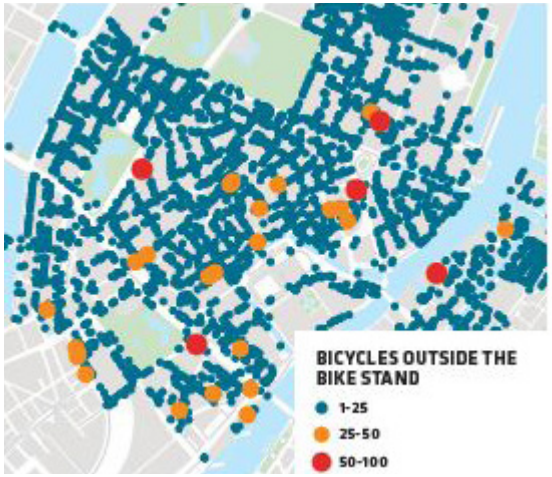


Figure 2.6k: Bike Parking Issues

- Digital signage providing updates on traffic flow and congestion.
- Separate platforms for cyclists at bus stops to make it safer to get on the bus.

Implementation Strategies and Funding

Since 2004, over 2 billion DKK ($31 million US) has been invested in cycling related initiatives in Copenhagen. Cycling infrastructure has significantly expanded as a result of these investments. These investments have come from a combination of City, Government, and Private funding sources, and have contributed to increased parking, improved safety, bike/pedestrian bridges, and streetscape improvements.

Future cycling investments are qualified under the Bicycle Track Priority Plan 2017-2025. This plan helps to take into consideration the projected increase in bicycle traffic, and identifies areas where tracks, routes, intersections, and streetscape most need to be improved or implemented prior to 2025.

Impact on Community

Copenhagen's bicycle network has positively contributed to the population through both health and socioeconomic benefits. Daily cycling improves physical activity, productivity, and overall health, while reducing both health care and transportation costs. According the Copenhagen's 2016 Bicycle Account, "The health benefit of every new km cycled in Copenhagen is the equivalent of DKK 0.99 (or .16 USD) in health care costs saved by the City of Copenhagen. This includes increased productivity (60%) and reduced treatment costs (40%)."
(1 Danish Krone - DKK = 0.16 American Dollar - USD)

Ultimately, Copenhagen's bicycle network is the preferred travel method by the majority of the population because it is considered to be the quickest and most efficient way to navigate the city. Some of the reasons that contribute to this are high accessibility, more direct connections, and existing vehicular congestion.

Since 2015, a number of initiatives have been implemented to improve commuter travel time on Copenhagen's bicycle network:

- New passing lanes are improving circulation, allowing for commuters to travel at a greater variety of speeds than before.
- Signs allowing cyclists to turn right on red

have shown improved travel times with no increase to conflict with other transportation methods.

- The "I Bike CPH" route planner app provides tips on the fastest way to reach your destination while recommending the "greenest" route.

Overall, the population of Copenhagen has shown satisfaction with the city's bicycle infrastructure, with over 97% of the population reported as being happy with the existing network. The population is generally satisfied with the extent of Green Cycle Routes and Cycle Superhighways. More specifically, satisfaction has increased regarding the number of cycle tracks (87%), the width of cycle tracks (62%), and cycle track condition and maintenance (71%). Copenhagener's are decidedly less satisfied with the amount of existing bicycle parking, reporting a 37% satisfaction rate.

*Graphs, images, and text sourced from

Copenhagen, City of Cyclists: Bicycle Account

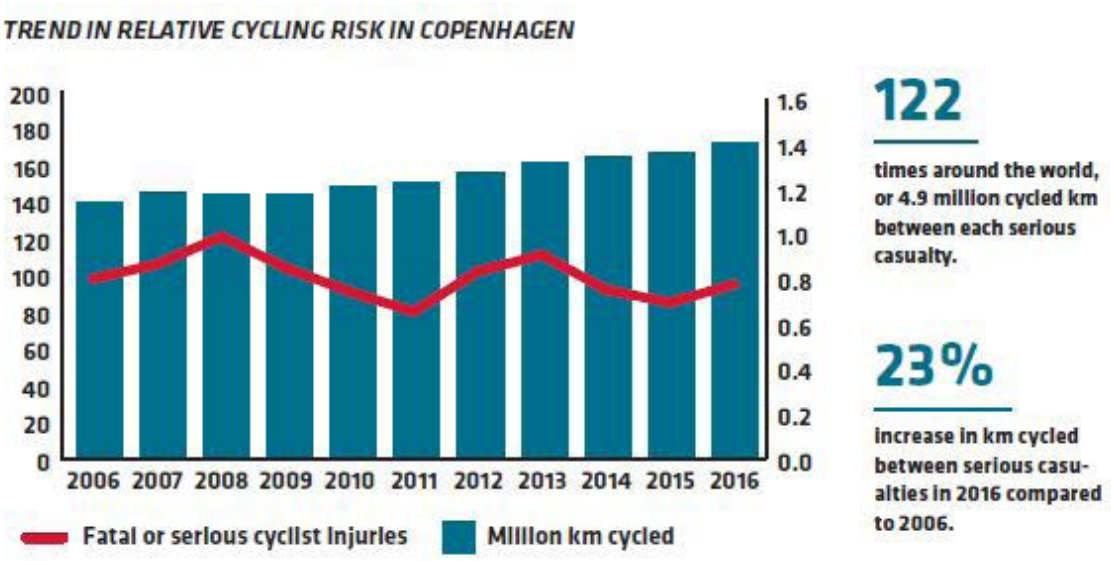


Figure 2.6l: Cycle/Bike Crash Statistics

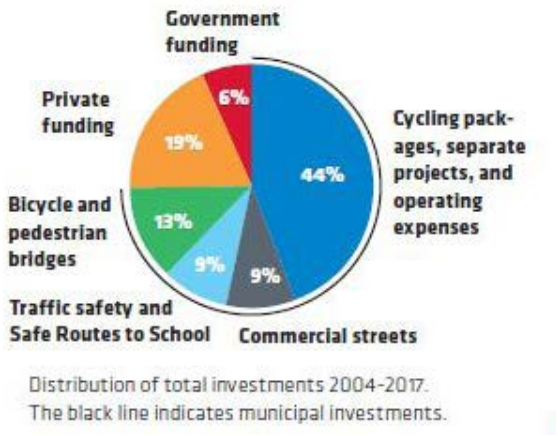


Figure 2.6m: Cycling Related Investment

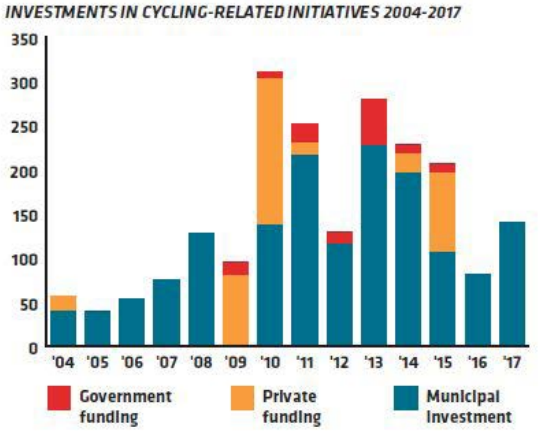


Figure 2.6n: Cycling Related Initiatives

Figure 2.6o: Cycle Tracks

Figure 2.6p: Family Cycling Together

Figure 2.6q: Digital Signals

DKK 0.99

is saved by the City of Copenhagen in health care costs per cycled km.

Equals USD 0.16

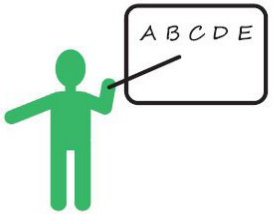
DKK 4.04

is the socio-economic impact of 1 km cycled rather than driven at peak times.

Equals USD 0.64

4 hours

children who cycle to school can concentrate for up to 4 hours longer than children who are driven to school.



19

The health benefits from switching from car to bicycle are 19 times higher than the drawbacks from accidents and air pollution.

5-6 years

longer life expectancy is a consequence of a physically active life style compared with physical inactivity.

30%

reduced mortality rate as a consequence of cycling 30 minutes a day over a longer period.

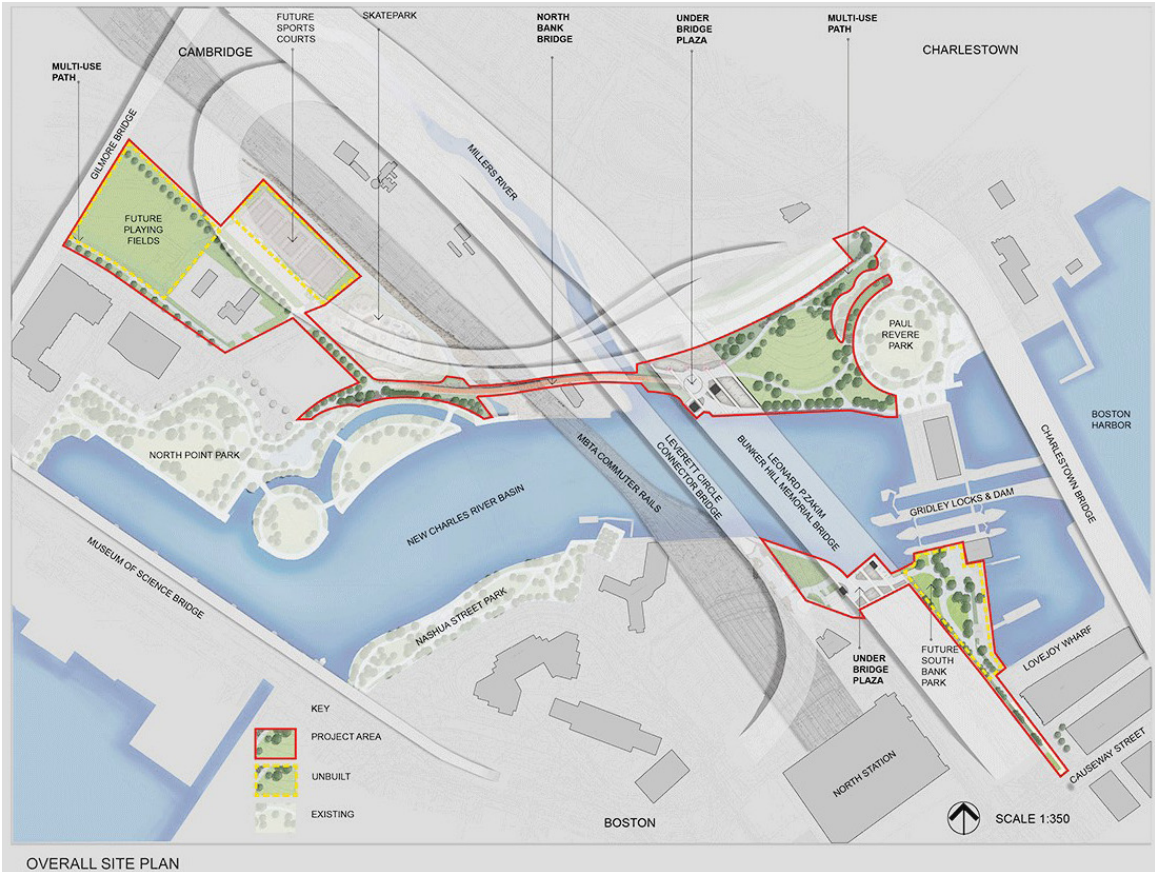
Figure 2.6r: Health Benefits

North Bank Bridge Park- Boston, Charlestown, Cambridge, MA

The North Bank Bridge Park project reclaims a derelict underbridge space overwhelmed by industry, highway ramps, and the looming Zakim Bridge and transforms it into a safe, vibrant, welcoming, and aesthetically pleasing Underbridge Plaza, that maintains its urban character while offering opportunities for environmental mitigation. It is the last park built within the New Charles River Basin, a formerly inaccessible portion of the Charles River on both the north and south banks, referred to as "The Lost Half Mile." The North Bank Bridge Park created the first river-edge connection between the Charles River and the Boston Harbor, finally fulfilling a century-old vision of Charles Elliot.

History

The "Big Dig" (aka the Central Artery/Tunnel Project in Boston) instigated this project. When the Interstate 93 Zakim Bridge was proposed to cross the Charles River, the MA Department of Environmental Protection required the Federal Highway Administration (who was building the Big Dig Project) to provide environmental mitigation. Part of that mitigation was to provide public access to the north and south banks of the Charles River along with new park land along those banks. The area consisted of active industry, active rail yards, former abandoned rail yards, and underutilized right-of-way of the interstate highway system. The Massachusetts Department of Environmental Protection required a Master Plan for what became the New Charles River Basin. The master plan subdivided the area into 5-6 projects. The North Bank Bridge Park was one of those projects, and one of the last ones to get implemented.



OVERALL SITE PLAN

Figure 2.6u: Concept Plan

A key feature of the Park is the Underbridge Plaza, an unexpected urban outdoor room that borders on the Charles River and utilizes the Zakim Bridge as its roof. The landscape architects saw an opportunity to create a new kind of urban public space, which responds directly to the extant urban industrial setting and the sleek monumentality of the sculptural bridge and highway infrastructure. Though this approach challenged the initial direction provided by the client and the Citizens' Advisory Committee, which was to move people through the space as quickly as possible, the landscape architects prevailed in promoting a memorable urban plaza beneath the Zakim Bridge. The uncluttered space

Figure 2.6v: View: Under-bridge

allows for such unanticipated uses as dog-walking, joggers performing morning calisthenics using the low retaining walls, cycle clubs holding dance parties, people offering marriage proposals, and film shoots for luxury car ads, giving evidence to the fascination and appeal this space holds for the public.

In the Underbridge Plaza, the linear paving design reflects linear folds in the underside of the Zakim Bridge. Landforms, which help to guide circulation, transition from soft to hard as they slip under the Zakim Bridge. The landscape architects invite the public into the Underbridge Plaza using subtle uplighting, while also establishing clear sightlines into and through the Plaza. To celebrate the verticality of the surrounding concrete highway piers, and to give a sense that "the lights were on," the landscape architects conceived of vertical light pylons to "occupy" and animate the Underbridge Plaza, a concept implemented in collaboration with an artist.

Connections and an icon

The North Bank Bridge, the project centerpiece, spans the Millers River and the MBTA Commuter Rails to create vital pedestrian and bicycle connections between Cambridge and Charlestown. It also creates a lively sculptural element within the park, an iconic piece of bridge architecture that complements, rather than competes with the even more iconic Zakim Bridge. The landscape architects worked with the bridge designer to develop the bridge's reverse curved horizontal alignment to create a seamless interface with approaching park pathways, while creating a dramatic view centered on the Zakim Bridge's north pylon.

Sustainability

Part of reclaiming this urban waterfront entailed using rigorous sustainable measures, such as native planting to restore parts of the riverbank and form the east abutment of the North Bank Bridge. Other extensive sustainable undertakings include the reclaiming of stone seawall blocks and granite cobblestones from other parts of the Central Artery project, and coordinating a complex brownfield reclamation effort that consisted of removal and capping of various on-site contaminated materials.

Lessons Learned

Always investigate underground utilities, their ages, and their constraints, especially if you are in an area with underlying layers of organic soils (peat), before proposing to raise the grade in an area. Heavy surcharge can cause settlement that can damage a utility.

Safety Design and Elements

Human instinct tells us to be apprehensive of dark, underbridge spaces. However, people's perceptions of the urban environment can be changed by good landscape architecture design, such as welcoming lighting, materials with quality finishes, and unobstructed sight lines:

- Lighting was a huge safety focus, providing attractive, comfortable and well lit areas under the bridge that were previously uninhabitable at night.
- New site furnishings and quality material finishes can help improve comfort, wayfinding, and safety by demarcating safe spaces and appropriate circulation patterns.
- Unobstructed site lines were also a critical component of safe design. Open view sheds give park users the ability to not feel restricted or trapped if presented with a precarious situation.
- Video surveillance is provided under the Zakim Bridge for highway security, but not for park protection. However, the Department of Conservation and Recreation have state police that send patrol cars through the site on a routine basis for added security.

Figure 2.6w: Condition Before the Project

Figure 2.6x: View: Lighting

Figure 2.6y: View: Landscaping

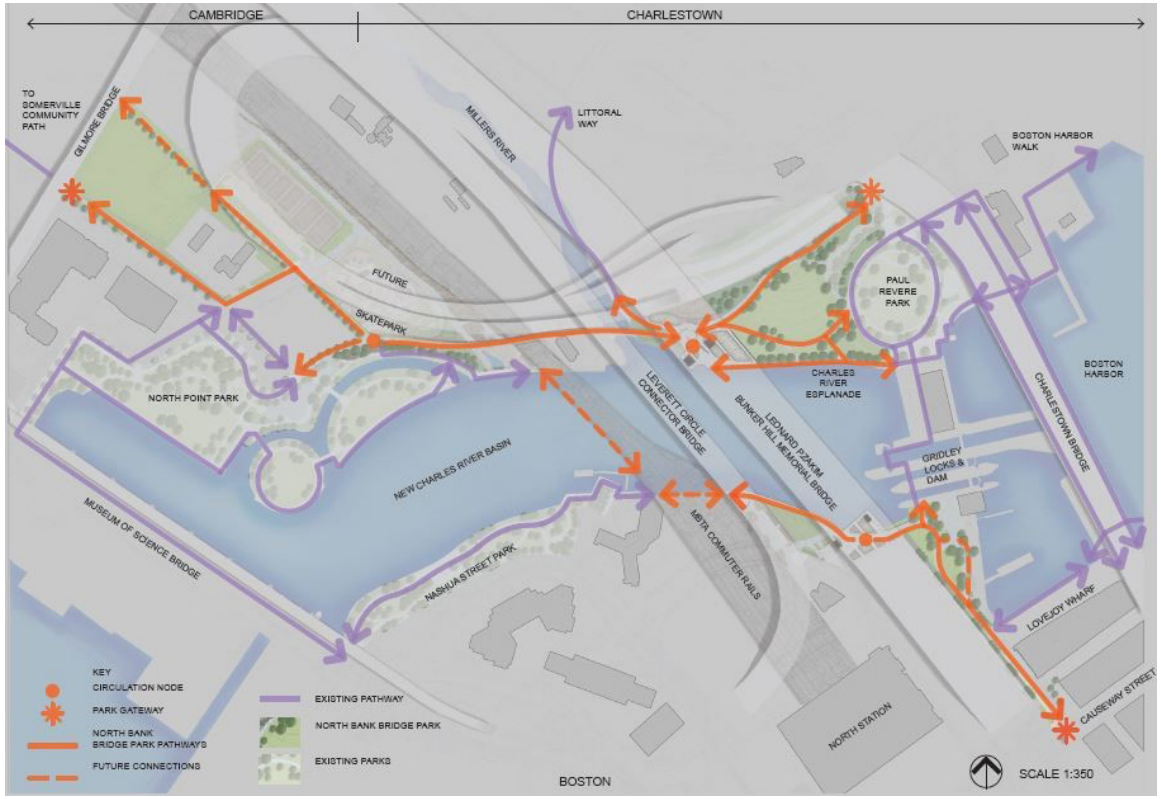


Figure 2.6z: Connectivity Plan

Implementation Strategies and Funding

North Bank Bridge Park is state owned, part-owned by MA Department of Conservation and Recreation and part-owned by MA Department Of Transportation. Funding initially was coming from the State as mitigation for the Zakim Bridge over the Charles River. However, in 2006 (a boom economy period), the lowest bid still exceeded the project budget, and the project was shelved for 3 years.

In 2009, The Commonwealth of MA applied for funding through the American Recovery and Reinvestment Act (ARRA) (Obama's version of the New Deal). Only "shovel-ready" projects were eligible, and North Bank Bridge Park was shovel-ready. The Commonwealth received federal funding of $30M for the park, the largest ARRA appropriation throughout the entire state, and that includes appropriations granted to highway bridges, new roads, and transit improvements projects.

The project was fully funded by the ARRA appropriation, and construction began in 2009. The park was completed in 2012.

Impact on Community

This project opened up critical linkages along the Charles River for walking and biking, increasing ridership dramatically. The planning and design for the North Bank Bridge Park, which took nearly a decade, was guided by the overriding conviction that the public would one day be thrilled to come into this new realm, to see the city from a new vantage point and to appreciate the unique experience of being "up close" with the colossal Zakim Bridge structure.

This pre-Big Dig aerial conveys the derelict and inaccessible condition of the future North Bank Underbridge Plaza area, shown in the center foreground.

The Atlanta BeltLine

The Atlanta BeltLine is a redevelopment project that uses a 22-mile historic industrial rail corridor that encircles the City of Atlanta to build 22 miles of modern streetcar, 33 miles of multi-use trails, and 2,000 acres of parks. The project was originally conceived as a light rail transit corridor and station area redevelopment project in a 1999 master's thesis by Georgia Tech student Ryan Gravel. Over time, and through collaboration with various non-profit organizations, such as the PATH Foundation and the Trust for Public Land, alongside community groups, civic leaders, and noted urban planner Alexander Garvin, the project evolved to become the integrated multi-modal transportation, land use, and greenspace project that it is known as today. As such, the project supports affordable workforce housing, economic development, job creation, public health, streetscapes, public art, environmental clean-up, and historic preservation.

The project is anticipated to be completed in the year 2030. A unique aspect of the project is that, not only will it provide multimodal connectivity to 45 intown neighborhoods, but it itself has become a destination and a place where residents and visitors come together to experience the City.

Project Leadership

The project is led by two organizations – Atlanta BeltLine, Inc. (ABI) and The Atlanta BeltLine Partnership. These two groups work together with a multitude of partner organizations and agencies throughout the region and the country to implement the project.

Figure 2.6aa: View: BeltLine Eastside Trail

ABI was formed by Invest Atlanta, the development authority for the City of Atlanta, in 2006 to manage the implementation of the Atlanta BeltLine. Specific functions of ABI consist of:

- Defining the Atlanta BeltLine plan;
- Leading efforts to secure federal, state and local funding;
- Spearheading all design and engineering; constructing trails, parks, transit, streetscapes, affordable housing, and art;
- Continuing the community engagement process;
- Managing all vendors and suppliers; and
- Serving as the overall project management office to execute the Atlanta BeltLine program.

The Atlanta BeltLine Partnership is a private, independent non-profit created in 2005 to help ABI advance the Atlanta BeltLine vision. It is charged with raising private capital, growing civic support, and providing positive socio-economic outcomes for the project. The Atlanta BeltLine Partnership's role is particularly important because public funding sources alone are not enough to fund the entire Atlanta BeltLine project. The Atlanta BeltLine Partnership helps fill funding gaps by soliciting investment from the philanthropic community and the private sector, while ensuring donors that their contributions are appropriately allocated. To date, the Atlanta BeltLine Partnership has raised over $54 million in corporate and philanthropic dollars.

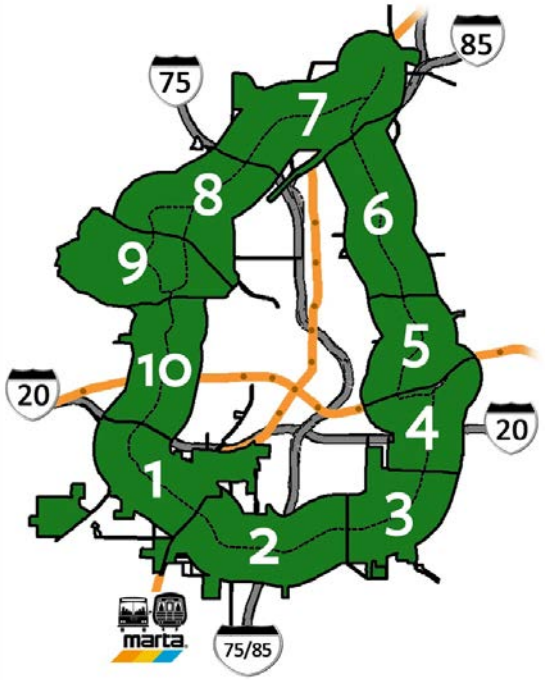


Figure 2.6ab: BeltLine Subarea Map

The Atlanta BeltLine Partnership grows civic support by engaging users and turning them into supporters. Engagement strategies include project tours and special events such as athletic special events, neighborhood festivals, and fitness classes. Growing civic support is important because private and philanthropic donors want to see their dollars going to worthwhile causes the are supported by the public. Additionally, this civic support leads to volunteers that help complete tasks that keep the project going and reduce program operations and maintenance costs. Examples of volunteer efforts include clean-ups and event and program advocacy staffing. To date, the Atlanta BeltLine Partnership has drawn over 45,000 supporters to events and volunteer programs.

Lastly, the Atlanta BeltLine Partnership provides positive socio-economic outcomes by bringing partners together to leverage some of the opportunities surrounding the BeltLine, specifically health, housing, and economic opportunities and strengthen the community.

Planning + Design + Management

The Atlanta BeltLine is more than just a trail project. It is an integrated multi-modal transportation, land use, and greenspace project. Specific modes proposed for the Atlanta BeltLine include a 14'-wide multi-use trail and a streetcar line with associated stations. Planning and designing this system required a comprehensive master planning process. This process began in 2007 and focused on the areas located a half-mile on either side of the Atlanta BeltLine corridor.

Working collaboratively with the City of Atlanta Department of Planning and Community Development, ABI divided the study area into 10 distinct subareas and managed a multitude of consultant teams to master plan each study area. The plans addressed land use, transportation, and park related elements to development a framework that would support future populations growths along the corridor. Every study area included extensive public engagement to ensure that residents had a voice in the development of the process.

In addition to the 10 subarea master plans, ABI has managed the design, implementation, and management of all the corridor design and construction projects that have been required to build and manage the corridor. A key element of the management of the corridor is public safety and maintenance. Public safety along the corridor is overseen by the Atlanta Police Department (APD). APD has a dedicated unit – the Path Force Unit – that is responsible for providing public safety to the Atlanta BeltLine and adjacent parks and neighborhoods. The Path Force patrols seven days a week and is comprised of 15 officers and three supervisors. The Path Force Unit is funded through $1.8 million grant obtained from the U.S. Department of Justice.

In addition to APD, the Atlanta BeltLine was designed with various safety features in mind. These features consist of access points, security cameras, mile markers and lighting. Security cameras on the trail feed into APD's citywide Video Integration Center (VIC) which allow police officer to monitor and view historic surveillance footage of the corridor.

Funding

The full implementation of the Atlanta BeltLine is projected to cost approximately $4.39 billion dollars. A project of this magnitude requires a multitude of funding sources. Figure 2.6ac identifies the funding sources that have been identified and estimated for the project.

Figure 2.6ac on next page shows that 20% of the funding for the project has not been identified. This represents almost $900 million. Despite

this funding shortfall, ABI and the City of Atlanta remain committed to moving the project forward and working with federal, regional, and local agencies, organizations, and partners to identify new funding strategies for the project.

Community Impact

The first seven years of the Atlanta BeltLine program generated more than $1 billion in private redevelopment catalyzed by roughly $350 million of investment. This represents roughly a 3:1 return on investment. Additionally, the BeltLine has led to the following impacts:

- Removal of 1,700 tons of contaminated soil
- Removal of 100+ acres of kudzu and other invasive species
- Planting of 600+ trees as part of the Atlanta BeltLine Arboretum
- Planting of 109,000 native grass plugs along 11 acres
- Creation of the City of Atlanta's largest temporary art exhibit
- Development of numerous cultural events such as the Lantern Parade which attracts over 11,000 spectators
- Development of a multitude of health and fitness programs including Yoga in the Park attended weekly by hundreds of people
- Increased volunteerism along the corridor

Sources	Costs	Percentage of Total
Tax Increment	$1,455,000,000	33%
Federal Funds (Estimated)	$1,272,000,000	29%
Federal, State, Regional, or Local Funding for Streetscapes (Estimated)	$343,000,000	8%
Local Funding for Parks (Estimated)	$157,000,000	4%
Private Funding (Estimated)	$257,000,000	6%
Unidentified	$857,000,000	20%
Total	**$4,393,000,000**	**100%**

Source: Atlanta BeltLine 2030 Strategic Implementation Plan

Figure 2.6ac: BeltLine Funding Sources

Vancouver International Airport (YVR) Bicycle System

Located in a semi-detached island know as Sea Island, Vancouver's International Airport (YVR) is committed to helping more people ride bicycles to and from its location. The airport is managed by the Vancouver Airport Authority (VAA), which markets the airport as a plane where you can do more than just catch a plan, but also as a destination. This destination is advertised as providing visitors with a variety of amenities such as shopping at the airport, riding to, from, and around the airport on a range of bicycle facilities, enjoying great vistas to the surrounding ocean and the Frazier River, and plane spotting at Flight Path Park. To encourage employees and visitors to use the bicycle system, the YVR participates in a variety of programs that promote active transportation. Long term, the YVR hopes to bolster the island's amenities and bicycle system to meet the future needs of surrounding communities, business partners, and employees.

The YVR Bicycle System

They YVR bicycle system provides a range of cycling options including cycle lanes, multi-use trails, and bike parking placed between airport terminals. Most of the system is comprised of on-street bicycle lanes and paved shoulders that connect the airport terminals to the surrounding areas. Figure 2.6ad on the following page illustrates YVR's bicycle system. The system connects riders directly to Downtown Vancouver, which is located approximately 11 miles from the airport. The VAA owns most of the roads in the island and appears to also maintain the bicycle system.

Figure 2.6ac: Vancouver Airport Bike Connection

Bicyclists riding to the airport from Downtown Vancouver are able to enter Sea Island on bike lanes located along the main bridge access roads to the airport as illustrated in Figure 2.6ae on the following page. Riders then have options to either enter the airport terminals or take some of the paved off-road paths to enjoy the scenery of Sea Island. Riders entering the terminal transition from bicycle lanes to shared lanes. Once at the terminals, riders are able to park their bicycles in bicycle racks located in various locations outside the terminal entrances.

The bicycle system also includes a 5.2-acre park known as Larry Berg Flight Path Park. The park is located directly in line with the end of one of airport's southern runway as shown in Figure 2.6ad.

Amenities found in the park consist of:

- A giant globe celebrating YVR's role in connecting British Columbia to the world
- Tail wings telling the story of why YVR became known as one of the best airports in the world
- Trails and runway paths that reflect the markings and lights of real runways
- Picnic tables and paper airplane benches
- Memorial benches for members of the British Columbia community remembering loved ones
- A bike tune-up station

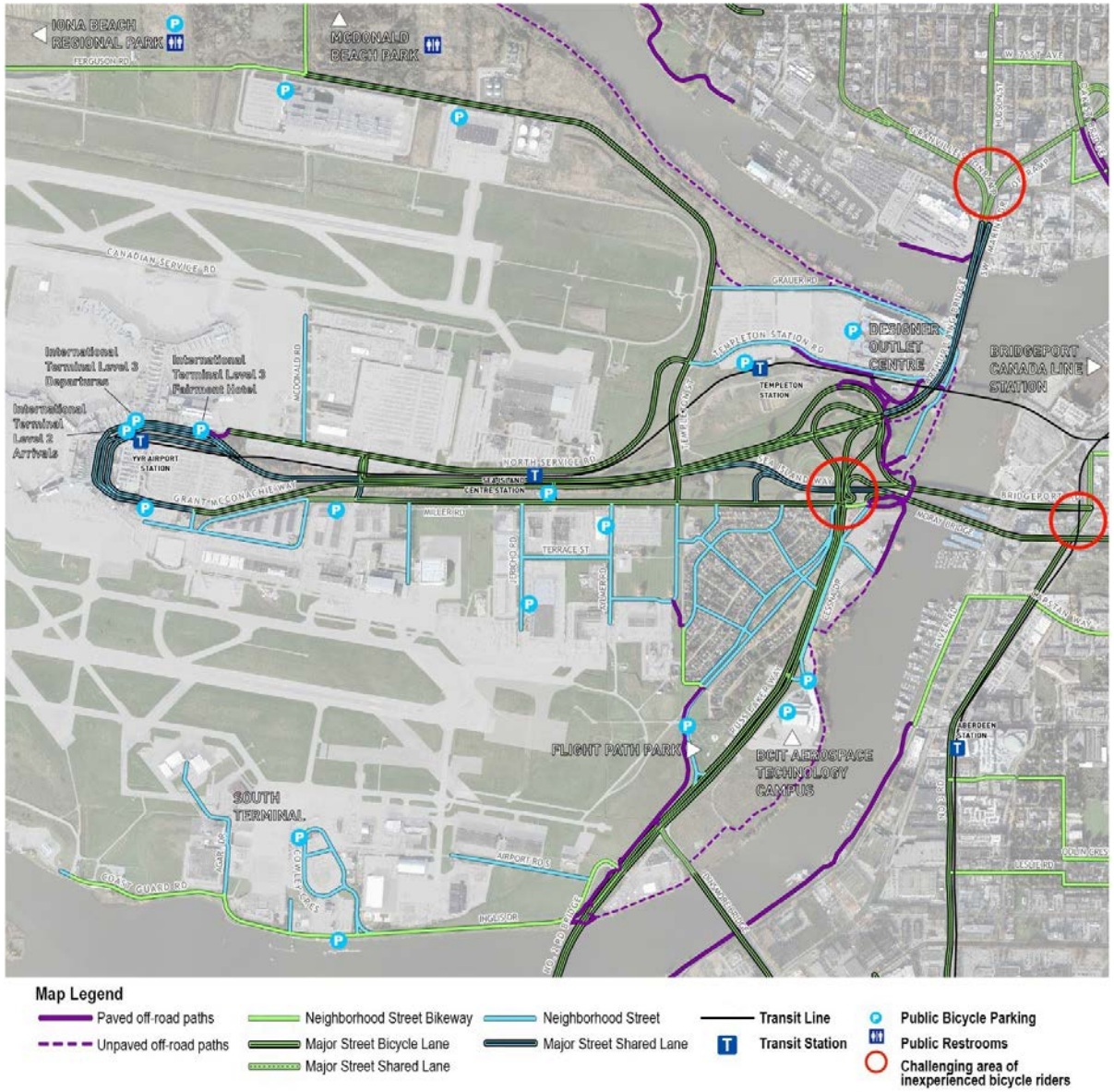


Figure 2.6ad: Vancouver Airport Bike Plan

Programs

YVR participates in various programs that promote sustainable transportation and encourage employees and visitors to experience the bike paths located all around the airport. Specific events include:

- Bike to Work Week (BTWW) – BTWW runs from May 30th through June 5th and promotes cycling, reducing carbon footprints, and living a healthy through an active lifestyle. YVR partners with a Vancouver, non-profit cycling advocacy organization known as HUB Cycling to help event participants track bike routes, distances travelled, greenhouse gas emissions saved, and calories burned. During one of the days of BTWW, YVR provides free bicycle mechanic services, snacks, and goodies at Larry Berg Flight Path Park.

- Commuter Challenge – Commuter Challenge runs from June 5th to June 11th. It encourages employees to take sustainable modes of transportation throughout the week to help reduce gas emissions. This includes options such as walking, biking, car-pooling, public transportation, telecommuting and more. Commuter Challenge also allows participants to track the kilometers travelled, emissions avoided, calories burned and liters of fuel saved during daily commutes.

The Future of YVR

YVR is also looking to the future to see how they can position the airport to meet the future needs of surrounding communities, business partners, and employees. Some of the improvements that the airport is proposing is a series of world-class

amenities, which extend beyond the typically offerings available at an airport. These include more of the existing attractions and recreational offerings that currently existing in Sea Island. Specifically, they consist of:

- Recreational and commuter cycling routes
- Walking paths
- Park spaces
- Natural areas
- Multi-use pathways
- Plane spotting areas
- Community and public spaces

Figure 2.6ag on the following page illustrates the potential amenity improvements that YVR is proposing for the airport. Following is a summarizes list of the proposed improvements, most of which deal with improving the pedestrian and bicycle experience connecting to the airport.

