



FREIGHT CLUSTER PLAN

INVENTORY AND ASSESSMENT

IN COOPERATION WITH **ARC**

FINAL REPORT
APRIL 2024



PREPARED BY



METRO ANALYTICS



ATLAS

Stonecrest Freight Cluster Plan

Inventory and Assessment

Final Report

Prepared by



For



In cooperation with



April 2024

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1 Overview and Purpose

1.1 Stonecrest Freight Cluster Plan Overview

The Stonecrest Freight Cluster Plan (SFCP) is developed within the framework of the Atlanta Regional Commission (ARC)'s freight cluster program. It serves as a strategic initiative aimed at aligning the transportation systems of the Cities of Stonecrest and Lithonia with the economic development goals of the region. The primary objectives of this plan are to enhance the efficiency of freight movement, optimize vehicular traffic flow, and address critical safety concerns. Furthermore, this plan emphasizes coordination with the broader regional planning process to ensure seamless integration with and support for regional objectives.

1.2 Study Area

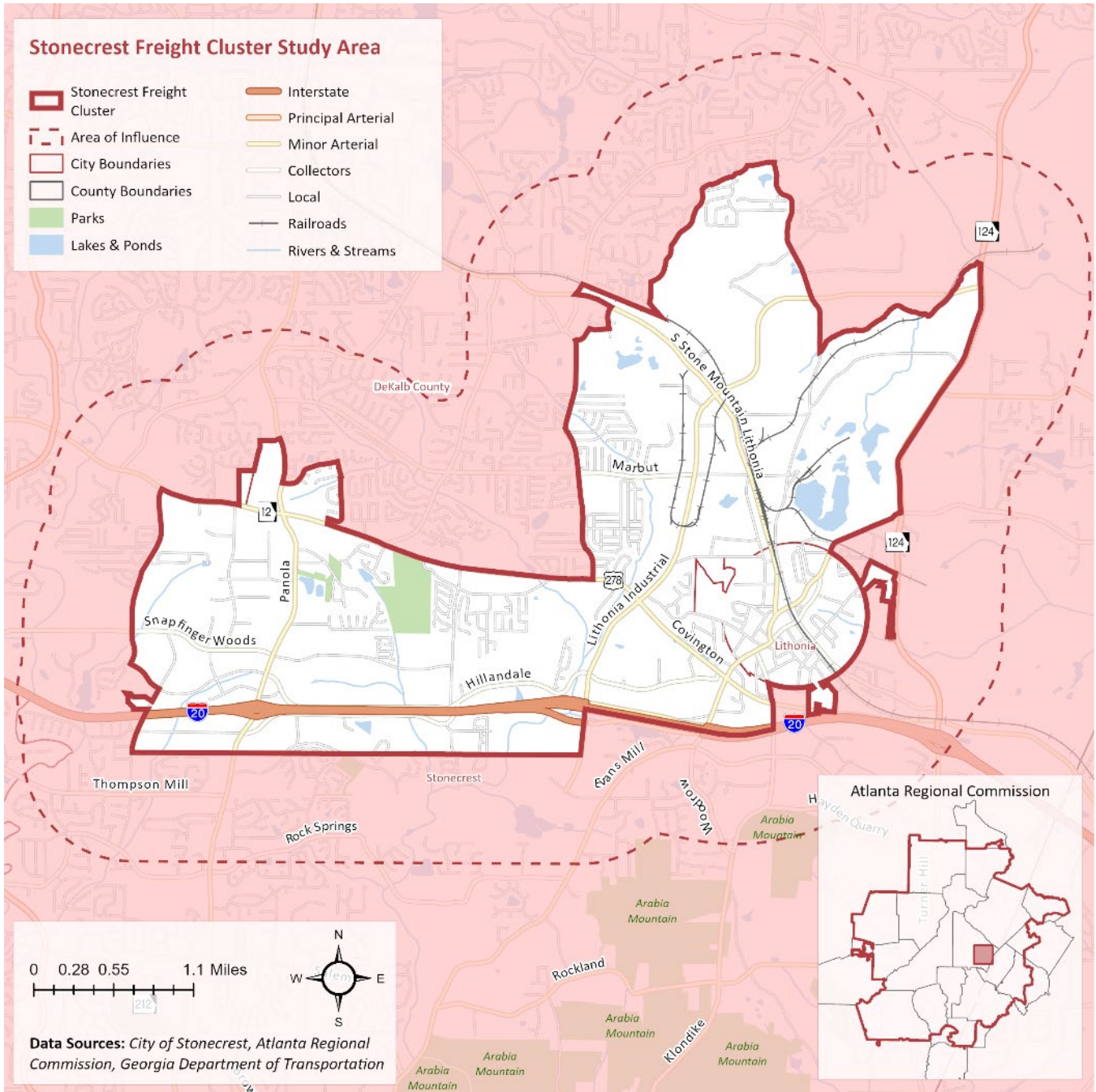
The Stonecrest Freight Cluster Study Area (Study Area) is shown in Figure 1-1. It spans 1.08 square miles and includes segments of both the City of Lithonia and the northern sector of the City of Stonecrest, situated north of the I-20 corridor. Additionally, it extends approximately 0.3 miles south of the I-20 corridor, covering the region between Miller Road and Lithonia Industrial Boulevard. The Study Area is geographically bounded by SR 124 to the east, Miller Road to the west, and US-278/SR-12/Covington Highway (Covington Highway), Philips Road, Rogers Lake Road, and a point 0.3 miles south of I-20 to the north and south, respectively.

Within the Study Area, key transportation arteries such as I-20/SR-402 (I-20) and Covington Highway play a pivotal role in the regional transportation network. These roadways are essential components of the planning and development efforts undertaken in the Study Area. In specific analytical contexts, a half-mile buffer area surrounding the study area has been considered, accounting for the broader influence of this strategic planning effort.

1.3 Purpose of Report

The purpose of the Inventory and Assessment Report (IAR) is to comprehensively address the challenges facing the freight network of the Study Area. This report identifies critical issues related to inefficiencies in the freight network and discusses the key factors influencing its performance in the Study Area. Furthermore, it pinpoints opportunities to stimulate economic development within the region. Finally, this report is a cohesive narrative of the freight system in the Study Area and lays the foundation for informed decision-making and the formulation of strategies to enhance the region's economic prosperity.

Figure 1-1: Stonecrest Freight Cluster Study Area (Study Area)



1.4 Organization of Report

The remainder of the report is organized as follows:

Chapter 2: Key Observations, Implications, and Assessment presents critical observations and assessments concerning roadway and bridge characteristics, the freight network and environment, multimodal travel, and land use, offering insights into their implications.

Chapter 3: Review of Previous Studies summarizes a range of previous studies, both local and regional, providing a foundation for the current plan by referencing relevant studies and reports.

Chapter 4: Roadway and Bridge Characteristics delves into existing and projected travel characteristics, including congestion levels, road volumes, and truck volumes. It also details roadway and bridge profiles.

Chapter 5: Freight Network and Environment explores the truck route network, railroads, intermodal connections, and considerations for freight resilience. It also analyzes the origins and destinations of freight traffic and addresses alternative fuel sources.

Chapter 6: Safety Analysis presents a safety analysis, including data on total crashes, commercial vehicle safety, and bicycle/pedestrian safety. It identifies collision hot spots to enhance safety measures.

Chapter 7: Multimodal Travel and Commute Interactions investigates how freight connects with transit, pedestrian, and commute services. It also examines the compatibility of multimodal designs.

Chapter 8: Land Use and Market Analysis examines the existing and future land use, zoning conflicts, and market trends. The analysis includes real estate inventory, workforce characteristics, and potential development sites.

Chapter 9: Transportation Funding and Funding Opportunities explores various funding sources for transportation projects, including local, state, and federal opportunities to support the plan's implementation.

2 Key Observations, Implications, and Assessment

Stonecrest, though a relatively new city in the Greater Atlanta metropolitan region, hosts a freight cluster that has long been a fundamental contributor to the regional economy. The distribution centers, manufacturing facilities, food processing industries, and stone quarries in this cluster make substantial contributions to regional employment and economic output. This economic operation critically relies on the flow of freight traffic, whether by truck or freight rail, within and beyond the study area. This interdependence underscores the significance of the cluster in both the city and the broader regional economic development. As the region develops further, effective management of this freight flow and the anticipated surge in transportation system demand becomes essential. Potential challenges such as congestion, safety concerns, multimodal integration, and land use conflicts necessitate a comprehensive plan to address these issues and guide the development of the Stonecrest Freight Cluster.

In this report section, a succinct overview of the key findings from this report are presented. More detail is provided in the sections that follow. The key observations help articulate the goals a successful SFCP should achieve. A comprehensive understanding of the critical issues enables a focused examination of subsequent tasks, challenges and strategies for the SFCP. The strategic analyses presented in this IAR aim to harmonize the Study Area growth with the broader economic and infrastructure improvement goals, fostering a balanced and sustainable development.

2.1 Roadway and Bridge Characteristics

This report provides an assessment of the roadways and bridges within the Study Area, building upon previous studies regarding commute patterns, mode share characteristics, and planned roadway improvements. The Study Area is a vital transportation hub, and the state of its roadways and bridges is important to the region's economic development and transportation efficiency.

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
<i>Increased projected roadway volume and congestion</i>	Roadway segments, especially major corridors like Panola Road, I-20, SR 124, and Lithonia Industrial Boulevard experience congestion and capacity limitations.	Congestion will hinder mobility and impact freight efficiency, necessitating prioritized infrastructure improvements, such as implementing congestion relief projects, expanding capacity on major corridors, and enhancing traffic management.	4.1.4	Figure 4-6
<i>Projected increase in freight volumes and percentages</i>	Freight traffic in the Study Area is anticipated to increase, particularly along key routes such as I-20 and Lithonia Industrial Boulevard.	The growing freight sector requires targeted investment and capacity planning, prioritizing projects to accommodate freight, expand capacity, and monitor freight routes closely.	4.1.6	Figure 4-9 Figure 4-10

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
<i>Signal management and corridor studies</i>	Signalized intersections and their management play a pivotal role in traffic flow, with a high prevalence of signal installations along Panola Road, Snapfinger Woods, and Lithonia Industrial Boulevard.	Effective signal management and corridor studies are essential for optimizing traffic and ensuring road safety, regularly optimizing signal timing, conducting corridor studies for major routes, and exploring Intelligent Transportation Systems options.	4.2.3	Figure 4-15
<i>Pavement Conditions</i>	Many roadway segments within the Study Area (Panola Road, Snapfinger Woods Drive, DeKalb Medical Parkway, Fairington Road, and Hillandale Drive) exhibit poor to failed pavement conditions, particularly in segments with high freight traffic.	Poor pavement conditions impact safety, efficiency, and maintenance costs, necessitating the prioritization of pavement maintenance, resurfacing, and rehabilitation on routes with high freight traffic.	4.2.4	Figure 4-16
<i>Bridge conditions and vertical clearances</i>	The majority of bridges are in good or satisfactory condition, but some along I-20 have lower vertical clearances than specified in GDOT standards.	Maintaining bridge integrity and addressing vertical clearance concerns is crucial for future freight needs, involving bridge inspection and maintenance, considering modifications for clearance standards, and implementing weight restrictions as necessary.	4.3	Figure 4-17

The Study Area is a critical transportation hub, and the assessment of its roadways and bridges reveals both strengths and areas of concern. Roadway conditions, particularly pavement quality and lane configurations, require attention to ensure efficient traffic flow. Additionally, bridges with satisfactory ratings and those not meeting vertical clearance standards need monitoring and potential upgrades. Solutions must focus on enhancing infrastructure to support the region's transportation needs, economic growth, and safety.

2.2 Freight Network and Environment

The IAR includes examination of truck routes, railroads, air cargo, waterways, truck parking, freight resilience, freight origins and destinations, and sustainability considerations such as alternative fuel technology and electric vehicle (EV) charging infrastructure.

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
<i>Truck Access and Routes</i>	Although identified in the ordinances, inadequate monitoring and management of truck routes in some areas, including Panola Road south of I-20, has resulted in safety, congestion, and road damage problems, incurring substantial costs to the city.	Inefficient truck access can lead to delays and increased transportation costs. Optimizing truck routes and resolving congestion issues are necessary to improve freight mobility in the region.	0	Figure 5-1
<i>Intermodal Freight Network</i>	Despite the presence of intermodal transportation options such as air, rail, and ports, there is limited utilization of infrastructure such as the H-JAIA and Port of Savannah in the region.	To enhance the efficiency and competitiveness of the freight network, the City needs to invest in the development of a comprehensive, connected intermodal system. By improving connections to the regional hubs via rail, road, and ports, the freight cluster can facilitate smoother freight transfers and reduce transportation costs.	5.2	Figure 5-3 Figure 5-4
<i>Truck Parking Management</i>	Existing issues on unregulated gravel parking lots along Redan Road. The city has updated truck parking ordinance to prevent illegal use and improve the conditions.	Proper enforcement of these regulations and ensuring compliance with environmentally responsible truck parking practices are crucial. This approach is essential for reducing unauthorized gravel lots and establishing a more organized and sustainable truck parking infrastructure.	5.3	Figure 5-6

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
<i>Freight Resilience</i>	Major corridors are prone to impacts of natural disasters such as flooding, and manmade disasters such as crashes and industrial incidents. Disruptions in freight traffic as a result of such incidents have far-reaching implications on the economy.	The City must prioritize resilience to cope with disruptions like natural disasters and supply chain interruptions. A comprehensive resilience plan for freight operations is essential to safeguard the region's economic stability. This involves contingency planning, infrastructure hardening, and ensuring the availability of emergency resources.	5.4	Figure 5-7
<i>Key Freight Generators</i>	Prominent freight traffic generators in the Stonecrest region include major distribution center and warehouses, manufacturing industries, as well as quarries in and around the Study Area.	Recognizing the impact of these major freight traffic generators is vital for optimizing logistics networks and infrastructure to support economic growth and development. Coordinated efforts are needed to effectively manage activities beyond the Study Area.	5.5	Figure 5-9 Figure 5-10
<i>Alternative Fuel Technology</i>	With limited alternate fuel stations around the Study Area, existing system does not adequately reflect the anticipated alternate fuel demand for the future (particularly for the heavy-duty freight trucks).	To address the increasing demand for sustainable freight transportation, the City should explore innovative technologies and alternative fuels for heavy-duty vehicles. Investing in alternative fuel infrastructure can promote sustainability and reduce emissions within the freight industry. As the demand for environmentally responsible freight transportation intensifies, addressing the vulnerabilities associated with traditional fuel sources, while embracing innovative technologies and alternative fuels, becomes not only relevant but also essential for the long-term viability and environmental stewardship of the region's freight industry.	5.6	Located within an ever-evolving transportation landscape, the Study Area faces numerous challenges and opportunities related to the adoption of cleaner and more efficient energy solutions. As the demand for environmentally responsible freight transportation intensifies,

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
				addressing the vulnerabilities associated with traditional fuel sources, while embracing innovative technologies and alternative fuels, becomes not only relevant but also essential for the long-term viability and environmental stewardship of the region's freight industry. Figure 5-11

The freight network and environment analysis highlights critical aspects of the Study Area’s freight network. Optimizing truck access and routes, managing truck parking efficiently, and bolstering freight resilience are essential for mitigating congestion and ensuring smooth operations during disruptions. Investing in intermodal connections enhances freight capacity and efficiency, and recognizing major industrial facilities as key freight generators is pivotal. Promoting alternative fuel technology is crucial for sustainability. These observations underscore the path forward for economic growth and environmental responsibility within the Study Area.

2.3 Safety Analysis

Safety was assessed within the context of transportation planning and the freight planning framework. The study extensively examines crash data to explore various facets of safety, including total crashes, commercial vehicle safety, bicycle and pedestrian safety, spatial and temporal distribution of crashes, and contributing factors. This analysis helps design a safe and resilient transportation network, and it forms the foundation for informed decision-making in creating a secure, efficient, and future-ready freight transportation plan.

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
<i>High Total crashes</i>	From 2018 to 2022, 14,351 crashes occurred, with rear-end collisions, daylight conditions, and dry road surfaces being prominent factors.	The area faces significant safety challenges, which may lead to traffic disruptions and economic costs, necessitating safety improvements that target high-crash areas and address contributing factors to reduce incidents.	6.1	Figure 6-1

<i>Commercial Vehicle Safety Concerns</i>	992 commercial vehicle crashes were recorded, including fatal and serious injuries, primarily involving rear-end and sideswipe-same direction collisions.	Commercial vehicle safety is a major issue and, safety measures for commercial vehicles should address specific issues like tailgating and lane changing.	6.2	Figure 6-2
<i>Bicycle and Pedestrian Safety</i>	Inadequate infrastructure led to 150 bicycle and pedestrian-related crashes, with 16 fatalities and 70 injuries.	Lack of safe crossings and lighting poses substantial risks to pedestrians and cyclists, making it critical to enhance pedestrian-bike infrastructure and improving, lighting and designated crossing points.	6.3	Figure 6-3
<i>Collision Hotspots</i>	Identified hotspots, such as I-20 and Panola Road, experience numerous crashes due to factors like tailgating, failure to yield, and adverse road conditions.	Safety interventions and infrastructure improvements are needed in these hotspots to address contributing factors.	6.4	Figure 6-4

This safety analysis underscores the critical need for targeted safety interventions within the Study Area. Key observations reveal prevalent crash patterns, particularly rear-end collisions, and identified hotspots requiring urgent attention. The implications highlight the necessity for enhanced infrastructure, improved pedestrian and cyclist safety, and targeted commercial vehicle safety measures. The assessment emphasizes infrastructure enhancements, public awareness campaigns, and policy advocacy as key strategies to enhance overall safety within the Study Area.

2.4 Multimodal Travel and Commute Interactions

The SFCP explores issues related to multimodal travel and commuting options, with a special focus on enhancing workforce accessibility to transit options. This analysis also includes bicycle and pedestrian infrastructure and assesses workforce commute services. Additionally, it examines the compatibility of freight and multimodal design, addressing concepts such as Complete Streets and Shared Use principles.

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
<i>Transit Services and Accessibility</i>	Limited transit options and connections to major employment centers around Panola Road and Lithonia Industrial Boulevard affecting	To improve workforce accessibility and connectivity within the Study Area, there is a need to address the gap in transit options availability, including train and streetcar routes, and provide	7.1.1	Figure 7-1 Figure 7-2 Figure 7-3

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
	workforce accessibility and connectivity.	wider connectivity and accessibility for the workforce.		
<i>Pedestrian and Bicycle Infrastructure</i>	Lack of sidewalks, crosswalks, and bike lanes pose safety risks and limit accessibility for pedestrians and cyclists particularly along Covington Highway. Limited I-20 crossing options for pedestrians to get from transit hubs to the south of I-20 to the employment centers to the north of it.	Enhancing safety and accessibility for pedestrians and cyclists through the development and expansion of pedestrian and bicycle infrastructure, including sidewalks, crosswalks, and bike lanes, should be planned and implemented to promote safe pedestrian and cyclist movement.	7.1.2	Figure 7-9
<i>Microtransit Options</i>	Absence of subsidized microtransit options within the study area affects last-mile connectivity and transit flexibility from transit hubs to the major employment centers.	To encourage the use of public transit, it is important to explore the feasibility and implementation of subsidized microtransit solutions, such as bike and scooter sharing, to bridge transportation gaps and enhance last-mile connectivity.	7.1.3.1	
<i>Georgia Commute Options Program</i>	Presence of the Georgia Commute Options (GCO) program aimed at reducing traffic congestion and enhancing air quality within the region.	To promote sustainable transportation choices and reduce single-occupancy vehicle commutes, it is essential to promote and facilitate participation in the GCO program, providing incentives and awareness to commuters and employers.	7.1.3.2	
<i>Complete Streets and Shared Use Paths</i>	Importance of integrating Complete Streets and Shared Use principles to optimize interactions between freight operations and multimodal facilities, particularly on roadways that have high pedestrian traffic, safety issues, or along major employee commuting corridors.	Prioritizing the integration of principles, such as incorporating Complete Streets and Shared Use principles, into transportation planning processes will enhance safety, accessibility, and sustainability, considering the needs of all users and promoting the efficient use of transportation corridors.	7.2.1	

The analysis of multimodal travel and commute interactions highlights critical needs related to transit services, pedestrian and bicycle infrastructure, workforce accessibility, microtransit options, and more. The implications

include the need for investment in transit, infrastructure upgrades, and additional pedestrian and bicycle infrastructure. Additionally, the integration of Complete Streets and Shared Use principles is essential for enhancing interactions between various transportation modes.

2.5 Land Use and Market Analysis

This report offers a detailed analysis of land use, zoning, and market dynamics in the Study Area with a focus on freight-related industries. It covers real estate inventory, market trends, workforce demographics, ongoing development, and related issues, providing valuable information for decision-making and planning.

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
<i>Conflicting Land Uses</i>	There are significant industrial properties adjacent to residential areas, especially around Miller Road and US 278, raising concerns of potential conflicts.	Heightened awareness and careful planning are essential to address potential tensions between industrial and residential land uses, ensuring community well-being and economic growth.	8.2.1	Figure 8-4
<i>Older Real Estate Inventory</i>	The majority of industrial space in the Study Area dates back to the 1970s and 1980s, with limited development between 1990 and 2020.	Aging infrastructure may require strategic revitalization efforts to align with evolving market demands and to maintain the Study Area’s competitiveness.	8.3.2	Figure 8-5 Figure 8-6
<i>Large Flex Space Inventory</i>	Flex spaces constitute over half of the industrial inventory in the study area, offering a versatile mix of office and light industrial uses. Flex space has the highest average rental rate per square foot but also the highest vacancy rates.	While the high rental rates suggest demand, the elevated vacancy rates signal challenges. Future development and marketing strategies should focus on optimizing the use and occupancy of flex spaces.	8.3.1 8.4.2	Figure 8-8
<i>Substantial Manufacturing Presence</i>	The study area boasts a substantial manufacturing sector, particularly in plastics, wood, and electrical equipment production, contributing over 2,200 jobs.	The robust manufacturing sector fosters economic resilience but demands ongoing support for workforce development and infrastructure to sustain growth.	8.4.3 8.5.1	Figure 8-9

In summary, the Study Area, with its diverse land use and aging industrial infrastructure, faces a balancing act between conflicting land uses and potential revitalization opportunities. The significant presence of flex spaces and a robust manufacturing sector underscore the area's adaptability and economic resilience, requiring strategic planning for sustained growth and community well-being.

3 Review of Previous Studies

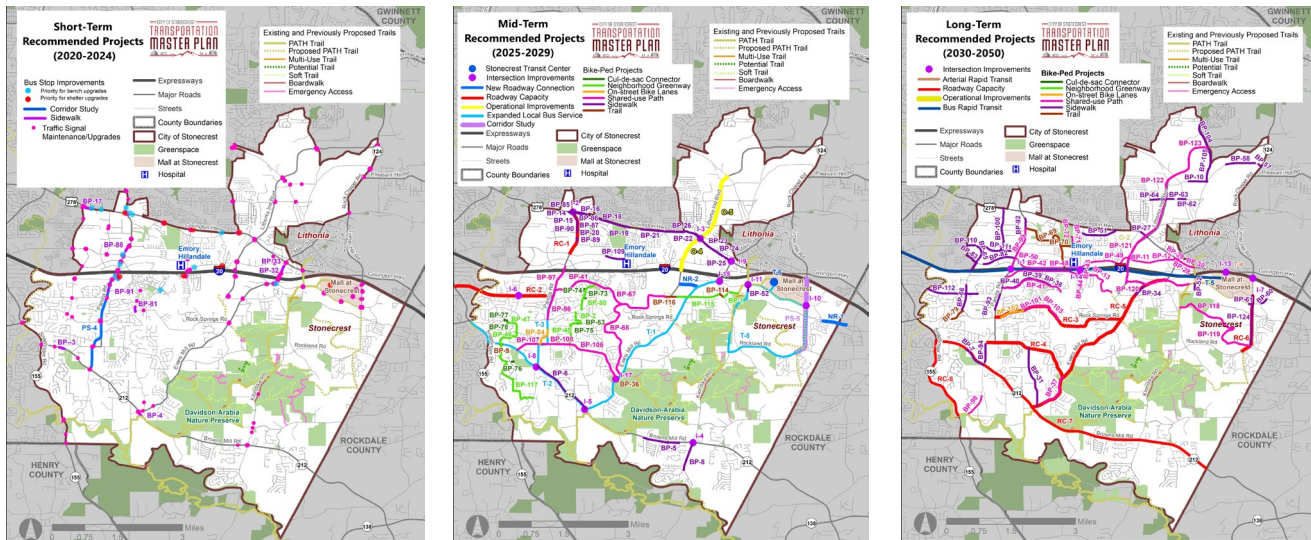
Chapter 3 provides an extensive review of local, county, regional, and statewide plans and studies that provide relevant insights for the development of SFCP. It covers a range of plans and studies, from local to statewide levels. Additionally, this chapter explores key national trends and drivers, contributing to a sound basis for development of SFCP. Understanding these studies and efforts provides context on the issues, recommendations, and potential synergies and alignment opportunities with broader regional and statewide initiatives. This comprehensive review allows integration of local, county, regional, and statewide perspectives and creation of a well-informed and coordinated approach to address freight and logistics challenges in the Study Area.

3.1 Local Studies

3.1.1 Stonecrest Transportation Master Plan (2020)

The Stonecrest Transportation Master Plan (STMP) is a comprehensive and forward-looking strategic document designed to address transportation challenges and needs in the City of Stonecrest over a 30-year horizon. It outlines key objectives, policies, and a phased approach to improving mobility, safety, and connectivity. The STMP identifies immediate priorities such as roadway maintenance, intersection improvements, transit expansion, and pedestrian infrastructure, along with long-term aspirational projects (see Figure 3-1). This plan offers a framework to guide transportation development and ensure responsible management and funding for the city's transportation infrastructure.

Figure 3-1: Stonecrest Transportation Master Plan – Short-term, Mid-term, and Long-term Recommended Projects



Relevance to the Stonecrest Freight Cluster

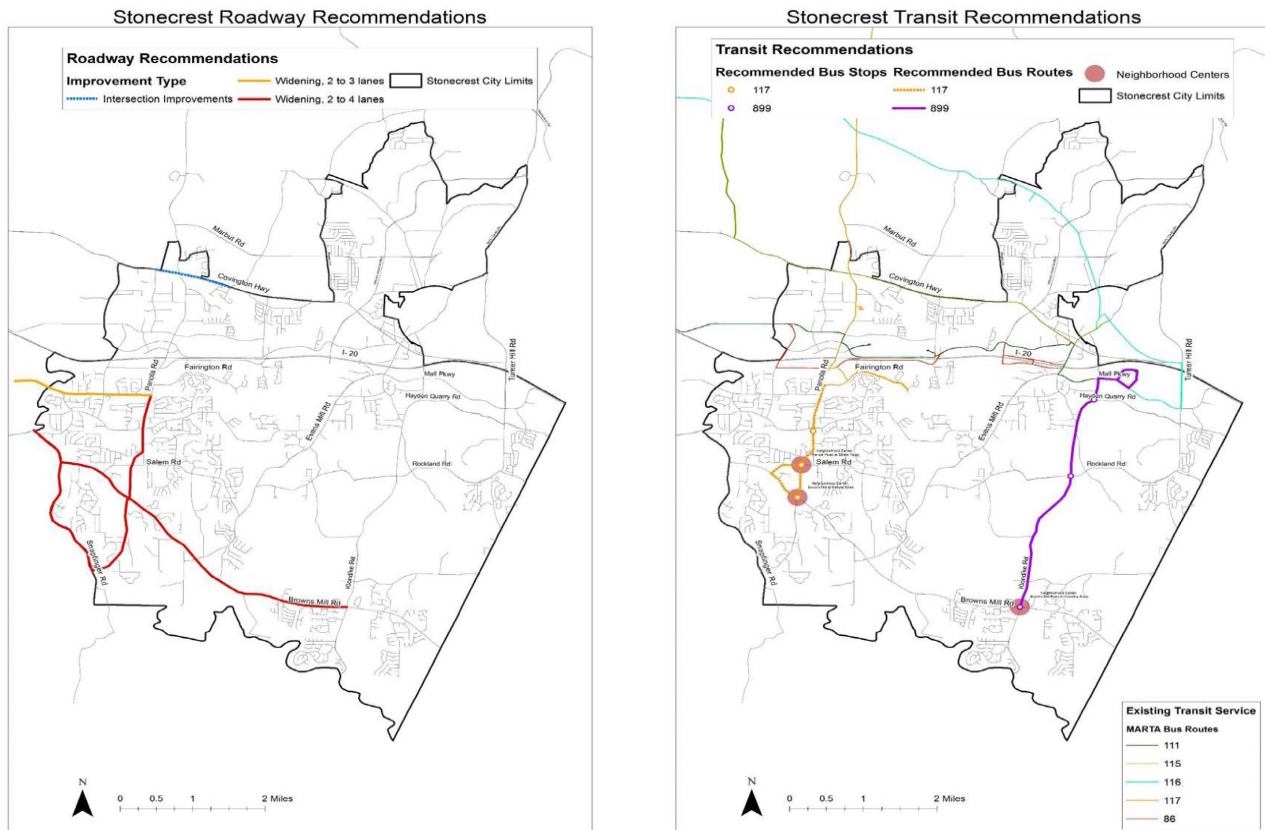
- **Roadway Maintenance and Intersection Improvements:** Prioritized maintenance and enhanced intersections directly benefit freight transportation by ensuring efficient, safe, and well-maintained routes.
- **Local Truck Traffic Ordinance:** Implementation of this ordinance manages and optimizes truck traffic within the Study Area, reducing congestion and enhancing freight flow.

- **Traffic Operations Program:** This program improves traffic management, which is vital for the timely delivery of goods by freight carriers.
- **Infrastructure Enhancement (Streetscape and Gateway Bridges):** Streetscape improvements and gateway bridge studies enhance infrastructure and access points crucial for efficient freight movement.
- **Long-Term Planning Integration:** The phased approach of the STMP ensures that freight transportation needs are integrated into the broader transportation network for sustainable economic growth.

3.1.2 Stonecrest Comprehensive Plan 2038 (2019)

The City of Stonecrest Comprehensive Plan 2038 is a strategic document outlining the city's vision for development and growth over twenty years through series of recommended projects as shown in Figure 3-2. The plan reflects the city's commitment to becoming a world-class city while preserving its history, fostering economic stability, valuing green spaces, and promoting a sense of community. The plan also emphasizes the integration of smart technology, the development of an Aerotropolis/Beltline, the expansion of educational facilities, the adoption of autonomous vehicles, and the preservation of historical heritage. It serves as a guideline for community, culture, and commerce development, aligning the city's goals and policies with the long-term needs and opportunities identified through community input and analysis.

Figure 3-2: Stonecrest Comprehensive Plan 2038 - Roadway and Transit Project Recommendations



Relevance to the Stonecrest Freight Cluster

- **Economic Development Support:** The plan's emphasis on economic stability and growth benefits the Study Area by fostering a conducive business environment.
- **Technological Alignment:** Integration of smart tech and autonomous vehicles aligns with the freight industry's drive for technological advancements.
- **Infrastructure Enhancements:** Proposed road, streetscape, and multi-modal improvements ease freight traffic and enhance access to logistics centers.
- **Future-Ready Infrastructure:** Consideration of connected and autonomous vehicle infrastructure supports the anticipated technological shifts in freight transportation.
- **Improved Freight Flow:** Addressing deficient service levels on key truck routes directly improves the flow of freight traffic within the Study Area.

3.1.3 Panola Road Study (2023)

The Panola Road Study is a comprehensive assessment of a corridor of Panola Road stretching from Minola Drive/Fairington Road to Browns Mill Road, spanning approximately 2.2 miles (see Figure 3-3). The study aims to identify critical safety and operational issues within this stretch of road. By conducting a thorough analysis, the study recommends various improvements to address these identified issues. Furthermore, conceptual plans are developed for each recommended improvement, taking into consideration the estimated benefit/cost ratio for each proposal. This study also places a focus on incorporating bicycle plans outlined in the SMTP, promoting a balanced and integrated approach to transportation development.

Figure 3-3: Scope of the Panola Road Study (Left side pointing North)



Image Credit: Arcadis/City of Stonecrest

Relevance to the Stonecrest Freight Cluster

- **Safety and Traffic Flow:** The study recommendations enhance safety and traffic flow along Panola Road, benefiting freight operations in the Study Area.

- **Multi-Modal Connectivity:** Multi-use paths improve accessibility for various transportation modes, aligning with the SFCP's holistic transportation approach.
- **Infrastructure Upgrades:** Recommendations like traffic signals and turn lanes enhance overall road infrastructure, supporting smoother and safer freight transportation.
- **Funding Opportunities:** Identification of potential funding sources, including State/Federal funds, can improve freight-related infrastructure in the Freight Cluster.
- **Integrated Transportation:** The study's approach integrates with the SFCP's transportation goals, fostering efficient and safe freight movement.

3.1.4 Stonecrest Bicycle, Pedestrian & Trail Plan (2023)

The Stonecrest Bicycle, Pedestrian, and Trail Plan is an ongoing initiative by the City of Stonecrest, designed to establish a comprehensive network of pedestrian walkways, bicycle lanes, and multipurpose trails. This continuous project prioritizes community engagement and aims to create a safer, more connected urban environment. As this plan progresses, it aligns with the ongoing SFCP, and together they form a synergistic approach to transportation and community development.

Relevance to the Stonecrest Freight Cluster

- **Complementary Infrastructure:** The ongoing Bicycle, Pedestrian, and Trail Plan aligns with the goals of the SFCP, introducing vital transportation infrastructure that supports both non-vehicular and freight movement needs.
- **Enhanced Connectivity:** The development of safe and integrated pedestrian and bicycle pathways improves overall connectivity within the community, benefiting residents and optimizing freight movement simultaneously.
- **Community-Centric Approach:** The input provided for this plan ensures that the freight cluster's transportation needs are aligned with the community's vision, promoting harmony and efficiency.
- **Quality of Life Impact:** By prioritizing non-vehicular transportation options, the ongoing plan contributes to a safer and more pleasant living environment, enhancing the overall quality of life for both residents and freight stakeholders. The symbiosis of these plans ensures a balanced and thriving urban ecosystem.

3.1.5 Strategic Plan to Transition Public Works Services

The Strategic Plan to Transition Public Works Services to the City of Stonecrest is an initiative with the goal of achieving a seamless transfer of public works responsibilities. The plan is primarily driven by the need for Stonecrest to have greater control over service delivery, quality, and responsiveness. It emphasizes the importance of local control, allowing the city to set its own priorities and allocate dedicated resources, such as staff, equipment, and materials. According to the plan, Stonecrest would officially begin providing public works services on January 1, 2021, with stormwater maintenance set to commence on January 1, 2022. The transition process involved a series of key steps, including finalizing an Intergovernmental Agreement (IGA) with DeKalb County, transferring millage collections from the county to Stonecrest, and entering into a contract amendment to facilitate the necessary staffing, equipment, and materials. The timeline for the transition is well-defined, with important milestones, such as City Council work sessions and contract approvals, scheduled in the months leading up to the official start date. The plan also outlines the scope of services that Stonecrest will undertake, encompassing road maintenance, right-of-way maintenance, traffic operations, emergency response, and more. The budget impact was estimated at \$3,700,000, with anticipated revenue from a millage transfer from DeKalb

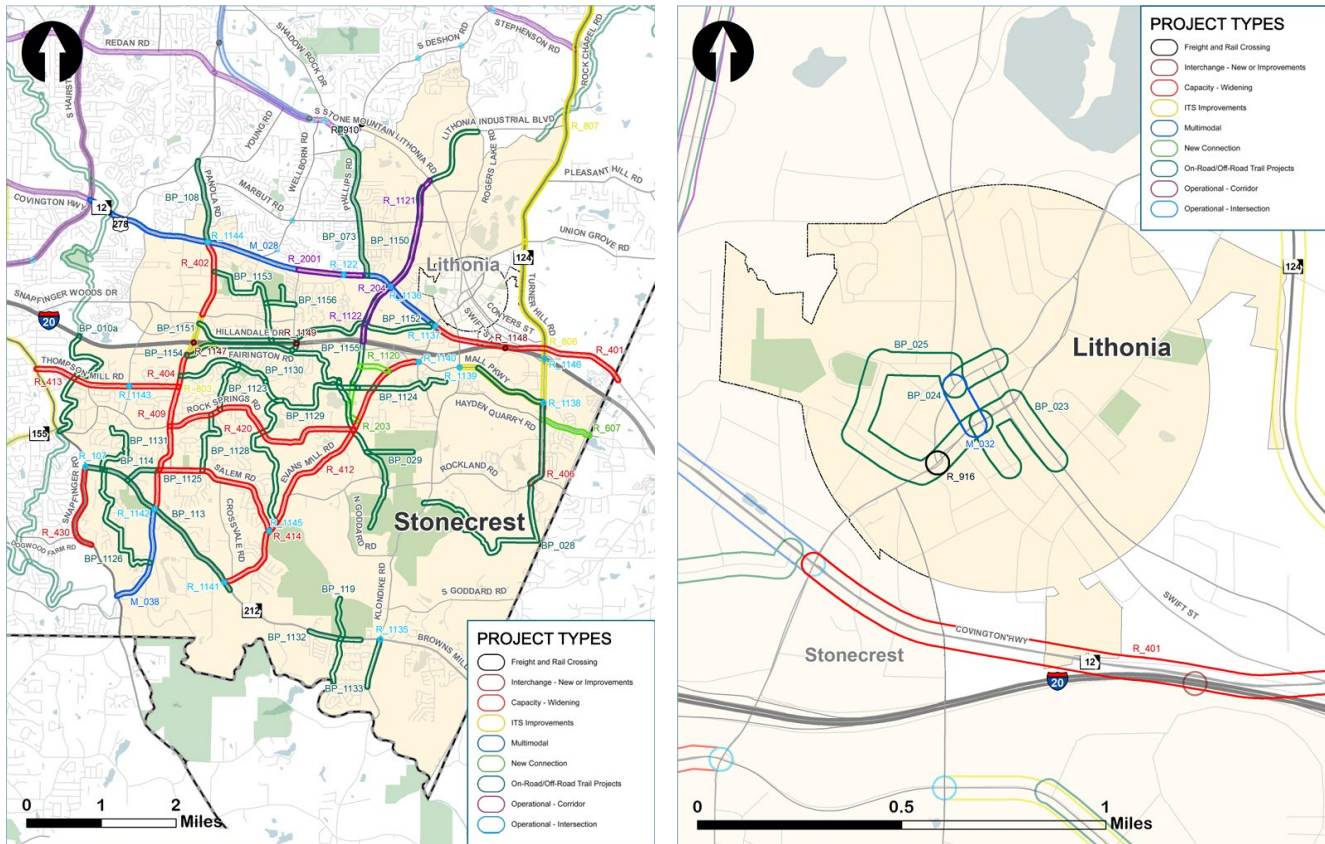
County. This comprehensive plan is designed to ensure a successful and efficient transition of public works services to benefit the residents of Stonecrest.

3.2 County Studies

3.2.1 DeKalb County 2050 Unified Plan (2022)

The DeKalb 2050 Unified Plan is a forward-looking and comprehensive strategy that integrates transportation and land use planning in DeKalb County, fostering a harmonized vision for its future. This innovative approach emerged from a collaboration between DeKalb County and the ARC, aiming to synchronize the comprehensive transportation plan (CTP) with the Comprehensive Land Use Plan (CLUP). The Existing Conditions and Needs Assessment (ECNA) Report underpins the plan, analyzing demographics, economic development, land use, environmental features, and transportation infrastructure, culminating in key themes such as population diversity, development patterns, safety, transit options, congestion mitigation, and more. The Transportation Nexus identifies seven top-line issues, interwoven with four guiding principles. These issues encompass housing, activity centers, economic development, freight, road improvements, transit expansion, and active transportation, forming the basis for balanced decision-making. The Future Land Use Plan (FLUP) emphasizes core development in activity centers, driven by Small Area Plans (SAP), infrastructure enhancements, and a focus on sustainability, ultimately shaping the County's growth and connectivity. The Unified Plan's project development involves an exhaustive examination of a universe of projects, with over 1,200 solutions derived from numerous planning studies and documents (see Figure 3-4). Evaluation criteria, aligned with community goals, guide the identification of high-impact projects, ensuring equitable access, safety improvements, economic benefits, and more. Collectively, the DeKalb 2050 Unified Plan presents an interconnected, visionary roadmap that seamlessly combines transportation and land use planning to shape the County's vibrant future.

Figure 3-4: DeKalb County 2050 Unified Plan - Priority Transportation Projects for the Cities of Stonecrest and Lithonia



2050 Comprehensive Land Use Plan: Relevance to the Stonecrest Freight Cluster

- **Capacity-Widening Projects:** The 2050 CTP outlines capacity-widening projects for roads like Covington Highway and Panola Road. These projects directly impact freight movement within the Study Area by reducing congestion and improving road infrastructure.
- **Rail Crossing Improvements:** The CTP includes rail crossing improvements, such as Main Street at Max Cleland Boulevard Rail Crossing Improvement, which enhance safety and efficiency for freight transport, benefiting the City of Lithonia within the Study Area.
- **Multimodal Improvements:** "Stone Mountain Street Multimodal Improvement" projects, part of the CTP, enhance accessibility for various modes of freight transport, promoting a more efficient transportation network in both the City of Stonecrest (north of I-20) and Lithonia.
- **Off-Road Trail Projects:** Off-road trail projects like "Loop A Trail," "Loop B Trail," and "Loop C Trail" offer indirect benefits to the Stonecrest Freight Cluster by improving overall transportation infrastructure and accessibility, including for freight transport.
- **Transportation Policies:** The CTP includes transportation policies that can shape the freight transportation landscape. These policies are valuable for both areas within the Study Area and can guide future transportation planning and logistics.
- **Coordination and Updates:** Ongoing coordination with partner agencies and future updates to the CTP are crucial to ensuring that the unique needs and challenges of both the City of Stonecrest (north of I-20) and the City of Lithonia are considered in transportation planning, aligning with the goals of the SFCP.

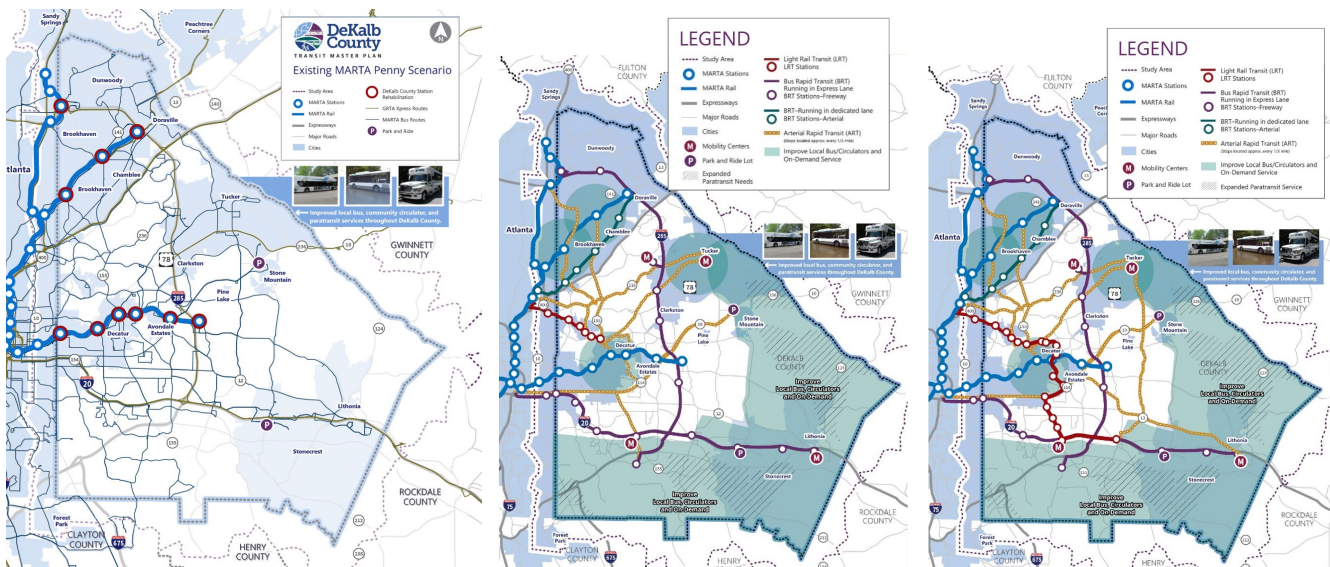
2050 Comprehensive Transportation Plan: Relevance to the Stonecrest Freight Cluster

- **Freight Cluster Development:** Implementing a comprehensive plan to establish a designated freight cluster within Stonecrest leverages its strategic location near major transportation routes.
- **Infrastructure Enhancement:** Enhancing transportation and logistics infrastructure is critical to supporting the freight cluster. This entails ensuring seamless connections to highways, railways, and airports.
- **Public-Private Partnerships:** Encouraging partnerships between public entities and private businesses to invest in and develop the freight cluster drives economic growth and job opportunities.
- **Sustainable Practices:** The incorporation of sustainable practices within the freight cluster promotes the use of environmentally friendly technologies and energy-efficient operations, reducing the environmental impact.
- **Skill Development and Training:** Establishing educational programs and training centers focuses on equipping local residents with skills relevant to the freight and logistics industry, enhancing their employability.
- **Zoning and Regulations:** Tailoring zoning regulations and policies to accommodate the specific requirements of the freight cluster optimizes land use, ensuring alignment with the 2050 CLUP.

3.2.2 DeKalb County Transit Master Plan (2019)

DeKalb County's Transit Master Plan (DCTMP) is a visionary initiative designed to address the county's mobility challenges, increase future development opportunities, and elevate the quality of life for its residents, both in the north and south through numerous recommended projects shown in Figure 3-5. At its core, this plan aims to seamlessly integrate transit into the daily lives of DeKalb County's diverse population. It emphasizes the importance of transit not just for moving people but for invigorating local businesses and economic growth. This visionary approach also underscores affordability and effectiveness, envisioning a collaborative process to define a practical and achievable transit roadmap. The plan places a strong emphasis on accessibility and equity, ensuring that transit serves everyone's needs, and strategically directs investments to foster thriving areas while leaving no corner of the county behind.

Figure 3-5: DeKalb County Transit Master Plan – Existing MARTA Penny, Half-Penny, and Full-Penny Scenario Projects



Relevance to the Stonecrest Freight Cluster

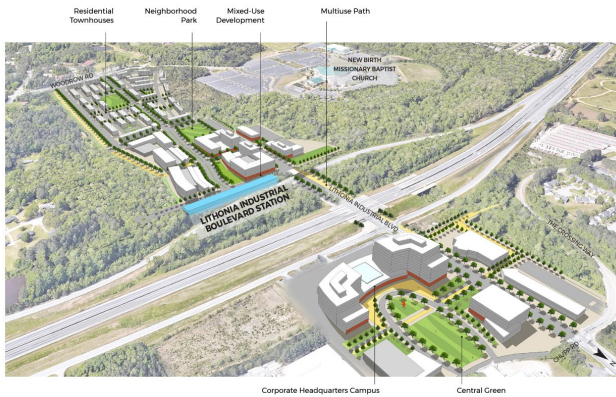
- **Enhanced Connectivity:** The DCTMP offers improved transportation connectivity within the Study Area through proposed Arterial Rapid Transit (ART) and Bus Rapid Transit (BRT) connections, optimizing the movement of workforces benefiting flow of goods and materials.
- **Economic Growth Facilitation:** By fostering economic development, the DCTMP aligns with the objectives of the Stonecrest Freight Cluster, attracting businesses and investments vital for the cluster's expansion.
- **Efficient Logistics:** The seamless integration of various transportation modes ensures more efficient logistics within the freight cluster, streamlining operations and timely deliveries.
- **Improved Last-Mile Connectivity:** The DCTMP's emphasis on improving first and last-mile connectivity directly benefits the freight cluster, enhancing accessibility and efficiency in the final stage of goods delivery.
- **Community Engagement Alignment:** The DCTMP's dedication to community engagement and collaboration is in sync with the Stonecrest Freight Cluster's inclusive approach, encouraging stakeholder involvement and cooperative efforts for infrastructure and logistics development.

3.2.3 I-20 East Transit-Oriented Development Plan (2019)

The I-20 East Transit-Oriented Development Community Plan (ITODCP), a collaborative effort involving DeKalb County, Atlanta, and the City of Stonecrest, focuses on fostering equitable development within the corridor (see Figure 3-6). Supported by a grant from the Federal Transit Administration (FTA) and local matching funds, the plan seeks to enhance economic growth, placemaking, and ridership on potential high-capacity transit investments. By prioritizing transit-supportive land use, affordable housing options, and ridership maximization, the plan aims to make I-20 East transit projects more competitive for federal funding while catalyzing private development around transit stations. The study emphasizes a corridor-wide Transit-Oriented Development (TOD) strategy, equitable TOD programs, and policies to transform communities into livable, walkable, and transit-friendly spaces.

Figure 3-6: I-20 East TOD Plan - Proposed TOD Locations





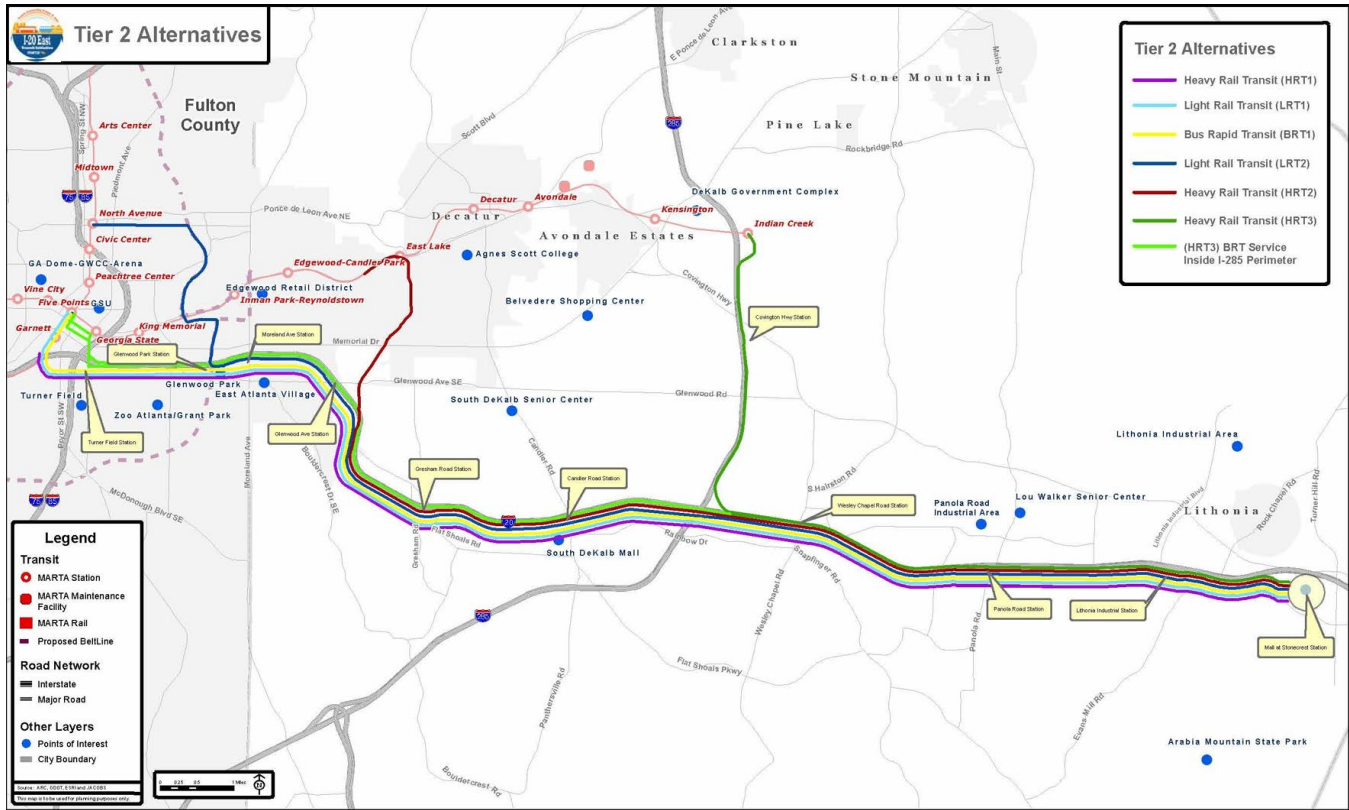
Relevance to the Stonecrest Freight Cluster

- **Multi-Modal Connectivity:** The ITODCP's emphasis on creating a transit hub aligns with the Stonecrest Freight Cluster's need for efficient transportation connections to enhance logistics and freight movements.
- **Mixed-Use Development:** Prioritizing mixed-use development within the ITODCP aligns with the Stonecrest Freight Cluster's vision of fostering a vibrant commercial and industrial environment.
- **Land Use and Zoning Updates:** Recommendations for land use and zoning updates in the Wesley Chapel area may positively impact adjacent industrial and commercial zones, offering opportunities for complementary development.
- **Equitable TOD Principles:** The ITODCP's focus on preventing displacement, supporting affordable housing, and enhancing safety resonates with the Stonecrest Freight Cluster's goal of promoting balanced and inclusive development, supporting the entire community.

3.2.4 MARTA South DeKalb Transit Initiative (2023)

The South DeKalb Transit Initiative, a collaborative effort by the Metropolitan Atlanta Rapid Transit Authority (MARTA), DeKalb County, the City of Atlanta, and the Federal Transit Administration (FTA), is a comprehensive study aimed at identifying the transportation and environmental impacts associated with the development of high-capacity transit service in south DeKalb County. Tier 2 alternatives of the initiative are shown in Figure 3-7. The primary objectives are to enhance mobility, improve accessibility to jobs and housing, and stimulate economic development in the region. By exploring various transit modes such as Bus Rapid Transit (BRT), Light Rail Transit (LRT), and Heavy Rail Transit (HRT), the initiative strives to address the concerns of the community, including traffic congestion and limited transportation options, thus envisioning a more connected and vibrant DeKalb County.

Figure 3-7: South DeKalb Transit Initiative - Tier 2 Alternatives



Relevance to the Stonecrest Freight Cluster

- **Improved Regional Connectivity:** Enhancing transit options in South DeKalb County will facilitate improved connectivity to the Study Area at the Mall at Stonecrest Station, enabling efficient movement of goods and enhancing the overall logistics network.
- **Alleviating Traffic Congestion:** By providing alternative transit modes, the initiative will contribute to reducing traffic congestion in the South DeKalb area, benefiting the freight movement and logistics operations within the Study Area.
- **Enhanced Economic Viability:** A well-connected and accessible South DeKalb County supports economic growth, which is beneficial for the Study Area, promoting business expansion and attracting potential investors.
- **Sustainable Transportation:** The initiative aligns with sustainability goals by promoting sustainable modes of transportation, potentially reducing emissions and making the area more appealing for sustainable logistics operations within the Study Area.
- **Community Accessibility:** Improved public transit options will enhance accessibility for both residents and workers, creating a favorable environment for those employed within the Study Area and improving overall community well-being.

3.2.5 Small Area Plans

DeKalb County's Small Area Plans (SAPs) encompass a series of focused initiatives designed to shape development, improve community well-being, and enhance sustainability across various regions. These SAPs are

guided by overarching goals, including the promotion of mixed-income neighborhoods, diverse housing, employment opportunities, and accessibility through multimodal transportation. Engaging stakeholders and implementing sustainable practices are integral components. Key SAPs include the I-20 East Transit Initiative, fostering economic growth and transit accessibility, and the Master Active Living Plans (MALPs) targeting public health through health-oriented communities. Additionally, the Memorial Drive Revitalization Corridor Plan (MDRCP) and North Druid Hills LCI seek to stimulate economic development and enhance quality of life. These plans serve as invaluable frameworks, offering comprehensive findings and recommendations for programs, policies, and actions that collectively shape the future of DeKalb County and its communities.

