

The Atlanta Regional Commission (ARC) is the federally designated metropolitan planning organization (MPO) for the Atlanta region. As the MPO for the region, the ARC collaborates with local governments and transportation agencies to develop the Metropolitan Transportation Plan (MTP), which prioritizes transportation investments in the 20-county Atlanta region through 2050. The ARC is responsible for maintaining the MTP as well as the Transportation Improvement Program (TIP), which allocates federal funds for the highest-priority projects in the region. As part of this work, the ARC also develops modal plans, including this *2024 Atlanta Regional Freight Mobility Plan (2024 ARFMP)*. The ARC adopted its latest strategic framework in March 2023. The strategic framework provides a vision and mission as well as a comprehensive set of values and goals for ARC to meet the needs of the region. The vision identified in the ARC strategic plan is One Great Region. It was important to make sure that the goals and objectives for the *2024 ARFMP* align with the latest ARC strategic framework. The goals for the *2024 ARFMP* were used as guiding principles for freight planning activities conducted by the ARC, as a guide to identifying freight issues and needs, and to influence the development of equitable freight strategies in the ARC MPO region.

GOALS AND OBJECTIVES



SAFETY

Improve the safety and security of the regional freight system and its users.

- Safety of all road users who interact with freight
- Safety and security of freight operators while on the road and parked



OPERATIONS

Enhance the operations of the freight network.

- Performance as measured by key metrics such as travel time, travel time reliability, and network connectivity
- Use and enhancement of intermodal connectors to improve system operations
- Improvement in travel efficiency from trip beginning to end



ECONOMY

Acknowledge and support key industries and their positive impact on the regional economy.

- Strengthening of the capabilities of the regional freight industry
- Understanding of the importance of freight by the public and decision makers



SUSTAINABILITY
AND RESILIENCY

Create a more sustainable and resilient network that incorporates innovative tools and technologies.

- Investment in freight infrastructure to ensure a resilient, sustainable system
- Use of technology and other innovations to streamline system performance and enhance environmental sustainability



QUALITY
OF LIFE

Leverage freight to enhance the quality of life for all people in the Metro Atlanta region.

- Access to equitable employment opportunities for all individuals and communities from diverse backgrounds through improved transportation options
- Follow best practices in context-sensitive land use planning in the siting of future industrial developments, seeking the fair and equitable treatment of all communities
- Thoughtful integration of freight activity in urban areas
- Convenient, expeditious, and reliable goods delivery



INTEGRATED
PLANNING

Ensure the consideration of freight in broader transportation and land use planning processes.

- Consideration of freight and industrial developments within the larger community and their impacts
- Acknowledgment of the need for housing within a reasonable commute time of industrial employment areas and development of policy to facilitate its creation
- Encouragement of meaningful discussion and collaboration between public and private sector entities
- Creation of local government guidance and tools to support the integration of freight with the local planning process

STAKEHOLDER ENGAGEMENT

Figure 1: Stakeholder Engagement



For the 2024 ARFMP, the project team engaged stakeholders through surveys, discussion groups, and interviews as seen in **Figure 1**. Twenty jurisdiction-level sessions with public sector stakeholders, including county and city staff and local community improvement district representatives were conducted.

Specialized advisory committees addressed topics like electric vehicles/alternative fuels, truck parking, and technology, with input from technical and policy experts. Two virtual roundtables gathered input on land use and air cargo from regional industry groups, and two online surveys collected ongoing feedback.

The project team presented to existing ARC standing committees, including the ARC Freight Advisory Task Force (FATF), Transportation Coordinating Committee (TCC), Transportation and Air Quality Committee (TAQC)/Board, and Land Use Coordinating Committee (LUCC), seeking feedback on planning direction and priorities. Two online surveys were conducted targeting broad stakeholder groups. Additionally, twenty virtual interviews with public and private sector freight professionals and policymakers were conducted.

FREIGHT NEEDS

The ARC completed a comprehensive review of plans and studies at the state, regional, and local levels to understand current trends of freight movement, freight bottlenecks, safety issues, and other needs and priorities. Stakeholder outreach also revealed additional needs related to truck parking, safety concerns, alternative fuels, sustainability, freight technology, and access to jobs. The list below highlights needs identified throughout the development of the 2024 ARFMP.

