Aerotropolis ATLANTA
Community Improvement Districts

Freight Cluster Plan

Powered by Aerotropolis Atlanta CIDs

Executive Summary

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MODERN MOBILITY partners

PEQ

Project Overview

Funded through the Atlanta Regional Commission (ARC) with contributions from the Aerotropolis Atlanta Community Improvement Districts (AACIDs) and local jurisdictions, the Aerotropolis Atlanta Freight Cluster Plan (FCP) outlines a framework and action plan for supporting the freight industry in the Aerotropolis while considering impacts on people who live and work in the area. The Atlanta Regional Freight Mobility Plan Update, completed in 2016, identifies the area surrounding Hartsfield-Jackson Atlanta International Airport (H-JAIA), including the AACIDs, as a regional freight cluster, warranting further study to better understand current and future freight travel patterns and to develop recommendations that would improve freight traffic operations, safety, and reliability, as well as job access. At the heart of the AACIDs, which are committed to creating an economically strong, safe, attractive and vibrant community surrounding the world's most-traveled passenger airport. Situated in South Metro Atlanta, the Aerotropolis encompasses H-JAIA and is where multiple National Highway Freight Network (NHFN) routes intersect, including I-75, I-85, and I-285.

The Aerotropolis is a diverse activity center for travel, logistics, and goods distribution that generates hundreds of thousands of trips daily.

In addition to H-JAIA's frequent designation as "the world's busiest airport," based on the total number of enplaned passengers, H-JAIA is also among the world's top 30 gateways for cargo traffic by value at approximately $55.4 billion in total exports and imports in 2018.[1] Total cargo weight passing through the airport is forecasted to be 1.4 million metric tons by 2031[2], a 119 percent increase from 2019 tonnage.[3] Additionally, through May 2020, the Port of Savannah exported more load containers than any other port in the nation.[4]

Hartsfield-Jackson Atlanta International Airport is among the world's top 30 gateways for cargo traffic by value at approximately $55.4 billion in total exports and imports in 2018.

1 Bureau of Transportation Statistics (2018). Top U.S. Foreign Trade Freight Gateways by Value of Shipments.
2 City of Atlanta (2015). H-JAIA Master Plan, p. 5.
3 City of Atlanta (2019) H-JAIA Monthly Airport Traffic Report, December 2019.
4 Georgia Ports Authority (2020). Savannah Top Port for U.S. Exports.

These factors will drive the expansion and development of distribution facilities and make a strong case for the need to invest in freight-supportive infrastructure throughout the Aerotropolis. Significant investment is needed to support the projected growth in freight traffic in the Atlanta region arriving from the Port of Savannah, growing rates of e-commerce and home delivery, and development of significant regional warehouse and distribution facilities throughout the Aerotropolis.

The overall goals and objectives for this Freight Cluster Plan were developed in collaboration with the Steering Committee and Project Management Team which seek to improve operations and travel time reliability, maintain economic competitiveness of the area, educate partners about best practices and trends, as well as to identify strategic investment opportunities and serve as a foundation for recommendations and proposed improvements.

76% 2013 to 2040 forecasted increase in freight moving through the Atlanta region

45% Percent of jobs held by residents in the study area are in freight-dependent industries

The Aerotropolis is home to 35+ million SF of warehouse space and will gain 16 million more SF by 2021.

H-JAIA is among the world's top 30 gateways for cargo traffic by dollar value. Total weight of cargo passing through the airport is forecasted to increase 113% between 2011 and 2031.

Freight Cluster Plan Process

The process to develop this Freight Cluster Plan consisted of several key tasks including Stakeholder Engagement, Best Practices, Inventory and Assessment of Existing Conditions, Traffic Study, Recommendations, and Documentation. Through these tasks, the project team was able to: identify what other regions and areas are doing with regard to technology, infrastructure, and warehousing activities; identify freight-related needs and opportunities; educate stakeholders, gain input on needs and opportunities, and build support for project implementation; analyze traffic operations at key intersections, supplemented by detailed field reviews, to identify improvements; and draft and refine recommendations for projects, policies, and strategies.