1. Plane Spotting Platform: Design and construct a viewing area including parking, path and a covered plane spotting deck.
2. Dyke Path in Sea Island Conservation Area (SICA) Lands: Open gated path to the public and connect to the surrounding region networks.
3. Ferguson Road – West Improvements: Widen the road, install bike route and provide a separated all ages all abilities path, and connect to surrounding trail network.
4. Plane Spotting Platform: Design and construct a plane spotting platform.
5. Jogging Loop / Pathway /Cycling Route: Complete an all ages, all abilities path from east end of US terminal to pathway system along north service road to Templeton. Also add a connection for cyclists from north service road to the International Terminal arrivals level.
6. Miller Road Bike Route: Provide a consistent bicycle route along the entire length of the corridor improving access to the arrivals level of the Domestic Terminal.
7. Arthur Laing Bridge Alternative Pedestrian and Bicycle Crossing: Provide an alternative pedestrian and bicycle only crossing.
8. Templeton Station Secure Bicycle Parking: Provide a secure bicycle-only parking facility.
9. Active Transportation Corridor: Construct a separated bi-directional, all ages all abilities

Figure 2.6ae: Dedicated Bike Lane Connection

Figure 2.6af: Pedestrian Interaction Spaces

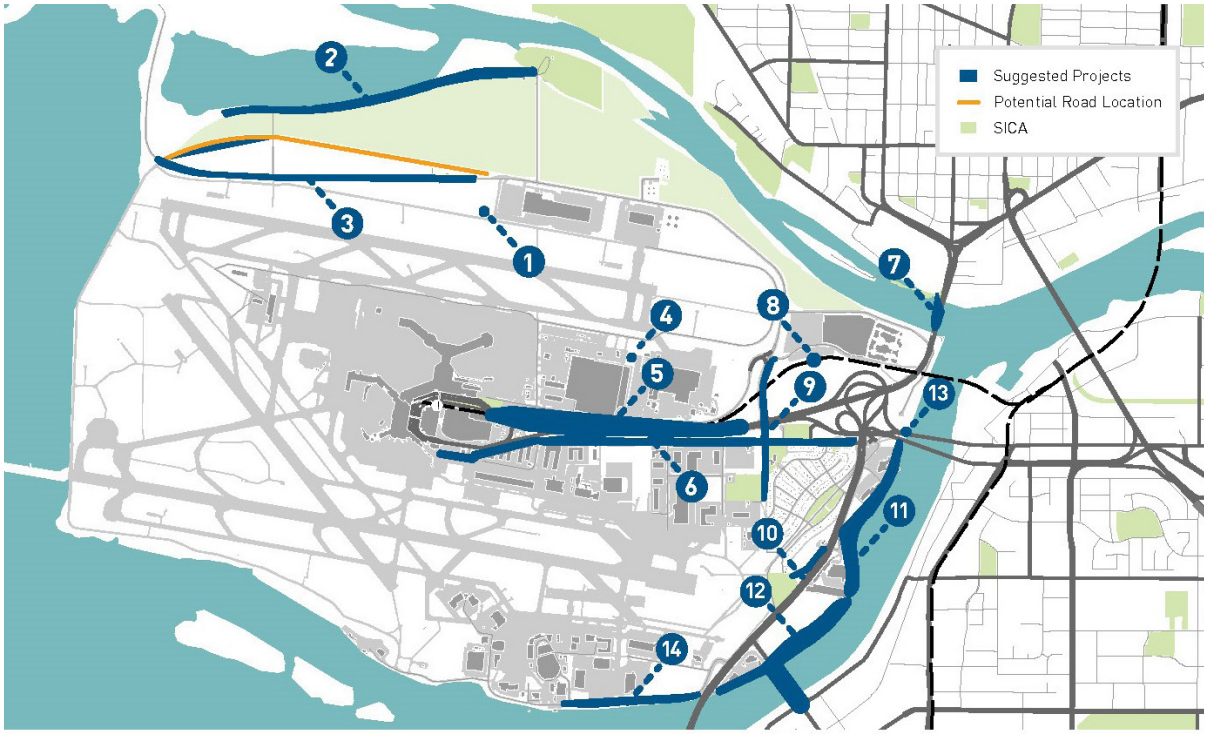


Figure 2.6ag: Potential Amenity Improvements

pathway and improve the pedestrian crossing. Add a separated bike lane for commuter traffic.

10. Multi-Use Pathway: Construct a new pathway to connect the existing pathway to nearby connecting Flight Path Park, BCIT Aerospace and Technology Campus and the Riverfront Dyke Trail.
11. Dyke Path Enhancement: Improve and complete the path along the east side of Sea Island. Link with paths coming from surrounding bridges.
12. Dinsmore Bridge and Gilbert Road: Enhance the facilities for people walking and cycling on the west side of the bridge and continue the pathway to tie into the existing pathway and dyke trails.
13. Moray Bridge Improvements: Add a pathway under the Moray Bridge.
14. Inglis Drive Pathway: Widen and improve the path to better accommodate pedestrians and cyclists.

Community Participation

3.0 Community Participation

3.1 Community Participation

Public involvement was an essential component of the AeroATL Greenway Plan. A comprehensive and inclusive approach combined online and traditional outreach tools with face-to-face meetings and interviews to engage a significant number of stakeholders.

Community stakeholders were engaged throughout three distinct phases of the project:

- Phase I: Inventory Assessment of Existing Conditions
- Phase II: Visioning & Goal-setting
- Phase III: Recommendations

During these project phases, the public was invited to three community meetings/workshops, one per phase. A Local Partners committee that engaged local leaders, decision makers, and community experts was convened, and a series of key stakeholder interviews were conducted. An Agency Coordination meeting was hosted to discuss transportation-specific issues and concerns. Online engagement was made possible via a consultant-hosted webpage, through outreach by the Aerotropolis Atlanta CIDs to its vast database, and with an online survey.

Phase I: Inventory Assessment of Existing Conditions

After project initiation, the Inventory Assessment of Existing Conditions phase began. During this phase, the Project Management Team which included representatives from the Aerotropolis CIDs and the Aerotropolis Atlanta Alliance, the Consultant Team, and the Atlanta Regional Commission was established. The Project Management Team met every other week via conference call to discuss the progress of the project. Public engagement focused on informing and educating the community on the purpose and objectives of the planning process; engaging a Local Partners Team as well as the broader public. Online engagement and promotion and outreach were also launched during Phase I.

LOCAL PARTNERS TEAM ENGAGEMENT

During this phase, the Local Partners Team was formed to help guide the process and provide input. The Team included individuals who were knowledgeable about the study area's issues and opportunities, were vital to the implementation of the final plan, and were members of organizations/jurisdictions that provided financial contribution to this study. The Local Partners Team was engaged in four meetings throughout the study process and were committed to providing technical guidance, assisting in advertising public meetings, distributing information to the larger community, and providing feedback on materials to be presented at public meetings prior to each meeting.

The following organizations were represented as members of the Local Partners Committee:

- Atlanta Regional Commission
- Aerotropolis Atlanta CIDs
- Aerotropolis Atlanta Alliance
- Clayton County
- Fulton County
- Hartsfield-Jackson Atlanta International Airport
- City of College Park
- City of East Point
- City of Hapeville
- City of Forest Park
- City of South Fulton

The first meeting of the Local Partners was held on November 1, 2017. At this first meeting, the Local Partners were introduced to the project, the planning process, and discussed the first community meeting. The Team began to broadly discuss goals, as well as study area issues and opportunities. They provided input on what would make this a successful project for the Aerotropolis community; identified opportunities for public engagement; and provided additional ideas for key stakeholder interviews.

PUBLIC ENGAGEMENT

The first community meeting was hosted on November 7, 2017. A total of 44 individuals were in attendance. The purpose of this first meeting was to kick off the project to the public and to begin understanding the communities' needs and wants. The meeting was open house style format with stations that asked a series of questions designed to gather public input on a number of topics, which included:

- Where do you live?
- What do you want to connect?
- Trail preferences visual survey
- Trail/greenway usage and purpose
- What conditions would encourage you to walk/cycle?

Attendees were invited to tell others about remaining meetings and to participate in the online survey at the meeting or at home.

3.1a: Community Meeting 1, November 7, 2017

ONLINE ENGAGEMENT

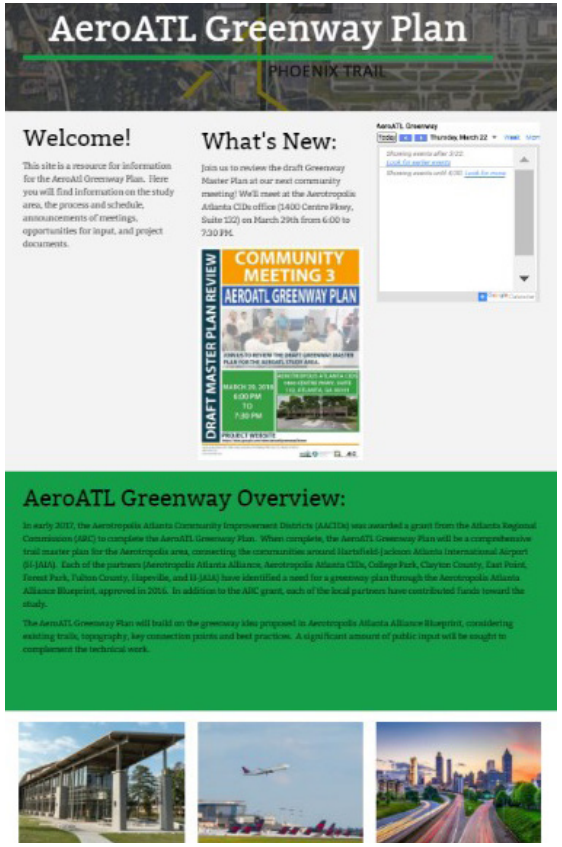
A project website was developed to serve as a resource for information about the AeroATL Greenway Plan and to provide a place where updates and future documents could be posted for the public. Information such as the public open house session details and links to the project website were posted on a regular basis.

An online community survey was also launched that provided the public with an alternative way to engage at a time and place more convenient for them. The purpose of the online survey was to collect input from stakeholders on their commuting behaviors, public transit usage, walking and biking habits, greenway usage, bicycle and pedestrian facility preferences, and demographics. The survey included a combination of 29 open-ended, multiple choice, and rating style questions. Refer to page 114 for a summary of survey results.

PROMOTION AND OUTREACH

In addition to the project website, promotion of the community workshop and survey and general public outreach was complemented by the use of direct email from the Aerotropolis CIDs to its constituent database. A digital billboard display at a high volume, high traffic intersection was also used to promote both engagement opportunities in addition to flyer distribution at the annual State of the Aerotropolis Breakfast.

Additionally, the Aerotropolis CIDs used its established Facebook, LinkedIn, and Twitter accounts to promote and reach the community at large. Local Partners were tasked with sharing electronic and hard copy flyers announcing the community meeting and survey to their communities using their already established channels and methods.



3.1b: Project Website

3.1c: Graphic for digital billboard display


Trail preference images
LOVE IT!
NO, THANKS
cycle Lane
uffered Bicycle Lane
Greenway Multi-Use
One Way Protected Cycle Track
Two Way Protected Cycle Track
Urban Multi-Use
SURVEY LINK AND QR CODE
http://www.surveymonkey.com/r/AeroATl
PROJECT WEBSITE
ile.com/view/aeroatlgreenway/home


Trail preference images

Phase II: Visioning and Goal-setting

Public engagement during Phase II included key stakeholder interviews; the second Local Partners Team meeting; a two-day Design Workshop; the community survey; and continued promotion and outreach.

KEY STAKEHOLDER INTERVIEWS

Key stakeholder interviews were utilized to gain insight on needs as it relates to specific user groups. Interviews were one-on-one sessions or small groups meetings and included a range of relevant discussion points. Key stakeholder interviews were completed with the following entities:

- Atlanta Regional Commission
- Atlanta Convention and Visitor Bureau
- ATL Airport District
- Clayton County
- Fulton County/Select Fulton
- City of East Point
- City of Forest Park
- City of Hapeville
- City of South Fulton
- Hartsfield-Jackson Atlanta International Airport

A number of common themes were heard throughout the interviews. Among them were a vision of a greenway system that will provide connectivity to municipalities; connectivity around the airport; and one that makes users feel safe and secure.

LOCAL PARTNERS TEAM ENGAGEMENT

The second Local Partners meeting was held on December 6, 2017. The purpose of this meeting was to discuss community engagement and input received to date; to discuss existing conditions analysis in regards to health assessment and transportation; a summary of case studies under consideration by the consultant team; a review of existing and proposed trails; and an overview of the two-day Design Workshop.

DESIGN WORKSHOP AND PUBLIC ENGAGEMENT

The two-day design workshop was held on January 11 and 12, 2018. Day 1 of the workshop began with a work session for invited guests, followed by a community workshop for the public later in the evening. Day 2 of the Design Workshop included a second work session for invited guests. Work session guests included the Local Partners Team as well as other municipal departmental staff, area agencies and advocates, and key stakeholders.

The workshop was organized by topic, which included:

- Greenway/On-road Connections
- Land Use/Development Opportunities
- Placemaking and Safety

Attendees were free to participate at any table/topic and were allowed to move between tables, as well.

Day 1 of the workshop began with a presentation of findings to date followed by two design sessions. The first session challenged participants to approach design within each topic, but with a big picture viewpoint. The second session focused on refining the big picture by topic. A review and discussion followed each session to allow participants to hear outcomes of each topic area.

The general public was invited to participate during the evening of Day 1. This workshop was the second public engagement opportunity for the community at large. The concepts and design strategies drafted by the Local Partners and other invited guests earlier in the day were presented for each of the three aforementioned topics:

Greenway/On-road Connections

Land Use/Development Opportunities

Place-making and Safety

Members of the community were invited to review and weigh in on all three areas. Input received was essential in vetting and refining the outcomes of the design workshop.

On Day 2 of the Design Workshop, Local Partners and other invited guests returned and received a recap of the community workshop. Attendees spent the bulk of Day 2 sharpening their focus for each topic and further refining design ideas and concepts. The session ended with a review and discussion of next steps.

3.1e: Design Workshop, January 11, 2018

ONLINE ENGAGEMENT

Online engagement via the project webpage continued during Phase II. Input continued to be collected by the community survey until coming to a close on December 15, 2018. While not a statistically valid survey which did not seek to capture a statistical sample size of respondents, the tool proved to be an effective way to reach the public. A total of 660 individuals completed the online survey. This invaluable input was folded into the draft trail concepts and greenway policies. Refer to page 114 for a summary of survey results.

PROMOTION AND OUTREACH

The community workshop and online survey were promoted via the project website and by direct email from the Aerotropolis CIDs to its constituent database. Input boards and a Frequently Asked Questions flyer were staged at recreation centers in East Point as well as in Forest Park to inform youth and a broader segment of the community. Additionally, the Aerotropolis CIDs used its established Facebook and Twitter accounts to promote and reach the community at large. Local Partners were tasked with sharing electronic and hard copy flyers announcing the community workshop and the online survey to their communities using their already established channels and methods.

Phase III: Recommendations

Public engagement during Phase III included the third and fourth Local Partners Team meeting; an Agency Coordination meeting; the third community meeting; and continued promotion and outreach.

3.1f: Community Meeting 2, January 11, 2018

LOCAL PARTNERS TEAM ENGAGEMENT

The third Local Partners meeting was held on February 6, 2018. The purpose of the third meeting was to deliver a recap of the Design Workshop; to review and discuss trail concepts; to review and discuss the priority project checklist; and to discuss costs, policies and funding. Local Partners were also asked to review the draft trail concept map by jurisdiction to gather one-on-one input on trail layouts. During this phase, Local Partners were also asked to review the draft trail master plan and to identify the trail implementation priorities for their respective jurisdiction.

The fourth Local Partners meeting was held on May 1, 2018. The purpose of this final meeting was to deliver a recap of the third community meeting; to discuss identified model miles; to review the identified implementation strategies' and to discuss priority trail costs, policies, and funding.

AGENCY COORDINATION MEETING

An Agency Coordination meeting was hosted on March 14, 2018 to coordinate with all of the transportation agencies and to get feedback on Local Partner Team members' priorities. Attendees included representatives from the Atlanta Regional Commission (ARC), the Georgia Regional Transportation Agency (GRTA), the State Road and Tollway Authority (SRTA), and the Georgia Department of Transportation. Representatives of the Metropolitan Atlanta Rapid Transport Authority (MARTA) were also invited but unable to attend. Topics of discussion at this meeting included:

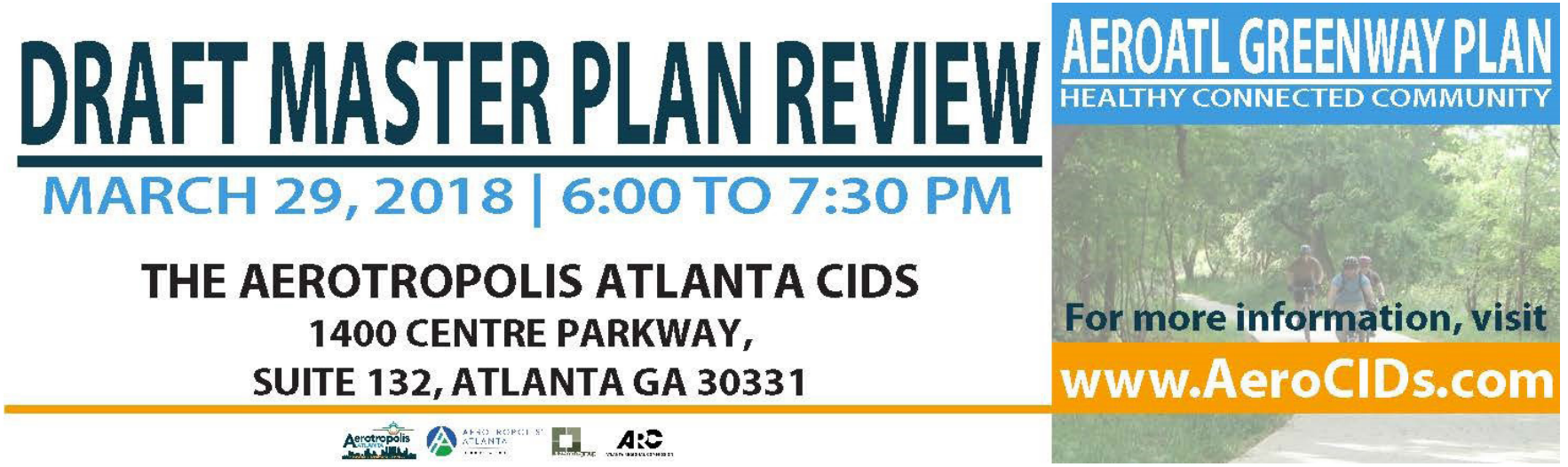
- MARTA transit considerations
- Ongoing streetscape projects
- Railroad right-of-way and land acquisition
- Funding
- Phasing
- Conflicts with traffic
- Connections to GRTA/SRTA park-n-ride facilities
- Multimodal connectivity
- Local best practices

PUBLIC ENGAGEMENT

The third and final community workshop was hosted on March 29, 2018. The community was invited to review the draft plan and to provide feedback before the plan became final. Input was sought regarding trail segment priorities, trail typology, and budgetary priorities. The workshop began with a brief presentation to provide background on the planning process and outcomes. Following was an open house session with a series of interactive stations and activities designed to collect feedback and demonstrate potential trail concepts.

PROMOTION AND OUTREACH

The final community workshop was promoted via the project website and through direct email to the Aerotropolis CIDs distribution list. A second digital display billboard was used to promote the final engagement opportunity. Additionally, the Aerotropolis CIDs used its established Facebook, LinkedIn, and Twitter accounts to promote and reach the community at large. Local Partners continued to reach out to their respective constituents and networks in advance of the final public engagement opportunity.



3.1g: Graphic for digital billboard display for Community Meeting 3

3.1h: Community Meeting 3, March 29, 2018: Tactical Demonstration

3.1i: Community Meeting 3, March 29, 2018

3.1j: Tactical Demonstration at Community Meeting 3, March 29, 2018

Community Survey Results

The community online survey was available to public from November 8 to December 15, 2017. This section provides a summary of the online survey and lists answers to some of the questions asked. The entire survey can be found in the appendix section of the report.

PURPOSE

The purpose of the online survey was to collect input from stakeholders and the community on their transportation behaviors, knowledge of existing trail and greenway facilities, preferences for future trail and greenway facilities, and demographic information of the survey respondents.

OUTREACH

The online survey was promoted through the project website; posts to the Aerotropolis CIDs and Aerotropolis Atlanta Alliance official Facebook, LinkedIn, and Twitter page; through flyer distribution at the public meetings; through email distribution using CID contact information; and in-person at the first public workshop. Additionally, members of the Local Partners Team were encouraged to share information about the survey with their networks. Lastly, all public meeting attendees who provided an email address either at registration or on their comment forms were invited to participate in the survey via direct email.

PARTICIPATION

A total of 660 individuals participated in the online survey.

SURVEY DESIGN

The survey included a combination of 28 open-ended, multiple choice, and choice-list style questions. It was available online for a total of five weeks and was accessible directly from the project website (https://sites.google.com/view/aeroatlgreenway/home). The survey was only available in the online format. It was not a statistically valid survey and did not seek to capture a statistical sample size of respondents.

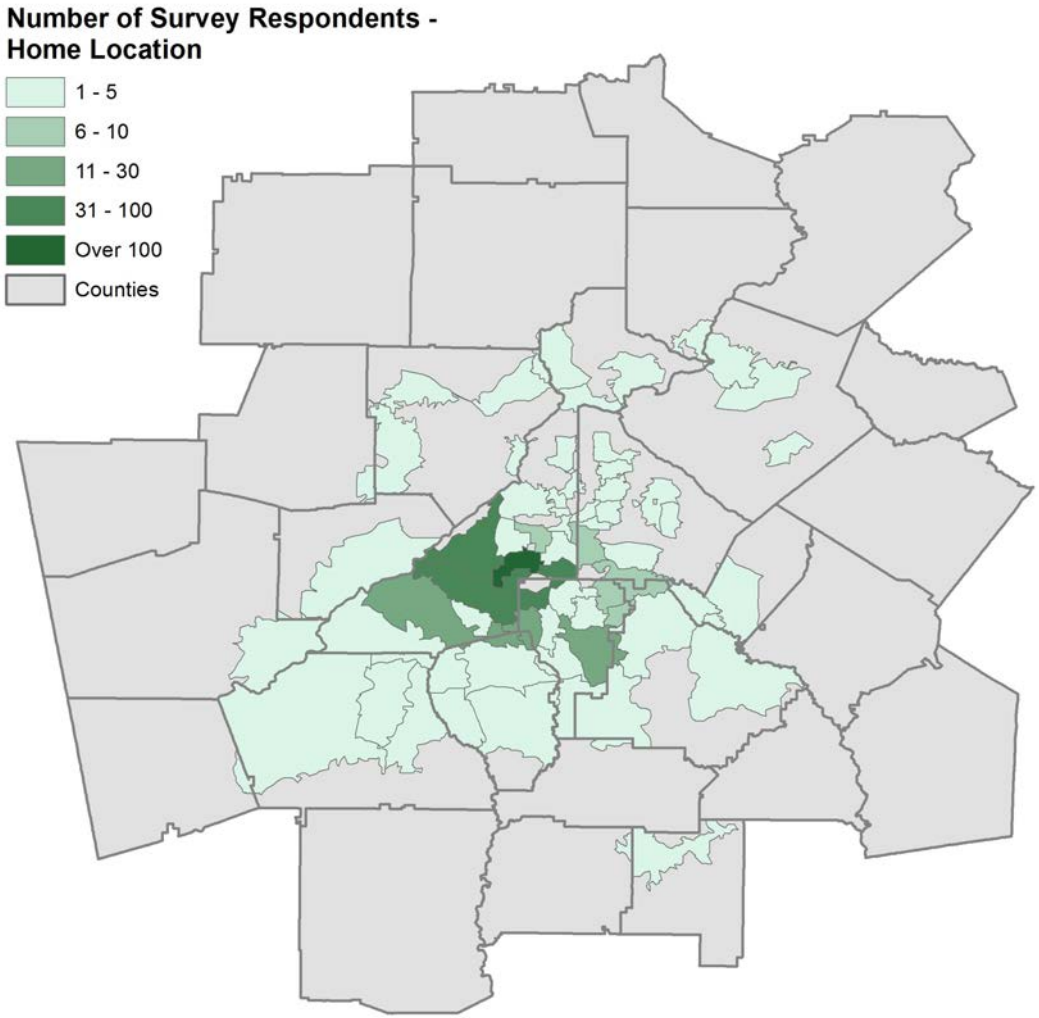
Among the more than 600 survey responses, there were some common sentiments expressed. As a study area where the majority of the survey respondents use a single-occupancy vehicle to travel, a majority never use public transit, never cycle or only occasionally walk in the Aerotropolis area. However, better sidewalk and trail conditions; improved lighting; and access to community amenities would encourage them to walk or cycle more.

Even though the majority of respondents have never used one to travel somewhere, the concept of a public greenway facility is very appealing. Many see it as an opportunity to create connections among employment centers and businesses, as well as to key destinations such as the airport, existing trail systems, and entertainment. Many priority areas ideal for connectivity through a greenway system were identified including downtown East Point; Virginia Avenue, Corporate Crescent, and King Arnold Street in Hapeville; the Airport Development Site in Mountain View; the Flint River and Forest Parkway/Phoenix Boulevard in Forest Park.

Survey Question 1

In what ZIP code is your home located? (enter 5-digit ZIP code)

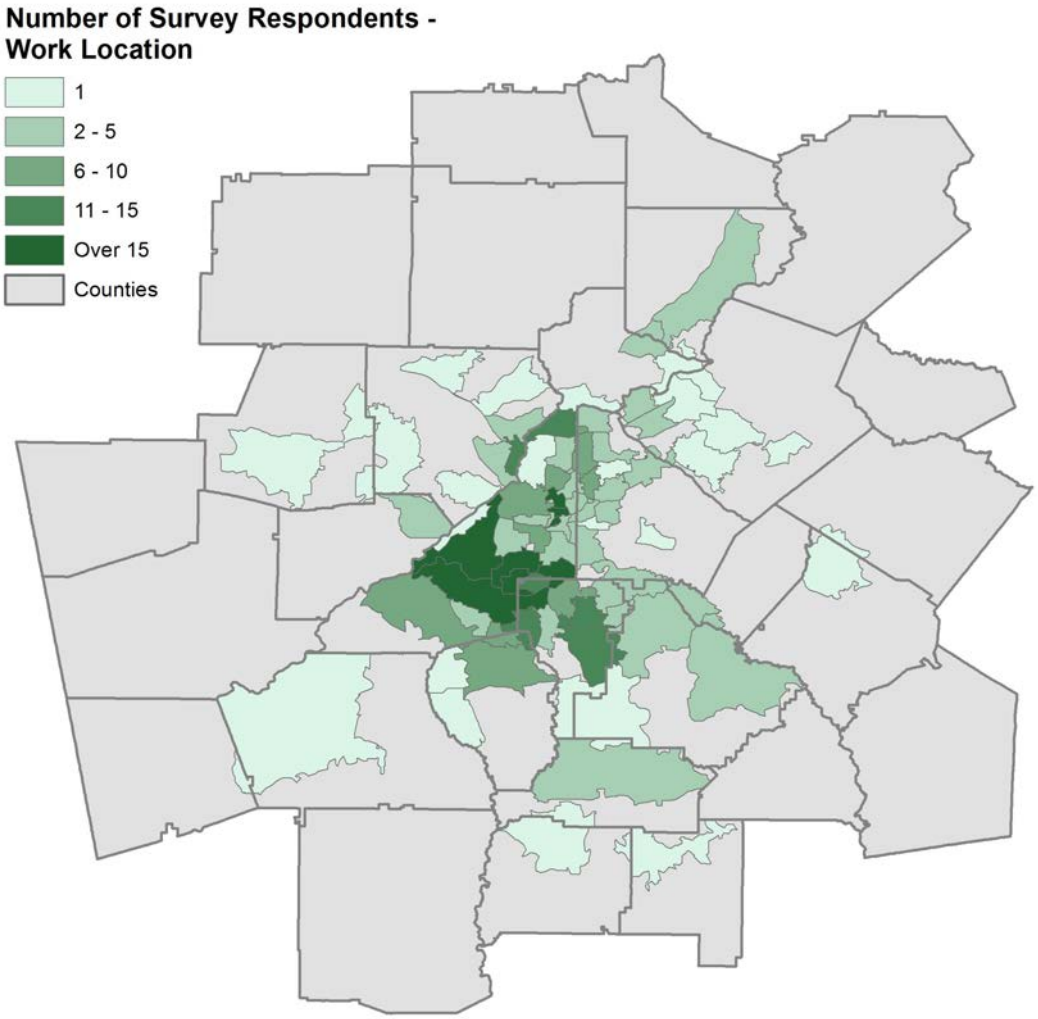
Number of people who answered this question: 657



Survey Question 2

In what ZIP code is your work or school located? (enter 5-digit ZIP code)

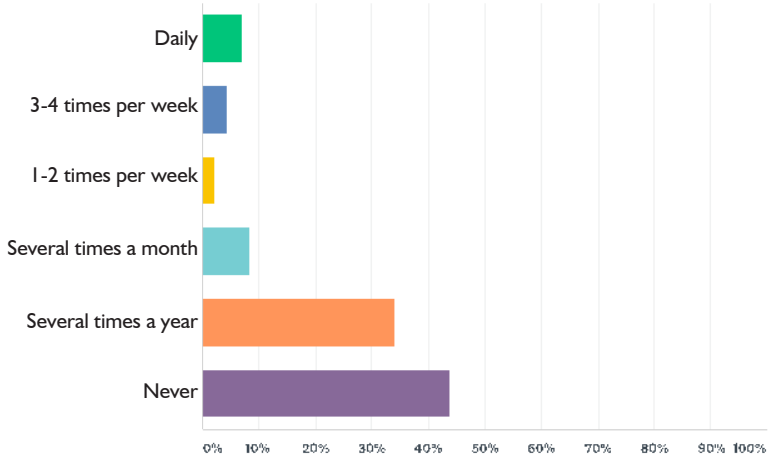
Number of people who answered this question: 652



Survey Question 7

How often do you use public transport in the Aerotropolis Area?

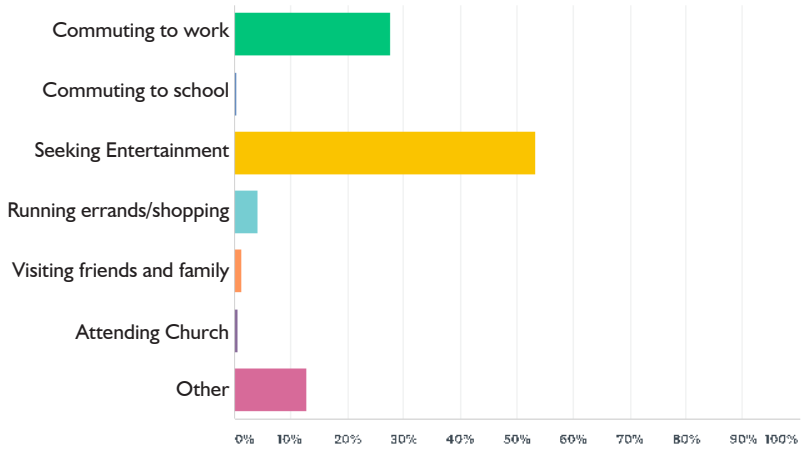
Number of people who answered this question: 646



Survey Question 9

If you use public transit, what is your main purpose or destination?

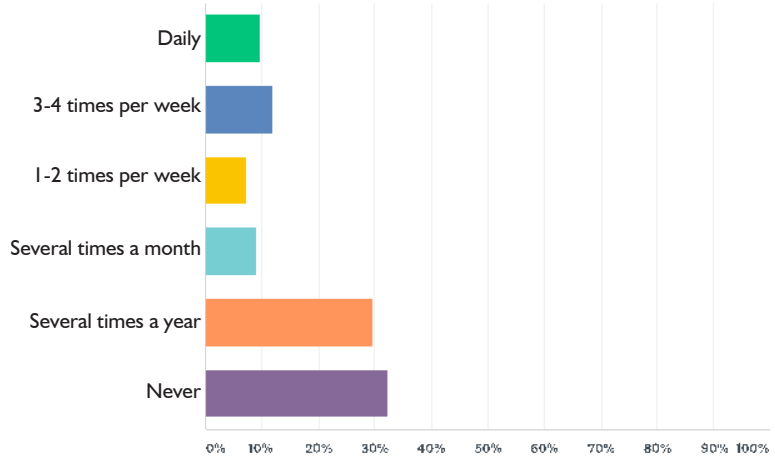
Number of people who answered this question: 537



Survey Question 10

How often do you walk or cycle in the Aerotropolis area?

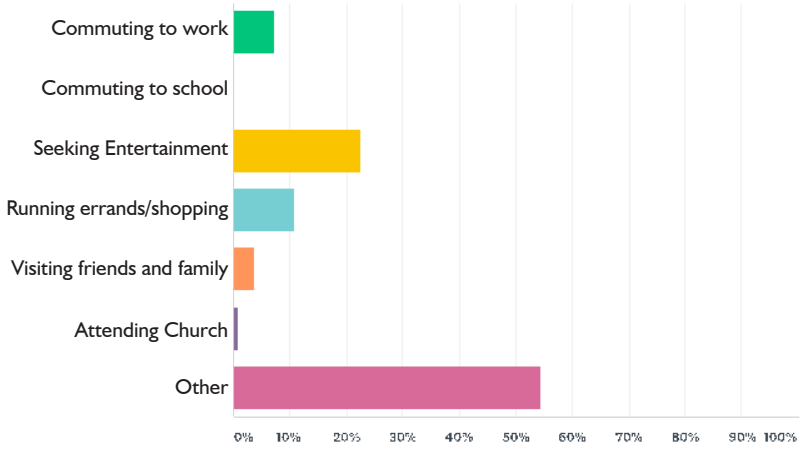
Number of people who answered this question: 627



Survey Question 11

If you do walk or cycle, what is your main purpose or destination?