- Safety Improvements at Crash Hotspot
- Freight Bottlenecks
- Freight System Resiliency
- Truck Parking
- Rail Grade Separation
- Improvements at Rail Grade Crossings
- Integrating ITS and Other Freight Technology
- Alternative Fuels/Electric Vehicles Adoption
- Employees Accessing Freight-Related Jobs
- Improve Access to Freight Clusters
- Curbside Management
- Operational Improvements
- Addressing System Gaps
- Deficient Bridges

FREIGHT FLOW AND COMMODITIES MOVED

Figure 2: Metro Atlanta Freight Statistics

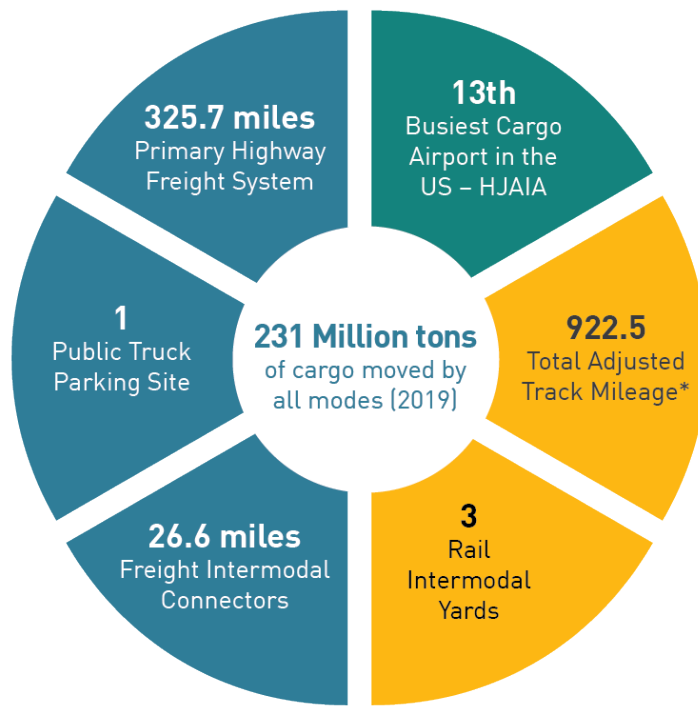
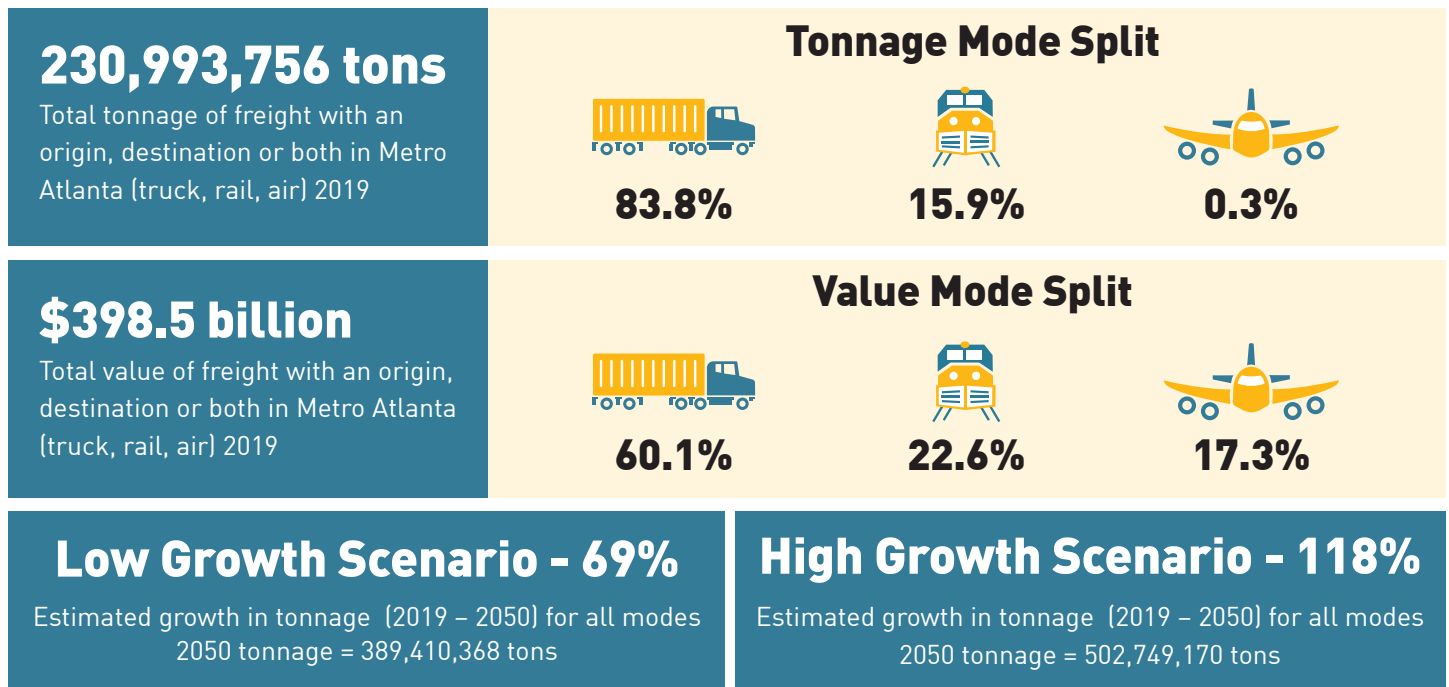