Study Process

- Task 1: Project Management
- Task 2: Stakeholder Engagement
- Task 3: Best Practices
- Task 4: Inventory & Assessment
- Task 5: Traffic Study
- Task 6: Recommendations
- Task 7: Documentation

Goals & Objectives

Goal: Improve freight operations to help maintain economic competitiveness

Objective: Improve freight travel time reliability and expand truck parking opportunities

Goal: Improve safety

Objective: Provide operational and pedestrian enhancements to improve safety

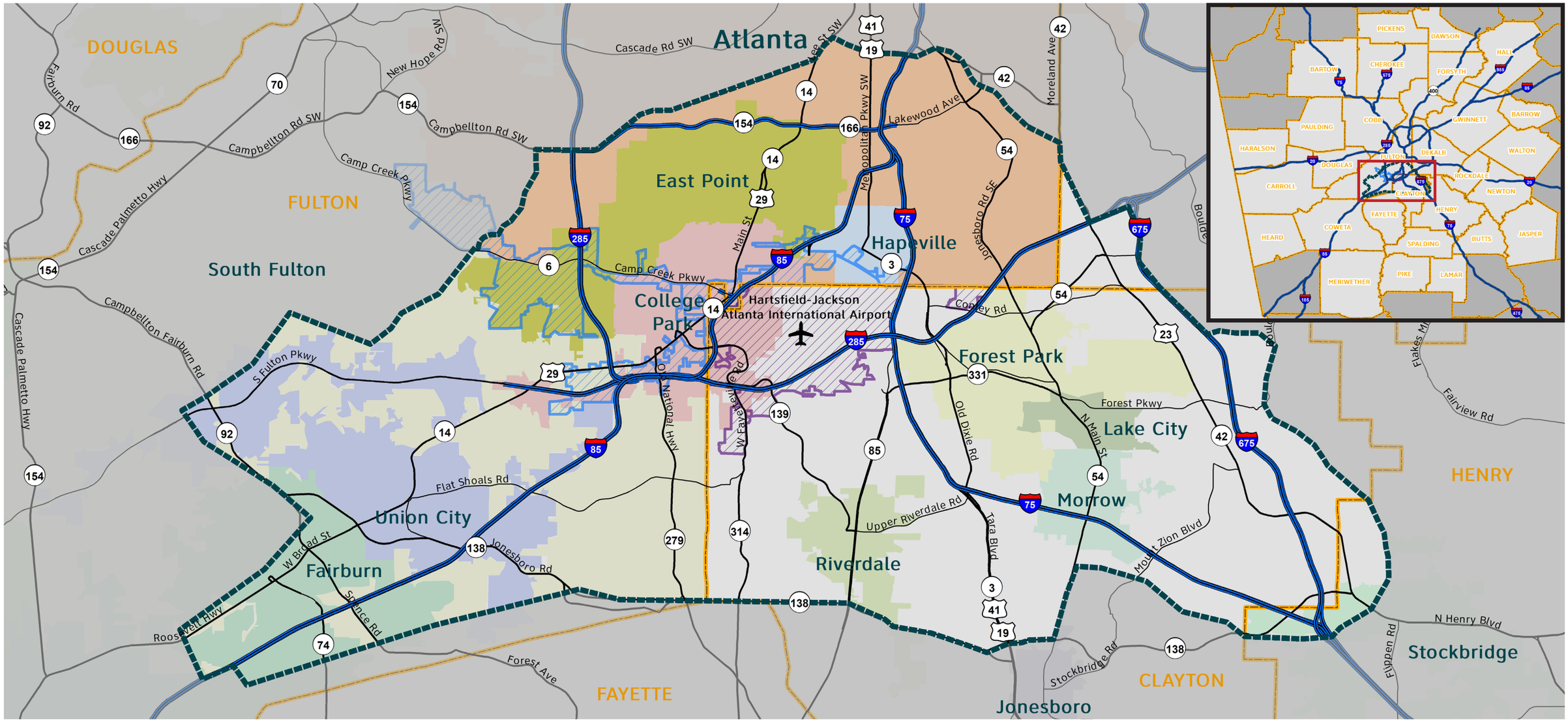
Goal: Facilitate stakeholder engagement

Objective: Educate stakeholders and community members about emerging trends in freight and logistics