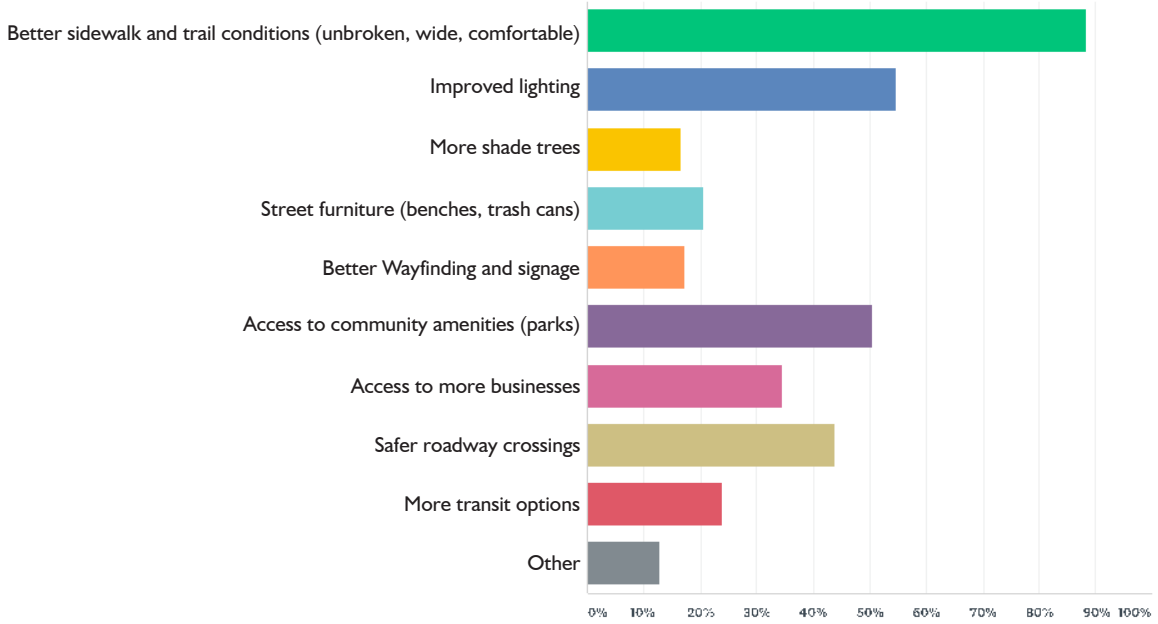
Number of people who answered this question: 537



Survey Question 12

What conditions would encourage you to walk or cycle more in the Aerotropolis area? (select three)

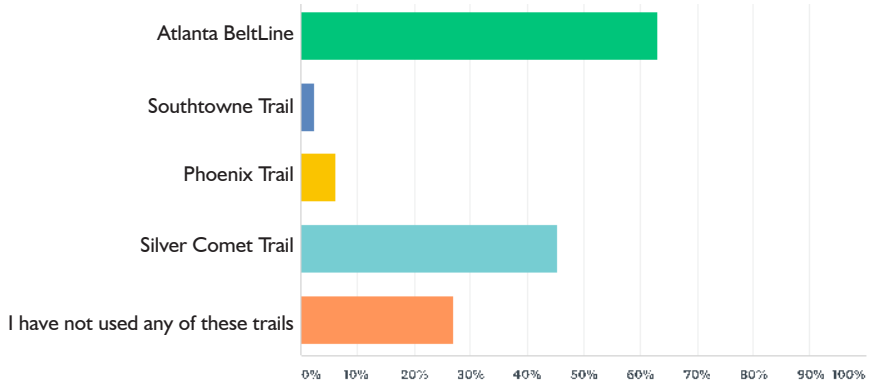
Number of people who answered this question: 621



Survey Question 16

Have you used any of the following trails/greenway facilities? (check all that apply)

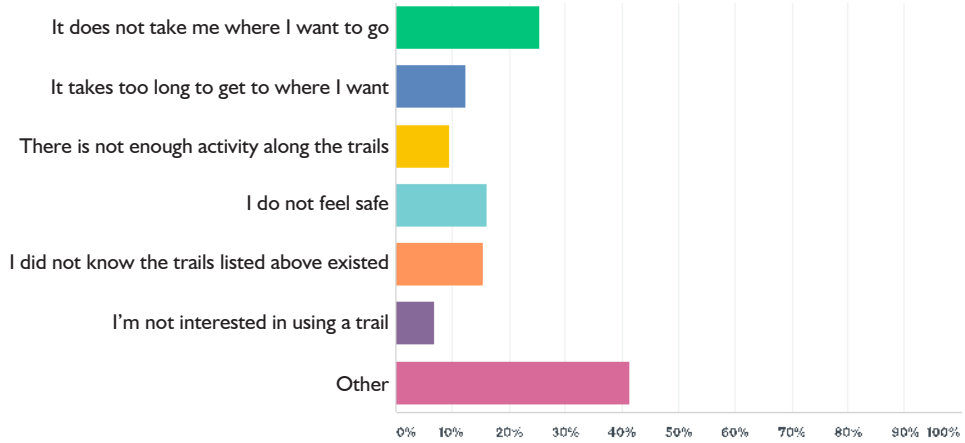
Number of people who answered this question: 615



Survey Question 19

If you have not used the trails listed above, why not? (check all that apply)

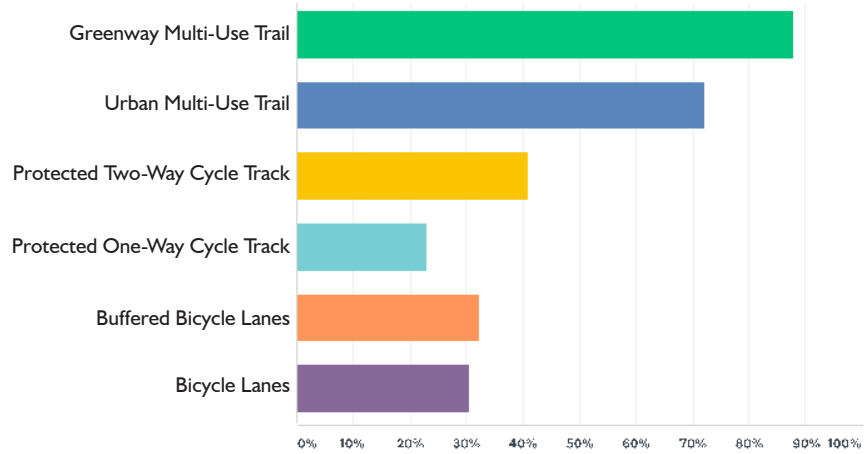
Number of people who answered this question: 411



Survey Question 22

Consider the examples below, please select the types of bicycle and pedestrian facilities that you and members of your household would prefer to use (check all that apply):

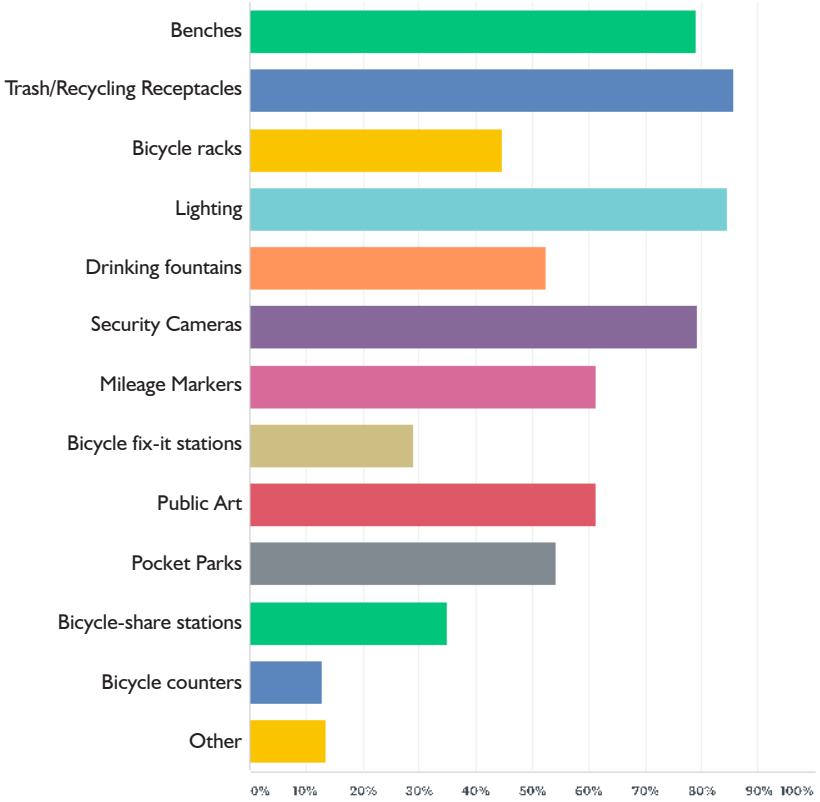
Number of people who answered this question: 572



Survey Question 20

If you do walk or cycle, what is your main purpose or destination?

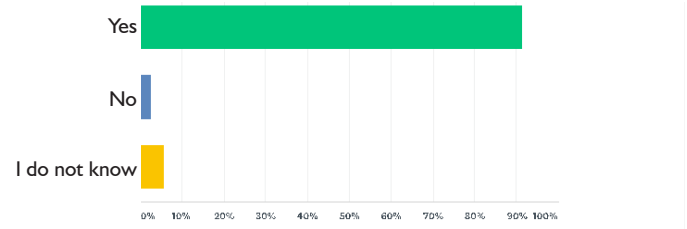
Number of people who answered this question: 611



Survey Question 23

Would you support the expansion of the greenway network in and around the Aerotropolis communities?

Number of people who answered this question: 574



Imagine meeting a friend on a beautiful spring morning to explore a new creekside trail...

Imagine cheering for runners in the annual AeroATL half marathon that crosses through 4 cities and 3 counties...

Imagine waving to a group of international tourists on rented scooters as you commute on bike to your job near the airport...

Imagine strolling with your family to the airport to watch Friday evening takeoffs after dinner...

This plan aims to create a "third space" for community interaction and wellbeing.

*In community building and urban planning, the third space refers to the social surroundings that separate the two usual social environments of home (first) and workplace (second).

Recommendations

4.0 Recommendations

4.1 Greenway Plan

This section provides an overview of the proposed greenway master plan recommendations.

The AeroATL Greenway Plan aims to create a greenway system that provides the Aerotropolis communities with an integrated, comprehensive bike/pedestrian trail system that improves the quality of life, health, connectivity, and economic growth of the Aerotropolis region. This is truly a world class system befitting of our world class airport infrastructure—connecting bike to flight.

Greenway Plan Goals

The recommendations within this report address project goals, major infrastructure barriers, economic development potential, and the needs, aspirations, and desires of the community to create a connected trail system. Key issues addressed include:

- Connect communities to area amenities and everyday services
- Connect to and loop around Hartsfield-Jackson Atlanta International Airport (H-JAIA)
- Enhance economic development opportunities in Aerotropolis downtowns and future development sites
- Create a system that is unique in the Atlanta region and positions Atlanta among the world's best airport areas.

Recommendations

To address these goals, a trail framework was developed, which includes:

Regional Framework: The regional framework connects the Aerotropolis communities to larger regional systems and includes:

- **Airport Loop:** An element that makes this trail system different from others is the access, physically and visually, to the world's busiest airport. This inner loop provides the most convenient access around and to H-JAIA.
- **Connecting Downtowns**: A secondary loop connects the major Aerotropolis downtowns and redevelopment sites.
- **Outer Ring**: A third loop links the outer edges of the Aerotropolis communities, connecting to parks, schools, and community centers.
- **Spokes**: The spokes connect the loops to the greater region along major corridors and existing trail systems, such as the Atlanta BeltLine.

Local Network: The local network infills the regional network, providing a more refined level of connectivity within communities. This network is just as much a priority as the regional framework as it provides the much needed "last mile" connections for residents to area amenities.

FROM BIKE TO FLIGHT

Approximately 350 miles of trails make up the AeroATL Greenway Plan, connecting Aerotropolis communities to jobs, schools, and shops, to flights, to nature, and to eachother.

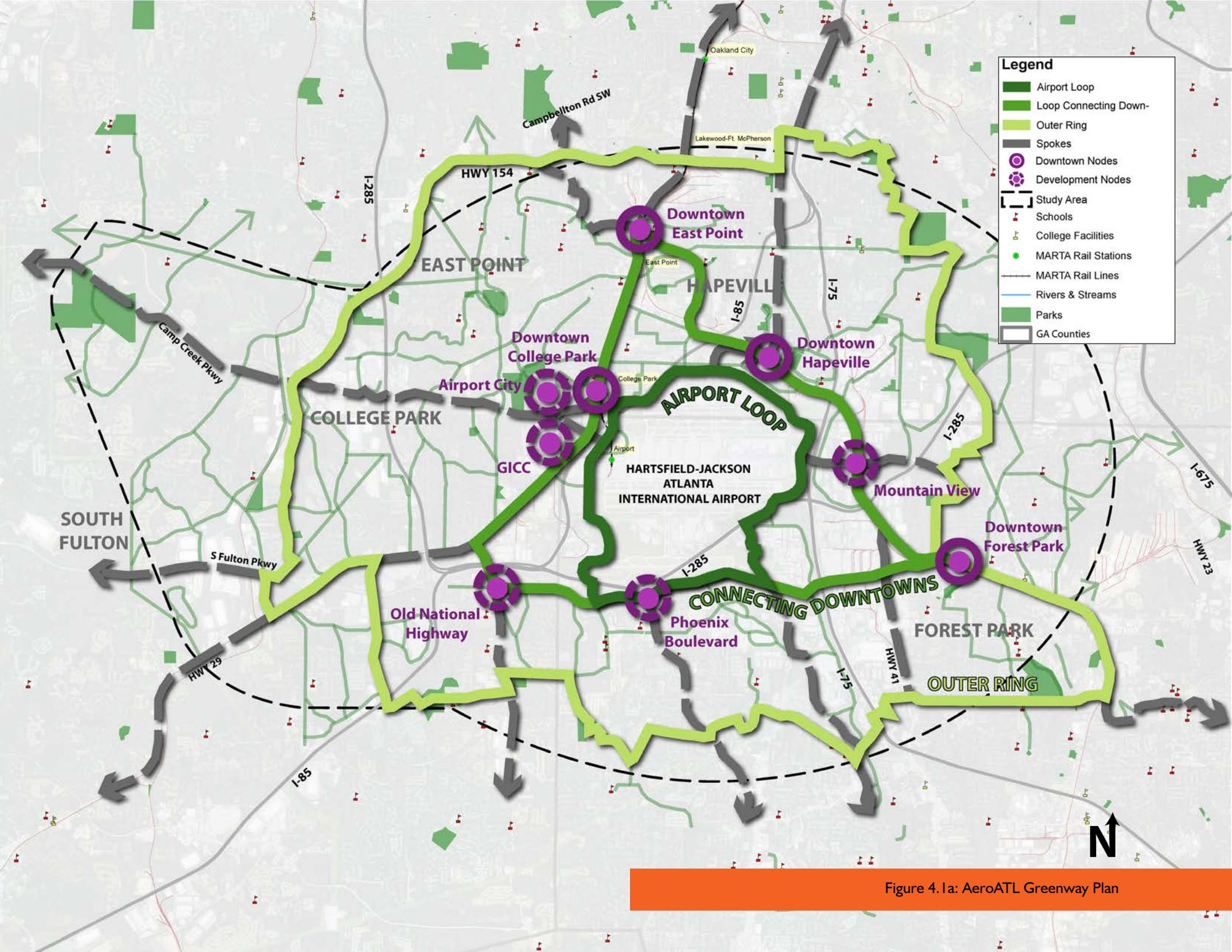


Figure 4.1a: AeroATL Greenway Plan

Regional Framework

This regional framework identifies safe crossings at major infrastructure barriers, such as interstates, streams, and bridges. With three interstates, three national routes, and ten state routes in the study area, crossing over highly trafficked roadways presents a challenge. Additionally, land uses around the airport include a significant amount of industrial/warehouse/distribution increasing the amount of tractor trailer trucks on these roadways. Routes that safely move bikes and pedestrians over/through/under high truck traffic areas is a priority. The regional framework looks closely at major truck routes, interstate interchanges, and major intersections to identify the best and safest routes for bike and pedestrian traffic, separated from high speed trucks and cars. The Framework includes four major components:

1. **Airport Loop**: This first loop provides the most unique opportunity and what will set this trail system apart from trail systems around the world. The Airport Loop is a 15-mile loop adjacent to H-JAIA. The trail provides an opportunity for the community to access the airport via bike/foot and for airport visitors to get out and stretch their legs or visit area downtowns during a long layover. Amenities such as pocket parks and playgrounds can be designed to play off the airport theme and include plane viewing platforms and airport inspired play equipment. Figure 4.1b on the next page illustrates the road names for the Airport Loop.

   The Airport Loop follows Loop Road on the north, east, and west segments. On the west, the trail connects from Inner Loop Road to Airport Boulevard to Riverdale Road to West Fayetteville Road. The southern portion of this loop, extends from West Fayetteville Road along Phoenix Boulevard/Forest Parkway to the Flint River to connect back to South Loop Road. On the east, South Loop Road connects North Loop Road to Perry J. Hudson Parkway back to Inner Loop Road. Few will bike or walk the entire 15-mile loop at once; rather smaller trails connecting to the Downtowns Loop, the Regional Spokes, and the Local Network system will provide a variety of options to get out of your car and explore.

2. **Connecting Downtowns**: The Downtown Loop connects the Aerotropolis downtowns and key redevelopment sites, including downtown East Point, College Park, Hapeville, Forest Park, and the Airport City and Mountain View redevelopment sites. By providing better connectivity to these downtowns, the trail becomes an economic generator. Figure 4.1c illustrates the road in this loop.

   The Downtown Loop starts in downtown East Point and follows US-29 on the west, adjacent to the railway and MARTA tracks from Norman Berry Drive to the College Park MARTA station, passing through downtown College Park and Airport City, and becomes road-adjacent south of the MARTA station to Old National Highway. On the south, this trail runs adjacent to Godby Road, Phoenix Boulevard, and Forest Parkway, overlapping with the Airport Loop, continuing on Forest Parkway to downtown Forest Park. On the east the trail continues north along Main Street/160 to US 41/Old Dixie through Mountain View and into downtown Hapeville. On the north, the trail continues through Hapeville along South Central Avenue/Porsche Avenue to Willingham Drive to Norman Berry Drive.

3. **Outer Ring**: The Outer Ring provides connectivity to community amenities, including parks, schools, and community centers. Refer to Figure 4.1d for the road in the Outer Ring.

   On the north, the Outer Ring trail begins in South Atlanta at South Bend Park and follows Lakewood Way west along Langford Parkway to Greenbriar Mall. On the west, the trail follows the North Fork Camp Creek to Camp Creek Parkway, and continues south via a utility easement to South Fulton Parkway to Welcome All Road. On the south, the trail follows US 29 to Buffington Road, under I-85 and eventually follows Carter Creek to East Fayetteville Road near Riverdale. The trail follows greenways east along Lee's Mill Road to a segment of the Flint River, east on Garden Walk Boulevard to connect to Bob White Trail, then to Reynolds Nature Preserve and Clayton State University in Morrow. On the east, the trail follows the rail tracks north to Forest Park, then follows Hendrix Drive north through the Mountain View area, following streams from Jonesboro Road to Cleveland Avenue, past Brown's Mill Golf Course along the Southtowne Trail back to South Bend Park.

4. **Regional Spokes**: The spokes complete the trail "wheel" by providing regional connections from the airport core outward to regional corridors, employment centers, retail districts, schools, and existing trail systems. Refer to Figure 4.1e. The spokes include: **Camp Creek Parkway** connects the H-JAIA domestic terminal through College Park to East Point and South Fulton.

   South Fulton Parkway connects the outer ring through South Fulton towards Chattahoochee Hills and the Chattahoochee River.

   US Highway 29/Main Street/Lee Street is a major regional north-south connection, extending from Downtown Atlanta past Fort McPherson, through East Point, College Park, to Union City, Fairburn, and Palmetto. This route is also heavily used by cyclist on long rides, as it sits relatively flat on a ridge and with portions adjacent to the railroad, has fewer crossings and conflicts.

   Old National Highway provides a key connection south of the airport from US Highway 29 through Clayton County towards Fayetteville, connecting employment centers, retail districts and residents.

   Riverdale Road connects the airport core to West Clayton Elementary School, the Frank Bailey Senior Center to Riverdale.

   Highway 41/Old Dixie Road connects through Clayton County's job center to an existing utility right-of-way (part of the Outer Ring) that connects to Reynolds Nature Preserve, Morrow, and Clayton State University.

   Charles W. Grant Parkway/Conley Road provides a key connection from the H-JAIA International Terminal to the Mountain View redevelopment area and the proposed future MARTA transit station at Old Dixie Highway and Conley Road.

   Dogwood Drive/Metropolitan Parkway provides a regional connection from the airport core, at the Delta Headquarters, through Downtown Hapeville into the City of Atlanta.

   Delowe Drive connects from the East Point MARTA Station to Sumner Park to Connally Nature Park to Adams Park, connecting to Delowe Drive, an official city bike route, to the Lionel Hampton Trail.

Local Network

The local network fills in the larger regional system connecting residents and visitors to neighborhood schools, community centers, employment, and parks. These trails are just as important as the regional connections in creating a true usable trail/greenway network and may be prioritized by communities over regional connections in early trail development.

Local network trails are described in individual city/county sections.

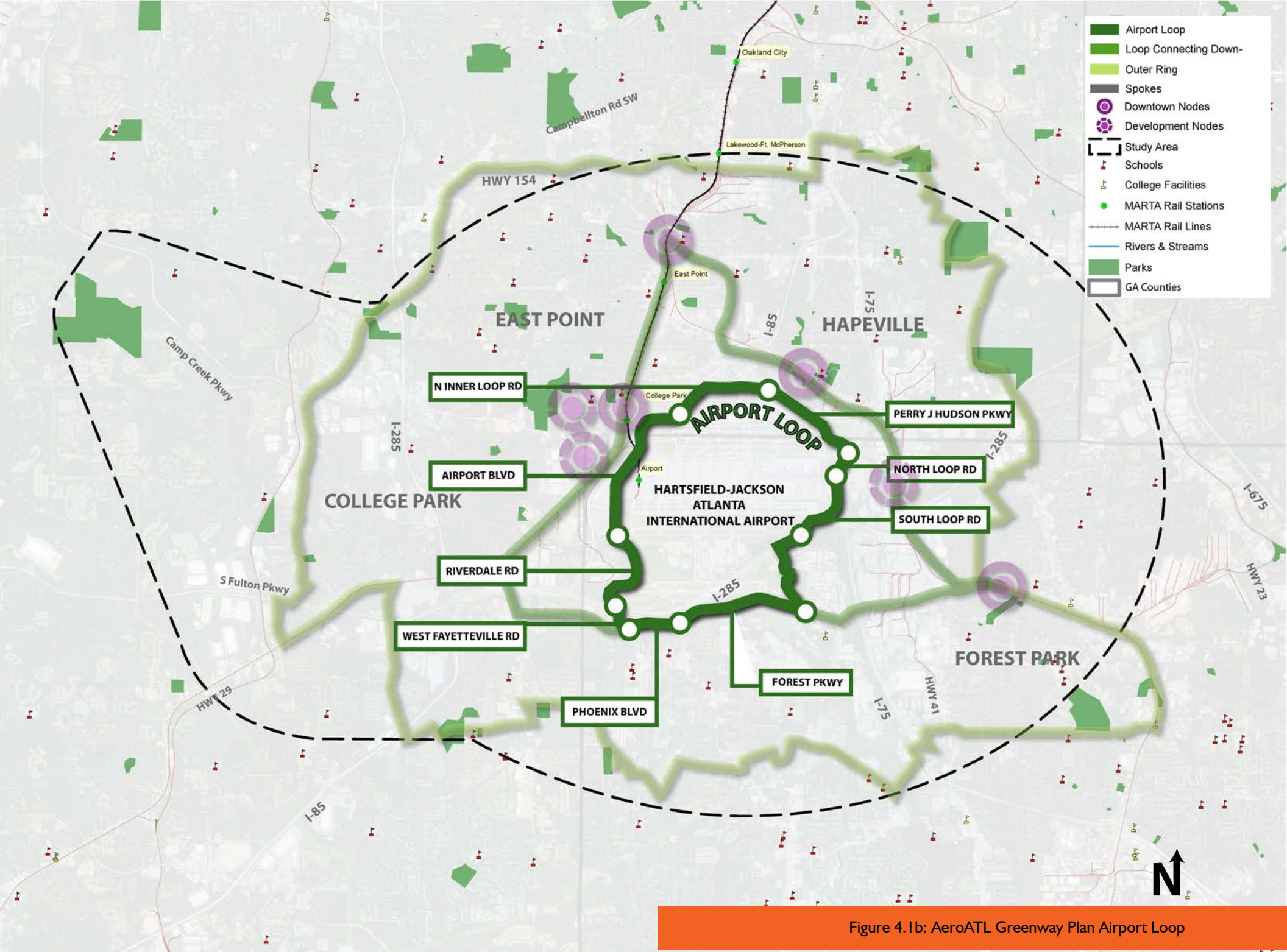


Figure 4.1b: AeroATL Greenway Plan Airport Loop

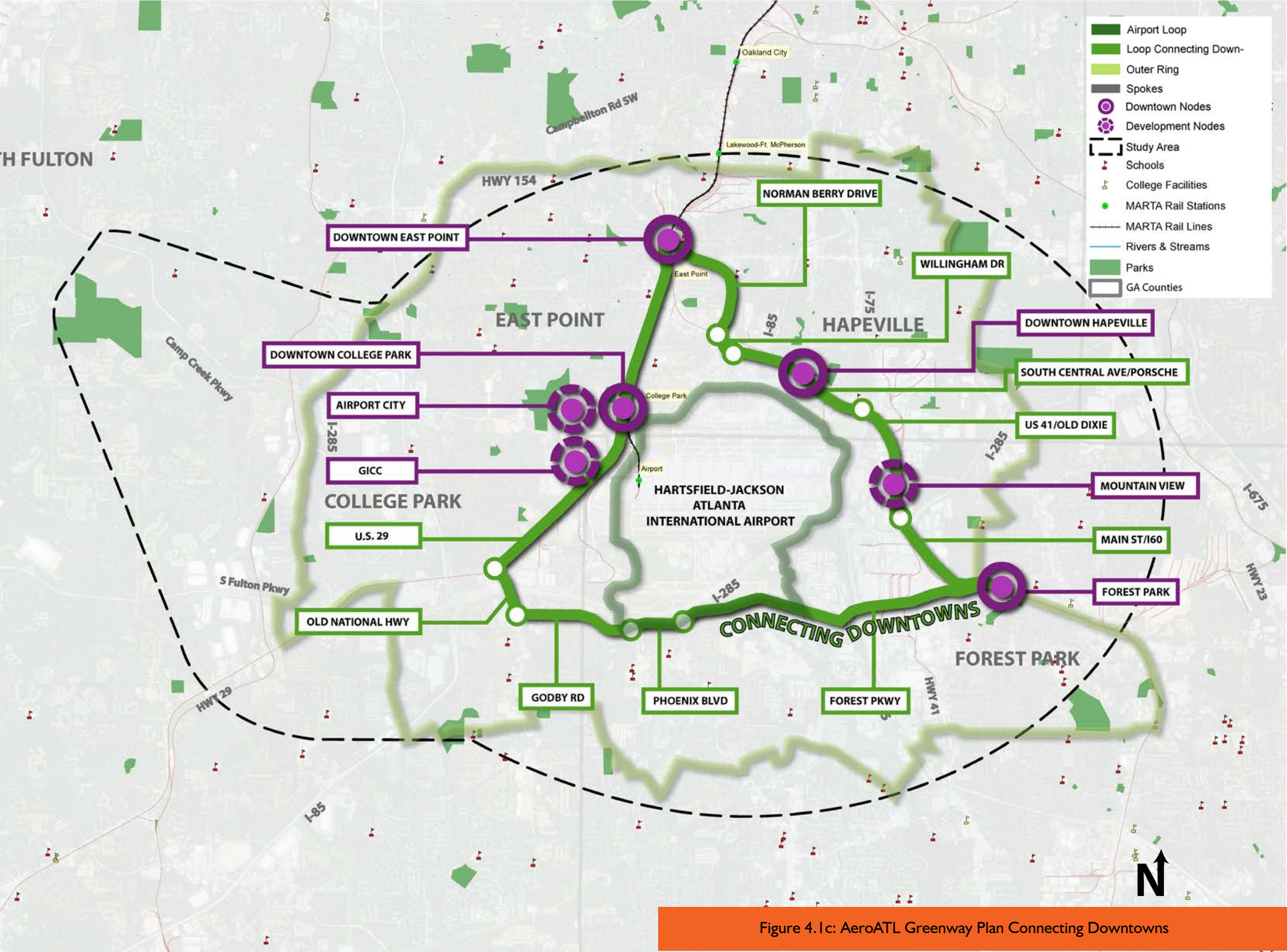


Figure 4.1c: AeroATL Greenway Plan Connecting Downtowns

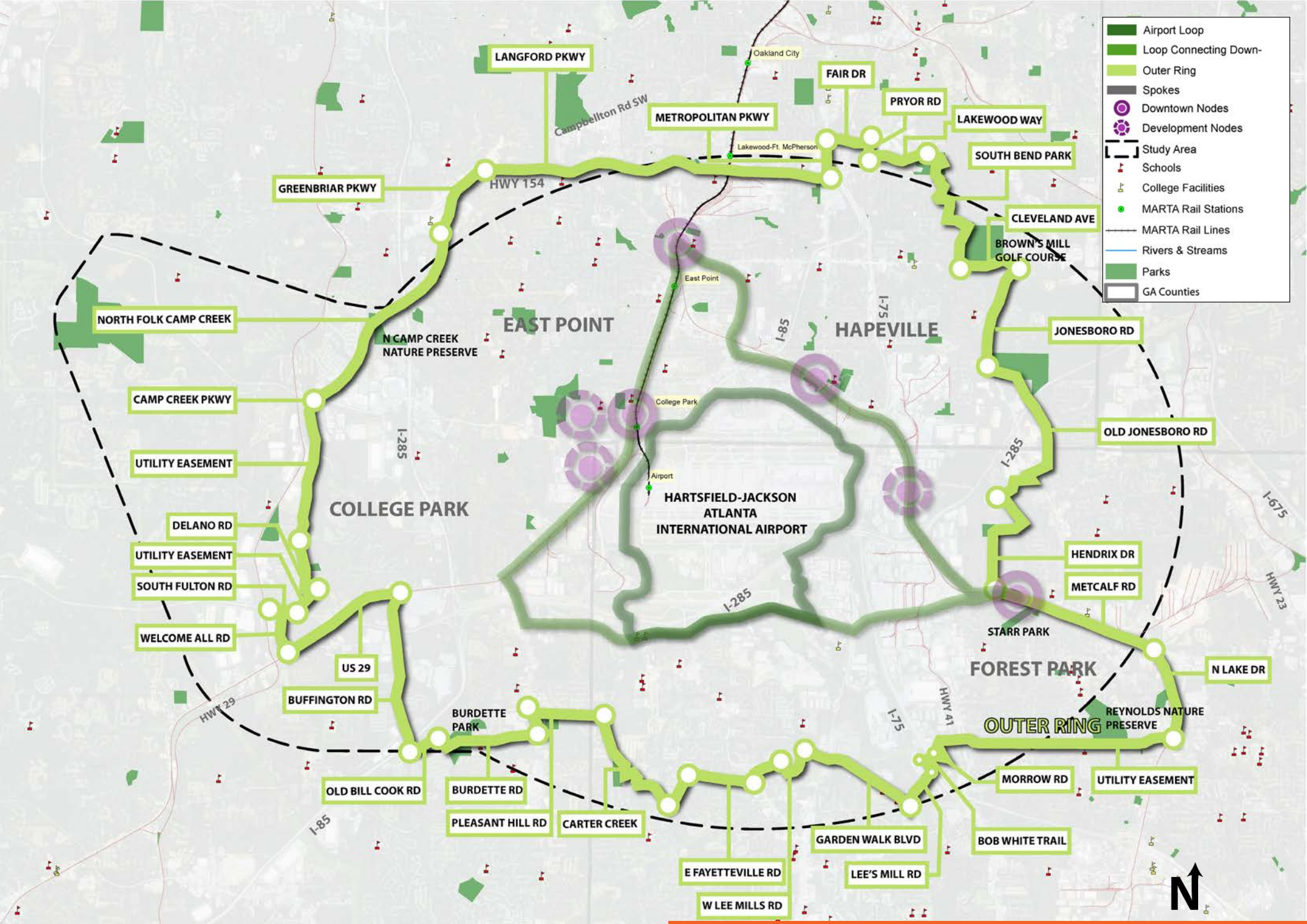


Figure 4.1d: AeroATL Greenway Plan Outer Loop

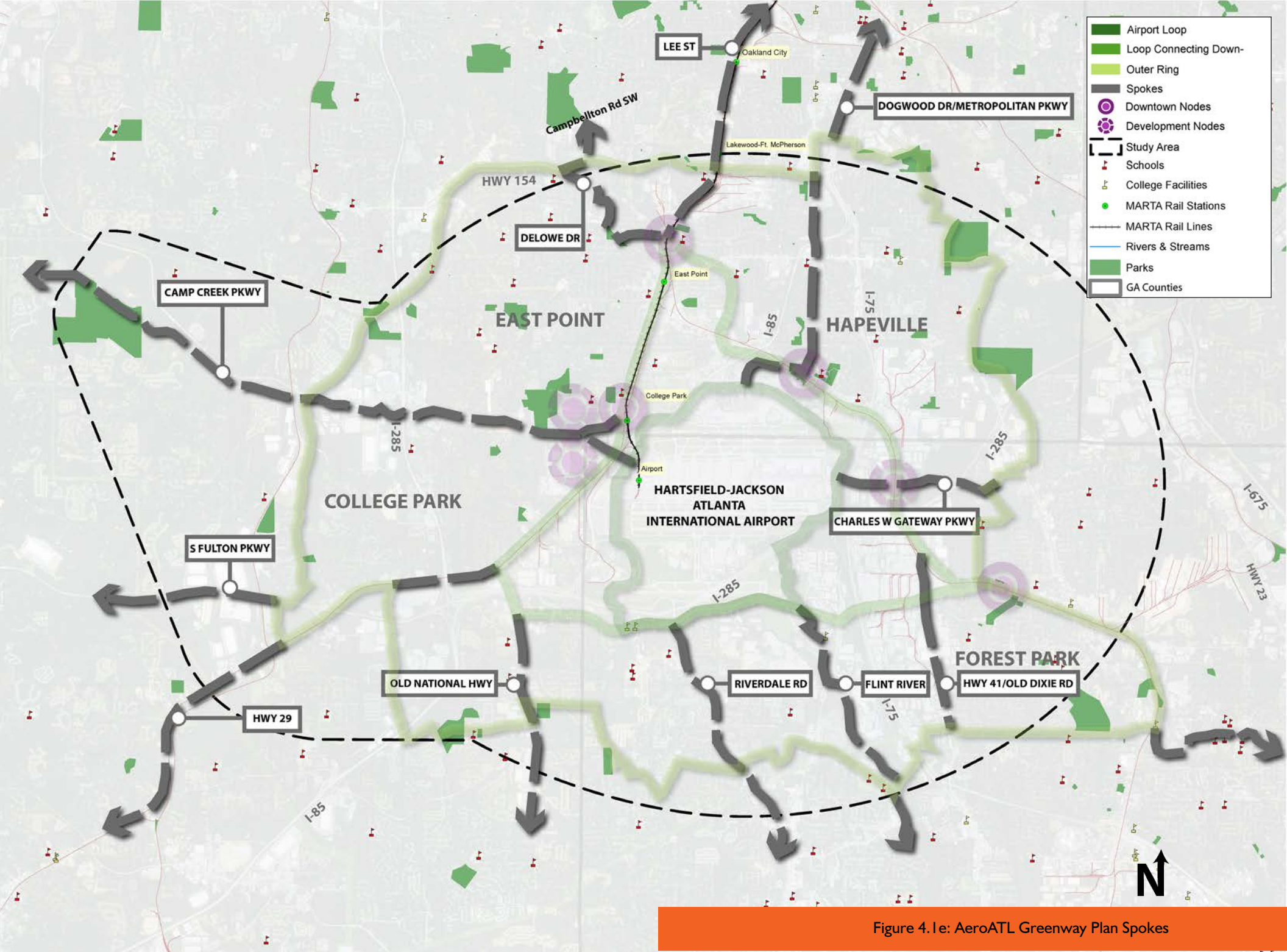


Figure 4.1e: AeroATL Greenway Plan Spokes

4.2 Trail Typologies and Street Sections

A variety of trail typologies will be necessary to build the 350-mile greenway system described above. While this plan aims to create a greenway system, in order to create an integrated and connected network, a variety of greenway and trail types are proposed, including roadway adjacent trails, neighborhood greenways/shared road, utility easement trails, and rail adjacent trails. Figure 4.2f identifies portions of the trail system that are envisioned as true greenways. These greenways take advantage of undevelopable land adjacent to streams, rivers and creeks and within utility easements. The remainder of the trails are envisioned as on-road lanes/cycle tracks, road adjacent separated trails, or neighborhood greenways/shared roads.

This section provides an overview of the different trail typologies that may be used within this large and varied trail system. Typologies are categorized into three types:

Greenways

Greenways are defined as long, narrow pieces of land utilized for pedestrian and bicycle traffic, separated from automobile roads. Greenway types include:

- ***Greenway/Natural Trails*** are trails built within a natural setting or a greenway. These types of trails are built within nature preserves, parks, and other natural settings and include hiking trails, deer path trails, multi-purpose trails, and may include non-emisision vehicles. Coordination with property owners and local jurisdictions are key to implementing this type of trail. Trail materials typically include dirt, compacted soil, mulch, aggregate, wood decking, concrete, or asphalt.