Relevance to the Stonecrest Freight Cluster

- **Enhanced Accessibility:** The focus on multimodal transportation in these plans is directly relevant to the Study Area, as improved transportation options can enhance the movement of goods in and out of the area.
- **Economic Advancements:** Initiatives like the I-20 East TOD Plan and MDRCP have the potential to stimulate economic growth around the Study Area, supporting logistics and businesses in the area.
- **Sustainability Benefits:** The emphasis on sustainability aligns with efforts to reduce environmental impacts associated with freight logistics in the Study Area, promoting eco-friendly practices.
- **Community Engagement:** Involving stakeholders in the planning process ensures that the development of the Study Area considers the needs and concerns of local residents and businesses, fostering community support.
- **Mixed-Use Opportunities:** Encouraging mixed-use development in proximity to the freight cluster can create synergies between logistics operations and other community activities, potentially benefiting both.
- **Health and Quality of Life:** Health-oriented initiatives from the MALPs can have positive effects on the well-being of workers and residents in the vicinity of the Study Area.

3.3 Regional Plans

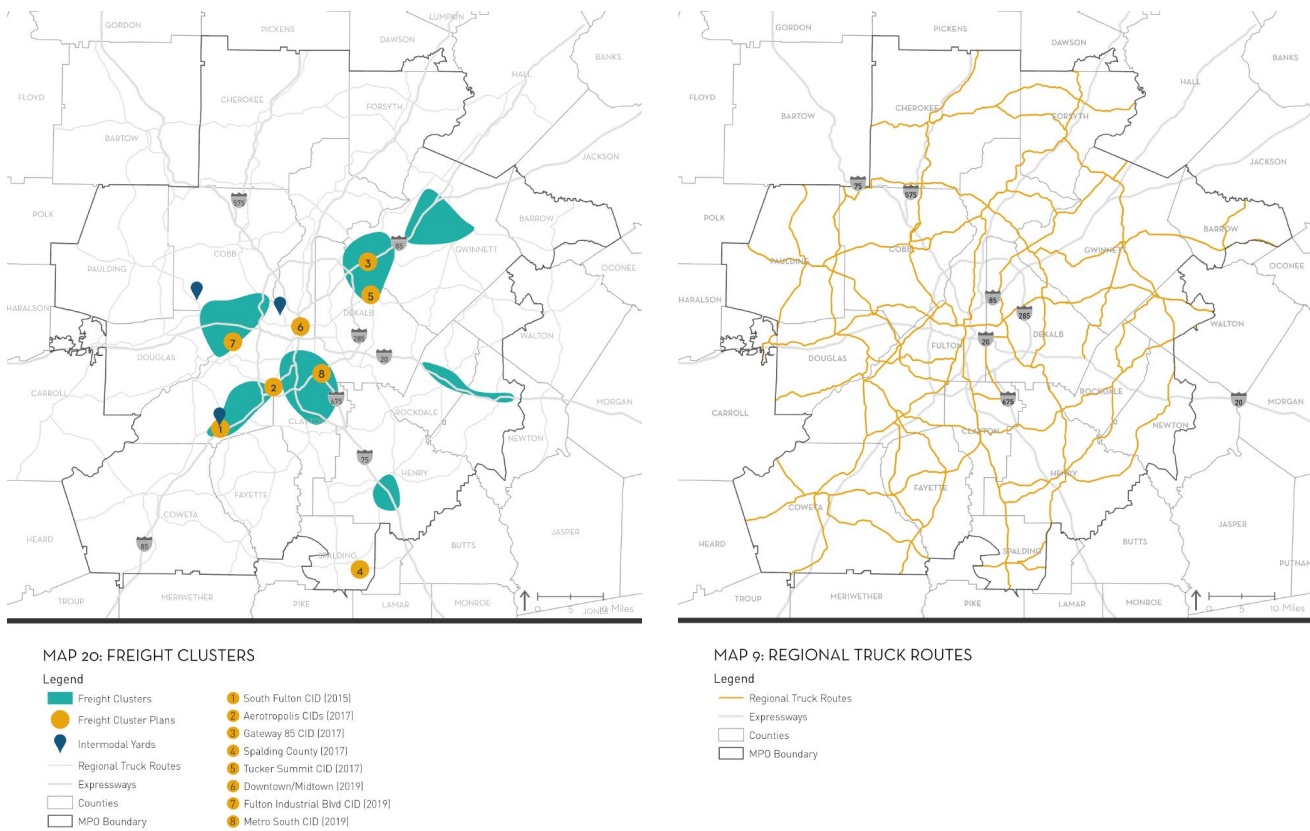
3.3.1 The ARC Regional Transportation Plan (RTP) (2023)

The ARC RTP is a comprehensive roadmap designed to meet the transportation needs of the Atlanta region up to 2050. The freight clusters truck routes addressed in the RTP are shown in Figure 3-8. It aligns with the overarching vision of "Winning the Future," emphasizing world-class infrastructure, a competitive economy, and the development of healthy, livable communities as its core pillars. The plan lays out six primary objectives, including establishing the region as an innovation hub, cultivating a highly skilled workforce, creating a sustainable transportation network, securing a reliable water supply, fostering vibrant urban centers, and promoting a high quality of life that encompasses health and the arts. These objectives are underpinned by a strong focus on adaptability, resilience, and equity.

The RTP employs an array of performance measures to assess transportation network performance, showing that recommended investments lead to increased transit ridership and positive trends in walking, cycling, and transit use. While some metrics related to personal vehicle travel time and congestion costs may not align with desired trends in a rapidly growing region like Atlanta, the plan recognizes the need for strategic adaptability. It embraces scenario planning to anticipate the impacts of disruptive technologies, such as autonomous vehicles and ride-hailing services, and uses equity models to address disparities in project impacts. Furthermore, the RTP emphasizes transportation technology policies aimed at issues like data sharing, infrastructure planning, mobility service management, environmental considerations, workforce development, and equitable access,

with the goal of steering technological advancements toward positive outcomes. Ultimately, the RTP serves as a compass, navigating through uncertainties and steering transportation policy in a direction that aligns with the holistic vision of "Winning the Future."

Figure 3-8: ARC Regional Transportation Plan - Freight Clusters and Truck Routes



Relevance to the Stonecrest Freight Cluster

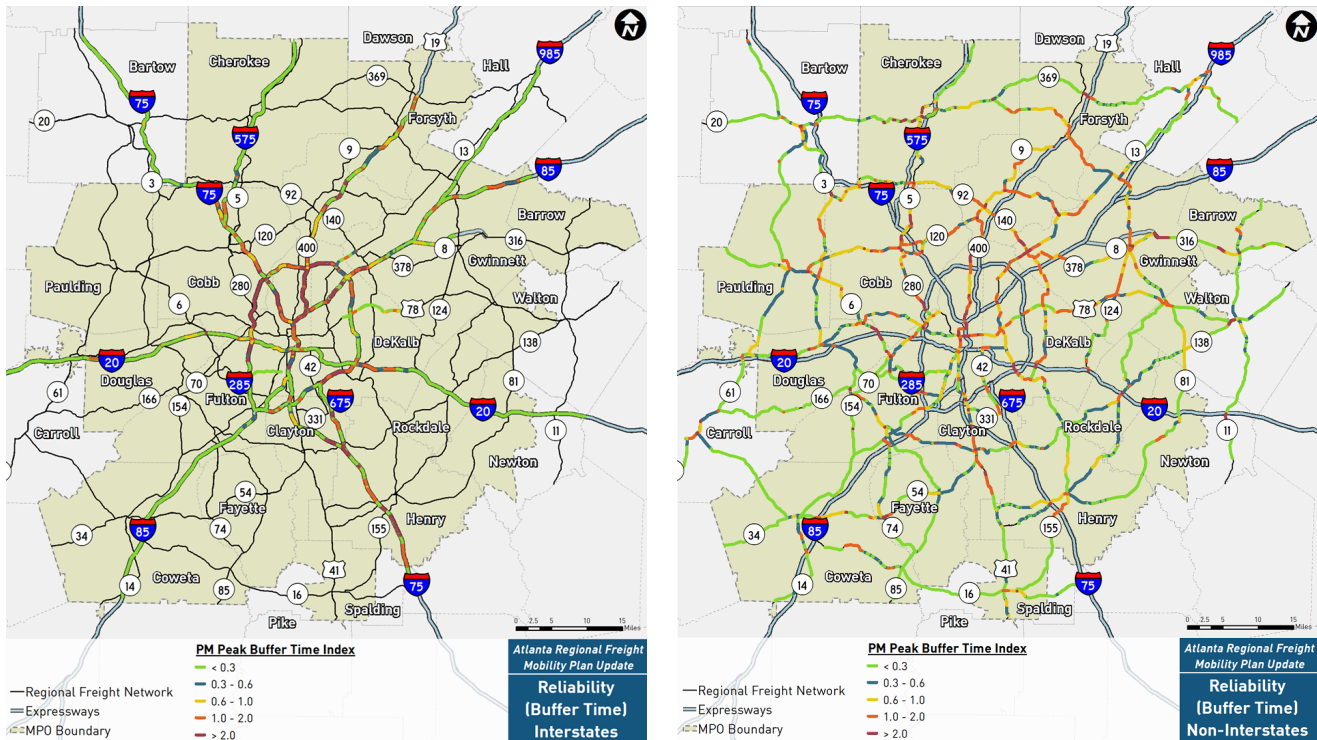
- **Interconnected Transportation Systems:** The RTP underscores the importance of a comprehensive transport network, aligning with the need for efficient freight movement in the Stonecrest Freight Cluster.
- **Performance Metrics:** The RTP's use of performance metrics informs the assessment of logistics improvements' effectiveness in Stonecrest, ensuring efficiency and sustainability.
- **Emerging Technologies:** Acknowledging rapid technological advancements, the RTP highlights the relevance of considering innovations like autonomous delivery vehicles for Stonecrest logistics.
- **Equity and Vulnerable Populations:** The RTP's equity focus helps the Stonecrest plan address community access and equity in the context of freight operations.
- **Scenario Planning:** The RTP's scenario planning approach aids the Stonecrest plan in preparing for various freight-related future scenarios, fostering adaptability.

3.3.2 Atlanta Regional Freight Mobility Plan Update (2016)

The Atlanta Regional Freight Mobility Plan Update (ARFMPU) is a comprehensive study that addresses the challenges and opportunities associated with the movement and distribution of freight in the Atlanta region. The study recognizes Atlanta's pivotal role as a major hub, facilitating the transportation of goods to and from

the fast-growing Port of Savannah and various markets across the Southeastern United States. It anticipates a substantial 56 percent increase in freight traffic by 2040 and identifies key global logistics trends influencing the region. The plan aims to enhance infrastructure, assess existing conditions, and update policies to optimize the performance of the freight network. It defines a strategic path forward for project investments and initiatives, recognizing the importance of fostering a responsive and efficient freight system.

Figure 3-9: Atlanta Regional Freight Mobility Plan Update - Reliability (Buffer Time)



Relevance to the Stonecrest Freight Cluster

- **Traffic Growth Alignment:** The Atlanta region's projected 56 percent increase in freight traffic aligns with Stonecrest's objectives to establish a robust freight cluster, indicating the region's potential as a significant transportation node.
- **Infrastructure Development:** Stonecrest can draw insights from the Atlanta plan's prioritization of infrastructure projects to enhance its freight cluster's efficiency, particularly in cases where traffic congestion and reliability are concerns.
- **Global Trends:** Consideration of global trends like e-commerce, oil and gas production, and export markets can inform Stonecrest's approach to developing its freight cluster to stay competitive and responsive to changing market dynamics.
- **Regional Collaboration:** Stonecrest can explore opportunities for collaboration with neighboring regions and states, as highlighted in the Atlanta plan's emphasis on trade with neighboring states, fostering partnerships, and developing strategic initiatives.
- **Sustainability and Technology:** Stonecrest can adopt sustainability measures and emerging technologies suggested in the Atlanta plan, such as alternative fuels and autonomous vehicle technologies, to enhance the sustainability and efficiency of its freight cluster operations.

An update to the Atlanta Regional Freight Mobility Plan is currently underway and is expected to be completed in 2024¹.

3.3.3 Community & Environmental Impact Scan & Assessment (2007-08)

The Atlanta Regional Freight Mobility Plan: Community Impact Technical Report is a comprehensive analysis of the impacts of freight movement on communities and the environment in the Atlanta region. The report focuses on five case study areas and provides an assessment of current conditions, future impacts, and suggested mitigation practices. It highlights the challenges faced by the freight industry, including issues related to infrastructure, noise, air quality, traffic, safety, and land use. The report also emphasizes the importance of balancing the needs of the freight industry with community goals and offers a range of best practices and strategies for mitigating the impacts of freight facilities and operations. This report serves as a valuable resource for the literature review section of the Stonecrest Freight Cluster Plan, providing insights into the potential impacts and mitigation measures relevant to the planning and development of freight infrastructure in the Atlanta region.

Relevance to the Stonecrest Freight Cluster

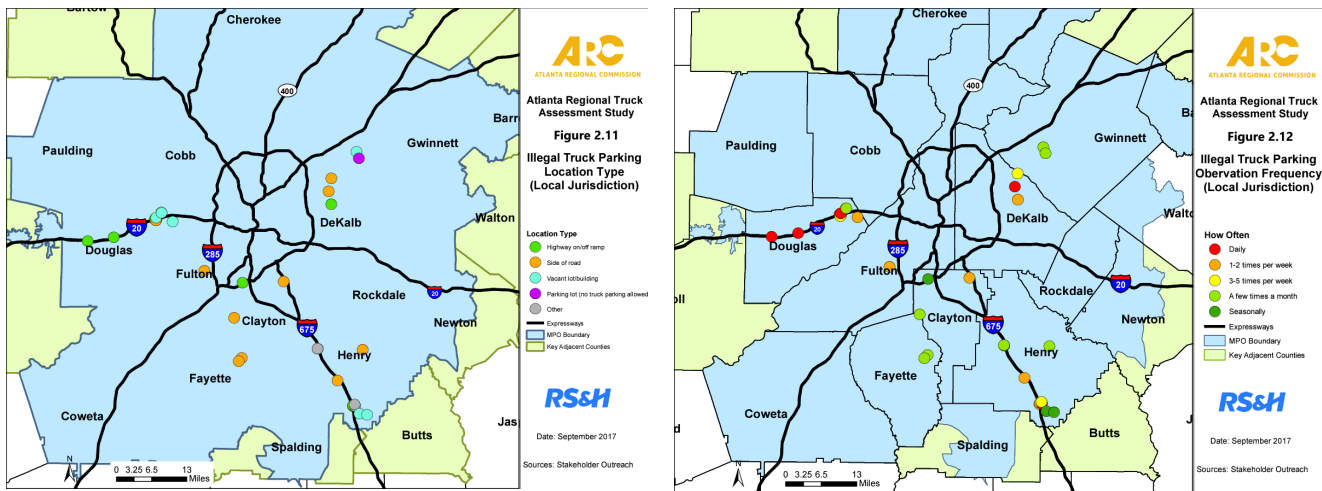
- **Community Health Impact Analysis:** The report delves into the intricate ways freight movement influences community health, providing valuable insights directly applicable to Stonecrest's Freight Cluster plan as it seeks to understand and manage potential health-related consequences within the local community.
- **Environmental Justice Indicators for Assessment:** Stonecrest can use the comprehensive criteria established in the report to systematically assess and address environmental justice concerns, ensuring that its Freight Cluster plan maintains fairness and equity in its impacts on different population groups.
- **Critical Land Use Considerations:** The report underscores the critical importance of land use planning to prevent potential conflicts between residential and industrial zones, offering a pertinent lesson for Stonecrest as it charts the course for its Freight Cluster plan and strives to strike a harmonious balance between these land uses.
- **Environmental Impact Awareness:** The report's in-depth examination of air quality, habitat disruption, and water pollution caused by freight operations provides Stonecrest with valuable awareness to make informed decisions regarding the environmental implications of its Freight Cluster plan.
- **Mitigation Strategy Insights:** By presenting an array of mitigation strategies to address adverse effects, the report equips Stonecrest with a toolkit of potential measures that can be tailored to mitigate negative impacts, thereby contributing to the creation of a more sustainable and community-friendly freight infrastructure.
- **Economic Implications Examination:** The report's analysis of economic consequences, including healthcare costs and productivity, offers Stonecrest a comprehensive view of the potential economic impacts associated with its Freight Cluster plan, assisting in a more holistic evaluation of the plan's overall implications.

¹ 2024 Atlanta Regional Freight Mobility Plan <https://atlantaregional.org/transportation-mobility/freight/2024-atlanta-regional-freight-mobility-plan/>

3.3.4 Atlanta Regional Truck Parking Assessment Study (2018)

The Atlanta Regional Truck Parking Assessment Study (ARTPAS), conducted in collaboration with the GDOT and the regional Freight Advisory Task Force (FATF), addresses the formidable challenge of secure and authorized truck parking within the Atlanta region. The study serves as a response to the escalating need for efficient truck parking solutions, primarily driven by the burgeoning freight and logistics activities in the area. It offers a comprehensive analysis of the existing truck parking landscape, highlighting substantial deficits, especially in urban counties (location and frequency of illegal truck parking is shown in Figure 3-10). The study advocates for a multi-pronged approach, encompassing strategies such as adding and expanding truck parking supply through future Comprehensive Transportation Plans (CTPs) and Freight Cluster Plans, developing truck parking policies, fostering partnerships, improving information sharing, and staying attuned to evolving freight technologies. These findings and recommendations collectively form a roadmap for addressing the truck parking challenges that plague the region.

Figure 3-10: Illegal Truck Parking - Location and Frequency



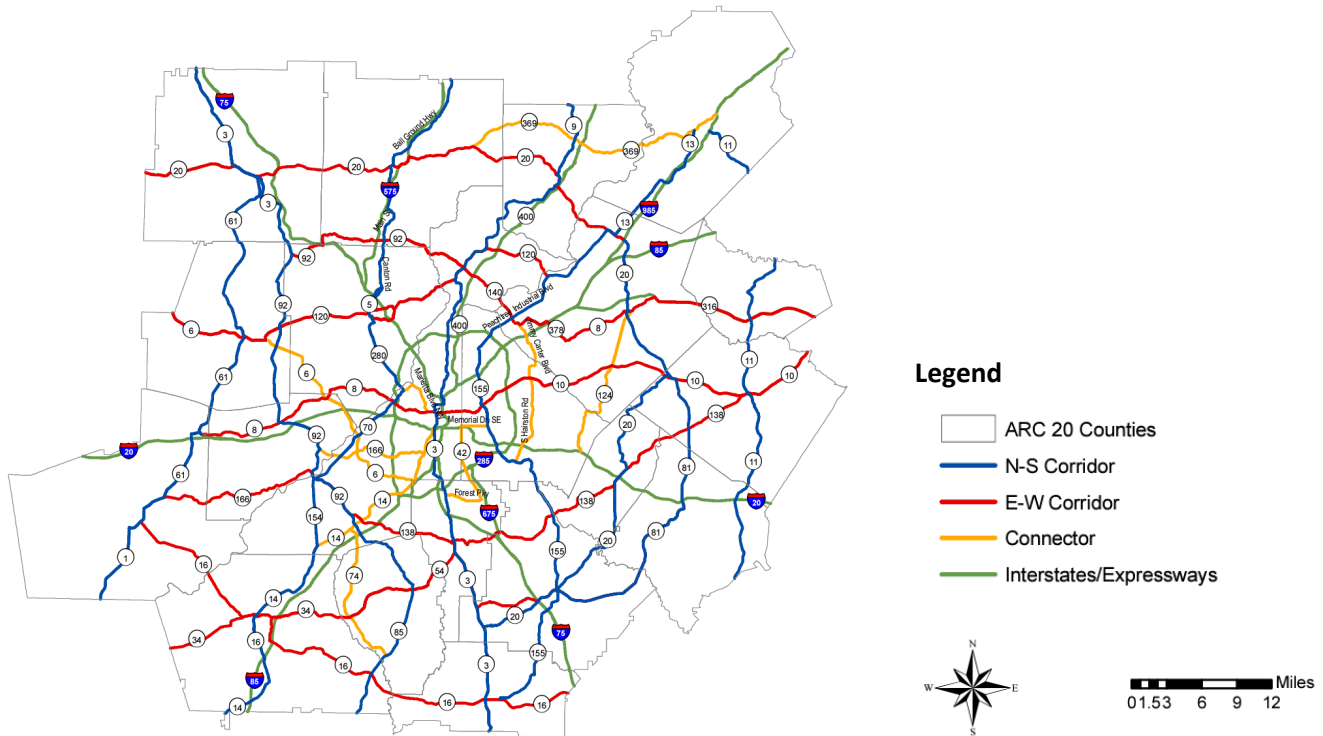
Relevance to the Stonecrest Freight Cluster

- **Truck Parking Challenges:** The study's findings highlight the pressing issue of secure and authorized truck parking, a challenge that aligns with Stonecrest's objectives to establish a robust freight cluster.
- **Deficits in Urban Areas:** The study identifies significant deficits in urban counties and particularly in I-20 East corridor, echoing the potential truck parking challenges that Stonecrest may face as it develops its freight cluster in urban settings.
- **Multi-Pronged Approach:** The recommended strategies, including the expansion of truck parking supply, development of policies, and fostering partnerships, offer a comprehensive framework that Stonecrest can adapt to address its specific truck parking needs.
- **Efficiency Enhancement:** By adopting similar measures, Stonecrest can enhance the efficiency of its freight cluster operations, ensuring that freight movements are smooth and uninterrupted.
- **Sustainable Transportation:** Implementing the study's recommendations aligns with Stonecrest's commitment to sustainable transportation practices, as efficient truck parking contributes to reduced congestion and improved traffic flow.

3.3.5 Atlanta Strategic Truck Route Master Plan (2010)

The ASTRoMaP (see Figure 3-11), or Atlanta Strategic Truck Route Master Plan, was developed in collaboration with state and local government bodies, including the Georgia Department of Transportation, to address the critical need for an efficient truck route system that balances the movement of truck traffic with community and environmental considerations. This comprehensive plan aimed to achieve several key objectives: collecting and analyzing data relevant to the suitability of routes, developing a grid system spanning the metropolitan region, identifying best practices for access management, and evaluating projects to enhance the utilization of existing roadways within the designated truck route plan. The plan used outreach programs, data collection, and a systematic project identification process to assess and recommend strategies for improving the truck route network. Key strategies and recommendations included truck-friendly roundabout design, signage practices, addressing at-grade rail crossings, optimizing intersection geometrics, bridge replacement, creating pullouts, enhancing capacity, and implementing grade separation for rail crossings.

Figure 3-11: ASTRoMaP System



Relevance to the Stonecrest Freight Cluster

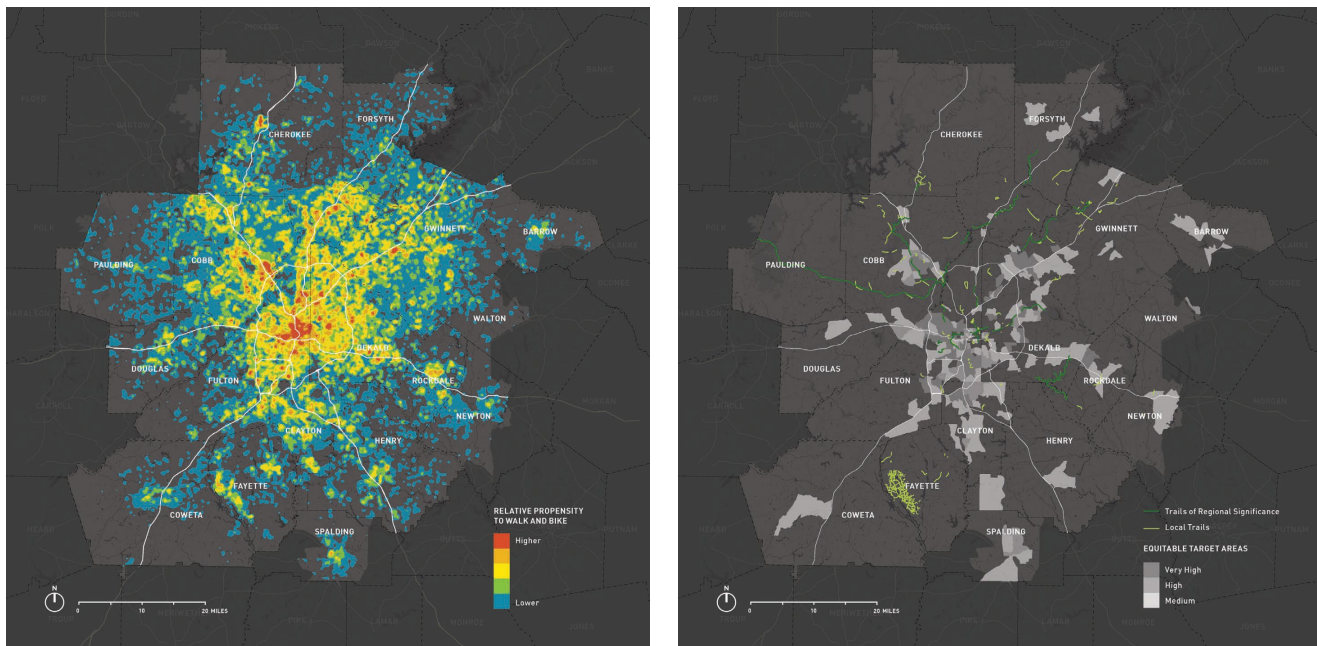
- **Enhanced Truck Routes:** ASTRoMaP's identification of efficient truck routes along I-20 and SR 124 aligns with the Stonecrest Freight Cluster's goal of improving freight movement within the region.
- **Community Impact:** ASTRoMaP's emphasis on minimizing impacts on communities is relevant to the Stonecrest plan, which seeks to balance freight operations with community well-being.
- **Infrastructure Recommendations:** The plan's recommendations regarding intersection geometrics, bridge replacements, and grade separations can inform infrastructure improvements within the SFCSA.

- **Truck-Friendly Design:** ASTRoMaP's focus on truck-friendly roundabout design and signage practices can enhance safety and efficiency within the Stonecrest freight corridors.
- **Cross-Jurisdictional Collaboration:** ASTRoMaP's engagement with multiple jurisdictions can serve as a model for collaborative efforts in the Stonecrest region to address freight transportation needs.

3.3.6 ARC Walk. Bike. Thrive! (2016)

The "Walk. Bike. Thrive!" Bike-Pedestrian Plan by the Atlanta Regional Commission (ARC) is a visionary strategy aimed at enhancing connectivity, health, and competitiveness in the region by promoting walking and bicycling. This comprehensive plan establishes ambitious goals, including creating accessible options for everyone, improving safety, and tying these improvements to the region's quality of life, economic competitiveness, and health. Walking and biking propensity and equitable target areas are shown in Figure 3-12. It also envisions the development of a Regional Trail Network and employs five key strategies to increase walking and biking, including focusing investments on communities, addressing safety and equity issues, working closely with transit providers, adopting a strategy of incremental progress, and leading the development of a regional trail system.

Figure 3-12: ARC Walk, Bike, Thrive! - Walking and Biking Propensity and Equitable Target Areas



The Plan consists of following parts: 1) Part 1: Recommendations, 2) Part 2: Assessment of Regional Travel Patterns & Existing Conditions, 3) Part 3: Public Participation & Priority Topics, 4) Bike to Ride – Supplemental Report, 5) Regional Trail Vision – Supplemental Report, 6) Safe Streets - Supplemental Report, and 7) Regional Workbook for Complete Streets.

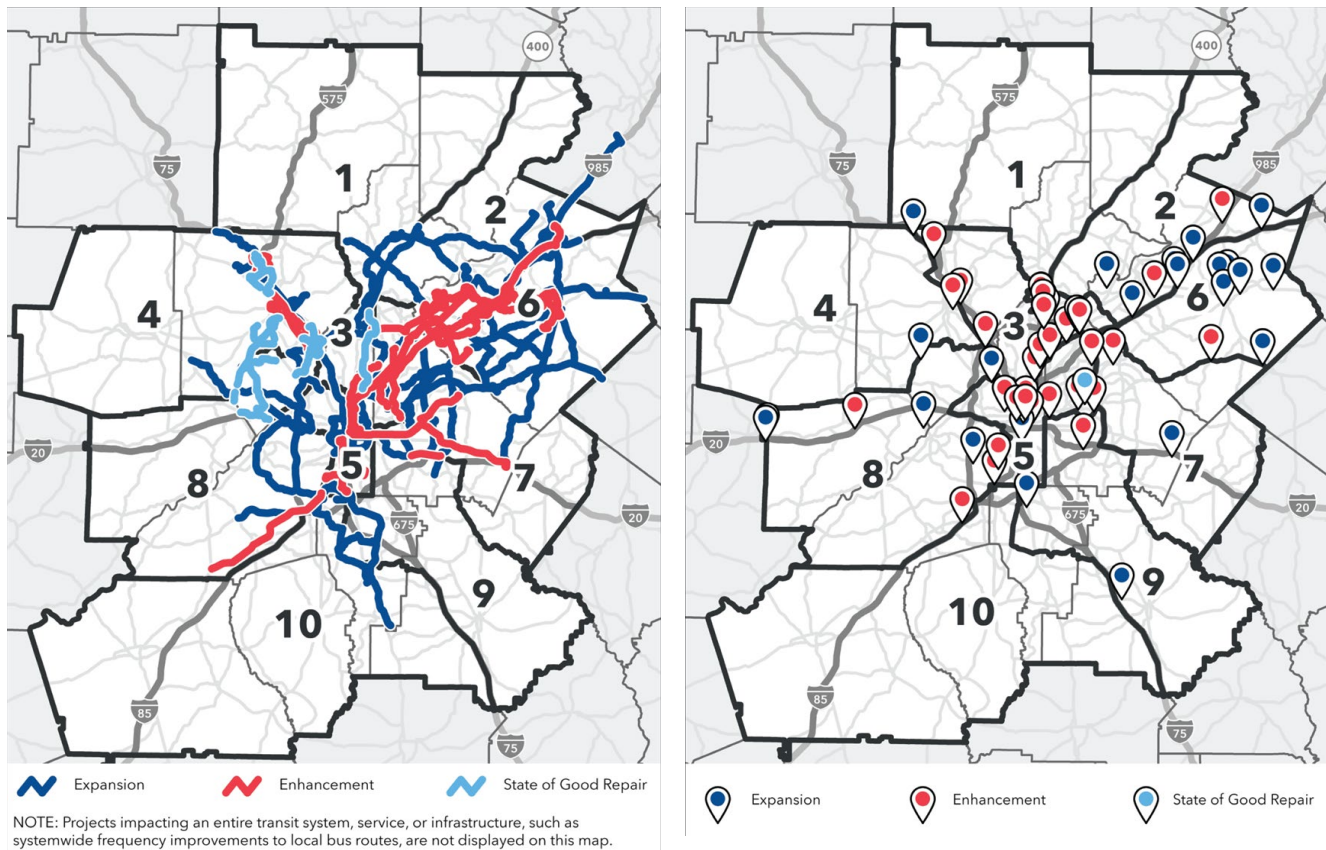
Relevance to the Stonecrest Freight Cluster

- **Enhanced Mobility:** The "Walk. Bike. Thrive!" plan can facilitate improved mobility within the SFCSA by encouraging the development of safe pedestrian and bicycle routes, enabling workers and residents to access the cluster more conveniently.
- **Safety:** Addressing safety concerns, a key aspect of the plan, is vital for the SFCP. Promoting safer walking and biking infrastructure can reduce traffic-related risks in the cluster and enhance overall safety.
- **Economic Competitiveness:** By aligning with the goals of "Walk. Bike. Thrive!" and creating pedestrian-friendly environments, the City can enhance its economic competitiveness by attracting businesses and a skilled workforce drawn to accessible, vibrant communities.
- **Quality of Life:** Implementing elements of the "Walk. Bike. Thrive!" plan can contribute to a higher quality of life for Stonecrest residents and workers by creating walkable neighborhoods and fostering a culture of respect for pedestrians and cyclists.
- **Equity:** Given the focus on equity in the plan, its principles can help ensure that improvements in the SFCSA benefit all community members, addressing disparities in access to transportation and infrastructure.

3.3.7 ATL Regional Transit Plan (2020)

The Atlanta-Region Transit Link Authority (ATL) Regional Transit Plan (ARTP) sets the stage for critical transit investments in the region, representing a significant opportunity to optimize transportation revenues for transit across federal, state, and local levels (see Figure 3-13). The plan encompasses 192 projects across three transit investment types: Expansion Projects introducing new transit elements, Enhancement Projects enhancing existing infrastructure, and State of Good Repair (SGR) Projects for maintenance. The plan emphasizes strategic investments to improve mobility and increase state funding availability for transit projects. Evaluations consider 14 performance criteria, weighted based on the investment type, aiding informed selection and subsequent recommendations for federal and state funding. The plan's broad scope addresses equity, environmental sustainability, innovation, economic development, and land use, ensuring an integrated and efficient regional transit system.

Figure 3-13: ATL Regional Transit Plan 2020 - All Proposed Corridor and Single-Location Projects



The 2022 update on the ATL Regional Transit Plan named as “Fast Forward” is currently underway, that aims to “utilize advanced approaches to regional transit planning, including development of the first-ever comprehensive regional transit analysis”².

Relevance to the Stonecrest Freight Cluster

- **Integrated Transportation Network:** The ARTP emphasizes integration, aligning with the need for seamless connectivity within the Stonecrest Freight Cluster. Among the recommended projects are the Covington Highway Arterial Regional Transit (ART), I-20 East BRT, and Stonecrest Transit Hub, which supports efficient freight movement by enhancing transit options for workforce accessibility and potentially reducing congestion.
- **Economic Growth:** The plan's focus on economic development and land use aligns with the Stonecrest Freight Cluster's objective of fostering economic growth. Improved transit accessibility can attract businesses and positively impact the freight cluster.
- **Environmental Sustainability:** The ARTP's commitment to reducing emissions and promoting sustainable transit solutions resonates with the Stonecrest Freight Cluster's goal of sustainable freight operations, aligning both in environmental objectives.

² Fast Forward, The ATL Regional Transit Plan <https://engaqekh.com/fastforward2022/fastforward2022-home>

- **Innovative Transit Technologies:** The emphasis on innovative transit technologies in the ARTP resonates with the need for advanced technologies within the Stonecrest Freight Cluster, potentially enhancing efficiency and productivity.
- **Enhanced Access to Jobs:** The ARTP's aim to increase job access through transit improvements mirrors the goal of the Stonecrest Freight Cluster to enhance accessibility to employment opportunities within the freight and logistics sector.

3.3.8 Livable Centers Initiative (LCI) Program

The Atlanta Regional Commission's Livable Centers Initiative (LCI) has been a driving force behind the transformation of numerous communities across the Atlanta region since its inception in 2000. With a primary focus on reducing vehicle miles traveled and enhancing air quality, LCI stands as a grant program that actively encourages local jurisdictions to reimagine their neighborhoods and town centers. The overarching goal is to create vibrant, walkable areas that not only offer increased mobility options but also foster healthier lifestyles while providing improved access to jobs and essential services. This program has invested over \$312 million in revitalizing more than 130 communities, contributing to the development of planning studies and critical transportation projects such as sidewalks and intersection improvements. A noteworthy aspect of the LCI program is its commitment to allocating \$600 million for transportation projects through 2050, stemming from completed LCI studies. Funded primarily by federal transportation dollars, these grants cover 80% of the expenses associated with each study or transportation project, with the local recipients matching the remaining 20%.

Relevance to the Stonecrest Freight Cluster

While there may not be specific LCI projects within the Stonecrest Freight Cluster area, nearby LCI initiatives, such as those in Clayton County, the City of Atlanta's West End, or the Town Center Community Improvement District in Cobb County, can serve as valuable examples and sources of inspiration for planning and development strategies within the freight cluster.

- **Transportation Integration:** The LCI program's emphasis on improving transportation options aligns with the need for enhanced transportation infrastructure within the SFCP, facilitating smoother movement of goods and services.
- **Economic Development:** LCI's goal of fostering mixed-income residential neighborhoods and supporting economic development is relevant to the SFCP, as it seeks to boost economic growth within the freight cluster.
- **Community Connectivity:** LCI's focus on promoting community connectivity and walkability resonates with the desire to create a well-connected and accessible freight cluster area in Stonecrest.
- **Public-Private Partnerships:** The Stonecrest Freight Cluster Plan can draw inspiration from LCI's success in fostering public-private partnerships, ensuring the involvement of various stakeholders in the development process.

3.4 Statewide Plans

3.4.1 Georgia Freight Plan (2023)

The 2023 Georgia Freight Plan, aligned with the Bipartisan Infrastructure Law, is a comprehensive evaluation of the state's freight and logistics-related infrastructure assets. This strategic assessment delves into various

demand scenarios, exploring investment opportunities and policy considerations that underpin the success of Georgia's shippers and logistics-driven enterprises. The plan aims to generate positive economic outcomes on a statewide scale while enhancing the safety, efficiency, and reliability of goods transportation within Georgia. It plays a pivotal role in documenting freight planning activities and investments in the state, assessing current and future freight needs, and engaging stakeholders for a holistic approach. By integrating policies and strategies from previous documents, the Georgia Freight Plan identifies and prioritizes investments crucial to the state's economic growth and global competitiveness. It sets specific goals for freight transportation, addressing issues often overlooked in broader statewide planning. As Georgia continues to burgeon as a premier business destination, this plan serves as a cornerstone for maintaining and fortifying the state's economic growth trajectory, with a particular focus on the logistics-enabled industries that are central to Georgia's prosperity.

Relevance to the Stonecrest Freight Cluster

- **Truck Parking Facilities:** The plan identifies 10 truck parking locations with 390 spaces along the I-20 corridor and emphasizes the need for updates and potential partnerships with private entities to accommodate increasing freight volumes.
- **Highway Bottlenecks:** It targets traffic bottlenecks such as that on westbound I-20, specifically from Evans Mill Rd to Panola Rd, affecting supply chains within the SFCSA, advocating for improvements to alleviate congestion.
- **Truck Crash Hotspots:** The plan identifies safety concerns at the Panola Road/I-20 interchange and the areas around Lithonia Industrial Boulevard and Covington Highway, highlighting the importance of safety measures to reduce truck-related accidents.
- **Freight Network Connectivity:** Recognizing the significance of the I-20 corridor connecting the Atlanta region to the Port of Savannah, the plan emphasizes the importance of maintaining smooth freight network connectivity within the Stonecrest Freight Cluster to prevent disruptions.
- **Electric Vehicle Infrastructure:** It acknowledges the role of electric vehicle infrastructure, particularly along I-20, funded by the Bipartisan Infrastructure Law (BIL), in supporting sustainability and electric vehicle adoption within the Stonecrest Freight Cluster.
- **Rail Network Improvements:** The plan underscores the potential benefits of closing gaps in disused or disrepair rail lines within the Stonecrest Freight Cluster to provide new access opportunities for industries and enhance overall network resiliency.

3.4.2 Freight and Logistics Subcommittee Report: Funding Georgia's Infrastructure Future (2020)

The Freight and Logistics Subcommittee Report: Funding Georgia's Infrastructure Future provides crucial insights into the challenges and opportunities facing Georgia's freight and logistics sector. This report outlines the significant impact of the COVID-19 pandemic, underscores workforce development needs, addresses truck parking shortages, and advocates for essential infrastructure improvements. With a set of comprehensive recommendations, the report seeks to enhance rail and highway infrastructure, promote private financing of projects, define criteria for public benefit, and explore innovative revenue streams to support the growth of freight and logistics in the state. These findings and recommendations offer valuable insights for the Stonecrest Freight Cluster Plan, serving as a relevant reference point for the strategic development of freight-related initiatives in the region.

Relevance to the Stonecrest Freight Cluster

- **Infrastructure Development:** The plan focuses on improving roadways, rail infrastructure, and truck parking facilities to support efficient freight movement.
- **Workforce Development:** The plan recommends implementation of training programs and initiatives to address workforce needs in the freight industry, including driver shortages and logistics education.
- **Economic Growth and Industry Expansion:** The plan recommendation suggests developing strategies to attract and support logistics businesses, fostering economic growth within the cluster.
- **Environmental Sustainability:** The plan additionally incorporates sustainable transportation practices and emissions reduction initiatives to promote green logistics solutions within the cluster.

3.4.3 Georgia State Rail Plan (2021)

The Georgia State Freight Plan is a vital roadmap for the state's rail and freight infrastructure, charting a 20-year vision that includes enhancing rail safety, expanding passenger and freight rail services, and ensuring accessibility. The plan acknowledges increased demand for rail services and the need for GDOT-owned rail upgrades, highlighting Georgia's investments in rail infrastructure and emphasizing the benefits of freight rail. It recognizes the pivotal role of rail in supporting key industries, such as agribusiness, automotive, energy, food processing, logistics, and manufacturing. The plan introduces a Rail Service and Investment Program to increase rail modal share, modernize short-line infrastructure, extend the Port of Savannah's reach through inland ports, and promote passenger rail projects. It includes a comprehensive project list and estimated costs, making it a valuable reference for the Stonecrest Freight Cluster Transportation Plan, aligning with the community's transportation and economic development objectives.

Relevance to the Stonecrest Freight Cluster

- **Infrastructure Enhancement:** The Georgia State Freight Plan offers strategies for optimizing rail and freight infrastructure, aligning with Stonecrest's transportation goals.
- **Industry Support:** Recognizing rail's role in supporting key industries, the plan resonates with Stonecrest's economic development objectives, particularly in logistics, manufacturing, and energy sectors.
- **Connectivity Expansion:** The plan's Rail Service and Investment Program introduces initiatives to enhance accessibility, reduce bottlenecks, and expand rail connectivity, directly relevant to Stonecrest's freight cluster.
- **Sustainability and Efficiency:** Emphasizing rail's benefits, including reduced congestion and environmental sustainability, the plan mirrors Stonecrest's vision for a more efficient and eco-friendly transportation system.

3.5 Key National Trends and Drivers

In the context of the SFCP, it is crucial to acknowledge and examine the Key National Trends and Drivers that significantly impact freight cluster operations. These trends encompass a range of dynamic factors that have far-reaching implications:

- **Truck Parking Shortage:** The acute shortage of truck parking availability across the United States poses a pressing challenge for freight cluster operations.

- **Technological Advancements:** Rapid technological advancements, including automation and digitalization, are reshaping logistics and supply chain management, leading to increased efficiency and automation in freight operations.
- **Evolving E-commerce Landscape:** The evolving e-commerce landscape and changing consumer expectations are driving shifts in last-mile delivery strategies, influencing the flow of goods within freight clusters.
- **Sustainability Emphasis:** Sustainability concerns are gaining prominence, with an increasing focus on eco-friendly transportation solutions and emissions reduction targets, impacting freight cluster sustainability practices.
- **Regulatory Changes:** Shifting regulatory frameworks, including alterations in trucking regulations and environmental standards, significantly impact the operational landscape of freight clusters.
- **Multimodal Interaction:** Understanding the multimodal interaction of freight operations, integrating various transportation modes like active transportation, road-based traffic, public transit, and railroad traffic, is vital for optimizing goods' movement within clusters.

The *Stonecrest Freight Cluster: Best Practices Report* will offer a comprehensive analysis that delves deeper into the impact of these national trends and drivers on freight cluster operations. The report will explore not only the key issues but also successful strategies and emerging best practices within the freight industry to optimize operations, enhance sustainability, and ensure regulatory compliance. By assimilating these insights, the Stonecrest Freight Cluster can proactively align its strategies and practices with national trends, ultimately positioning itself as a resilient and adaptive entity within the broader framework of evolving freight transportation dynamics.

4 Roadway and Bridge Characteristics

Chapter 4 examines the critical aspects of roadway and bridge characteristics. Beginning with an analysis of existing and projected travel characteristics, it discusses congestion levels, projected congestion levels, roadway volumes, projected roadway volumes, truck volumes, and projected truck volumes. Understanding commute patterns and mode share characteristics is pivotal in this assessment. Additionally, this chapter highlights planned and programmed roadway improvements. Delving into the roadway profile, it focuses on the number of lanes, functional classification, signalization, ITS components, and pavement conditions. Furthermore, the bridge profile is explored, encompassing area bridge conditions and vertical clearance analysis. This chapter lays the foundation for informed decision-making regarding the region's transportation infrastructure.

4.1 Existing and Projected Travel Characteristics

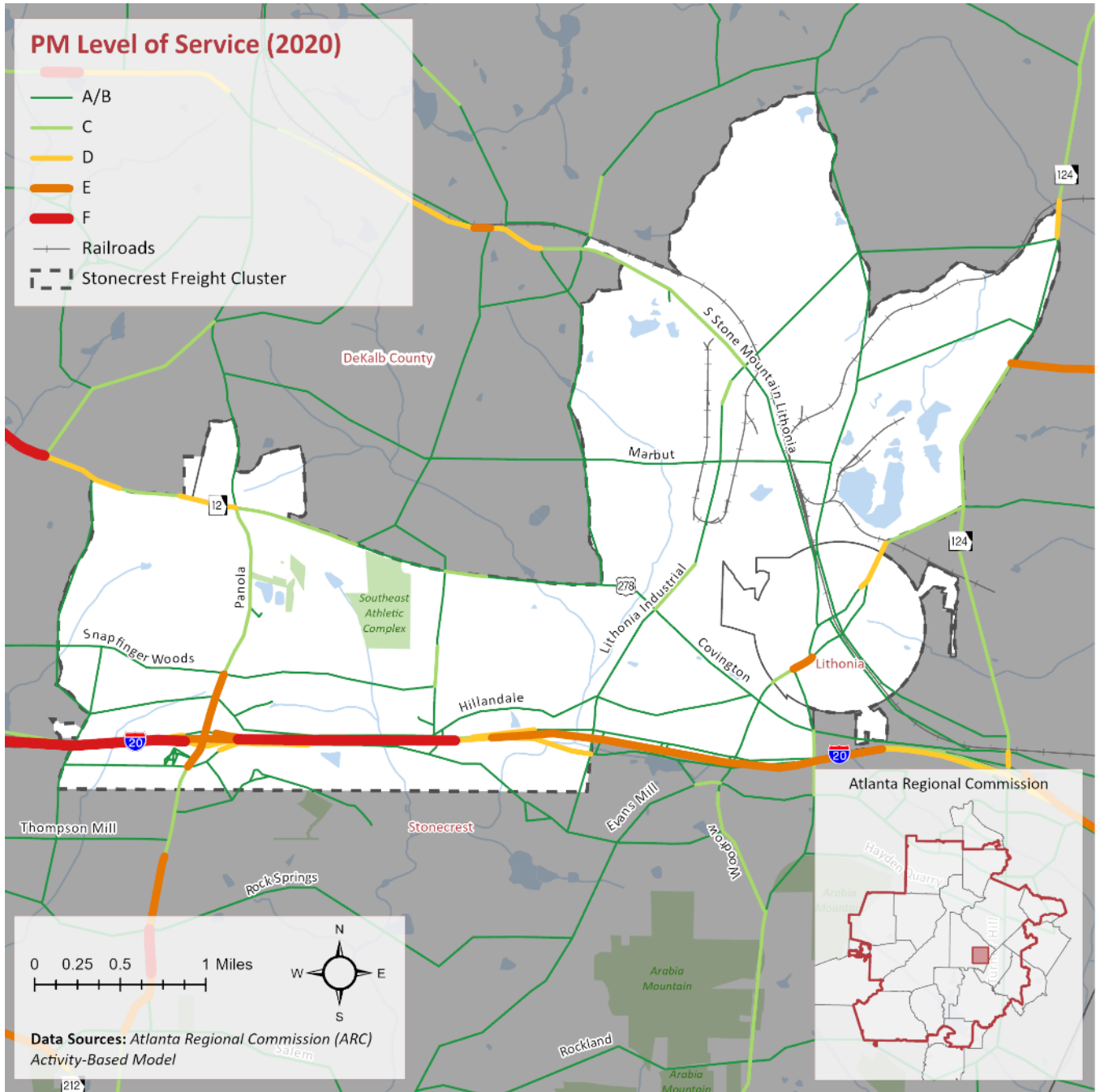
4.1.1 Congestion (Level of Service)

The term “Level of Service” or LOS, as defined by the Highway Capacity Manual (HCM)³, is a descriptive categorization of the quality or performance of a particular service, system, or facility based on factors such as travel time, speed, congestion, safety, and comfort. LOS generally ranges from letter grade A to F, where A represents the highest LOS (low congestion, high speeds, and short travel times) and F represents the lowest LOS (highly congested, has low speeds, and long travel times). Generally, a LOS of A or B is considered good, C is considered fair, and D or lower is considered poor.

The latest available Levels of Service (LOS) have been obtained from the ARC’s Activity Based Model (ABM) calibrated for the year 2020 and have been adopted as the base year for analysis. Figure 4-1 represents the 2020 LOS based on volume-to-capacity within the Stonecrest Freight Cluster study area during the afternoon peak period.

³ *Transportation Research Board (2010). Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 6th Edition. The National Academies of Sciences, Engineering & Medicine: Washington, DC. Chapter 9, Page 13.*

Figure 4-1: Existing PM Levels of Service (2020)



Currently, the interstate I-20 exhibits the highest levels of congestion within the study area. Specifically, LOS F is observed around the Panola Road interchange, and LOS E is recorded at the intersections of I-20 with Lithonia Industrial Boulevard, Evans Mill Road, and SR 124 respectively, during the peak afternoon hours (see Figure 4-2 and Figure 4-3).

Figure 4-2: Vehicles Backing up along Panola Road between I-20 and Snapfinger Woods Drive



Figure 4-3: Trucks Waiting at Intersection Result in Longer Queues



The Panola Road interchange with interstate I-20 experiences the most significant bottleneck, as both eastbound ramps at I-20 Entrance/Exit 71 are graded as LOS F. Moreover, the sections of Panola Road that lead to and away from the interchange have a LOS E, possibly attributable to the concentration of businesses along this route, particularly in close proximity to the interchange. Additionally, the section of Panola Road north of the interchange features a high density of traffic signals, leading to reduced traffic speed and resulting in congestion.

Despite satisfactory LOS on most other on-interstate roadways, particularly graded as LOS A/B or C, the section of Covington Highway located northwest of the study area (west of Panola Road) experiences congestion with a

LOS of D within the study area boundary and degrades further to LOS F immediately outside the study area during peak afternoon traffic. Furthermore, the sections of Main Street in Lithonia between Max Cleland Boulevard and Klondike Road (LOS E) and Rock Chapel Road between Railroad Street and Max Cleland Boulevard (LOS D) exhibit poor traffic flow during afternoon peak hours, likely attributed to the higher number of intersections in close succession along these segments.

4.1.2 Projected Levels of Congestion

The projected levels of traffic congestion were derived for the roads based on the ARC's Activity Based Model, considering 2050 as the horizon year. Figure 4-4 displays the projected level of service of the links within the study area in the year 2050. All the major corridors that provide critical access to both general traffic and commercial vehicles are projected to have poor traffic flow, low travel speed, heavy congestion, and longer travel times.

As depicted in Figure 4-1 and Figure 4-4, the anticipated levels of service for the roadways within the designated study area display a slight deterioration from the baseline year of 2020 to the projected year of 2050.

Figure 4-4: Projected PM Levels of Service (2050)

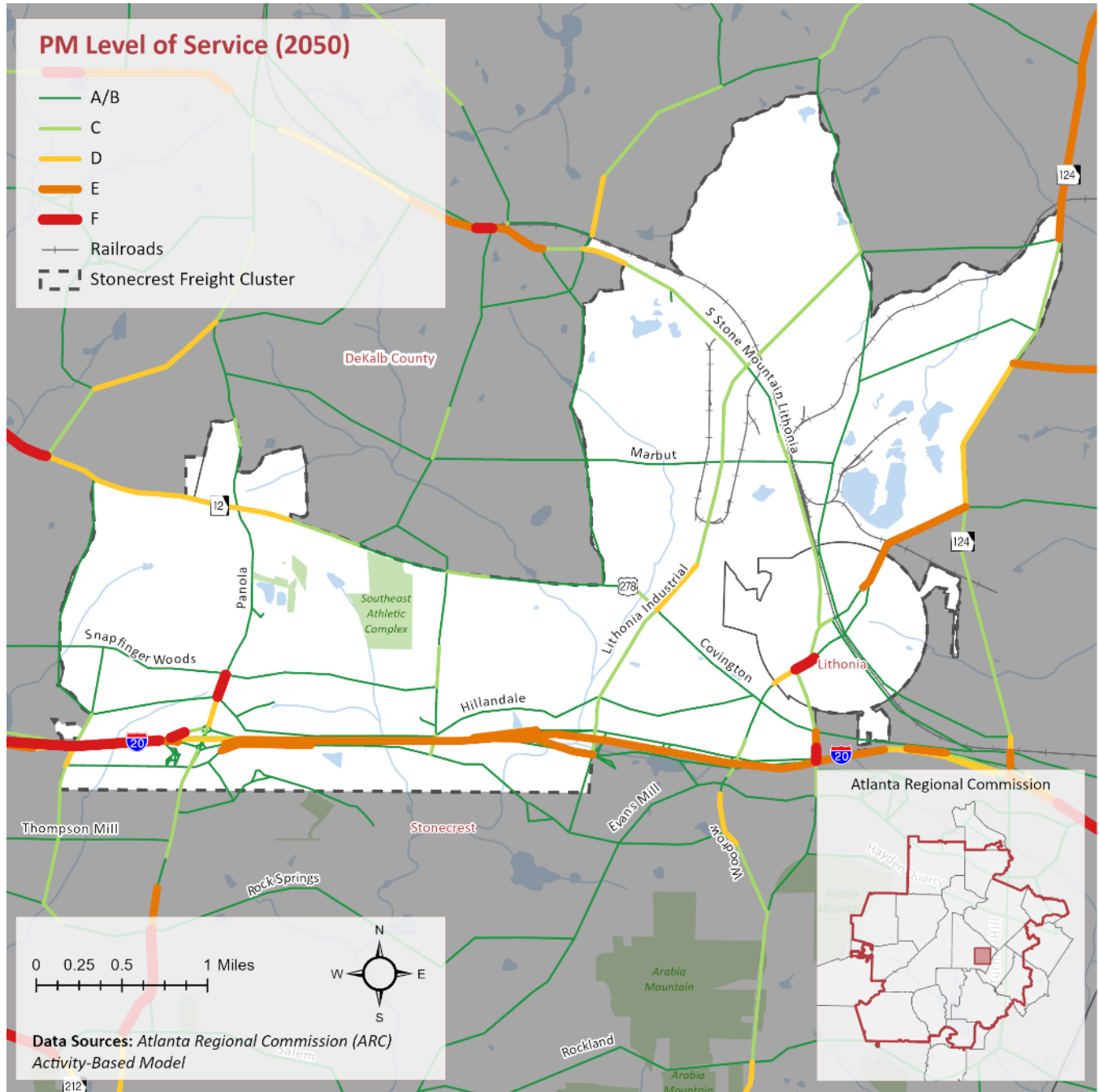


Table 4-1 presents comparisons of PM LOS for major corridors in 2020 and 2050. In spite of the planned expansion of the I-20 from its current six lanes in each direction to eight lanes plus an additional express lane in each direction, the congestion levels on I-20 are projected to remain unaltered, with a Level of Service (LOS) rating of F observed to the West of the Panola Road interchange, and an LOS rating of E noted towards the East of this interchange. Furthermore, critical congestion points are projected at I-20 Westbound Entrance 71, Eastbound Entrance 71, Westbound Entrance 74, and Eastbound Exit 74, underscoring the potential bottlenecks leading to elevated levels of congestion within the interstate corridor. The Panola Road interchange is being

reconstructed (GDOT Project ID: 0002868) as a Diverging Diamond Interchange with the aim of improving the performance of the corridor.