Goal: Conduct strategic investment planning

Objective: Prioritize projects to identify quick wins

Aerotropolis Freight Cluster Study Area Context Map



N

0 2.5 5 10

Miles

Expressways
State Highways
Major Roads
Counties
Study Area Boundary
Airport South CID
Airport West CID

Cities in Freight Cluster Study Area

- Atlanta
- College Park
- East Point
- Fairburn
- Forest Park
- Hapeville
- Lake City
- Morrow
- Riverdale
- South Fulton
- Stockbridge
- Union City

Freight Cluster Plan
Powered by Aerotropolis Atlanta CIDs

Study Area Context Map

Data Courtesy of Aerotropolis Atlanta CIDs and Atlanta Regional Commission

Stakeholder Engagement

The Freight Cluster Plan process included opportunities for local input and feedback on the challenges and needs related to freight movement and logistics. A Stakeholder and Outreach Strategy was prepared that identified activities designed to engage a cross section of local government agencies, freight and logistics companies and business organizations. The strategies coincided with key milestones in the process, and input received informed decisions that led to final recommendations for the Plan. Several outreach activities were conducted that involved close to 100 stakeholders and include the following:

- **Steering Committee:** Consisting of representatives from the counties and municipalities represented by AACIDs, H-JAIA, GDOT, private freight stakeholders, local business representatives and development advocates, the Steering Committee was tasked with providing input into the identification of needs and proposed solutions.
- **Digital Outreach:** AACIDs utilized social media platforms and developed a study web page to inform the public and post general information about the study process through various communication platforms.
- **Freight Forum:** The forum presented information about the freight study followed by a facilitated discussion and breakout sessions allowing participants to provide input on types of projects and specific locations where the AACIDs can implement them to help improve freight operations.
- **Stakeholder Interviews:** The purpose of the stakeholder interviews was to gather input on freight-related transportation challenges, facility operations, and trends in the logistics and supply chain industry that are impacting freight movement.
- **Truck Driver Intercept Surveys:** To better understand the challenges of freight activity in the study area, the project team conducted a survey of truck drivers representing area companies to obtain feedback on their experiences driving to and through the area.
- **Community Stakeholder Meeting:** A virtual stakeholder meeting was conducted for local community leaders and stakeholders to provide an overview of the study process and to introduce final draft recommendations.

Freight Forum Breakout Session

Summary of Feedback

Key Challenges

- Access to Transportation for Workforce
- Lack of Truck Parking
- Proximity of Residential and Freight-Intensive Areas
- Roadway Capacity and Expansion
- Network Connectivity
- Inefficient Intersection Operations and Geometry
- Lack of Wayfinding and Directional Signage
- Forecasted Growth in Truck Traffic
- Continued Growth of e-Commerce
- Congestion and Safety along Freight Corridors

Key Opportunities

- Bus Stop Upgrades and New Sidewalks
- Improve Parking Requirements and Policies
- Intergovernmental Coordination
- New and Emerging Technologies
- Leverage Connected Signals for Operational and Safety Improvements
- Intersection Upgrades and Redesign
- New Wayfinding Signage District-Wide
- Cargo Expansion at Airport
- Supporting Access to Freight and Logistics Jobs
- Access Management Policies and Projects

Stakeholder Engagement Activities

- **44 Truck Driver Intercept Surveys**
- **12 Stakeholder Interviews**
- **1 Freight Forum**
- **3 Presentations to Freight Advisory Task Force**
- **4 Steering Committee Meetings & Bus Tour**
- **Recorded Podcasts & Project Video**

Stakeholder Interview Participants

Public Sector Interviews

- City of East Point
- City of College Park
- City of Forest Park
- City of Hapeville
- City of South Fulton
- Clayton County
- Fulton County
- H-JAIA

Private Sector Interviews

- Atlanta Air Cargo Association
- Metro Atlanta Chamber
- Elite Logistics
- Norfolk Southern
- Truck Specialized Parking Services

Best Practices

The Best Practices Technical Memorandum discusses innovative and cost-effective approaches in the freight industry for congestion mitigation and land use coordination in areas with high truck traffic and industrial and warehousing activities. It serves as an educational and empowerment tool for county and municipal partners on current national freight-intensive technologies that are relevant to the Aerotropolis.