- ***Utility Easement Trail*** is a trail built within a utility right-of-way or easement. Utility easements are long, narrow strips of land that are designated for utility lines, including sewer/stormwater, electrical, and communications. The land remains undeveloped to provide access for the utility companies. These types of easements are a great opportunity for trails, as they connect through and to communities, supplying much needed utility access. Coordination with utility companies and easement owners/leasers is key to implementing this type of trail. Utility easement trail materials may include natural footpaths to compacted soil, mulch, aggregate, wood decking, and concrete and depend on the location and types of users.

- ***Creek/Wetlands Trail*** is a trail built along side a natural stream, creek, river or in wetlands. Federal and State regulations restrict development within floodplains and along waterways with 25 foot to 100 foot buffers. Taking advantage of these regulations, communities can build trails within this undevelopable land, providing access to nature and connectivity. Coordination with land owners and local, state, and federal water agencies is key to trail implementation. Trail materials may include natural footpaths to compacted soil, mulch, aggregate, wood decking, and concrete and depend on the location and types of users.

- ***Mountain Biking Trail*** is a trail specifically built for mountain bike recreation. These trails are usually built in public or private parks/recreation areas with rough or hilly terrain. Trails are usually composed of the natural trail surfaces.

- ***Living Street and Alley Trail*** is a street that is designed primarily for bicycle and pedestrian traffic. It is a space for social interaction and play. Alley trails similarly are primarily for bicycle and pedestrian traffic and occupy the space between buildings. Cars may utilize these trail types at very slow speeds and only as necessary.

- ***High Speed Bicycle Highway*** is a dedicated bike only trail system that is meant for long-distance, high speed travel. This system is separated from the automobiles and pedestrians to allow for a fast flow of bicycle users.

Road Adjacent Trails

Road Adjacent Trails are trails separated from the roadway by a landscaped or paved buffer. These trails provide a safe separation from automobiles. Trail types include:

- ***Rail With Trail*** is a trail that is built adjacent to an active rail line. Typically, and most commonly within this AeroATL study area, railroads sit adjacent to roadways with a large buffer separating the two modes of transportation. A rail with trail allows for a full multi-modal corridor with trails being built in the buffer between the roadway and rail. This takes significant coordination with the railroad owners/providers, state and federal roadway agencies, and local jurisdictions. Safe separation from the railroad, appropriate buffer, fencing, landscaping is a key factor in implementation. Trail materials may include natural footpaths to compacted soil, mulch, aggregate, and concrete

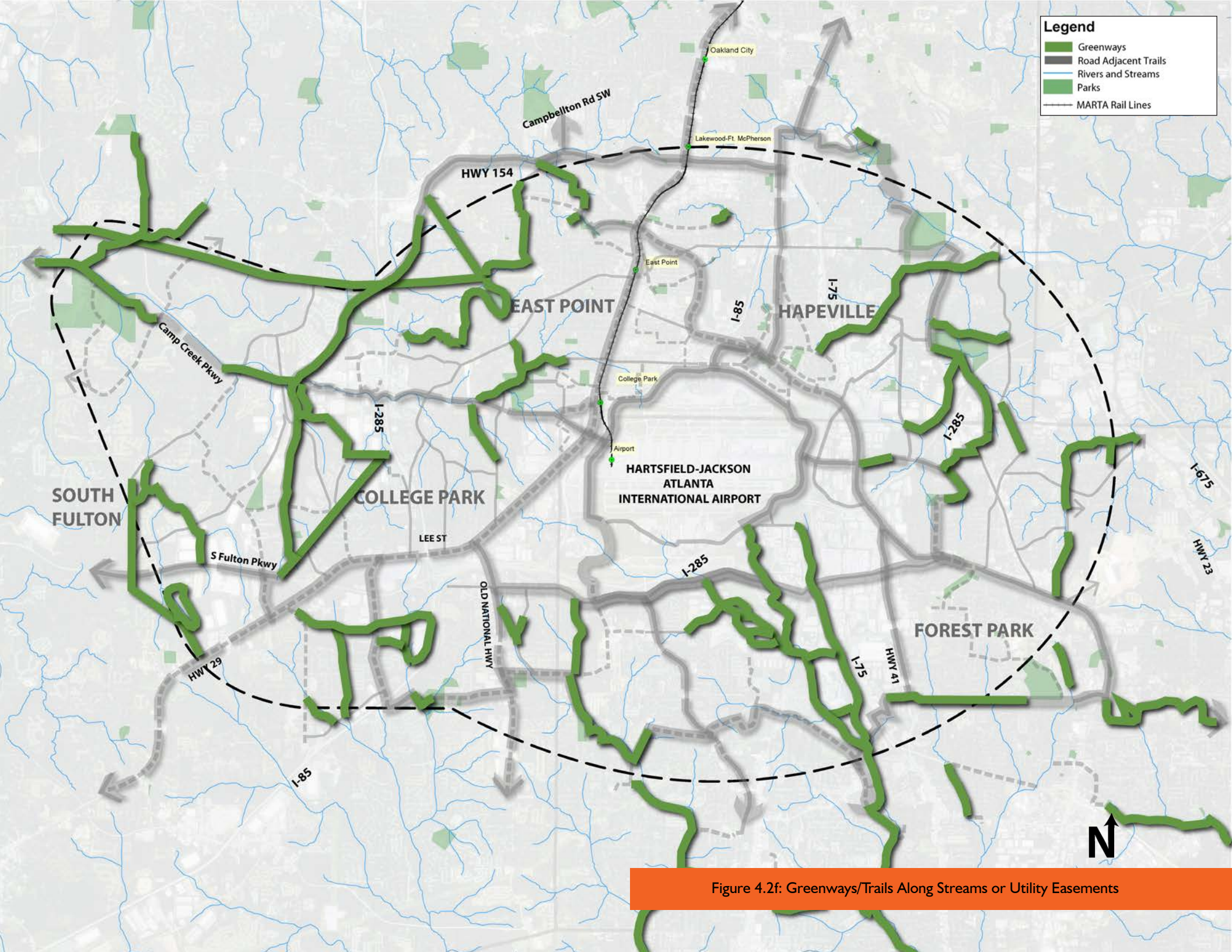


Figure 4.2f: Greenways/Trails Along Streams or Utility Easements

and depend on the location and types of users. A rail to trail is similar to a rail with trail, although it replaces an inactive rail line with a trail.

- ***Road Adjacent Multi-Use Trail*** is a pathway separated from the roadway by a landscaped or paved buffer and utilized by bicyclists, walkers, and runners for transportation and recreational needs. These trails can be built in exiting right-of-ways, if feasible, or may take careful coordination with property owners. Trail materials typically include wood decking, concrete, or asphalt.

- ***Cycle Track*** is an on-road separated bike only facility. The cycle track is typically built within the road right of way but separated with bollards, a curb, or planters. Coordination with local, state and/or federal roadway agencies as well as adjacent property owners is necessary. Trail material typically includes concrete or asphalt.

On-Road Trails

On-road Trails share the roadway pavement with the vehicles and are either separated by a bike lane marking or the entire roadway is shared. Trail types include:

- ***Neighborhood Greenway*** is a bike friendly shared street. Neighborhood Greenways are best situated for low volume, low speed residential streets. On these roadways, bicyclists and pedestrians are the priority. Coordination with the local jurisdiction and adjacent property owners is important.

- ***Bike Lane*** is an on-road bike only facility that is separated from the roadway by painted lines, bollards or planters. Bike lanes are generally most successful in attracting a variety of riders in lower volume, low speed roadways. Coordination with local, state and/or federal roadway agencies as well as adjacent property owners is necessary. Trail material typically includes concrete or asphalt.

Trail Materials

The material matrix can be utilized to determine the best surface type for the various trail typologies. Refer to Figure 4.2g.

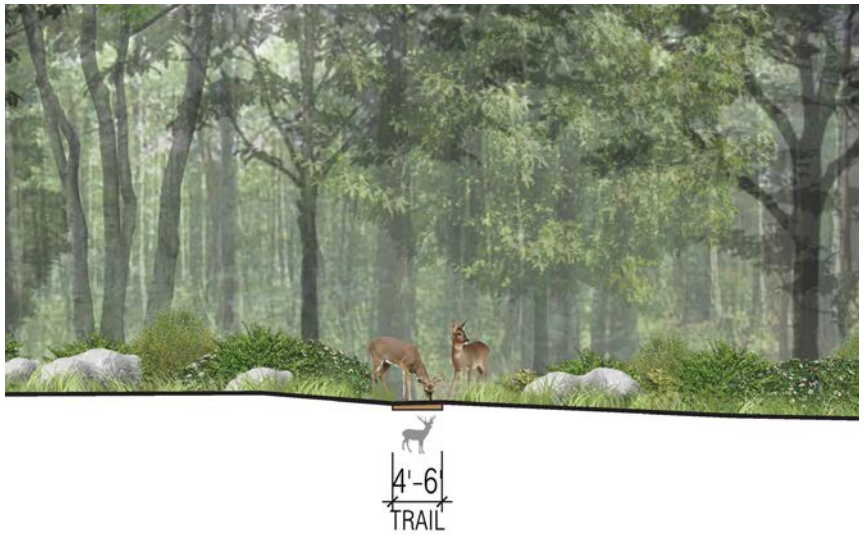
TRAIL TYPE / SURFACE MATERIAL	INFLUENCING DESIGN FACTORS				
	COST	DRAINAGE	HEALTH	SAFETY	RIDERSHIP ATTRACTION
NATURAL	LOW	GOOD	EXCELLENT	POOR	FAIR
COMPACTED SOIL	LOW	FAIR	EXCELLENT	FAIR	FAIR
MULCH	MEDIUM	GOOD	EXCELLENT	FAIR	FAIR
AGGREGATE	MEDIUM / HIGH	GOOD	EXCELLENT	GOOD	GOOD
WOOD DECKING	HIGH	EXCELLENT	EXCELLENT	GOOD	GOOD
CONCRETE / ASPHALT	HIGH	FAIR	EXCELLENT	EXCELLENT	EXCELLENT