Table 4-1: PM Level of Service Comparison for Major Corridors (2020 and 2050)

Corridors	Sections	LOS 2020*	LOS 2050*
I-20	West of Panola Road	F	F
	Between Panola Road and Lithonia Industrial Boulevard	F	E
	Between Lithonia Industrial Boulevard and Evans Mill Road	E	E
	East of Evans Mill Road	E	E
Panola Road	South of I-20	E	C
	Between I-20 and Snapfinger Woods Drive	E	F
	Between Snapfinger Woods Drive and Covington Highway	C	A/B
	North of Covington Highway	A/B	C
Covington Highway	West of Panola Road	D	D
	Between Panola Road and Lithonia Industrial Blvd.	C	D
	East of Lithonia Industrial Boulevard	A/B	A/B
SR-124	Between Rock Chapel Road and Pleasant Hill Road	C	D
	Between Pleasant Hill Road and Lithonia Industrial Boulevard	A/B	A/B
Lithonia Industrial Boulevard	Between I-20 and Covington Highway	A/B	C
	Between Covington Highway and Marbut Road	C	D
	Between Marbut Road and South Stone Mountain Lithonia Road	C	C
	Between South Stone Mountain Lithonia Road and Roger Lake Road	A/B	C
South Stone Mountain Lithonia Road	West of Lithonia Industrial Boulevard	C	D
	Between Lithonia Industrial Boulevard and Evans Mill Road	A/B	C
Evans Mill Road / Main Street	Between I-20 and Covington Highway	A/B	C
	Between Covington Highway and Klondike Road	C	D
	Between Klondike Road and Center Street/Conyers Street	E	F
Snapfinger Woods Drive	West of Panola Road	A/B	A/B
	Between Panola Road and DeKalb Medical Parkway	A/B	A/B
Rock Chapel Road	Between Max Cleland Boulevard to SR 124	D	E
Marbut Road	Between Phillips Road to Rogers Lake Road	A/B	A/B
	Between Panola Road and DeKalb Medical Parkway	A/B	A/B

Corridors	Sections	LOS 2020*	LOS 2050*
Hillandale Drive / Chupp Road	Between DeKalb Medical Parkway and Lithonia Industrial Boulevard	A/B	A/B
	Between Lithonia Industrial Boulevard and Covington Highway	A/B	A/B
DeKalb Medical Parkway	Between Hillandale Drive and Covington Highway	C	C
Klondike Road	Between I-20 and Main Street	C	F
Rogers Lake Road	Between Center Street to Swift Creek	A/B	A/B

*Data Sources: *Atlanta Regional Commissions (ARC) Activity Based Model*

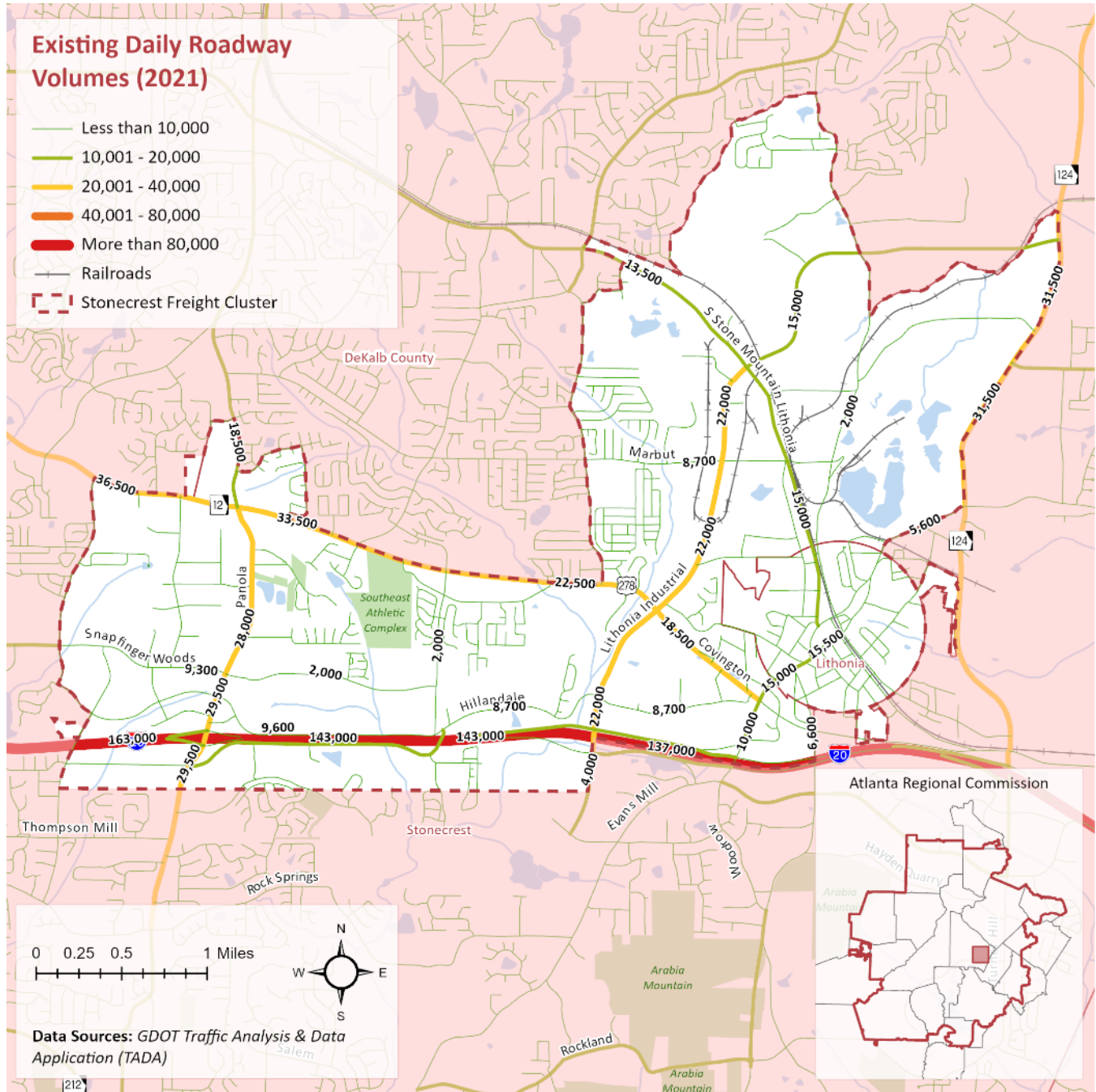
Within the broader framework, key arterial routes such as SR 124 and Rock Chapel Road are projected to exhibit subpar performance levels, with a considerable proportion of segments indicating an LOS rating of D or E. Likewise, several prominent corridors including Panola Road, South Stone Mountain Lithonia Road, Lithonia Industrial Boulevard, and Evans Mill Road, though maintaining an LOS of A/B or C in most segments, are expected to experience traffic flow challenges with an LOS rating of D or E in select segments. Conversely, roadways such as Snapfinger Woods Drive, Hillandale Drive, and Marbut Road demonstrate an acceptable Levels of Service ranging from A/B to C in the year 2050 according to the Atlanta Regional Commission (ARC) Activity-Based Model.

This substantial decline in roadway performance foresees challenges in accommodating future freight movement demand through these corridors. Therefore, it becomes imperative to enhance the capacity of these roadway segments to ensure sustainable and efficient transportation operations in the face of projected growth. It is noteworthy that segments of roadways such as Panola Road, Covington Highway, and SR 124 are predicted to exhibit even poorer LOS ratings immediately beyond the boundaries of the study area. This phenomenon carries implications for traffic flow within the study area and on overall traffic conditions.

4.1.3 Roadway Volumes

The GDOT’s Office of Transportation Data (OTD) collects traffic data using continuous counters, short-term counters, or portable and continuous weigh-in-motion counters. The latest roadway volumes have been adopted from this Traffic Analysis & Data Application (TADA) Traffic Counts data for the base year 2021. The existing (2021) roadway volumes within the study area are displayed in the Figure 4-5.

Figure 4-5: Existing Daily Roadway Volumes



As anticipated, I-20 exhibits the highest traffic counts within the study area boundary, with an Average Annual Daily Traffic (AADT) ranging from 137,000 to 163,000. Notably, the segment of I-20 located west of the Panola Road interchange experiences even higher roadway volumes. This heightened traffic demand is well-founded, considering that I-20 serves as a vital conduit linking the Atlanta Metropolitan region to other major cities in Georgia and beyond.

Following I-20, Covington Highway has the second highest roadway volume, with an AADT of 36,500, followed by SR 124 with an AADT of 31,600. Subsequently, Panola Road registers an AADT of 29,400, while Lithonia

Industrial Boulevard, Old Hillandale Drive, Evans Mill Road, South Stone Mountain Lithonia Road, and Fairington Road experience notable daily traffic volumes of 21,900, 19,308, 15,400, 15,100, and 14,000, respectively. These roadways stand out as key arteries accommodating significant traffic flows. In particular, Lithonia Industrial Boulevard, South Stone Mountain Lithonia Road, SR 124, and Snapfinger Woods Drive play pivotal roles in serving the industrial areas situated within the region.

On the other hand, most other local roads exhibit daily traffic volumes of less than 10,000. This variance in traffic volumes across roadways necessitates tailored planning and management strategies to optimize the transportation network's efficiency and accommodate the diverse mobility needs within the study area.

4.1.4 Projected Roadway Volumes

Projected truck volumes within the Study Area, offer insights into future transportation dynamics. Derived from the ARC's ABM, anticipated roadway volumes for 2050 (see Figure 4-6) reveal that over the next three decades spanning 2021 to 2050, major corridors like interstate I-20, Panola Road, SR 124, Lithonia Industrial Boulevard, Evans Mill Road, and Rock Chapel Road are projected for substantial increases in traffic volume. However, a different trajectory is envisaged for the Covington Highway, where a modest decline is anticipated, and collectors such as Marbut Road, Hillandale Drive, and Chupp Road, which are projected to experience significant reductions. Table 4-2 illustrates the comparative traffic volume shifts along major roadway corridors within the study area between 2021 and 2050.

The following discussion outlines changes in major roadway corridor volumes, from the 2021 traffic count to the projected figures for 2050.

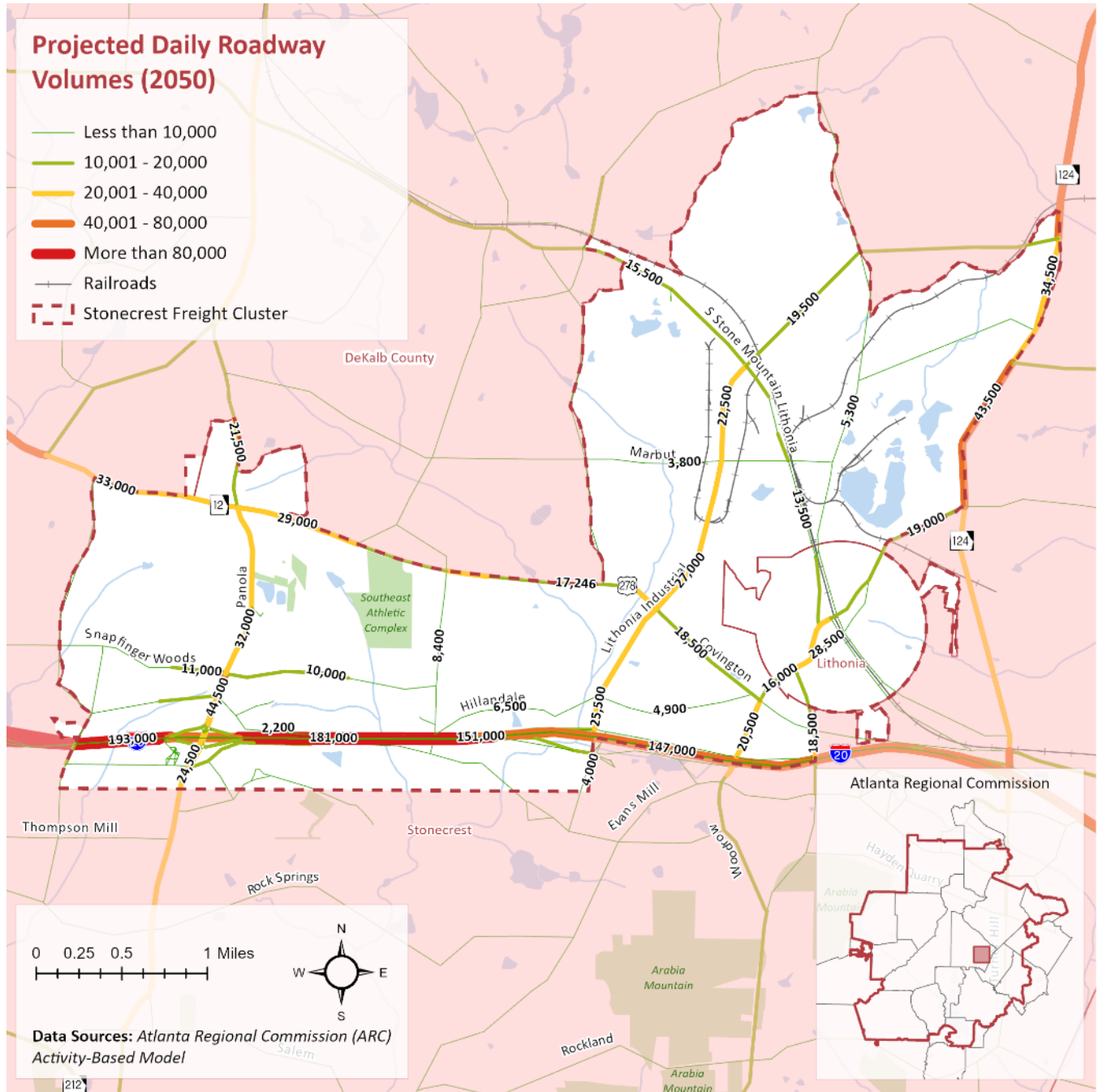
I-20: Anticipated daily traffic volumes near the Panola Road Interchange are expected to range from 147,000 to 193,000 vehicles in 2050, reflecting a roughly 20-25% increase compared to the 2021 traffic count, particularly in the segments east of Lithonia Industrial Boulevard. To accommodate this increased roadway demand, future plans encompass a two-lane expansion from the current six lanes in each direction, supplemented by the incorporation of an express lane. Despite this expansion, it is anticipated that these vehicles will encounter notable congestion along the corridor during peak hours, as discussed in the earlier section.

Panola Road: A substantial rise in traffic volumes is foreseen along Panola Road, notably between I-20 and Snapfinger Woods Drive, with an estimated addition of around 15,000 vehicles in daily traffic over the next three decades—a 50% increase relative to current traffic counts. Conversely, traffic south of the I-20 interchange is predicted to experience a substantial 17% decrease.

Covington Highway: A slight reduction in traffic volumes is projected for Covington Highway between 2021 and 2050. Daily traffic volumes west of Lithonia Industrial Boulevard are expected to range from 23,000 to 33,000, marking a 15% decrease from the average daily traffic in 2021. Likewise, traffic east of Lithonia Industrial Boulevard is expected to decrease by approximately 18%, equating to about 18,500 daily vehicles in 2050. These reductions in roadway volumes are likely due to the increased capacity on interstate I-20.

SR-124: Average daily traffic along SR 124 in between Rock Chapel Road and Lithonia Industrial Boulevard is expected to increase significantly by 38%, rising from an average daily traffic of 31,500 in 2021 to 43,500 by 2050.

Figure 4-6: Projected Daily Roadway Volumes (2050)



Lithonia Industrial Boulevard: Traffic projections point to an overall traffic surge along Lithonia Industrial Boulevard. Particularly within the section between Covington Highway and Marbut Road, traffic is predicted to increase by up to 23%, reflecting an increase from average daily traffic of 22,000 vehicles in 2021 to approximately 27,000 vehicles in 2050.

South Stone Mountain Lithonia Road: To the west of Lithonia Industrial Boulevard, a projected 15% traffic increase is estimated, indicating a rise in average daily roadway volume from 13,500 to 15,500 vehicles. In

contrast, the stretch east of Lithonia Industrial Boulevard up to Evans Mill Road is expected to experience a 10% decline in average daily traffic, lowering from 15,000 to 13,500 vehicles.

Evans Mill Road/Main Street: Traffic volume between I-20 and Covington Highway is expected to double from 10,000 in 2021 to 20,500 in 2050. Similarly, the traffic volume between Covington highway and Klondike Road is expected to modestly increase by 7% from 2021 to 2050. The section of Main Street adjacent to Evans Mill Road, in between Klondike Road and Center Street/Conyers Street, is expected to almost double the traffic volume to 28,500 vehicles per day in 2050.

Snapfinger Woods Drive: A substantial surge of around 400% is anticipated between Panola Road and DeKalb Medical Parkway, projecting an estimated daily traffic volume of approximately 10,000 vehicles by 2050. This contrasts significantly with the present average daily traffic count of 2,000 vehicles.

Rock Chapel Road: A substantial transformation is projected for the segment between Max Cleland Boulevard, with average daily traffic volume anticipated to leap by 245%, escalating from 5,600 in 2021 to 19,000 in 2050.

Marbut Road: Between Phillips Road and Rogers Lake Road, Marbut Road is expected to observe a substantial 56% decrease in average roadway volumes, plummeting from 8,700 in 2021 to 3,800 in 2050.

Hillendale Drive/Chupp Road: According to the ARC’s Activity Based Model, Hillendale Drive's segment between Panola Road and DeKalb Medical Parkway is expected to undergo a 77% decrease in traffic, declining from 9,600 in 2021 to 2,200 in 2050. Between DeKalb Medical Parkway and Lithonia Industrial Boulevard, a 25% decrease is predicted from 8,700 in 2021 to 6,500 in 2050. Chupp Road, stretching from Lithonia Industrial Boulevard to Covington Highway, is projected to experience a 44% drop in traffic, declining from 8,700 in 2021 to 4,900 in 2050. As with the Covington Highway, the decline in traffic in these sections could be due to the planned capacity increase of interstate I-20. However, as these links are minor roadway segments, the counterintuitive decline in traffic volume could be a result of inaccuracies in the travel demand model itself. Therefore, consideration needs to be taken while making decisions based exclusively on these numbers.

DeKalb Medical Parkway: The average daily traffic volume along the DeKalb Medical Parkway connecting Hillendale Drive to the Covington Highway is expected to increase by three folds, from 2,000 vehicles in 2021 to 8,400 vehicles in 2050 according to the ARC Activity Based Model.

Table 4-2: Daily Roadway Volume Comparison (2021 and 2050)

Corridors	Sections	Volume (2021) [#]	Volume (2050) [*]	Change	Percent Change
I-20	West of Panola Road	163,000	193,000	30,000	18.4%
	Between Panola Road and Lithonia Industrial Boulevard	143,000	181,000	38,000	26.6%
	Between Lithonia Industrial Boulevard and Evans Mill Road	143,000	151,000	8,000	5.6%
	East of Evans Mill Road	137,000	147,000	10,000	7.3%
Panola Road	South of I-20	29,500	24,500	-5,000	-16.9%
	Between I-20 and Snapfinger Woods Drive	29,500	44,500	15,000	50.8%

Corridors	Sections	Volume (2021) [#]	Volume (2050) [*]	Change	Percent Change
	<i>Between Snapfinger Woods Drive and Covington Highway</i>	28,000	32,000	4,000	14.3%
	<i>North of Covington Highway</i>	18,500	21,500	3,000	16.2%
<i>Covington Highway</i>	<i>West of Panola Road</i>	36,500	33,000	-3,500	-9.6%
	<i>Between Panola Road and Lithonia Industrial Blvd.</i>	33,500	29,000	-4,500	-13.4%
	<i>East of Lithonia Industrial Boulevard</i>	22,500	18,500	-4,000	-17.8%
<i>SR-124</i>	<i>Between Rock Chapel Road and Pleasant Hill Road</i>	31,500	43,500	12,000	38.1%
	<i>Between Pleasant Hill Road and Lithonia Industrial Boulevard</i>	31,500	34,500	3,000	9.5%
<i>Lithonia Industrial Boulevard</i>	<i>Between I-20 and Covington Highway</i>	22,000	25,500	3,500	15.9%
	<i>Between Covington Highway and Marbut Road</i>	22,000	27,000	5,000	22.7%
	<i>Between Marbut Road and South Stone Mountain Lithonia Road</i>	22,000	22,500	500	2.3%
	<i>Between South Stone Mountain Lithonia Road and Roger Lake Road</i>	15,000	19,500	4,500	30.0%
<i>South Stone Mountain Lithonia Road</i>	<i>West of Lithonia Industrial Boulevard</i>	13,500	15,500	2,000	14.8%
	<i>Between Lithonia Industrial Boulevard and Evans Mill Road</i>	15,000	13,500	-1,500	-10.0%
<i>Evans Mill Road / Main Street</i>	<i>Between I-20 and Covington Highway</i>	10,000	20,500	10,500	105.0%
	<i>Between Covington Highway and Klondike Road</i>	15,000	16,000	1,000	6.7%
	<i>Between Klondike Road and Center Street/Conyers Street</i>	15,500	28,500	13,000	83.9%
<i>Snapfinger Woods Drive</i>	<i>West of Panola Road</i>	9,300	11,000	1,700	18.3%
	<i>Between Panola Road and DeKalb Medical Parkway</i>	2,000	10,000	8,000	400.0%
<i>Rock Chapel Road</i>	<i>Between Max Cleland Boulevard to SR 124</i>	5,600	19,000	13,400	239.3%
<i>Marbut Road</i>	<i>Between Phillips Road to Rogers Lake Road</i>	8,700	3,800	-4,900	-56.3%
	<i>Between Panola Road and DeKalb Medical Parkway</i>	9,600	2,200	-7,400	-77.1%

Corridors	Sections	Volume (2021) [#]	Volume (2050) [*]	Change	Percent Change
Hillandale Drive / Chupp Road	Between DeKalb Medical Parkway and Lithonia Industrial Boulevard	8,700	6,500	-2,200	-25.3%
	Between Lithonia Industrial Boulevard and Covington Highway	8,700	4,900	-3,800	-43.7%
DeKalb Medical Parkway	Between Hillandale Drive and Covington Highway	2,000	8,400	6,400	320.0%
Klondike Road	Between I-20 and Main Street	6,600	18,500	11,900	180.3%
Rogers Lake Road	Between Center Street to Swift Creek	2,000	5,300	3,300	165.0%

Data Sources: [#]GDOT Traffic Analysis & Data Application (TADA), ^{}Atlanta Regional Commissions (ARC) Activity Based Model*

4.1.5 Truck Volumes

As with the general traffic volumes, the existing truck volumes were obtained from the 2021 GDOT Traffic Analysis & Data Application (TADA) Traffic Counts. The average annual daily truck traffic volumes for the year 2021 within the study area are illustrated in Figure 4-7. It is essential to note that the total truck count data encompasses both single unit and combo unit commercial trucks.

The truck volume within the Study Area reflects the anticipated pattern. Notably, the I-20 interstate facility stands as a focal point, unsurprisingly registering a heightened average count and proportion of daily truck trips. This interstate assumes a pivotal role as the cornerstone connecting the Stonecrest freight cluster to the broader regional landscape, encompassing pivotal freight hubs such as Hartsfield Jackson International Airport for air cargo and the Port of Savannah for maritime shipments. Additionally, Panola Road serves as a vital link, accommodating freight movement from the light industrial zone to the western segment of Panola Road within the study area. Likewise, Lithonia Industrial Boulevard and Evans Mill Road serve the northeastern region, catering to a spectrum of light and heavy industrial zones. Furthermore, Covington Highway is a noteworthy corridor, with an average daily truck volume of up to around 1,000 trucks. Its strategic relevance lies in bridging the Study Area to the Northwest and beyond, extending through the Atlanta metropolitan region. Detailed truck volume information is provided in Table 4-3, underscoring the significance of truck travel within the Study Area.

Figure 4-7: Existing Truck Volumes (2021)

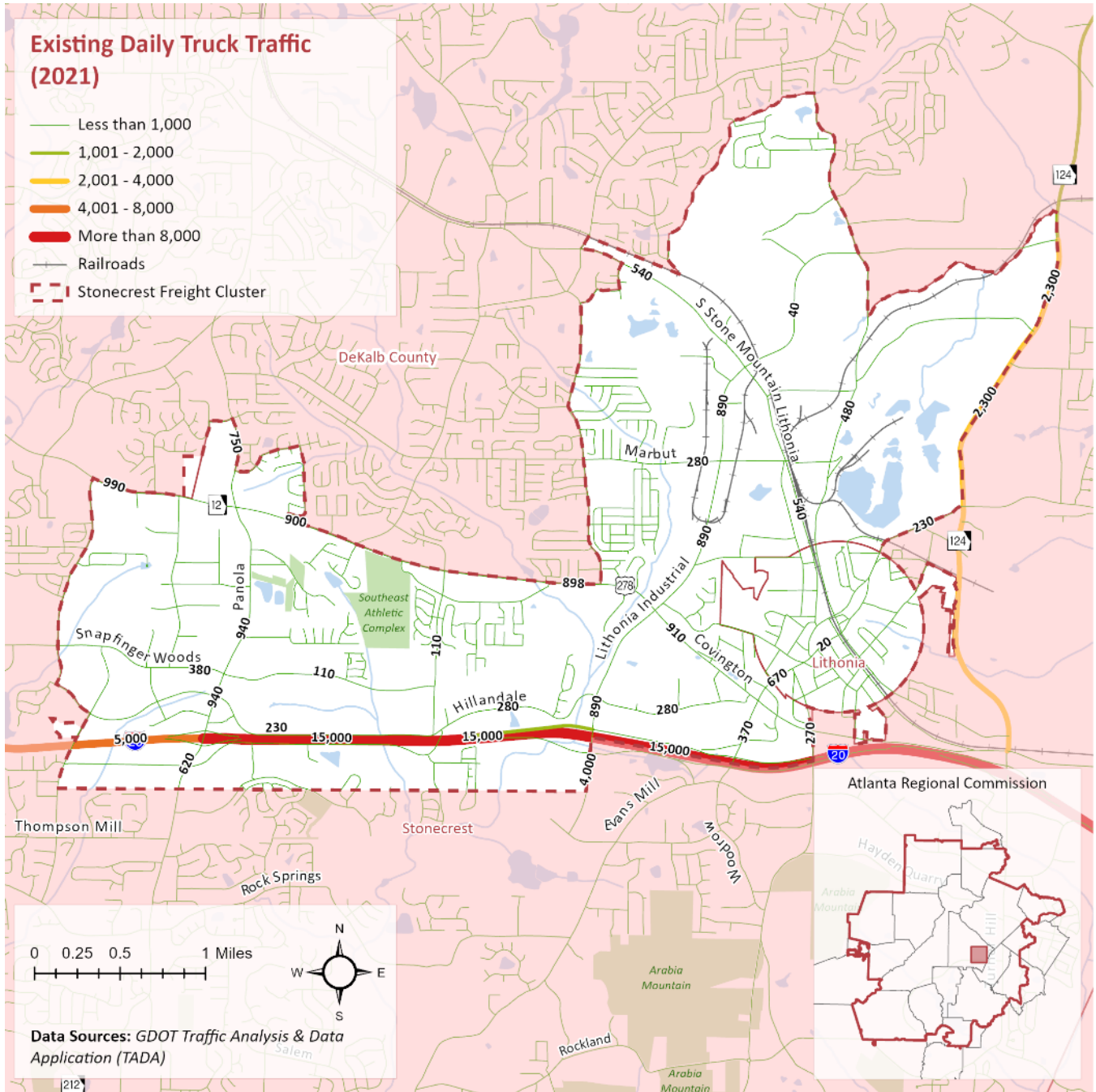
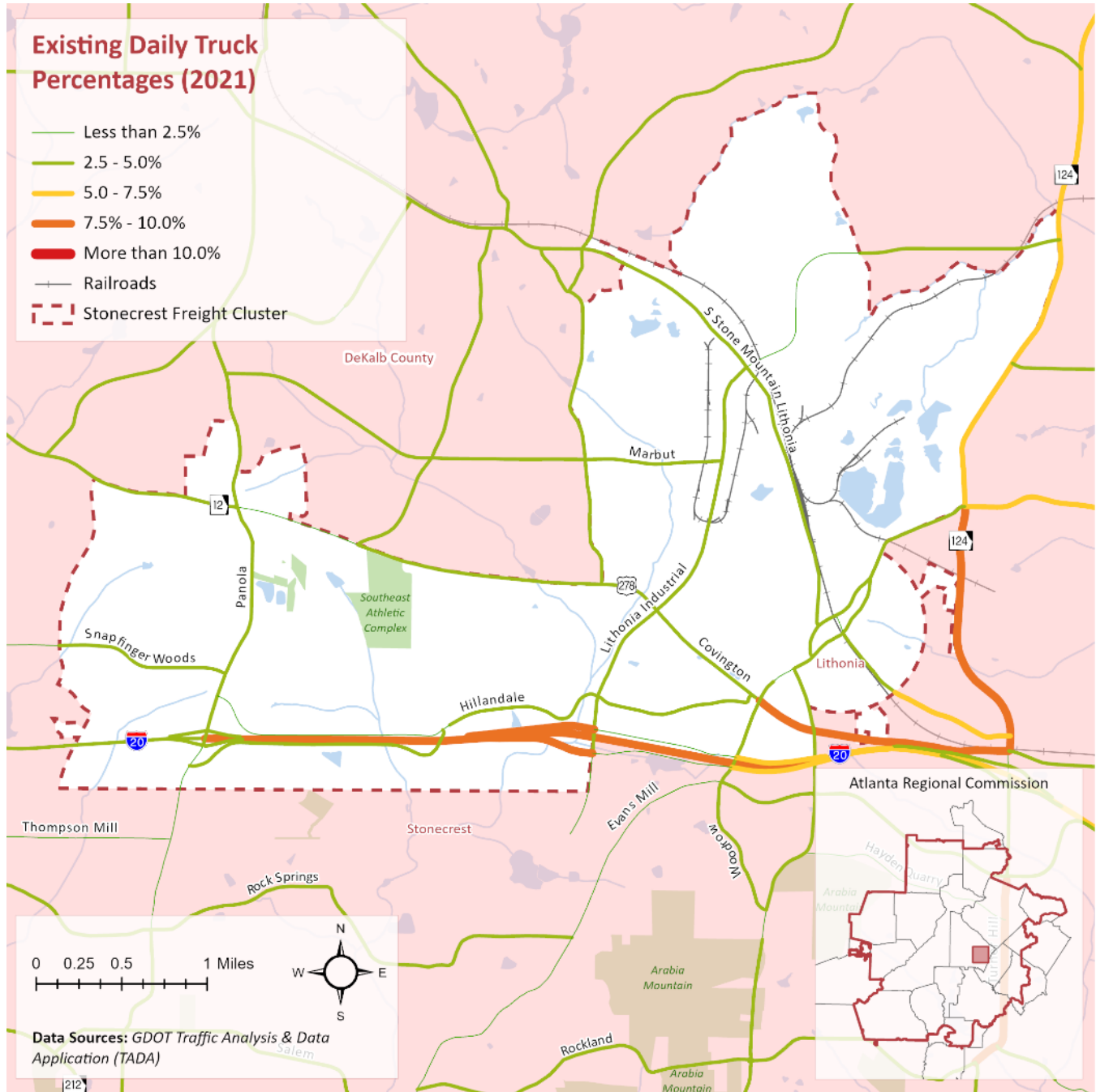


Figure 4-8 highlights the truck volume as a percentage of the total roadway volumes in major roadways within the study area. The I-20 carries the highest amount of truck traffic as a percentage of its daily roadway volume, followed by SR 124 and Covington Highway.

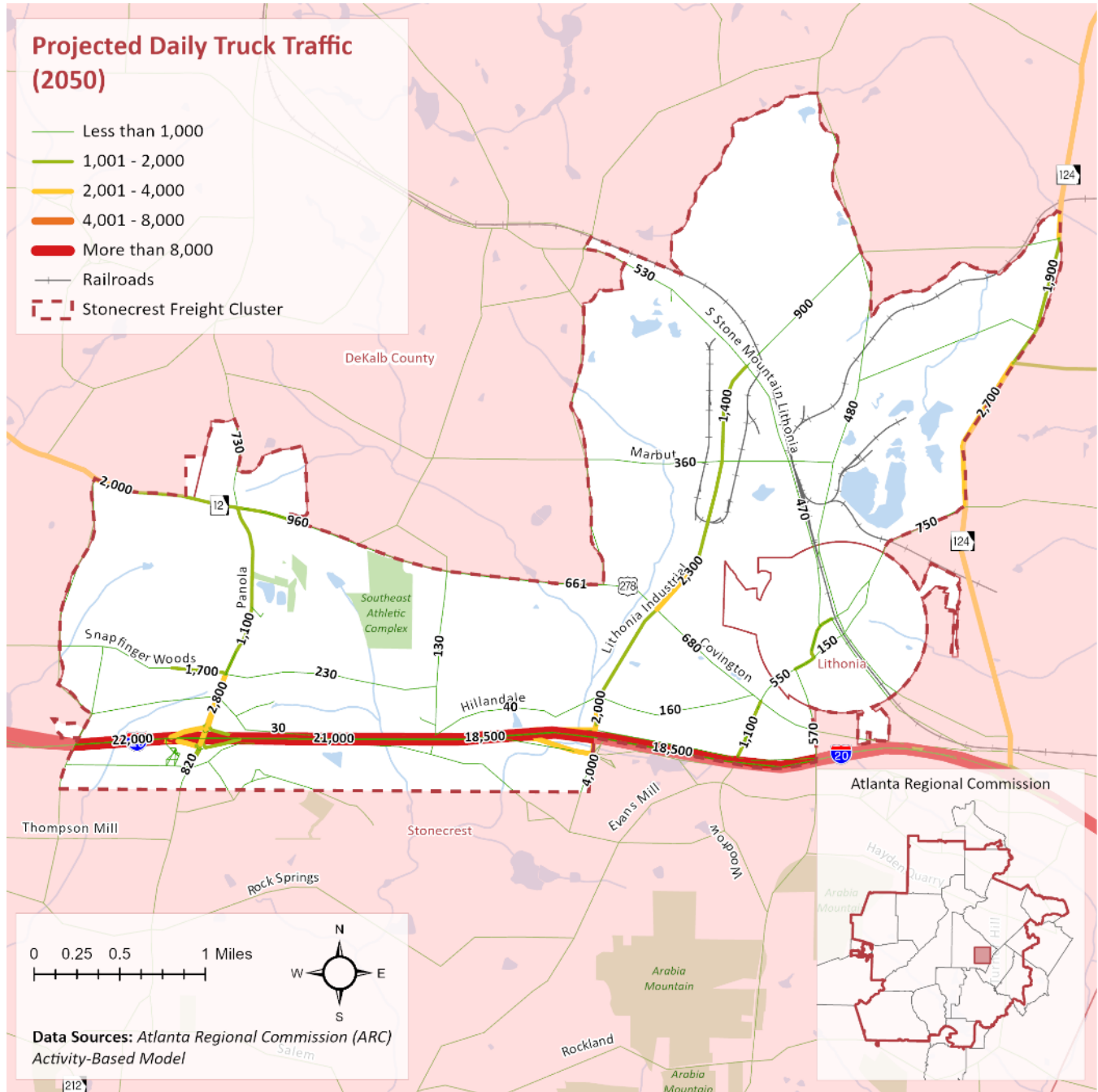
Figure 4-8: Existing Percentage of Truck Volume of Total Roadway Traffic (2021)



4.1.6 Projected Truck Volumes

The projected truck traffic in the year 2050 provides an insight on the future volume of freight traffic that the transportation infrastructure is expected to support. Processed from the ARC Activity Based Model, Figure 4-9 represents the future increase in truck traffic within the Stonecrest Freight Cluster study area. The projected truck traffic counts only include the medium- and heavy-duty trucks, while excluding light commercial vehicles.

Figure 4-9: Projected Daily Truck Traffic (2050)



A moderate increase in freight volume is expected throughout the study area between 2021 and 2050. Key corridors including I-20, Panola Road, and Lithonia Industrial Boulevard are anticipated to experience notable increases in truck traffic volume by 2050, based on projections from the Atlanta Regional Commission (ARC)'s activity-based model. Furthermore, the stretch of Snapfinger Woods Drive west of Panola Road and the segment of Evans Mill Road between I-20 and Covington Highway are also projected to encounter significant increase in freight traffic. Upon examining the projected proportion of truck traffic relative to total roadway traffic, I-20, Panola Road, Lithonia Industrial Boulevard, specific segments of Covington Highway, Evans Mill Road, and

Rogers Lake Road are projected to handle the majority of freight traffic in relation to their overall daily traffic flow.

Figure 4-10: Projected Percentage of Truck Volume of Total Roadway Traffic (2050)

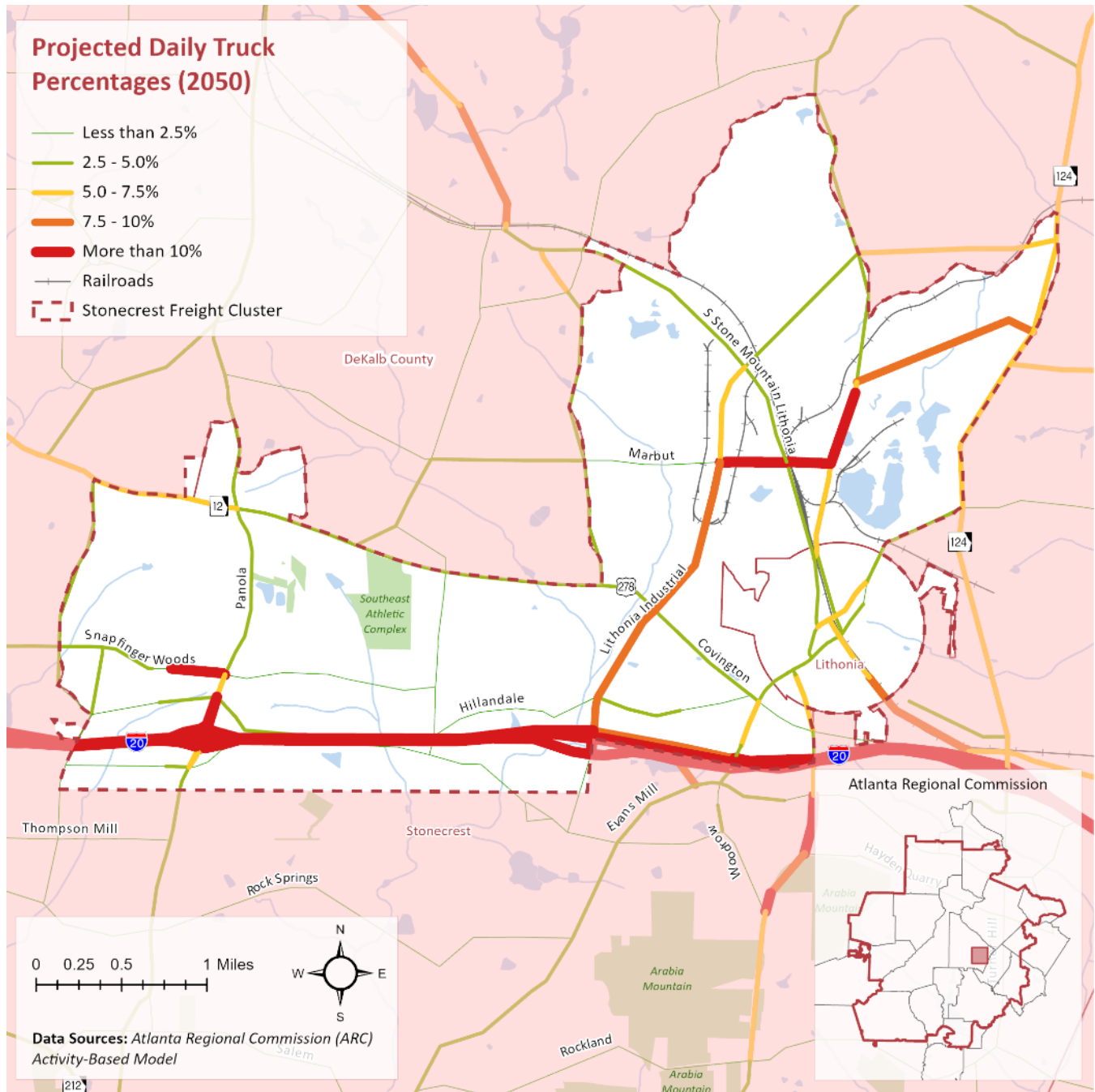


Table 4-3 summarizes the number of freight traffic in major roadway segments within the Study Area along with the respective proportion in comparison with the total roadway traffic volumes. It should be noted that the ARC acknowledges that projecting freight traffic is problematic given the ever-changing nature of goods movement technologies and demand.

Table 4-3: Daily Truck Volumes and Percentages (2021 and 2050).

Corridors	Sections	Volume (2021) [#]	Volume (2050) [*]	Percent (2021)	Percent (2050)
I-20	West of Panola Road	5,000	22,000	3.1%	11.4%
	Between Panola Road and Lithonia Industrial Boulevard	15,000	21,000	10.5%	11.6%
	Between Lithonia Industrial Boulevard and Evans Mill Road	15,000	18,500	10.5%	12.3%
	East of Evans Mill Road	15,000	18,500	10.9%	12.6%
Panola Road	South of I-20	620	820	2.1%	3.3%
	Between I-20 and Snapfinger Woods Drive	940	2,800	3.2%	6.3%
	Between Snapfinger Woods Drive and Covington Highway	940	1,100	3.4%	3.4%
	North of Covington Highway	750	730	4.1%	3.4%
Covington Highway	West of Panola Road	990	2,000	2.7%	6.1%
	Between Panola Road and Lithonia Industrial Blvd.	900	960	2.7%	3.3%
	East of Lithonia Industrial Boulevard	910	680	4.0%	3.7%
SR-124	Between Rock Chapel Road and Pleasant Hill Road	2,300	2,700	7.3%	6.2%
	Between Pleasant Hill Road and Lithonia Industrial Boulevard	2,300	1,900	7.3%	5.5%
Lithonia Industrial Boulevard	Between I-20 and Covington Highway	890	2,000	4.0%	7.8%
	Between Covington Highway and Marbut Road	890	2,300	4.0%	8.5%
	Between Marbut Road and South Stone Mountain Lithonia Road	890	1,400	4.0%	6.2%
	Between South Stone Mountain Lithonia Road and Roger Lake Road	40	900	0.3%	4.6%
South Stone Mountain Lithonia Road	West of Lithonia Industrial Boulevard	540	530	4.0%	3.4%
	Between Lithonia Industrial Boulevard and Evans Mill Road	540	470	3.6%	3.5%
Evans Mill Road / Main Street	Between I-20 and Covington Highway	370	1,100	3.7%	5.4%
	Between Covington Highway and Klondike Road	670	550	4.5%	3.4%
	Between Klondike Road and Center Street/Conyers Street	20	150	0.1%	0.5%

Corridors	Sections	Volume (2021) [#]	Volume (2050) [*]	Percent (2021)	Percent (2050)
Snapfinger Woods Drive	West of Panola Road	380	1,700	4.1%	15.5%
	Between Panola Road and DeKalb Medical Parkway	110	230	5.5%	2.3%
Rock Chapel Road	Between Max Cleland Boulevard to SR 124	230	750	4.1%	3.9%
Marbut Road	Between Phillips Road to Rogers Lake Road	280	360	3.2%	9.5%
Hillandale Drive / Chupp Road	Between Panola Road and DeKalb Medical Parkway	230	30	2.4%	1.4%
	Between DeKalb Medical Parkway and Lithonia Industrial Boulevard	280	40	3.2%	0.6%
	Between Lithonia Industrial Boulevard and Covington Highway	280	160	3.2%	3.3%
DeKalb Medical Parkway	Between Hillandale Drive and Covington Highway	110	130	5.5%	1.5%
Klondike Road	Between I-20 and Main Street	270	570	4.1%	3.1%
Rogers Lake Road	Between Center Street to Swift Creek	110	480	5.5%	9.1%

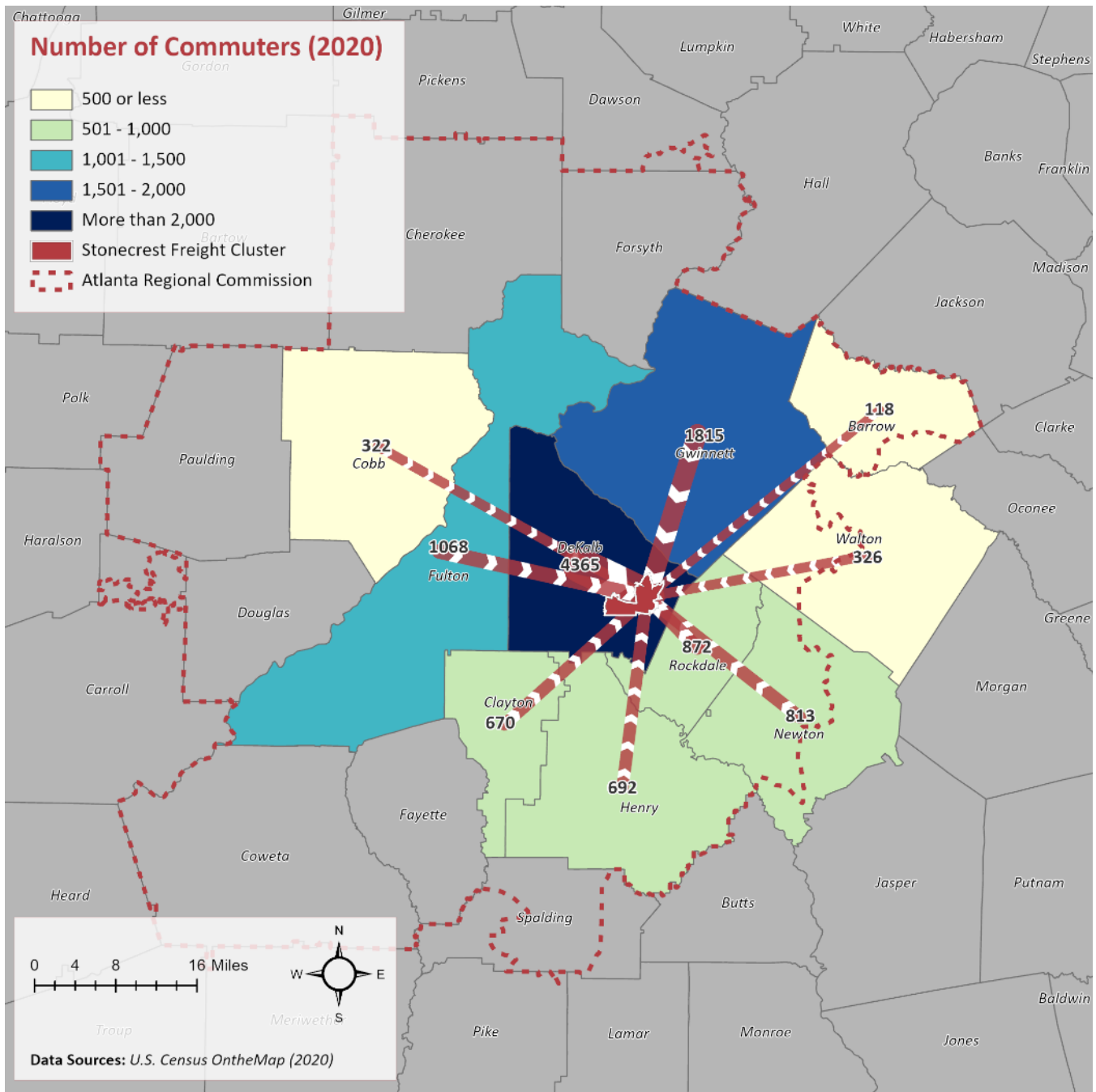
Data Sources: [#]GDOT Traffic Analysis & Data Application (TADA), ^{}Atlanta Regional Commissions (ARC) Activity Based Model*

4.1.7 Commute Patterns

Based on US Census Bureau’s Longitudinal Household-Employer Dynamics data, OnTheMap⁴ application provides information on flow of commuters to the Stonecrest Freight Cluster from the surrounding areas for employment. Figure 4-11 indicates the flow of such commuters from surrounding counties to the study area.

⁴ United States Census Bureau, OnTheMap Web Application <https://onthemap.ces.census.gov/>

Figure 4-11: Commute Travel Patterns



The map in Figure 4-11 reveals a significant concentration of work commutes originating from the North-West direction within the study area. Notably, approximately one-third of the workforce in the Stonecrest Freight Cluster study area commutes from DeKalb County, the location of the study area. Additionally, 13.4%, 7.9%, 6.4%, and 6.0% of work trips to the study area originate from Gwinnett County, Fulton County, Rockdale County, and Newton County, respectively. The distribution of work trip estimates to the study area from the surrounding counties are detailed in Table 4-3. Importantly, it is noteworthy that approximately 18% of the work commute

trips to the Stonecrest Freight Cluster originate from regions outside the neighboring counties, underscoring the area's significance as a regional employment hub.

Table 4-4: Commuter Flows to Stonecrest Freight Cluster - Counts and Shares

Origins	2020		2019		2018	
	Count	Share	Count	Share	Share	Share
DeKalb County, GA	4,365	32.3%	4,397	33.2%	4,043	30.9%
Gwinnet County, GA	1,815	13.4%	1,781	13.4%	1,644	12.6%
Fulton County, GA	1,068	7.9%	1,015	7.7%	1,068	8.2%
Rockdale County, GA	872	6.4%	812	6.1%	817	6.3%
Newton County, GA	813	6.0%	777	5.9%	845	6.5%
Henry County, GA	692	5.1%	658	5.0%	617	4.7%
Clayton County, GA	670	5.0%	625	4.7%	595	4.6%
Walton County, GA	326	2.4%	345	2.6%	348	2.7%
Cobb County, GA	322	2.4%	349	2.6%	329	2.5%
Barrow County, GA	118	0.9%	105	0.8%	105	0.8%
All Other Locations	2,465	18.2%	2,383	18.0%	2,658	20.3%
Total	13,526	100.0%	13,247	100.0%	13,069	100.0%

Data Source: U.S. Census OnTheMap Application, 2020

4.1.8 Mode Share Characteristics

The distribution of transportation modes for work commute within the Stonecrest Freight Cluster study area is presented in Table 4-5. Among employed individuals aged 16 and above who live within the study area, the majority, accounting for 71.5 percent, opt for solo driving as their primary commuting mode. A significant proportion of remaining commuters either engage in carpooling (9.7 percent) or utilize public transit (5.9 percent). Active transportation modes, including walking and cycling, are utilized by 0.4 percent of the workforce. Around 11 percent of workers chose to work from home. The data presented have been collected from the U.S. Census Bureau’s American Community Survey (ACS) 5-Year Estimates for 2021 at the block group level for which may not align precisely with the Stonecrest Freight Cluster boundary. Thus, it is to be noted that the calculations are approximations.

For individuals working within DeKalb County, 68.5 percent choose solo driving, 9.4 percent carpool, 3.6 percent commute via transit, and less than two percent utilize active transportation modes. These numbers represent the number of individuals who work within DeKalb County commuting either from within the county boundary or from neighboring counties. Notably, transportation mode data based on workplace geography is available only at the county level according to the U.S. Census Bureau’s American Community Survey (ACS) 5-Year Estimates for 2021.

Table 4-5: Mode Share Characteristics (2021)

Means of Transportation to Work	Population working in DeKalb County		Population living within the Stonecrest Freight Cluster	
	Count	Share	Count	Share
<i>Car</i>	276,137	77.8%	24,156	81.2%
<i>Drive Alone</i>	242,924	68.5%	21,268	71.5%
<i>Carpool</i>	33,213	9.4%	2,888	9.7%
<i>Public Transportation</i>	12,903	3.6%	1,763	5.9%
<i>Taxicab</i>	2,268	0.6%	198	0.7%
<i>Motorcycle</i>	258	0.1%	27	0.1%
<i>Bicycle</i>	896	0.3%	-	0.0%
<i>Walked</i>	4,685	1.3%	126	0.4%
<i>Other Means</i>	4,069	1.1%	202	0.7%
<i>Worked from Home</i>	53,631	15.1%	3,273	11.0%
Total	354,847	100.0%	29,745	100.0%

Data Source: U.S. Census American Community Survey (5-Year Estimate), 2021

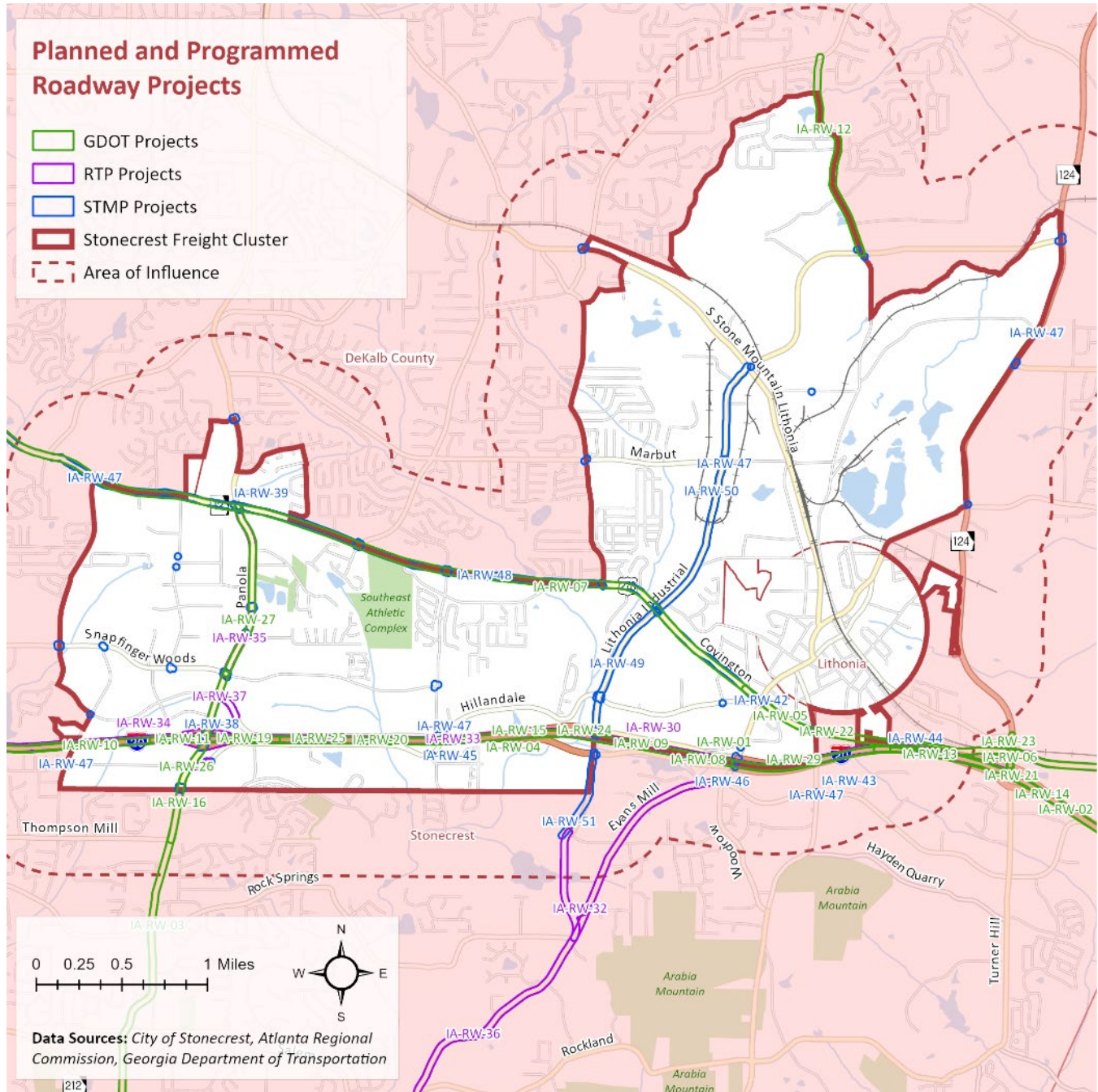
The two sets of census data presented in Table 4-5 illustrate a somewhat distinct yet parallel pattern in mode choice among individuals residing and/or working within the study area.

4.1.9 Planned and Programmed Roadway Improvements

There are three main types of improvements that are planned and programmed – programmed, planned, and aspirational projects. Programmed projects are those that have enough money and are ready to be implemented in the short term. Planned projects are those that have a budget allocation in the ARC’s RTP but are not expected to be completed soon. Aspirational projects are those that have no funding source yet but are desired for the future.