Inventory and Assessment

The Inventory and Assessment of Existing Conditions compiles data pertinent to the Freight Cluster Plan in order to undertake a comprehensive assessment of the transportation network, land use and development, freight-related facilities, demographics of residents and workers, and related planning initiatives in the Aerotropolis area. This deliverable incorporates commercial vehicle travel patterns and origin-destination data from StreetLight to provide a deeper understanding of the movements of commercial vehicles.

Traffic Study

The Traffic Study examined the existing and future conditions of 18 intersections in the Aerotropolis Freight Cluster Area. The traffic study included capacity, operational and safety analysis of these intersections to identify deficiencies and recommend potential improvement projects to mitigate the deficiencies. This analysis considered growth rates based on the outputs of the 2040 ARC Activity-Based Model (ABM) and developments of regional impact (DRIs). The project team also conducted operational and geometric design field reviews at each key intersection focusing on overall traffic conditions, design considerations, level-of-service (LOS), and operational issues related to freight movement.

Findings Supporting Freight Investment

14% **Percent of households in the study area which do not have access to a personal vehicle.**

Camp Creek Pkwy (SR 6), Old National Hwy (SR 279), and S Fulton Pkwy will experience 30% or higher increase in total daily traffic by 2050.

Most key corridors leading in and out of the AACIDs have crash rates that exceed statewide averages for roads of the same type - some two times higher.

Pedestrian and bicycle routes do not provide consistent and connected coverage. Some bus routes near warehouses lack sidewalk access.

Nearly 90 trucks per day distribute goods from Amazon Prime planes at H-JAIA, and the airport is expanding cargo with new facilities and better use of passenger planes.

Frequent driveway spacing is prevalent along key truck routes, like Forest Pkwy (SR 331) and Old National Hwy (SR 279), increasing the risk of turning conflicts and limiting efficiency.

Truck regulations vary across cities within the AACIDs. A lack of designated parking and staging makes pick-up and delivery less efficient and can mean more trucks circling or idling, waiting to pick up or drop off.

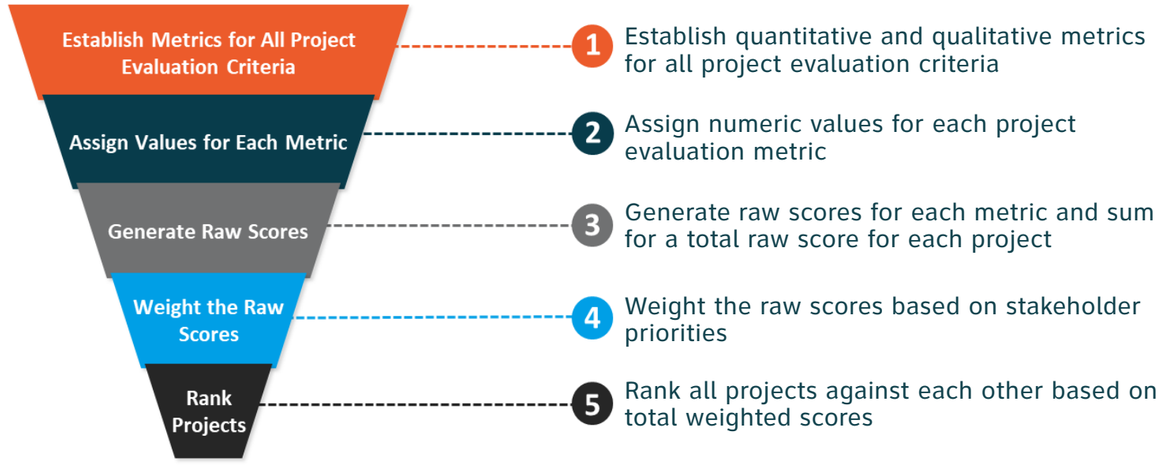
Project Prioritization Process

To identify potential projects and recommendations, the project team reviewed and evaluated information and key findings from several sources, including ongoing and programmed projects at the local, regional, and state level, as well as recommendations from recent plans and studies, and findings from the traffic study and Inventory and Assessment. Based on these sources, several key needs and opportunities became apparent, especially in the areas of capacity, access management, and bicycle and pedestrian facilities.