MATERIAL MATRIX

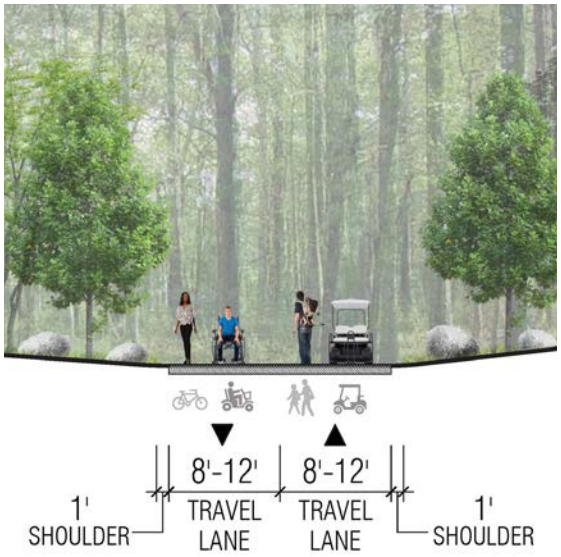
Figure 4.2g: Trail Material Matrix

Greenways

Multi-Purpose Trail

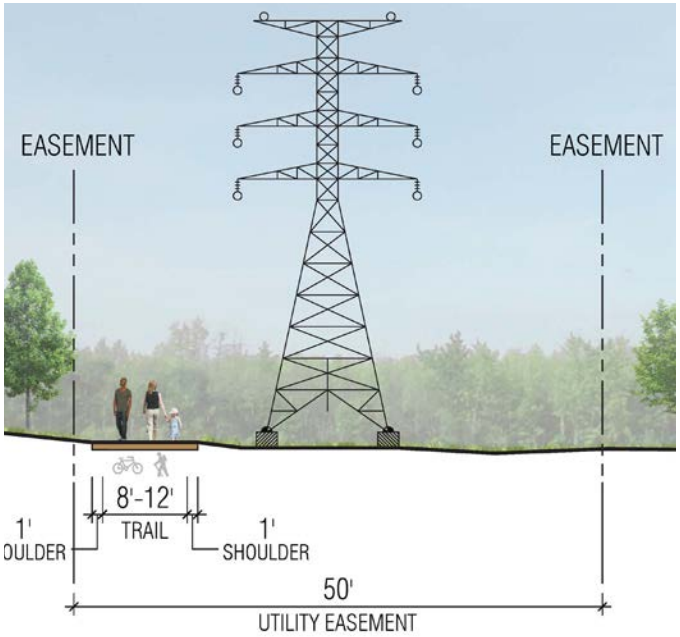


Deer Path Hiking Trail

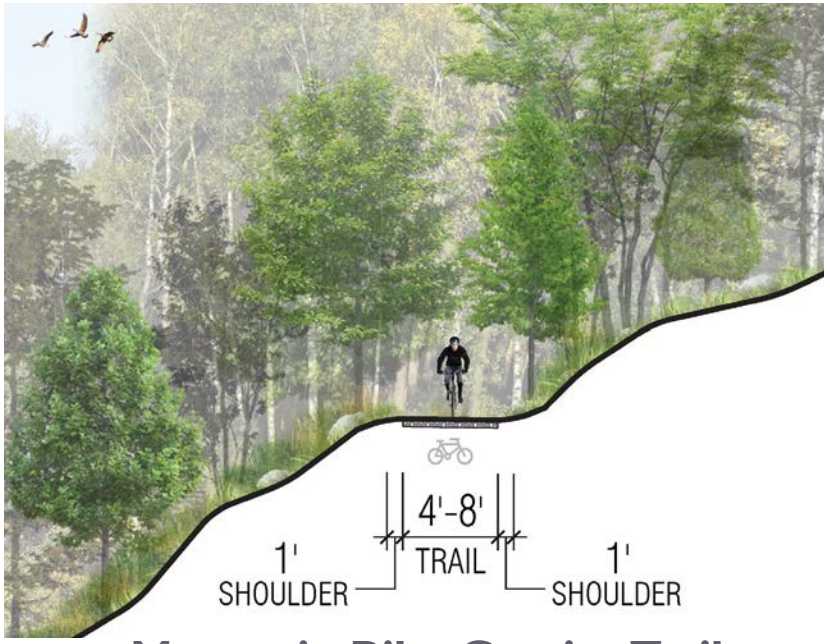


Multi-Use with Non Emission Vehicle Trail

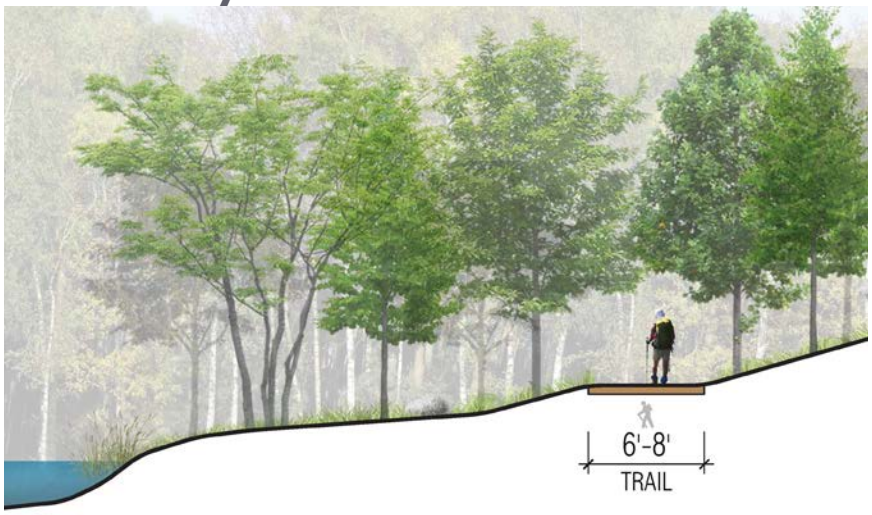
Hiking Trail



Utility Easement Trail



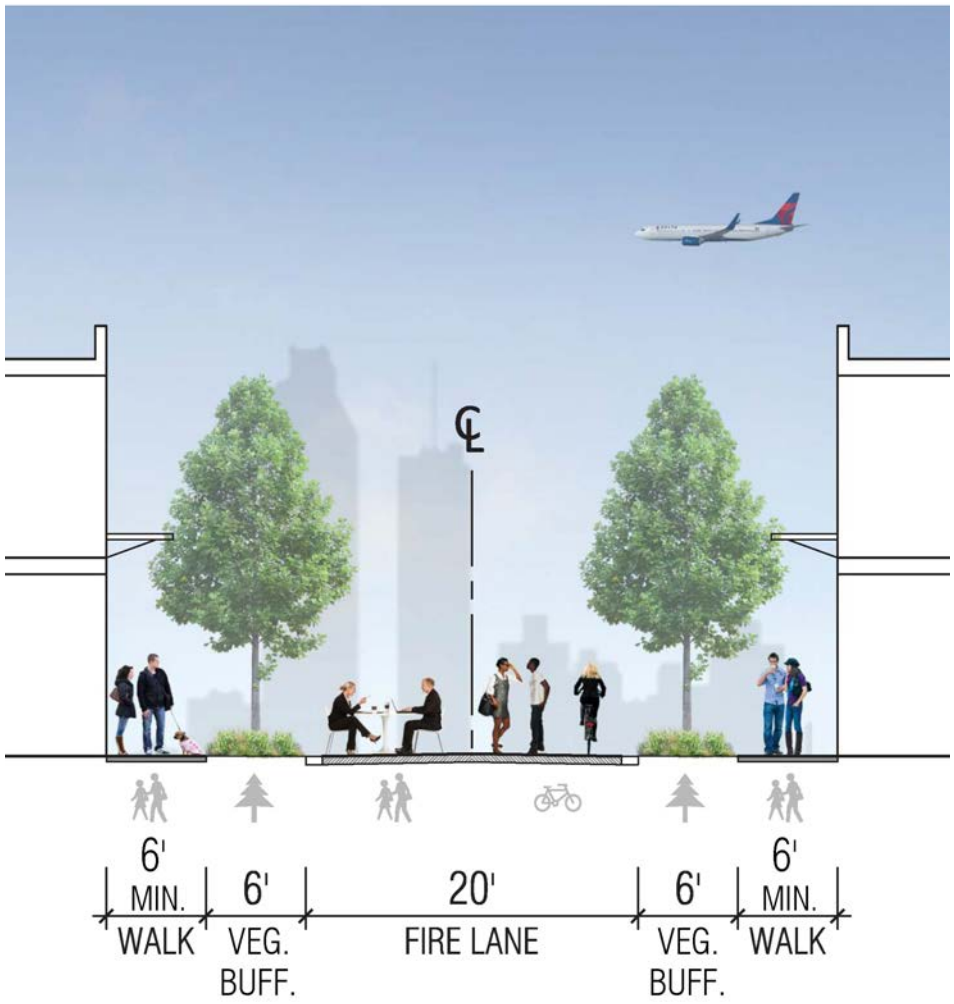
Mountain Bike Gravity Trail



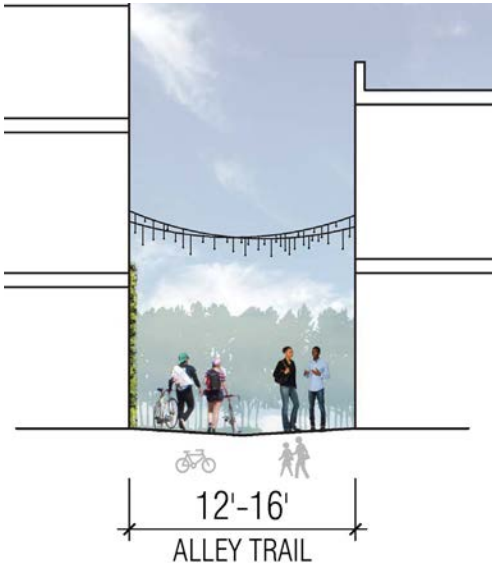
Creekside Trail

Elevated Wetlands Trail

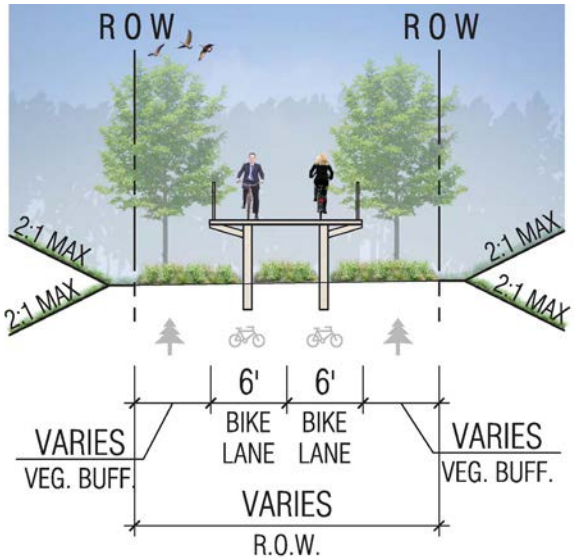
Greenways



Living Street

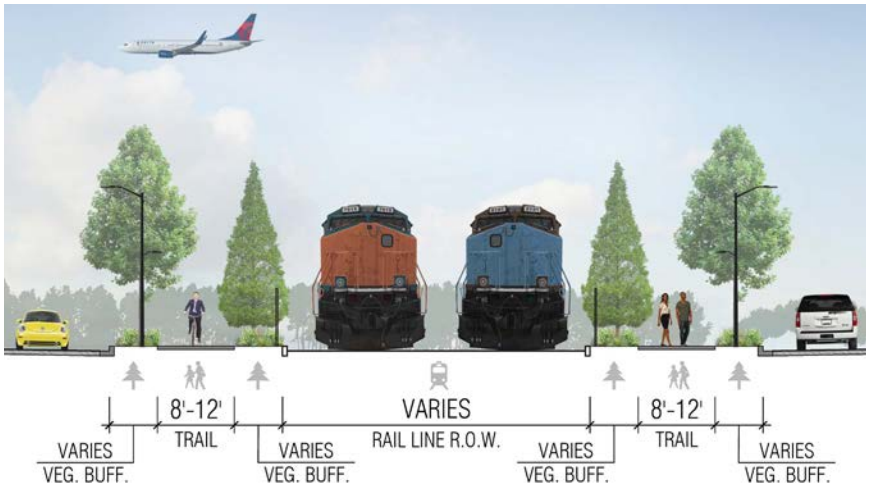


Alley Trail

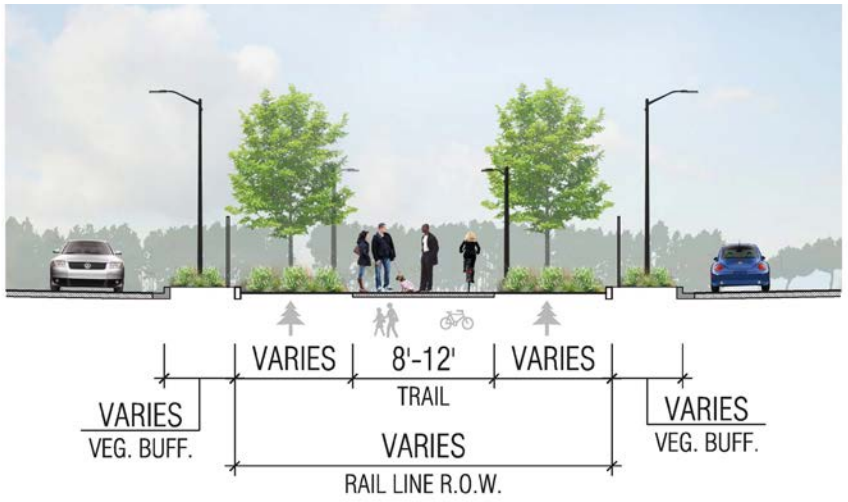


High Speed Bicycle Highway

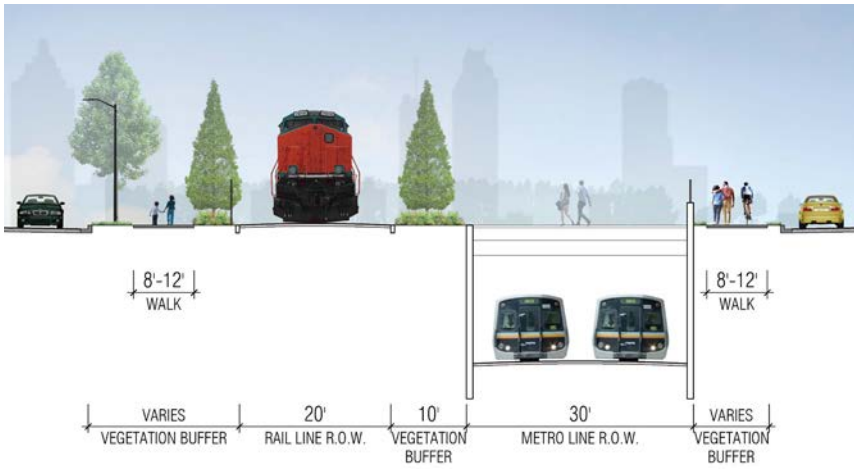
Road Adjacent Trails



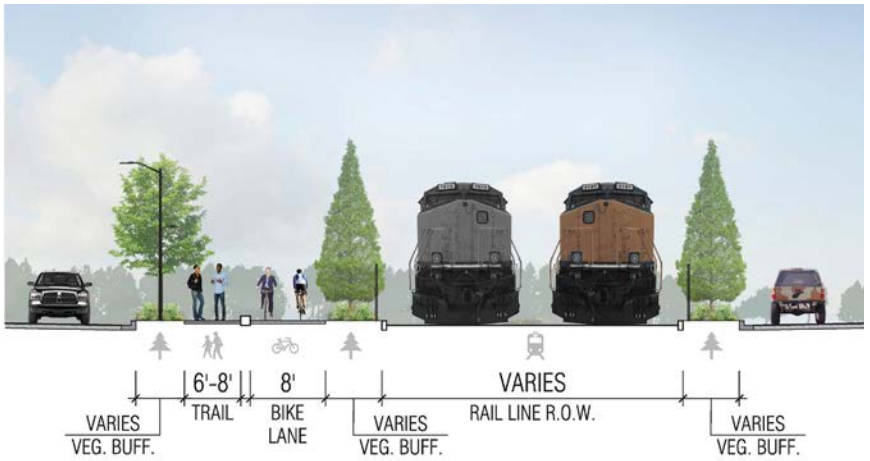
Rail With Trail



Rail To Trail

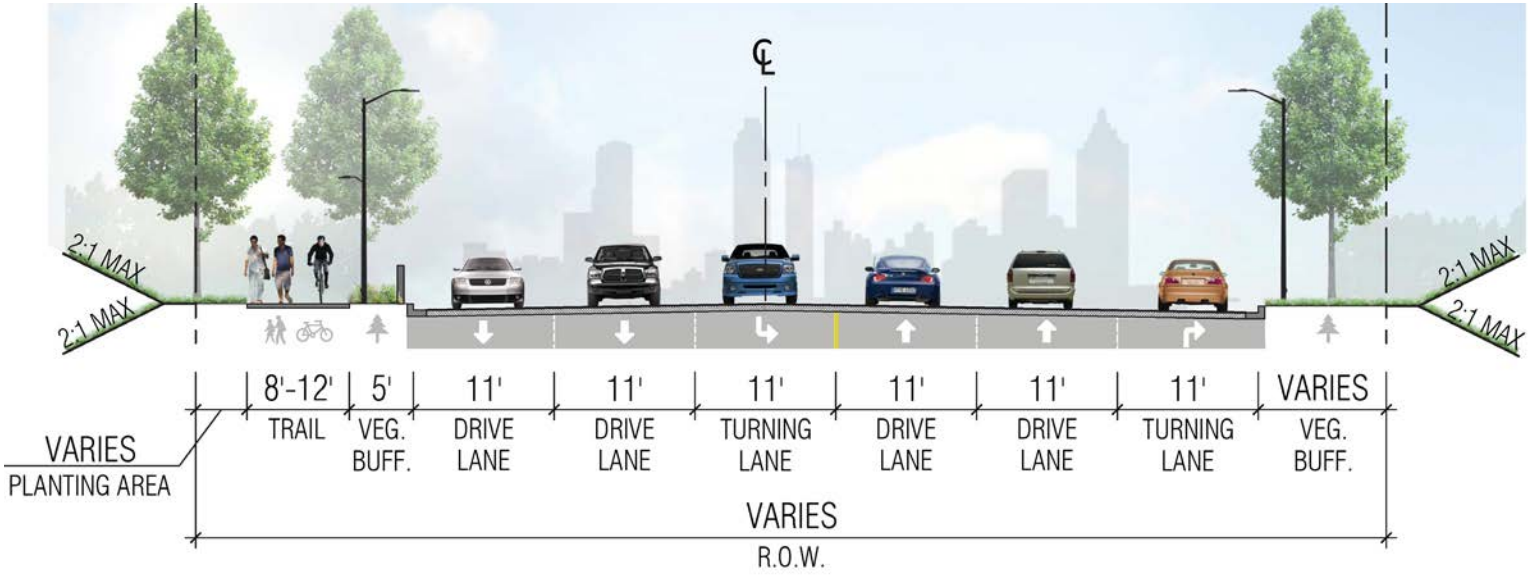


Around Rail Infrastructure Trail

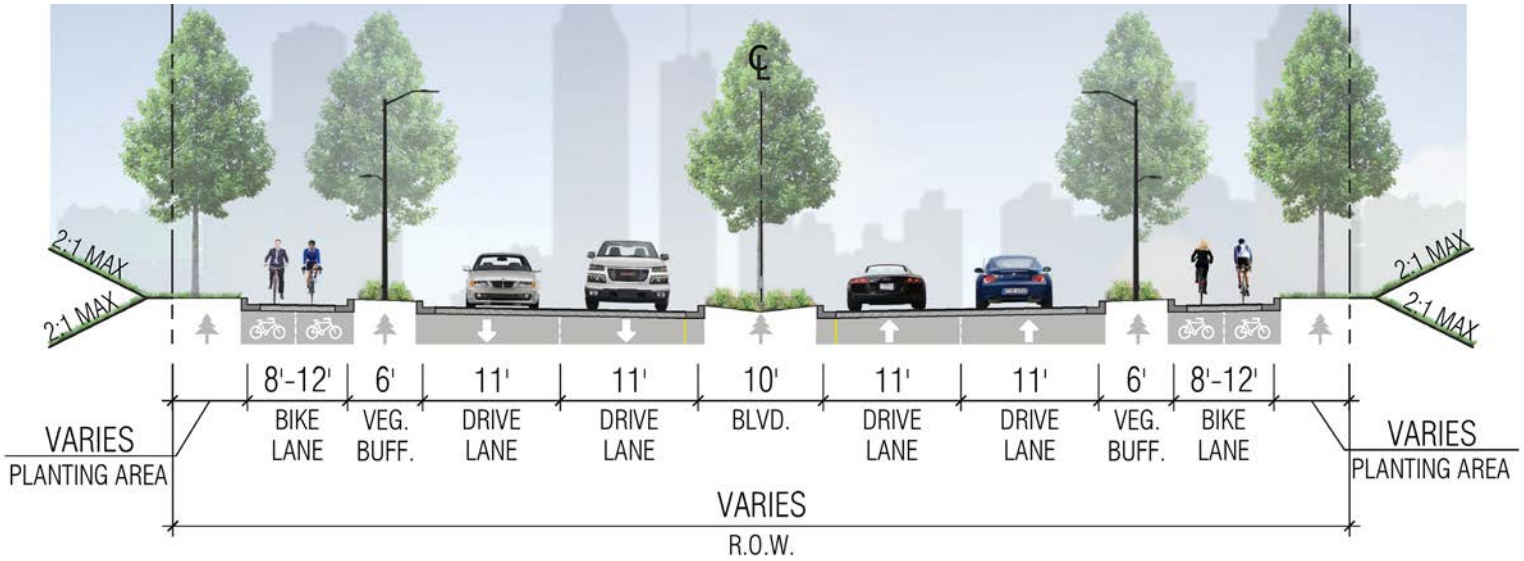


Rail With Pedestrian And Bike Trails

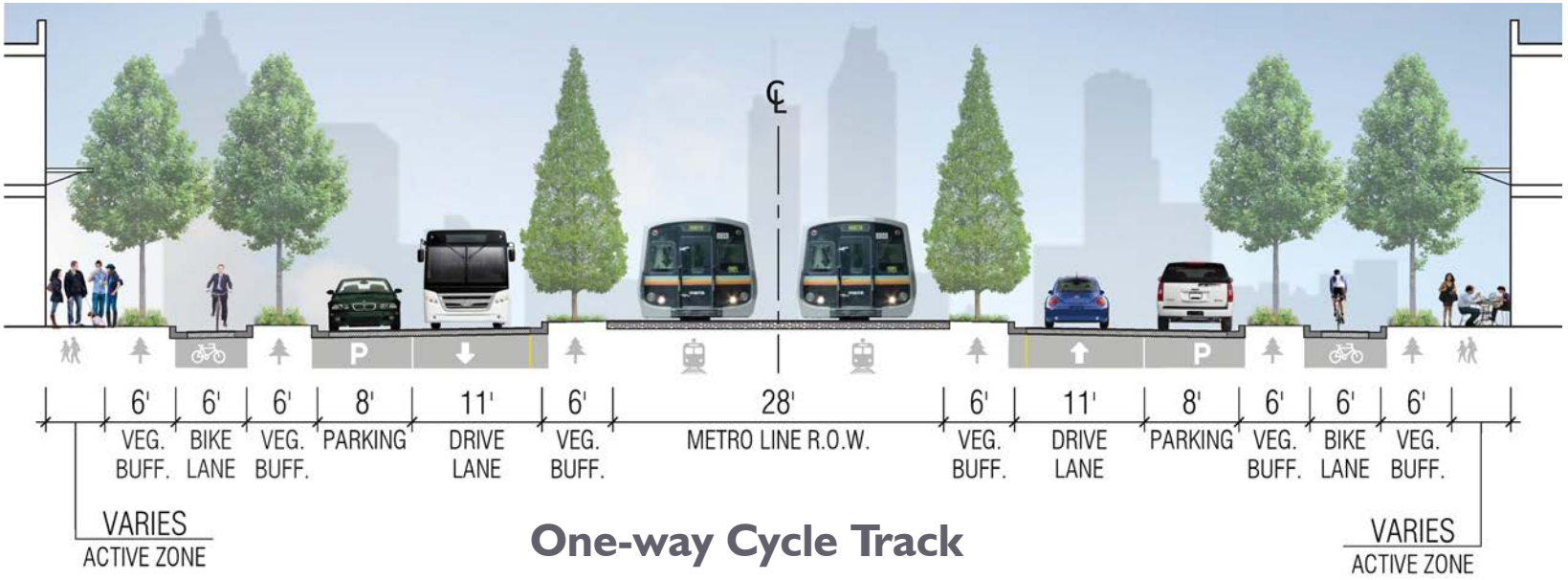
Road Adjacent Trails



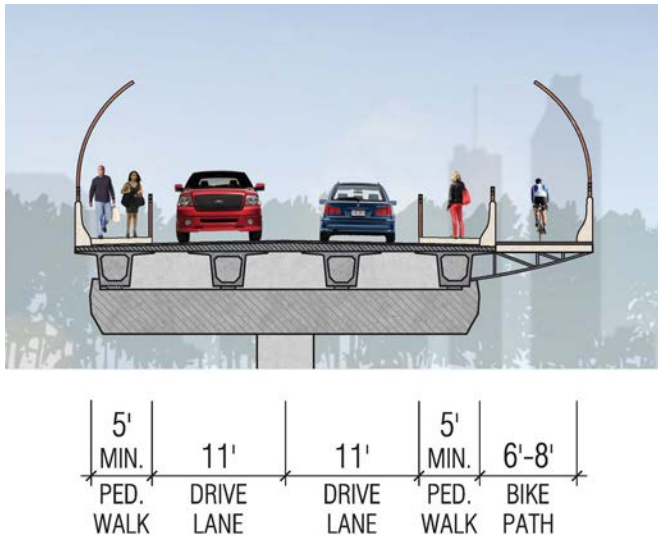
Road Adjacent Multi-Use Trail



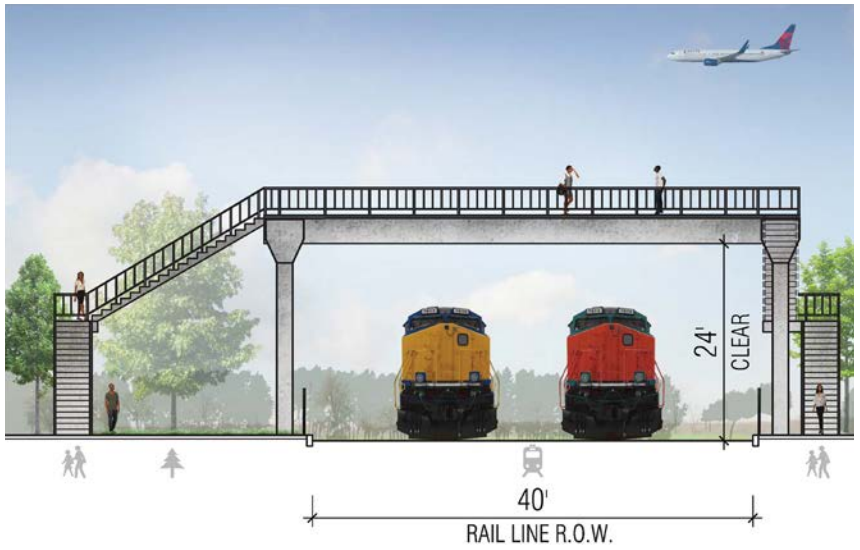
Two-way Cycle Track



One-way Cycle Track

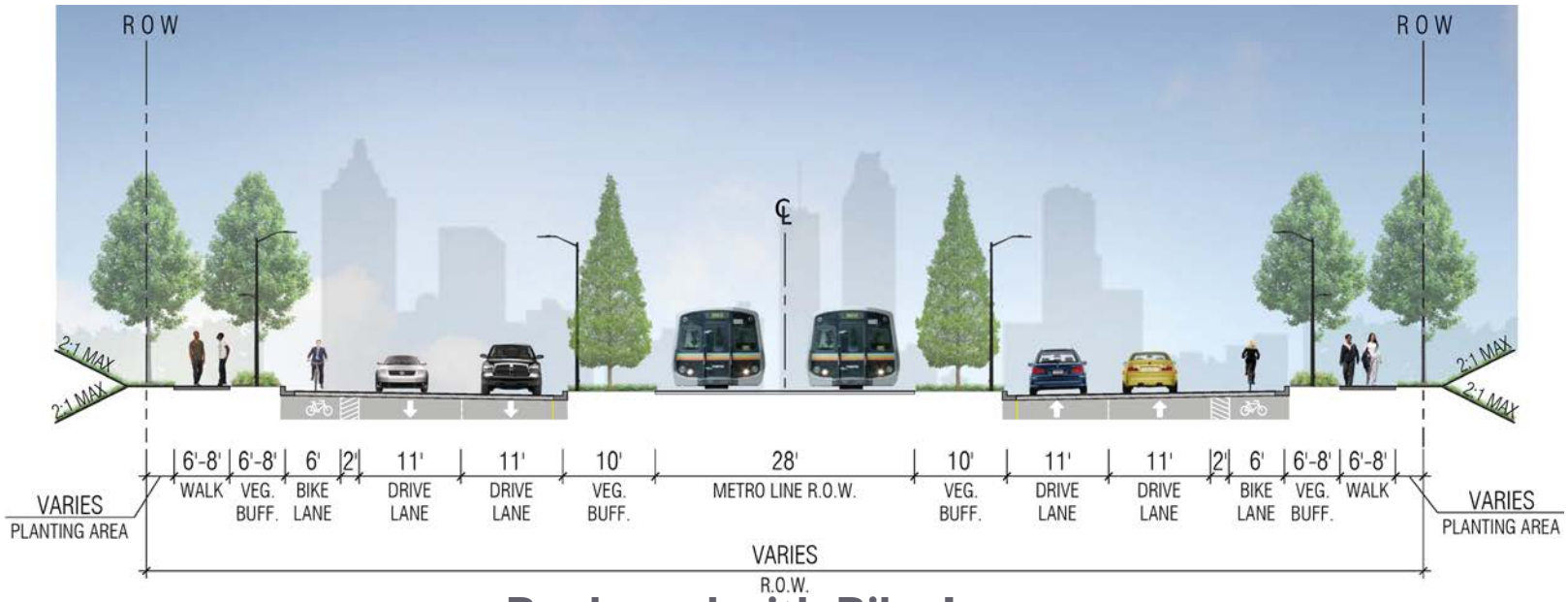


Cantilevered Bicycle Trail at Bridge

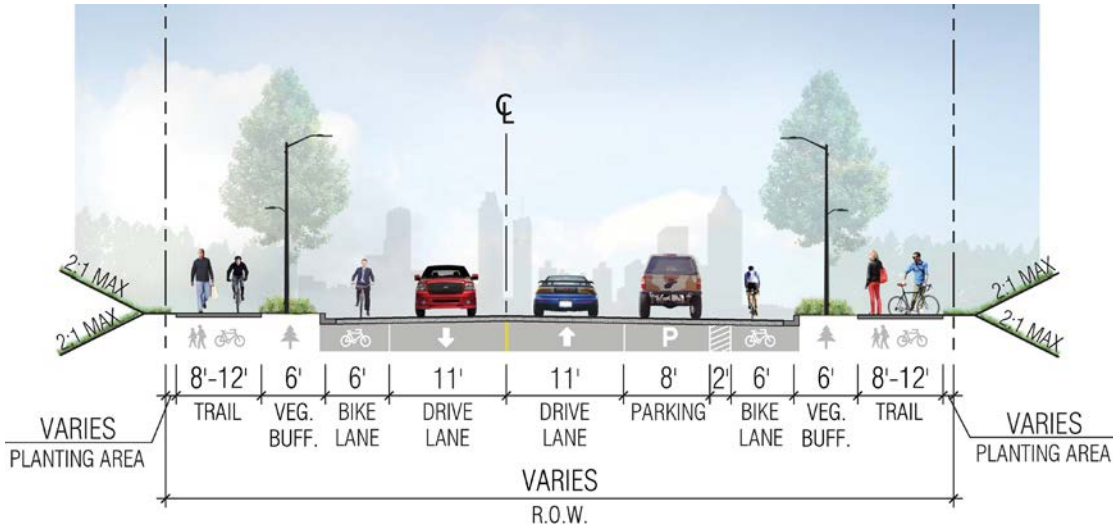


Pedestrian Bridge At Rail Crossing

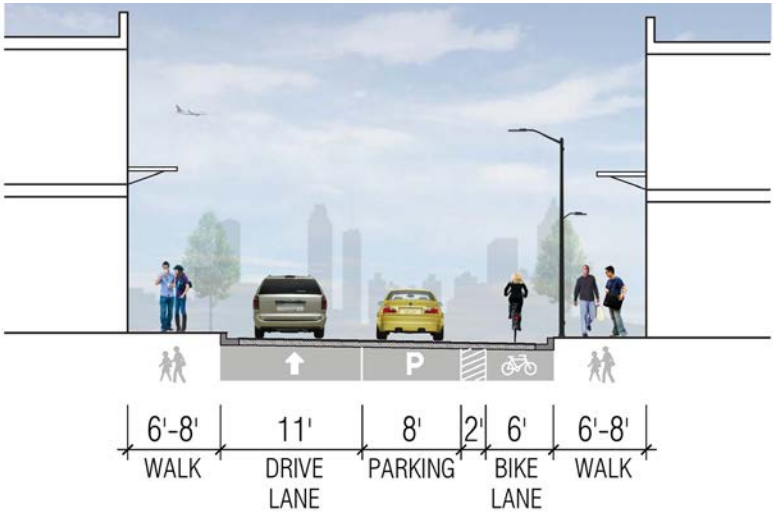
On-Road Trails



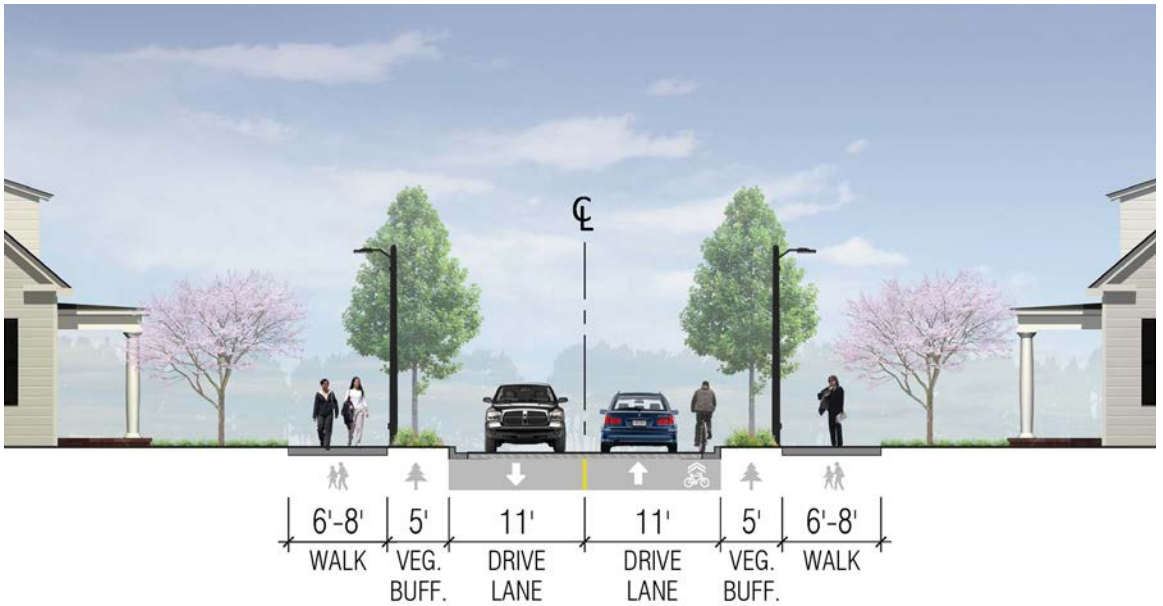
Boulevard with Bike Lanes



Two Way Road with Bike Lane



One Way Road-with Bike Lane



Neighborhood Greenway / Share Road

4.3 Priority Trail Network

Local Partners were asked to identify priority trails for their communities. These priorities create the Priority Trail Network, Figure 4.3a. Trails that are labeled on this map are trail connections identified by the Local Partners. These are further described below. To create a comprehensive priority trail network, these trails were connected via secondary priorities, shown as unlabeled lines in Figure 4.3a.

CITY OF EAST POINT

Priority trail areas for the City of East Point were drawn from the East Point PATH: Trail System Master Plan, and include trails along Main Street, adjacent to Wagon Works and the Sumner Park trail that connects the Park to Tri-Cities High School. Trails EP-1, EP-3 to 7; and EP-8 and 9 represent these priorities on Figure 4.3a.

CITY OF HAPEVILLE

Key trail connectivity in the City of Hapeville, as identified by Local Partners, include Virginia Avenue and Central Avenue. Trails HV-1, 2, 3, and 4 represent these trails on Figure 4.3a.

Trail Abbreviations
SF.FC: City of South Fulton and Fulton County
FC: Fulton County
FP: City of Forest Park
CC: Clayton County
CP: City of College Park
HV: City of Hapeville
EP: City of East Point
AL: Airport Loop

Priority Trails
SF.FC-1: Wolf Creek Trail
SF.FC-2: Camp Creek Parkway Trail
SF.FC-3: Welcome All Trail
SF.FC-4: Roosevelt Highway Trail
SF.FC-5: Roosevelt Highway Trail
SF.FC-6: Roosevelt Highway Trail
SF.FC-7: Roosevelt Highway Trail
FC-1: Butner Road Trail
FP-1: Forest Parkway-Fort Gillem Trail
FP-2: Forest Parkway-Fort Gillem Trail
FP-3: Forest Parkway-Fort Gillem Trail
FP-4: Forest Parkway-Fort Gillem Trail
FP-5: Hendrix Elementary-Starr Park Trail
FP-6: Hendrix Elementary-Starr Park Trail
FP-7: Hendrix Elementary-Starr Park Trail
FP-8: Hendrix Elementary-Starr Park Trail
FP-9: Starr Park-Fountain Park School Trail
FP-10: Starr Park-Fountain Park School Trail
CC-1: Flint River Trail Connection
CC-2: Flint River Trail Connection
CC-3: Flint River Trail Connection
CC-4: Flint River Trail Connection
CC-5: Flint River Trail Connection
CC-6: Flint River Trail Connection
CC-7: Flint River Trail Connection
CC-8: Flint River Trail Connection
CC-9: Flint River Trail Connection
CC-10: Flint River Trail Connection
CC-11: Flint River Trail Connection
CC-12: Flint River Trail Connection
CC-13: Flint River Trail Connection

Priority Trails
CP-1: Herschel Road/Dodson Connector
CP-2: Herschel Road/Dodson Connector
CP-3: Herschel Road/Dodson Connector
CP-4: Herschel Road/Dodson Connector
CP-5: Lakeshor Drive Bike Trail
CP-6: Lakeshore Drive Bike Trail
CP-7: East Main Street Connection
CP-8: East Main Street Connection
CP-9: Airport City Connector
HV-1: Virginia Ave.-Downtown Connection
HV-2: Virginia Ave.-Downtown Connection
HV-3: Porsche Avenue
HV-4: Porsche Avenue
EP-1: Sumner Park to Tri-Cities
EP-2: East Main Street Connection
EP-3: Main Street Connection
EP-4: Main Street Connection
EP-5: Main Street Connection
EP-6: Main Street Connection
EP-7: Main Street Connection
EP-8: Wagon Works to Downtown
EP-9: Wagon Works to Downtown
AL-1: Airport Loop-North
AL-2: Airport Loop-North
AL-3: Airport Loop-North
AL-4: Airport Loop-North
AL-5: Airport Loop-North
AL-6: Airport Loop-North

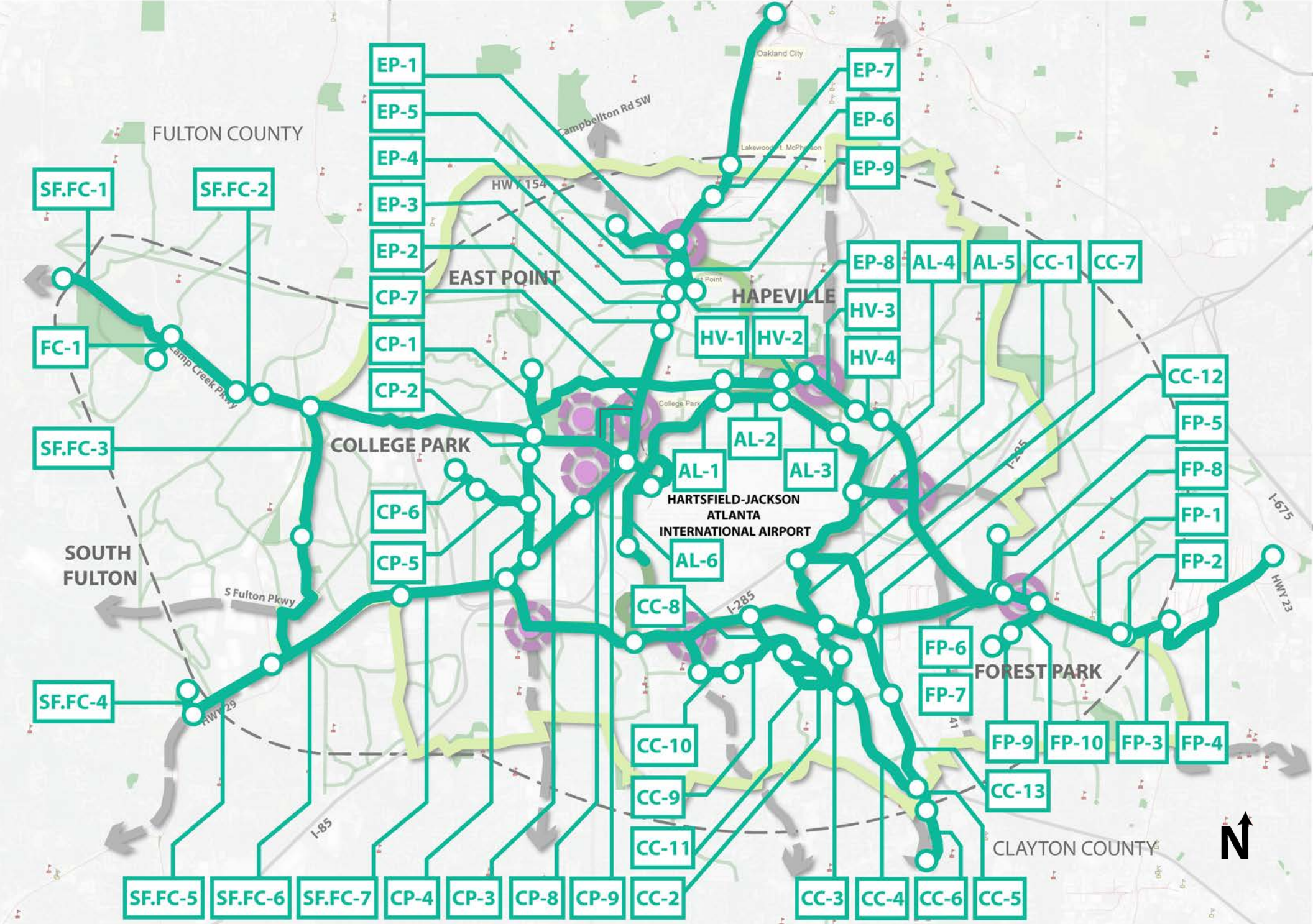


Figure 4.3a: Priority Trail Network

CITY OF FOREST PARK

Local Partners from the City of Forest Park identified rail adjacent trails on Main Street in downtown and trails connecting Fountain Elementary School to Starr Park and downtown. Trails FP-1 to 4 and FP-8 and 9 represent these trails on Figure 4.3a.

CLAYTON COUNTY

Clayton County priority trails focused on enhancing the Flint River as an amenity for the community. Trail CC-1 in Figure 4.3a identifies the priority trail segment to begin building the Flint River connectivity.

CITY OF SOUTH FULTON & FULTON COUNTY

Local Partners from the City of South Fulton identified trails along Camp Creek Parkway, Butner Road, Welcome All Park, and Roosevelt Highway as priority trails. Trails SF.FC-1, SF.FC-3, SF-FC-4 to 7, and FC-1 represent these trails on Figure 4.3a.

CITY OF COLLEGE PARK

The City of College Park prioritized trail connectivity from the GICC to Airport City to Downtown, as well as Lakeshore Drive and the Herschel Road/ Dodson Connector. Trails CP-1 to 4 and CP-7 and CP-8 represent these trails on Figure 4.3a.

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT

The full Airport Loop is identified as the priority trail for H-JAIA. This trail follows Loop Road, encircling the airport. Trails AL-3 and 4 represent the preferred first phase of the Loop, as identified in Figure 4.3a.

Trail Ranking

To identify the Model Mile for each jurisdiction, the priority trail network as described above was filtered through a ranking system. The ranking system prioritized trails based on the following goals:

- Goal 1: Connects residences, employment, services, retail, transit, recreation destinations, and trails.
- Goal 2: Provides a Direct Connection
- Goal 3: Provides a Safe Connection
- Goal 4: Provides a Comfortable Connection
- Goal 5: Provides an Attractive Connection
- Goal 6: Ease of Implementation

Trail segments that ranked highly in the above categories and, particularly, that provided for an ease of implementation, were identified as the Model Miles. Figure 4.3b shows the priority trail segments and Figures 4.3c and 4.3d, on the next page, list the ranking criteria used to rank them.

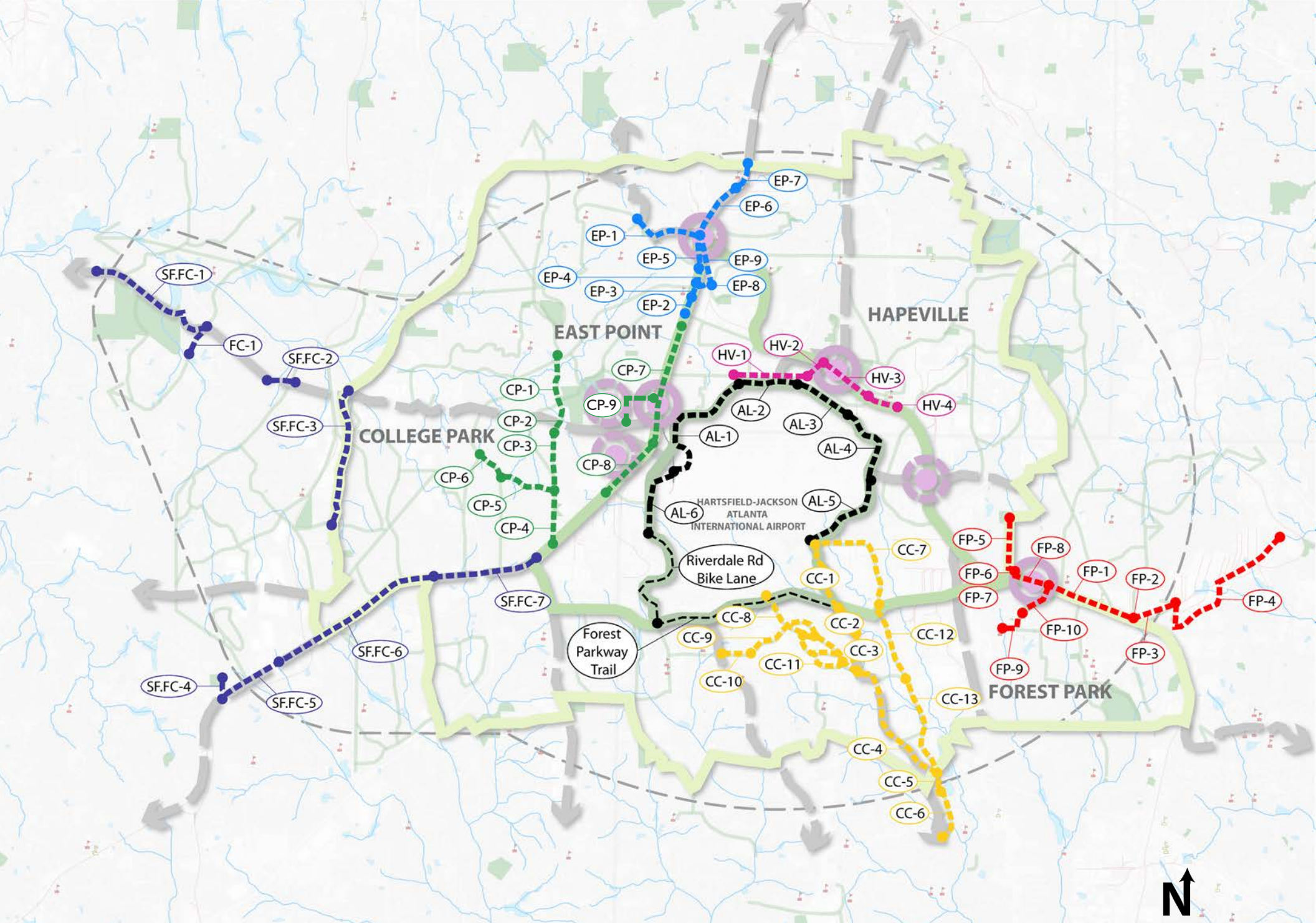


Figure 4.3b: Priority Trail Network Ranking

The AeroATL Greenway Master Plan prioritization strategy ranks the proposed multi-use trail segments based on six key goals. Refer to Figures 4.3c and 4.3d. The first five goals are derived from the principal requirements for developing bicycle friendly infrastructure as described in the CROW Manual - the manual that the Dutch have used to develop their world renown and highly coveted bicycle infrastructure system. These five goals are:

- Connectivity
- Directness
- Safety
- Comfort
- Attractiveness

A sixth goal, Implementation, was added to acknowledge the opportunities and challenges associated with funding, permitting, and constructing trail segments. Construction costs were an important part of the implementation goal. Order of Magnitude Planning Level Cost were developed for each segment based on recently completed projects by Perez Planning + Design, LLC in collaboration with the PATH Foundation. Costs include a 20% Contingency.

Each goal contains a variety of objectives that expand on each of the goals. Each of these objectives contain metrics used to express measures of effectiveness for proposed segments. These were used to assign basic scores to projects, allowing them to be ranked in order of the score as a way for the Aerotropolis community to prioritize projects.

Values ranging between 1 to 5 were assigned to each segment for each metric. Metrics were kept to a minimum to facilitate ranking and limit

Goal 1: Connects residences, employment, services, retail, transit, recreation destinations, and trails.							
1.1 - Connects residential area to commercial area/activity center		**1.2 - Connects residential/commercial area to transit**		**1.3 - Connects residential area to recreation destination**		**1.4 - Bicycle Segment Connects to An Underserved Destination**	
0	The bicycle facility segment does not connect a residential area to a commercial/civic area	0	The bicycle facility segment does not connect a residential / commercial area to a transit area	0	The bicycle facility segment does not connect a residential area to a recreation destination/amenity	0	The bicycle facility segment connects to an area that already has some form of bicycle facility connection
5	The bicycle facility segment does connect a residential area to a commercial/civic area	5	The bicycle facility segment does connect a residential / commercial area to a transit area	5	The bicycle facility segment does connect a residential area to a recreation destination/amenity	5	The bicycle facility segment connects to an area that currently does not have any bicycle facility connectivity

			Goal 2: Provides a Direct Connection				Goal 3: Provides a Safe Connection			
s n	1.5 - Bicycle Segment Connects to a Bicycle Facility		2.1 - Bicycle Segment is Direct In Terms of Distance		2.2 - Bicycle Segment is Direct In Terms of Time		3.1 - Bicycle Segment Minimizes Conflicts with Crossing Traffic		3.2 - Bicycle Segment Provides Sufficient Separation from Traffic Corridors with Major Speed Differentials	
	0	The bicycle facility segment does not connect to an existing bicycle facility	0	The bicycle facility segment does not minimize detours and requires bicyclist to take 90 degree turns to reach a destination	0	The bicycle facility segment does not allow riding at an acceptable speed and rate of flow due to more than 2 interruptions that require the bicyclist to stop	0	The bicycle facility is interrupted more than 2 times	0	The bicycle facility segment does not provide a buffer between the user and a vehicle
y	5	The bicycle facility segment does connect to an existing bicycle facility	5	The bicycle facility segment minimizes detours	5	The bicycle facility segment allows riding at an acceptable speed and rate of flow due to 1 or 2 interruptions that require the bicyclist to stop	5	The bicycle facility segment is interrupted less than 2 times	5	The bicycle facility segment does provide an appropriate buffer between the user and a vehicle or is located in a corridor where a buffer is not necessary

Figure 4.3c: Priority Project Ranking Chart

middle range scores. Within each goal, the sum of these values was divided by the total number of objectives for that goal. This was intended to keep one goal from being weighted over another: for example, since Goal 1 has five objective and Goal 3 has two objectives, the total score for Goal 1 would be divided by five and the score for Goal 3 by two, meaning each goal would thus yield a maximum composite score of 5 and thus each goal has equal importance in being met.

Goal 4: Provides a Comfortable Connection						Goal 5: Provides an At	
4.1 - Bicycle Segment Minimizes Traffic Nuisance		4.2 - Bicycle Segment Minimizes Incline Nuisance		4.3 - Bicycle Segment Minimizes Weather Nuisance		5.1 - Bicycle Segment Socially Safe	
0	The bicycle facility segment does not minimize car fumes and noise due to its proximate location next to vehicular traffic	0	The bicycle facility segment has inclines greater than 5%	0	The bicycle facility segment does not minimize weather nuisance due to its location away from shelter from wind, rain, and sun	0	The bicycle facility is not socially safe poor lighting, visib the vicinity, and th perceived safety o area
2	The bicycle facility segment minimize car fumes and noise due to its buffered location from vehicular traffic or along corridors with minimal traffic	5	The bicycle facility segment has inclines less than 5%	2	The bicycle facility segment minimizes weather nuisance due to its location that provides partial shelter from wind, rain, and sun	5	The bicycle facility is socially safe due lighting, visibility fr vicinity, and the pe safety of the area
5	The bicycle facility segment minimize car fumes and noise due to its location +20' away from vehicular traffic			5	The bicycle facility segment minimizes weather nuisance due to its location that provides shelter from wind, rain, and sun		

ttractive Connection			Goal 6: Ease of Implementation							
Is	5.2 - Bicycle Segment Is Visually Attractive		6.1 - Requires Right of Way Acquisition		6.2 - Requires Stakeholder Coordination		6.3 - Leverages Programmed (Funded) Construction Project		6.4 - Construction Costs (Including Acquisition if Necessary)	
segment due to ility from e f the	0	The bicycle facility segment is not visually attractive due to poor buffer separation (if applicable), adjacent land uses, and natural environment	0	The bicycle facility segment requires right of way acquisition or an easement	0	The bicycle facility segment requires coordination with multiple stakeholders	0	The bicycle facility segment does not leverage a programmed (funded) construction project	0	The bicycle facility segment cost per mile is 50% higher than the average per mile costs of all the proposed improvements
segment to great rom the erceived	5	The bicycle facility segment is visually attractive due to visually appealing buffer separation (if applicable), adjacent land uses, and natural environment	5	The bicycle facility segment does not require right of way acquisition or an easement	5	The bicycle facility segment requires coordination with one stakeholder	5	The bicycle facility segment does leverage a programmed (funded) construction project	3	The bicycle facility segment cost per mile is higher than the average per mile costs of all the proposed improvements but below 50% higher than the average per mile costs of all the proposed improvements
									4	The bicycle facility segment cost per mile is below the average per mile costs of all the proposed improvements but not lower than 50% of the average per mile cost of all the proposed improvements
									5	The bicycle facility segment cost per mile is 50% below the average per mile costs of all the proposed improvements

Figure 4.3d: Priority Project Ranking Chart Continued

Figures 4.3e and 4.3f list the ranking of all the trail segments

Atlanta Aerotropolis Greenway Prioritization																												
		Goal 1: Connects residences, employment, services, retail, transit, recreation destinations, and trails.					Goal Average	Goal 2: Provides a Direct Connection		Goal Average	Goal 3: Provides a Safe Connection		Goal Average	Goal 4: Provides a Comfortable Connection			Goal Average	Goal 5: Provides an Attractive Connection		Goal Average	Goal 6: Ease of Implementation				Goal Average	SUM	COMBINED AVERAGE
ID	Project List	1.1	1.2	1.3	1.4	1.5		2.1	2.2		3.1	3.2		4.1	4.2	4.3		5.1	5.2		6.1	6.2	6.3	6.4			
SF.FC-1	Wolf Creek Trail	0	0	5	5	5	3.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	4	1.00	20.50	3.42
SF.FC-2	Camp Creek Parkway Trail	0	0	5	5	5	3.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	5	1.25	20.75	3.46
SF.FC-3	Welcome All Trail	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	4	1.00	18.50	3.08
SF.FC-4	Roosevelt Highway Trail	0	0	0	5	5	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	0	0	0	5	1.25	20.58	3.43
SF.FC-5	Roosevelt Highway Trail	0	0	0	5	5	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	0	0	0	4	1.00	20.33	3.39
SF.FC-6	Roosevelt Highway Trail	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	0	0	0	0	0.00	18.33	3.06
SF.FC-7	Roosevelt Highway Trail	5	0	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	0	0	0	4	1.00	20.33	3.39
FC-1	Butner Road Trail	0	0	5	5	5	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	5	2.50	22.83	3.81
FP-1	Forest Parkway - Fort Gillem Trail	5	0	5	5	0	3.00	5	0	2.50	0	5	2.50	2	5	0	2.33	5	5	5.00	0	0	0	4	1.00	16.33	2.72
FP-2	Forest Parkway - Fort Gillem Trail	5	0	5	5	0	3.00	5	0	2.50	0	5	2.50	2	5	0	2.33	5	5	5.00	0	0	0	5	1.25	16.58	2.76
FP-3	Forest Parkway - Fort Gillem Trail	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	4	2.25	20.58	3.43
FP-4	Forest Parkway - Fort Gillem Trail	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	0	1.25	19.58	3.26
FP-5	Hendrix Elementary - Starr Park Trail	5	0	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	5	2.50	21.83	3.64
FP 6	Hendrix Elementary - Starr Park Trail	5	0	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	0	0	0	5	1.25	21.58	3.60
FP 7	Hendrix Elementary - Starr Park Trail	5	0	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	0	0	0	5	1.25	21.58	3.60
FP 8	Hendrix Elementary - Starr Park Trail	5	0	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	0	0	0	5	1.25	21.58	3.60
FP-9	Starr Park - Fountain Park School Trail	0	0	5	5	0	2.00	5	5	5.00	5	5	5.00	5	5	0	3.33	5	5	5.00	5	5	5	5	5.00	25.33	4.22
FP-10	Starr Park - Fountain Park School Trail	0	0	5	5	0	2.00	5	5	5.00	5	5	5.00	5	5	0	3.33	5	5	5.00	5	0	0	5	2.50	22.83	3.81
CC-1	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	17.50	2.92
CC-2	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	4	1.00	18.50	3.08
CC-3	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	4	1.00	18.50	3.08
CC-4	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	17.50	2.92
CC-5	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	3	0.75	18.25	3.04
CC-6	Flint River Trail Connection	5	0	5	5	0	3.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	19.50	3.25
CC-7	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	17.50	2.92
CC-8	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	17.50	2.92
CC-9	Flint River Trail Connection	5	0	0	5	0	2.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	18.50	3.08
CC-10	Flint River Trail Connection	5	0	0	5	0	2.00	5	5	5.00	5	5	5.00	5	5	0	3.33	5	5	5.00	0	0	0	0	0.00	20.33	3.39
CC-11	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	17.50	2.92
CC-12	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	17.50	2.92
CC-13	Flint River Trail Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	0	0.00	17.50	2.92
CP-1	Herschel Road/Dodson Connector	0	5	5	5	0	3.00	5	5	5.00	5	5	5.00	5	5	2	4.00	5	5	5.00	5	0	0	5	2.50	24.50	4.08
CP-2	Herschel Road/Dodson Connector	0	5	0	5	0	2.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	5	0	0	5	2.50	21.00	3.50
CP-3	Herschel Road/Dodson Connector	0	5	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	2	3.00	5	5	5.00	5	0	0	5	2.50	23.50	3.92
CP-4	Herschel Road/Dodson Connector	0	5	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	2	3.00	5	5	5.00	5	0	0	5	2.50	23.50	3.92
CP-5	Lakeshore Drive Bike Trail	0	5	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	2	3.00	5	5	5.00	5	0	0	5	2.50	23.50	3.92
CP-6	Lakeshore Drive Bike Trail	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	2	5	2	3.00	0	5	2.50	5	0	0	5	2.50	19.00	3.17
CP-7	East Main Street Connection	5	5	0	5	0	3.00	5	5	5.00	5	5	5.00	2	5	2	3.00	0	5	2.50	5	0	0	4	2.25	20.75	3.46
CP-8	East Main Street Connection	5	5	5	0	5	4.00	5	5	5.00	5	5	5.00	2	5	0	2.33	0	5	2.50	5	0	0	4	2.25	21.08	3.51
CP-9	Airport City Connection	5	5	5	5	0	4.00	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Figure 4.3e: Priority Trail Network Ranking Chart

Atlanta Aerotropolis Greenway Prioritization

ID	Project List	Goal 1: Connects residences, employment, services, retail, transit, recreation destinations, and trails.					Goal Average	Goal 2: Provides a Direct Connection		Goal Average	Goal 3: Provides a Safe Connection		Goal Average	Goal 4: Provides a Comfortable Connection			Goal Average	Goal 5: Provides an Attractive Connection		Goal Average	Goal 6: Ease of Implementation				Goal Average	
		1.1	1.2	1.3	1.4	1.5		2.1	2.2		3.1	3.2		4.1	4.2	4.3		5.1	5.2		6.1	6.2	6.3	6.4		
HV-1	Virginia Avenue-Downtown Connection	5	0	0	5	0	2.00	5	0	2.50	0	5	2.50	2	5	2	3.00	5	5	5.00	5	0	0	5	2.50	1
HV-2	Virginia Avenue-Downtown Connection	5	0	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	5	2.50	2
HV-3	Porsche Avenue Trail	5	0	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	5	2.50	2
HV-4	Porsche Avenue Trail	5	0	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	5	2.50	2
AL-1	Airport Loop-North	0	5	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	0	5	2.50	0	0	0	3	0.75	1
AL-2	Airport Loop-North	0	0	0	5	0	1.00	5	0	2.50	0	5	2.50	2	5	2	3.00	0	5	2.50	5	0	0	4	2.25	1
AL-3	Airport Loop-North	0	5	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	2	3.00	0	0	0.00	5	0	0	5	2.50	1
AL-4	Airport Loop-North	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	5	5	2	4.00	0	5	2.50	0	0	0	3	0.75	1
AL-5	Airport Loop-North	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	2	5	2	3.00	0	5	2.50	5	0	0	4	2.25	1
AL-6	Airport Loop-North	0	5	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	0	2.33	0	5	2.50	0	0	0	3	0.75	1
EP-1	Sumner Park to Tri-Cities	0	0	5	5	0	2.00	5	5	5.00	5	5	5.00	2	5	2	3.00	5	5	5.00	5	0	0	5	2.50	2
EP-2	East Main Street Connection	5	0	5	5	0	3.00	5	5	5.00	5	5	5.00	2	5	2	3.00	5	5	5.00	5	0	0	5	2.50	2
EP-3	Main Street Connection	5	0	5	5	0	3.00	5	5	5.00	5	5	5.00	5	5	0	3.33	0	5	2.50	5	0	0	5	2.50	2
EP-4	Main Street Connection	0	0	0	5	0	1.00	5	5	5.00	5	5	5.00	2	5	0	2.33	0	0	0.00	5	0	0	5	2.50	1
EP-5	Main Street Connection	5	5	0	5	0	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	0	2.50	5	0	0	5	2.50	2
EP-6	Main Street Connection	5	5	0	5	0	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	5	2.50	2
EP-7	Main Street Connection	5	5	0	5	0	3.00	5	5	5.00	5	5	5.00	2	5	0	2.33	5	5	5.00	5	0	0	5	2.50	2
EP-8	Wagon Works to Downtown	0	5	0	5	0	2.00	5	0	2.50	0	5	2.50	2	5	2	3.00	0	5	2.50	5	0	0	4	2.25	1
EP-9	Wagon Works to Downtown	0	5	0	5	0	2.00	5	5	5.00	5	5	5.00	2	5	2	3.00	5	5	5.00	5	0	0	5	2.50	2

Figure 4.3f: Priority Trail Network Ranking Chart Continued

Using the six ranking criteria from Figures 4.3c and 4.3d, the Project Ranking Chart in Figures 4.3e and 4.3f are prepared and utilized to identify Model Miles for each jurisdiction. The ranking chart allows for selection of trails based on how closely they align to the community goals identified through this process. While this report recommends model miles for each community, the next phase of trail development can be supported with the help of the Priority Project Ranking Chart (Figures 4.3e and 4.3f). This chart provides an easy and relatively quick method to justify trail development to sponsors and partners.