The Stonecrest Freight Cluster has a diverse portfolio of planned and programmed projects aimed at enhancing transportation infrastructure and safety in the region. These projects span various categories, including reconstruction/rehabilitation, maintenance, safety improvements, new construction, and general-purpose capacity enhancements. As part of its ongoing initiatives, GDOT is reconstructing the Panola Road at I-20 Interchange through the implementation of a Diverging Diamond Interchange (DDI). This undertaking is aimed at enhancing traffic management, bolstering the multi-modal transportation framework, elevating safety measures, and accommodate the requisite clearance for forthcoming expansions along the I-20 corridor at this intersection.

Figure 4-12: Planned and Programmed Roadway Projects



Other notable GDOT projects include various safety modifications and reconstruction/rehabilitation endeavors, including new construction projects like the addition of High Occupancy Vehicle (HOV) lanes on I-20, safety initiatives such as off-system safety improvements and high-friction surface treatments, maintenance efforts, bridge rehabilitation, and express lane construction on I-20. The projects recommended by the ARC Regional Transportation Plan focuses on general-purpose capacity enhancements, encompassing widening projects on Old Covington Highway and Lithonia Industrial Boulevard, as well as aspirational projects such as collector/distributor lanes and specific express lanes. Additionally, the Stonecrest Transportation Master Plan

outlines intersection and operation improvement projects with varying timelines, addressing traffic signal maintenance and upgrades, and enhancing various intersections throughout the region. In addition to the projects mentioned, the City of Stonecrest also includes various pavement resurfacing projects as part of its regular transportation investments, funded by the Special-Purpose Local-Option Sales Tax (SPLOST) program.

Figure 4-12 and Table 4-6 provide a list of relevant projects that are either programmed or programmed so far. These projects collectively reflect a multifaceted approach to improving transportation infrastructure, safety, and capacity within the Stonecrest Freight Cluster, with funding and planning originating from a diverse set of sources.

Table 4-6: Planned and Programmed Roadway and Bridge Projects

Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-RW-01	I-20 Safety Modification	NA	GDOT	H032607	TBD	NA	NA
IA-RW-02	Signs-Safety Modification DIV.2	NA	GDOT	H032627	TBD	NA	NA
IA-RW-03	Panola Road from S of SR 212 to Fairington Road	Reconstruction/Rehabilitation	GDOT	0006879	Federal	NA	NA
IA-RW-04	I-20 from SR 6/Douglas to SR 124/DeKalb - Variable Speed Signs	Reconstruction/Rehabilitation	GDOT	0012662	TBD	NA	NA
IA-RW-05	Covington Highway @ Mill Road	Reconstruction/Rehabilitation	GDOT	0013759	TBD	NA	NA
IA-RW-06	SR 124 from I-20 to Old Covington Highway	Reconstruction/Rehabilitation	GDOT	0015701	Federal	Construction Work Program	NA
IA-RW-07	Covington Highway from SR 10 to I-20	Maintenance	GDOT	M006304	Federal	NA	NA
IA-RW-08	I-20 from I-285 East to Evans Mill Road Add 2 HOV Lanes	New Construction	GDOT	0000715	Federal	NA	NA
IA-RW-09	I-20 from Columbia Drive East to Evans Mill Road	Reconstruction/Rehabilitation	GDOT	713610-	Federal	Long Range Program	NA
IA-RW-10	I-285 @ I-20 - East Side Interchange Reconstruction	Reconstruction/Rehabilitation	GDOT	0013915	Federal	Construction Work Program	NA
IA-RW-11	I-20 from Columbia Drive to Panola Road - Movable Barriers	New Construction	GDOT	0015244	Federal	NA	NA
IA-RW-12	Off-System Safety Improvements @ 11 Locations in DeKalb Co - VRU	Safety	GDOT	0018221	Federal	Under Construction	NA
IA-RW-13	Atlanta-Augusta Interstate	NA	GDOT	H032616	TBD	NA	NA
IA-RW-14	I-20 from Evans Mill Rd/DeKalb to SR 162/Rockdale HOV Lanes	Reconstruction/Rehabilitation	GDOT	0013885	TBD	NA	NA
IA-RW-15	I-20 from 0.25 Mi W of Columbia Drive to Rockdale County Line	Maintenance	GDOT	M006058	Federal	Under Construction	NA
IA-RW-16	Panola Road from Thompson Mill Road to Fairington Road	Reconstruction/Rehabilitation	GDOT	0005905	Federal	NA	NA
IA-RW-17	Old Covington Highway from SR 124 to CR 67/Lake Capri Road	Reconstruction/Rehabilitation	GDOT	0005955	Federal	NA	NA
IA-RW-18	Old Covington Highway from SR 124 to CR 67/Lake Capri Road	Reconstruction/Rehabilitation	GDOT	0013566	TBD	Long Range Program	NA
IA-RW-19	I-20 @ Panola Road & @ Turn Around - Bridge Rehab	Maintenance	GDOT	M005944	Federal	NA	NA

Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-RW-20	I-20 from W of Columbia Drive to W of Lithonia Industrial Boulevard @ 19 Locations	Maintenance	GDOT	M006456	Federal	NA	NA
IA-RW-21	Sharp Curve High Friction Surface Treatment @ 5 Locations	Safety	GDOT	0019611	Federal	Construction Work Program	NA
IA-RW-22	Covington Highway from Evans Mill Road to SR 124	Reconstruction/Rehabilitation	GDOT	721350-	Federal	NA	NA
IA-RW-23	Covington Highway @ CSX #279861D	Safety	GDOT	0019694	Federal	Construction Work Program	NA
IA-RW-24	I-20 ATMS Comm/Surveillance from I-285/Dek to SR138/SR20/Rock Chapel Rd.	Safety	GDOT	714085-	Federal	NA	NA
IA-RW-25	I-20 from I-285 to SR 124 - Express Lanes	Reconstruction/Rehabilitation	GDOT	0013913	TBD	Long Range Program	NA
IA-RW-26	Panola Rd @ I-20 from Fairington Rd to Snapfinger Woods Dr.	Reconstruction/Rehabilitation	GDOT	0002868	Federal	Construction Work Program	NA
IA-RW-27	Panola Rd from Covington Highway to Snapfinger Wd Dr.	Reconstruction/Rehabilitation	GDOT	0006890	TBD	NA	NA
IA-RW-28	Lithonia Industrial Boulevard from Woodrow Rd to Evans Mill Rd - Phase IV	New Construction	GDOT	0013756	TBD	Long Range Program	NA
IA-RW-29	I-20 from Evans Mill Rd/DeKalb to Salem Rd/Rockdale HOV Lanes	Reconstruction/Rehabilitation	GDOT	0003166	Federal	NA	NA
IA-RW-30	I-20 East Express Lanes	Express Lanes	ARC Regional Transportation Plan	AR-ML-510	GDOT	Programmed	NA
IA-RW-31	Old Covington Highway Widening	General Purpose Capacity	ARC Regional Transportation Plan	DK-030	GDOT	Long Range	NA
IA-RW-32	Lithonia Industrial Boulevard Extension: Phase IV - New Alignment	General Purpose Capacity	ARC Regional Transportation Plan	DK-328B	DeKalb County	Long Range	NA
IA-RW-33	I-20 East Collector/Distributor Lanes	General Purpose Capacity	ARC Regional Transportation Plan	ASP-DK-380	TBD	Aspirations	NA
IA-RW-34	I-20 East Collector/Distributor Lanes (Westbound Direction Only)	General Purpose Capacity	ARC Regional Transportation Plan	ASP-DK-379	TBD	Aspirations	NA
IA-RW-35	Panola Road Widening	General Purpose Capacity	ARC Regional Transportation Plan	DK-065E	City of Stonecrest	Long Range	NA

Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-RW-36	Evans Mill Road Widening	General Purpose Capacity	ARC Regional Transportation Plan	DK-150	City of Stonecrest	Long Range	NA
IA-RW-37	Panola Road: Segment 3 Operations Improvements - Includes I-20 Interchange	General Purpose Capacity	ARC Regional Transportation Plan	DK-AR-242	GDOT	Programmed	NA
IA-RW-38	I-20 Panola Road Interchange	Intersection Improvement	Stonecrest Transportation Master Plan	I-1	TBD	NA	Long Term
IA-RW-39	Panola Road at Covington Highway	Intersection Improvement	Stonecrest Transportation Master Plan	I-2	TBD	NA	Mid Term
IA-RW-40	Covington Highway at Lithonia Industrial Boulevard	Intersection Improvement	Stonecrest Transportation Master Plan	I-3	TBD	NA	Mid Term
IA-RW-41	Turner Hill Road at I-20 East	Intersection Improvement	Stonecrest Transportation Master Plan	I-7	TBD	NA	Long Term
IA-RW-42	Evans Mill Road at Covington Highway	Intersection Improvement	Stonecrest Transportation Master Plan	I-9	TBD	NA	Mid Term
IA-RW-43	Klondike Road at Mall Parkway	Intersection Improvement	Stonecrest Transportation Master Plan	I-11	TBD	NA	Mid Term
IA-RW-44	New I-20 East Express Lanes Access Point (Stonecrest Mall)	Intersection Improvement	Stonecrest Transportation Master Plan	I-13	TBD	NA	Long Term
IA-RW-45	New I-20 East Express Lanes Access Point (Fairington Road)	Intersection Improvement	Stonecrest Transportation Master Plan	I-14	TBD	NA	Long Term
IA-RW-46	Mall Parkway at Evans Mill Road	Intersection Improvement	Stonecrest Transportation Master Plan	I-15	TBD	NA	Mid Term
IA-RW-47	Traffic Signal Maintenance/Upgrades	Intersection Improvement	Stonecrest Transportation Master Plan	I-18	TBD	NA	Short Term

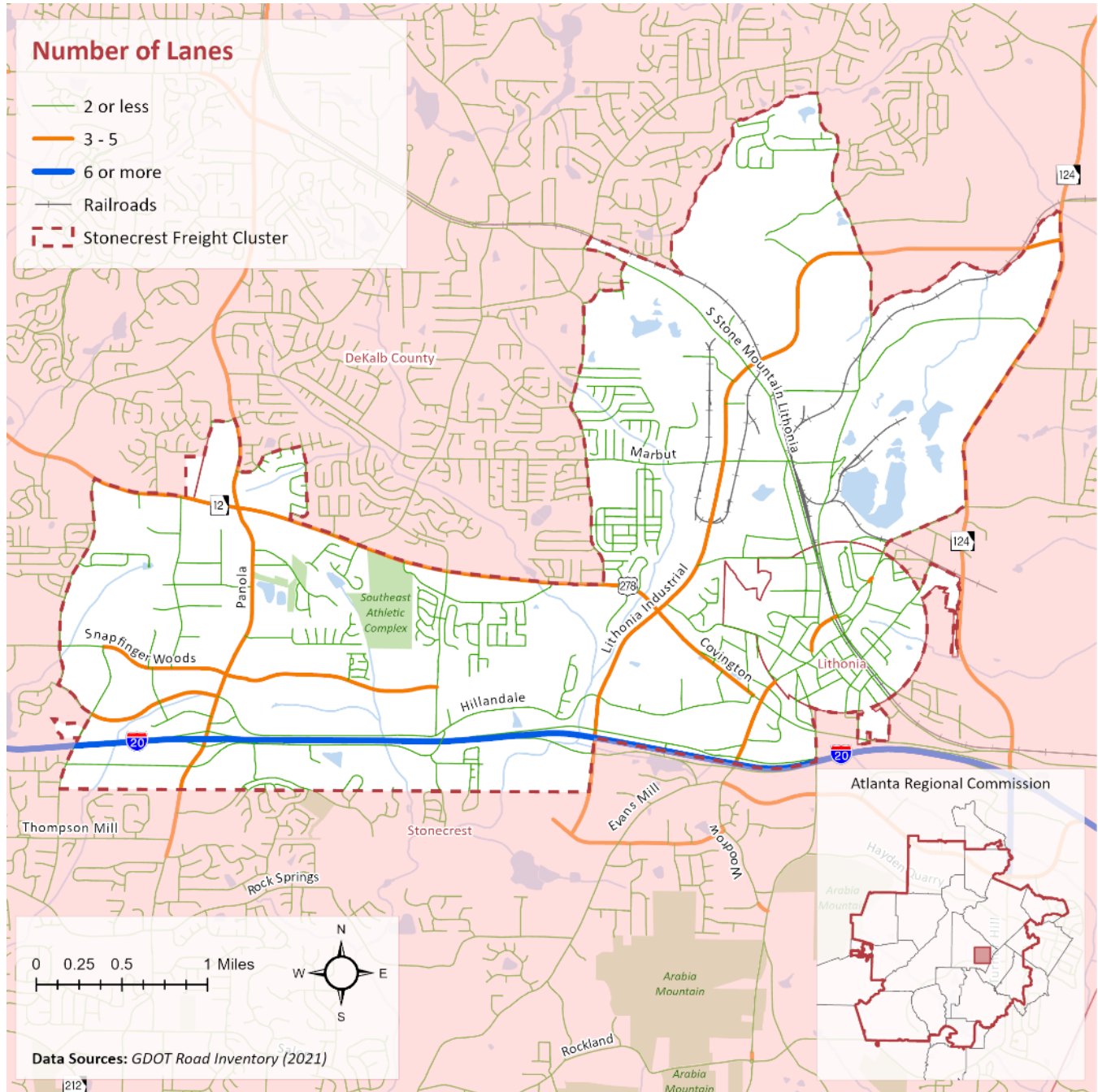
Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-RW-48	Covington Highway RTOP Corridor	Operational Improvements	Stonecrest Transportation Master Plan	O-2	TBD	NA	Long Term
IA-RW-49	Lithonia Industrial Boulevard (LIB) Operational Improvements (Segment 1)	Operational Improvements	Stonecrest Transportation Master Plan	O-4	TBD	NA	Mid-Term
IA-RW-50	Lithonia Industrial Boulevard (LIB) Operational Improvements (Segment 2)	Operational Improvements	Stonecrest Transportation Master Plan	O-5	TBD	NA	Mid-Term
IA-RW-51	East Glen Road Upgrade and Extension	New Roadway	Stonecrest Transportation Master Plan	NR-2	TBD	NA	Mid-Term

4.2 Roadway Profile

4.2.1 Number of Lanes

Figure 4-13 presents a comprehensive overview of the lane coverage within the Stonecrest Freight Cluster study area, drawing data from the GDOT Road Inventory for the year 2021. The analysis reveals that a substantial portion of road segments feature configurations of two through lanes or fewer in both directions combined. However, notable exceptions include major corridors such as Panola Road, Covington Highway, Lithonia Industrial Boulevard, Snapfinger Woods Drive, and SR 124, featuring three to five total through lanes in both directions. The main I-20, traversing through the study area, comprises a six through lanes roadway throughout the study area, three through lanes in each direction. These lane configurations play a pivotal role in shaping the transportation infrastructure and capacity within the study area, influencing traffic flow and overall mobility. The map represents the total number of through lanes in both directions, excluding turn lanes, auxiliary lanes, and collector distributor lanes.

Figure 4-13: Total Number of Through Lanes in both directions

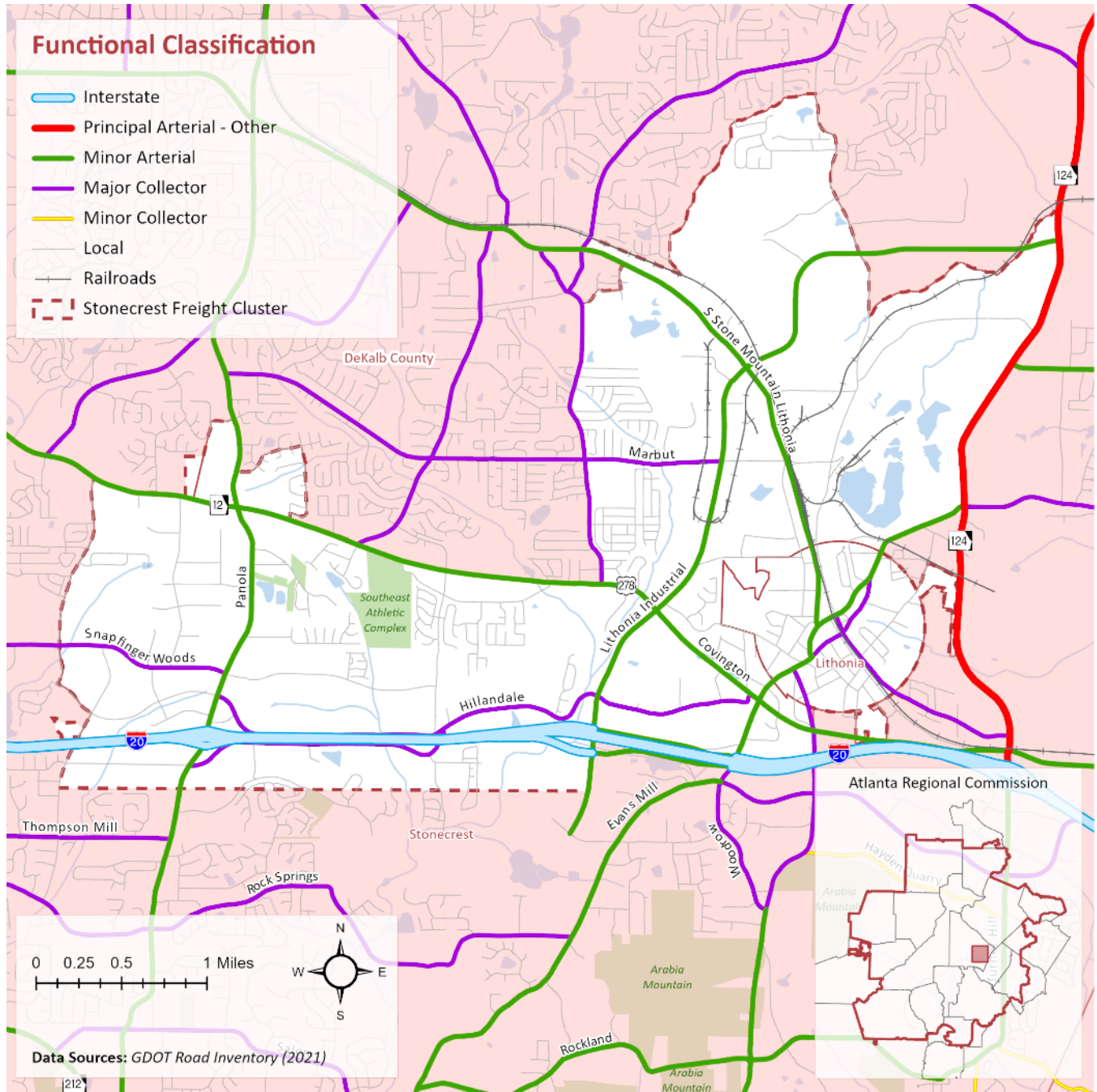


4.2.2 Functional Classification

In accordance with the guidelines set by the Federal Highway Administration (FHWA), roadways are categorized into functional classification categories, considering factors like access, traffic volumes, and spacing, to determine their role within a specific region. In this study, functional classification plays a pivotal role, as it significantly influences the overall design of the roadways. Particularly, roadways designed to cater to longer trips, such as Interstates and principal arterials, are engineered to accommodate freight movements. To gain insights into the distribution of roadway functional classification in and around the SFCSA, Figure 4-14 and Table

4-7 offer a comprehensive overview, shedding light on the specific roles and characteristics of different road segments within the transportation network. This analysis holds immense value for transportation planning, ensuring the appropriate alignment of roadway design with their intended functions and facilitating efficient freight movement in the region.

Figure 4-14: Roadway Functional Classification



The roadways within the study area have the following functional classification:

Table 4-7: Roadway Functional Classifications within the study area

Functional Classifications	Roadway Segments	Length in Miles
Interstate	I-20	7.68
Principal Arterial – Other Freeways and Expressways	-	0
Principal Arterial - Others	SR-124	1.61
Minor Arterial	Panola Road, Lithonia Industrial Boulevard, Covington Highway, South Stone Mountain Lithonia Road, Evans Mill Road, Rock Chapel Road	16.2
Major Collector	Snapfinger Woods Drive, Marbut Road, Hillendale Drive	10.4
Minor Collector	-	0
Local	All others	58.4

Source: GDOT Road Inventory, 2021

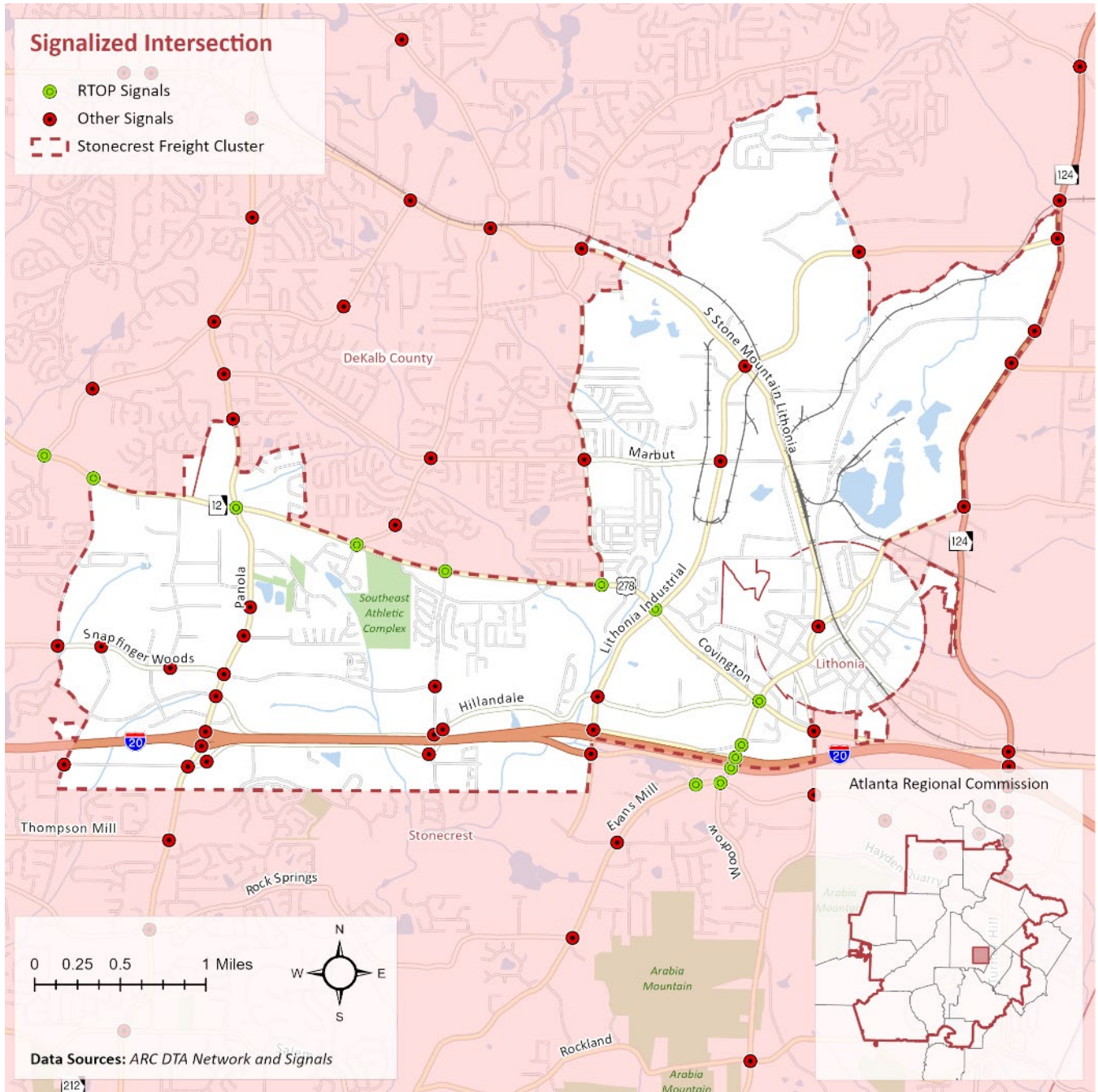
The Stonecrest Freight Cluster's functional roadway classification is highlighted by I-20, which overwhelmingly has the highest traffic load facilitating movement to, from, and through the study area. This stretch not only accommodates general vehicular traffic but also assumes a pivotal role in accommodating substantial truck traffic, accounting for the highest truck volume as a proportion of total auto volume in the region. Furthermore, I-20 connects the study area with critical regional hubs such as Hartsfield Jackson International Airport for air cargo and the Port of Savannah (via I-675, I-75) for maritime transport. Equally vital are principal arterials like SR 124 and minor arterials including Panola Road, Covington Highway, and South Stone Mountain Lithonia Road, which serve as crucial corridors for regional freight movement. Their significance is projected to amplify in the future, paralleling the projected surge in freight trips along these corridors.

4.2.3 Signalization and ITS Components

The Regional Traffic Operations Program (RTOP) in metro Atlanta is managed by GDOT, aiming to efficiently control signal timing and alleviate traffic congestion and emissions across the entire Atlanta region. Within the program, each RTOP corridor, including sections of Covington Highway and Evan Mills Road within the study area, undergoes continuous monitoring. As needed, signal timing is adjusted to ease congestion caused by both general traffic and special events. All other signals are maintained by DeKalb County.

Figure 4-15 and Table 4-8 indicate all the RTOP signalized and standard signalized intersections within the SFCSA.

Figure 4-15: Signalized Intersections



Within the study area, a total of 40 intersections have been equipped with traffic signals. Among these, nine intersections are managed using the Regional Traffic Operations Program (RTOP) framework, overseen by GDOT, while the remainder adopt standard signalization protocols overseen by DeKalb County. Several key corridors that experience higher truck traffic and percentages, such as Panola Road, Snapfinger Woods Drive, and Lithonia Industrial Boulevard, feature standard signalized intersections that can be administered at the local level to provide optimized traffic flow efficiency. It is worth emphasizing that the prevalence of signal installations along

corridors such as Panola Road, Hillendale Drive, Evans Mill Road, and SR 124 is notably high, a factor that might contribute to the observed comparatively lower LOS along these routes.

Table 4-8: RTOP and Standard Signalized Intersections

Type of Intersection	Primary Route	Cross Street	
<i>RTOP Signalized Intersection</i>	Covington Highway	Miller Road	
		Panola Road	
		DeKalb Medical Parkway	
		Phillips Road	
		Lithonia Industrial Boulevard	
		Evans Mill Road/Main Street	
	Evans Mill Road	Old Hillendale Drive	
		Hillendale Drive	
<i>Locally Controlled Signalized Intersections</i>	Panola Road	Minola Drive/Fairington Road	
		I-20 Eastbound Exit/Entrance 71	
		I-20 Westbound Exit/Entrance 71	
		Panola Industrial Boulevard/Hillendale Drive	
		Snapfinger Woods Drive	
		Shirewick Drive	
		Lou Walker Senior Center	
		Panola Way Lane/ Panola Downs Road	
	Lithonia Industrial Boulevard	I-20 Eastbound Exit 74/Access Road	
		I-20 Westbound Entrance 74/Access Road	
		Hillendale Drive/Chupp Road	
		Marbut Road	
		South Stone Mountain Lithonia Road	
		Rogers Lake Road	
	Snapfinger Woods	Miller Road/Lithonia Way	
		Miller Road	
		Park Central Boulevard	
		DeKalb Medical Parkway	
	SR-124/Turner Hill Road	Rock Chapel Road/Union Grove Road	
		Pleasant Hill Road	
		Maddox Road	
		Lithonia Industrial Boulevard	
	South Stone Mountain Lithonia Road	S Deshon Road	
		Lithonia Plaza/Max Cleland Boulevard	
	Hillendale Drive	Fairington Road	
		DeKalb Medical Parkway	
	Fairington Road	Walmart Drive	
		Chupp Way	
	Covington Highway	Klondike Road	
		Miller Road	
			Minola Drive

The implementation of Intelligent Transportation Systems (ITS) plays a pivotal role in enhancing the safety and efficiency of the transportation network. Supported by GDOT, these ITS applications form an integral part of the Georgia 511 information network, delivering real-time information to travelers about road conditions. Through the utilization of advanced technologies, such as vehicle detection systems offering real-time speeds and travel times, closed-circuit television cameras for monitoring major road conditions and incidents, and environmental sensor stations providing weather alerts and forecasts, GDOT ensures that motorists stay informed and can make well-informed decisions during their journeys. Moreover, the deployment of ramp meters effectively manages traffic flow onto freeways, while Changeable Message Signs offer real-time traffic updates, enabling drivers to adjust their routes accordingly. Embracing both existing and emerging technologies, GDOT proactively optimizes and maintains traffic signals with the installation of Vehicle-to-Everything (V2X) infrastructure, thereby ensuring smoother operations and further enhancing the overall efficiency of the transportation system.

To complement these efforts, the Office of Traffic Operations operates the SigOps program, collaborating closely with state and local traffic engineers to optimize traffic signals across the state. Leveraging cutting-edge technology and signal timing methodologies, the SigOps team diligently monitors and optimizes traffic flow, with a primary focus on providing a more efficient and safer commute for the public. This multi-jurisdictional signal optimization initiative by Georgia DOT seeks to improve traffic flow, reduce vehicle emissions, and ultimately enhance the overall transportation experience for residents and visitors in Stonecrest and beyond.

4.2.4 Pavement Conditions

Pavement surface conditions play a pivotal role in shaping traffic dynamics, including freight movements. The quality of pavement surfaces dictates traffic flow efficiency, impacting various transportation-associated costs such as vehicle operation, emissions, safety, and travel time. This underscores the influence of pavement conditions on maintenance decisions, given their substantial share in transportation investments.

Utilizing the Distress Deduct Method as standardized by the American Society for Testing and Materials (ASTM), roadway segments are rated on a scale of 0 to 100, with 0 representing the worst condition and 100 denoting excellent condition. This rating system further categorizes roadway sections, as presented in Table 4-9.

Table 4-9: Pavement Condition Index Categorization

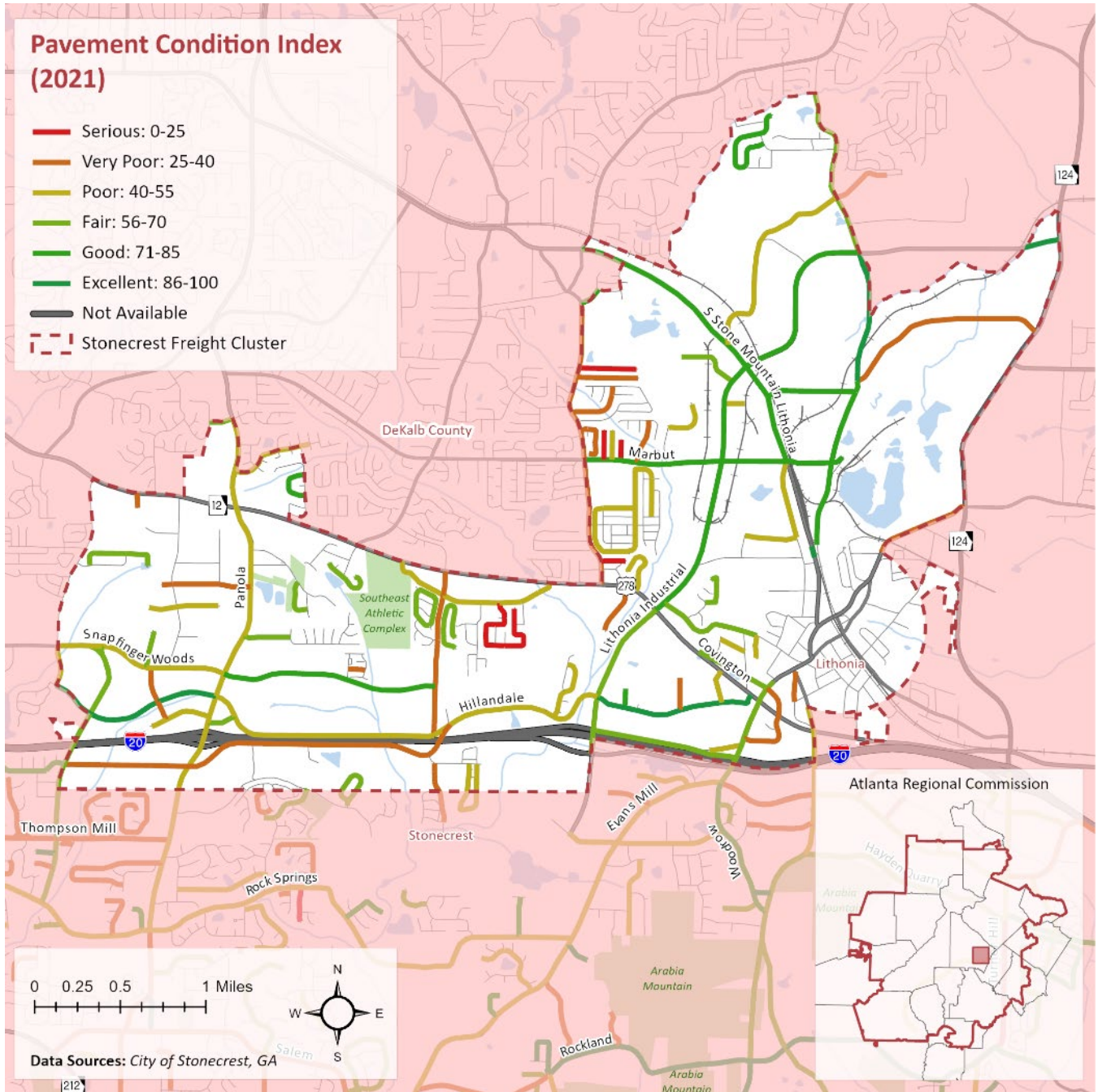
PCI Range	0-10	10-25	25-40	40-55	55-70	70-85	85-100
Class	Failed	Serious	Very Poor	Poor	Fair	Satisfactory	Good

Figure 4-16 visually represents the pavement condition of city-maintained roadway segments within the study area, excluding I-20, Covington Highway, and certain local streets as provided by the City of Stonecrest. Notably, the map reveals that a significant portion of roadways within the study area exhibit poor to failed pavement conditions.

Specifically focusing on segments with high volume of freight traffic, such as Snapfinger Woods Drive west of Panola Road, DeKalb Medical Parkway, Minola Drive, Panola Road south of I-20, Hillendale Drive, Rock Chapel Road, and Maddox Road, pavement conditions are found to be suboptimal. Notably, Stone Mountain Lithonia between Marbut Road and Rogers Lake Road, along with Park Central Boulevard exhibit extremely low Pavement Condition Index (PCI) values, signaling critical pavement deterioration. Beyond these instances, the remaining sectors of South Stone Mountain Lithonia Road, Lithonia Industrial Boulevard, Evans Mill Road, Chupp

Road, Snapfinger Woods Drive east of Panola Road, and Marbut Road exhibit fair to good surface pavement conditions. Enhancing and maintaining good pavement conditions along these roadway segments holds paramount significance in ensuring optimal traffic flow for local freight transportation.

Figure 4-16: Pavement Conditions



(Note: An updated pavement condition study is currently underway. If available prior to the completion of this report, this section will be updated accordingly.)

4.3 Bridge Profile

4.3.1 Area Bridge Conditions

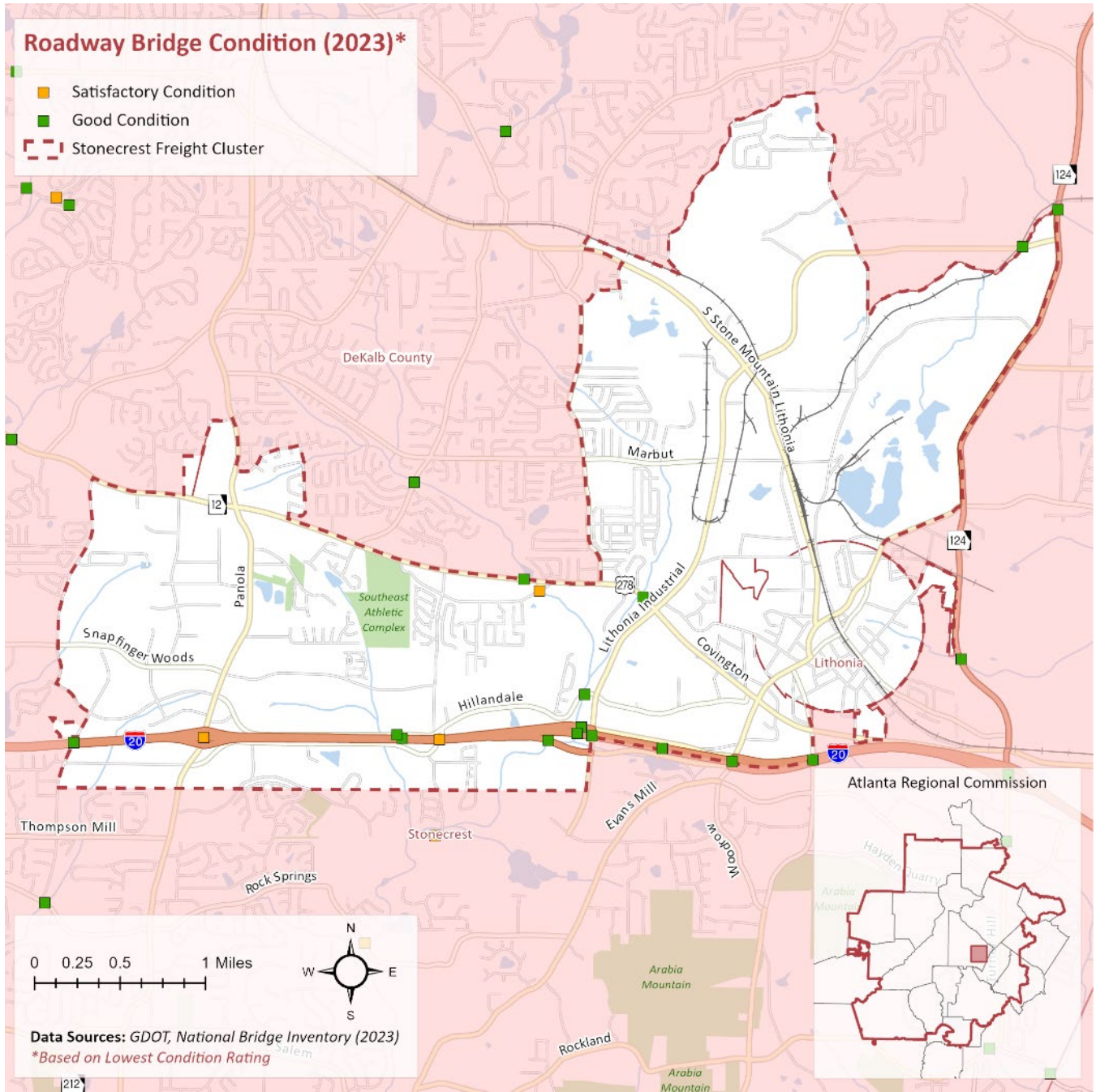
National Bridge Inventory (NBI)⁵ is an extensive dataset of bridge information collected from state Departments of Transportation (DOT)s and compiled by the Federal Highway Administration (FHWA). Among other information, it assigns separate condition ratings to roadway bridges based on the state of their components, including deck, superstructure, substructure, channel, or culvert. Ratings range from 0 to 9, where 0 represents a bridge that is 'out of service/beyond corrective actions,' and 9 indicates an 'excellent condition.' The 'Lowest Rating (LR)' among these components is used to assess the overall condition of a bridge for maintenance, repair, or replacement considerations.

Figure 4-17 displays a map illustrating the Lowest Ratings of bridges within and around the study area, based on the National Bridge Inventory 2023 dataset. Among the 18 total roadway bridges in the study area, 15 bridges have been rated as being in good condition (LR = 7), and three bridges have been rated as satisfactory (LR = 6). Notably, two of these three bridges are situated along I-20 at the intersections of Panola Road and Farmington Road, while the third bridge is located on Hillvale Road over the Pole Bridge Creek, just south of the Covington Highway. The Georgia Department of Transportation (GDOT) has incorporated the replacement of the two I-20 bridges into its scheduled projects, both currently in the pre-construction phase. Although the Hillvale Road bridge isn't part of the designated truck routes, it is being used as an alternate route for trucks during periods of heavy traffic along the Covington Highway corridor. While presently deemed to be in fair condition for accommodating automobile traffic without issue, the passage of trucks over this bridge may pose safety concerns and potentially accelerate its deterioration to a critical state. None of the bridges within the study area were found to have any weight restrictions posted.⁶

⁵ USDOT Federal Highway Administration <https://www.fhwa.dot.gov/bridge/nbi.cfm>

⁶ Georgia Department of Transportation GeoPI, <https://www.dot.ga.gov/applications/geopi/Pages/Search.aspx>

Figure 4-17: Bridge Sufficiency Ratings & Weight Restrictions (2018)



4.3.2 Vertical Clearances

For standard cases, GDOT mandates a minimum vertical clearance of 17'-0" for bridges over the freeways and 16'-9" for bridges over arterial, collector, or local roadways⁷. Among the 15 total bridges within the study area, only six are situated above travel ways. Four of these bridges are over I-20, while the remaining two bridges are under I-20. Table 4-10 shows the vertical clearances of bridges within the study area that are over roadway facilities and compares it to the GDOT's current design requirements.

Table 4-10: Vertical Clearances of Bridges over Roadway Facilities

Features Intersected / Facilities Under	Functional Classification	Facilities Carried	Under clearance	GDOT Minimum Requirement
I-20	Freeway	Miller Road	16'-6"	17'-0"
I-20	Freeway	Fairington Road	16'-11"	17'-0"
I-20	Freeway	Panola Road	16'-6"	17'-0"
Evans Mill Road	Arterial	I-20	18'-9"	16'-9"
I-20	Freeway	I-20 Turn Around	16'-10"	17'-0"
Lithonia Industrial Boulevard	Arterial	I-20	18'-3"	16'-9"

Source: National Bridge Inventory/GDOT, 2023

Examination of the table reveals that all four of the bridges over I-20 fall slightly short of the current design standard of 17'-0" set by the GDOT. Despite their present operation under special design variance approval from GDOT, these measurements warrant consideration for bridge modifications in the future, particularly during the repair or replacement of the two bridges currently deemed satisfactory. GDOT is currently in the preconstruction phase for replacing the three bridges over I-20 at Miller Road, Fairington Road, and Panola Road. The bridge on the Miller Road over I-20 is being completely rebuilt with the design phase currently ongoing. Similarly, the bridges on Fairington Road and on Panola Road over I-20 are also programmed for replacement/reconstruction.

Notably, none of the bridges within the study area are subject to restrictions on vertical clearances over them.

⁷ Bridge and Structure Design Manual, Revision 3.3 (2023) Section 2.3.3.1 Pg. 2-4
[https://www.dot.ga.gov/PartnerSmart/DesignManuals/BridgeandStructure/GDOT Bridge and Structures Policy Manual.pdf](https://www.dot.ga.gov/PartnerSmart/DesignManuals/BridgeandStructure/GDOT%20Bridge%20and%20Structures%20Policy%20Manual.pdf)

5 Freight Network and Environment

Chapter 5 provides a comprehensive assessment of the freight network and its environmental aspects. It begins by examining the truck route network, differentiating between designated and restricted routes, and proceeds to investigate the railroads, air cargo, and waterways within the intermodal network. This chapter also evaluates the availability of truck parking and staging areas and analyzes the resilience of the freight system, addressing both natural and manmade vulnerabilities while ensuring emergency access. Furthermore, it delves into freight origins and destinations, identifying traffic generators and sharing insights from origin and destination analysis, RITIS data, and surveys. Lastly, it highlights the evolving landscape of electric vehicle (EV) charging and alternative fuel sources, emphasizing sustainability in freight mobility.

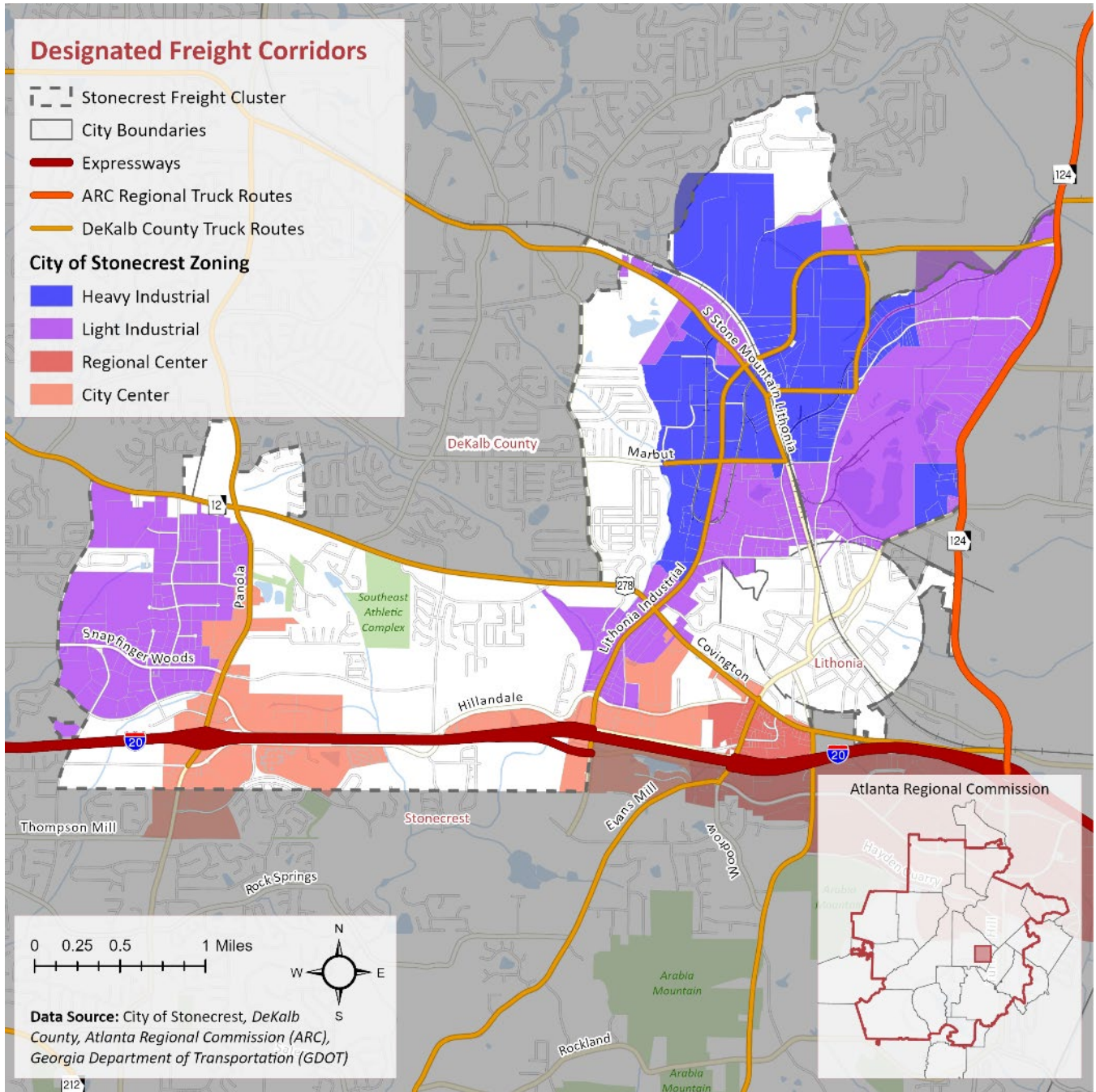
5.1 Truck Route Network

5.1.1 Designated Truck Routes

The composite freight network encompassing the Study Area is delineated by three distinct categories. The National Highway Freight Network (NHFN) encompasses the I-20 corridor, providing a vital connection to the broader National Highway System. The inclusion of SR 124 in the Atlanta Regional Commission's (ARC) Regional Freight Network further enhances connectivity, offering crucial access to I-85 and I-985. Moreover, the [DeKalb County Code of Ordinances Article XXI, Sec. 17-361](#) designates several key roads, including Chapman Road, Covington Highway, Evans Mill Road, Klondike Road, Lithonia Industrial Boulevard, Panola Road, Redan Road, Rock Chapel Road, Rock Mountain Road, Marbut Road, and Rogers Lake Road, as established truck routes in and around the study area.

Figure 5-1 presents a visual representation of the relevant freight network encompassing the Stonecrest Freight Cluster and its surroundings. Although previously identified as a truck route in the 2050 DeKalb County Comprehensive Plan, Panola Road south of I-20 has recently been reclassified as a "No Truck Route" at the specific request of the City of Stonecrest. Given the recent nature of this adjustment, it is advisable for both the city and the county to actively monitor truck utilization along this route to assess the effectiveness of the implemented changes. Additionally, it is noteworthy that, while Snapfinger Woods Drive and Hillandale Drive/Chupp Road are not explicitly designated as truck routes, their substantial truck traffic volumes merit attention.

Figure 5-1: Designated Freight Corridors and Associated Land Uses within Stonecrest Freight Cluster Study Area



5.1.2 Truck Restricted Routes

In addition to the specified truck routes, notable truck traffic is evident on certain roadway segments, often serving as connectors to industries and businesses linked to the designated truck routes. Consequently, the cities of Stonecrest and Lithonia have introduced regulations governing permissible truck routes and their intended purposes.

Under the City of Stonecrest's ordinances ([Ordinance No. 2019-04-05, Section 17-94 & 17-361](#)), freight vehicles that are over 36,000 pounds in weight, or 30 feet in length, are disallowed in city streets, except for the road sections that adjoin properties zoned for industrial activities. Similarly, the City of Lithonia ([Ordinance No. 2022-01-02, Section 5-1520](#)) enforces a prohibition on truck traffic across all city streets.

Nonetheless, it's important to highlight that exemptions to these restrictions apply for trips related to business activities or maintenance, where the shortest practicable routes are pursued. However, this has resulted in traffic flow movement across the Study Area on streets that are not particularly designed for truck traffic to access some of the businesses and truck parking locations, resulting in poor pavement condition affecting all traffic flows.

5.2 Railroads and Intermodal Network

5.2.1 Railroads and Railroad Crossings

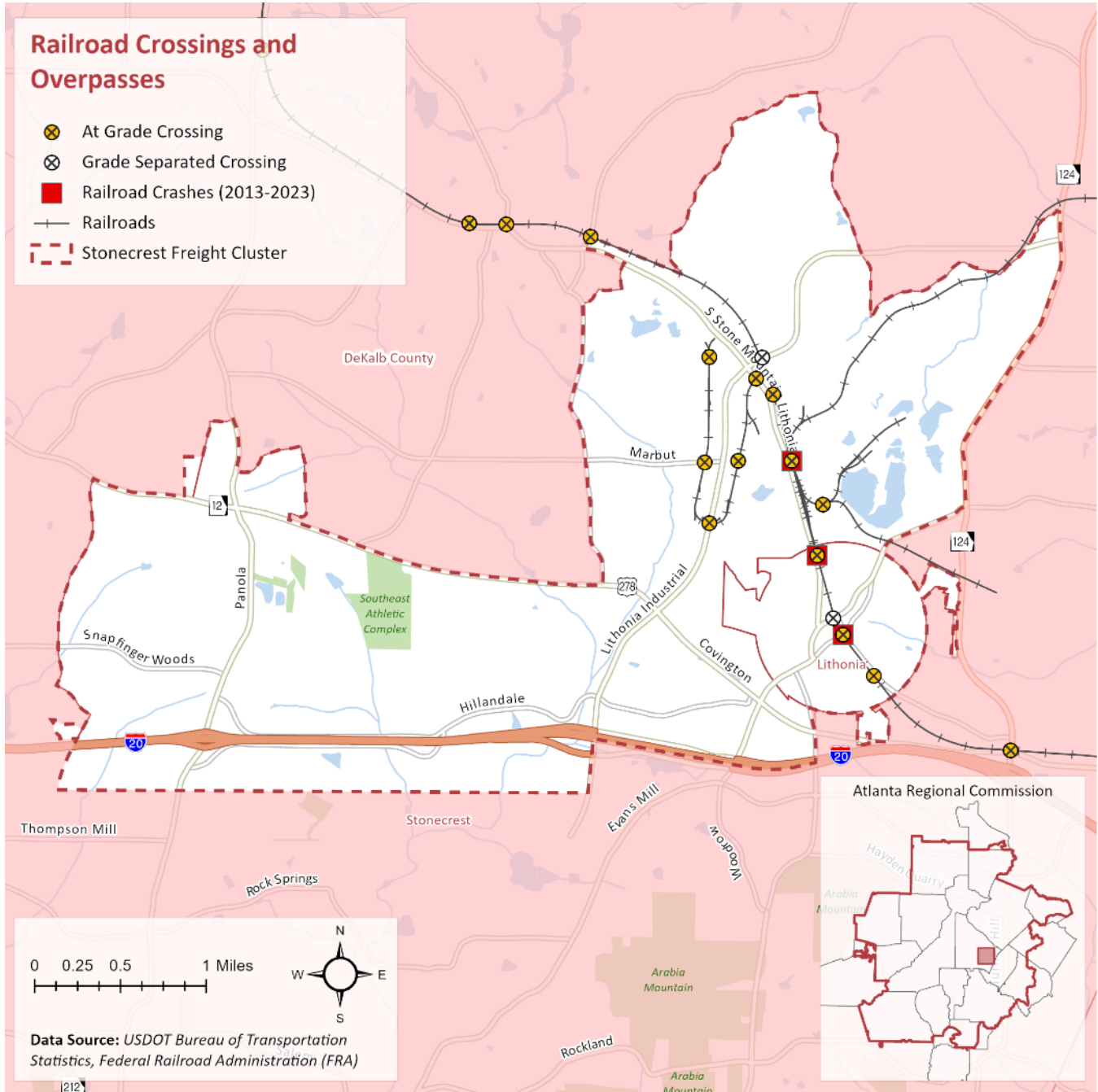
Within the Stonecrest Freight Cluster, an extensive network of railway lines, spanning approximately 20 miles, is operated by CSX Transportation. This railroad plays a pivotal role in connecting various industries and businesses within the region to significant freight transportation hubs. This railway network serves as a critical transportation artery, connecting the Study Area to various destinations. To the west, it establishes connections to Alabama and Tennessee via the CSX railyard situated in the northwestern part of the Atlanta metropolitan region, utilizing CSX-owned tracks. Similarly, it establishes eastward links to South Carolina through the City of Augusta and southern connections to Florida via CSX-owned tracks. Figure 5-2 shows one of the key railroad highway crossings in the Study Area. Furthermore, these railroads also provide vital connections to the Ports of Savannah and Brunswick, albeit through railroads owned by other companies.

Figure 5-2: At-grade Railroad Crossing at Rock Chapel Road leading to the Main Street of Lithonia (Source: Google Street View)



An inventory of these railroads, accompanied by at-grade and grade-separated crossings, is presented in Figure 5-3. The study area encompasses a total of 12 at-grade crossings and 2 grade-separated crossings. Effective management of these at-grade crossings is of paramount importance in freight transportation planning, as it directly impacts the flow of both freight and passenger traffic, while also significantly influencing safety considerations.

Figure 5-3: Railroad Crossings and Overpasses



Of the at-grade crossings, several merit particular attentions due to their interface with roadway traffic. These crossings include:

- The crossing at Lithonia Industrial Boulevard (Average Annual Daily Traffic - AADT: 22,000, Truck AADT: 890) is situated between Marbut Road and Covington Highway.
- The crossing on South Stone Mountain Lithonia Road (AADT: 15,000, Truck AADT: 540) is located just south of the intersection with Lithonia Industrial Boulevard.
- The Marbut Road railroad crossing (AADT: 8,700, Truck AADT: 280) is situated west of the Marbut Road/Lithonia Industrial Boulevard Intersection.

These specific crossings stand out as critical conflict points with roadway traffic, given the substantial vehicular volumes on these three roadways.

Despite the number of high-volume conflict points between auto traffic and railroad at several locations, there have only been 29 recorded railroad crossing crashes/incidents since 1976 and four crashes in the last 10 years according to Federal Railroad Administration (FRA)⁸, of which two crashes were reported to have resulted in injuries.