Projects identified as part of this Freight Cluster Plan were prioritized using a multifaceted process that rated projects in several categories, developed in consultation with the project Steering Committee including Return on Investment & Economic Benefits; Safety; Project Readiness; Mobility Options; and Environment & Public Health. For each category, the project team identified metrics as well as quantitative and qualitative scoring criteria. The team then assigned scores to each project and applied a weighting scenario. Generally, the metrics were evaluated on a low/medium/high scale or a yes/no scale, with defined values and resulting scores assigned to each.

To evaluate projects on each metric, the team compiled and assessed a range of data. Multiple data inputs were used to develop scores for some metrics. For example, "level of effort to implement," under Project Readiness, was based on whether right-of-way would be needed for a project and the presence of wetlands, historic resources, or cemeteries within a likely project area. Having established values that correspond to each metric, the team assigned scores to each project, for each metric. The aggregated scores were then weighted according to the average scenario.

Project Evaluation & Prioritization Process



Project Evaluation and Prioritization Process

Project Prioritization Framework

Stakeholder Input
Regional partners, elected officials, private sector

Return on Investment & Economic Benefits
Proximity to distribution and activity centers, ROI by project type

Safety
Proximity to high crash location, expected reduction in crashes

Project Readiness
Level of effort to implement project, inclusion in RTP, coordination requirements

Mobility Options
High freight volumes and/or percentages, designated freight corridors, vehicle hours of delay

Environment & Public Health
Anticipated emissions reduction, active transportation

Project Prioritization Framework

Recommendations Overview

The Aerotropolis Freight Cluster Plan proposes a series of recommendations based upon the findings and analysis of existing conditions, current and projected traffic volumes, anticipated growth in freight traffic throughout the Aerotropolis, and stakeholder input. Recommendations focus primarily on designated truck routes and key freight corridors, as well as intersections analyzed as part of the traffic study component of this project. It also takes into account and builds upon recommendations from recently completed plans and studies, as well as ongoing projects such as US 29/SR 14 at Washington Road (PI 0011845), Buffington Road improvements and widening (PI 0013948 and 0013949), and the relocation and extension of Conley Road, which will connect and align with CW Grant Parkway (PI 0001817), among others. The resulting set of proposed recommendations include a variety of projects to address identified needs in areas of access management, operational and safety improvements, capacity, wayfinding and signage, advanced technology, and workforce access to jobs.

The plan includes 68 total recommendations, including 57 projects and 11 policies and strategies. The recommendations are intended to support and improve freight mobility throughout the Aerotropolis and within the AACIDs are divided into implementation timeframes based on the project evaluation, prioritization results and estimated revenue availability, including: 1-5 Years (51 projects shown in white); 6-10 Years (13 projects shown in orange); and Long Term (4 projects shown in blue).

To guide implementation, a Financially Feasible Short-Term Action Plan was prepared for projects to be undertaken within the 10-year timeframe based on several factors, including but not limited to, anticipated cost and funding availability. This Financially Feasible Plan is based on the AACIDs share of projects only and does not account for financial readiness or availability by local partners. This Plan does not assume that the projects will be completed in these timeframes, but rather that a project can be *started* within that timeframe, or at a minimum, that the funding for a project will be available to the AACIDs within that timeframe and can be set aside for implementation. Project completion will highly depend on the availability of federal funding assumptions and local partners for the remaining match, among other factors. The team has also identified several longer-term projects that are more complex in nature and will require additional planning, coordination, and funding before being pursued. In determining the timeframes for each project, extensive coordination with the Southern Fulton CTP project team was undertaken for consistency. Based on 2020 dollars, the total cost of all 68 projects in the Financially Feasible Plan is estimated to be just over $33 million. Of this total amount, the AACIDs portion is estimated to be roughly $5.9 million, or approximately 18 percent of the total cost of all projects.