Figure 2 illustrates the total quantity of freight, measured in tons, transported by all modes in the Atlanta region in 2019, along with the transportation infrastructure that supports this movement. **Figure 3** presents the modal split of the total freight by tonnage and value, and also shows the projected low and high tonnage growth scenarios for the Atlanta region. The low growth scenario is based on projections from the FHWA Freight Analysis Framework (FAF 5.5.1), while the high growth scenario is based on projections from the S&P Global Transearch data, 2019. **Figures 4 and 5** on the next page display the top 5 commodities by mode, categorized by tonnage and value, along with the share of each commodity in the total tonnage and value, respectively.




*Adjusted track mileage is calculated as the reported rail track mileage multiplied by the number of mainline tracks.

Figure 3: Metro Atlanta Freight Flow and Projected Growth






Source: S&P Global Transearch data, 2019 (truck, rail and air); Surface Transportation Board Carload Waybill Data, 2019 (Rail); FHWA Freight Analysis Framework (FAF 5.5.1), 2019 (truck, rail and air)

Figure 4: Top 5 Commodities by Mode by Tonnage and Share of Total Commodity Tonnage, 2019

			
Ranking	Truck	Rail	Air
1st	Non-metallic ores, minerals, excluding fuels (37.2%)	Intermodal Containers (27.1%)	Machinery (14.4%)
2nd	Warehouse and distribution center goods (16.3%)	Coal (17.6%)	Electronics (10.2%)
3rd	Petroleum or coal products (9.6%)	Food and kindred products (9.5%)	Motorized vehicles (9.8%)
4th	Food and kindred products (8.4%)	Clay, concrete, glass, or stone products (5.7%)	Precision instruments* (8.0%)
5th	Clay, concrete, glass, or stone products (6.7%)	Farm products (5%)	Articles of base metal† (6.2%)
Top 5 – Percent of mode total tons	78.2%	64.9%	48.6%

Source: S&P Global Transearch data, 2019 (truck, rail and air); Surface Transportation Board Carload Waybill Data, 2019 (Rail); FHWA Freight Analysis Framework (FAF 5.5.1), 2019 (truck, rail and air)

Figure 5: Top 5 Commodities by Mode by Value and Share of Total Commodity Value, 2019

			
Ranking	Truck	Rail	Air
1st	Warehouse and distribution center goods (37.0%)	Intermodal Containers (56.6%)	Machinery (21.2%)
2nd	Food and kindred products (11.9%)	Transportation equipment (10.2%)	Electronics (16.2%)
3rd	Transportation equipment (9.8%)	Chemicals or allied products (6.1%)	Precision instruments* (13.4%)
4th	Chemicals or allied products (5.4%)	Apparel or other finished textile products or knit apparel (4.6%)	Motorized vehicles (11.8%)
5th	Machinery, excluding electrical (5.0%)	Food and kindred products (4.1%)	Transportation equipment (9.9%)
Top 5 – Percent of mode total value	69.1%	81.6%	72.5%

Source: S&P Global Transearch data, 2019 (truck, rail and air); Surface Transportation Board Carload Waybill Data, 2019 (Rail); FHWA Freight Analysis Framework (FAF 5.5.1), 2019 (truck, rail and air)

* Precision Instruments: typically refer to high-accuracy devices used for measurement and control in various scientific and industrial applications

† Articles of base metal: items or products made from non precious base metals such as copper, aluminum, lead, zinc, nickel and tin used in industrial and commercial application