5.2.2 Air Cargo

Air cargo service, due to its high-speed performance in transportation, is the most expensive shipping mode. Despite accounting for just 2.0 percent of the total cargo volume on a global scale, air cargo holds a significant position, representing about 35 percent of the overall value within the global supply chain. This sector primarily serves industries dealing with perishable items, high-value goods (where shipping expenses form a small part of the total product cost), and businesses that rely on aviation for meeting urgent demands, adapting to changing schedules, or fulfilling stringent delivery requirements⁹. These commodities benefit significantly from the rapidity of aerial transportation, which often outweighs the associated costs¹⁰.

- | | |
|--|---|
| • Aerospace equipment and parts | • Medical/surgical devices and equipment |
| • Automotive equipment and parts | • Chemicals |
| • Energy development | • Perishables including flowers, seafood, fruit, and vegetables |
| • Pharmaceuticals | • Printed materials such as newspapers |
| • Fashion/garments/ textiles | • Telecommunications equipment/cell phones |
| • Consumer electronics | • Film |
| • Computers and computer components | • Defense/military equipment |
| • Medical diagnostic equipment and specimens | |

Hartsfield-Jackson Atlanta International Airport (H-JAIA) plays a central role in the air cargo network of the Study Area (see Figure 5-4). The Study Area, strategically positioned alongside major regional highways like I-20 and I-285, is interconnected with H-JAIA, facilitating the movement of goods to and from the airport.

Renowned as the United States' busiest airport for passenger traffic, it equally serves as a vital hub for air cargo operations. In 2022, H-JAIA oversaw more than 720,000 aircraft operations, facilitating the transportation of

⁸ Highway-Rail Grade Crossing Accident Data (Form 57) <https://data.transportation.gov/Railroads/Highway-Rail-Grade-Crossing-Accident-Data-Form-57-/7wn6-i5b9>

⁹ Identifying Airport-Reliant Businesses (2016) Airport Cooperative Research Program https://crp.trb.org/acrpwebresource1/wp-content/uploads/sites/7/2016/10/E2_Tool1-IdentifyingAirportReliantBusinesses.pdf

¹⁰ Products that Benefit from Air Cargo <https://crp.trb.org/acrpwebresource1/products-that-benefit-from-air-cargo/>

approximately 688,614 metric tons of air cargo, including various freight, express shipments, and mail. These findings, systematically presented in Table 5-1, offer valuable insights into H-JAIA's recent performance amid the challenges posed by the COVID-19 pandemic. As the world grappled with the uncertainties of this global crisis, H-JAIA witnessed a surge in air cargo tonnage during 2021 as it embarked on its journey to recovery. By 2022, air cargo volumes had impressively rebounded to levels similar to those observed before the pandemic struck. These statistics, which encapsulate air cargo activities across the Atlanta region and Northwest Georgia, provide valuable insights into the landscape affecting industries within the Study Area.

Table 5-1: Annual Total Air Cargo in Hartsfield-Jackson Atlanta International Airport (H-JAIA)

Year	Total Aircraft Operations (including Passenger)	Percent Change	Total Air Cargo (Freight, Express, & Mail) in Metric Ton	Percent Change
2012	930,310	-	655,122	-
2013	911,074	-2.07%	616,364	-5.92%
2014	868,359	-4.69%	601,269	-2.45%
2015	882,497	1.63%	626,201	4.15%
2016	898,356	1.80%	648,596	3.58%
2017	880,342	-2.01%	683,685	5.41%
2018	895,682	1.74%	689,466	0.85%
2019	904,301	0.96%	639,277	-7.28%
2020	548,016	-39.40%	599,179	-6.27%
2021	707,661	29.13%	734,771	22.63%
2022	724,145	2.33%	688,614	-6.28%
2023	446,569*	7.16%#	332,393*	-20.81%#

*Data Source: Atlanta International Airport Operating Statistics <https://www.atl.com/business-information/statistics/>
Until July 2023, #Compared to the same period in 2022

Prominent industry leaders like FedEx Corporation and United Parcel Service (UPS) heavily depend on H-JAIA for their freight and logistics operations. These companies have strategically established connections between their regional hubs and the Study Area via the following access locations. Providing seamless connectivity for these operations to H-JAIA is pivotal for streamlining air cargo operations within the study area.

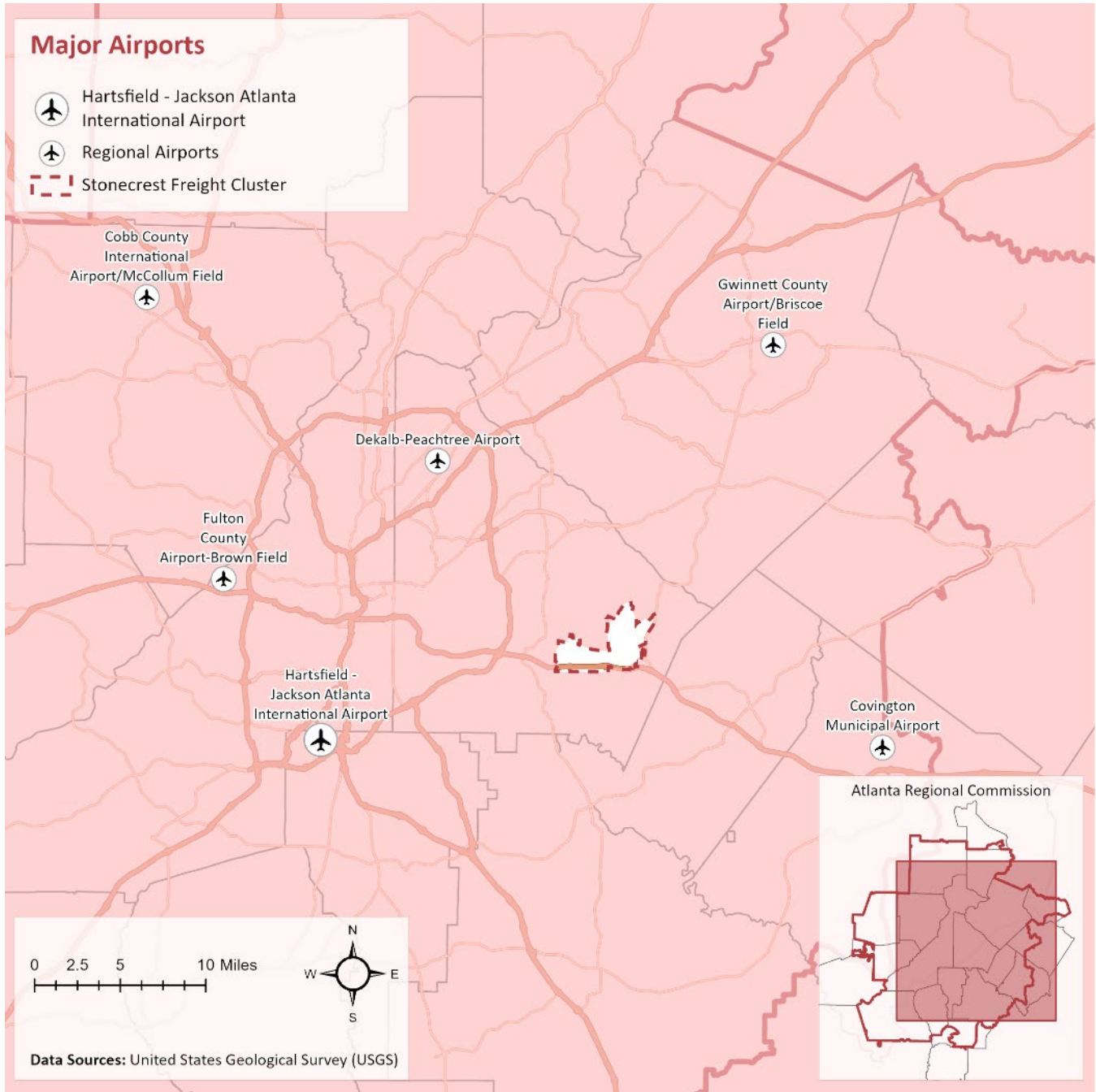
UPS Access Point Locations:

- 7550 Covington Hwy, Lithonia, GA 30058
- 2910 Evans Mill Rd, Stonecrest, GA 30038
- 7173E Covington Hwy STE 9B, Stonecrest, GA 30058

FedEx OnSite Locations:

- 3068 Panola Rd Suite 3, Lithonia, GA 30038
- 2945 Panola Rd, Lithonia, GA 30038
- 6671 Covington Hwy, Lithonia, GA 30058
- 6700 Tribble St, Lithonia, GA 30058

Figure 5-4: Major Airports around Stonecrest Freight Cluster Study Area



Aside from Hartsfield-Jackson Atlanta International Airport (H-JAIA), smaller regional reliever airports like Cobb County International Airport, Fulton County Airport, Gwinnett County Airport, Covington Municipal Airport, and DeKalb Peachtree Airport lie within a 50-mile radius of the Stonecrest Freight Cluster. These airports serve

smaller general aviation aircraft, including corporate jets, charters, training planes, and helicopters, effectively reducing congestion at major air-carrier airports.¹¹

5.2.3 Ports and Waterways

The Study Area is well-positioned to take advantage of the Port of Savannah, the busiest container port in the southeastern United States. The port is located approximately 200 miles from Stonecrest and is connected to the cluster via I-75 and I-16 highways and via railway segments owned and operated by CSX Transportation, Norfolk Southern Corporation, and Georgia Central Railroad. The Port of Savannah, owned and operated by Georgia Ports Authority (GPA), handles over 6 million Twenty-foot Equivalent Units (TEUs) of cargo annually, making it a major gateway for international trade. The port is also a major hub for the movement of goods throughout the southeastern United States.

In 2019, the Georgia Ports Authority (GPA) provided a connection of over 200,000 tons (11,000 TEUs) of import and over 43,000 tons (4,000 TEUs) of export from DeKalb County.¹² This underscores the established connections between industries in DeKalb County, including those in the Study Area, and the Port of Savannah, from which they are already benefiting. These businesses encompass a wide spectrum, including distribution centers, manufacturing facilities, and logistics companies.

The Study Area derives numerous advantages from its close proximity to the Port of Savannah. Firstly, this strategic location offers a direct gateway to global markets, broadening the reach of businesses within the cluster to a more extensive customer and supplier network. Secondly, the Port's streamlined operations contribute to cost-efficiency in transportation, bolstering the competitive edge of businesses operating within the cluster. Furthermore, the Port's accessibility via major highways and interstates facilitates the smooth transit of goods to and from the cluster. The Stonecrest Freight Cluster is also well-positioned to benefit from future investment and growth of the GPA. The GPA is investing heavily in its infrastructure, including the expansion of the Ocean Terminal docks¹³ and Mason Mega Rail Terminal, the expansion of refrigerated container capacity¹⁴, the construction of four new inland port facilities, the deepening of the Savannah River shipping channel, and the improvement of rail and highway intermodal infrastructure¹⁵. These enhancements are expected to increase the capacity of the port by 60 percent from 6 million TEUs to 9.5 million TEUs by 2025¹⁶. These investments will further enhance the value of the Port of Savannah to the Study Area and to the broader Atlanta metropolitan area, creating even more opportunities for businesses in the Study Area.

¹¹ DeKalb Peachtree Airport <https://www.DeKalbcountyga.gov/airport>

¹² Georgia Ports Authority <https://gports.com/more-impact/overview/county>

¹³ GPA to renovate Ocean Terminal docks <https://gports.com/press-releases/gpa-to-renovate-ocean-terminal-docks/>

¹⁴ Georgia Ports expanding refrigerated container capacity <https://gports.com/press-releases/georgia-ports-expanding-refrigerated-container-capacity/>

¹⁵ GPA details capacity, operations expansion <https://gports.com/press-releases/gpa-details-capacity-operations-expansion/>

¹⁶ Port of Savannah to grow capacity by 60 percent <https://gports.com/press-releases/port-of-savannah-to-grow-capacity-by-60-percent/>

5.3 Truck Parking and Staging Areas

Truck parking availability plays a critical role in the operational framework of the Stonecrest Freight Cluster. This economic hub relies heavily on the smooth movement of freight, including industries like logistics, manufacturing, and warehousing. As such management of truck parking facilities is a significant part of the SFCP. A general assessment of the study area reveals an abundance of existing commercial (truck) parking facilities along with a handful of reserved parking spaces for private business use only. A succinct summary of the comprehensive inventory findings is presented in Table 5-2. The capacity has been estimated through visual examination of the most recent satellite imagery available. The estimated area for gravel lots is representative of the corresponding parcel area or the gravel-paved parking area.

Table 5-2: Summary of Truck Parking Inventory

Truck Parking Type	Number of Lots	Estimated Area (in sq.ft)	Estimated Capacity
<i>Gravel Parking Lots</i>	58	12,672,217	4,405
<i>Reserved/Private Lots</i>	45	4,221,304	2,225

A detailed examination of the area revealed that there are currently no publicly owned truck parking facilities, and it was observed that trucks were not utilizing street parking. A substantial number of large warehouses within the Study Area have established their private/reserved parking spaces for freight. These dedicated spaces cater specifically to their logistical needs. Furthermore, it's noteworthy that the light industrial zones situated west of Panola Road lack commercial truck parking availability. However, the industries in this area have demonstrated a proactive approach by providing ample private/reserved truck parking spaces for their operations. In addition to these private truck parking spaces, the region boasts a substantial number of commercial parking options, particularly in the form of gravel parking lots, many of which are located along key roadways, such as Maddox Road and Rogers Lake Road (see Figure 5-5). These gravel lots have raised concerns due to their unregulated nature, overcrowded conditions, and their failure to comply with prescribed parking design specifications. This issue, according to the City of Stonecrest, has led to environmental concerns, as well as complications related to tax compliance and business regulation.

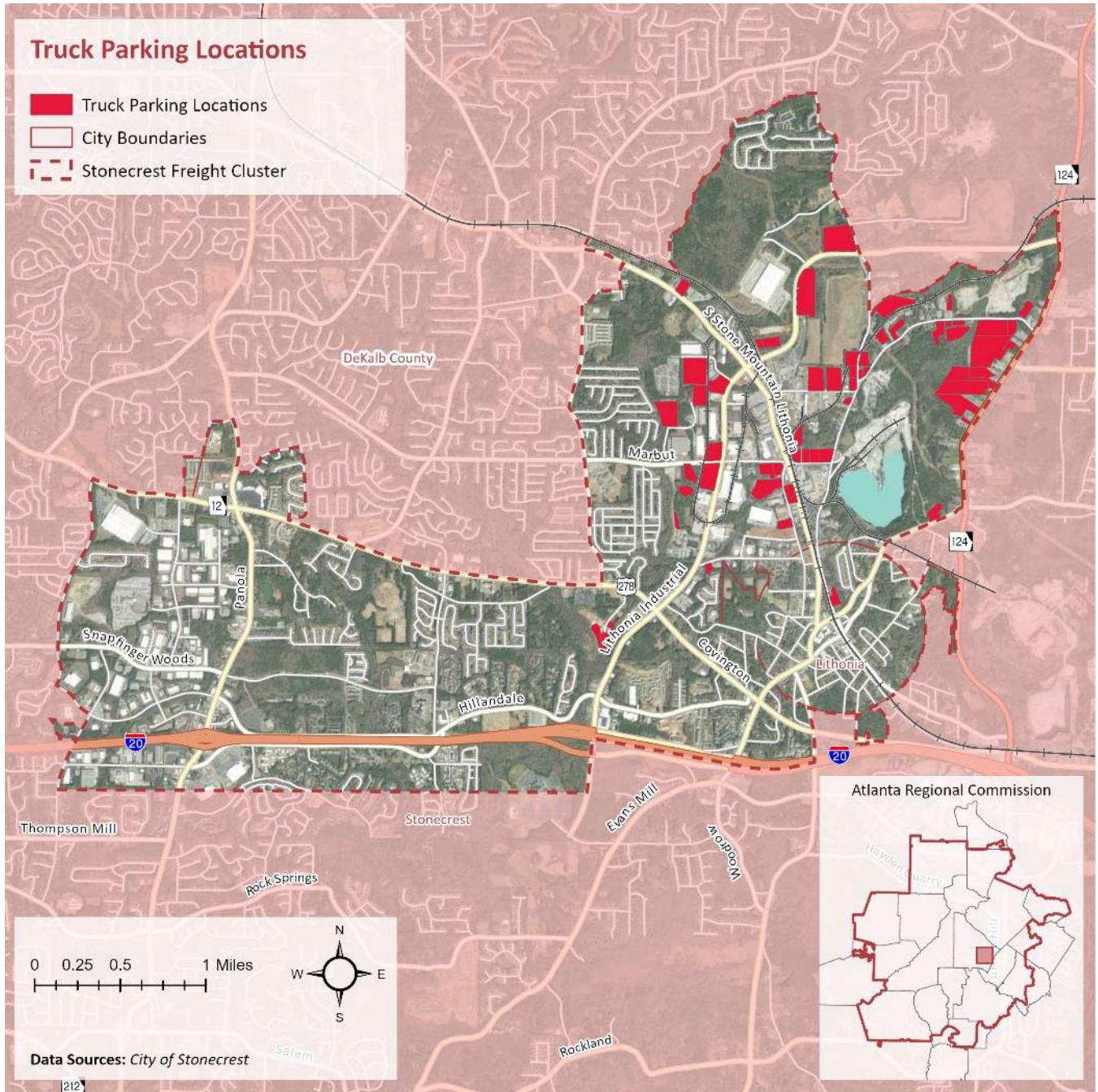
Figure 5-5: A Gravel Parking Lot Located at the Edge of the Study Area



To address these challenges, the City of Stonecrest is taking proactive steps by updating its regulations to require paved and professionally managed truck parking facilities, ensuring compliance and aligning with the city's commitment to promote safer neighborhoods, sustainable growth, and environmental responsibility. Notably, the City of Stonecrest's Ordinance No. 2023-08-01 represents a substantial amendment to all previously existing parking lots within the city, ensuring strict compliance with the Land Development Ordinance and effectively prohibiting any further development of unpaved commercial parking facilities. While the ordinance accommodates the continued operation of existing gravel parking lots with active business licenses, it explicitly designates them as legally nonconforming. Consequently, any prospective alterations or modifications to these facilities will mandate strict adherence to the current ordinance, in line with the city's overarching objectives. These modifications are aimed to provide suitable parking options for businesses within the city's boundaries while discouraging unauthorized operations and addressing the passage of trucks that are merely passing through.

Figure 5-6 represents the distribution of truck parking facilities within the study area. The data on the gravel parking lot was compiled from the City of Stonecrest records as well as from Google satellite imagery.

Figure 5-6: Truck Parking Inventory



5.4 Freight Resilience Considerations

The Stonecrest Freight Cluster is situated in a region susceptible to an array of natural and manmade hazards. Historically, the area has grappled with natural hazards such as flooding, hurricanes, and storms. Conversely, manmade hazards, including traffic crashes and ongoing construction projects, pose potential threats to traffic flow. Given its status as an industrial hub, the region must also remain vigilant regarding hazards related to fire and explosions. These diverse hazards have the capacity to disrupt the smooth movement of freight, exerting a

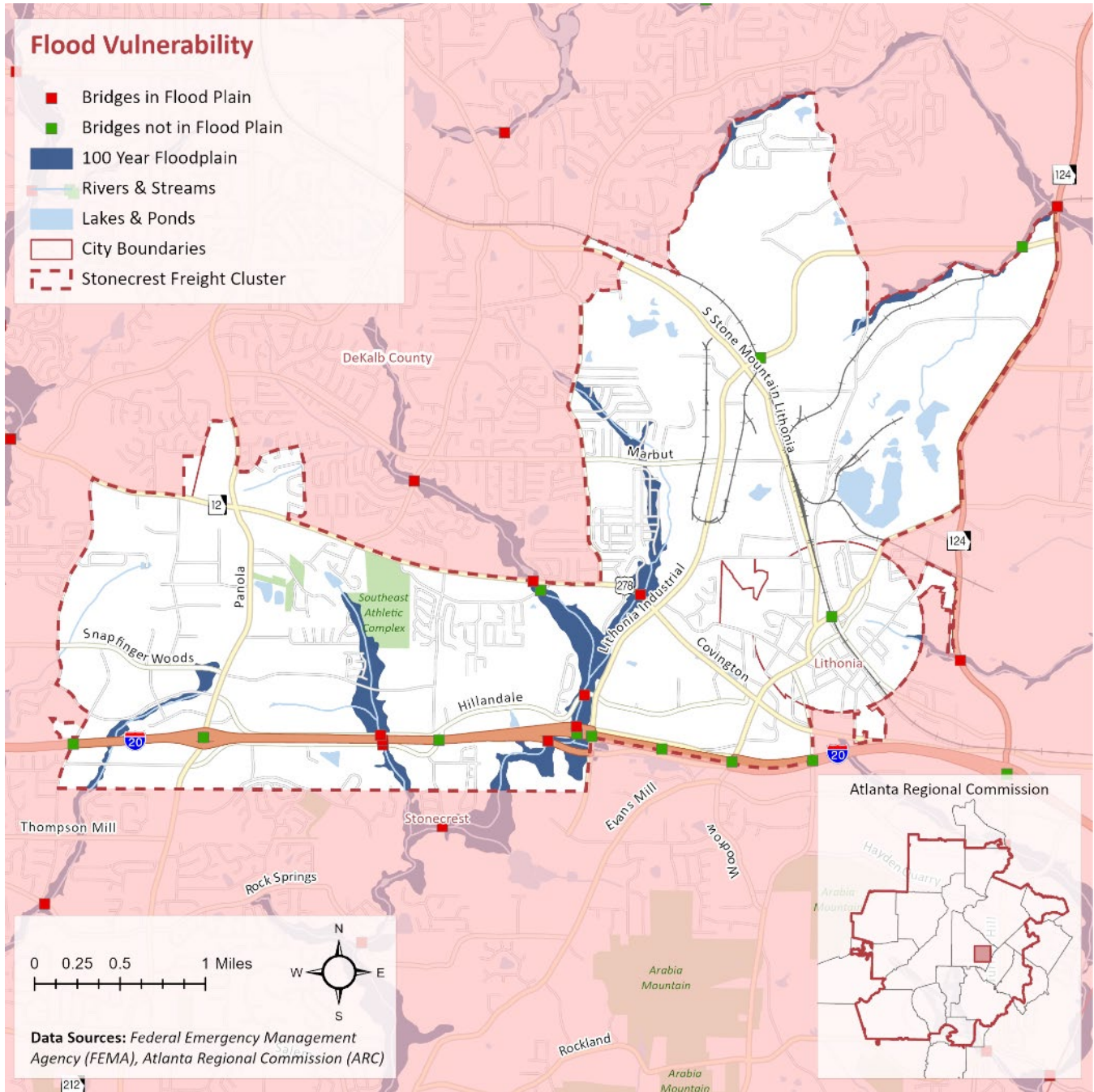
significant economic impact. As such, it becomes imperative to both identify and mitigate these hazards while concurrently formulating comprehensive emergency plans through collaborative efforts among stakeholders.

5.4.1 Natural Vulnerability

The presence of several creeks and rivulets, including Pole Bridge Creek, within the Stonecrest Freight Cluster introduces a notable flood hazard. This vulnerability extends to the region's roadway segments, bridges, and railroad crossings, all of which are at risk of flooding events, as indicated by historic data and the FEMA 100-Year flood plain outlined in Figure 5-7. The potential disruption to traffic flow poses a substantial risk, with far-reaching economic implications.

Additionally, the region has witnessed the proximity of hurricane storms, including unnamed hurricanes in 1900, 1903, and 1911, as well as Frances in 2004, Claudette in 2021, and Nicole in 2022, all categorized as tropical depressions. These nearby hurricane events may lead to disruptions in essential infrastructure, such as electricity and communication systems, pivotal to efficient freight operations. Despite Stonecrest's low earthquake and drought hazard classification, the damages that might result from such events could be high. Therefore, it is imperative to recognize the potential for such high-impact events emphasizes the need to establish a comprehensive emergency preparedness plan involving all pertinent stakeholders to effectively address these multifaceted natural vulnerabilities and hazards.

Figure 5-7: Flood Vulnerability in Stonecrest Freight Cluster

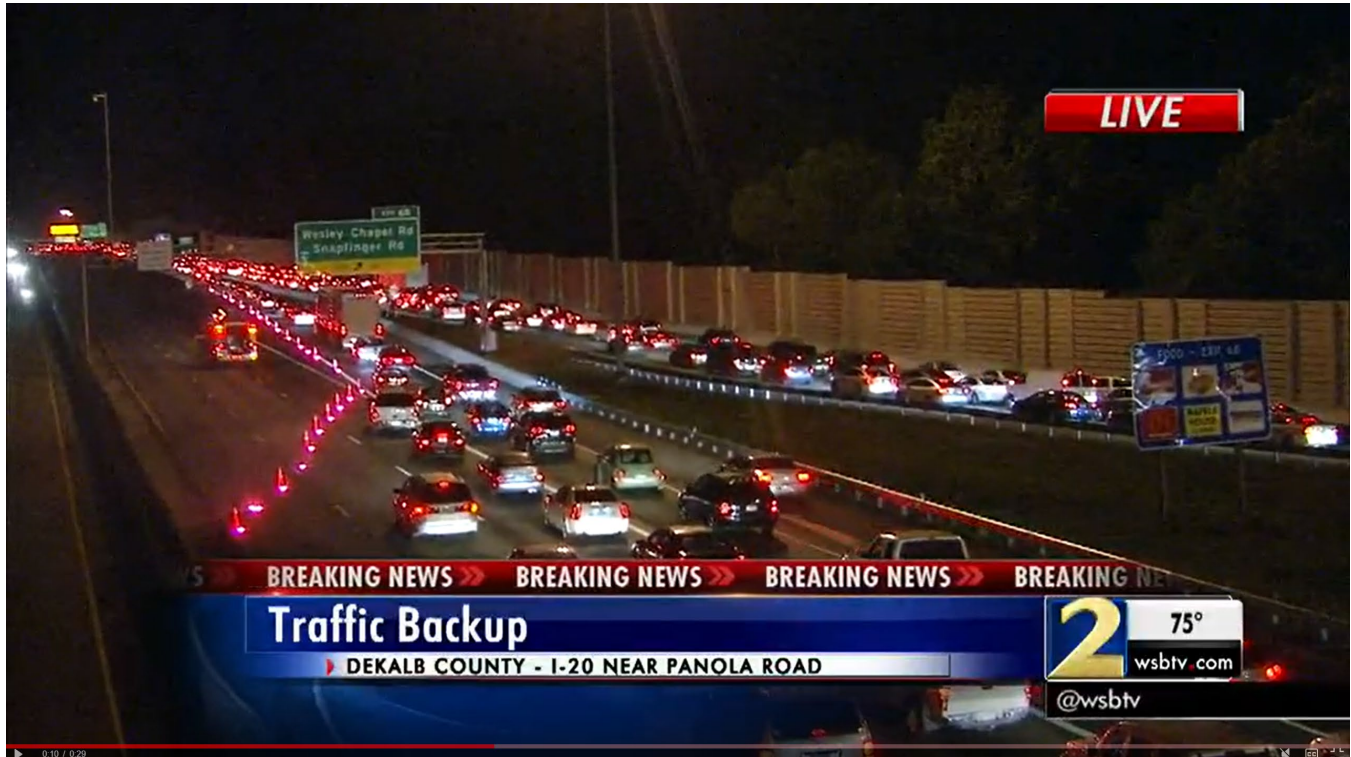


5.4.2 Manmade Vulnerability

The Stonecrest Freight Cluster is confronted with vulnerabilities stemming from manmade hazards, notably traffic crashes and ongoing construction projects, both of which have the potential to significantly disrupt the smooth flow of freight transportation. Over the period from 2018 to 2022, the roadway segments within the study area witnessed a staggering total of 14,351 traffic crashes, resulting in more than 1,000 injuries and tragically claiming 39 lives. Figure 5-8 shows considerable backup resulting from one of the crashes. These

unfortunate incidents often precipitate road closures, necessitate detours, and result in substantial delays, presenting formidable challenges to the effective movement of freight.

Figure 5-8: Screenshot of traffic backup due to a crash on March 23, 2021 (Source: wsbtv.com)



Concurrently, the region is poised for a multitude of roadway improvement initiatives, as outlined in section 4.1.9, encompassing various construction projects such as the Panola Road and I-20 interchange reconstruction efforts which is programmed to undergo well until the end of 2020s. These endeavors are anticipated to induce delays and traffic congestion while potentially jeopardizing critical infrastructure, including roads and bridges, further exacerbating the disruptions experienced by freight transportation.

The ramifications of traffic crashes and construction projects on freight transportation are substantial, encompassing notable delays, heightened operational expenses, and the looming possibility of goods shortages. To effectively address these challenges, it is imperative to establish pragmatic strategies, including meticulous detour route planning, the judicious utilization of technology for real-time traffic monitoring, and fostering collaborative partnerships with stakeholders. Such measures will prove instrumental in mitigating the adverse effects of manmade hazards and bolstering the resilience of the Stonecrest Freight Cluster's freight transportation operations.

5.4.3 Emergency Management

The Georgia Statewide Freight Plan 2023¹⁷ outlines the importance of resilience and emergency management for the freight transportation operations, including those involving the Stonecrest Freight Cluster. The plan

¹⁷ Georgia Freight Plan (2023), Georgia's Critical Freight Issues, Needs and Trends

https://www.dot.ga.gov/InvestSmart/Freight/GeorgiaFreight/Chapter4_Georgia_Critical_Freight_IssuesNeedsTrends.pdf

describes the emergency response initiatives implemented by the GDOT, such as Highway Emergency Response Operators (HERO) and the Coordinated Highway Assistance & Maintenance Program (CHAMP). These initiatives aim to clear roads quickly after emergency events such as traffic- or weather-related incidents. Furthermore, the plan prioritizes supply chain resilience through collaborative coordination among state DOTs, Port Authorities, and stakeholders, aiming to identify and document the impacts of extreme weather events in Georgia and develop efficient approaches to enhance resilience across the entire transportation system in the state. The plan emphasizes the use of real-time data to inform freight operators and supply chain managers about roadway conditions to adapt to immediate roadway conditions, like extreme weather events, traffic disruptions, or construction work detours. The plan advocates the adoption of technology for seamless information dissemination and connectivity, particularly for autonomous and electric vehicles. It also encourages data exchange among partners, enabling operational solutions like Freight Signal Priority (FSP) and Emergency Vehicle Preemption (EVP). In alignment with these efforts, GDOT's 'Georgia 511' initiative¹⁸ provides real-time traffic and travel information, including updates on travel speeds, traffic incidents, construction events, lane closures, and severe weather alerts, ensuring the safety of motorists and facilitating their journeys.

The City of Stonecrest currently does not provide emergency management services directly. However, all the emergency services including police, medical, and fire protection operations within the city are managed by the DeKalb County, in accordance with the Inter-Governmental Agreement (IGA) with the City of Stonecrest. In the Study Area encompassing cities of Stonecrest and Lithonia, the DeKalb County Emergency Management Agency (DEMA)¹⁹ plays a vital role in coordinating emergency responses across local agencies. DEMA focuses on aligning resources effectively to respond promptly to impacted areas during disasters. Their initiatives involve collaboration with local governments, volunteer organizations, and the private sector to develop disaster preparedness plans, mitigation techniques, and provide essential training and exercise evaluations. Furthermore, DEMA manages the Emergency Operations Center²⁰ (EOC) for DeKalb County, as well as the incorporated cities within its jurisdiction, including Stonecrest and Lithonia. This central hub serves as the nerve center during emergencies, facilitating real-time coordination, information dissemination, and resource allocation. DEMA operates under key disaster plans, including the Emergency Operations Plan (EOP), which outlines responsibilities and available resources during response; the Hazard Mitigation Plan²¹, a foundational strategy to reduce disaster losses and enhance community resilience; and the Continuity of Operations Plan, ensuring critical functions persist during various emergencies²². These comprehensive measures underscore the commitment to ensuring a resilient and effective emergency management approach within the Stonecrest Freight Cluster study area.

¹⁸ Georgia 511 <https://511ga.org/>

¹⁹ Emergency Management, DeKalb County, Georgia - Code of Ordinance https://library.municode.com/ga/dekalb_county/codes/code_of_ordinances?nodeId=CODECO_CH11EMMA

²⁰ Emergency Operations Center (EOC) <https://www.dekalbcountyga.gov/dema/codered>

²¹ 2022 Countywide Hazard Mitigation Plan Update https://www.dekalbcountyga.gov/sites/default/files/Dekalb%20County%20Plan%20-%20Ready%20for%20Public%20Comment%20PDF%209.22.2022%20%20pdf--DRAFT_0.pdf

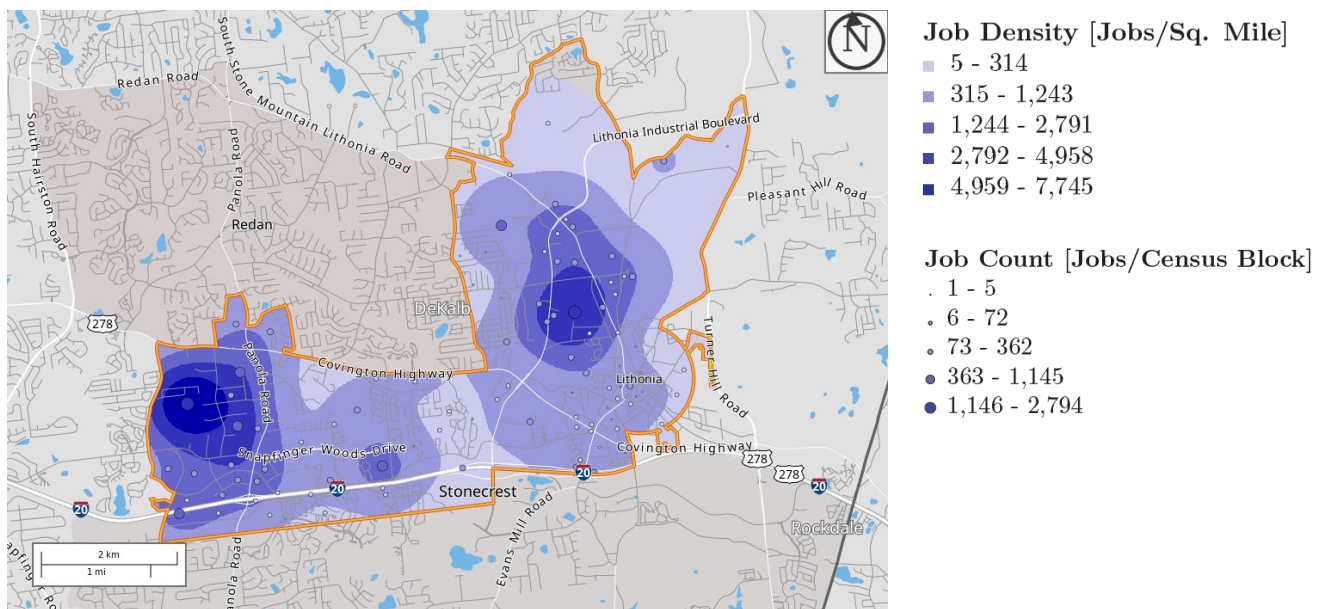
²² DeKalb Emergency Management Agency. "What We Do & How Can We Help?" https://www.canva.com/design/DAEPFRkvd1k/hVBKjJkzMrDCXR1Vu6Vzw/view?utm_content=DAEPFRkvd1k&utm_campaign=designshare&utm_medium=link&utm_source=publishpresent#1

5.5 Freight Origins and Destinations

5.5.1 Freight Traffic Generators

Within the context of the Stonecrest Freight Cluster Plan, a number of industries can be identified as major freight traffic generators, playing a pivotal role in shaping the region's logistics landscape (see Figure 5-9). Among the foremost contributors are major industrial facilities and distribution centers. Notably, Swift Transportation, Home Depot Distribution Centers, and Amazon Warehouses serve as prominent players, facilitating the efficient movement of goods within and beyond Stonecrest. Additionally, the Heidelberg Materials & Aggregates quarry located between Rogers Lake Road and Rock Chapel Road also contributes a significant amount of freight traffic in the region. These facilities, characterized by substantial employee counts, are critical cogs in the regional supply chain, underlining Stonecrest's significance as a distribution and manufacturing hub.

Figure 5-9: Count and Density of All Jobs within Stonecrest Freight Cluster in 2020



Map and Data Source: U.S. Census Bureau, OnTheMap Application <https://onthemap.ces.census.gov/>

In addition to these major entities, a comprehensive analysis of employment data reveals several noteworthy industries across various census blocks within the study area. Notable examples include Swift Transportation's Atlanta Terminal, Marshalls Distribution Center Company, Fulton Metals Recycling, and GMR Gymnastics Sales, among others. These industries, encompassing logistics, recycling, and manufacturing, contribute significantly to the local economy and generate substantial freight traffic. Furthermore, the influence of the Martin Marietta - Lithonia Quarry, though situated outside the study area, extends its impact on regional traffic, particularly along SR 124. Recognizing these freight traffic generators is pivotal for informed transportation planning, enabling the optimization of logistics networks and infrastructure to support the region's economic vitality.

The following table (Table 5-3) represents the major freight generator industries along with the total number of jobs by census block.

Table 5-3: Major Freight Generating Industries in Stonecrest Freight Cluster

Census Blocks	Total Jobs	Major Industries
Block 3001 (West of Panola Road)	2,794	Swift Transportation – Atlanta Terminal, Marshalls Distribution Center Company, Kliklok LLC, Insulation Distributors, etc.
Block 3001 (West of Lithonia)	1,461	Fulton Metals Recycling, GMR Gymnastics Sales
Block 3007	728	DAWG Transport, TextureSource, Glass Systems Inc., Golden Krust Distribution Center
Block 3000	601	Coca-Cola Vending, Vendors Supply,
Block 2010	578	Emory Hillandale Hospital
Block 1003	458	Foam Fabricators-Georgia, Shook & Fletcher Insulation, 4 Sur Deals Liquidation, Procoaters Inc, Trojan Battery Co, FW Logistics, No Limit Catalytics, Caribbean International Shipping Services, New South Construction Supply
Block 1002	373	Woodbridge Corporation, Mr. Plastics, GCP Applied Technologies, Home Depot Distribution Center (8)
Block 1010	358	International Paper Co, Sansom Equipment Company, Starbase Atlanta, FFE Transportation
Block 3010	445	S DOT Williams Transport, Swift Orientation, (A Giant Warehouse)
Block 2010	355	Grace Care Ambulance Transport, Myers Shipping, Universal Steel Inc.
Block 2000	335	Heidelberg Materials & Aggregates, Gravel Parking Lots

Data Source: U.S. Census Bureau

Besides these traffic generators within the study area, it is also to be noted that some of the significant traffic generators (quarries like Metro Materials, Vulcan Materials, Martin Marietta-Lithonia Quarry, etc.) that could impact the traffic in the Stonecrest Freight Cluster are located outside the boundary of study area and outside the jurisdiction of the cities of Stonecrest and Lithonia. Therefore, while this plan will consider the impacts of activities on the study area, proper management of such would require greater coordinated efforts.

5.5.2 Origin and Destination Analysis Methodology

The Regional Integrated Transportation Information System (RITIS)²³ is an automated data fusion and distribution system that enhances an understanding of transportation network performance and trends, enabling the analysis of traffic bottlenecks and trends in new signal installations. One of RITIS’s features is the Trip Analytics Origin-Destination (OD) Matrix module²⁴, which generates trip tables based on passive data from the University of Maryland Center for Advanced Transportation Technology (CATT) Lab. Data can be parsed by specific date ranges, times of the day, days of the week, and vehicle classes.

²³ An Introduction to RITIS <https://www.ritis.org/intro#ritis>

²⁴ Trip Analytics – OD Matrix <https://www.ritis.org/tools#odmatrix>

The Georgia Department of Transportation (GDOT) is an active participant in the NextGen National Household Travel Survey (NHTS) OD Data Portal. GDOT supplied a series of different geographic polygons to NextGEN/RITIS, such that OD data are available at the county, sub-county, and statewide traffic analysis zone (TAZ) levels. For the purposes of the Stonecrest Freight Cluster Study, an OD-Matrix analysis was conducted for medium- and heavy-duty vehicles at a sub-county level, covering 270 zones within Georgia and 657 zones outside Georgia using data for the calendar year 2022. Since the sub-county zones provided by the RITIS tool do not perfectly align with the study area, the trip numbers presented in the analysis should be considered approximations. Consideration was given to using RITIS at the TAZ level for more geographic specificity; however, dashboard runtimes precluded the use of these data over a large geographic region.

5.5.3 RITIS Analysis Results

The analysis of freight flows to and from the Study Area reveals a crucial role in supporting economic vitality and growth in the region. The data indicates a thriving network of freight movements, both within the cluster itself and to various destination zones. These findings have several implications for the economic landscape of the area. Table 5-4 identifies the top origins and destinations of truck trips associated with the Stonecrest Freight Cluster.

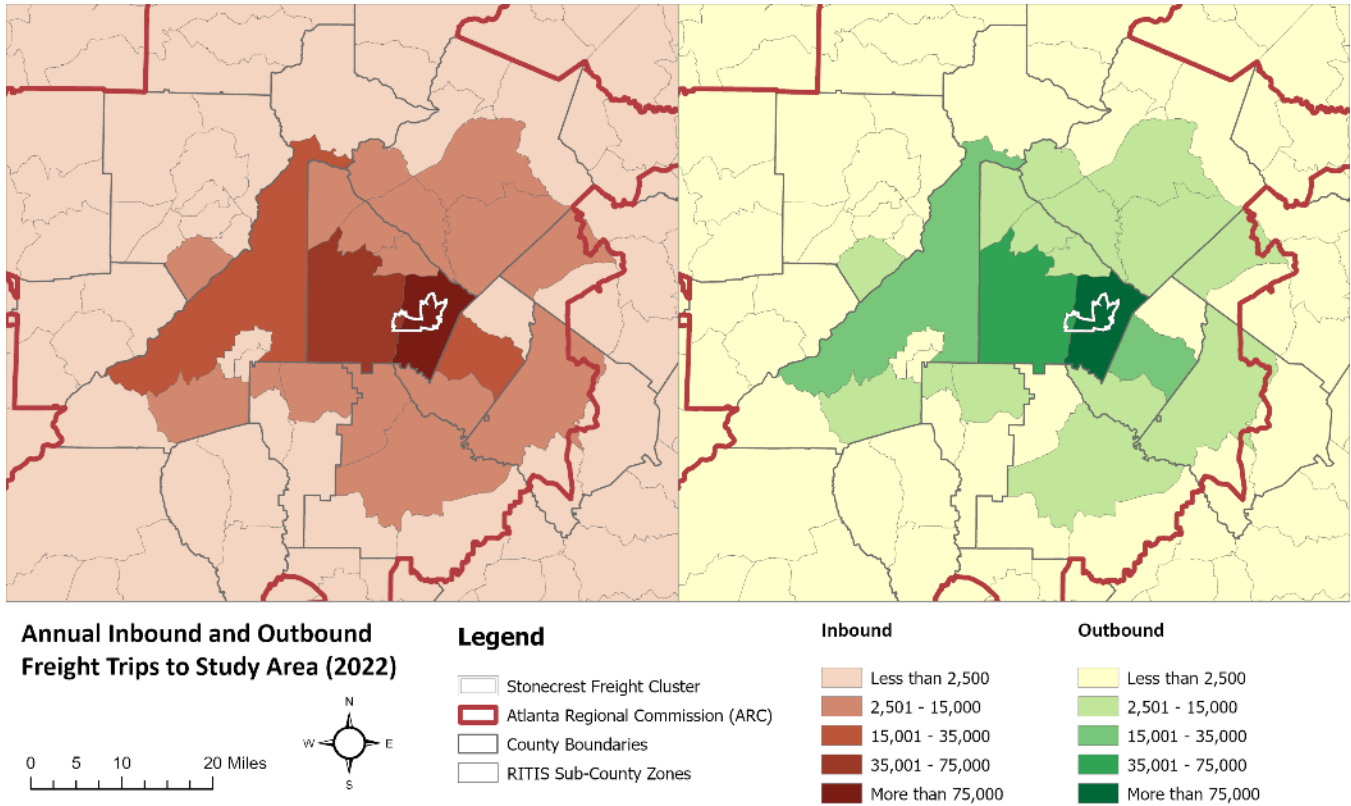
Table 5-4: Top 10 Annual Outbound and Inbound Truck Flows to/from Stonecrest Freight Cluster Area

Top Destination Zones (Outbound)	Trips	Top Origin Zones (Inbound)	Trips
Atlanta-Decatur (DeKalb County)	56,400	Atlanta-Decatur (DeKalb County)	58,200
Atlanta (Fulton County)	25,600	Conyers (Rockdale County)	27,500
Conyers (Rockdale County)	24,000	Atlanta (Fulton County)	22,500
Snellville-Grayson (Gwinnett County)	12,800	Snellville-Grayson (Gwinnett County)	12,600
Stone Mountain (DeKalb County)	10,800	Stone Mountain (DeKalb County)	10,900
Covington-Porterdale (Newton County)	10,600	Covington-Porterdale (Newton County)	9,600
Forest Park-Morrow (Clayton County)	8,500	Forest Park-Morrow (Clayton County)	8,600
Lilburn (Gwinnett County)	7,900	Lilburn (Gwinnett County)	8,200
Tucker (DeKalb County)	6,100	Tucker (DeKalb County)	5,600
Others	78,800	Others	74,600
Total	241,400	Total	238,300

Data Source: RITIS

The Study Area continues to serve as a vital driver of economic activity. The study area encompasses a total of 189,900 annual internal truck trips, constituting a significant portion of the overall flows, in addition to 241,400 outbound and 238,300 inbound daily truck trips directed towards key destinations. These internal flows encompass critical activities such as warehousing, manufacturing, and distribution, contributing substantially to job creation and fostering local economic development. Furthermore, the diversity of both destination and origin zones involved in these freight flows underscores Stonecrest's integral position within a broader regional network. Figure 5-10 provides a visual representation of these same truck flows.

Figure 5-10: Annual Inbound and Outbound Truck Trips to/from the Stonecrest Freight Cluster Area (2022)



The outbound freight trips continue to highlight Stonecrest's pivotal role in shaping the regional economy. With 241,400 annual outbound trips, Stonecrest significantly influences commerce within the region. The prominent destination zone of Atlanta-Decatur (DeKalb County) leads with 56,400 trips, cementing Stonecrest's status as a central distribution and supply chain hub for goods destined for the most densely populated areas of DeKalb County. Additionally, 25,600 trips to Atlanta (Fulton County) and 24,000 trips to Conyers (Rockdale County) emphasize Stonecrest's importance in facilitating the supply chains of neighboring counties. These robust outbound flows play an instrumental role in supporting regional commerce, further highlighting Stonecrest's substantial contribution to the broader economic landscape.

Conversely, Stonecrest continues to be an attractive destination for goods from various locations, as indicated by the 238,300 annual inbound trips it receives. Atlanta-Decatur (DeKalb County) contributes 58,200 inbound trips, underscoring its role in channeling goods into Stonecrest's logistics network. Additionally, 27,500 trips from Conyers (Rockdale County) and 22,500 trips from Atlanta (Fulton County) reflect local reliance on a consistent inbound supply of goods, showcasing Stonecrest's adaptability and significance in fostering sustained economic growth.

5.5.4 Key Takeaways Related to O/D Analysis

The freight origin-destination analysis underscores the crucial role of the Study Area in shaping the region's logistics landscape, fostering economic development, and maintaining a strong presence in both outbound and inbound freight flows. This data is vital for informed transportation planning and infrastructure optimization in support of the region's economic vitality.

- Prominent Freight Traffic Generators:** Major contributors to freight traffic in the Stonecrest region include industrial facilities like Swift Transportation, Home Depot Distribution Centers, and Amazon Warehouses, as well as the Heidelberg Materials & Aggregates quarry. These facilities, characterized by substantial employee counts, play a critical role in the regional supply chain, highlighting Stonecrest's significance as a distribution and manufacturing hub.
- Top Freight Flows:** The analysis relies on the Regional Integrated Transportation Information System (RITIS) OD data portal. The top origin-destination freight flows were observed, including 106,000 annual truck trips outbound to Atlanta-Decatur (DeKalb County), Atlanta (Fulton County), and Conyers (Rockdale County), underlining Stonecrest's pivotal role as a central distribution and supply chain hub. Additionally, 108,200 annual inbound trips from Atlanta-Decatur (DeKalb County) and Conyers (Rockdale County) reflect Stonecrest's significance in channeling goods into its logistics network and supporting regional commerce.
- Economic Significance:** The Stonecrest Freight Cluster plays a pivotal role in supporting economic vitality and growth in the region. It generates a significant number of truck trips, both internally and to various destination zones. These freight flows encompass essential activities such as warehousing, manufacturing, and distribution, contributing significantly to job creation and fostering local economic development. The Stonecrest region's importance is evident in both outbound and inbound truck flows, highlighting its substantial contribution to regional commerce and its adaptability in fostering sustained economic growth.

5.6 EV Charging and Alternative Fuel Sources

The integration of Electric Vehicle (EV) charging infrastructure and the exploration of alternative fuel sources emerge as critical considerations for ensuring sustainable and resilient freight operations. Derived from the 2021 Bipartisan Infrastructure Law and the National Electric Vehicle Infrastructure (NEVI) Program guidance, GDOT has designated 10 Alternative Fuel Corridors (AFCs) along the major highways in Georgia²⁵. One of such major corridors that passes through the Study Area is the 201 miles along the I-20 corridor where GDOT plans to fill in the gaps in the NEVI-Compliant DCFC (Direct Current Fast Charging) coverage.

According to U.S. Department of Energy, there are two alternative fuel stations within the Study Area, and seven others located within half-a-mile distance from it. Although the department recognizes eight different alternative fuels (Biodiesel, CNG, Ethanol, Electric, Hydrogen, LNG, Propane, and Renewable Diesel), all these nine fuel stations are electric charging stations (see Table 5-5 and Figure 5-11). Throughout these nine locations, there are seven Level-2 and 21 Level-3 (DC Fast) charging stations. And most of the stations are available throughout the day. However, it is to be noted that these stations cater only to electric cars, and none are intended to accommodate heavy vehicles such as freight trucks.

Table 5-5: Electric Vehicle Fuel Stations in and around Stonecrest Freight Cluster

Station Name	Address	EV Network	Charging Stations
Hilton Garden Inn Atlanta East/Stonecrest - Tesla Destination	78990 Mall Ring Rd, Lithonia, GA 30038	Tesla Destination	2 (Level-2)
Walgreens - Lithonia, GA #6202	6671 Covington Hwy, Lithonia, GA 30058	SemaCharge Network	1 (Level-2)
The Centre at Panola - Tesla Supercharger	3007 Panola Road, Lithonia, GA 30038	Tesla	12 (Level-3)

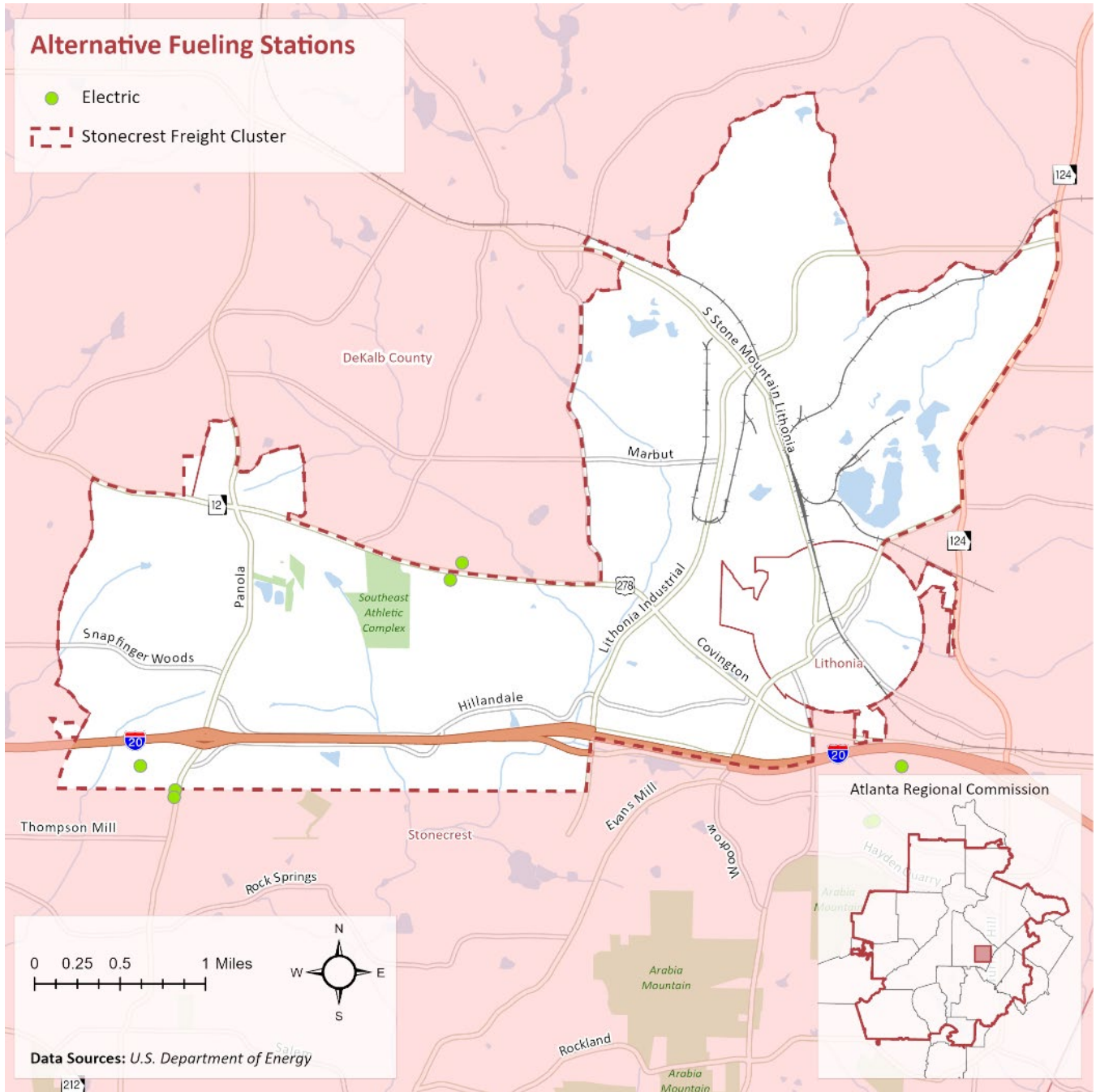
²⁵ Georgia National Electric Vehicle Infrastructure Deployment Program (2022) <https://nevi-qdot.hub.arcgis.com/>

Station Name	Address	EV Network	Charging Stations
<i>Georgia Power Minola L2</i>	5215 Minola Dr, Lithonia, GA 30038	ChargePoint Network	2 (Level-2)
<i>Georgia Power Minola DC</i>	5215 Minola Dr, Stonecrest, GA 30038	ChargePoint Network	1 (Level-3)
<i>Kroger 6678 Covington Highway</i>	6678 Covington Highway, Lithonia, GA 30058	Volta	2 (Level-2)
<i>Centre at Panola</i>	3007 Panola Rd, Stonecrest, GA 30038	eVgo Network	6 (Level-3)
<i>Asbury Customer Area</i>	7909 Mall Pkwy, Stonecrest, GA 30038	ChargePoint Network	1 (Level-3)
<i>Asbury Inventory Lot</i>	7909 Mall Pkwy, Stonecrest, GA 30038	ChargePoint Network	1 (Level-3)

Source: U.S. Department of Energy, 2023

Located within an ever-evolving transportation landscape, the Study Area faces numerous challenges and opportunities related to the adoption of cleaner and more efficient energy solutions. As the demand for environmentally responsible freight transportation intensifies, addressing the vulnerabilities associated with traditional fuel sources, while embracing innovative technologies and alternative fuels, becomes not only relevant but also essential for the long-term viability and environmental stewardship of the region's freight industry.