Recommendations by Category

- **1 Access Management**
- **1 Capacity & Widening**
- **19 Intersection Improvements**
- **24 Pedestrian Safety & Workforce Supportive**
- **4 Smart Corridor & ITS Technology**
- **4 Studies & Concept Reports**
- **4 Wayfinding & Signage**
- **11 Policies & Strategies**

68 Recommendations

Access Management

Financially Feasible Short-Term Action Plan (Years 6-10)

A1 Camp Creek Parkway (SR 6) Median Barrier

Capacity & Widening

Long-Term Vision Project Recommendation

C1 Roosevelt Highway (US 29/SR 14) Widening

Policies & Strategies

Financially Feasible Short-Term Action Plan (Years 1-5)

P1 Access Management Policy

P2 On-Site Truck Parking Policy

ST1 Forest Parkway (SR 331) Access Management

ST2 Old Dixie Road (US 19/US 41/SR 3) Access Management

ST3 Old National Highway (SR 279) Access Management

ST4 Sidewalk and First/Last Mile Upgrades

ST5 Repurpose Vacant Commercial or Industrial Properties for Temporary Truck Parking

ST6 Redevelop Underutilized Sites for New Permanent Truck Parking

ST7 Future Sullivan Road Improvements

ST8 Zoning and Land Use Coordination

ST9 Systematic Intersection Upgrades along Key Truck Routes

Intersection Improvements

Financially Feasible Short-Term Action Plan (Years 1-5)

- **I2** Loop Road at CW Grant Parkway/MH Jackson Jr Boulevard
- **I3** North Commerce Drive at Washington Road
- **I4** Riverdale Road (SR 139) at Phoenix Boulevard/Forest Parkway
- **I5** South Fulton Parkway (SR 14) at Majestic Place
- **I7** Camp Creek Parkway (SR 6) at Centre Parkway/ Princeton Lakes Parkway
- **I8** Camp Creek Parkway (SR 6) at North Commerce Drive
- **I9** Forest Parkway (SR 331) at Old Dixie Road (US 19/ US 41/SR 3)
- **I14** North Commerce Drive at Centre Parkway
- **I16** Riverdale Road (SR 139) at Global Gateway Connector
- **I17** Welcome All Road at Scarborough Road/Jailette Road
- **I18** Camp Creek Parkway (SR 6) at Washington Road

Financially Feasible Short-Term Action Plan (Years 6-10)

- **I1** Ben Hill Road at Welcome All Road
- **I6** Old National Highway (SR 279) at Sullivan Road
- **I11** Riverdale Road (SR 139) at Sullivan Road
- **I12** South Loop Road at Lake Mirror Road
- **I13** Clark Howell Highway at Lake Mirror Road
- **I15** Riverdale Road (SR 139) at West Fayetteville Road (SR 314)

Long-Term Vision Project Recommendation

- **I10** Loop Road at Toffie Terrace
- **I19** Riverdale Road (SR 139) at Phoenix Boulevard/Forest Parkway

Pedestrian Safety & Workforce Supportive

Financially Feasible Short-Term Action Plan (Years 1-5)

- **PW2** North Commerce Drive Sidewalk
- **PW7** Phoenix Boulevard Sidewalk
- **PW8** Clark Howell Highway Sidewalk
- **PW9** Bus Stop: 4800 North Commerce Drive
- **PW10** Bus Stop: North Commerce Drive at Logistics Way
- **PW11** Bus Stop: Welcome All Road at Kenwood Trail
- **PW12** Bus Stop: Atlanta South Parkway at SR 85
- **PW13** Bus Stop: Roosevelt Highway (US 29/SR 14) at Campbell Road
- **PW14** Desert Drive Transit Access: RRFB Crossing
- **PW15** Forest Parkway (SR 331) Sidewalk
- **PW16** Lake Mirror Road Sidewalk
- **PW18** Bus Stop: Old Dixie Road (US 19/US 41/SR 3) at Forest Parkway (SR 331)
- **PW19** Bus Stop: Falcon Drive at Frontage Road
- **PW20** Bus Stop: Old Dixie Road (US 19/US 41/SR 3) at Old Dixie Highway
- **PW21** Bus Stop: Forest Parkway (SR 331) at Old Dixie Road (US 19/US 41/SR 3)
- **PW22** Bus Stop: 4980 Old Dixie Road
- **PW23** Bus Stop: Old Dixie Highway at Lake Mirror Road
- **PW24** Bus Stop: Forest Parkway (SR 331) at Main Drive (Farmers Market)

(continued)

Financially Feasible Short-Term Action Plan (Years 6-10)