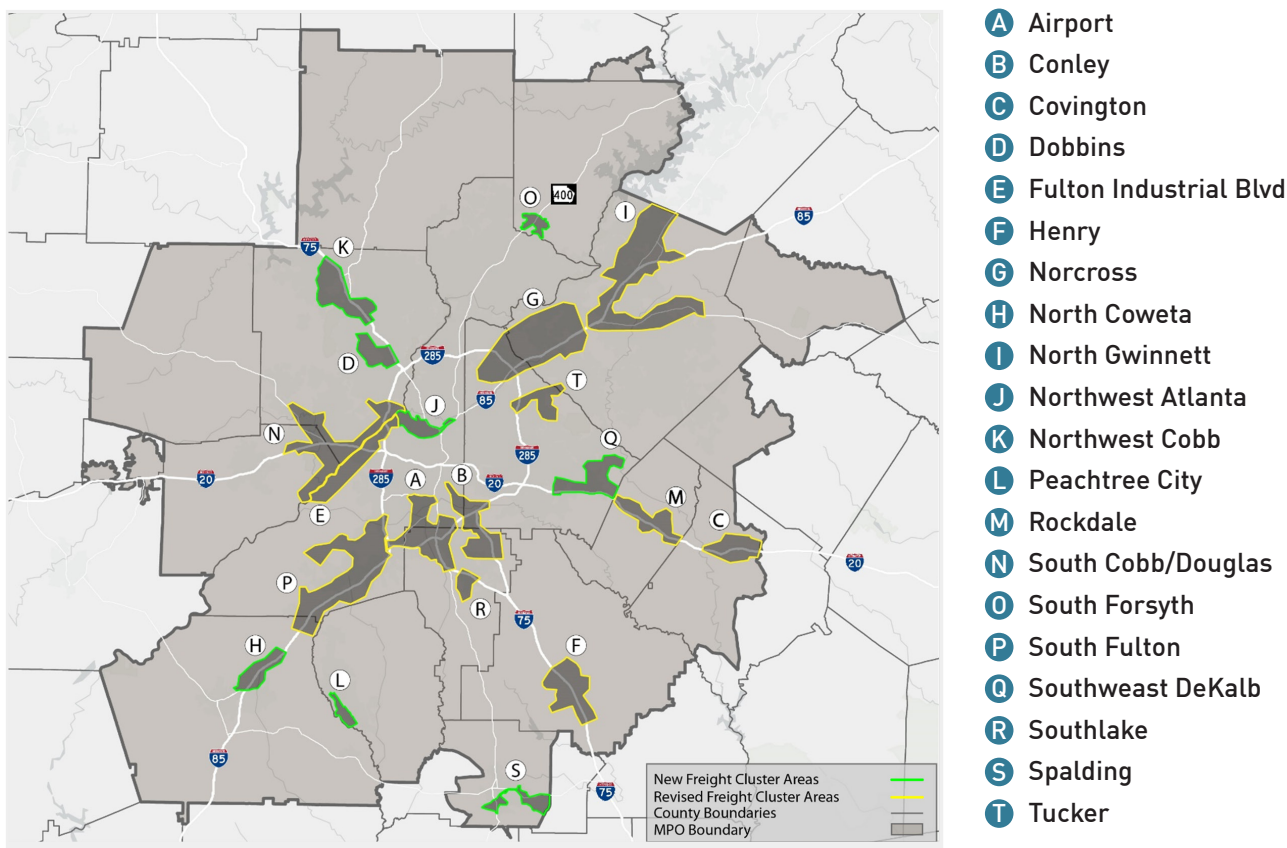
INDUSTRIAL DEVELOPMENT - FREIGHT CLUSTERS

The 2016 Atlanta Regional Freight Mobility Plan included an analysis of industrial properties in the ARC MPO region to identify clusters of significant freight and industrial activity. The 2016 plan recommended an initial set of areas on which to focus additional plans, studies, policies, and investments. Seven freight clusters were identified, mostly along interstate highways and outside I-285. When the plan was finalized, much of the freight activity in Metro Atlanta was centered in these seven areas.

To update the freight clusters for the 2024 ARFMP, the ARC looked at all industrial properties within the

MPO boundaries to identify expansions of industrial development since the 2016 Plan. After the analysis of industrial development trends and the distribution of industrial areas throughout the region, as well as input from stakeholders and ARC staff, 20 clusters were identified. Twelve clusters include areas that fell within the original seven cluster areas identified in 2016. The remaining eight clusters cover areas that were not previously in a freight cluster. The clusters are shown in **Figure 6**.