Figure 5-11: Alternative Fueling Stations in Stonecrest Freight Cluster Study Area



6 Safety Analysis

Crash and safety analysis is critical in transportation planning, particularly within the context of freight transportation plans. Analyzing past crash data, understanding their spatial and temporal distribution, and identifying contributing factors are essential steps in fostering a safe and resilient future transportation network. The assessment of crash data offers value through the identification of potential system deficiencies about operations. Comprehensive crash analysis enables identification of the areas of heightened risk and vulnerability, informing targeted interventions to enhance safety measures and mitigate potential disruptions. Discerning past patterns in crash occurrences can lead to the proactive design of roadways and infrastructure that mitigate risks and ensure the smooth flow of freight traffic. Minimizing crash incidents directly translates to fewer disruptions in traffic flow, ultimately resulting in improved operational efficiency, reduced economic costs, and heightened overall resilience of the freight transportation system. As such, a rigorous crash and safety analysis forms the bedrock of informed decision-making, fortifying the foundation for a secure, efficient, and future-ready freight transportation plan.

The safety evaluation undertaken within the study area has been conducted using crash data sourced from the Numetric AASHTOWare Safety²⁶ data portal, as provided by GDOT. The study analyzes the spatial pattern and contributing factors of crashes for a span of five years, encompassing the inclusive period spanning from 2018 through 2022. The following table (Table 6-1) summarizes the count of all crashes, commercial vehicle crashes, and bike & pedestrian related crashes that occurred within the study area by KABCO severities, roadway functional classification, location at impact, manner of collisions, lighting, and roadway surface conditions.

Table 6-1: Number of Crashes within the study area (2018-2022)

	All Crashes	Commercial Vehicle Crashes	Bicycle and Pedestrian Crashes
<i>Total</i>	14,351	992	150
KABCO Crash Severity			
<i>(K) Fatal Injury</i>	39	5	16
<i>(A) Suspected Serious Injury</i>	207	19	23
<i>(B) Suspected Minor / Visible Injury</i>	833	48	47
<i>(C) Possible Injury / Complaint</i>	3,207	170	44
<i>(O) No Injury</i>	9,906	747	19
<i>Unknown</i>	159	3	1
Roadway Functional Classification			
<i>Interstate</i>	3,533	440	7
<i>Principal Arterial - Other</i>	238	16	3
<i>Minor Arterial</i>	6,565	336	84
<i>Major Collector</i>	1,364	51	29
<i>Local</i>	1,628	78	24
<i>Ramps</i>	701	59	2
<i>Not able to classify</i>	299	11	1

²⁶ GDOT AASHTOWare Safety <https://qdot.aashtowaresafety.com/>

	All Crashes	Commercial Vehicle Crashes	Bicycle and Pedestrian Crashes
<i>Unknown</i>	23	1	-
Location at Impact			
<i>Unknown</i>	41	3	-
<i>Entrance/Exit Ramp</i>	353	43	1
<i>Off Roadway</i>	599	20	3
<i>On Roadway - Driveway Intersection</i>	746	34	5
<i>On Roadway - Non-Intersection</i>	8,353	649	85
<i>On Roadway - Roadway Intersection</i>	3,684	200	35
<i>Others</i>	575	43	21
Manner of Collision			
<i>Unknown</i>	35	3	-
<i>Angle (Other)</i>	2,605	215	5
<i>Head On</i>	319	11	-
<i>Left Angle Crash</i>	1,498	48	-
<i>Not a Collision with Motor Vehicle</i>	1,343	58	142
<i>Rear End</i>	5,979	316	2
<i>Right Angle Crash</i>	300	28	-
<i>Sideswipe-Opposite Direction</i>	283	20	-
<i>Sideswipe-Same Direction</i>	1,989	293	1
Lighting Condition			
<i>Unknown</i>	19	2	-
<i>Dark-Lighted</i>	2,284	87	35
<i>Dark-Not Lighted</i>	1,982	115	45
<i>Dawn</i>	129	9	1
<i>Daylight</i>	9,829	774	66
<i>Dusk</i>	108	5	3
Roadway Surface Condition			
<i>Unknown</i>	34	3	-
<i>Dry</i>	12,094	861	127
<i>Ice/Frost</i>	34	1	-
<i>Mud</i>	1	-	-
<i>Oil</i>	1	-	-
<i>Other</i>	7	-	-
<i>Sand</i>	2	1	-
<i>Snow</i>	4	1	-
<i>Water (standing or moving)</i>	34	3	-
<i>Wet</i>	2,140	122	23

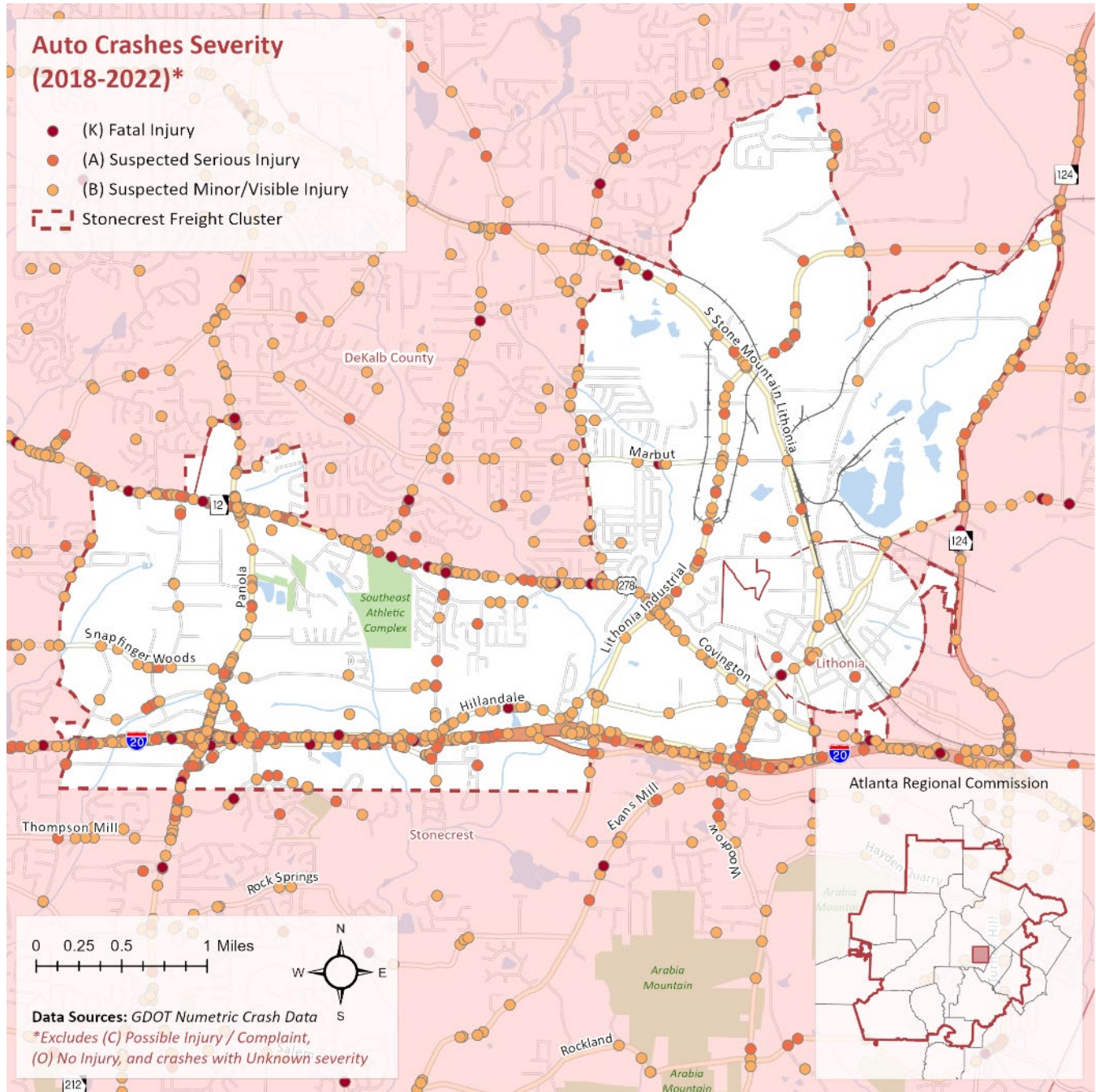
6.1 Total Crashes

During the period from 2018 to 2022, a total of 14,351 crashes were recorded within the study area boundary. Among these, 39 crashes resulted in fatal injuries, and 207 crashes led to serious injuries. Rear end collisions accounted for a significant portion, constituting 5,979 crashes, representing approximately 42% of all incidents. Daylight conditions were prevalent during 9,829 crashes, accounting for approximately 68% of the total. Moreover, 12,094 crashes occurred on dry road surfaces, comprising approximately 84% of all recorded incidents, while 2,140 crashes transpired on wet road surfaces, representing approximately 15% of the total. For a detailed breakdown of the number of crashes based on KABCO crash severity, manner of collision, lighting condition, and surface conditions, please refer to Table 6-1.

This comprehensive analysis serves as a crucial reference for transportation planning, highlighting critical patterns and factors that contribute to crash occurrences within the study area, enabling targeted safety and mitigation measures to be implemented to improve overall traffic safety.

Analyzing crash incidents across various severity levels, spanning from minor injury to fatal crashes, provides a nuanced understanding of the diverse risks faced by road users within the study area. Concurrently, a meticulous assessment of the spatial distribution of these incidents reveals localized patterns and potential high-risk zones. The density of crashes along I-20, particularly at intersections at Panola Road, Fairington Road, and Evans Mill Road, as well as along Covington Highway are high with a significant number of fatal crashes during the 2018-2022 period (Figure 6-1). Most of the crashes along this corridor are vehicle on vehicle collisions, with reasons ranging from lack of sufficient lighting, losing control of the vehicle, failure to yield, and crash with parked vehicles. In addition, within the same period, three fatal crashes have been recorded along the section of South Stone Mountain Lithonia Road towards the northeast edge of the study area in between the Redan E Street and East DeKalb Health Center. This could potentially be a result of lack of safe crossing for pedestrians, forcing the pedestrians to take risks while crossing the Covington Highway segments.

Figure 6-1: Auto Crashes Severity (2018-2022)

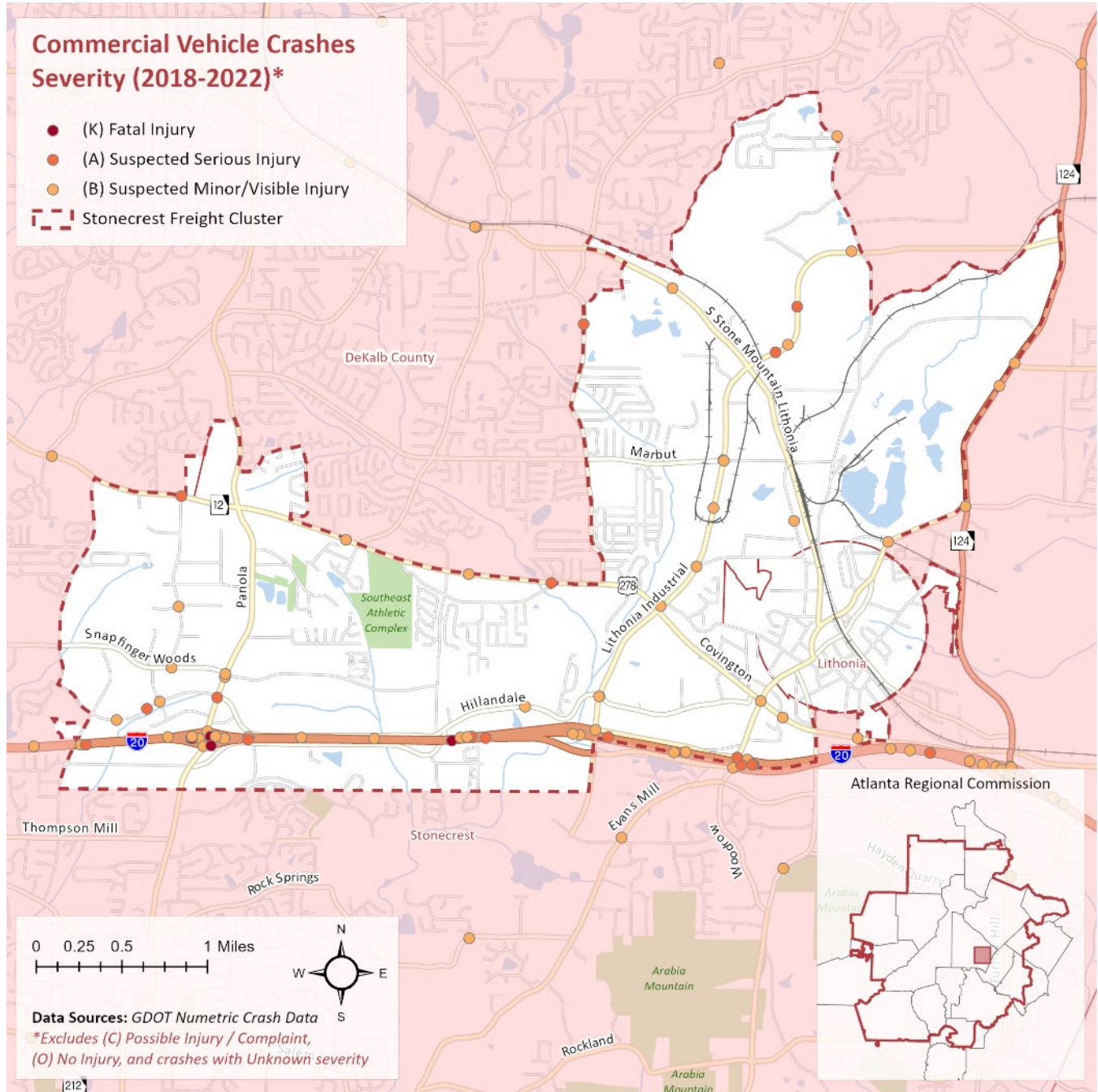


6.2 Commercial Vehicle Safety

Observing a similar trend as all auto crashes, the analysis of 992 total commercial vehicle crashes within the study area boundary from 2018 to 2022 shows that five crashes and 19 crashes resulted in fatal and serious injuries respectively. Further analysis indicates that rear-end collisions (32%) and sideswipe-same direction collisions (30%) accounted for a notable proportion of incidents. Additionally, most of these crashes occurred during daylight hours (78%) or on dry road surfaces (87%), mirroring the patterns observed in overall crash data. The detailed breakdown of commercial vehicle crashes by KABCO crash severity, manner of collision, lighting

condition, and surface conditions is provided in Table 6-1. Figure 6-2 shows the commercial vehicle crashes severity.

Figure 6-2: Commercial Vehicle Crashes Severity (2018-2022)

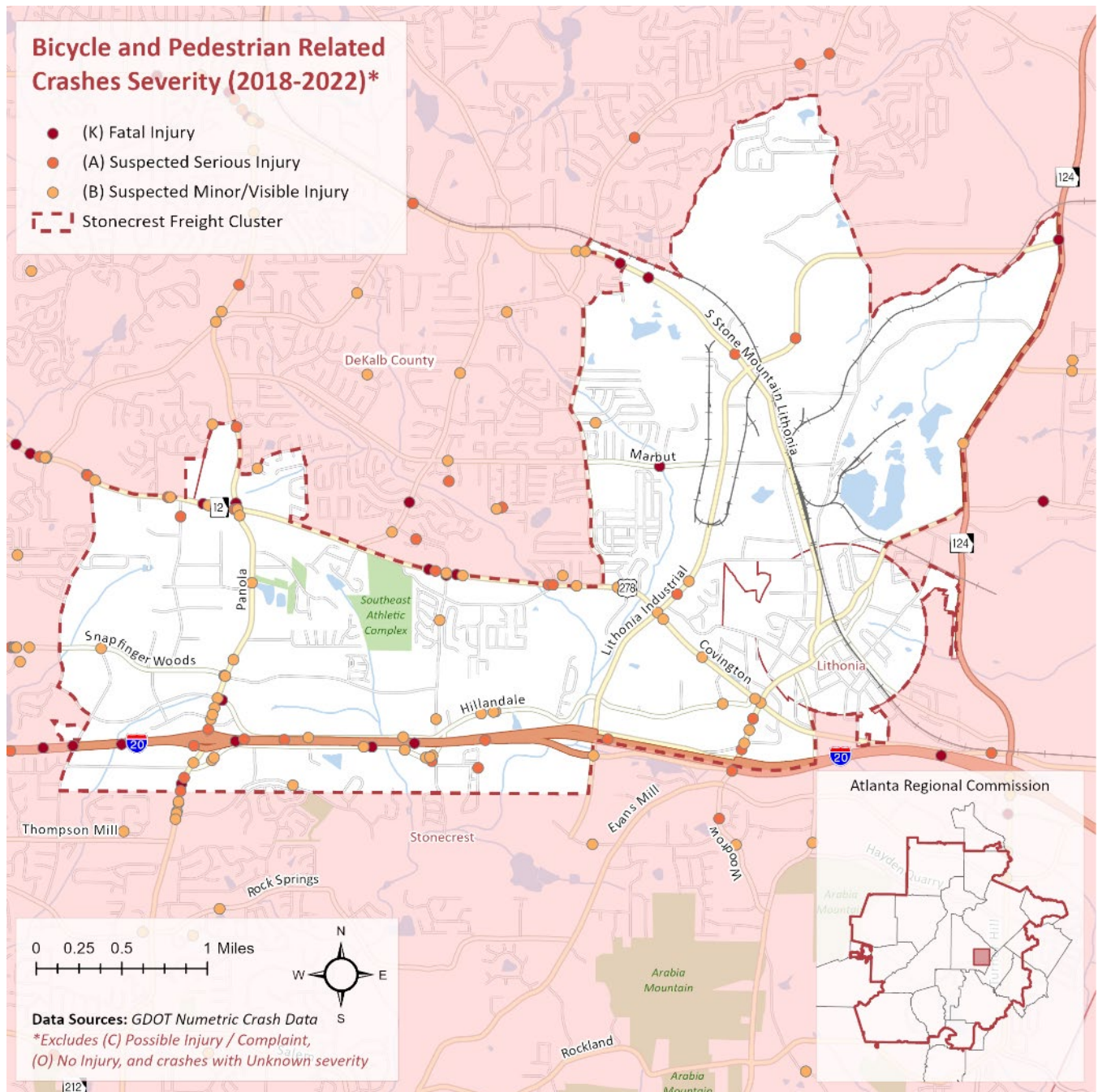


From the spatial distribution map in Figure 6-2, the interchange between I-20 with Panola Road and with Evans Mill Road can be identified as the crash hotspots with 15 and eight injury/fatal crashes respectively. Out of five fatal commercial vehicle crashes within the study area, four occurred along the I-20 corridor or on a ramp adjacent to it. Two of the fatal crashes were a result of rear end collision with a passenger car in dark/unlighted condition and two were collisions with parked vehicles.

6.3 Bicycle and Pedestrian Safety

Considering the general lack of bicycle- and pedestrian-friendly facilities such as bike lanes, crosswalk, center island, etc., the roadways within the Study Area occur to be dangerous for biking and walking users. Panola Road, Covington Highway, and Evans Mill Road have been observed to be hotspots for bicycle and pedestrian related crashes during the study period (see Figure 6-3).

Figure 6-3: Bicycle and Pedestrian Related Crashes Severity (2018 - 2022)



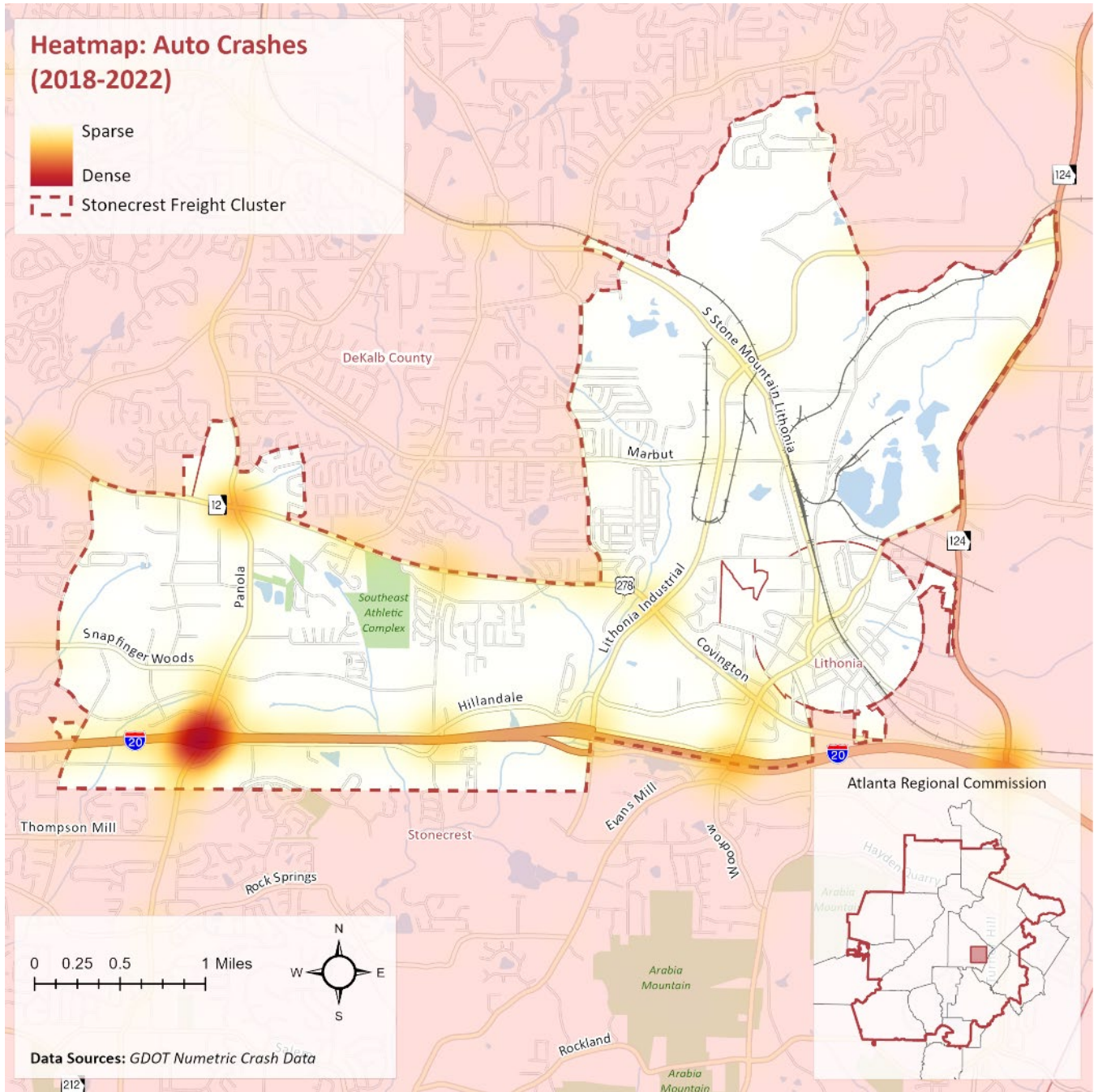
Between 2018 and 2022 inclusive, 150 bicycle and pedestrian related crashes were reported within the study area. Out of these, 16 were fatal and 70 resulted in major or minor injuries. Of the 16 fatal incidents, 14 took place in conditions with inadequate lighting during dark hours, underscoring the need for improved visibility for safe crossings. Furthermore, four of the fatal incidents happened at intersections, while 10 occurred outside of intersections. Notably, the majority of these non-intersection accidents occurred more than 500 feet away from the nearest crosswalk. The absence of proper illumination paired with the lack of designated crossing points underscores the insufficient bicycle and pedestrian infrastructure in the study area, compelling people who walk and bike to assume substantial risks when navigating roadways. The severe lack of bicycle and pedestrian infrastructure in the region suggests that these crashes are a result of policy choices and not just one-off incidents.

6.4 Collision Hot Spot Analysis

Both automobile crashes and commercial vehicle crashes exhibit a comparable spatial distribution pattern within the study area. This observation is evident from the data presented in Table 6-1, where a significant majority of both types of crashes occur on interstates or minor arterials. The heatmap (Figure 6-4) underscores the prominence of the interchange between I-20 and Panola Road as a hotspot for auto crashes, with a high number of crash incidents occurring at or in close proximity to this location. This hotspot extends along Panola Road, reaching up to the intersection of Panola Road and Snapfinger Woods Drive.

Additionally, other notable hotspots with a high density of crashes at or near intersections include the junction of Panola Road and Covington Highway, as well as the I-20 and Evans Mill Road interchange. Further potential hotspots identified are the intersections of Fairington Road with Hillandale Drive, and Covington Highway with Evans Mill Road, Lithonia Industrial Boulevard, and DeKalb Medical Parkway.

Figure 6-4: Auto Crashes Heatmap (2018-2022)



The information pertaining to the crash count, crash severity, and contributing factors for the study period of 2018 through 2022 at each identified hotspot area is as follows:

Panola Road from I-20 Interchange to Snapfinger Woods Drive Intersection

- Total: 5,243 crashes, 452 commercial vehicle crashes
- Severity: 13 Fatal injuries, 60 Serious Injuries, 234 Minor Injuries

- Contributing Factors: Following Too Close, Failure to Yield, Changed Lanes Improperly, Improper Turn, Driver Lost Control, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: Panola Road, spanning from the I-20 Interchange to Snapfinger Woods Drive Intersection, exhibits concerning safety issues with over 5,000 crashes, including numerous commercial vehicle incidents, resulting in fatalities and injuries primarily caused by factors like tailgating, failure to yield, and adverse road conditions.

Panola Road and Covington Highway Intersection

- Total: 1,151 crashes, 37 commercial vehicle crashes
- Severity: 3 Fatal injuries, 21 Serious Injuries, 71 Minor Injuries
- Contributing Factors: Failure to Yield, Following Too Close, Changed Lanes Improperly, Improper Turn, Driver Lost Control, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: Panola Road and Covington Highway Intersection presents safety concerns with 1,151 crashes, including commercial vehicle incidents, resulting in fatalities and injuries primarily caused by factors like failure to yield, tailgating, and adverse road conditions.

I-20, Evans Mill Road, and Old Hillandale Drive Interchange

- Total: 741 crashes, 43 commercial vehicle crashes
- Severity: 13 Serious Injuries, 34 Minor Injuries
- Contributing Factors: Following Too Close, Failure to Yield, Changed Lanes Improperly, Improper Turn, Driver Lost Control, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: The I-20, Evans Mill Road, and Old Hillandale Drive Interchange raises safety concerns with 741 crashes, including commercial vehicle incidents, resulting in numerous injuries primarily due to factors like tailgating, failure to yield, and challenging road conditions.

Fairington Road, and Hillandale Drive Intersection

- Total: 941 crashes, 63 commercial vehicle crashes
- Severity: 4 Fatal injuries, 20 Serious Injuries, 57 Minor Injuries
- Contributing Factors: Following Too Close, Changed Lanes Improperly, Failure to Yield, Driver Lost Control, Improper Passing, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: The Fairington Road and Hillandale Drive Intersection poses safety concerns with 941 crashes, including a significant number involving commercial vehicles, leading to fatalities and injuries primarily attributed to factors like tailgating, improper lane changes, and adverse road conditions.

I-20 and Lithonia Industrial Boulevard Interchange

- Total: 545 crashes, 74 commercial vehicle crashes
- Severity: 1 Fatal injury, 2 Serious Injuries, 27 Minor Injuries
- Contributing Factors: Following Too Close, Changed Lanes Improperly, Failure to Yield, Driver Lost Control, Disregard Stop Sign/Signal, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: The I-20 and Lithonia Industrial Boulevard Interchange exhibits safety concerns with 545 crashes, including a notable number involving commercial vehicles, resulting in injuries and fatalities primarily linked to factors such as tailgating, improper lane changes, and adverse road conditions.

Covington Highway and Evans Mill Road Intersection

- Total: 565 crashes, 29 commercial vehicle crashes
- Severity: 6 Serious Injuries, 26 Minor Injuries
- Contributing Factors: Following Too Close, Failure to Yield, Changed Lanes Improperly, Improper Turn, Improper Backing, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: The Covington Highway and Evans Mill Road Intersection presents safety concerns with 565 crashes, including incidents involving commercial vehicles, resulting in injuries primarily attributed to factors like tailgating, failure to yield, and challenging road conditions.

Covington Highway and Lithonia Industrial Boulevard Intersection

- Total: 560 crashes, 44 commercial vehicle crashes
- Severity: 1 Fatal injury, 6 Serious Injuries, 38 Minor Injuries
- Contributing Factors: Following Too Close, Failure to Yield, Changed Lanes Improperly, Improper Turn, Improper Backing, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: The Covington Highway and Lithonia Industrial Boulevard Intersection exhibits safety concerns with 560 crashes, including incidents involving commercial vehicles, resulting in injuries and a fatality, primarily attributed to factors like tailgating, failure to yield, improper lane changes, and adverse road conditions.

Covington Highway and DeKalb Medical Parkway Intersection

- Total: 459 crashes, 11 commercial vehicle crashes
- Severity: 3 Fatal injuries, 5 Serious Injuries, 40 Minor Injuries
- Contributing Factors: Following Too Close, Failure to Yield, Changed Lanes Improperly, Improper Turn, Improper Passing, Road Surface Condition (wet, icy, snow, slush, etc.)
- Assessment: The Covington Highway and DeKalb Medical Parkway Intersection raises safety concerns with 459 crashes, including a few involving commercial vehicles, leading to fatalities and injuries primarily due to factors like tailgating, failure to yield, and adverse road conditions.

7 Multimodal Travel and Commute Interactions

This chapter explores multimodal travel and commute interactions within the Study Area. It begins by investigating how freight connects with transit, pedestrian pathways, and commute services, with a specific focus on enhancing workforce accessibility to transit options. Furthermore, this chapter delves into bicycle and pedestrian infrastructure, emphasizing consistency with local transportation analysis. It also assesses the workforce commute services, striving to improve the overall travel experience for employees. Additionally, this chapter scrutinizes the compatibility of freight and multimodal design, addressing concepts such as complete streets and shared-use paths. By examining these vital aspects, Chapter 7 aims to foster seamless interactions among various modes of transportation, ultimately enhancing the efficiency and accessibility of the freight cluster's transportation network.

7.1 Freight Connections to Transit, Pedestrian, and Commute Services

7.1.1 Workforce Accessibility to Transit

7.1.1.1 *Transit Service Characteristics*

The Metropolitan Atlanta Rapid Transit Authority (MARTA) serves as the primary transit provider for the Study Area, offering essential transportation options for residents and businesses. MARTA's transit network in the area is primarily composed of five strategically planned bus routes, ensuring comprehensive coverage and accessibility within the cluster. Although train and streetcar routes are currently absent, these five bus routes form the backbone of the local transit infrastructure, providing crucial connectivity. MARTA maintains an extensive network of 181 strategically located bus stops within the cluster, facilitating convenient access to public transportation. These well-placed stops contribute to the seamless movement of both passengers and goods throughout the region. Notably, The Mall at Stonecrest serves as a central hub where multiple MARTA bus routes converge, enhancing connectivity within the community. While there are future proposals to develop this location into a formal Transit Hub, the current significance of the mall as a transit hub is already notable, providing valuable accessibility and transportation options for the SFCA.

In addition, three XPRESS bus routes, operated by the State Road & Tollway Authority (SRTA), traverse the study area and seamlessly connect to MARTA rail stations²⁷, significantly enhancing regional connectivity. These XPRESS buses primarily operate on weekdays, with a focus on facilitating morning and evening commutes. The Panola Road Park & Ride currently serves as an unofficial transit hub for SRTA bus routes within the study area, further solidifying its role in enhancing regional connections, including access to MARTA rail stations.

7.1.1.2 *Transit Routes*

The Stonecrest Freight Cluster is served by five MARTA Bus routes: Route 86, Route 111, Route 115, Route 116, and Route 117. These routes connect the cluster to various points of interest, including the Mall at Stonecrest, Emory Hillandale Hospital, Redan Village, East DeKalb Health Center, and the DeKalb County Health Department as well as provide vital regional connection to workforce working in the industries located within the freight cluster through metro Atlanta rail 'Blue' line.

²⁷ *Transit Services in the Atlanta Region* <https://atlantaregional.org/transportation-mobility/transit/transit-in-the-atlanta-region/>

Similarly, the three SRTA XPRESS Bus routes that provide regional connection from and to the Stonecrest study area are: Route 423, Route 426, and Route 428. These routes connect the Panola Road Park & Ride to the Midtown, Downtown, and Perimeter Mall respectively, providing important accessibility options to the employers as well as the workforces in the Stonecrest Freight Cluster study area.

- MARTA Route 86 connects Kensington Station to the Mall at Stonecrest, traveling along Peachcrest Rd., Snapfinger Rd., Snapfinger Woods Dr., Fairington Rd., Hillandale Dr., and Mall Parkway during mall hours. Notable stops include Emory Hillandale Hospital and the Mall at Stonecrest.
- MARTA Route 111 links Indian Creek Station with the Mall at Stonecrest via Redan Rd., S. Hairston Rd., Covington Hwy., Wesley Chapel Rd., Snapfinger Woods Dr., Hillandale Dr., Chupp Rd., Turner Hill Rd., and Mall Pkwy. Some trips extend to the Alice Williams Towers. Key destinations include Emory Hillandale Hospital and the Mall at Stonecrest.
- MARTA Route 115 offers service between Kensington Station and The Mall at Stonecrest via Covington Highway, Turner Hill Road, and Mall Parkway, with a focus on the Mall at Stonecrest.
- MARTA Route 116 runs from Indian Creek Station to the Mall at Stonecrest along Redan Rd., S. Stone Mountain-Lithonia Rd., Max Cleland Blvd., Main St., Evans Mill Rd., and Mall Pkwy. Stops of interest include Redan Village and the East DeKalb Health Center.
- MARTA Route 117 operates between Avondale Station and XPRESS Panola Park & Ride, covering Winn Way, N. Decatur Rd., Rockbridge Rd., S. Stone Mtn.-Lithonia Rd., Panola Rd. to Park & Ride, Fairington Pkwy, and W. Fairington Pkwy. Some weekday trips extend to the Lou Walker Senior Center, serving locations like the DeKalb County Health Department and Emory Decatur Hospital.
- SRTA Route 423 provides vital connectivity, linking N Salem Road at I-20 to the Arts Center MARTA station and Midtown through the Panola Road Park & Ride and West Conyers Park & Ride, utilizing major routes such as I-20 and I-85.
- SRTA Route 426 offers seamless transportation options, bridging N Salem Road at I-20 to the Civic Center MARTA station and Downtown. This route runs along I-20 and encompasses key transit points, including the Panola Road Park & Ride and West Conyers Park & Ride.
- SRTA Route 428 connects the West Conyers Park & Ride to the Dunwoody MARTA station and Perimeter Mall. This route utilizes strategic roadways such as I-20, Panola Road Park & Ride, and I-285 to ensure efficient mobility across the region.

Table 7-1 identifies the five MARTA Bus routes through Stonecrest Freight Cluster, Figure 7-1 shows transit connections, and Figure 7-2 indicates transit routes. The connection of each of the routes are discussed below.

Table 7-1: Transit Connections to Stonecrest Freight Cluster

Route Number	Route Name	Agency	Connections
86	Fairington Road	MARTA	Kensington Station - Mall at Stonecrest
111	Snapfinger Woods	MARTA	Indian Creek Station - Mall at Stonecrest
115	Covington Highway	MARTA	Kensington Station - Mall at Stonecrest
116	Redan Road	MARTA	Indian Creek Station - Mall at Stonecrest
117	Rockbridge Road / Panola Road	MARTA	Avondale Station - XPRESS Panola Park & Ride
423	E Conyer/W Conyer/Panola - MT	SRTA	N Salem Road @ I-20 – Arts Center Station

Route Number	Route Name	Agency	Connections
426	E Conyer/W Conyer/Panola - DT	SRTA	N Salem Road @ I-20 – Civic Center Station
428	W Conyers/Panola - Perimeter	SRTA	West Conyers Park & Ride – Dunwoody Station

Figure 7-1: Transit Connections to Stonecrest Freight Cluster

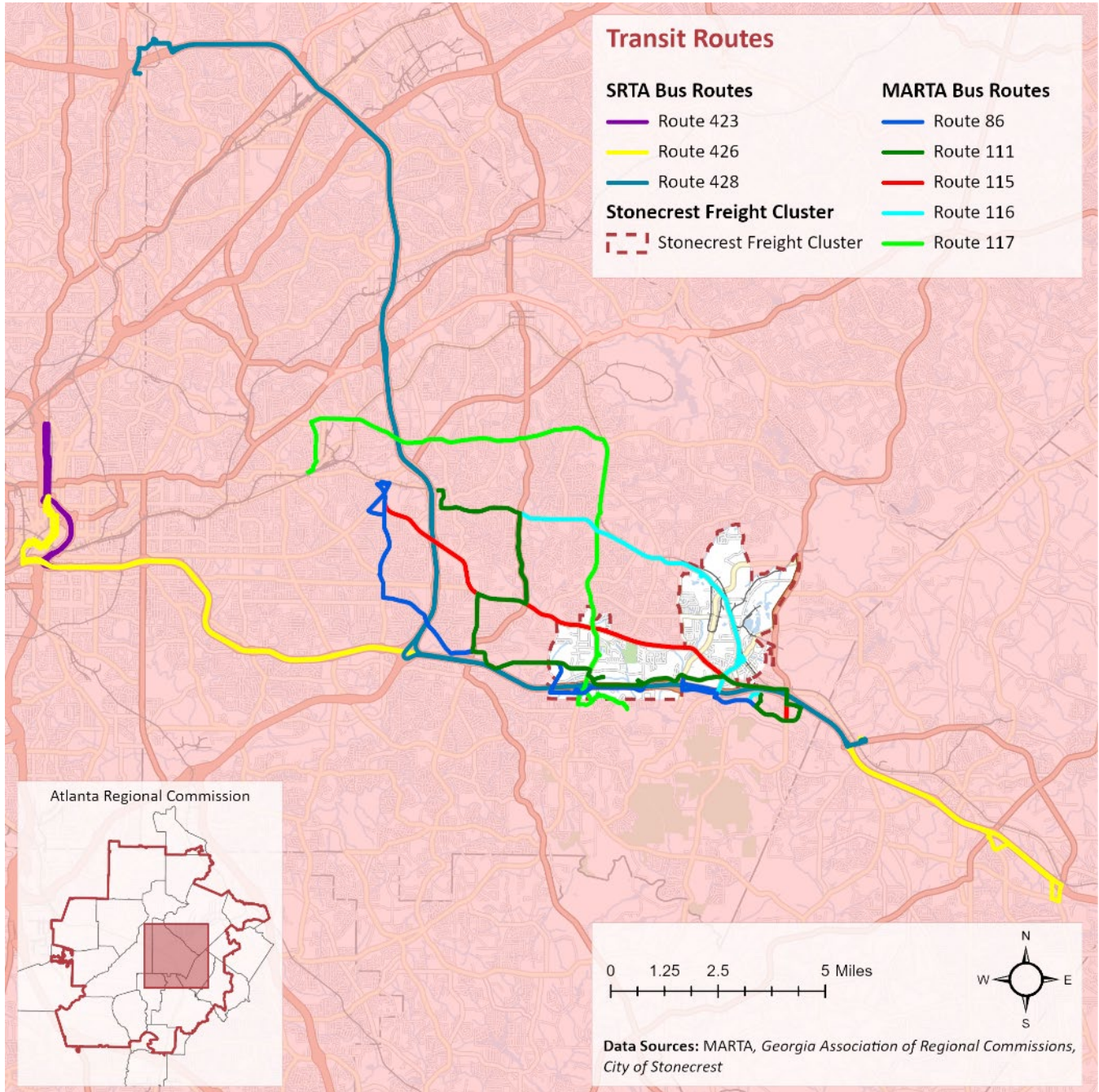
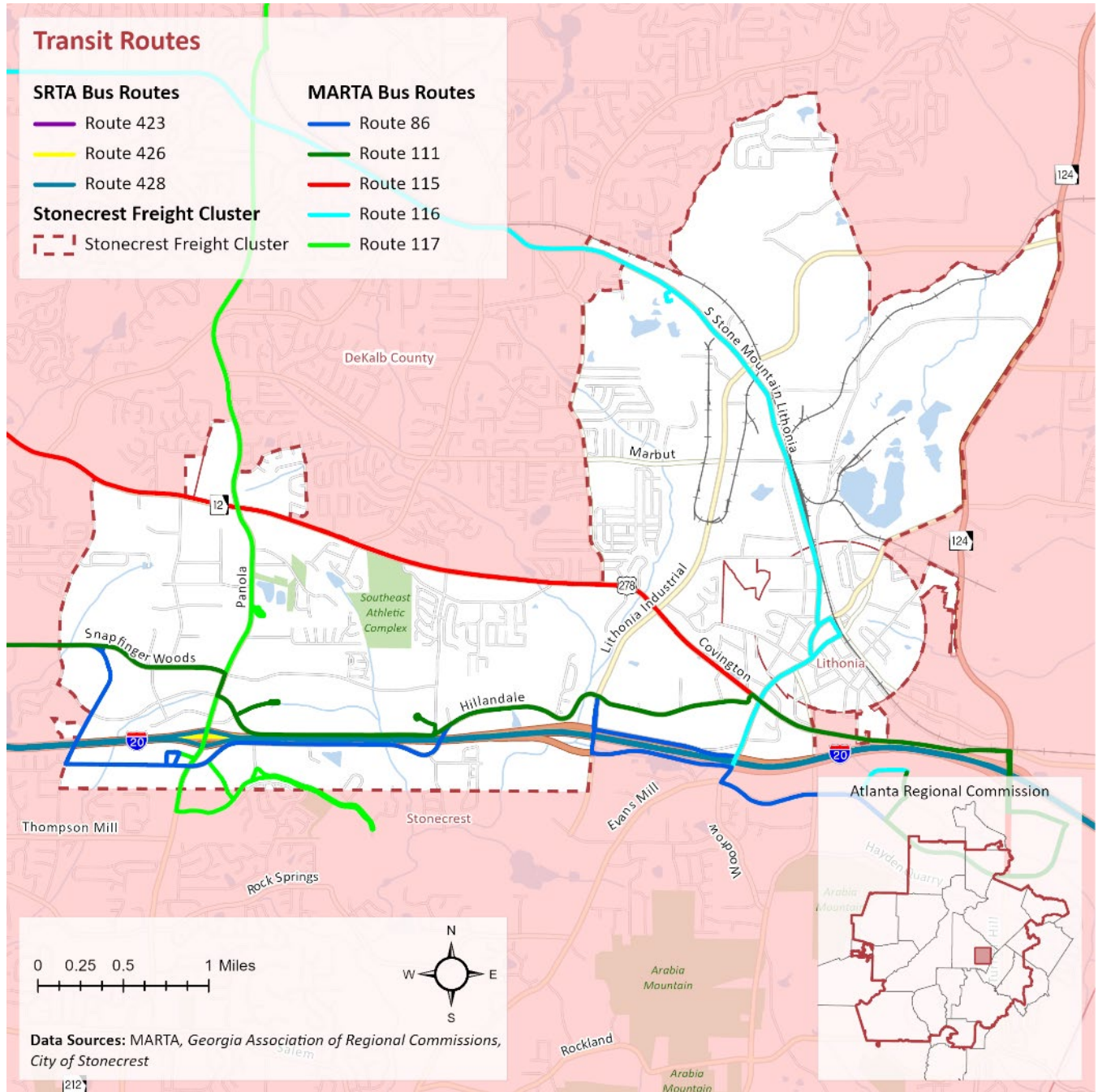


Figure 7-2: Transit Routes in Stonecrest Freight Cluster



7.1.1.3 Bus Stops and Amenities

The Stonecrest Freight Cluster boasts a network of 172 strategically positioned bus stops servicing eight vital bus routes in the area. These stops cater to the transportation needs of the cluster's workforce and commuters. Among them, 30 stops offer the added convenience of shelters equipped with benches, ensuring a comfortable waiting experience and nine other stops provide benches without shelter. The remainder of the stops are marked by signage on posts. While not sufficient, this network of stops and amenities contributes to the mobility and accessibility within the Stonecrest Freight Cluster.

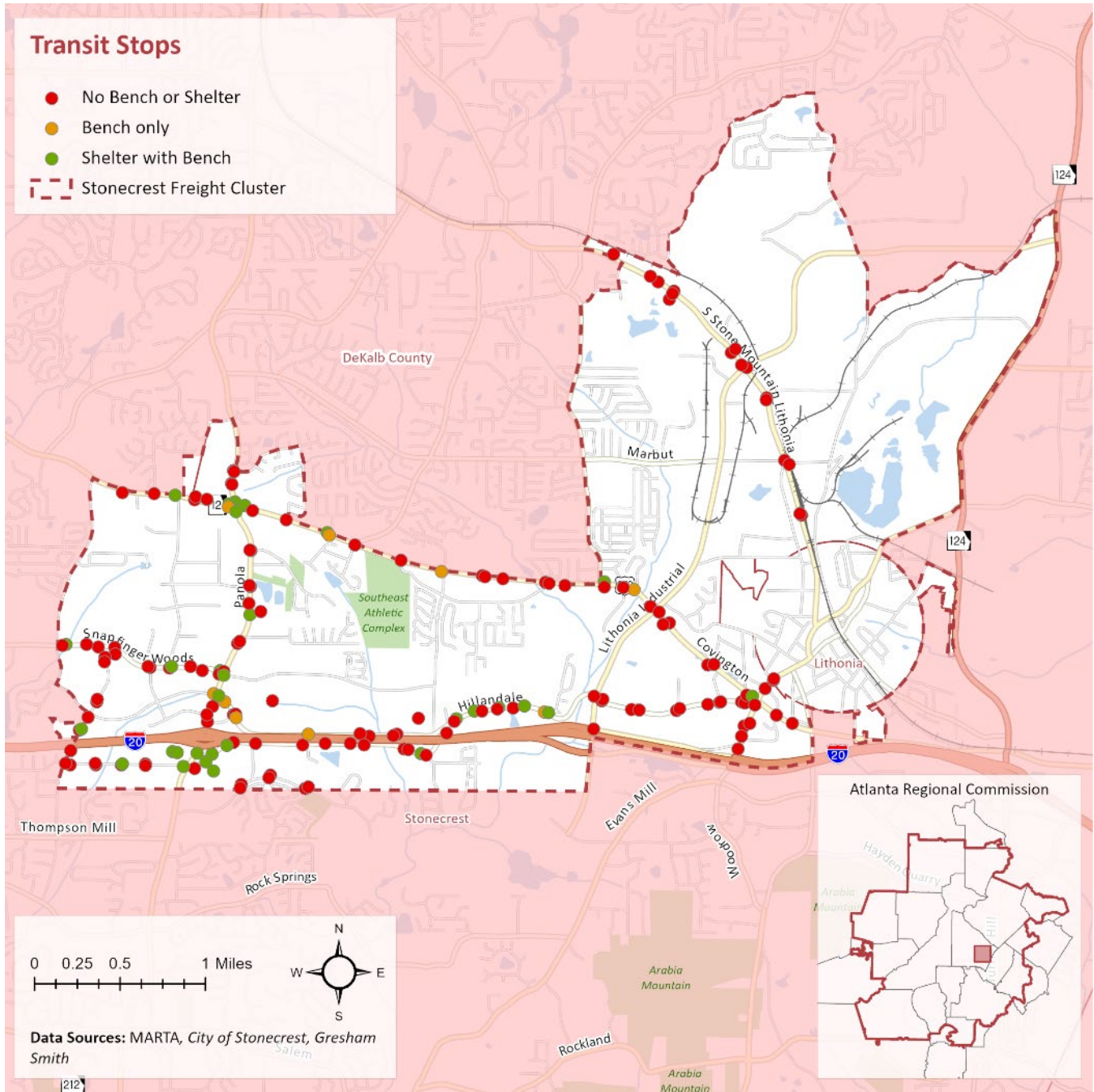
The following lists identifies nine bus stops within the Stonecrest Freight Cluster that have benches without shelters and 30 stops with shelters and benches.

Stops with Shelter & Bench	Stops with Bench only
<ul style="list-style-type: none"> • Panola Rd P&R (Multiple) • Fairington Rd @ Walmart Dr (Westbound) • Hillandale Dr @ 6136 (Westbound) • Hillandale Dr @ Fairington Rd (Westbound) • Panola Rd @ 2538 (Northbound) • Fairington Rd @ Walmart Dr (Eastbound) • Panola Rd@Covington Hwy (Northbound) • Snapfinger Woods Dr @ Panola Rd (Westbound) • Covington Hwy @ Strathmoor Manor Dr (Westbound) • Fairington Rd @ Chupp Way (Westbound) • Panola Rd @ 2944 (Northbound) • Grta - Panola Park & Ride (Multiple) • Covington Hwy@Phillips Rd (Westbound) • Covington Hwy @ Panola Rd (Westbound) • Fairington Rd @ 5425 (Eastbound) • Hillandale Dr @ Panola Rd (Westbound) • Minola Dr @ 5174 (Westbound) • Covington Hwy @ Evans Mill Rd (Westbound) • Hillandale Dr @ Hillandale Park Dr (Westbound) • Snapfinger Woods Dr @ Miller Rd (W) (Westbound) • Hillandale Dr @ Somerset Pkwy (Westbound) • Minola Dr @ Panola Rd (Eastbound) • Covington Hwy @ Panola Rd (Westbound) • Panola Rd @ Snapfinger Woods Dr (Northbound) • Hillandale Dr @ 6170 (Westbound) • Miller Rd @ 2910 (Northbound) • Walmart Dr @ Fairington Rd (Eastbound) • Panola Rd@Covington Hwy (Southbound) • Snapfinger Woods Dr @ Park Central Blvd (Westbound) • Covington Hwy @ Park Central Blvd (Eastbound) 	<ul style="list-style-type: none"> • Panola Rd @ Panola Industrial Blvd (Southbound) • Covington Hwy @ DeKalb Medical Pky (Eastbound) • Hillandale Dr @ Embarcadero Dr (Eastbound) • Hillandale Dr @ Panola Rd (Eastbound) • Covington Hwy @ Wellington Chase Ct (Westbound) • Hillandale Dr @ Jw Williams Sr Ln (Westbound) • Covington Hwy @ Panola Rd (Eastbound) • Hillandale Dr @ Concepts 21 Dr (Westbound) • Covington Hwy @ Strathmoor Manor Dr (Eastbound)

It is to be noted that the user experience of transit depends as much on the infrastructure such as benches, shelters, ticket machines, display screen and announcements as much as they do with the route accessibility. Therefore, it is of utmost importance to provide sufficient amount of such infrastructure to increase the use of transit in the study area.

The following map in Figure 7-3 represents the location of bus stops and amenities within the Stonecrest Freight Cluster study area.

Figure 7-3: Transit Stops in Stonecrest Freight Cluster



7.1.1.4 Transit Ridership

Analyzing transit ridership is a crucial factor of a freight cluster plan as it provides an understanding of the multimodal workforce accessibility. Among the transit available within the study area, MARTA routes service the bus stops across the entire study area, while the SRTA services connect the Atlanta metropolitan region with the study area at the Panola Park & Ride stop.

Total Ridership:

The data presented in Table 7-2 and Table 7-3 underscores the notable variations in ridership levels across different routes within MARTA and SRTA. The prevailing pattern indicates that both MARTA and SRTA primarily cater to the needs of commuters and regular travelers, as evidenced by the consistent high ridership for weekday travel over weekends. The ridership data analysis underscores the significance of optimizing services during weekdays to cater to the commuting and regular travel needs of passengers.

Table 7-2: Transit Ridership by Month

Route	January	February	March	April	May	June	July	August	September	Total
MARTA* (4/22/2023 – 8/25/2023)										
86	-	-	-			15,866			-	15,866
111	-	-	-			13,489			-	13,489
115	-	-	-			21,853			-	21,853
116	-	-	-			14,106			-	14,106
117	-	-	-			22,829			-	22,829
SRTA (01/2023 – 09/2023)										
423	2,150	2,253	2,632	2,187	2,458	2,381	2,114	2,568	2,241	20,984
426	4,391	4,228	4,733	4,194	4,372	4,260	3,776	4,914	4,757	39,625
428	485	451	644	449	473	554	493	641	598	4,788

*Note: MARTA Ridership data only available as Period totals.

Data Source: MARTA, SRTA

For MARTA, while the data is available for only a period between April 22, 2023, and August 25, 2023, we can observe that the routes 115 and 117, connecting Mall at Stonecrest to Kensington Station and Panola Park & Ride to Avondale Station respectively, exhibit the highest ridership during this period. Notably, weekdays (Monday to Friday) consistently attract significantly higher ridership than weekends.

Table 7-3: Transit Ridership by Day of Week

Route	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
MARTA (4/22/2023 – 8/25/2023)								
86	1432			2530*			1784	15,866
111	1250			2141*			1534	13,489
115	1847			3543*			2291	21,853
116	1228			2266*			1548	14,106
117	2156			3611*			2618	22,829
SRTA (01/2023 – 09/2023)								
423	-	3,567	5,119	4,707	4,475	3,116	-	20,984
426	-	6,894	9,209	9,303	8,523	5,696	-	39,625
428	-	769	1,097	1,084	1,078	760	-	4,788

*Note: Average Weekday Ridership

Data Source: MARTA, SRTA

In contrast, SRTA maintains consistent ridership throughout the first nine months of the year, with Route 426, (to Civic Center Station at Downtown Atlanta) consistently leading in terms of ridership. The midweek, particularly Tuesdays and Wednesdays, stands out with higher SRTA ridership compared to other days. It's essential to note that SRTA does not operate their XPRESS buses on weekends.

Boarding and Alighting:

Additionally, the transit ridership data also provides valuable insights into boarding and alighting patterns during specific time frames. Notably, the MARTA services between April 22, 2023, and August 25, 2023, reveal substantial activity at key stops (see Table 7-4). The GRTA - Panola Park & Ride, serviced by MARTA Routes 117 and 86, stands out with a total of 881 boarding and alighting. Similarly, stops like Covington Hwy @ Evans Mill Rd and Panola Rd @ Covington Hwy witness consistent passenger engagement. These findings underscore the importance of understanding transit utilization patterns for effective planning and improvement initiatives within the Stonecrest Freight Cluster.

Table 7-4: Bus Stops with the Highest 10 Boarding and Alighting Numbers during the given period.

Stop ID	Stop Name	Routes	Boarding	Alighting	Total
MARTA (4/22/2023 – 8/25/2023)					
210346	GRTA - Panola Park & Ride	117, 86	478	403	881
211523	Covington Hwy @ Evans Mill Rd	111, 115	120	26	146
133050	Covington Hwy @ Panola Rd	115	113	29	142
133083	Covington Hwy @ DeKalb Medical Pky	115	34	107	141
210023	Panola Rd @ Covington Hwy	117	70	70	140
132134	Minola Dr @ Panola Rd	117, 86	41	98	139
133052	Covington Hwy @ Panola Rd	115	36	89	125
133095	Covington Hwy @ Phillips Rd	115	99	16	115
133029	Fairington Rd @ Chupp Way	86	103	8	111
133146	Covington Hwy @ Phillips Rd	115	15	93	108

7.1.1.5 Freight Jobs Near Transit Facilities

In the context of the Inventory and Assessment of the Study Area, the proximity and accessibility of freight-related jobs to transit facilities are essential components of the overall evaluation. This section focuses on the examination of the existing landscape concerning the location of freight jobs in relation to transit hubs and facilities. Understanding this relationship is crucial for optimizing transportation efficiency, promoting sustainable commuting options, and enhancing workforce accessibility.

The current assessment of transit services in the Stonecrest area unveils critical insights that bear significant implications for the Freight Cluster Plan. Several major commercial and industrial corridors, including Panola Road, Snapfinger Woods Drive, Covington Highway, South Stone Mountain Lithonia Road, and the I-20 corridor, benefit from MARTA and XPRESS transit services, which are complemented by numerous strategically located transit stops. However, this transit network exhibits limitations. Lithonia Industrial Boulevard, a pivotal industrial

corridor between Covington Highway and South Stone Mountain Lithonia Road, currently lacks any form of transit access, posing a substantial challenge for the businesses and workforce operating in this area. Additionally, within the study area, there are employment centers to the west of Panola Road with some existing transit services, yet another significant employment hotspot between South Stone Mountain Lithonia Road and Lithonia Industrial Boulevard lacks adequate transit facilities. Furthermore, while transit services are available within the study area, their connections to the greater Atlanta metropolitan region are limited. This limitation restricts job accessibility for potential labor markets and hinders the area's full economic potential.