In addition, and just as important as this chart, is to continue to expand the trail system as opportunities arise in the public and private sector. This includes leveraging roadway re-designs by local and state agencies and redevelopment projects led by the private development community to incorporate the trails from this master plan into projects early on.

4.4 Model Miles

Based on ranking performance as described above, following are the Model Miles for each jurisdiction. Model Miles are further described in the remainder of this section.

EAST POINT

The identified Model Mile for East Point per the East Point PATH: Trail System Master Plan is the Sumner park connection from Harris park/Tri-Cities High School (US 29) along Norman Berry Drive and Headland Drive. This is proposed as a roadway adjacent multi-use trail approximately 1.35 miles in length.

FOREST PARK

The identified Model Mile for Forest Park is the Starr Park-Fountain Elementary connection from Forest Parkway to Fountain Elementary. The Lake Drive section is proposed as a two way cycle track and the West Street section as a neighborhood greenway or shared road. This trail segment is 1 mile in length.

CLAYTON COUNTY

The identified Model Mile for Clayton County is the Flint River adjacent multi-purpose trail that Connects the Loop Road trail to Forest Parkway. This trail segment extends approximately 1.2 miles.

HAPEVILLE

The identified Model Mile for Hapeville is a roadway adjacent multi-purpose trail along South Central Avenue/Porsche Avenue, from Virginia Avenue to Sunset Avenue. This trail segment extends approximately 1 mile in total.

SOUTH FULTON & FULTON COUNTY

The identified Model Mile for the City of South Fulton is the Wolf Creek Trail connection. This connection extends from Enon Road to Butner Road and connects to the existing Camp Creek Trail. This will be a river adjacent multi-purpose trail totalling approximately 1.6 miles.

COLLEGE PARK

Two Model Miles have been identified for College Park. The priority Model Mile is the Airport City Connector. This trail connects the GICC, through Airport City and into Downtown College Park. As the Airport City master plan is further developed, it is recommended that this trail design be a key component.

The second Model Mile opportunity for College Park is the Herschel Road/Dodson Connector, which connects Camp Creek Parkway to Washington Road, along Herschel Road. This roadway adjacent trail and greenway is approximately 0.8 miles in length.

H-JAIA

The identified Model Mile for the Airport connects Charles Grant Parkway to Atlanta Avenue along Loop Road. This roadway adjacent multi-purpose trail segment is 1.4 miles in length.

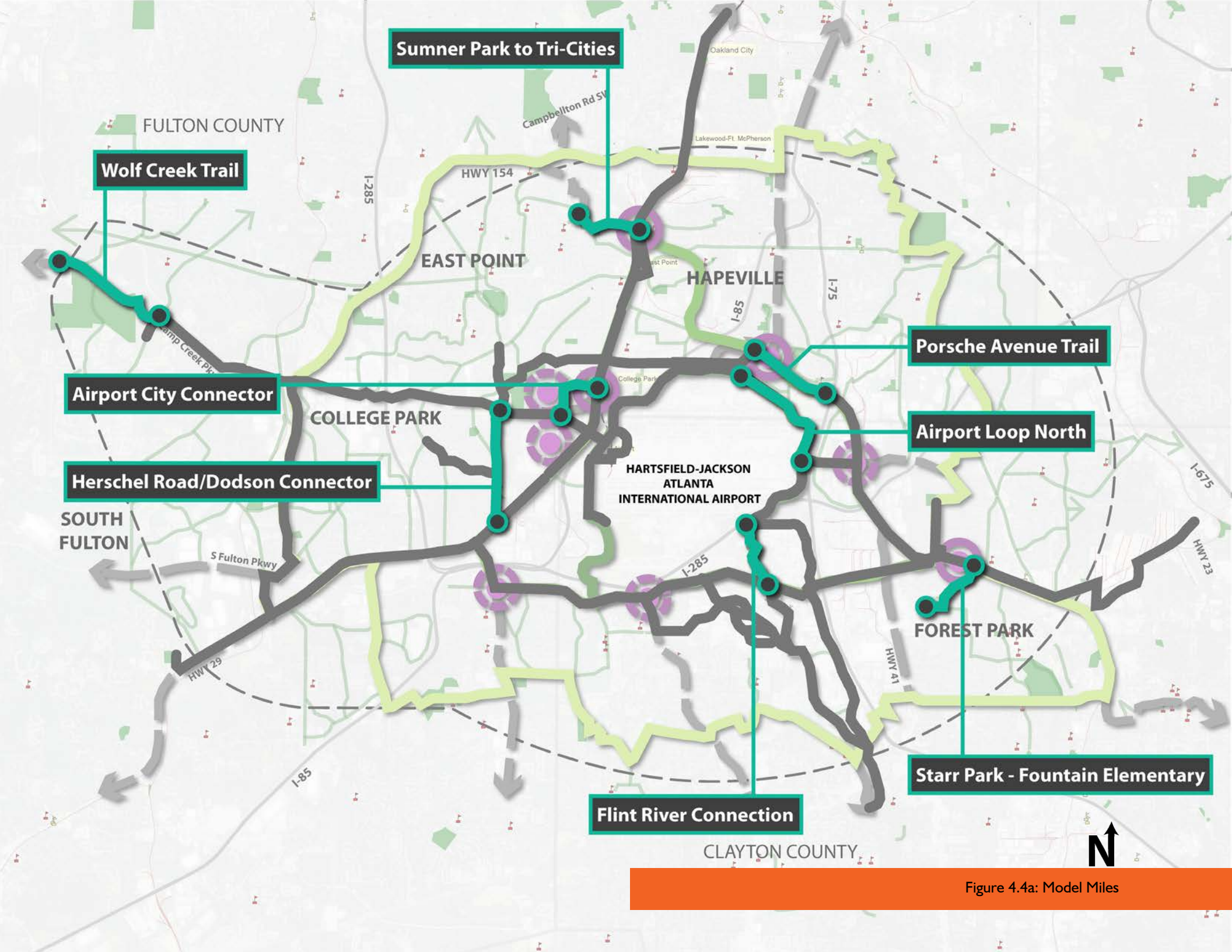


Figure 4.4a: Model Miles

City of East Point Trail Master Plan

Figure 4.4b represents the East Point local trail system. This network aligns with the East Point PATH: Trail System Master Plan and adds a few regionally significant connections, including:

- Langford Parkway, along the northern boundary of the city
- Cleveland Avenue to Irene Kidd Parkway to Washington Avenue, along the southern boundary of the community
- Utility easements connecting from Sykes Park to the Greenbriar Mall and west into the City of South Fulton
- Dodson Drive Connector and Hershel Road, connecting Sykes Park to Camp Creek Parkway and to the Brady Trail
- Redwine Road connecting Camp Creek Marketplace to the Washington Avenue proposed trail
- Camp Creek Parkway, a east-west regional connector
- Willingham Drive and Virginia Avenue connecting East Point, College Park and Hapeville
- North Fork Camp Creek, a portion of the Outer Loop concept, described in this report
- Welcome All Road and Ben Hill, connecting residents to the Welcome All business district, the Welcome All Park and Camp Creek Elementary School

City of East Point Priorities

As described above, and as identified in Figure 4.4b, the East Point priority trails include:

1. Priority 1: Sumner Park to Tri-Cities Trail (EP-1)
2. Priority 2: Main Street/US 29 Trail (EP-2 to 7). As this roadway crosses through several jurisdictions and changes character and width, it is recommended that a joint jurisdictional study follow for this specific corridor
3. Priority 3: Wagon Works to Downtown Trail (EP-8 to 9)

The City of East Point is moving forward with development of Priority 1 and is currently underway with the construction document phase. Construction is anticipated to be complete by the summer of 2019. With this momentum, Priority 1 will be East Point's Model Mile.

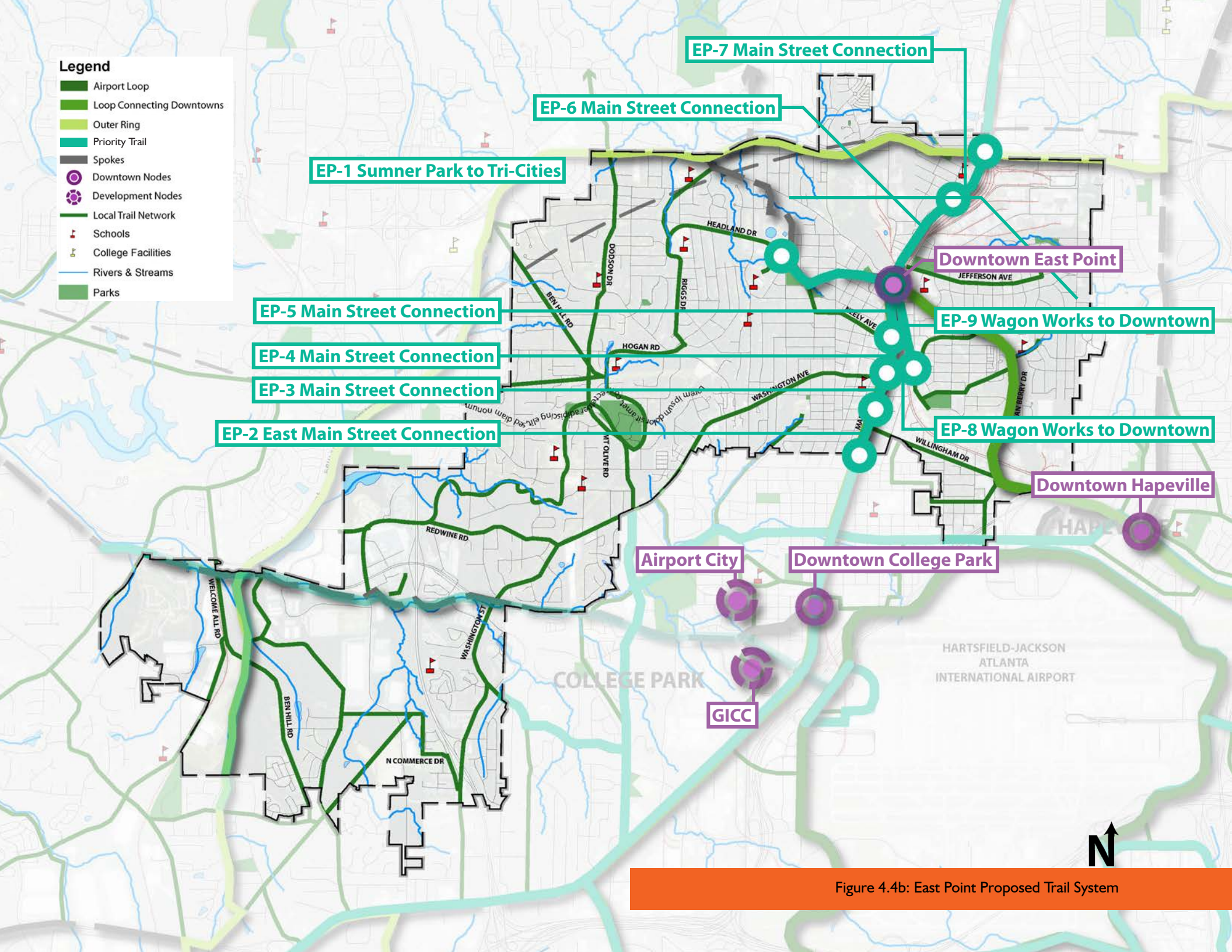


Figure 4.4b: East Point Proposed Trail System

City of East Point Model Mile

The identified Model Mile for East Point, per the East Point PATH: Trail System Master Plan is the Sumner Park connection from Harris Park/Tri-Cities High School (US 29) along Norman Berry Drive and Headland Drive. Per the Priority Trail Network Ranking Chart, this segment includes EP1. Refer to Figure 4.4c.

Facility: Headland Drive and Norman Berry Roadway Adjacent Multi-Purpose Trail

Location: From Sumner Park to Harris Park/Tri-Cities High School

Length: 1.35 Miles

Estimated Cost: $2,167,239

This trail ranked highly in the Priority Trail Network Ranking Chart and stands out as a priority trail due to the following factors:

- Cost is 50% below the average per mile cost of all proposed improvements
- Facility does not require right-of-way acquisition or an easement
- Facility is socially safe (lighting, visibility, perceived safety)
- Facility is visually attractive due to visually appealing buffer separation from the road
- Facility has inclines less than 5%
- Route is interrupted less than 2 times
- Safe route due to separation from roadway
- Route is direct in terms of distance and time
- Facility connects residents to Sumner Park, Tri-Cities High School, and Harris Park

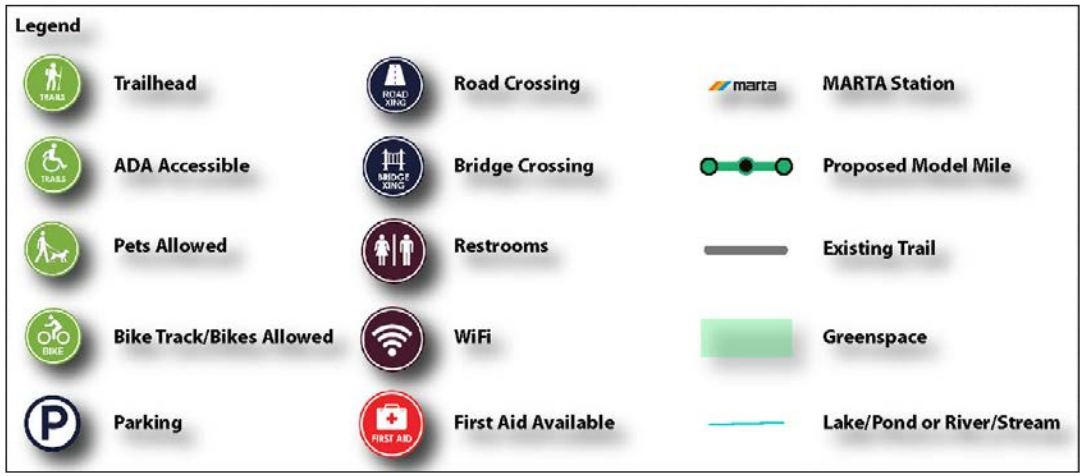


Figure 4.4c: East Point Model Mile


before

Figure 4.4d: East Point Model Mile: Norman Berry Drive Looking West
Image Credit: East Point PATH, October 2017

City of Hapeville Trail Master Plan

Figure 4.4e represents the Hapeville local trail system. Significant and regional connections include:

- South Central Avenue/Porsche Avenue connecting hotels and employees from the east and west into downtown.
- Inner Loop Road on the southern boundary, connecting the community to the central loop system.
- Additional local trail connections identified on Figure 4.4e connect the community to area parks, schools, and government facilities.

City of Hapeville Priorities

As described above, and as identified in Figure 4.4e, the Hapeville priority trails include:

1. Priority 1: South Central Avenue/Porsche Avenue (HV-3 & 4)
2. Priority 2: Virginia Avenue (HV-1 & 2)

Priority 1 is identified as the model mile as it provides a much desired connection from the area hotels and employment centers into downtown.

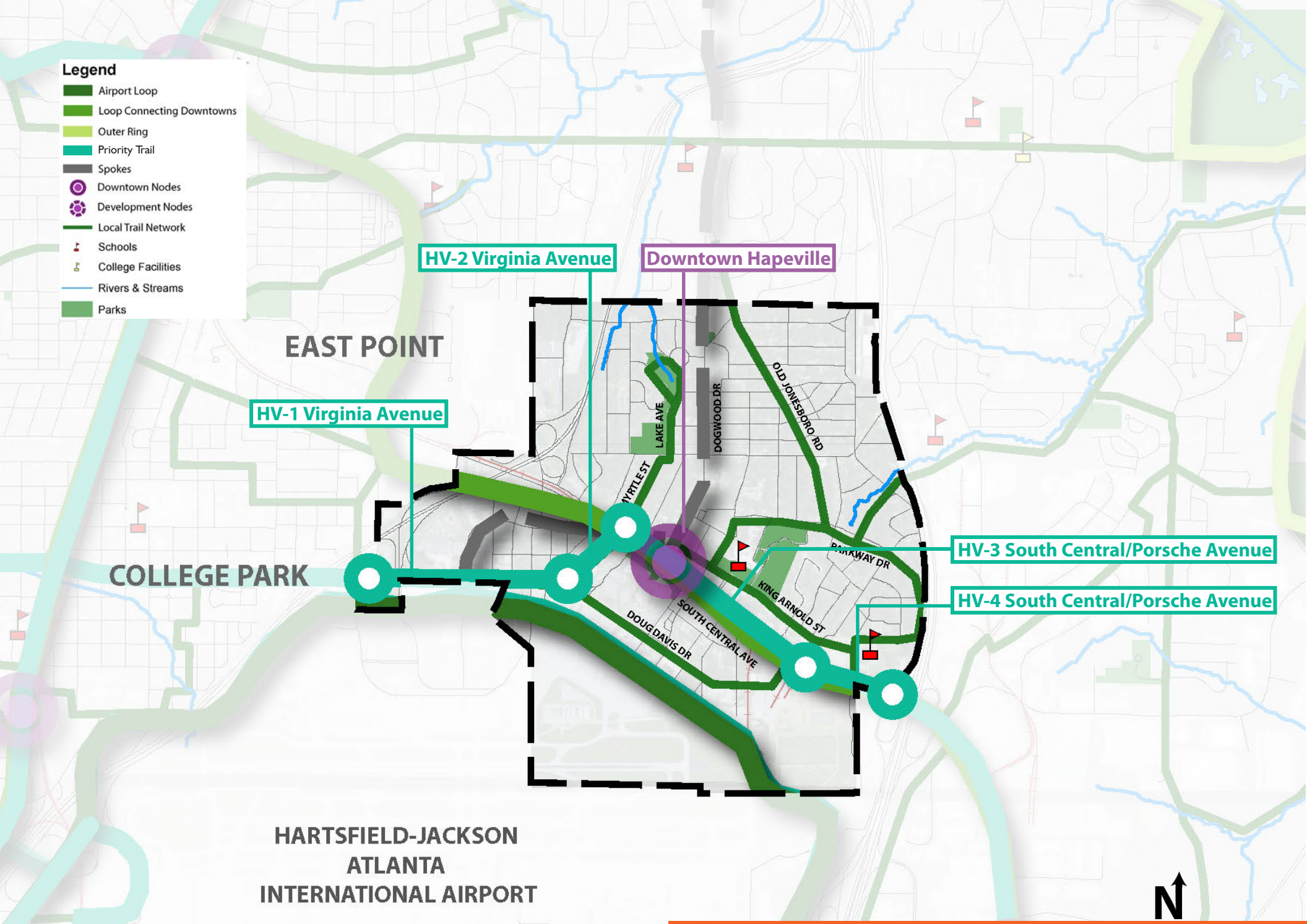


Figure 4.4e: City of Hapeville Proposed Trail System

City of Hapeville Model Mile

The identified Model Mile for Hapeville is a roadway adjacent multi-purpose trail along South Central Avenue, from Virginia Avenue to Sunset Avenue. Refer to Figure 4.4f.

Facility: South Central Avenue Roadway Adjacent Multi-Purpose Trail (reduce one lane along corridor)

Location: From Virginia Avenue to Sunset Avenue

Length: 1 Mile

Estimated Cost: $1,800,000

This trail ranked highly in the Priority Trail Network Ranking Chart and stands out as a priority trail due to the following factors:

- Cost is 50% below the average per mile cost of all proposed improvements
- Facility does not require right-of-way acquisition or an easement
- Facility is visually attractive due to visually appealing buffer separation from the road
- Facility is socially safe (lighting, visibility, perceived safety)
- Facility has inclines less than 5%
- Route is interrupted less than 2 times
- Safe route due to separation from roadway
- Route is direct in terms of distance and time
- Facility connects residents, hotels, and office to downtown retail and to Jess Lucas Y-Teen Park

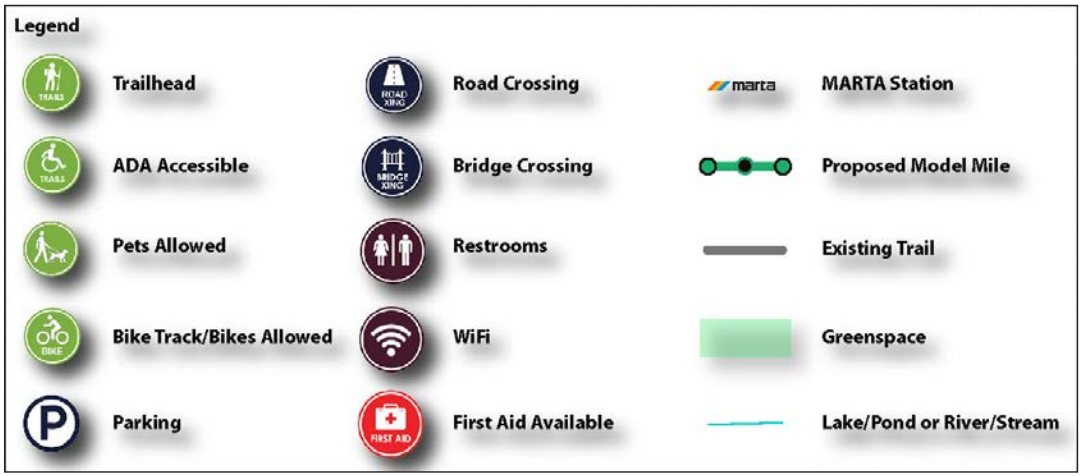


Figure 4.4f: Hapeville Model Mile


ATLANTA AVE
before

Figure 4.4g: Model Mile: Porsche Avenue Trail

City of Forest Park

Figure 4.4h represents the City of Forest Park local trail system. Signficant and regional connections include:

- Forest Parkway connecting the Farmers' Market through downtown and to Fort Gillem
- Main Street connecting from downtown to Mountain View.
- Lake Drive/West Street connecting Fountain Elementary School to Starr Park to downtown.
- Additional local trail connections identified on Figure 4.4h connect the community to area schools and parks.

City of Forest Park Priorities

As described above, and as identified in Figure 4.4h, the City of Forest Park priority trails include:

1. Priority 1: Starr Park Trail on Lake Drive/West Street (FP-9 & 10)
2. Priority 2: Forest Parkway/Fort Gillem Trail (FP-1 to 4)
3. Priority 3: Hendrix Elementary School Trail connecting to downtown along Pucket Street and Main Street. (FP-5-8)

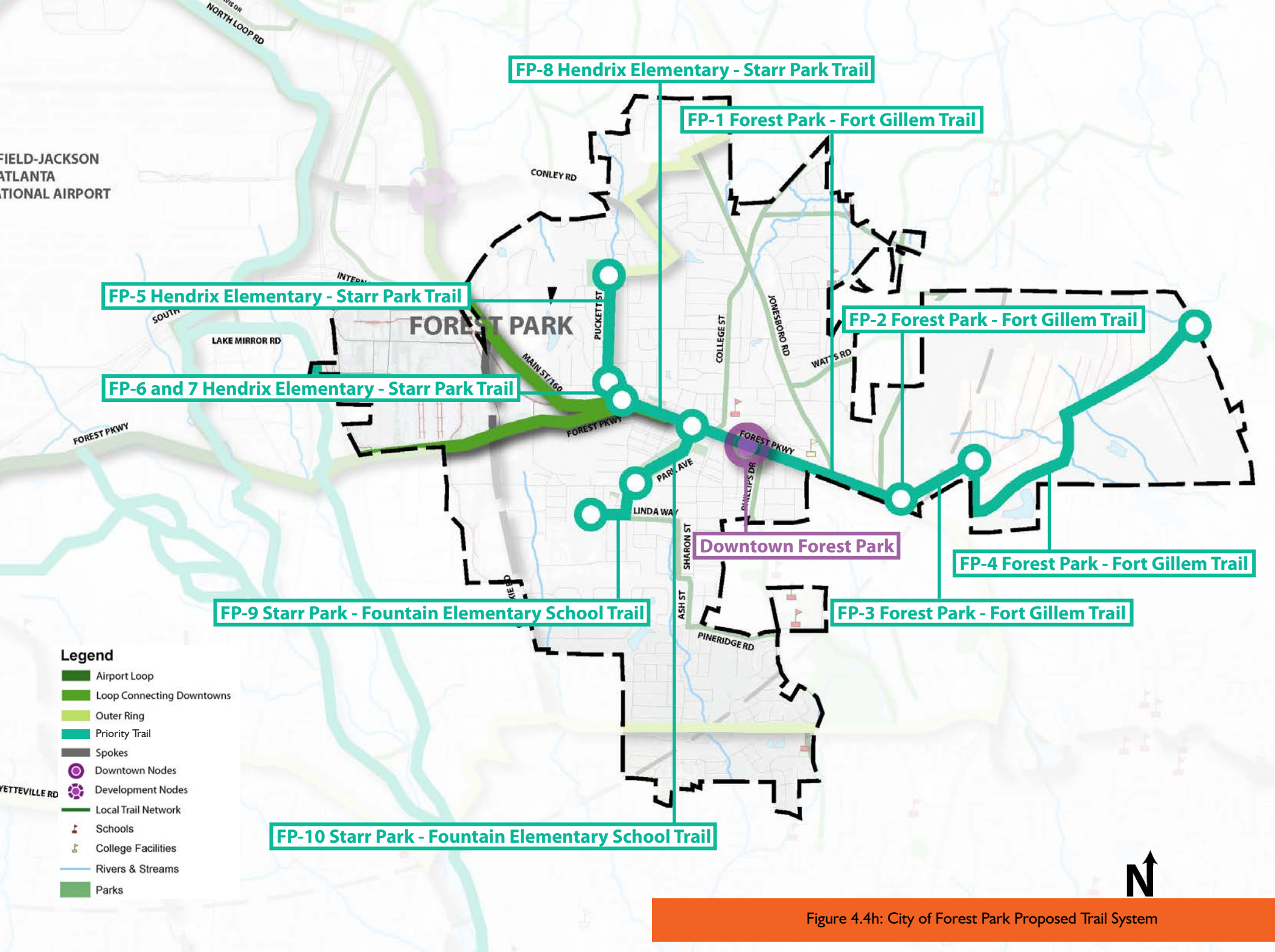


Figure 4.4h: City of Forest Park Proposed Trail System

City of Forest Park Model Mile

The identified Model Mile for Forest Park is the Starr Park-Fountain Elementary connection from Forest Parkway to Fountain Elementary. The Lake Drive section will be a two way cycle track and the West Street section will be a neighborhood greenway (multi-use). Refer to Figure 4.4i.

Facility: Lake Drive Two Way Cycle Track (switch angled parking to parallel parking); West Street Neighborhood Greenway (reduce speed to 15 mph and incorporate signage)

Location: From Forest Parkway to Fountain Elementary

Length: 1 Mile

Estimated Cost: $102,500

This trail ranked highly in the Priority Trail Network Ranking Chart and stands out as a priority trail due to the following factors:

- Cost is 50% below the average per mile cost of all proposed improvements
- Facility leverages a programmed construction project (FP-9)
- Coordination with only one stakeholder (FP-9)
- Facility does not require right of way acquisition or an easement
- Facility is visually attractive due to visually appealing buffer separation from the road
- Facility is socially safe (lighting, visibility, perceived safety)
- Facility has inclines less than 5%
- Segment minimizes car fumes and noise due to its location away from vehicular traffic
- Route is interrupted less than 2 times
- Safe route due to separation from roadway
- Route is direct in terms of distance and time
- Facility connects Starr Park and Fountain Elementary

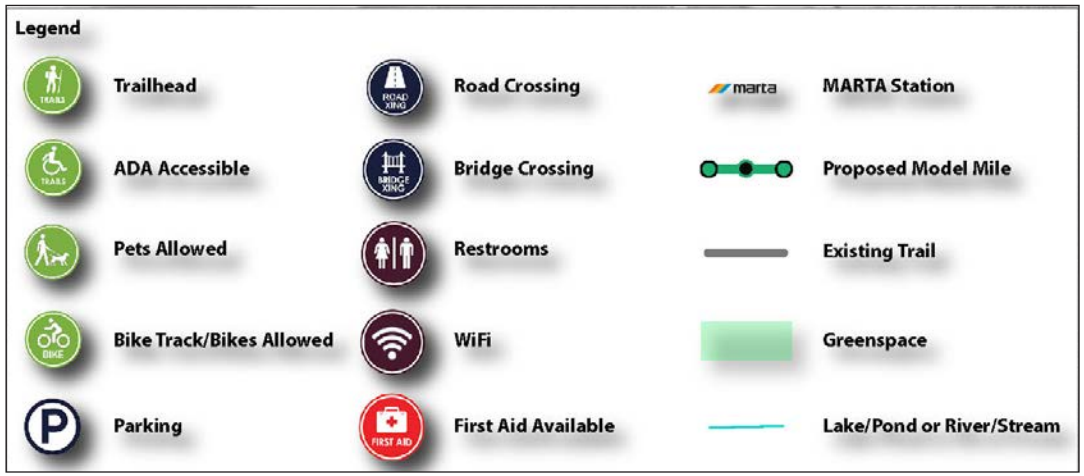


Figure 4.4i: Forest Park Model Mile


before

Figure 4.4j: Forest Park Model Mile: Starr Park to Fountain Elementary School - West Street


before

Figure 4.4k: Forest Park Model Mile: Starr Park to Fountain Elementary School - Cycle Track along Lake Drive

Clayton County

Figure 4.4l represents the Clayton County local trail system.

The trails in this portion of Clayton County have the potential to become a regional attraction, as they follow the Flint River, Mud Creek, and Sullivan Creek through forests and wetlands, then looping around existing quarries and ponds to the dramatic southern edge of the airport. Once the quarries have completed their productive lifecycle, they have great potential to be utilized for regional water retention. Greenspace and parks can accompany this potential water feature to create a regional park and trail amenity.

Clayton County Priorities

As described above, and identified in Figure 4.4l, the Clayton County priority trails include:

1. Priority 1: Flint River Trail from Airport Inner Loop Trail to Forest Parkway (CC-1)

This first segment of the Flint River/Mud Creek Trail provides runs from the Airport Loop to Forest Parkway—both connections to the regional trail system.

It should be noted that this segment of the Flint River Trail sits within the H-JAIA's security fence. Coordination with the airport security team will be important.

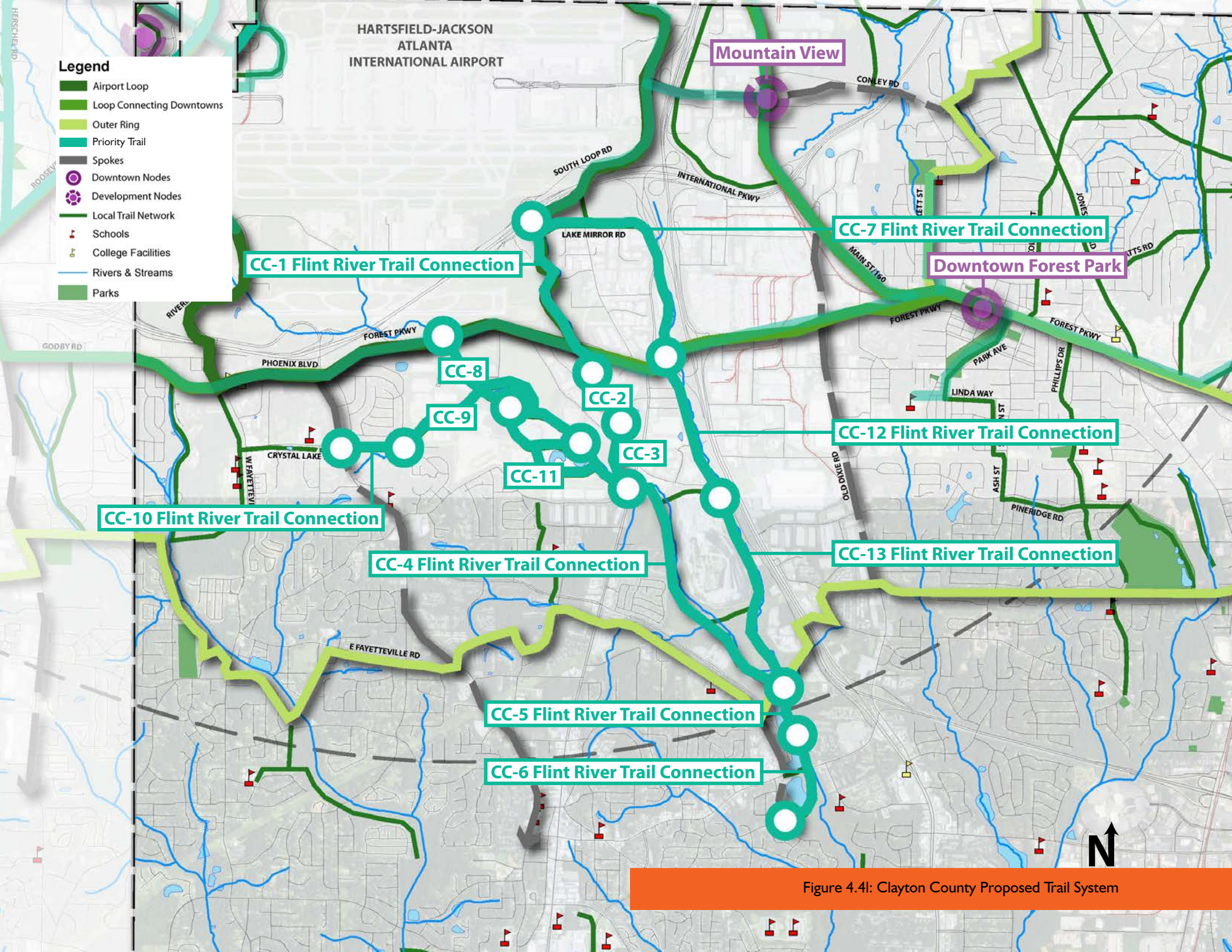


Figure 4.4l: Clayton County Proposed Trail System

Clayton County Model Mile

The identified Model Mile for Clayton County is the Flint River Trail Airport Inner Loop to Forest Parkway. Refer to Figure 4.4m.