- **PW1** Centre Parkway Sidewalk
- **PW4** Sullivan Road Sidewalk
- **PW5** Best Road Sidewalk
- **PW6** Roosevelt Highway (US 29/SR 14) Sidewalk
- **PW17** Old Dixie Highway Sidewalk

Long-Term Vision Project Recommendation

- **PW3** Camp Creek Parkway (SR 6) Sidewalk

Studies & Concept Reports

Financially Feasible Short-Term Action Plan (Years 1-5)

- **S1** Camp Creek Parkway (SR 6) Scoping Study
- **S2** Riverdale Road (SR 139) Scoping Study
- **S3** CW Grant Parkway Interchange Modification Report
- **S4** Study to Support Implementation of I-285 NB Directional Signage

Wayfinding & Signage

Financially Feasible Short-Term Action Plan (Years 1-5)

- **W1** Redirect Camp Creek Marketplace Traffic
- **W2** Herschel Road Truck Prohibition Signage
- **W3** Riverdale Road (SR 139) Truck Prohibition Signage
- **W4** Directional and Wayfinding Signage to Key Destinations

Smart Corridor & ITS Technology

Financially Feasible Short-Term Action Plan (Years 1-5)

T1 Camp Creek Parkway (SR 6) Advanced Dilemma-Zone Detection System

T2 Connected Vehicle Technology along Key Corridors

T4 Partnerships to Provide Truck Parking Data to Existing Parking Availability Notification Apps

Financially Feasible Short-Term Action Plan (Years 6-10)

T3 Supplemental Signals at Intersections along Key Truck Routes

Plan Implementation

This plan is a major step for the AACIDs and partner jurisdictions. As one of the first regional Freight Cluster Plans to be carried out under ARC's Regional Freight Plan, it will inform and help shape future Freight Cluster Plans. The AACIDs and its partners have a unique opportunity to set a precedent by advancing a combination of infrastructure projects, technology projects, studies, strategies, and policies to improve freight mobility for the benefit of the Aerotropolis and surrounding region. As home delivery and e-commerce continue to grow, particularly in recent months in light of the COVID-19 pandemic, competition for limited roadway space will also grow - placing additional pressure on area roadways.

Through a combination of project types, the Freight Cluster Plan aims to offer a balanced set of solutions that can help alleviate some of that pressure, improving intersection operations, providing additional turning movement capacity, and directing drivers who may not be familiar with the area to key destinations, like H-JAIA and interstate highways. The Plan also capitalizes on recent advances in technology to improve safety and operations along key corridors throughout the study area, starting with Camp Creek Parkway (SR 6). Connected signal and connected vehicle technology is rapidly advancing and as more vehicles are able to communicate directly with traffic signals, deployment of other technology applications, such as Freight Signal Priority, should be explored for this area.

Funding Sources

The project team considered a range of potential funding sources including local, state, and federal sources to private and public-private partnerships. While many recommendations may be funded by the AACIDs in partnership with local jurisdictions through common sources such as the regional Transportation Improvement Program (TIP), there are a wide range of state and federal grants that could also be used. When identifying funding for projects, the AACIDs can seek opportunities to leverage multiple funding sources, including competitive grant funding and partnership opportunities with public and private agencies such as MARTA, ATL, SRTA, GDOT, ARC and private companies that may have a shared interest in improving transportation conditions in the area. Given the negative economic impact and uncertainty resulting from the COVID-19 pandemic, the project team took a conservative approach to estimating and projecting current and future revenues for the AACIDs. It has been difficult for businesses, government, and communities to adapt; however, the AACIDs maintain a strong commitment to continue to collaborate and partner with local jurisdictions and property owners to advance infrastructure projects for the benefit of the District, community members, and travelers passing through.

Potential Funding Sources

- Federal-Aid Programs
- Federal Grants
- State Resources
- ARC Programs
- Local Jurisdictions
- CID Revenues

Moving Forward

- **Implement the Freight Cluster Plan by partnering and collaborating with local jurisdictions and agencies to secure funding and enhance project delivery**
- **Continue public involvement and stakeholder outreach on a project-by-project basis**
- **Incorporate projects stemming from the Freight Cluster Plan into other AACIDs planning efforts, such as the ongoing Model Mile initiative and Blueprint update**