Pedestrian accessibility also emerges as a significant concern, as the absence of essential facilities such as crosswalks and sidewalks leading to transit stops discourages workforce utilization of public transportation. Additionally, the geographic isolation of existing and proposed transit hubs, including Panola Road Park & Ride and The Mall at Stonecrest, situated south of the I-20, presents formidable challenges for pedestrians seeking to access these facilities from the study area.

In light of these findings, it is imperative for the Freight Cluster Plan to prioritize bridging these transit gaps, enhancing pedestrian infrastructure, and improving connectivity to employment centers. Such efforts will be instrumental in fostering the growth of freight-related jobs in the Stonecrest region while concurrently facilitating a more accessible and efficient transit network.

7.1.1.6 Planned and Programmed Transit Improvements

The planned and programmed transit improvements for the Stonecrest Freight Cluster represent a significant step towards enhancing the region's transportation infrastructure. These initiatives are strategically designed to address both immediate and long-term transit needs. Table 7-5 identifies the different projects programmed or planned within the study area.

Table 7-5: Planned and Programmed Transit Projects

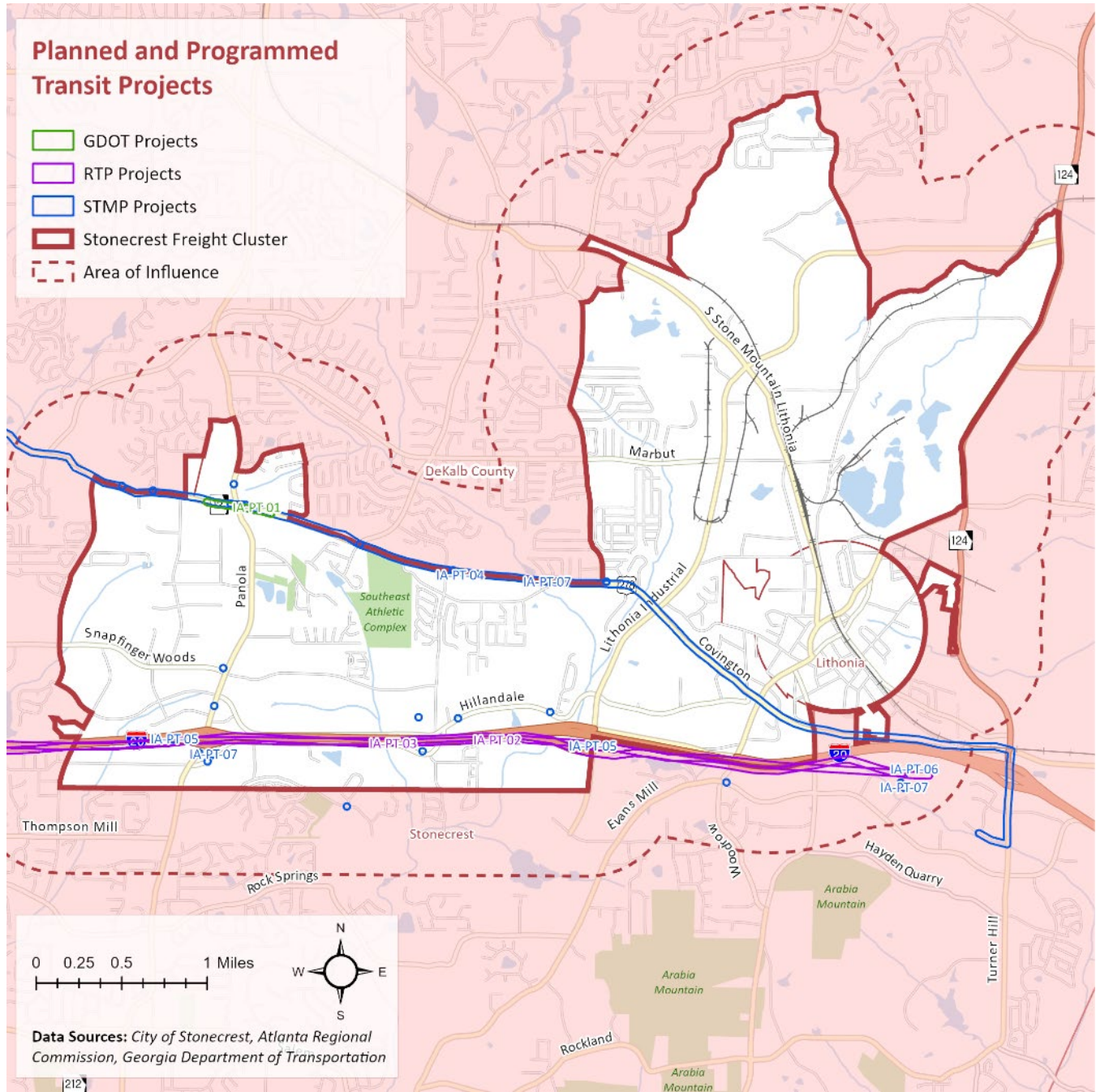
Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-PT-01	MARTA Bus Corridor Improvements @ 6 Locations	Intermodal	GDOT	0019803	TBD	Construction Work Program	NA
IA-PT-02	I-20 East Transit Initiative - Phase 2 Heavy Rail Transit Extension from Wesley Chapel Road to Mall at Stonecrest	Transit / Rail Capital	ARC Regional Transportation Plan	ASP-AR-407	MARTA	Aspirations	NA
IA-PT-03	I-20 East High-Capacity Premium Transit Service (Bus Rapid Transit)	BRT Capital	ARC Regional Transportation Plan	AR-420	MARTA	Long Range	NA
IA-PT-04	Covington Highway Arterial Rapid Transit (ART)	Arterial Rapid Transit	Stonecrest Transportation Master Plan	T-4	TBD	NA	Long Term
IA-PT-05	I-20 East BRT Stations (@ 3 Locations)	Bus Rapid Transit	Stonecrest Transportation Master Plan	T-5	TBD	NA	Long Term

Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-PT-06	Stonecrest Mobility Hub	Transit Center	Stonecrest Transportation Master Plan	T-6	TBD	NA	Mid Term
IA-PT-07	Bus Stop Bench (@ 14 Locations) and Shelter Upgrades (@ 8 Locations)	Bus Stop Upgrades	Stonecrest Transportation Master Plan	T-7	TBD	NA	Short Term

GDOT supports the MARTA Bus Corridor Improvements, enhancing bus corridors in the Construction Work Program. The ARC Regional Transportation Plan funds two vital projects: the I-20 East Transit Initiative, expanding Heavy Rail Transit, and the I-20 East High-Capacity Premium Transit Service, focusing on Bus Rapid Transit. These align with MARTA's goals for improved rail and high-capacity transit.

The STMP addresses local transit needs, leading to projects like the Covington Highway Arterial Rapid Transit and I-20 East BRT Stations (see Figure 7-4). A mid-term Stonecrest Mobility Hub centralizes operations, while short-term upgrades provide benches and shelters at select bus stops, enhancing passenger amenities. This approach integrates funding from various plans to meet immediate and long-term transit demands, forming a cohesive transit network in the Stonecrest Freight Cluster.

Figure 7-4: Planned and Programmed Public Transit Projects



7.1.2 Bicycle and Pedestrian Infrastructure

7.1.2.1 Existing Facilities

The Stonecrest Freight Cluster encompasses a predominantly industrial landscape, featuring numerous warehouses, manufacturing facilities, and distribution centers, coexisting with pockets of residential and mixed-use commercial zones adjacent to these industrial properties. However, the challenge lies in the severe deficiency of pedestrian and bicycle infrastructure within this area. This deficiency is characterized by the

absence of sidewalks, disjointed sidewalk networks, the lack of designated bike lanes, and other critical gaps in infrastructure.

Some glaring examples of these inadequate infrastructures are presented in the pictures below. Figure 7-5 illustrates the absence of a crosswalk linking the bus stop at the intersection of Park Central Road and Covington Highway, requiring pedestrians to either cross the road hazardously or walk over a quarter mile to access a designated crosswalk. Figure 7-6 displays a bus shelter on Panola Road at Covington Highway lacking a crosswalk or sidewalk connection, forcing pedestrians to use an informal path along the roadside to reach the shelter. Figure 7-7 shows a bus stop at the intersection of Covington Highway and Panola Road without sidewalks, compelling pedestrians to traverse a retail parking lot to access their destinations. Finally, Figure 7-8 indicates the location of a pedestrian push-button situated at a traffic island at the intersection of Covington Highway and Evans Mill Road, requiring pedestrians to cross halfway through the street to use it. These are just a handful of examples of a similar trend that can be observed throughout the study area. Figure 7-9 indicates existing bicycle and pedestrian facilities.

Figure 7-5: Lack of crosswalk at Park Central Rd & Covington Highway Intersection



Figure 7-6: Lack of crosswalk and sidewalk to the Bus Stop (Image Credit: Google Street View)



Figure 7-7: Lack of sidewalk access to Bus stop

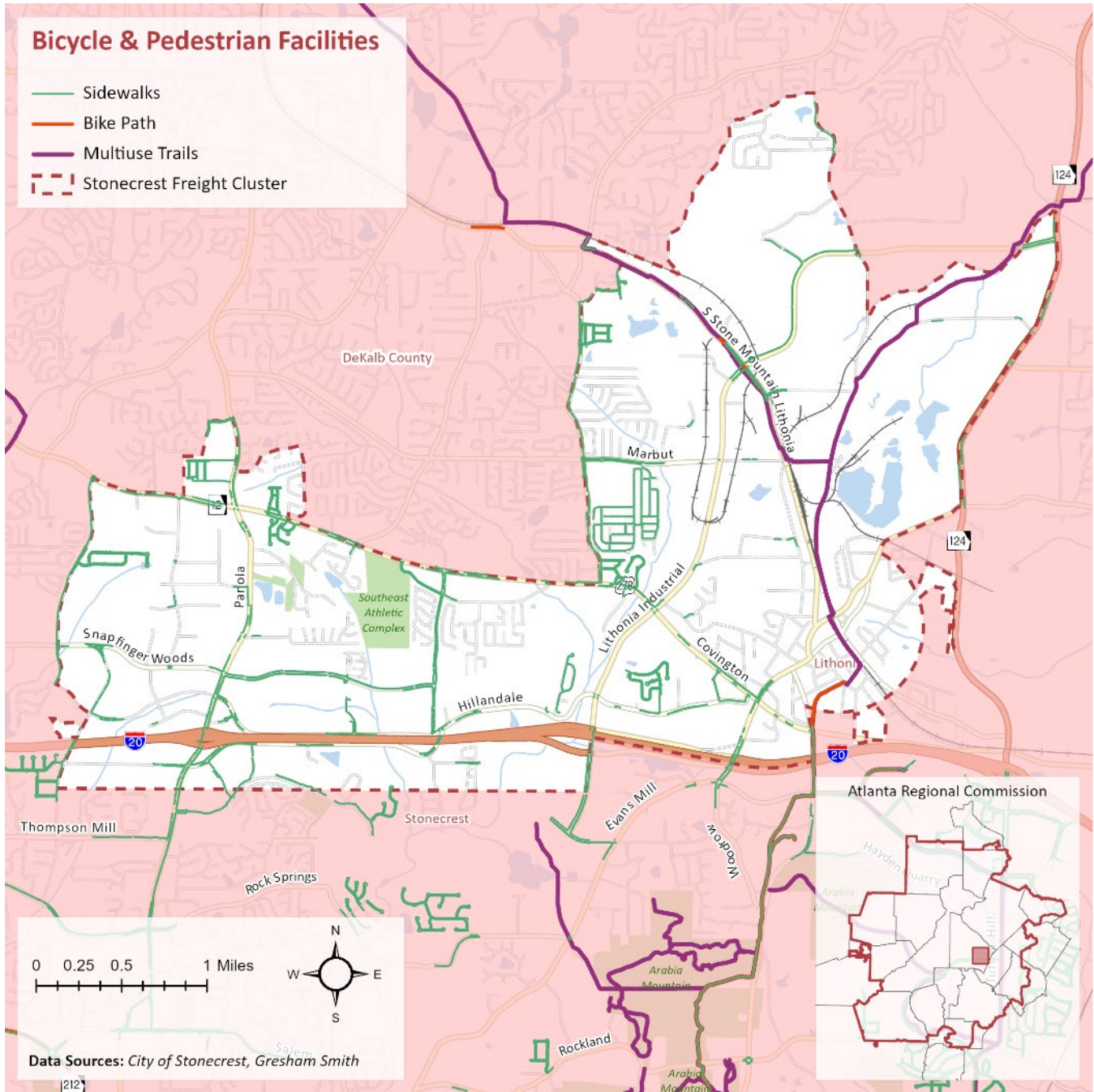


Figure 7-8: Push buttons located at the traffic island rather than at the edge of the road.



Despite the glaring inadequacy of pedestrian and bicycle facilities, a significant number of individuals rely on these roadways to reach their destinations, particularly along the busy Covington Highway. Unfortunately, this situation poses substantial risks to pedestrians who often resort to using the roadways for lack of safer alternatives. The alarming consequences of this issue are further evident in the elevated number of pedestrian and bicycle-related accidents within the area, including at least two fatal incidents over the past five years, as detailed in section 6.3 of this report.

Figure 7-9: Existing Bicycle and Pedestrian Facilities



The Stonecrest Bicycle, Pedestrian & Trail Plan is presently underway with the overarching objective of enhancing the current state of active transportation infrastructure and establishing “a safe, connected, and integrated multimodal network”²⁸. This comprehensive plan is anticipated to conclude by the Fall of 2023, contributing significantly to the advancement of the Stonecrest Freight Cluster's transportation ecosystem.

²⁸ Stonecrest Bicycle, Pedestrian & Trail Plan <https://greshamsmithplanning.com/stonecrest-bicycle-and-pedestrian-plan>

7.1.2.2 Planned and Programmed Bicycle and Pedestrian Improvements

There has been a comprehensive range of bicycle and pedestrian improvement projects that have been planned or programmed within the Stonecrest Freight Cluster, derived from diverse sources and characterized by varying project types. GDOT contributes to the Long-Range Program with sidewalk projects on Covington Highway and Panola Road, enhancing pedestrian access. Additionally, the Federal-funded project on Covington Highway focuses on pedestrian safety from DeKalb Medical Parkway to Cragstone Court, showcasing a commitment to safety enhancements.

The Stonecrest Transportation Master Plan introduces an array of projects, aligning with short, mid, and long-term objectives. Sidewalks and shared-use paths on various roads such as Chupp Rd, Covington Highway, and Fairington Parkway are tailored to improve accessibility. Moreover, neighborhood greenways and crosswalk enhancements are part of the mid-term vision, emphasizing community connectivity and safety. Furthermore, potential I-20 crossings at three locations are under consideration, aiming to enhance regional accessibility and multimodal connectivity. Intersection improvements and shared parking agreements are also integral components of this multifaceted plan.

Table 7-6 and Figure 7-10 identifies a list of planned and programmed active transportation projects within the Study Area compiled from previous planning efforts. This amalgamation of projects from varied sources underscores the Stonecrest Freight Cluster's commitment to establishing a comprehensive bicycle and pedestrian infrastructure, ensuring the safety, accessibility, and connectivity of the transportation network within the area.

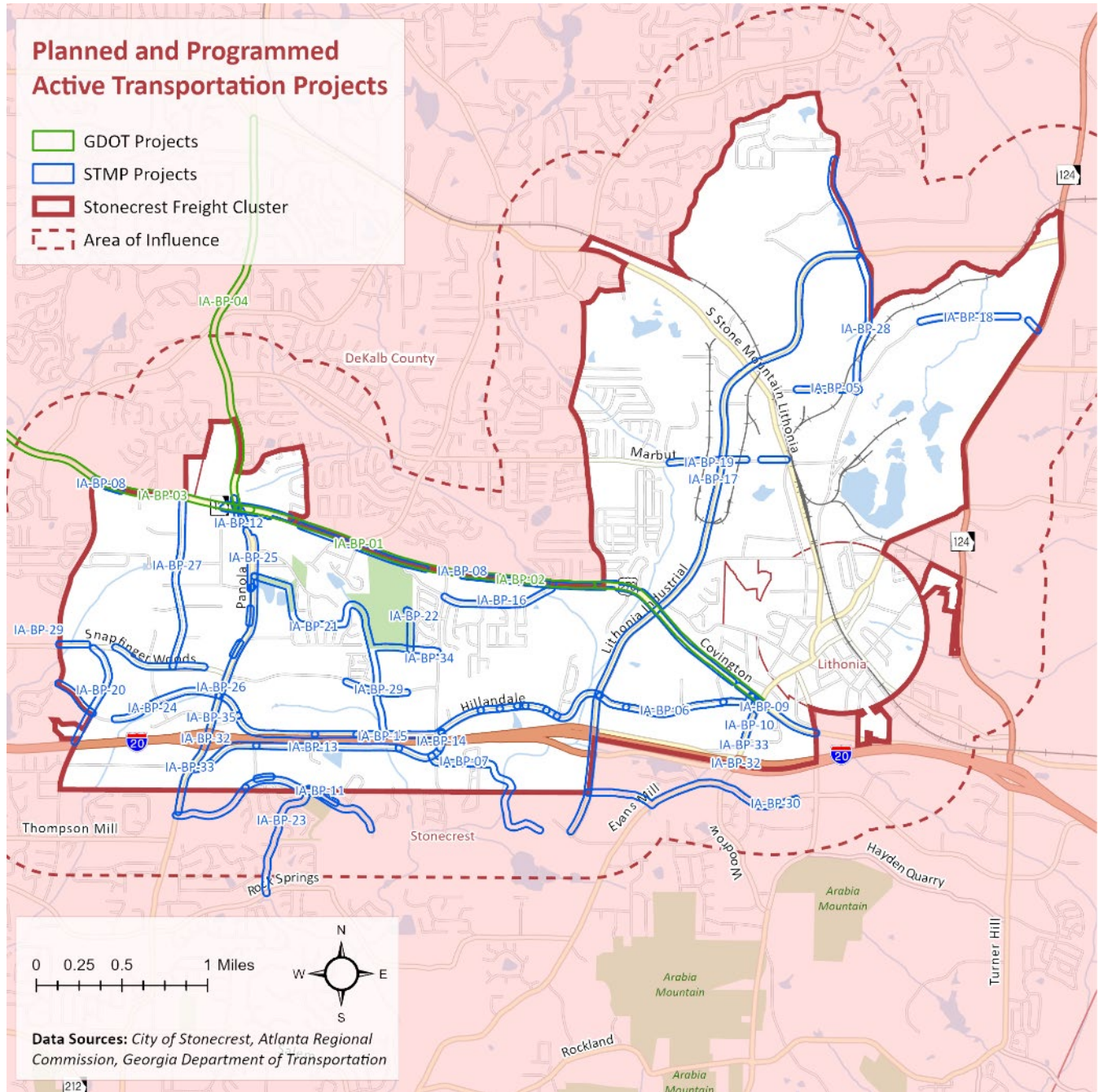
Table 7-6: Planned and Programmed Active Transportation Projects

Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-BP-01	Covington Highway from Panola Road to Evans Mill Road	Sidewalks	GDOT	0007681	TBD	Long Range Program	NA
IA-BP-02	Covington Highway from DeKalb Medical Parkway to Cragstone Court - VRU	Pedestrian Safety	GDOT	0008288	Federal	Construction Work Program	NA
IA-BP-03	Covington Highway from Margarett Drive to Panola Road	Sidewalks	GDOT	0007680	Federal	Long Range Program	NA
IA-BP-04	Panola Road from Covington Highway to Redan Road	Bicycle/Pedestrian Facility	GDOT	0007095	TBD	Long Range Program	NA
IA-BP-05	Chapman Rd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-10	TBD	NA	Long Term
IA-BP-06	Chupp Rd Path	Shared-use Path	Stonecrest Transportation Master Plan	BP-11, 12	TBD	NA	Long Term
IA-BP-07	Chupp Way Path	Shared-use Path	Stonecrest Transportation Master Plan	BP-13	TBD	NA	Long Term

Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-BP-08	Covington Hwy Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP- 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 87	TBD	NA	Short, Mid & Long Term
IA-BP-09	Covington Hwy Path	Shared-use Path	Stonecrest Transportation Master Plan	BP-28, 29, 30	TBD	NA	Long Term
IA-BP-10	Evans Mill Rd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-32, 33	TBD	NA	Short Term
IA-BP-11	Fairington Pkwy Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-38, 40	TBD	NA	Long Term
IA-BP-12	Panola Road Sidewalks - North (West Side)	Sidewalk	Stonecrest Transportation Master Plan	BP-39	TBD	NA	Long Term
IA-BP-13	Fairington Pkwy Path	Shared-use Path	Stonecrest Transportation Master Plan	BP-41, 42, 44	TBD	NA	Long Term
IA-BP-14	Fairington Rd Bridge Path	Shared-use Path	Stonecrest Transportation Master Plan	BP-43	TBD	NA	Long Term
IA-BP-15	Hillandale Dr Path	Shared-use Path	Stonecrest Transportation Master Plan	BP-48, 49, 50	TBD	NA	Long Term
IA-BP-16	Hillvale Rd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-51	TBD	NA	Long Term
IA-BP-17	Lithonia Industrial Blvd Sidewalks	Shared-use Path	Stonecrest Transportation Master Plan	BP-54, 55, 56	TBD	NA	NA
IA-BP-18	Maddox Rd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-57, 58	TBD	NA	Long Term
IA-BP-19	Marbut Rd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-62, 63, 64	TBD	NA	Long Term
IA-BP-20	Miller Rd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-65	TBD	NA	Long Term
IA-BP-21	Miller Grove Path	Trail	Stonecrest Transportation Master Plan	BP-69, 70, 72	TBD	NA	Long Term
IA-BP-22	Southeast Athletic Complex/Miller Grove HS Connector	Shared-use Path	Stonecrest Transportation Master Plan	BP-71	TBD	NA	Long Term
IA-BP-23	Ottawa Trail Neighborhood Greenway	Neighborhood Greenway	Stonecrest Transportation Master Plan	BP-80	TBD	NA	Mid Term

Project ID	Name of Project	Project Type	Source	Source ID	Sponsor	Status	Term
IA-BP-24	Panola Industrial Blvd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-82, 83	TBD	NA	Long Term
IA-BP-25	Panola Rd Sidewalks (West Side)	Sidewalk	Stonecrest Transportation Master Plan	BP-85, 86, 88, 89, 90, 92	TBD	NA	Short, Mid & Long Term
IA-BP-26	Panola Rd Path Crossing	Shared-use Path	Stonecrest Transportation Master Plan	BP-95, 97, 99	TBD	NA	NA
IA-BP-27	Park Central Blvd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-100	TBD	NA	Long Term
IA-BP-28	Rogers Lake Rd Sidewalks	Sidewalk	Stonecrest Transportation Master Plan	BP-104, 105	TBD	NA	Mid & Long Term
IA-BP-29	Snapfinger Woods Dr Sidewalk	Sidewalk	Stonecrest Transportation Master Plan	BP-109, 110, 111	TBD	NA	Mid & Long Term
IA-BP-30	Trail Connection between PATH and Lithonia Industrial Boulevard	Shared-use Path	Stonecrest Transportation Master Plan	BP-120, 121, 122, 123	TBD	NA	Long Term
IA-BP-31	Crosswalk @ 21 Locations	Crosswalk	Stonecrest Transportation Master Plan	NA	TBD	NA	NA
IA-BP-32	Potential I-20 Crossing @ 3 Locations (Fairington Rd Path, Panola Rd Bridge, Evans Mill Rd)	Potential I-20 Crossing	Stonecrest Transportation Master Plan	NA	TBD	NA	NA
IA-BP-33	Intersection Improvements @ 5 Locations	Intersection Improvements	Stonecrest Transportation Master Plan	NA	TBD	NA	NA
IA-BP-34	Miller Grove HS Shared Parking	Shared Parking Agreement	Stonecrest Transportation Master Plan	NA	TBD	NA	NA
IA-BP-35	Panola Rd Access Management Study	Access Management Study	Stonecrest Transportation Master Plan	NA	TBD	NA	NA

Figure 7-10: Planned and Programmed Active Transportation Projects



7.1.3 Workforce Commute Services

7.1.3.1 Microtransit Options

Microtransit or micromobility, including bike and scooter sharing, is experiencing growing popularity as a means of fulfilling short-distance travel needs within urban environments. These modes of transportation play a crucial role in bridging the gap between the “first and last mile” segments of the transit service network. The presence of microtransit infrastructure is of paramount importance in incentivizing individuals to transition from single-

occupancy vehicle usage to utilizing public transit. Notably, within the study area, there are currently no available microtransit options.

7.1.3.2 Georgia Commute Options

Georgia Commute Options (GCO) stands as an essential initiative designed to support commuters and employers in the reduction of traffic congestion and the enhancement of air quality within the metropolitan Atlanta region. The GCO program operates within an area characterized by suboptimal air quality levels that do not meet federal standards. Notably, programs of this nature are eligible for federal funding due to their pivotal role in mitigating commuting-related environmental impacts through the strategic implementation of Transportation Demand Management (TDM) strategies. These TDM strategies encompass but are not limited to carpooling, vanpooling, transit utilization, and teleworking, all of which offer promising avenues for enhancing air quality.

GCO extends its support to employers and workers within the Stonecrest Freight Clusters, offering valuable assistance in establishing shared carpools and vanpools while skillfully matching participants based on their commuting needs and preferences. Additionally, the program provides financial incentives to encourage commuters to engage in the initiative for one or more days each week, thereby fostering a reduction in single-occupancy vehicle commutes. Furthermore, GCO offers a Guaranteed Ride Home service exclusively for registered commuters participating in the program, assuring them of reliable transportation alternatives in unforeseen situations.

To avail themselves of the multitude of benefits offered by GCO, individuals are required to complete the registration process in advance, which can be conveniently accomplished by visiting the official website.²⁹ In partnership with the Stonecrest Freight Cluster and its stakeholders, GCO can be helpful to realize a more sustainable and efficient transportation plan that aligns with both environmental and commuter needs.

7.1.3.3 Private Transportation Providers

In addition to the MARTA and SRTA transit services, as well as Georgia Commute Options, the region benefits from the presence of private rideshare providers, including Uber and Lyft. While these private transportation options offer convenience to residents and the workforce, it is essential to note that their pricing structures are contingent on factors such as time of day, travel distance, and overall demand. As a result, they may be considered less suitable for routine commuting requirements.

7.2 Freight and Multimodal Design Compatibility

In the Stonecrest Freight Cluster Plan, the focus on Freight and Multimodal Design Compatibility is of paramount importance. This section addresses the critical need to seamlessly integrate diverse transportation modes, including road-based traffic, public transit, rail, and active transportation, to optimize the efficient movement of goods within the cluster. It emphasizes strategic planning and infrastructure design that facilitates the smooth coexistence of freight transportation with other modes of mobility. The overarching objective of multimodal design compatibility is to enhance accessibility, reduce congestion, and promote sustainability by thoughtfully shaping the transportation network to accommodate various modes while ensuring the uninterrupted flow of freight.

²⁹ Georgia Commute Options <https://gacommuteoptions.com/>

7.2.1 Complete Streets and Shared Use

Within the study area of Stonecrest Freight Cluster, the integration of Complete Streets and Shared Use principles plays a pivotal role in optimizing the interaction between freight operations and multimodal facilities. Complete Streets, as a design approach, prioritizes the safety, accessibility, and convenience of all users, recognizing the diverse transportation needs within a community. This means incorporating features such as sidewalks, bike lanes, safe crosswalks, transit stops, and efficient traffic flow for freight vehicles. By strategically designing streets that accommodate various modes of transportation, including freight, the plan envisions a safer and more accessible environment for both commuters and freight operators. Additionally, Shared Use strategies aim to maximize the efficiency of transportation corridors by allowing multiple modes to coexist. This entails careful planning to ensure the smooth integration of freight movements, public transit, and pedestrian pathways, optimizing space and resources for all users.

Several existing policies and guidelines serve as the foundation for designing interactions between freight and multimodal facilities. For instance, the "National Complete Streets Coalition" advocates for the incorporation of Complete Streets policies at the state and local levels, promoting safer, more accessible streets. The "Freight Advisory Committee" guidelines provide insights into effectively incorporating freight considerations into transportation planning processes, emphasizing seamless freight flow while considering the needs of other users. Furthermore, policies from the Federal Highway Administration (FHWA), such as the "Every Day Counts" initiative, underscore the importance of innovative solutions, including Complete Streets and Shared Use strategies, to enhance the safety, efficiency, and sustainability of transportation networks. These established policies guide the Stonecrest Freight Cluster Plan in developing an inclusive and efficient transportation system that accommodates freight operations while prioritizing safety, accessibility, and sustainability for all.

In addition to these national guidelines and policies, the "Regional Workbook for Complete Streets," serving as a supplement to the Atlanta Regional Commission's 2016 WALK.BIKE.THRIVE! plan, provides a comprehensive framework for prioritizing Complete Streets principles and optimizing transportation systems. The workbook provides a blueprint for addressing safety, access, and mobility challenges in the Atlanta metropolitan area by calling for a departure from the cycle of road expansion, unchecked development, sprawl, and congestion and emphasizing the development of walkable communities, the advancement of regional transit, and the construction of safe, comfortable, and convenient streets that benefit all users. The following key features are highlighted within the workbook:

- **Prevent Further Problems:** The workbook advocates for the immediate cessation of road widening projects with hazardous designs that discourage alternative modes of transportation. It suggests addressing congestion through innovative solutions like new roadway connections, pricing mechanisms, multimodal corridors, diverse travel options, and robust support for public transportation.
- **Address Current Issues:** The workbook emphasizes the need to address known transportation issues promptly. This includes identifying high-crash locations and high-risk corridors for immediate retrofitting with proven safety measures. It also encourages slowing speeds through studies and adopting city-wide speed limits, as well as making opportunistic safety improvements during capital and resurfacing projects.
- **Anticipate Future Needs:** A balanced perspective is promoted, emphasizing community engagement and input into decision-making processes. It suggests establishing community visions, performing quantitative analysis to identify priorities for Complete Street projects, and embracing qualitative input from residents and the community.

- **Ensure Better Outcomes:** The workbook encourages aligning community policies to support Complete Streets, increasing network connectivity through the development of multi-modal roads, and supporting enhanced transit options. It also promotes the construction of compact, walkable communities within existing urban centers, focusing on connected streets with multimodal facilities.

By adhering to these features and recommendations from the workbook, the SFCP can ensure the seamless integration of Complete Streets and Shared Use principles, thereby optimizing interactions between freight operations and multimodal facilities, prioritizing safety and accessibility for all users. This will help to facilitate the seamless coexistence of freight transportation with other modes of mobility, enhance accessibility, reduce congestion, and promote sustainability.

8 Land Use and Market Analysis

Chapter 8 provides a comprehensive overview and analysis of the Study Area's land use and market dynamics. It examines existing and future land use, zoning regulations, and potential conflicts, with a particular focus on industries generating freight traffic. The chapter offers insights into real estate inventory and market trends, covering various property types and development prospects. It also highlights workforce characteristics within the study area and discusses ongoing development activities and associated issues, laying the groundwork for informed decision-making and planning.

8.1 Existing and Future Land Use

8.1.1 Existing Land Use and Zoning (2023)

Chapter 27 of the Code of Ordinances³⁰ of the City of Stonecrest is the governing regulation for the Zoning Ordinance in the majority of the Study Area.

8.1.1.1 Existing Land Use Zones

The existing land use and zoning within the Study Area is characterized by a diverse mix of land use zones. Table 8-1 provides an overview of these zones, their distribution, and composition as of 2023 and in the future (2038) according to the City of Stonecrest Comprehensive Plan³¹ (2019). However, it's important to acknowledge that the City of Stonecrest is presently revising its Comprehensive Plan, with anticipated land use changes along the I-20 corridor. Consequently, the information presented in the table below is subject to change.

Table 8-1: Comparison of Existing (2023) and Future (2038) Land Use Zone Composition

Land Use Zones	Existing (2023)		Future (2038)	
	Area (Acres)	Percent	Acres (Acres)	Percent
Heavy Industrial	1,118.0	18.5%	1,118.0	18.5%
Light Industrial	1,849.0	30.6%	1,842.0	30.5%
Regional Center	88.9	1.5%	88.9	1.5%
City Center	579.0	9.6%	579.0	9.6%
Neighborhood Center	101.0	1.7%	94.1	1.6%
Office Professional	273.0	4.5%	280.0	4.6%
Urban Neighborhood	645.0	10.7%	652.0	10.8%
Suburban	1,025.0	17.0%	1,025.0	17.0%
Rural Residential	0.0	0.0%	0.0	0.0%
Institutional	200.0	3.3%	200.0	3.3%
Conservation/OpenSpace	112.0	1.9%	123.0	2.0%
Unspecified	51.6	0.9%	40.5	0.7%
Total	6,042.5	100.0%	6,042.5	100.0%

Data Source: City of Stonecrest

³⁰ Chapter 27 – Zoning Ordinance

https://library.municode.com/ga/stonecrest/codes/code_of_ordinances?nodetd=COOR_CH27ZOOOR

³¹ <https://www.stonecrestga.gov/Assets/Files/Departments/ComprehensivePlan/Comp-Plan-2038.pdf>

Industrial Zones: The Stonecrest Freight Cluster exhibits a significant concentration of industrial zones, primarily located in the northeast and the western section of the Study Area. Most of these industrial zones are designated for both light and heavy industrial purposes, with many of them situated adjacent to key transportation arteries, such as Lithonia Industrial Boulevard, South Stone Mountain Lithonia Road, and SR 124. Additionally, the western section of the study area, west of Panola Road and to the north and south of Snapfinger Woods Drive, also features light industrial zoning.

Commercial/Retail Zones: Commercial zones are prevalent along the I-20 corridor. Notably, the Regional Center is situated near the intersection of I-20 and Evans Mill Road, while the City Center encompasses areas adjacent to the intersections of I-20 at Panola Road and Lithonia Industrial Boulevard. The City Center zone also extends to the Hillandale Drive/Chupp Road vicinity. Neighborhood Centers are clustered around the intersection of Covington Highway and Panola Road. Furthermore, Office Professional zones can be found east of Panola Road, along Snapfinger Woods Drive, and west of Panola Road, adjacent to I-20.

Residential Zones: The Stonecrest Freight Cluster includes various residential zones, such as the Urban Neighborhood zone adjacent to Covington Highway and Hillandale Drive. Suburban zones are located to the north and south of Marbut Road, east of Philips Road. Additionally, numerous inner residential suburban parcels can be found south of Covington Highway, situated between Panola Road and Lithonia Industrial Boulevard, and adjacent to the DeKalb Medical Parkway. Notably, there are no Rural Residential parcels within the study area.

There are several institutional parcels scattered across the study area. Additionally, the Southeast Athletic Complex primarily comprises the Conservation/Open space zone within the Study Area.

Figure 8-1 provides a visual representation of the distribution of different existing land use and overlay zones within the study area, offering a clear perspective on the spatial arrangement of these zones.

8.1.1.2 *Overlay Districts*

The City of Stonecrest has established specific overlay districts in addition to the Land Use zones for the Study Area. These overlay districts govern permissible and prohibited activities in the land based on the Overlay Use Table ³² found in the zoning ordinance. There are three main types of overlay districts in the city: Stonecrest Area Overlay (Tier 1 through Tier 6), Interstate 20 Corridor Overlay (Tier 1 through Tier 3), and Arabia Mountain Conservation Overlay. Within the Study Area, only Stonecrest Area Overlay Tier 2, Tier 4, Tier 6, and Interstate 20 Corridor Overlay Tier 1 and Tier 2 are applicable. The distribution of these overlay districts across the Study Area is shown in Figure 8-2.

³² *Overlay Use Table*

https://library.municode.com/ga/stonecrest/codes/code_of_ordinances?nodeId=COOR_CH27ZOOR_ART3OVDIRE_DIV1OVD_I_S3.1.6OVUSTA

Figure 8-1: Existing Land Use Zoning (2023)

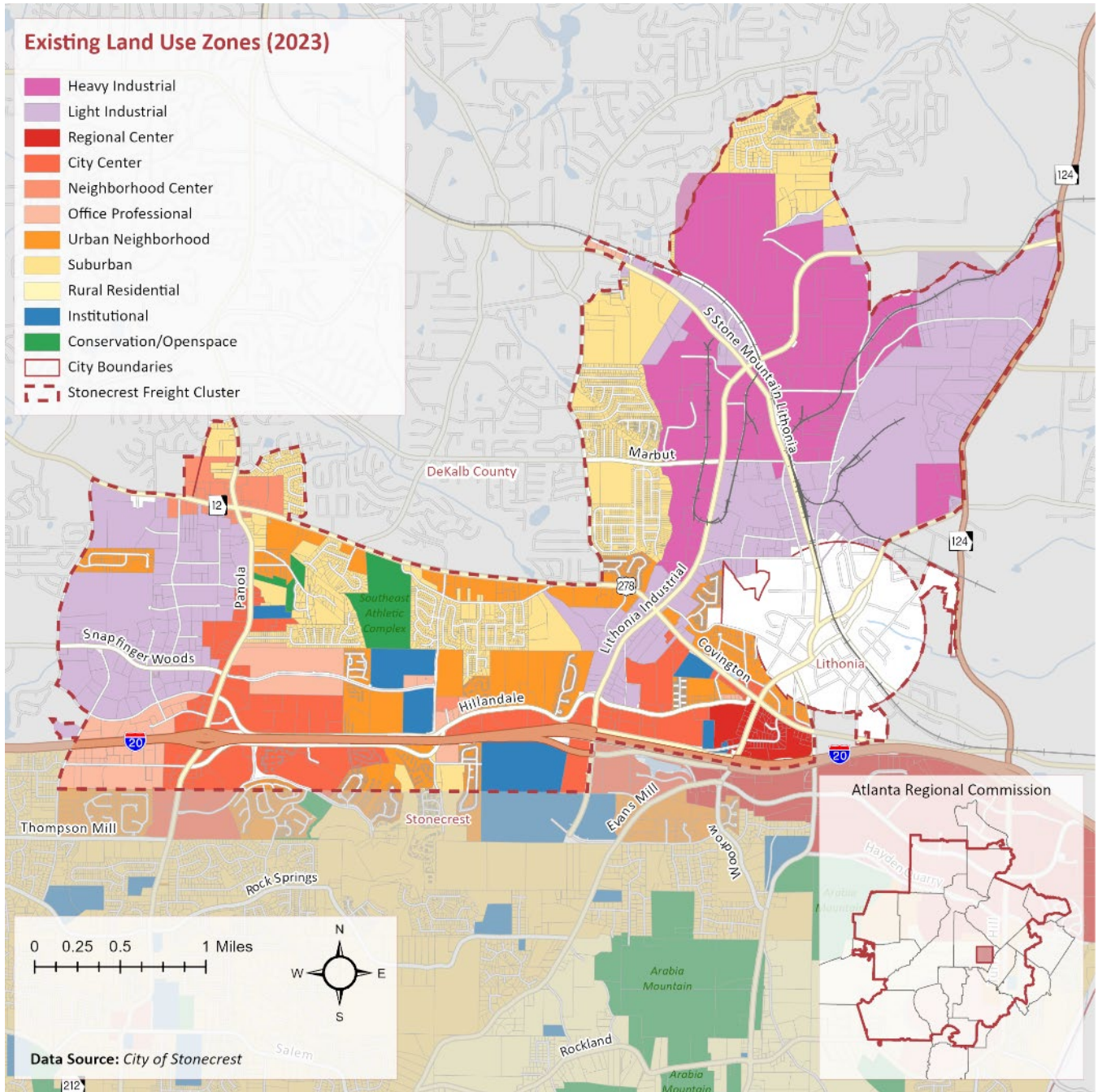
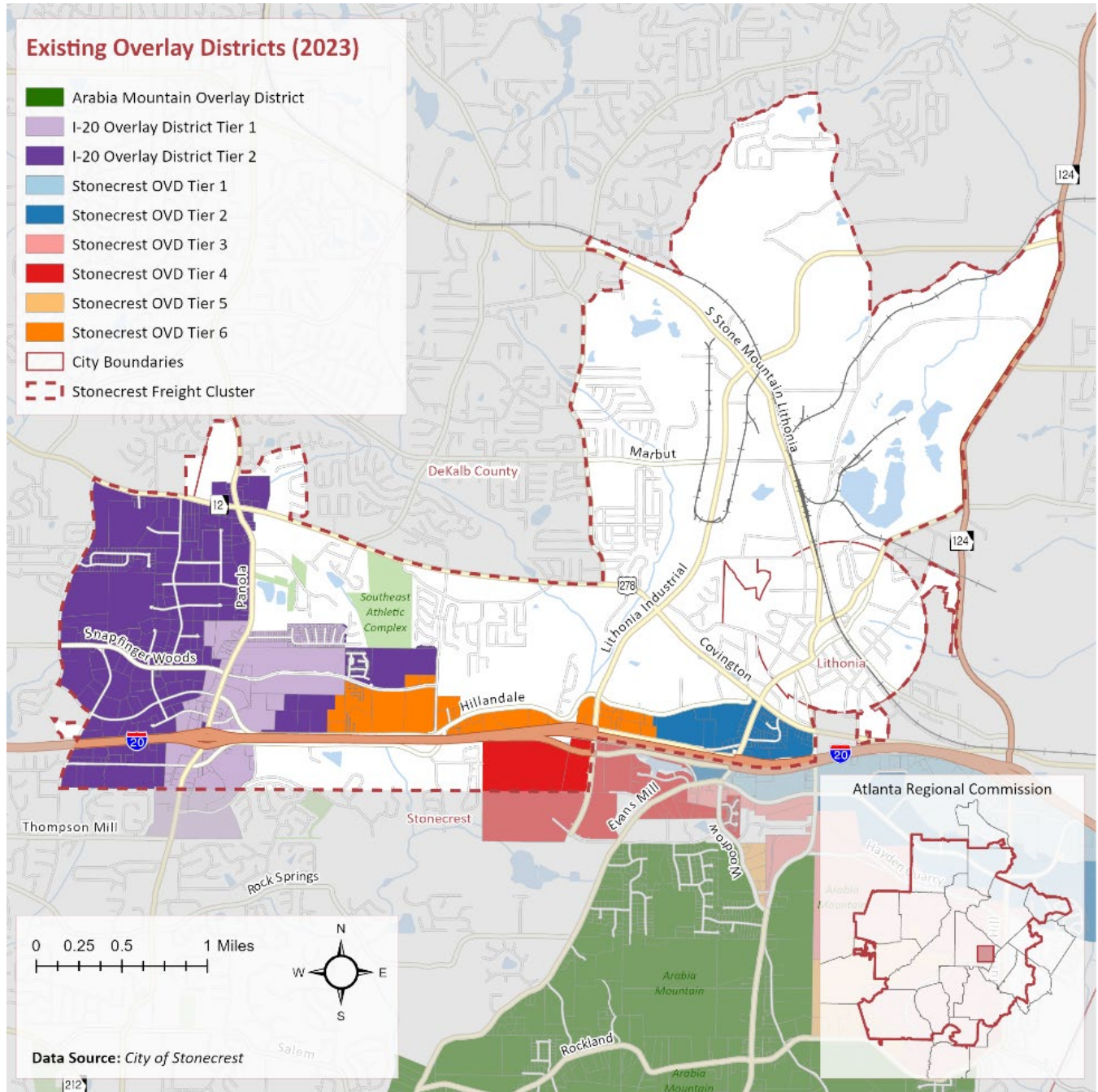


Figure 8-2: Existing Zoning Overlay Districts (2023)



The Interstate 20 Corridor Compatible Use Overlay District (I-20 Overlay District) in the City of Stonecrest aims to promote mixed-use development, improve pedestrian access, enhance aesthetics, stimulate economic growth, and create a balanced and visually cohesive community. I-20 Overlay District Tier 1 covers the vicinity around the intersection of I-20 and Panola Road, extending to Panola Road and Snapfinger Woods Drive to the east. In contrast, most of the areas in the Stonecrest Freight Cluster west of Panola Road fall under the I-20 Overlay District Tier 2.

On the other hand, the Stonecrest Area Compatible Use Zone Overlay District (Stonecrest OVD) has been established to preserve open spaces, stimulate economic growth, maintain community balance, support high-density housing, encourage mixed-use development, and protect residential areas. The Stonecrest OVD Tier 2 zone is situated along I-20 near the intersection with Evans Mills Road. The Stonecrest OVD Tier 4 zone is located south of I-20, encompassing the area to the east and west of Lithonia Industrial Boulevard. The Stonecrest OVD Tier 6 zone primarily covers the areas north of I-20, including DeKalb Medical Parkway, Hillandale Drive, and Chupp Road.

8.1.2 Future Land Use (2038)

The projection of future land use in the Stonecrest Freight Cluster for the year 2038 is characterized by a minimal overall change in land use composition compared to the existing conditions in 2023, as outlined in Table 8-1. The analysis indicates that the general distribution of land use zones is expected to remain largely consistent. However, several land use zones are anticipated to experience slight changes in the area by 2038. Currently, the City of Stonecrest is updating its Comprehensive Plan, with expected changes to land uses along the I-20 corridor and its northern and southern extensions. Consequently, the information in this section is subject to change.

Land Use Zones with Slight Increases in Area:

- **Office Professional:** The Office Professional zone is anticipated to experience a slight increase in area, reflecting the ongoing demand for office spaces within the study area.
- **Urban Neighborhood:** The Urban Neighborhood zone is also expected to see a slight expansion, possibly due to population growth and the demand for urban housing options.
- **Conservation/Open space:** The Conservation/Open space zone is projected to increase slightly, underscoring the continued importance of preserving open spaces within the region.

Land Use Zones with Slight Decreases in Area:

- **Light Industrial:** Light Industrial zones are expected to slightly decrease in area. This may reflect a shift in the industrial landscape or redevelopment efforts in certain areas.
- **Neighborhood Center:** The area dedicated to Neighborhood Center zoning is projected to decrease slightly, which may result from changes in commercial and community development patterns.
- **Unspecified:** The area of land that does not have specified zone is expected to reduce, indicating the refinement and clarification of zoning in the study area.

Figure 8-3: Future Land Use Zoning (2038)

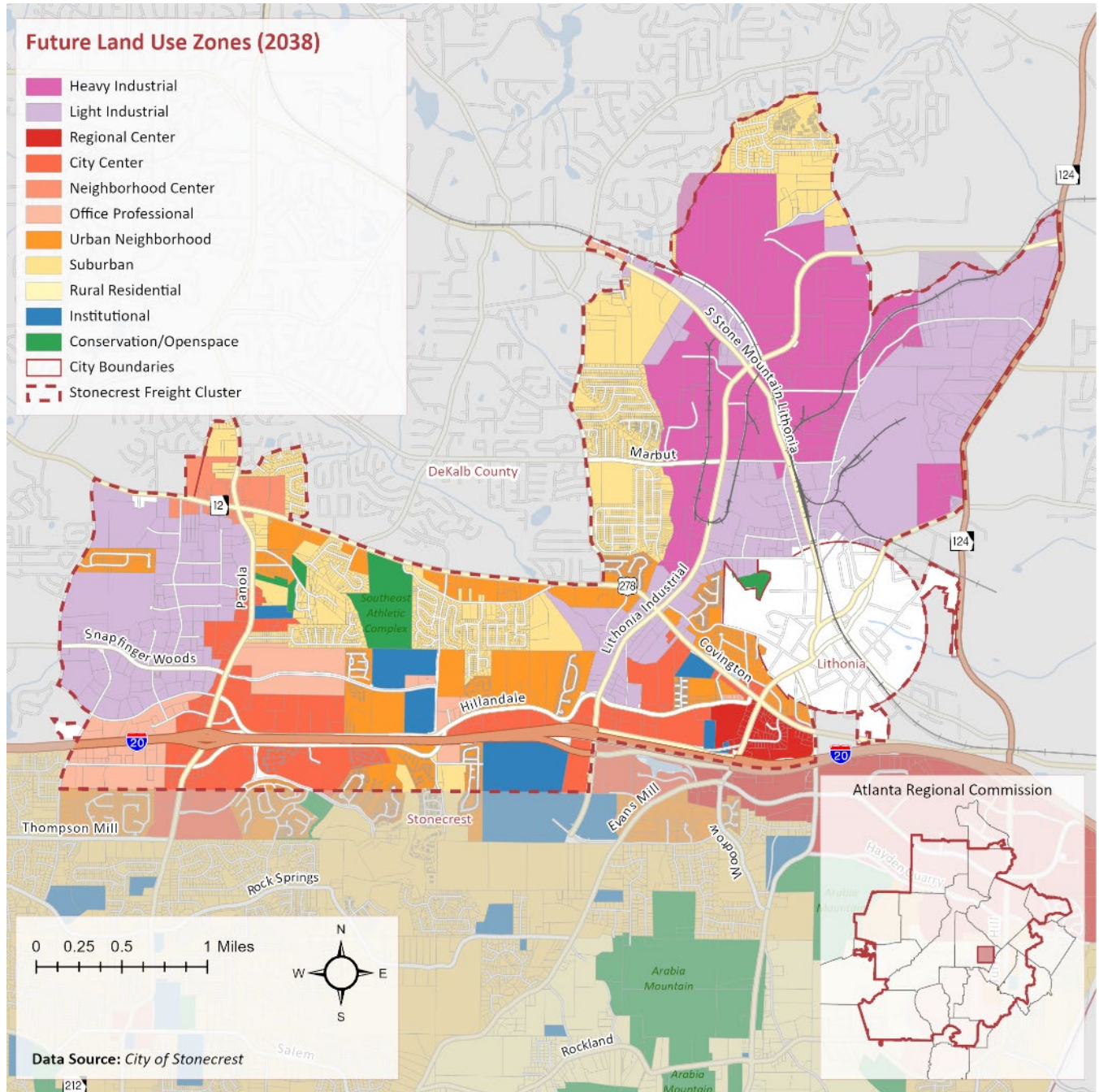


Figure 8-3 provides a visual representation of the distribution of future land use zones within the study area, allowing for a comprehensive visualization of the projected land use patterns in 2038. The future land use composition in 2038 is expected to remain largely consistent with the existing land use in 2023. While some land use zones show slight changes in area, the overall distribution and character of land use in the Stonecrest Freight Cluster are anticipated to remain stable. However, these subtle shifts in land use can be indicative of the dynamic potential of urban development and zoning within the study area, guided by the evolving needs and priorities of the community.

8.2 Land Use and Zoning Conflicts

8.2.1 Areas of Potential Conflicts

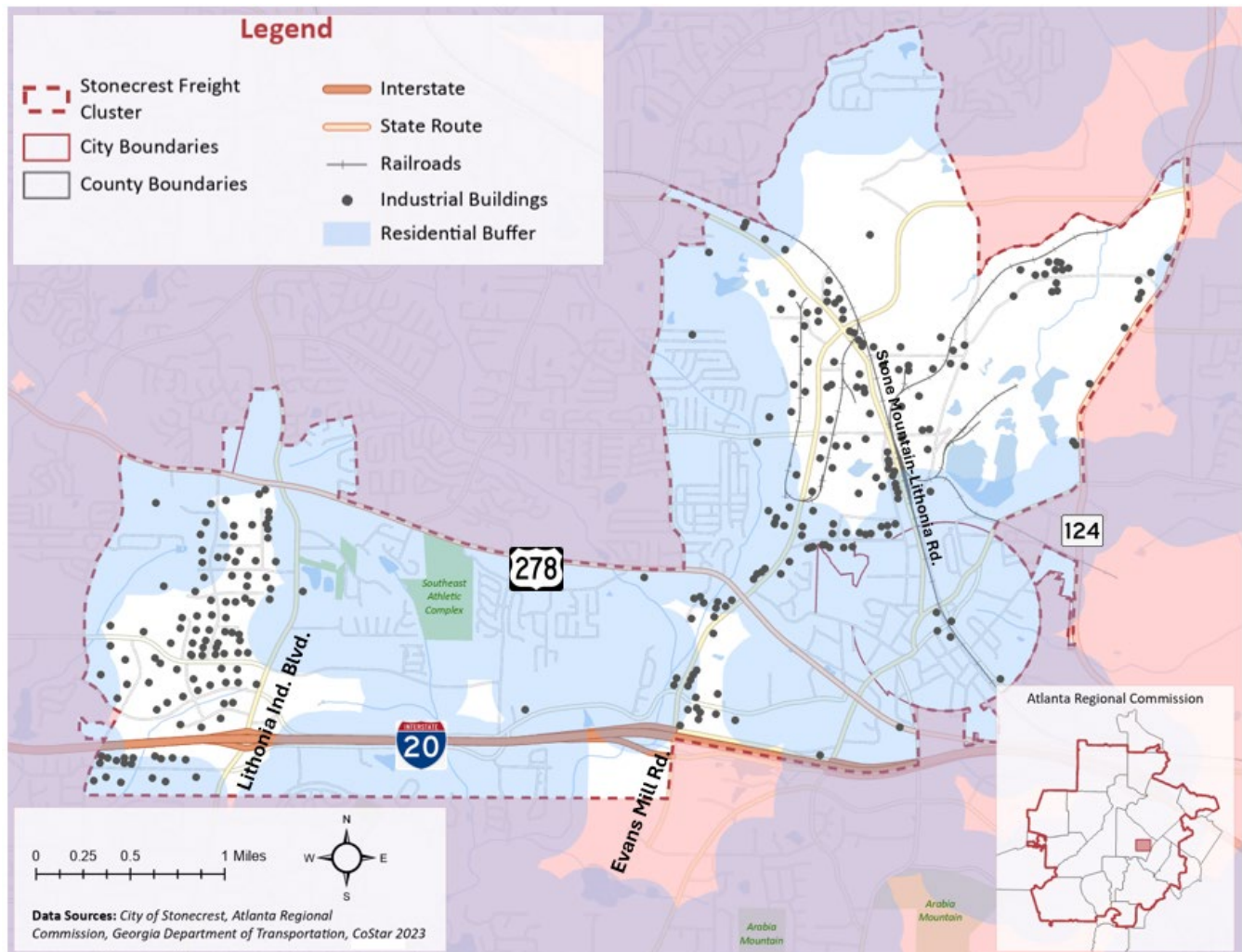
There is substantial industrial inventory located adjacent to residential areas, both in terms of the overall number of properties and the square footage those businesses comprise. The blue-shaded area on the map below (Figure 8-4) indicates all residential land use in and around the study area, plus a quarter-mile buffer area extending beyond, overlaid above all industrial inventory.

The areas of overlap represent places where Stonecrest should be aware of potential conflicts between industrial and residential uses. As shown, the areas of conflict are primarily around Miller Road and US 278 in the western portion of the Study Area, and along portions of Lithonia Industrial Boulevard in the center of the area. Over 100 properties, representing over 4 million square feet of inventory, are located within a quarter of a mile of residential areas as shown in Table 8-2.

Table 8-2: Conflicting Industrial Inventory by Type

Freight Land Use	Count	Square Feet
<i>Warehouse</i>	27	1,925,556
<i>Flex Space</i>	69	1,550,927
<i>Other Industrial</i>	11	718,644
Total	107	4,195,127

Figure 8-4: Conflicting Industrial Inventory Map



8.2.2 Locations of Industries that Generate Truck Traffic

As outlined in section 5.5.1, the study areas encompass a cluster of key industries that serve as major generators of truck traffic, significantly shaping the logistics landscape of the region. These industries, primarily situated to the west of Panola Road and towards the northeast along Lithonia Industrial Boulevard and S Stone Mountain Lithonia Road, contribute substantially to the overall truck traffic in major corridors. This heightened vehicular activity, particularly in major corridors, has resulted in potential conflicts, particularly in proximity to residential areas adjacent to industrial zones, as highlighted in section 8.2.1. The collective impact of these industries underscores the need for a comprehensive understanding of their roles in regional freight movements and the associated challenges they pose to the existing infrastructure.