Facility: Flint River Adjacent Multi-Purpose Trail

Location: From Airport Loop to Forest Parkway

Length: 1.2 Miles

Estimated Cost: $5,040,000

This trail ranked highly in the Priority Trail Network Ranking Chart and stands out as a priority trail due to the following factors:

- Facility is visually attractive due to visually appealing buffer separation from the road
- Segment minimizes car fumes and noise due to its location away from vehicular traffic
- Facility has inclines less than 5%
- Route is interrupted less than 2 times
- Safe route due to separation from roadway
- Route is direct in terms of distance and time
- Will ultimately connect Airport Loop to Forest Parkway

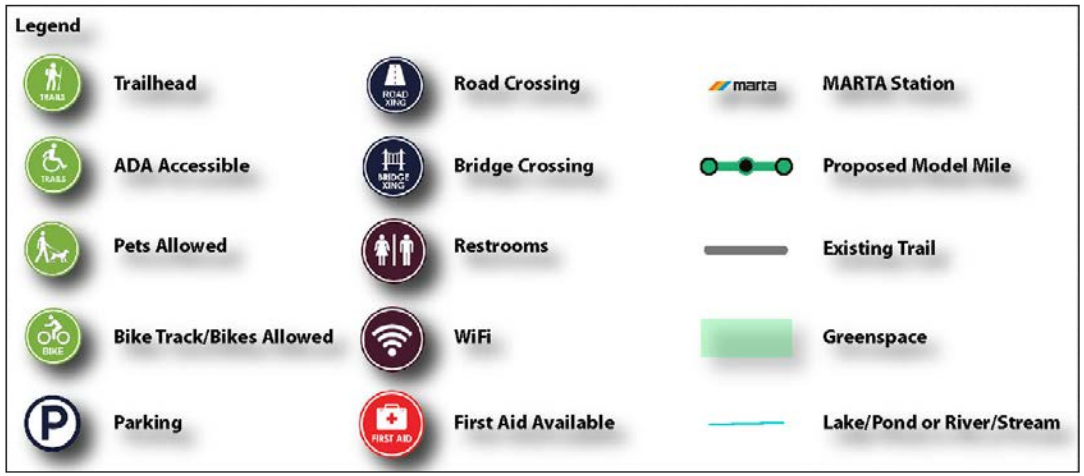


Figure 4.4m: Clayton County Model Mile

Only in Atlanta can you experience—on foot, bike, or kayak—the unexpected beauty of a river at the edge of a busy airport.

The Flint River Connection celebrates the hidden river and its continuous tree canopy at the heart of the Aerotropolis.

Figure 4.4n: Clayton County Model Mile: Flint River Connection - Bird's Eye View

City of College Park

Figure 4.4o represents the City of College Park local trail system. Signficant and regional connections include:

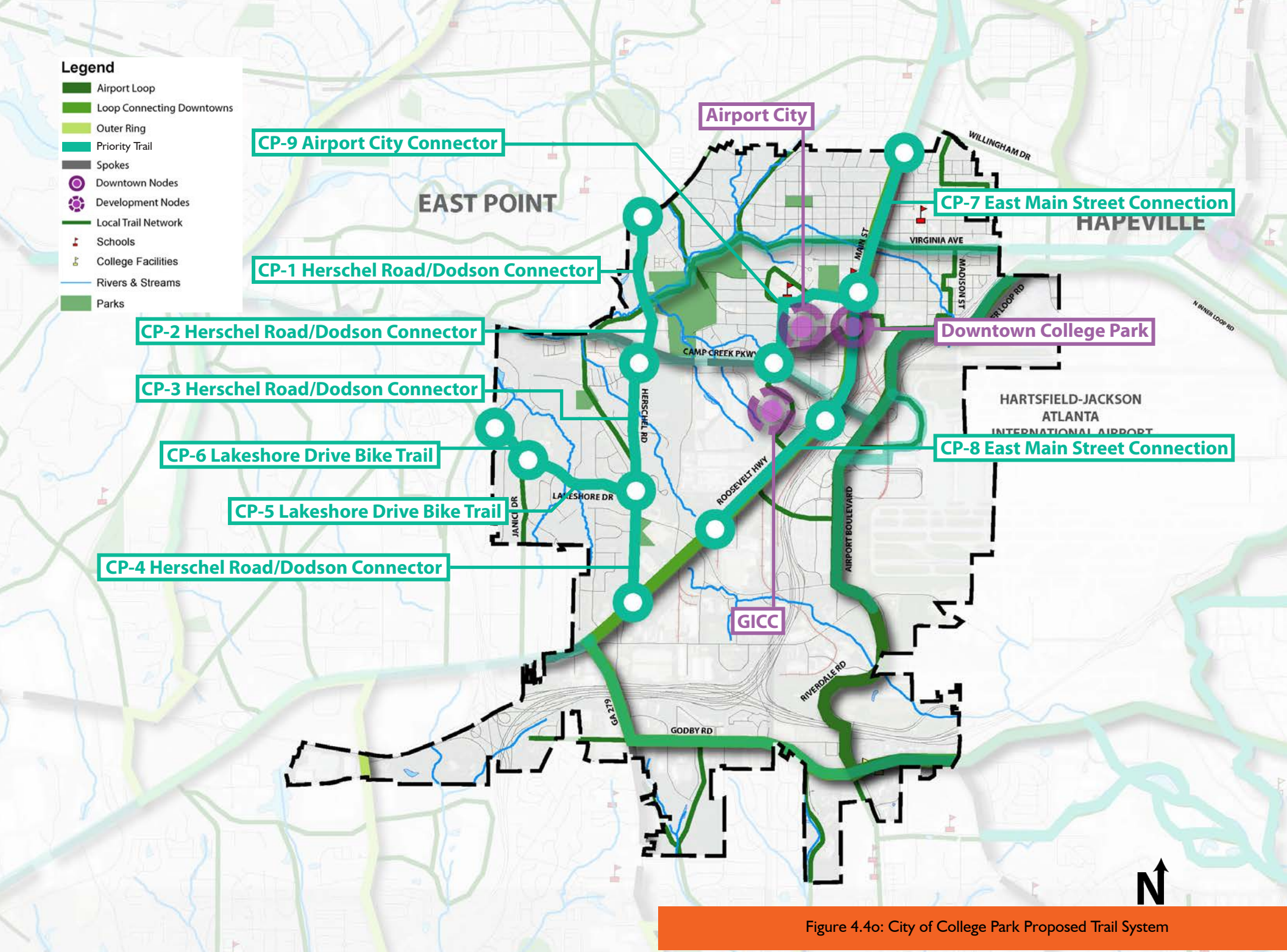
- Herschel Road connecting from Roosevelt Hwy/US 29 to the College Park Golf Course and potential connectivity to the Brady Trail and Airport City to Washington Road. The City of College Park is currently considering the following projects that could further increase the bicycle and pedestrian connectivity along and adjacent to Herschel Road:
    - Brady Trail Phase I Extension is proposed to connect Herschel Road with the existing Brady Trail.
    - Herschel Road bridge replacement: The City has earmarked $324,000 of Transportation Special Purpose Local Option Sales Tax (TSPLOST) to replace the vehicular bridge over Camp Creek waterway. Consider bicycle and pedestrian improvements as part of this effort.
- Airport City connectivity: It is highly recommended that trail connectivity from the GICC to Airport City to downtown be a priority as this development site is planned, designed and built. Consider Conley Street or Napoleon Street into downtown via Princeton Drive from the proposed GICC Pedestrian Bridge through Airport City.
- Herschel Road trail connection provides a link from US-29/Main Street/Roosevelt Highway to Camp Creek Parkway to Washington Road, connecting to Camp Creek Parkway and the existing Brady Trail that ties into the College Park Golf Course and Airport City. This trail could be extended to the north along the Herschel Road/Dodson Connector to provide cross-jurisdictional connectivity to East Point, Sykes Park, City of Atlanta, Cascade Springs Nature Preserve and the Lionel Hampton Trail.
- Lakeshore Drive provides connectivity from Herschel Road through residential areas to the Main Street Academy and via Janice Road to Washington Road.
- Main Street/US-29 trail connectivity provides regional connection along this north-south cross-jurisdictional arterial, connecting to South Fulton, Union City, Fairburn and Palmetto to the south and East Point and Atlanta to the north.

City of College Park Priorities

As described above, and as identified in Figure 4.4o, the City of College Park priority trails include:

1. Priority 1: Airport City connectivity, from the GICC through Airport City to downtown College Park (CP-9). Exact connection to be identified with master developer.
2. Priority 2: Hershel Road from Washington Road to Camp Creek Parkway (CP-1). Consider extending the Brady Trail to Hershel Road as part of this project.
3. Priority 3: Main Street/US-29. As this roadway crosses through several jurisdictions and changes character and width, it is recommended that a joint jurisdictional study follow for this specific corridor.

The model mile described in this section for College Park is Priority 2, the Herschel Road Trail (CP-1). This model mile can be designed and built in concurrence with the Airport City connectivity.


Legend
Airport Loop
Loop Connecting Downtowns
Outer Ring
Priority Trail
Spokes
Downtown Nodes
Development Nodes
Local Trail Network
Schools
College Facilities
Rivers & Streams
Parks
Airport City
CP-9 Airport City Connector
CP-7 East Main Street Connection
CP-1 Herschel Road/Dodson Connector
Downtown College Park
CP-2 Herschel Road/Dodson Connector
CP-3 Herschel Road/Dodson Connector
CP-8 East Main Street Connection
CP-6 Lakeshore Drive Bike Trail
CP-5 Lakeshore Drive Bike Trail
CP-4 Herschel Road/Dodson Connector
GICC
EAST POINT
HAPEVILLE
HARTSFIELD-JACKSON ATLANTA
WILLINGHAM DR
VIRGINIA AVE
MAIN ST
MADISON ST
CAMP CREEK PKWY
HERSCHEL RD
ROOSEVELT HWY
LAKESHORE DR
JANICE DR
AIRPORT BOULEVARD
RIVERDALE RD
GODBY RD
GA-279
N
Figure 4.4o: City of College Park Proposed Trail System

City of College Park Model Mile

The identified Model Mile for College Park is the Herschel Road connection from Camp Creek Parkway to Washington Road. This trail is envisioned to be a neighborhood greenway from Washington Road south to Camp Creek, where it can connect to the Brady Trail. South of Camp Creek to Camp Creek Parkway, the trail is proposed as a roadway adjacent trail. Refer to Figure 4.4p.

Facility: Herschel Road

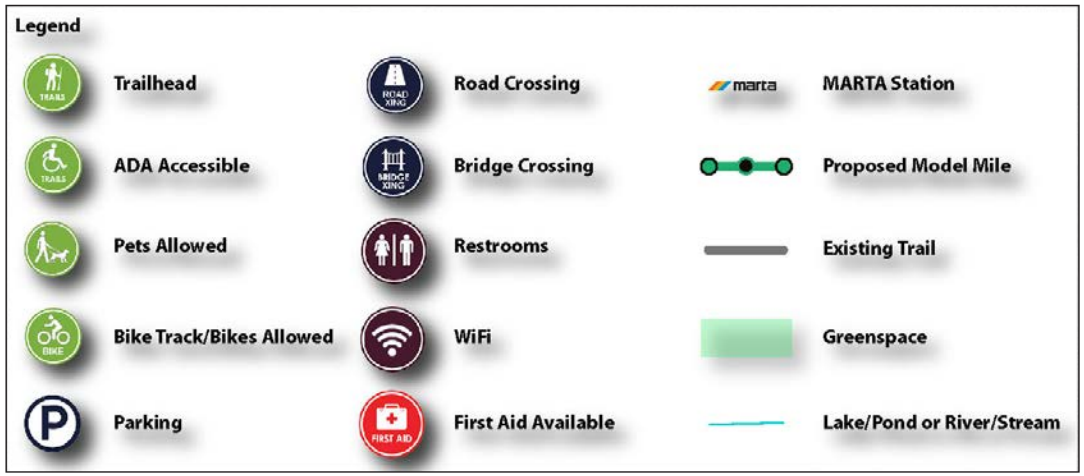
Location: From Washington Road to Camp Creek Parkway Neighborhood Greenway (reduce speed to 15 mph and incorporate signage) and Roadway Adjacent Multi-Purpose Trail (reduce travel lane widths and move curb to provide trail)

Length: 0.8 Miles

Estimated Cost: $72,000 +

This trail ranked highly in the Priority Trail Network Ranking Chart and stands out as a priority trail due to the following factors:

- Cost is 50% below the average per mile cost of all proposed improvements
- Facility does not require right-of-way acquisition or an easement
- Facility is socially safe (lighting, visibility, perceived safety)
- Facility is visually attractive due to visually appealing buffer separation from the road
- Facility has inclines less than 5%
- Route is interrupted less than 2 times
- Safe route due to separation from roadway
- Route is direct in terms of distance and time
- Facility connects residents to the Golf Course, Camp Creek, GICC, and Sykes Park



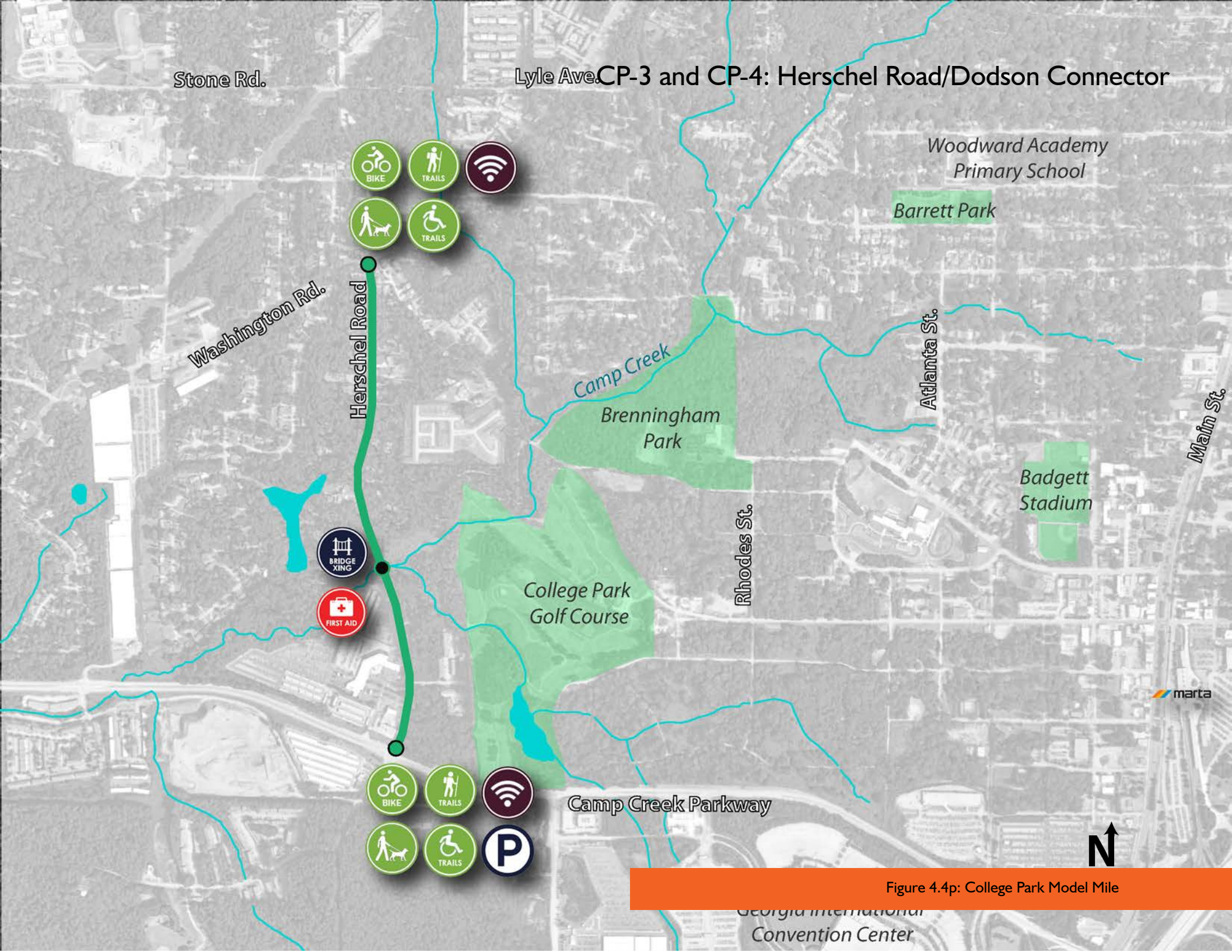


Figure 4.4p: College Park Model Mile


before

Figure 4.4q: College Park Model Mile: Herschel Road/Dodson Connector

City of South Fulton

Figure 4.4r represents the City of South Fulton local trail system. Significant and regional connections include:

- Camp Creek Parkway trail is envisioned to run adjacent to Camp Creek itself, which roughly follows Camp Creek Parkway. This trail will connect the Wolf Creek Amphitheater and Library, shopping districts, including Camp Creek Marketplace, to the GICC and H-JAIA.
- Welcome All Road trail follows an existing tributary of Camp Creek through the Georgia Soccer Park to Welcome All Park, connecting residents along the way.
- Roosevelt Highway/US-29 trail connectivity provides regional connection along this north-south cross-jurisdictional arterial, connecting to South Fulton, Union City, Fairburn and Palmetto to the south and East Point and Atlanta to the north.
- Additional local trail connections identified on Figure 4.4l connect the community to area parks, schools, and government facilities.

City of South Fulton Priorities

As described above, and as identified in Figure 4,4r, the City of South Fulton priority trails include:

1. Priority 1: Wolf Creek Trail (SF.FC-1), extending from the existing Camp Creek Parkway Trail to Enon Road.
2. Priority 2: Welcome All Trail (SF.FC-3) from Camp Creek Parkway to Will Lee Road.
3. Priority 3: Roosevelt Highway/US-29 (SF-FC-4 to 7). As this roadway crosses through several jurisdictions and changes character and width, it is recommended that a joint jurisdictional study follow for this specific corridor.

The Model Mile for the City of South Fulton is the Wolf Creek Trail, as this trail builds from the existing Camp Creek Trail to provide connectivity to community amenities including Wolf Creek Amphitheater and Wolf Creek Library.

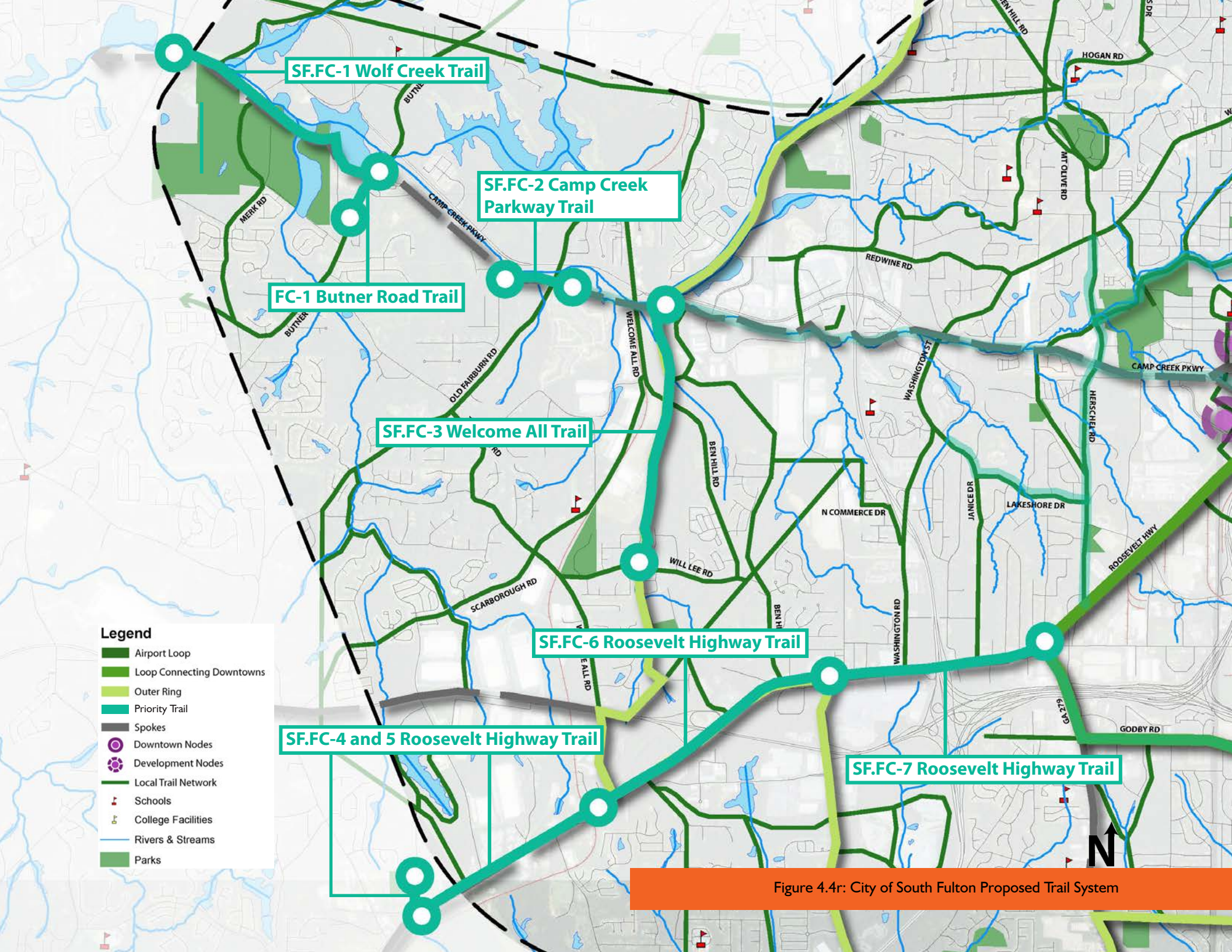


Figure 4.4r: City of South Fulton Proposed Trail System

City of South Fulton Model Mile

The identified Model Mile for City of South Fulton is the Wolf Creek Trail connection. This connection runs from Enon Road to Butner Road and connects to the existing Camp Creek Trail. This will be a river adjacent multi-purpose trail totalling 1.6 miles. Refer to Figure 4.4s.

Facility: Camp Creek River Adjacent Multi-Purpose Trail

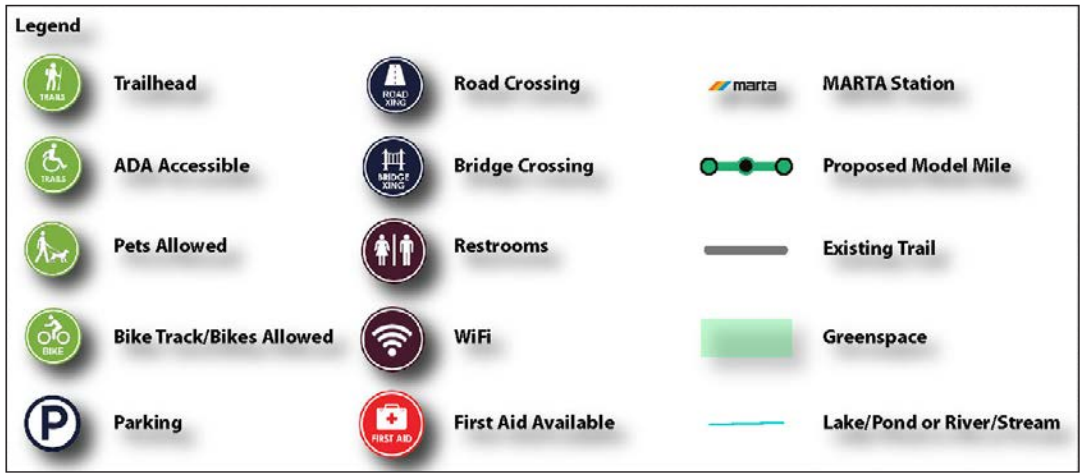
Location: From Enon Road to Butner Road/Existing Camp Creek Trail

Length: 1.6 Miles

Estimated Cost: $1,920,000

This trail ranked highly in the Priority Trail Network Ranking Chart and stands out as a Priority trail due to the following factors:

- Cost is 50% below the average per mile cost of all proposed improvements
- Facility is visually attractive due to visually appealing buffer separation and natural environment
- Segment minimizes car fumes and noise due to its location away from vehicular traffic
- Facility has inclines less than 5%
- Route only has one interruption at Merk Road
- Safe route due to separation from roadway
- Route is direct in terms of distance and time
- Facility connects residents to Wolf Creek Amphitheater, Library, and Park
- Segment connects to the existing Camp Creek Trail



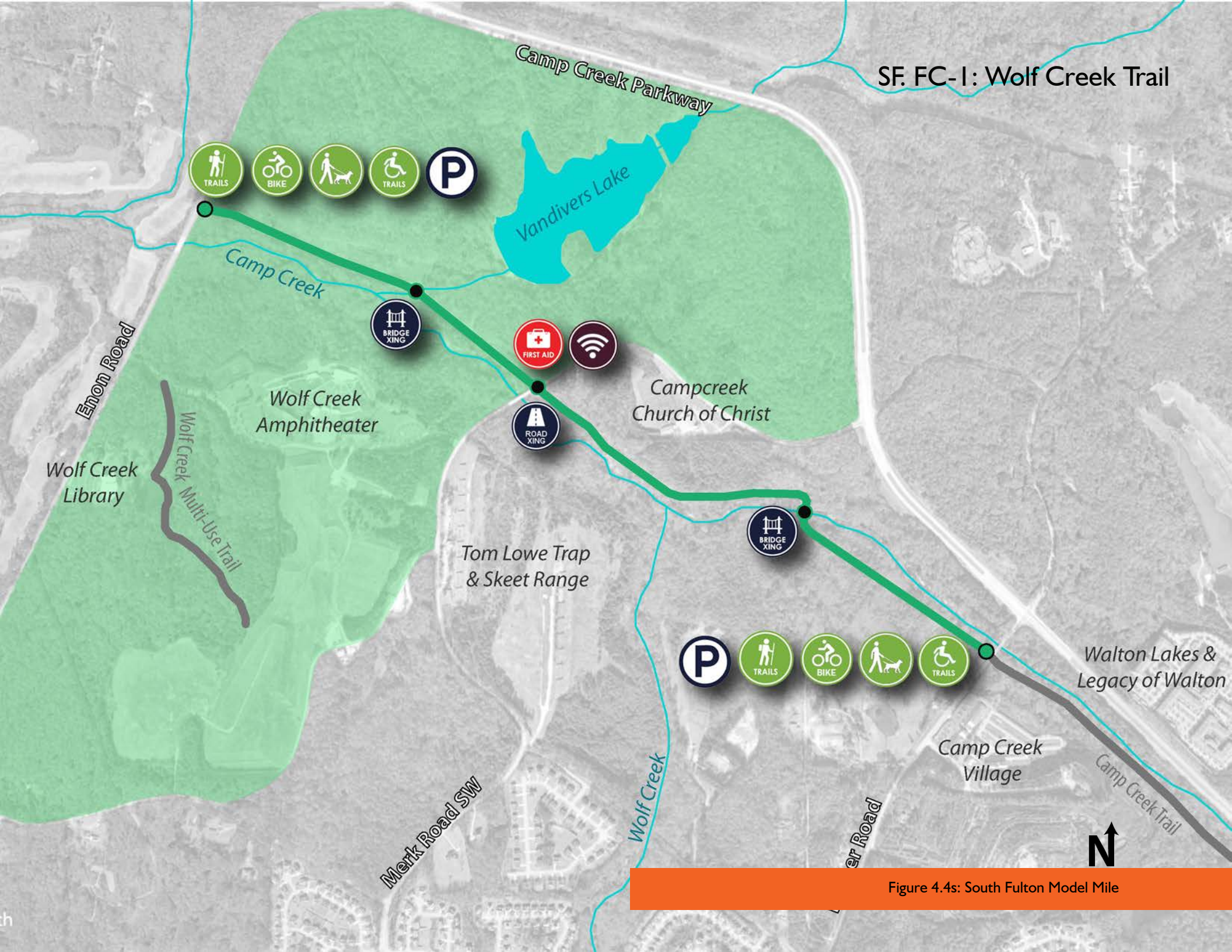


Figure 4.4s: South Fulton Model Mile

Recommendations

before

Figure 4.4t: South Fulton Model Mile: Wolf Creek Trail

after

Hartsfield-Jackson Atlanta International Airport

Figure 4.4u represents the Hartsfield-Jackson Atlanta International Airport local trail system. Significant and regional connections include:

- The H-JAIA loop trail is the core of the AeroATL Greenway Plan, connecting surrounding communities to the airport, with potential for future pedestrian and bicycle access into the domestic and international terminals. The loop trail connections from the Forest Parkway Trail to the Flint River priority trail (CC-1) to encircle the airport on South Loop Road, North Loop Road, Airport Boulevard, and Riverdale Road.

- Airport connectivity: While current regulations do not allow for cyclist and pedestrians to directly enter the terminals, it is recommended that this access be further studied and case studies of airports where this is allowed be explored. In the meantime, it is recommended to connect pedestrians and cyclists to existing transit infrastructure that enters the airport, including MARTA and the SkyTrain. Consider direct trail connectivity and bike parking to these facilities.

- Trail Facilities: As this loop is unique in it is based around an airport, park furniture, playground equipment, art and other trail amentities are recommended to play off of the airport theme. Consider airplane themed playground equipment and airplane viewing platforms.

Hartsfield-Jackson Atlanta International Airport Priorities

As described above, and as identified in Figure 4.4u, the H-JAIA priority trails include:

1. Priority 1: Airport Loop Road from Atlanta Avenue to Charles W Grant Parkway (AL-4), providing a connection from the International Terminal to the Mountain View redevelopment site to Hapeville

2. Priority 2: South Loop Road from Flint River to Charles W Grant Parkway (AL-6).

3. Priority 3: North Loop Road from Atlanta Avenue to Rainey Avenue (AL-3).

Hartsfield-Jackson Atlanta International Airport's recommended Model Mile is Airport Loop from Atlanta Avenue to Charles W Grant Parkway (AL-4)

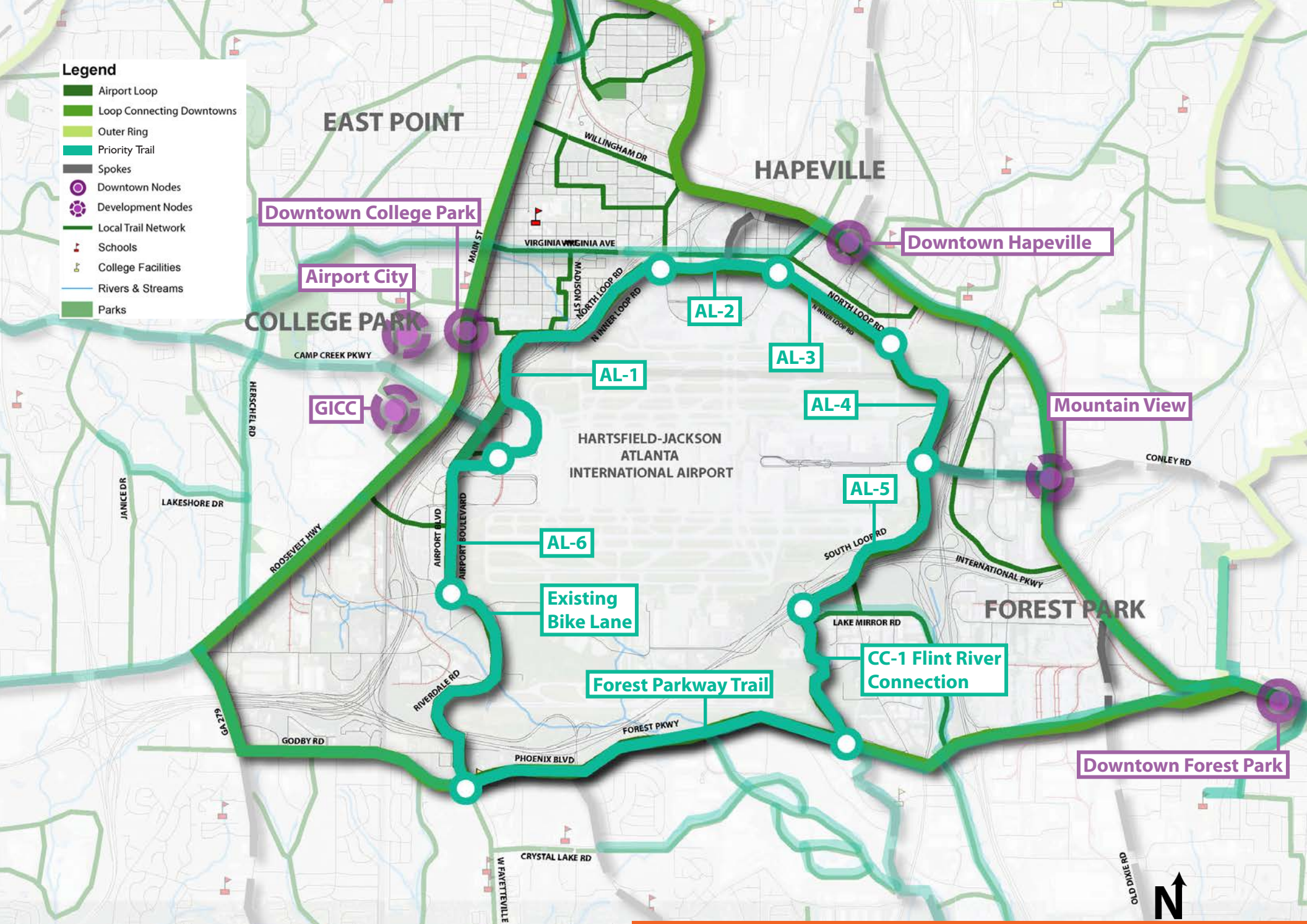


Figure 4.4u: Hartsfield-Jackson Atlanta International Airport Proposed Trail System

Hartsfield-Jackson Atlanta International Airport

The identified Model Mile for the Airport is the portion of the Airport Loop that connects Charles W. Grant Parkway to Atlanta Avenue. This will be a 1.4 miles long roadway adjacent multi-purpose trail.

Facility: Airport Loop Roadway Adjacent Multi-Purpose Trail

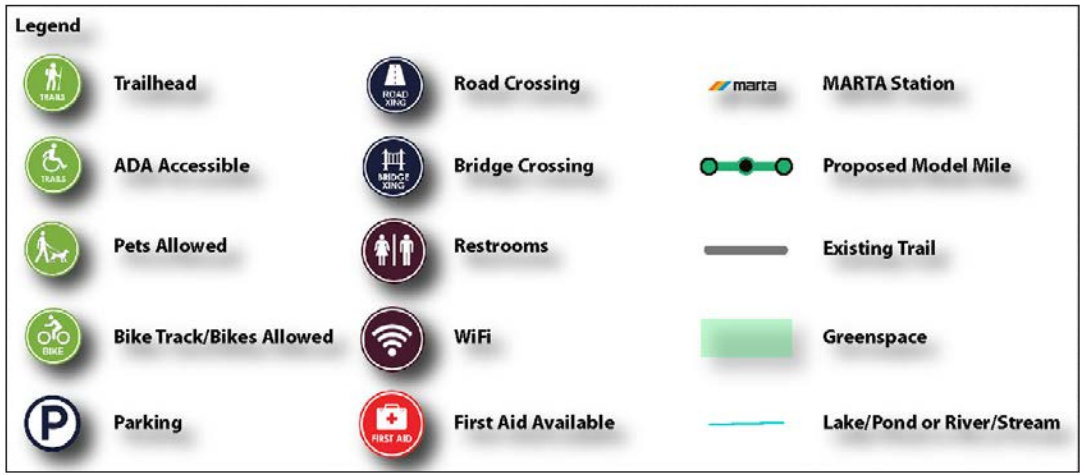
Location: From Charles Grant Parkway to Atlanta Avenue

Length: 1.4 Miles

Estimated Cost: $2,520,000

This trail ranked highly in the Priority Trail Network Ranking Chart and stands out as a priority trail due to the following factors:

- Cost depends on if right-of-way acquisition is needed
- Facility is visually attractive due to visually appealing buffer separation from the road
- Facility has inclines less than 5%
- Route is interrupted less than 2 times
- Safe route due to separation from roadway
- Route is direct in terms of distance and time
- Facility connects International Terminal to Hapeville



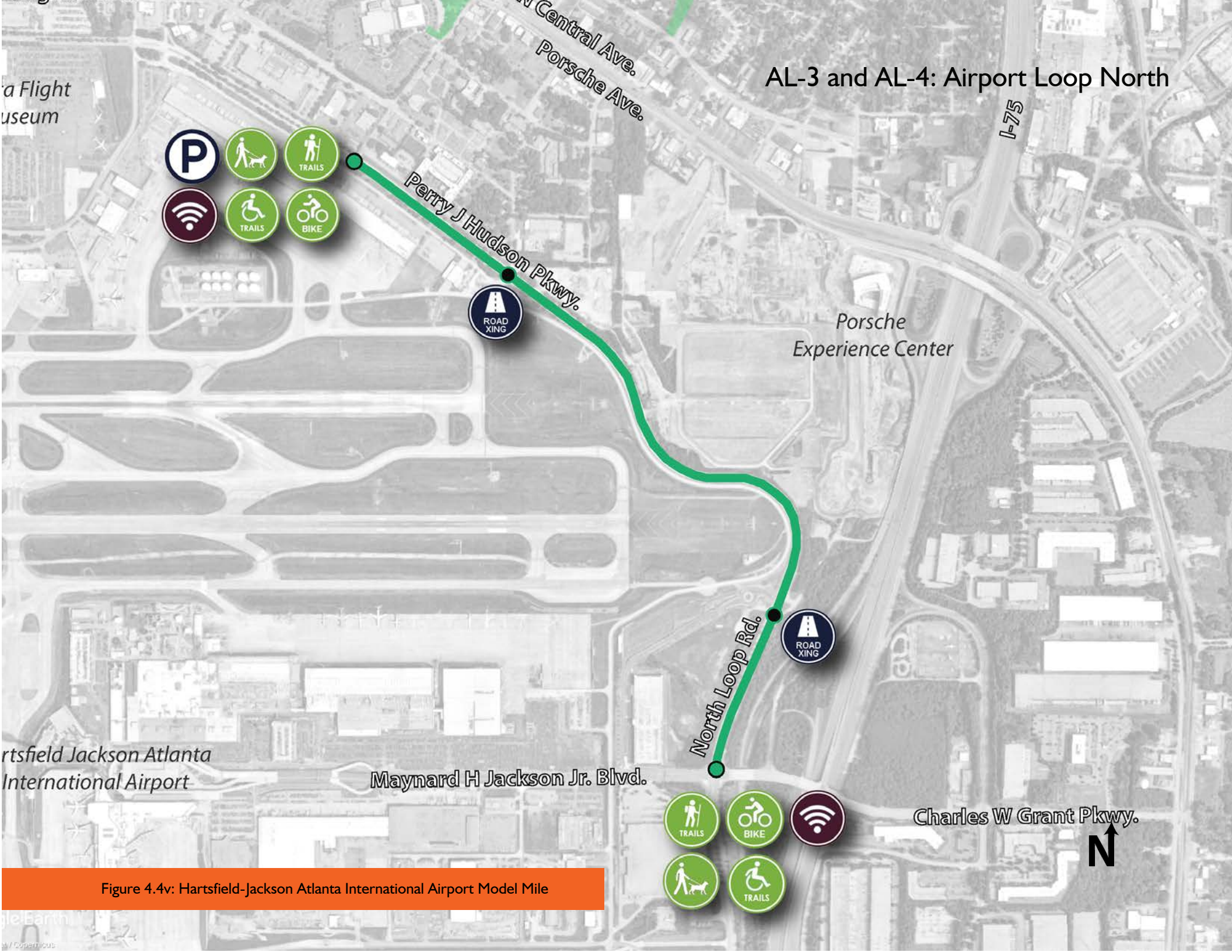
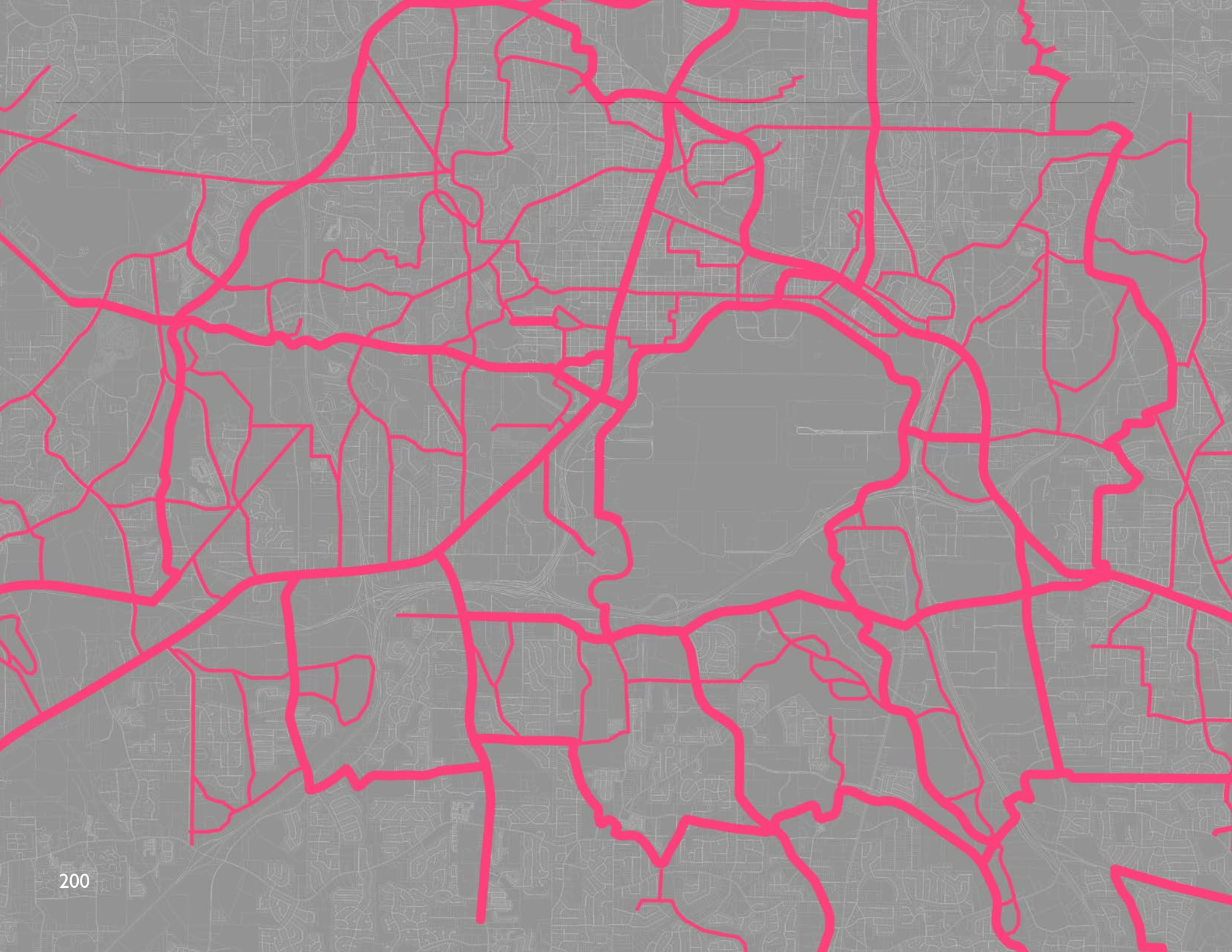
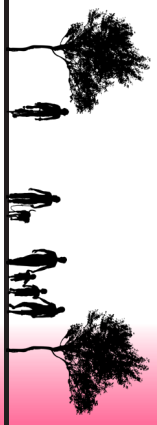


Figure 4.4v: Hartsfield-Jackson Atlanta International Airport Model Mile

The Airport Loop is a simple but iconic feature to connect communities, orient visitors, and restore clarity to a complex transit hub.

Figure 4.4w: Hartsfield-Jackson Atlanta International Airport Model Mile: Airport North Loop





Implementation Plan

5.1 Implementation Strategies

This section provides key next steps to implementation, including inter-jurisdictional coordination, an implementation team, and wayfinding/branding.

Multiple Jurisdiction Coordination

While this master plan provides priority trails per jurisdiction, it is important to work across jurisdictional boundaries to create a truly comprehensive and connected system. Consider prioritizing cross-jurisdiction trails to help better connect the Aerotropolis communities. Multi-jurisdictional partnerships can mean multiple funding sources and may rank highly in some grant applications to secure implementation funds.

AeroATL Greenway Implementation Team

In order to move the AeroATL Greenway Plan from concept to reality, an implementation team will be vital.

In the short term the Aerotropolis Atlanta Alliance and Aerotropolis Atlanta CIDs should lead implementation efforts, working closely with local jurisdictions to identify trail priorities, funding, and partnerships. The Alliance as a non-profit can be the conduit for grant and giving funds. In the long run, however, it is recommended to develop a separate AeroATL Greenway organization that can focus solely on the master plan implementation. This organization should acquire non-profit status for giving opportunities. As a next step towards developing the AeroATL Greenway organization, a volunteer Greenway Committee could be formed under the Aerotropolis Atlanta Alliance to focus on trail implementation and organizational development. During the final community meeting interested community members and leaders signed up to be a part of an implementation committee. Utilize this list to develop a coalition of advocates and volunteers to make this trail system a reality.

Equity

Case studies across the country have shown the impact trails have on drawing development and economic growth. While this can be a positive opportunity for communities to thrive, it will be important for the Aerotropolis communities to address equity and the potential negative impacts of development, including displacement. It is strongly encouraged that the AeroATL Greenway Implementation Team create policies on equitable trail development, allowing for all communities to connect to this system, affordable housing and strategies to avoid displacement, and policies on environmental justice, particularly how trail development can enhance environmental quality in low income and historically under-served communities.

Wayfinding and Branding

Signage, wayfinding and branding are a key next step to create a unified trail system as it moves through city and county boundaries. It is recommended that the Aerotropolis Atlanta Alliance and Aerotropolis Atlanta CIDs identify supplemental funding to develop a coherent and comprehensive brand and signage strategy. The branding should provide an overall theme and look for the AeroATL Greenway Plan, but also provide opportunities for each community to showcase their individual character.

The Aerotropolis Atlanta CIDs are currently working with the Aerotropolis Alliance and relevant jurisdictions on a Signage and Wayfinding Plan. This process finished its conceptual phase in September 2018. The process included several stakeholder engagement meetings to gather their input, refine the design criteria, and finalize the concepts. Currently starting its construction phase, this project is scheduled to be complete by early 2019.

5.2 Policies

Bicycle and Pedestrian Policy Recommendations

This section identifies policies that each jurisdiction should consider to assist in implementing the AeroATL Greenway Plan.

Development Ordinances:

Zoning for Mixed Use Developments + Zoning

Zoning laws help regulate the land use, form, and density of communities. Zoning codes which support higher densities and allow for or require mixed uses – retail coupled with residential, civic uses adjacent to businesses – lay the foundation for bicycle-friendly neighborhoods and districts. When mixed uses are side by side, the communities created are compact, and people do not have to travel great distances to live, work, and play. As a result, walking and biking become not only feasible, but desirable.

Developer Incentives

Municipalities can use policy to create incentives – both financial and non-financial - to encourage

developers to invest in mixed-use, higher-density development, or even to provide bicycle infrastructure (such as bike racks, showers, and lockers) on site or build bikeways as part of their schemes.

Financial

Financial incentives can include property tax abatement programs, decreased impact fees, and loans with below-market-rate interest. Commonly, jurisdictions help pay for these incentives through revenues collected from tax increment financing programs, sales taxes, road and parking pricing programs, and vehicle registration fees.

Non-Financial

These incentives require little cost to jurisdictions but can be powerful enticements to developers. Common non-financial incentives include expedited permitting (which can save them time and money) and density bonuses (which allow them to build more, potentially increasing their profits in the long run). Other incentives can include reduced car parking requirements, decreased inspection fees, and expedited reviews.

Street Design Standards

Jurisdictions at local and state levels can set policies that encourage or mandate road designs that are safe and convenient for bicyclists. Guidelines can cover various design elements such as street width, grade and curvatures of bikeways and sidewalks. To help ensure their implementation, municipalities may choose to officially adopt the National Association of City Transportation Officials (NACTO) Bike Guide.

Road-Diet Policy

A road diet eliminates a lane of traffic, or narrows wide lanes, and uses the space instead for bikeways, refuge islands, or wider sidewalks for pedestrians. Safety benefits for cyclists and pedestrians are increased, and motorists' travel times are generally not negatively impacted. Because a road diet mostly consists of re-striping, it is also a relatively low-cost way to accommodate bicyclists.

Traffic Calming

Traffic calming design measures encourage cars to travel safely, decreasing dangers posed to bicyclists and pedestrians. This is often achieved by creating physical and visual cues that make motorists drive more slowly. Some approaches include narrowing streets and installing speed humps, bulb-outs, traffic diverters, roundabouts, and chicanes (an artificial narrowing or turn on a road). Providing street trees, pedestrian-scale lighting, and landscaping also encourages lower speeds.

Block Size

City block sizes can be established or redeveloped to facilitate and encourage pedestrian or bicycle connectivity. While geographic and political boundaries vary, an ideal block size should be around 240'x360'. This size maximizes the benefits for developers as well as for pedestrian and bicycle connectivity.

Right-of-Way Space Allocation

Right-of-ways should be designed to provide adequate space for pedestrians, bicyclists, and vehicles. As a general rule of thumb, cities should strive to allocate 50 percent of right-of-way space to bicyclists and pedestrians and 50 percent to vehicles.

Maximum Street Connectivity

Street networks should be designed to maximize connectivity between streets and minimize dead ends and cul de sacs. This increases directional mobility options for all modes of transportation and minimizes congestion causes by the closing of streets or travel lanes.

Intersection Design

A set of national requirements controls all "traffic control devices," such as signals, signs, markings, and anything else that controls the flow of traffic. Innovations include separate bike signals at intersections and "bike boxes" which position cyclists ahead of other traffic at intersections. However, the FHA's Manual of Uniform Traffic Control Devices (MUTCD) does not allow specific controls that have been shown to increase bicycle safety, as exemplified in many European countries. The MUTCD allows some flexibility, however, in how standards are applied, and some states have taken advantage of this to allow for more bicycle-friendly designs at intersections.

Minimum Travel Lane Widths

Reducing automobile travel lane widths creates multiple benefits for pedestrians and cyclists. Primarily, this allows more space within the right-of-way for pedestrian and cyclist use and helps reduce traffic speeds. Depending on the roadway type, jurisdictions should look to establish automobile lane widths that range between 8' wide on slow residential roads and 10' on major corridors.

Buffers

Buffers that provide a physical separation between vehicles and those traveling on foot or on bikes help enhance the overall pedestrian and cyclist experience, especially in roadways with posted speeds greater than 30 miles per hour (MPH) and with Average Annual Daily Traffic (AADT) rates greater than 4,000. Jurisdictions can establish policies that require certain types of roadways to have appropriate buffers to facilitate safe and comfortable pedestrian and cyclist circulation.

Shade Trees

Shade trees located along streets and spaced at appropriate distances can provide multiple benefits, including helping to create comfortable micro-climates, reduce traffic speeds, and increase the overall aesthetic of the street.

Public Art

Along with helping to enhance the physical appearance of the street scene, public art can help create a sense of place as well as activate the right-of-way for pedestrians and bicyclists.

Bold Street Crossings

Traditional crosswalks can get lost in a driver's view-shed. Many cities have begun to use bold and painted crosswalks to help alert drivers to potential pedestrian and cyclist crossings. These elements have the added benefit of helping to create a sense of place.

Public Access Easement

Jurisdictions typically have limited access easements along utilities such as sewer lines, water lines, and electrical lines when these utilities traverse private properties. Jurisdictions should adopt policies that require the establishment of public access easements along all utilities for the use of these linear corridors as walking and biking trails.

Stream Buffer

Jurisdictions should establish policies that allow trails to be located within the 50' and 75' stream buffer. This facilitates the implementation of trails along streams while also increasing the important ecological role of streams and creeks within the built environment.

Trail Corridor + Building Façade Orientation/ Setbacks

Building facades that encourage "eyes on trails and bicycle facilities" are important for creating a safe and comfortable user experience. Jurisdictions should strive to establish policies that require buildings to "face" bicycle and pedestrian facilities and provide sufficient setbacks between the building and the edge of the right-of-way to create quality and comfortable public environments.

Street improvement Coordination – Repaving + Utilities

To help leverage funding, jurisdictions often coordinate implementing bicycle projects with other infrastructure improvements. For example, bikeways can be more easily and efficiently installed when street repaving is being undertaken. Jurisdictions can adopt a policy which requires that bicycling needs be considered whenever major maintenance, utilities, or transportation projects are to be tackled.

Operations and Management Ordinances:

Adopt NACTO Bike Guide

Recognizing the need for more bicycle-friendly roadway designs, the National Association of City Transportation Officials (NACTO) developed an Urban Bikeway Design Guide in 2011. Jurisdictions may choose to adopt the Bike Guide to supplement regulations spelled out in the AASHTO Green Book or other existing design guidelines to help ensure innovative, safe bikeway designs are implemented.

Multi-Modal Level of Services Standards

Typically, level of service (or LOS) is measured to reflect the flow of cars on roads (whereby a road with free flowing traffic would have a LOS "A" and one with constant congestion LOS "F"). Recently, attempts have been made to assess whether roads serve everyone's needs - including those cycling,

walking, and using transit in addition to drivers – through the development of multi-modal level of service (MMLOS) systems. MMLOS is in its infancy (establishing the best method for measuring LOS for bicycling continues to be up for debate, for example), but incremental steps are being taken by some cities to develop their own MMLOS measures.

Bicycle Anti-harassment Ordinance

In 2011, the City of Los Angeles passed the first ordinance designed to protect people bicycling from harassment by drivers, such as intentionally distracting a cyclist on the road. The law is unlike traditional assault and battery cases because it does not require proof of actual damages, giving greater protection to bicyclists. A handful of other cities across the country have now passed similar ordinances as well.

Stop as Yield Signs for Bicyclists

If no other traffic is present, these signs allow for bicyclists to continue through an intersection without coming to a complete stop. As bicyclists pose low safety risks to other travelers as compared to cars, these signs help cyclists maintain momentum rather than stop and start when not necessary, acknowledging the energy exerted to do so is far greater on a bike than in a car. Only one state – Idaho - has adopted such a law, and studies of its impact show that bicycle injuries have not increased since its passage and safety has actually improved.

Adjusting Enforcement Priorities

Policy can be adopted which instructs police officers to not ticket bicyclists who do not stop at stop signs, as long as they are riding safely. Priority instead can be placed on enforcing violations by people bicycling or driving who do pose safety risks.

Police on Bicycle Patrols

Increasingly, police departments are deploying bicycle patrols to augment policing efforts in communities. The benefits are manifold: police officers have positive interactions with the community, can reach places inaccessible by cars, legitimize bicycles as a form of transportation, and familiarize officers with bicycle rules and regulations.

Police Training on Bicycle Safety

Officers trained to understand what causes bicycle collisions and which traffic laws promote bicycle safety can better protect cyclists and those around them. Adopting a policy that provides training can help officers accomplish this. The National Highway Traffic Safety Administration (NHTSA) has guidelines which encourage training of law enforcement on bicycle safety and has developed training materials for this purpose.

Prohibit Obstruction of Bicycle Lanes

When vehicles such as taxis and delivery trucks stop or park in bike lanes, significant safety hazards are created for cyclists: collisions can occur with the obstructions themselves or from swerving to avoid them. Regulations can prohibit stopping or parking in bike lanes, but enforcement can be challenging.

Bike Share Program

Bike share programs offer access to bikes at strategic locations around town. Typically, people can rent a bike using their cell phones or credit cards from one station or kiosk and return it to another in a different location. Bike shares are usually used for short trips (one half to three miles). If placed near public transit, these bikes can help complete the first or last leg of people's journeys or commutes. The first 30 to 60 minutes are normally free, though annual membership fees are often required. Bikes are designed to stand out – with bright colors and logos – to deter theft. In the event a bike does get stolen or lost, many are equipped with a GPS unit to help locate them. Local jurisdictions or non-profits typically fund and operate the programs.

Bike Fleets at Government Buildings

Bike fleets can serve the same purpose as car fleets, often provided by governments for employees who need to use a vehicle as part of their job, if the trips cover short distances. Bike fleets can be ideal for travel to meetings, to monitor projects, patrol visitor areas, or generally to get around during the work day. A primary benefit is cost savings, as maintaining a bike fleet is much less expensive than a car fleet.

Bicycle Distribution and Maintenance

When people lack the funds to purchase a bicycle, local jurisdictions or non-profits can facilitate the distribution of abandoned or donated bikes. Bicycle maintenance can be taught as part of these programs as a youth activity or to build skills among adult populations.

Increase Traffic Fines and Allocate Dollars to Bicycle Project

Monies garnered through traffic fines can be allocated to fund bicycle friendly policies. Some

jurisdictions take fines collected from bicycle-related infringements (e.g. speeding, dooring, obstruction of bike lanes) and use them toward bicycle related infrastructure or programs. Others have increased fines for speeding or other violations such as running red lights and stop signs to be able to allocate a portion of the fees toward cycling projects.

Business Ordinances:

Truck, Bicycle, Pedestrian Safety

Large trucks are leading killers of cyclists and pedestrians in urban areas. These large trucks have a series of blind spots, and when collisions occur they are often fatal, with pedestrians and cyclists falling under the vehicle and being run over. According to the Volpe Center, a research arm of the DOT, nearly half of bicyclists and more than one-quarter of pedestrians killed by a large truck first impact the side of the truck. Recognizing this danger, the City of Boston has taken measures to help protect its pedestrian and cyclist populations by adopting policy that requires vendors contracted with City agencies to have properly installed side guards, convex mirrors, cross-over mirrors, and blind-spot awareness decals. Washington, DC and other states have adopted similar policies to help reverse the tide of fatalities among their bikers and walkers. (Sources: 1) Schmitt, Angie. "Why American Trucks are So Deadly for Pedestrians and Cyclists." StreetsBlog USA. October 31, 2016. 2) City of Boston Truck Side Guard Ordinance)

Bicycle Parking + Amenities

Over 150 local governments have adopted laws requiring bicycle parking in new development and major remodels in both commercial and residential developments. Many jurisdictions are finding that bike parking is also being provided by requiring buildings meet LEED certification standards (whereby providing bike parking earns the development some of the necessary points needed to obtain certification). Short and long-term bike parking – and in some instances showers and lockers - may be put in place by developers in return for incentives, such as the reduction of costly car parking spaces required. Policies should also be considered which require parking lots and garages to provide bicycle parking. Existing parking lots can required to provide bike racks as a condition of renewing their business licenses. Bicycle commuting can be further encouraged by passing a policy that requires building owners to either provide secure bicycle parking or allow employees to bring their bicycles into office buildings to help ensure their mode of transportation to and from work is safeguarded.

Bicycle Friendly Business Districts

Promotional campaigns in business districts which highlight the availability of bicycle parking, special discounts or promotions for customers who arrive by bike, and other bike friendly features can help encourage biking as a form of transportation. Employers in the district can also encourage employees to ride by offering incentives. Studies show that districts which encourage bicycling often benefit from higher spending over time by customers who bicycle and greater availability of parking spaces for those arriving by car. Jurisdictions can establish bicycle friendly business districts by passing resolutions and can help such districts through policy development pertaining to bicycle parking and employer incentives.

Bicycle Riding Incentive Programs

Parking Cash-Out Opportunities

Parking cash-out policies offer workers the option to take a cash allowance in lieu of a free parking space. Rather than mandate this option, states can encourage private employers to implement cash-out laws by providing tax credits to cover costs for those employees who opt to forgo their parking space.

Matching Bicycle to Transit Subsidies

Jurisdictions which offer public transit subsidies can do the same for commuters who bike to work, matching the subsidy dollar for dollar.

Reimbursement for Work Travel by Bicycle

Most job-related use of government employees' cars is reimbursable, and the reimbursement is tax exempt. On-the-job bike usage, however, is rarely reimbursed, and when it is, it is negligible and considered taxable income. Government policies could encourage greater bike usage, particularly when trips can easily be made by bike rather than car, by equalizing the reimbursable rate, no matter the mode of personal transportation used.

Bike Fleets at Private Employers

Private employers can be encouraged to provide bike fleets for use by their employees during the work day through tax credits or incentives offered by local jurisdictions. Incentives can also

be offered to help subsidize employees' use of bike shares where available, or to purchase bikes for commuting purposes. Publicity of employers who participate is another way to entice employers to participate.

Programs + Education Community:

Bicycle + Walking Events

Many jurisdictions around the world are following the lead of Bogota, Columbia, which first started the concept of "ciclovia" ("bike path" in Spanish), whereby select streets on closed to vehicular traffic on certain days to allow unencumbered use by pedestrians and bicyclists. These events, also known as "open streets" and "Sunday Streets" in the US, also help build community.

Bike Valets in Special Events

Requiring large civic events to provide monitored bicycle parking not only encourages a healthy, non-polluting form of transport, but it can increase attendance of events, attracting people normally dissuaded by traffic congestion or lack of secure bike parking. An added benefit is a reduction in traffic itself if more people bike to large events rather than drive.

Bike to Work Day/Week/Month

Many state and local governments adopt resolutions adopting a Bike to Work Day/Week/Month. Studies have shown these events have been highly successful in encouraging people to try cycling, and then even converting them to become regular cyclists. (One study showed that one in five people who participated in Bike to Work Day for the first time became regular commuters, for example.) The programs are particularly effective when local officials also participate, and when efforts are coordinated with local businesses to offer additional incentives for bicyclists during the events.

Schools:

Bicycle + Pedestrian Safety in Traffic School Curriculums

Public and private traffic schools can be required by states to include bicycle and pedestrian traffic safety lessons, increasing awareness about bike and pedestrian laws and providing instruction on how to properly share the road.

Bicycle + Pedestrian Safety in Elementary Schools

As part of the health and safety or physical education curriculum in elementary schools, bicycling and bicycle safety could be included. Countries such as Germany, Denmark, and the Netherlands teach their children this from a young age as part of the standard curriculum or through safe bicycling courses. While some schools across the country are beginning to embrace lessons on bicycling and bicycling safety, it is mostly provided by non-profit bicycle organizations or health or transportation governmental organizations (such as Safe Routes to School programs). The development of more rigorous state and local standards could help ensure bicycle skills are learned from a young age through the public school system.

Bicycle and Vocational Training in High Schools, Adult Schools, and Community Colleges

Likewise, bicycle maintenance and mechanics could be incorporated into adult classes in a variety of educational institutions. "Learn to ride" courses could also be included. Non-profits sometimes fill this need, but more could be done by government agencies to normalize and encourage bike riding.

5.3 Funding

Implementing extensive greenway systems such as the AeroATL Greenway Plan typically require a multitude of funding sources over a number of years. Funding sources typically fall into two primary buckets – Pay as You Go or Borrowing. Within these two buckets, there are typically a variety of alternative funding sources available. These include:

Pay as you Go

- General Fund/Capital Improvement Projects (CIP)
- Grants
- Community Improvement District
- Partnerships:
  - Businesses
  - Agencies
  - Developers
  - Non-profit Organizations

Borrowing:

- General Obligation Bond
- Revenue Bonds
- Tax Allocation District (TAD)
- Partnerships:
  - Businesses
  - Agencies
  - Developers
  - Non-profit Organizations

Table 5.3a contains a list of these and other funding sources for pedestrian and bicycling projects categorized by the time frame of implementation as well as the relative size of the project budget.

Table 5.3a: Typical Funding Sources for Pedestrian and Bicycling Projects

	Short Project <Than 2 Years	Long Term Project >Than 2 years
Small Budget	• Neighborhood Association • Community Improvement District • Crowd sourcing • Non-Profit Grants • Impact Fees • Infrastructure Bonds • Governor's Office of Highway Safety • Local taxes • Local health departments • Foundation grants • Individual donors	• Federal Transportation Funds • Capital Improvement Budget Funds • State Programs: • Georgia Department of Transportation • Recreational Trails Program (Department of Natural Resources) • Community Development Block Grant (CDBG)
Big Budget	• Foundation grants • Individual donors • Community Improvement Districts • Public-Private Partnerships • Infrastructure Bonds • Local taxes	• Federal Transportation Funds • Congressional Earmarks

Source: Atlanta Regional Commission, Walk Bike Thrive!: Atlanta Regional Bicycle & Pedestrian Plan (2016)

Additionally, Figure 5.3b identifies a variety of grants that the AeroATL Implementation Team should consider applying for. Grant amounts, match requirements, eligible elements, and application deadlines are also included in the figure.

The funding options identified in Table 5.3b are based on the AeroATL Implementation Team's eligibility to apply for the listed funding opportunities. Prior grant awards or current projects may affect the ability of the AeroATL Implementation Team's to obtain the listed grants. Additionally, grant amounts are based on the maximum award possible. The cost of elements will ultimately determine the maximum amount to be obtained. These funding sources are typically available on a yearly basis.

Table 5.3b: Potential Trail Implementation Grants

Funding Program	Grant Amount	Match Requirements	Types of Eligible Elements	Anticipated Deadline
Greenway and Trail Development				
Recreational Trails Program (RTP)	$100,000	20%	Trails and facilities that support trails such as restrooms, shelters, signage, support facilities, infrastructure, and design	November
Land & Water Conservation Fund (LWCF)	$200,000	100%	Trails, trailhead facilities, restrooms, shelters, signage, support facilities, infrastructure, and design	TBD
American Academy of Dermatology (AAD)	$8,000	0%	Shade structures	November
Urban & Community Forestry (U&CF)	$20,000	100%	Landscaping (tree planting)	TBD
Our Town Grant	$200,000	100%	Innovative public art projects	December
Transportation Alternative Program	$7,200,000	0%	Bicycle/pedestrian facilities, landscaping, and traffic calming	Fall
Stormwater/Water Quality/Environmental Education				
Section 319(h) Grants	$400,000	40%	Stormwater, water quality, and education projects	October
Pre-Disaster Mitigation	$3,000,000	25%	Stormwater including open space, and hardening	October
Urban Waters Grant	$60,000	5%	Signage, public education, and innovative water quality projects	February
Environmental Education Grants	$91,000	25%	Environmental education related facilities and programming	March

The integration of stormwater and other emergency management features into projects such as a recreation center or recreation trail can significantly increase the grant funding opportunities available to the AeroATL Implementation Team. Examples of design features that would introduce additional grant opportunities would include the construction of parking areas to act as drainage basins for severe weather events, stormwater retention ponds that alleviate localized flooding as part of park or trail project, and the hardening of an indoor facility such as a recreation center to act as a shelter and/or public outreach center before and after a disaster.

Before applying for the grant, the AeroATL Implementation Team should schedule an appointment with the granter to discuss the project and receive direction related to its eligibility and any specific requirements that the granter might have for the grant.

Philanthropic Funding Sources

The Atlanta Region benefits from over $500 million of philanthropic gifts every year. Some of these organizations fund trail and linear park projects similar to the AeroATL Greenway Plan. In order to apply for philanthropic funding, the Aerotropolis Atlanta Alliance would need to be the applicant, as they are a 501(c)(3) and/or an implementation team would need to be developed and establish themselves as a 501(c)(3). Below is a list of a variety of foundations in the Atlanta Metro Area that may be available to assist in the implementation of the AeroATL Greenway Plan.

- Arthur M. Blank Family Foundation
- Community Foundation for Greater Atlanta
- The Coca-Cola Foundation, Inc.
- Georgia Power Foundation, Inc.
- Home Depot Foundation
- James M. Cox Foundation of Georgia, Inc.
- J.Bulow Campbell Foundation
- Lettie Pate Whitehead Foundation, Inc.
- O. Wayne Rollins Foundation
- Robert W. Woodruff Foundation
- Turner Foundation, Inc.
- UPS Foundation
- CDC Foundation
- The AFLAC Foundation, Inc.
- Bradley-Turner Foundation, Inc.
- The Courts Foundation, Inc.
- North Georgia Community Foundation
- Community Foundation of Central Georgia
- Georgia-Pacific Foundation, Inc.
- Carlos and Marguerite Mason Trust
- The Sartain Lanier Family Foundation, Inc.
- Gay and Erskine Love Foundation
- The Peyton Anderson Foundation, Inc.
- Community Foundation for Northeast Georgia
- William I. H. and Lula E. Pitts Foundation
- The Abraham J. and Phyllis Katz Foundation
- Dorothy V. and Logan Lewis Foundation, Inc.
- Callaway Foundation, Inc.
- Luther and Susie Harrison Foundation, Inc.
- The Savannah Community Foundation
- Ann Cox Foundation, Inc.
- Healthcare Georgia Foundation
- The Tull Charitable Foundation
- AGL Resources Private Foundation
- The Community Foundation of Northwest Georgia
- Williams Family Foundation of Georgia, Inc.

It is important to note that philanthropic organizations typically look to leverage their dollars with other funding sources. Ideally, they expect the public sector to provide anywhere between 65 - 75 percent of the project funding. Table 5.3c illustrates how each of the proposed AeroATL Trails might be funded given the various types of funding mechanisms available and the various types of trails found within the AeroATL.

Model Mile Trails	Potential Funding Sources																	
	Local Taxes/General Fund/CIP	Community Improvement District	Impact Fees	Local Health Departments	Bonds	Crowd Sourcing	Community Development Block Grants (CDBG)	Recreational Trails Program (RTP)	Land and Water Conservation Fund (LWCF)	American Academy of Dermatology (AAD)	Urban and Community Forestry (U&CF)	Our Town Grant	Transportation Alternative Program	Section 319(h) Grants	Pre-Disaster Mitigation	Urban Waters Grant	Environmental Education Grants	Philanthropic Funds
Wolf Creek Trail (South Fulton)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Porsche Avenue (Hapeville)	■	■	■	■	■	■	■	■	■	■	■	■	■				■	■
Starr park - Fountain Elementary (Forest Park)	■	■	■	■	■	■	■	■	■	■	■	■	■				■	■
College Park Trail	■	■	■	■	■	■	■	■	■	■	■	■	■				■	■
Flint River Trail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Airport Loop Trail	■	■	■	■	■	■	■	■	■	■	■	■	■				■	■

Table 5.3c: Potential Funding Sources per Trail

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