Among these industries, notable players such as Swift Transportation, Home Depot Distribution Centers, Amazon Warehouses, and the Heidelberg Materials & Aggregates quarry play pivotal roles in shaping freight movements within and beyond the Study Area. Further analysis extends to identify key contributors in various census blocks, including Marshalls Distribution Center Company, Fulton Metals Recycling, and GMR Gymnastics Sales. These industries, spanning logistics, recycling, and manufacturing, not only contribute significantly to the

local economy but also generate substantial freight traffic. The study also highlights the influence of external factors, such as the Martin Marietta - Lithonia Quarry located outside the Study Area, impacting traffic along SR 124. The inclusion of external quarries like Metro Materials and Vulcan Materials emphasizes the necessity for coordinated efforts beyond Stonecrest's jurisdiction to effectively manage regional traffic impacts.

In the context of the SFCP, this detailed assessment of major freight-generating industries provides a foundation for informed transportation planning. Understanding the specific industries and their spatial distribution enables the optimization of logistics networks and infrastructure. Understanding the distribution and relationship of different, and often conflicting, land uses, allows planners and city staff to mitigate these conflicts and optimize the overall efficiency, commercial operations, and quality of life in the Stonecrest Freight Cluster. By recognizing the varied impacts of key industries, the SFCP can better cater to the unique needs of the region, fostering sustainable development and ensuring the seamless flow of goods within and around the Stonecrest Freight Cluster.

8.2.3 Areas for Community Coordination

The potential conflicts arising from the intersection of industrial activities with residential areas are diverse, encompassing issues such as pollution, noise, odors, and visual disturbances. The interplay between trucks associated with industrial properties and local residential traffic, including school buses, further exacerbates these conflicts, posing challenges for both industries and nearby residents. Recognizing the intricacies of these challenges, this section underscores the crucial role of community coordination in addressing and mitigating conflicts, particularly in areas where existing industrial structures coexist closely with residential properties.

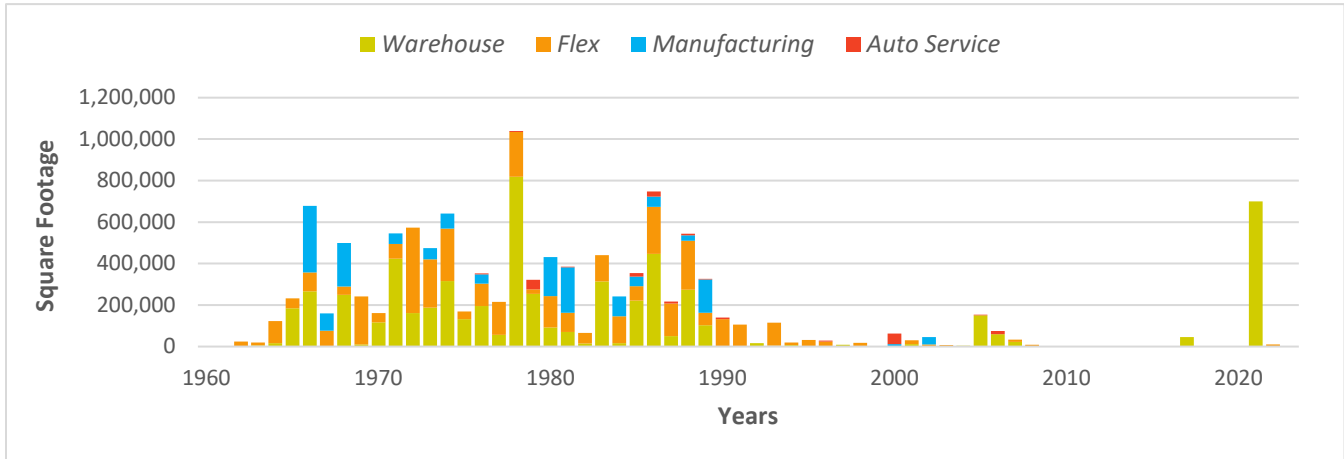
Throughout the formulation of this report, City of Stonecrest authorities have proactively engaged with neighboring residential communities to address potential conflicts between industrial and residential land uses. A targeted effort has been directed towards areas within a quarter mile of residential structures, aligning with established land use classifications in DeKalb County and the City of Stonecrest. The analysis of industrial properties within this designated quarter-mile radius (see Figure 8-4) within the Stonecrest Freight Cluster provides valuable insights into the inventory and spatial distribution of industrial facilities.

Significantly, the analysis highlights a substantial concentration of warehouse and manufacturing facilities in close proximity to residential areas, both in terms of the number of properties and the square footage they occupy (refer to Table 8-2). Flex space, recognized for being less disruptive, constitutes the largest share, while other industrial uses also contribute substantial square footage. Notably, these conflicts are particularly evident in areas along major corridors, including Miller Road, Panola Road, Lithonia Industrial Boulevard, Evans Mill Road, Covington Highway, and Marbut Road. These identified zones serve as focal points for ongoing initiatives aimed at managing potential impacts, aligning seamlessly with the plan's commitment to fostering a harmonious and sustainable coexistence between industrial and residential entities.

8.3 Overview of Market Area Real Estate Inventory and Trends

This section describes the industrial real estate inventory of the Study Area broken out by property subtypes. The area is largely comprised of what would be described as legacy assets constructed in the 1970s and 1980s. There was a long lull period in industrial development in the Study Area between 1990 and 2020, during which the amount of industrial inventory added in any particular year was never more than 200,000 square feet. Not until 2021 was a substantial new addition built in the area.

Figure 8-5: Inventory Square Footage Construction by Year



Source: CoStar, Inc.

8.3.1 Market Area Real Estate Inventory Overview

The freight cluster has a large variety of industrial uses, concentrated in two major geographic clusters on the eastern and western ends of the Study Area. These can be described as being between I-20 and US 278 (west of Panola Road) on the west side, and along Lithonia Industrial Boulevard and Stone Mountain Lithonia Road on the east side. For this analysis, industrial real estate is divided into the following subtypes, described as:

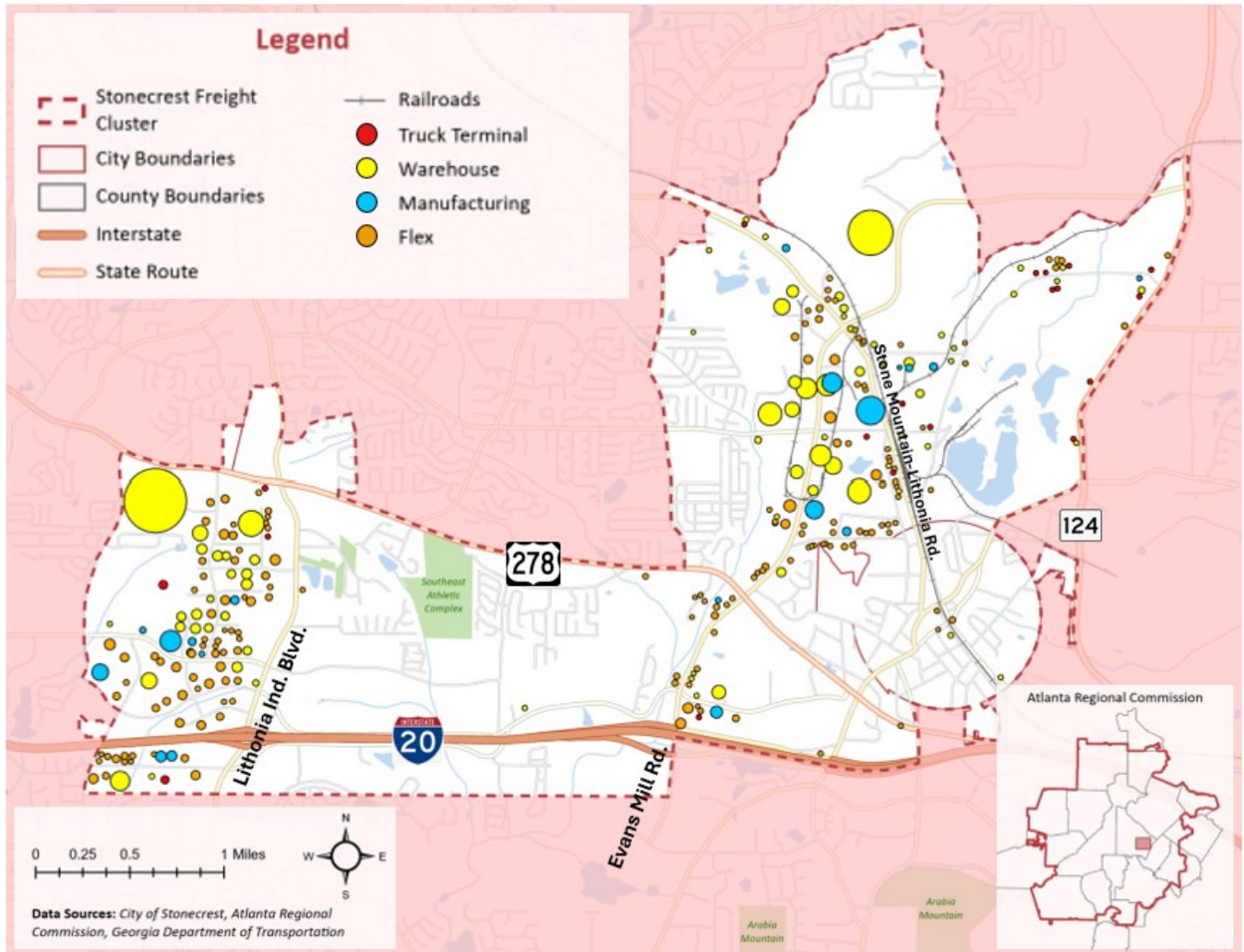
- Warehouse: typical goods distribution
- Flex: combination office and light industrial space
- Manufacturing: goods production
- Auto Service: corporate fleet and private vehicle maintenance and storage

The study area has roughly 12 million square feet of industrial real estate, which is spread across more than 270 different properties. By number of properties, more than half are flex space, and measured in terms of square footage, over half of the inventory is warehouse space. As is typical for the property type compared to other industrial subtypes, flex space has the highest average rental rate per square foot, at almost \$15, though those properties also have the highest vacancy rates in the area at about 15%.

Table 8-3: Industrial Inventory by Type

	Number of Properties	Square Feet of Inventory (Millions)	Rents per Square Foot	Vacancy Rate
Warehouse	80	6.1	\$6.99	8.6%
Flex	160	4.0	\$14.92	15.2%
Manufacturing	19	1.7	NA	NA
Auto Service	19	0.2	\$8.92	10.1%

Figure 8-6: Industrial Inventory Map



*Industrial building dot sizes are scaled to square footage.

8.3.2 Industrial Inventory Development Trends

The majority of the industrial inventory in the Study Area is comparatively old, relative to other parts of Metro Atlanta, with over 75% of all industrial space in the area by square footage built in the 1970s and 1980s as shown in Table 8-4. While warehouse construction has continued through the present day, very little flex or manufacturing space has been added since the year 2000.

Table 8-4: Inventory Square Footage Construction by Decade

Decade	Warehouse	Flex	Manufacturing	Auto Service	Total
2020s	700,249	10,000	0	0	710,249
2010s	45,000	0	0	0	45,000
2000s	248,022	54,231	48,000	71,056	421,309

Decade	Warehouse	Flex	Manufacturing	Auto Service	Total
1990s	36,532	436,297	0	13,138	485,967
1980s	1,602,382	1,300,273	788,009	64,846	3,755,510
1970s	2,662,077	1,557,950	221,068	55,415	4,496,510
1960s	732,839	632,033	614,796	0	1,979,668
Pre-1960	32,963	23,566	0	0	56,529

As is typical for older warehouse inventory, the average size of the warehouse properties in the freight cluster is relatively small, at around 75,000 square feet, with about 20 loading docks as shown in Table 8-5. Among other industrial types, auto service facilities are the smallest and newest, followed by flex space. Manufacturing properties are the largest in the area on average, at almost 90,000 square feet.

Table 8-5: Industrial Inventory Physical Characteristics

Type	Size	Year Built	Loading Docks
Warehouse	75,751	1981	19
Flex	25,090	1979	4
Manufacturing	87,993	1980	6
Auto Service	10,761	1989	3

8.4 Detailed Assessment of Freight Intensive Real Estate and Land Uses

This section contains a detailed breakdown of each industrial subtype within the context of DeKalb County and the Metro Atlanta region at large.

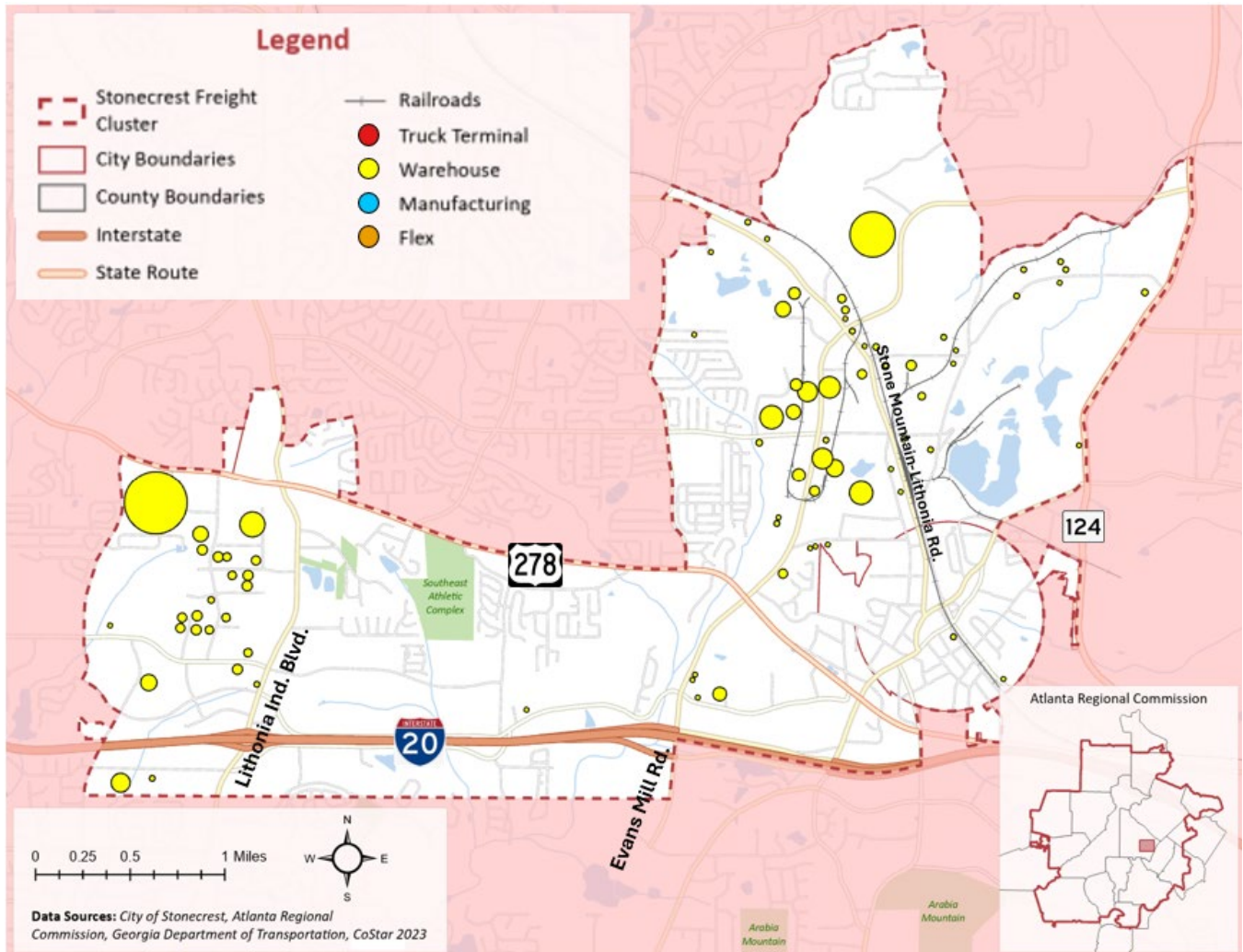
8.4.1 Warehouse Inventory

There are 80 warehouse properties totaling over 6 million square feet in the freight cluster, which are spread between the two major nodes as shown in Table 8-6 and Figure 8-7. The Home Depot and Marshalls have large distribution centers in the Study Area, which are among the largest such individual facilities in the area. By square footage, warehouse inventory in the area represents about 13% of the total amount in DeKalb County, and slightly more than one percent of the total inventory in Metro Atlanta.

Table 8-6: Warehouse Inventory Comparison

Area	Number of Properties	Inventory (Millions of Square Feet)
Stonecrest	80	6.1
DeKalb County	1,045	45.2
Metro Atlanta	8,790	545.0

Figure 8-7: Warehouse Industries within the Study Area



*Industrial building dot sizes are scaled to square footage.

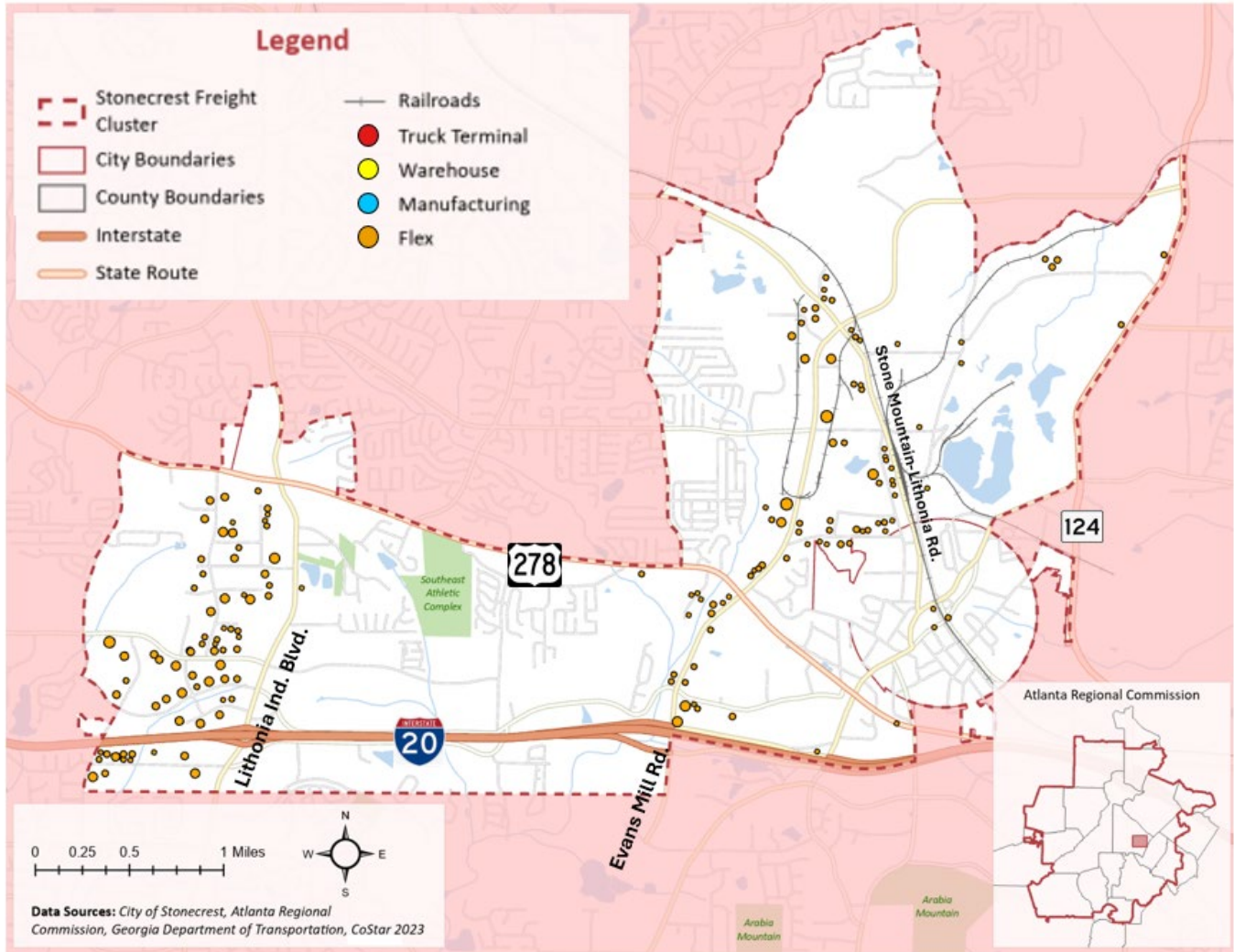
8.4.2 Flex Space Inventory

The 160 flex space properties in the freight cluster total 4 million square feet and are dispersed along two major corridors as shown in Table 8-7 and Figure 8-8. Flex space in the area makes up over half of the total in DeKalb County, qualifying it as a preeminent node for such property types in the county, and one of the larger such concentrations in Metro Atlanta.

Table 8-7: Flex Space Inventory Comparison

Area	Number of Properties	Inventory (Millions of Square Feet)
Stonecrest	160	4.0
DeKalb County	463	7.7
Metro Atlanta	3,565	64.3

Figure 8-8: Flex Spaces within the study area



**Industrial building dot sizes are scaled to square footage.*

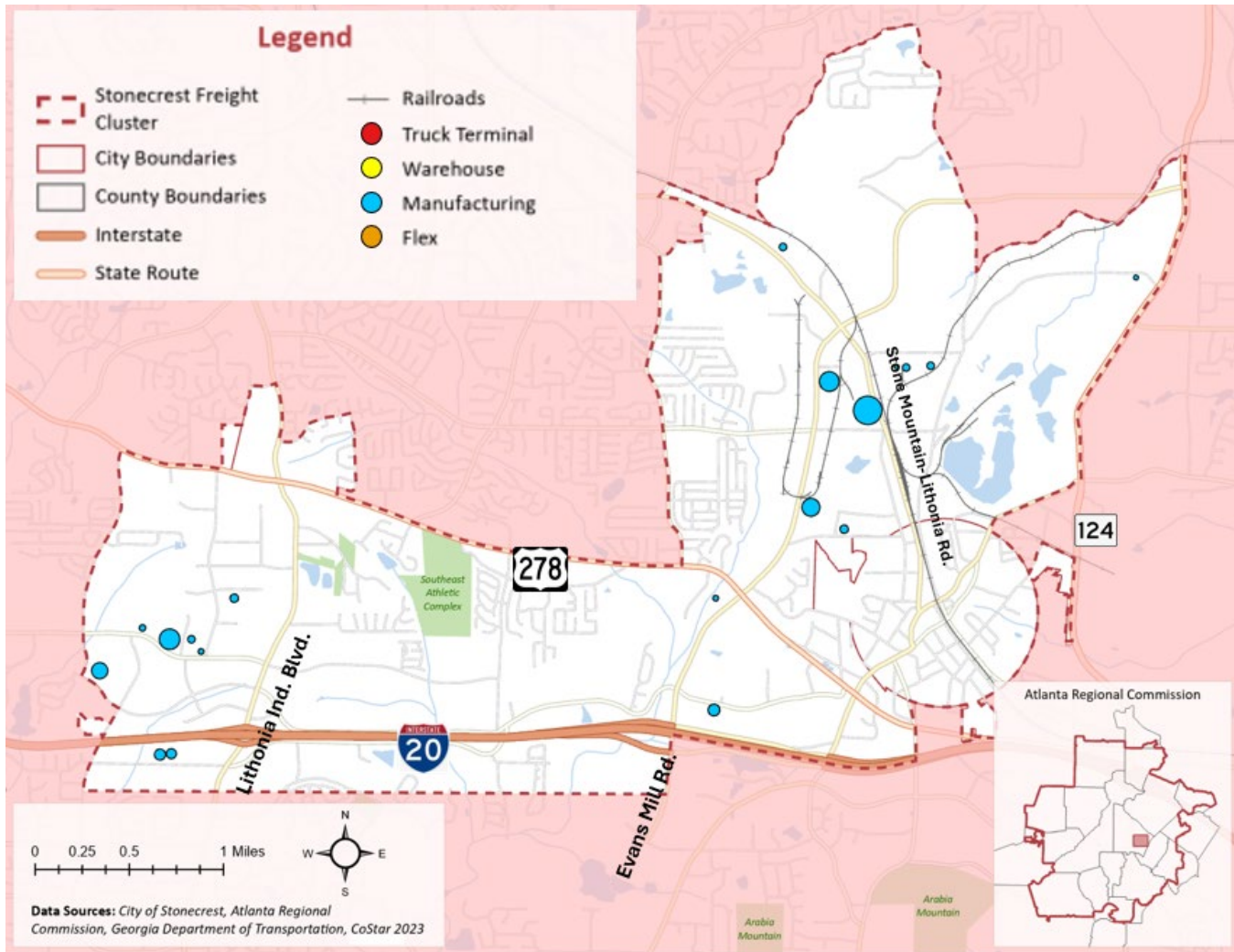
8.4.3 Manufacturing Inventory

There are a relatively small number of manufacturing properties in the Study Area, at less than 20, but the total square footage amounts to over 1.7 million as shown in Table 8-8 and Figure 8-9. As is typical of manufacturing, a wide variety of business types are represented, with the Schnitzer steel recycling facility being among the more prominent examples. A substantial portion (over one third) of DeKalb County’s manufacturing square footage is located in the Study Area.

Table 8-8: Manufacturing Inventory Comparison

Area	Number of Properties	Inventory (Millions of Square Feet)
Stonecrest	19	1.7
DeKalb County	73	4.6
Metro Atlanta	460	42.1

Figure 8-9: Manufacturing Industries within the study area



**Industrial building dot sizes are scaled to square footage.*

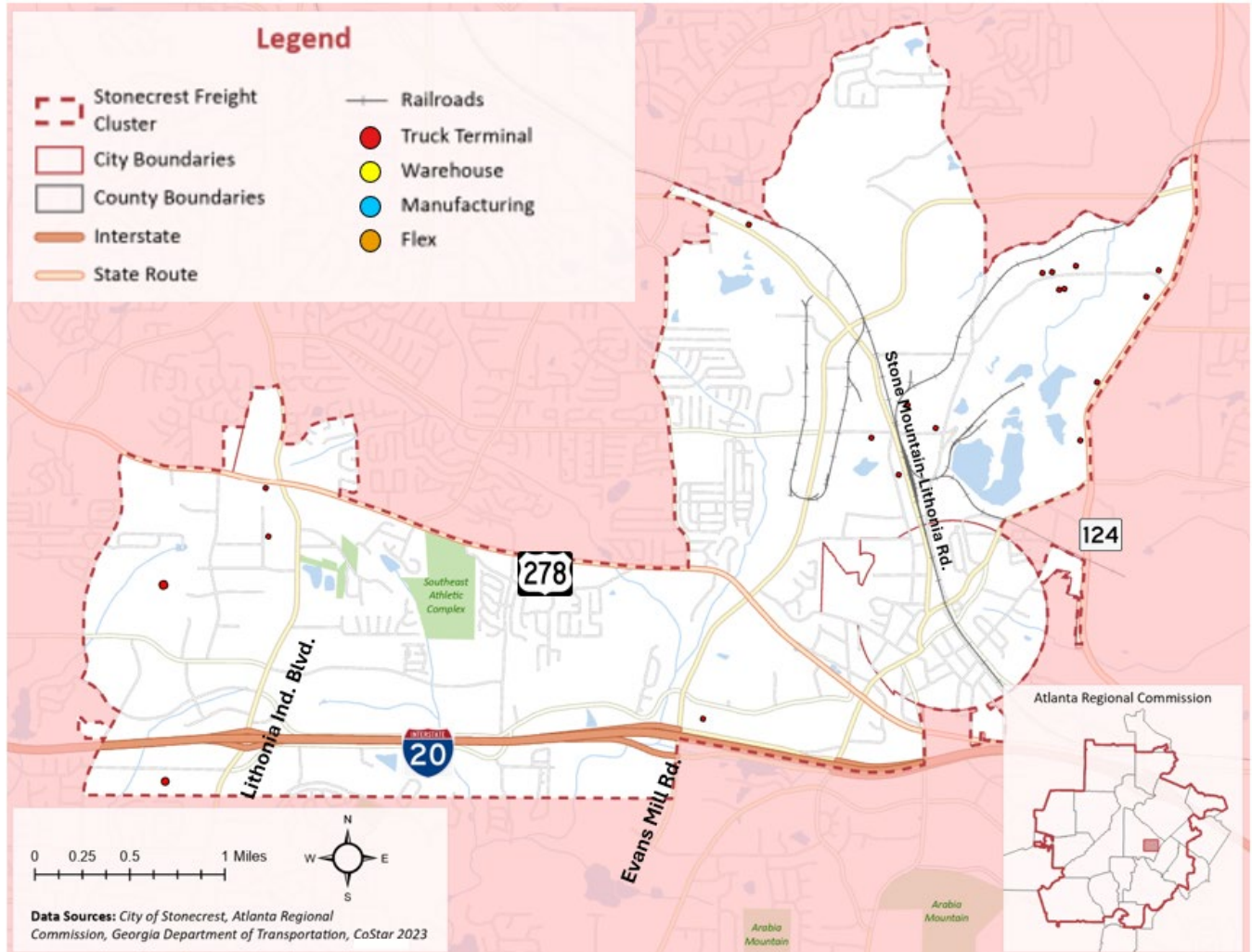
8.4.4 Auto Service Inventory

There are 19 auto service properties in the Study Area as shown in Table 8-9 and Figure 8-10. The total square footage of such facilities in the area totals around 200,000 square feet, which is a small portion of the total number in DeKalb County, however these types of properties typically have very large parking areas for vehicle fleets. Georgia Power and Swift Transportation have some of the largest auto service facilities in the study area.

Table 8-9: Auto Service Industry Comparison

Area	Number of Properties	Inventory (Millions of Square Feet)
Stonecrest	19	0.2
DeKalb County	172	2.6
Metro Atlanta	771	10.4

Figure 8-10: Auto Service Industries within the study area



*Industrial building dot sizes are scaled to square footage.

8.4.5 Performance Trends

In terms of market performance, rents for industrial properties in the Study Area have been trending upwards over the past ten years as shown in Figure 8-11, while vacancies have generally been trending down as shown in Figure 8-12. In 2020 rents began to increase at a notable rate, especially for flex space in the area, while auto service and warehouse properties saw a more modest increase. Vacancies among various industrial types have

dropped significantly since 2013, especially among flex space, though there has been an uptick across all sectors lately.

Figure 8-11: Rents Over Time by Type (Source: CoStar, Inc.)

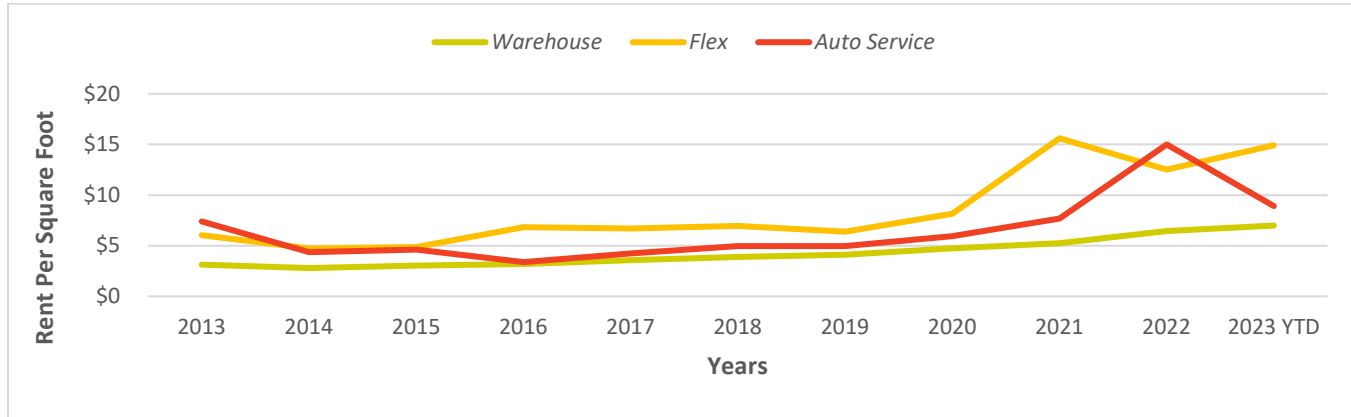
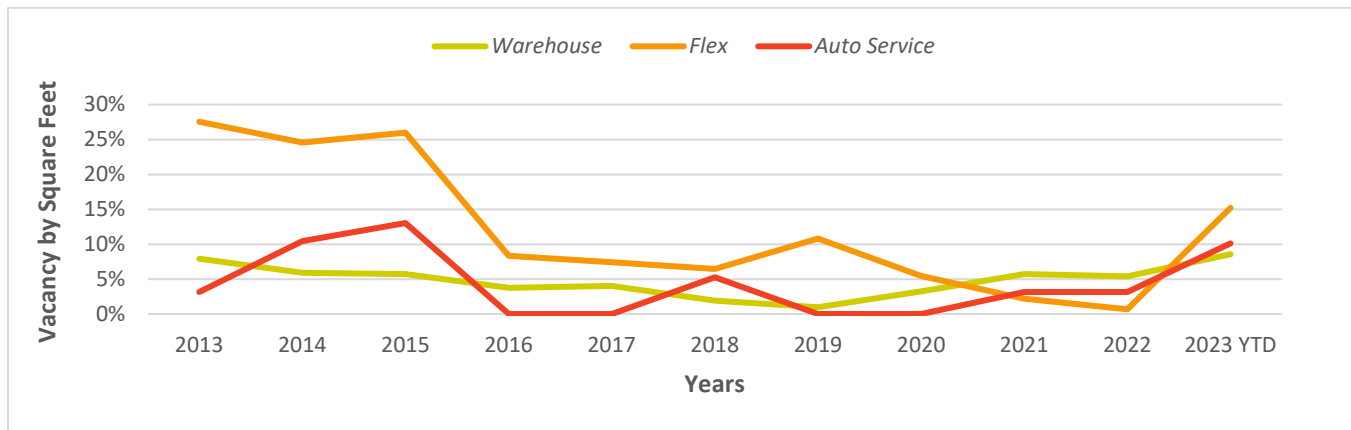


Figure 8-12: Vacancy Over Time by Type (Source: CoStar, Inc.)



8.4.6 Development Pipeline

The current construction pipeline in the Study Area includes five proposed projects, one of which is a modestly sized flex space, and four are large scale warehouses representing over 2.1 million square feet. The new warehouse proposals represent a shift towards properties with much larger individual footprints, few of which currently exist in the area.

8.5 Workforce Characteristics

8.5.1 Study Area Work Force Characteristics

The study area has a total of over 15,000 jobs of all types, with about 1,650 individual businesses as shown in Table 8-10. Healthcare, manufacturing, and wholesale trade are the three largest sectors by number of employees in the area.

Table 8-10: Jobs by Sector (Source: Claritas, Inc.)

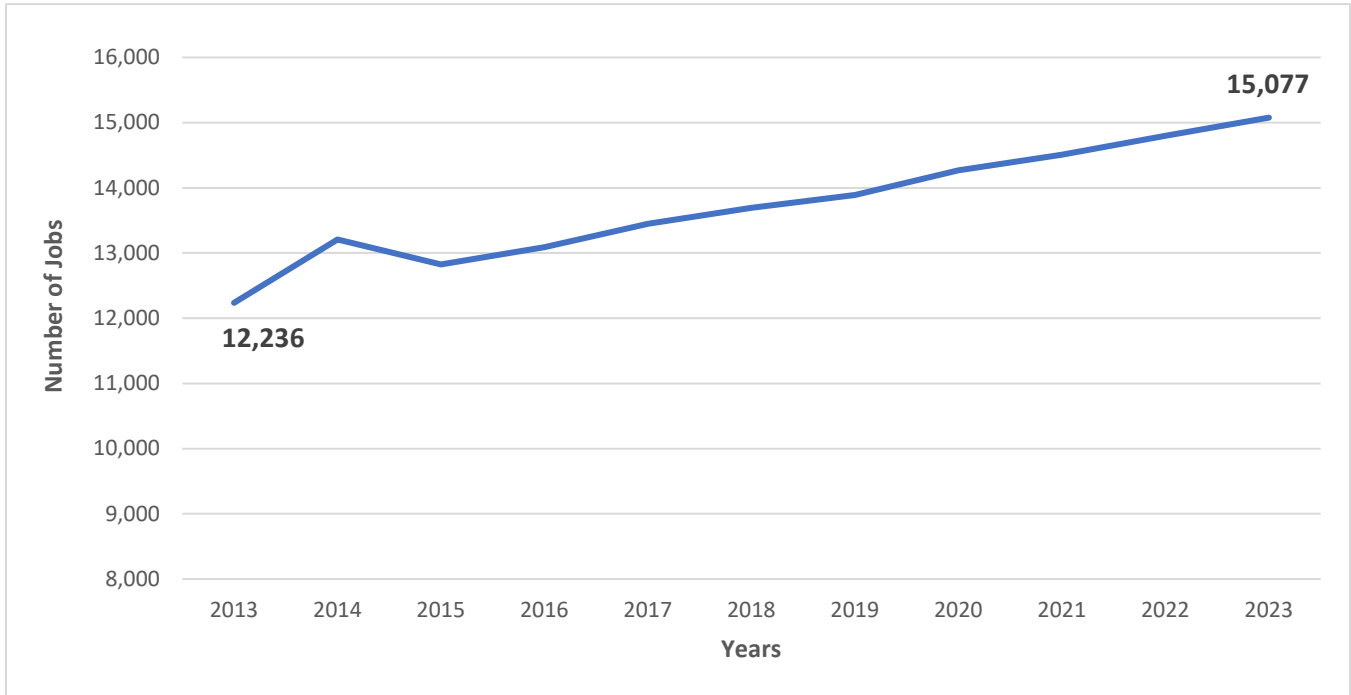
Industry Sector	Firms	Jobs	Percent of Jobs
11: Agriculture, Forestry, Fishing and Hunting	0	0	0.0%
21: Mining, Quarrying, and Oil and Gas Extraction	1	5	0.0%
22: Utilities	0	0	0.0%
23: Construction	76	1,032	6.8%
31-33: Manufacturing	71	2,232	14.8%
42: Wholesale Trade	62	2,055	13.6%
44-45: Retail Trade	169	1,059	7.0%
48-49: Transportation and Warehousing	46	430	2.9%
51: Information	26	125	0.8%
52: Finance and Insurance	76	503	3.3%
53: Real Estate and Rental and Leasing	89	563	3.7%
54: Professional, Scientific, and Technical Services	98	557	3.7%
55: Management of Companies and Enterprises	2	4	0.0%
56: Admin & Support & Waste Mgmt Services	63	325	2.2%
61: Educational Services	16	671	4.4%
62: Health Care and Social Assistance	441	2,932	19.4%
71: Arts, Entertainment, and Recreation	29	195	1.3%
72: Accommodation and Food Services	95	1,059	7.0%
81: Other Services (except Public Administration)	185	915	6.1%
92: Public Administration	14	310	2.1%
99: Unassigned	92	104	0.7%
Total	1,651	15,077	100.0%

Employment in the Study Area has generally continued to trend upward over the past ten years as shown in Figure 8-13, even during the COVID-19 pandemic. This is likely a function of the predominance of industrial employment in the area. The area has gained more than 2,800 jobs in the last decade, amounting to an increase of almost 25%.

The Study Area has very substantial manufacturing employment, with over 2,200 sector jobs. Individual subsectors representing large portions of manufacturing employment include:

- Machinery
- Plastics and Rubber
- Electrical Equipment
- Paper
- Fabricated Metal

Figure 8-13: Total Jobs Over Time



The area has roughly 1.4% of all manufacturing jobs in Metro Atlanta as shown in Table 8-11. In particular, Stonecrest has large portions of Metro Atlanta’s plastics and rubber manufacturing, as well as wood product manufacturing.

Table 8-11: Manufacturing Jobs Comparison

Industry Sectors	Stonecrest	Metro Atlanta	Freight Cluster Percent of Metro Atlanta
311: Food Manufacturing	50	15,142	0.33%
312: Beverage and Tobacco Product Manufacturing	21	11,037	0.19%
313: Textile Mills	2	767	0.24%
314: Textile Product Mills	0	1,758	0.00%
315: Apparel Manufacturing	0	785	0.00%
316: Leather and Allied Product Manufacturing	0	176	0.00%
321: Wood Product Manufacturing	111	3,960	2.81%
322: Paper Manufacturing	232	11,172	2.07%
323: Printing and Related Support Activities	87	5,631	1.55%
324: Petroleum and Coal Products Manufacturing	15	594	2.50%
325: Chemical Manufacturing	28	7,017	0.40%
326: Plastics and Rubber Products Manufacturing	363	5,262	6.90%
327: Nonmetallic Mineral Product Manufacturing	35	3,668	0.96%
331: Primary Metal Manufacturing	0	2,296	0.00%
332: Fabricated Metal Product Manufacturing	227	13,524	1.68%

Industry Sectors	Stonecrest	Metro Atlanta	Freight Cluster Percent of Metro Atlanta
333: Machinery Manufacturing	458	17,772	2.58%
334: Computer and Electronic Product Manufacturing	88	10,776	0.82%
335: Electrical Equipment, Appliance, and Component Mfg	298	7,827	3.81%
336: Transportation Equipment Manufacturing	6	12,048	0.05%
337: Furniture and Related Product Manufacturing	43	11,816	0.36%
339: Miscellaneous Manufacturing	169	15,774	1.07%
Total	2,232	158,802	1.41%

The Study Area also has very substantial wholesale and transportation employment as shown in Table 8-12 and Table 8-13, with almost 2,500 combined sector jobs. Large individual subsectors of wholesale and transportation employment include durable goods wholesalers and truck transportation. Over 2% of all wholesale employment in Metro Atlanta is located in the area.

Table 8-12: Wholesale Jobs Comparison

Industry Sector	Stonecrest	Metro Atlanta	Freight Cluster Percent of Metro Atlanta
423: Merchant Wholesalers, Durable Goods	1,919	67,014	2.86%
424: Merchant Wholesalers, Nondurable Goods	133	23,943	0.56%
425: Wholesale Electronics Brokers	3	6,017	0.05%
Total	2,055	96,974	2.12%

Table 8-13: Transportation Jobs Comparison

Industry Sector	Stonecrest	Metro Atlanta	Freight Cluster Percent of Metro Atlanta
481: Air Transportation	0	87,420	0.00%
482: Rail Transportation	0	1,223	0.00%
483: Water Transportation	6	205	2.71%
484: Truck Transportation	333	23,544	1.41%
485: Transit and Ground Passenger Transportation	19	6,450	0.29%
486: Pipeline Transportation	0	412	0.00%
487: Scenic and Sightseeing Transportation	0	94	0.00%
488: Support Activities for Transportation	59	17,774	0.33%
491: Postal Service	4	7,020	0.05%
492: Couriers and Messengers	0	1,106	0.00%
493: Warehousing and Storage	10	3,305	0.31%
Total	430	148,553	0.29%

9 Transportation Funding and Funding Opportunities

This chapter identifies potential transportation funding and related opportunities for SFCP recommended projects. It does not provide specific funding details but rather offers an overview of available resources that can facilitate decision-making and the pairing of projects with appropriate funding sources. Detailed and specific funding opportunities shall be discussed in the *Stonecrest Freight Cluster Plan: Recommendations* report.

This chapter identifies three key funding sources that are available for transportation improvements at the scale of Stonecrest Freight Cluster: local/regional transportation funding, state transportation funding, and federal transportation funding. By exploring these sources, the chapter aims to provide a clear understanding of the financial resources available to support transportation initiatives in the region. Whether it be funding at the local and regional levels, with state-level support, or through federal allocations, this chapter equips stakeholders with the knowledge needed to access and leverage financial resources for the sustainable development of the Stonecrest Freight Cluster.

9.1 Local/Regional Transportation Funding

Local and regional funding opportunities for Stonecrest Freight Cluster Plan projects are necessary in securing federal and state funding, as these projects typically provide the 20% local contribution for each phase of work. Local funding plays a dual role, first by covering part or all of the required match for federal and state grants and second, by exceeding the local match requirement, leveraging more resources from state or federal sources. This strategic use of local funding enhances the likelihood of securing non-local funding.

9.1.1 Special Purpose Local Option Sales Tax (SPLOST)

DeKalb County's Special Purpose Local Option Sales Tax (SPLOST), approved by voters in November 2017 and set to run until 2024, is a one-cent sales tax dedicated to financing capital projects within the county and its municipalities. The SPLOST program is distinctive in that it mandates that a substantial 85 percent of the generated revenue must be allocated to transportation or public safety initiatives, with the remaining 15 percent designated for the repair of non-transportation and non-public safety capital assets. Funding distribution is based on a per capita basis between the unincorporated area and each municipality, excluding the section of city of Atlanta in DeKalb County. Between April 2018-March 2024, the Cities of Stonecrest and Lithonia received an estimated amount of \$47,757,176 (7.5%) and \$1,872,082 (0.3%) respectively over the course of 6 years based on 2016 population share within the county³³. The program was a success with the revenue being used to support the city's expenses in capital projects such as roads, buildings, vehicles, and major equipment.

Following its initial success, the SPLOST program was renewed as SPLOST II after DeKalb voters approved it in a referendum on November 7th, 2023. Estimated to generate additional revenue of \$70.9 million (\$11.8 million annually) and \$3.1 million (\$0.5 million annually) for the City of Stonecrest and the City of Lithonia respectively over the next six years, based on the estimated 2023. Table 9-1 presents the estimated breakdown of the anticipated SPLOST revenue by project category.

³³ DeKalb County SPLOST I <https://www.dekalbcountyga.gov/splost/dekalb-county-splost>

Table 9-1: SPLOST Approximate Allocation by the City of Stonecrest 2024-2030

No	Project Category	Approximate Allocation
1	Street Paving / Resurfacing / Transportation Improvement	\$41,334,550
2	Parks Improvement	\$11,805,800
3	Property Acquisition / New Infrastructure	\$17,722,931
	Total	\$70,863,281

Data Source: City of Stonecrest 2024 SPLOST II Amendment Resolution

It is, however, important to note that while SPLOST provides substantial financial support for capital projects, its reliance solely on this funding source is challenged by economic volatility, as exemplified by the impact of the COVID-19 pandemic. This underscores the need for additional sources of funding to fully realize the transportation plan for the Stonecrest Freight Cluster. Nonetheless, SPLOST remains a critical funding mechanism that will continue to play a pivotal role in advancing transportation and public safety initiatives in the city of Stonecrest.

9.1.2 Special Freight Tax District

To supplement funding sources for transportation projects, the City of Stonecrest can explore other avenues to address the funding needs for transportation infrastructure, particularly in areas heavily impacted by freight movement such as the Stonecrest Freight Cluster. One such option is the establishment of a Special Freight Tax District, a strategy employed by cities like Doraville³⁴ and Brookhaven³⁵ in the Atlanta Metropolitan region. This district would allow city authorities to levy additional property taxes specifically from industrial and commercial land uses within the Special Tax District to finance improvements in transportation infrastructure within such districts. The importance of such investment is underscored by the strain placed on existing roads like Panola Road, Marbut Road, Lithonia Industrial Boulevard, and S Stone Mountain Lithonia Road due to freight movement, which is critical to the local economy. However, relying solely on regular property taxes to fund these infrastructure needs burdens city residents who may not directly benefit from or contribute to freight traffic. By establishing a Special Freight Tax District, the city can ensure that funds are allocated specifically to address transportation infrastructure needs related to freight movement, including roadway operational improvements, pavement maintenance, signal enhancements, and safety upgrades. This targeted approach not only provides a sustainable funding source for vital infrastructure projects but also ensures that those most impacted by freight movement contribute to its mitigation.

9.2 State Transportation Funding

The SFCP stands to benefit from a range of state-level transportation funding sources tailored to meet its objectives and priorities. These funding sources can significantly contribute to the realization of essential transportation improvements:

- **Transportation Funding Act (HB 170) Funds:** This program represents a cornerstone of state funding, supporting a wide array of initiatives aimed at repairing, enhancing, and expanding Georgia's transportation

³⁴ City of Doraville, Ordinance 2017-02 <https://acrobat.adobe.com/id/urn:aaid:sc:us:b1070f88-e249-427e-817d-8d60506664cc>

³⁵ <https://roughdraftatlanta.com/2021/12/17/amidst-resident-concern-brookhaven-approves-special-tax-district/>

network. These funds can be harnessed for both routine maintenance and capital improvement projects, making them an ideal fit for the comprehensive approach outlined in the Stonecrest Freight Cluster.

- **Quick Response Projects:** Designed for efficiency and cost-effectiveness, the Quick Response Projects program targets lower-cost operational endeavors that can be executed rapidly, typically within one year, and with budgets under \$200,000. These projects encompass critical tasks such as restriping, intersection improvements, and the addition or extension of turn lanes. Leveraging this program can expedite the implementation of key elements within the Stonecrest Freight Cluster.
- **Local Maintenance & Improvement Grant (LMIG):** The LMIG program operates on an allocation model based on the total centerline road miles within each local road system and the population of counties or cities in comparison to statewide figures. This approach ensures equitable distribution of resources. Eligible projects for LMIG funding are diverse, encompassing preliminary engineering, construction supervision and inspection, utility adjustments or replacement, roadway maintenance and resurfacing, grading, drainage, base and paving of existing or new roads, storm drainpipe or culvert replacement, intersection improvements, turn lanes, bridge repair or replacement, sidewalk construction within the right of way, roadway signage, striping, guardrail installation, and signal installation or improvement. The flexibility of LMIG funding makes it an asset for the multifaceted needs of the Stonecrest Freight Cluster.

In addition to these primary funding sources, two competitive programs offered by the GDOT have been identified that hold the potential to bolster the Stonecrest Freight Cluster:

- **Georgia Transportation Infrastructure Bank (GTIB):** Administered by the State Road and Tollway Authority (SRTA), GTIB presents an opportunity for grant and loan funding for projects with budgets of up to \$10 million. Notably, GTIB funds can serve as a local match for federal ARC programs, enhancing their attractiveness. When pursuing GTIB support, key considerations include demonstrating economic development potential, project readiness, and feasibility, aligning with the goals of the Stonecrest Freight Cluster.
- **GDOT Freight Operations Program:** Tailored to address freight-specific operational challenges, the GDOT Freight Operations Program is responsive to the needs of communities grappling with issues related to truck and freight rail activity. The program targets solutions such as improving turning lanes and enhancing signal timing at key intersections along freight-heavy routes. The program offers awards of up to \$2 million, making it a valuable resource for addressing critical freight-related concerns. Potential sponsors are encouraged to submit project proposals to the GDOT District Engineer for approval.

These state-level transportation funding opportunities offer a diverse range of resources that align with the SFCP's objectives. By strategically exploring and utilizing these sources, the City of Stonecrest can secure the necessary financial support to realize its vision, fostering economic development and enhancing transportation infrastructure in the region.

9.3 Federal Transportation Funding

The SFCP has a promising array of federal transportation funding opportunities, particularly following the enactment of the Bipartisan Infrastructure Law (BIL) in November 2021. The BIL authorizes federal funding over a five-year period (FY 2022-2026), providing a substantial allocation of \$350.8 billion for highway programs. Within this allocation, \$303.5 billion is derived from the Highway Trust Fund (HTF), supplemented by an additional \$47.3 billion in advance appropriations from the General Fund (GF). Notably, the BIL introduces more than a dozen new highway programs, ranging from resilience and carbon reduction to bridges and electric

vehicle (EV) charging infrastructure. It emphasizes safety, bridges, climate change, resilience, and efficient project delivery, presenting diverse funding avenues aligned with the objectives of the SFCP.

Within the realm of formula programs, several federal initiatives under the administration of the ARC stand out as potentially beneficial for the Stonecrest Freight Cluster's transportation goals:

- **National Highway Freight Program:** This program allocates funds to states by formula, with the objective of enhancing the efficient movement of freight on the National Highway Freight Network. While managed by the GDOT, the ARC administers this program within the Atlanta region as part of the Regional Transportation Plan and/or Transportation Improvement Program.
- **National Highway System (NHS) Funds:** These funds, known as the National Highway Performance Program (NHPP) funds, are closely tied to GDOT's performance targets for the statewide NHS network. Consequently, they are often directed towards major interstate facilities, including I-20 and SR 124 within the Study Area.
- **Surface Transportation Block Grant (STBG) Funds - Urban:** This federal program offers substantial flexibility, allowing for the preservation and improvement of conditions and performance on Federal-aid highways and bridges. Eligible projects encompass non-motorized transportation facilities, transit capital projects, and public bus terminals and facilities.
- **STBG - Transportation Alternatives Program:** Within the broader STBG program, funds are set aside specifically for smaller-scale transportation projects, including pedestrian and bicycle facilities, recreational trails, and safe routes to school initiatives.
- **Congestion Mitigation and Air Quality Improvement (CMAQ) Funds:** These funds offer a flexible source for transportation projects and programs, aimed at achieving Clean Air Act requirements. In the Atlanta region, CMAQ funds have supported transportation demand management (TDM) programs, trail facilities, sidewalks, and transit initiatives.
- **Metropolitan Planning Program (MPP):** Formerly known as Metropolitan Planning (PL) funds, the MPP provides planning assistance from the Federal Highway Administration (FHWA) to GDOT, which then channels these funds to the ARC for planning programs.
- **Promoting, Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT):** A newly introduced formula program administered by FHWA, PROTECT focuses on promoting resilience planning, community resilience, evacuation routes, and improvements to at-risk coastal infrastructure. It offers a higher federal share if the state develops a resilience improvement plan incorporated into its long-range transportation plan.
- **National Electric Vehicle (EV) Formula Program:** Another recently introduced FHWA formula program, this initiative seeks to deploy EV charging infrastructure and establish an interconnected network to facilitate data collection, access, and reliability. Eligibility for these funds is contingent on GDOT's plan submission outlining fund allocation and the designation of alternative fuel corridors.

Additionally, the BIL retained existing discretionary grant programs and introduced new ones, offering further opportunities for federal funding:

- **Local and Regional Project Assistance Grants (Formerly RAISE):** These discretionary grants have been recently updated and awarded based on merit criteria that encompass safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and partnership. Projects falling within the range of \$5 million to a maximum of \$25 million are eligible for RAISE funding.

- **Nationally Significant Freight and Highway Projects (Formerly INFRA):** This program awards competitive grants for multimodal freight and highway projects of national or regional significance. The objective is to enhance the safety, efficiency, and reliability of freight and passenger movement across rural and urban areas. Projects that promise to eliminate freight bottlenecks and enhance critical freight movements are prioritized.
- **National Infrastructure Project Assistance or "Megaprojects":** This program, sometimes referred to as the "Megaprojects program" or MEGA, offers grants to support multijurisdictional or regional projects of significance that cut across multiple transportation modes. These grants assist communities in completing large-scale projects that would otherwise be challenging to accomplish independently. Eligible projects include improvements on the National Multimodal Freight Network, National Highway Freight Network, National Highway System, and rail-highway grade separations.
- **Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT - Discretionary):** This discretionary program, akin to the formula counterpart, is aimed at funding projects that promote system resilience.
- **National Electric Vehicle (EV) Formula Program - Discretionary:** Under the BIL, a portion of this program's funding (10%) is designated for discretionary grants to state and local governments requiring additional assistance to strategically deploy EV charging infrastructure. Similar to the formula portion, eligibility hinges on GDOT's designation of Moreland Avenue as an alternative fuel corridor in future NEVI Plan updates.
- **Charging and Fueling Infrastructure Program:** This discretionary initiative aims to deploy EV charging and alternative fueling infrastructure along designated alternative fuel corridors and in communities. To utilize this program, corridors must first be designated as alternative fuels corridors, and a process for redesignating these corridors must be in place. Eligible projects include the acquisition and installation of publicly accessible EV charging or alternative fueling infrastructure, operating assistance for the first five years post-installation, and the acquisition and installation of traffic control devices.
- **Consolidated Rail Infrastructure and Safety Improvement (CRISI) Grants:** Administered by the Federal Railway Administration (FRA), this program funds projects that enhance the safety, efficiency, and reliability of intercity passenger and freight rail. Eligible projects span a wide spectrum, including capital investments in freight and passenger rail, safety technology deployment, planning, environmental analyses, research, workforce development, training, and locomotive emission reduction initiatives.
- **Railroad Crossing Elimination Grant:** Also administered by the FRA, this program finances rail crossing improvements, with a focus on enhancing safety and freight mobility. Eligible projects encompass grade-separated rail crossings, including planning, environmental review, and design components.