Figure 6: Map of 2024 Freight Clusters in Metro Atlanta

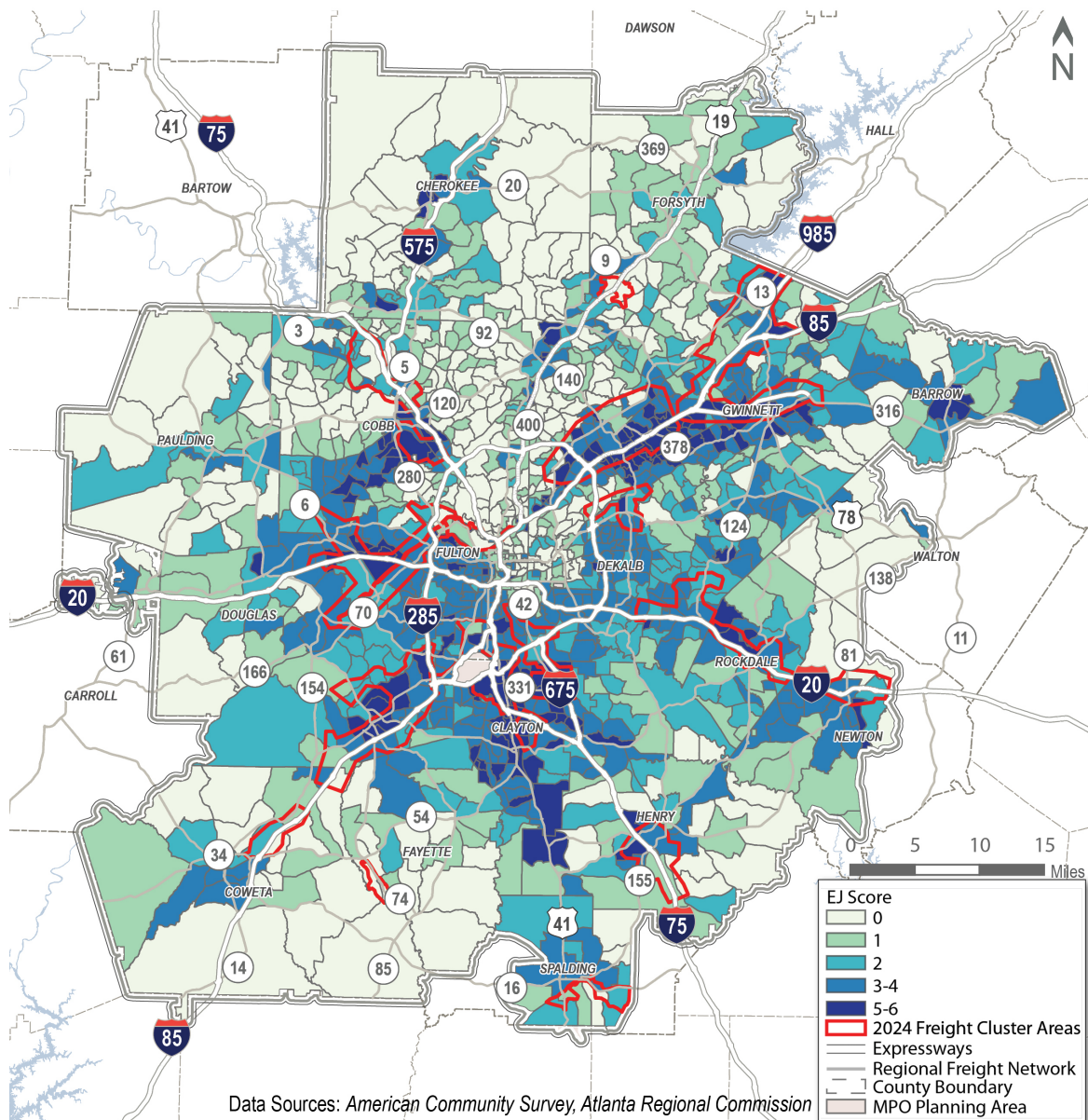


EQUITY

Environmental justice (EJ) refers to the practice of acknowledging, planning for, and including all people, regardless of race, color, national origin, or income in decision-making that affects human health and the environment. The ARC has developed a scoring system to measure EJ that uses American Community Survey data (2020) for indicators such as racial minorities, ethnic minorities, and poverty. In addition,

the ARC's scoring uses transportation access and housing burden indicators. A higher score reflects greater disadvantage. **Figure 7** displays ARC EJ scores for Metro Atlanta. In the map, freight clusters are identified by heavy red lines and census tracts are shaded in a range of light to dark according to their EJ scores—from low to high. Many of the freight clusters include areas with high EJ scores.

Figure 7: ARC EJ Scores for Metro Atlanta with Freight Clusters

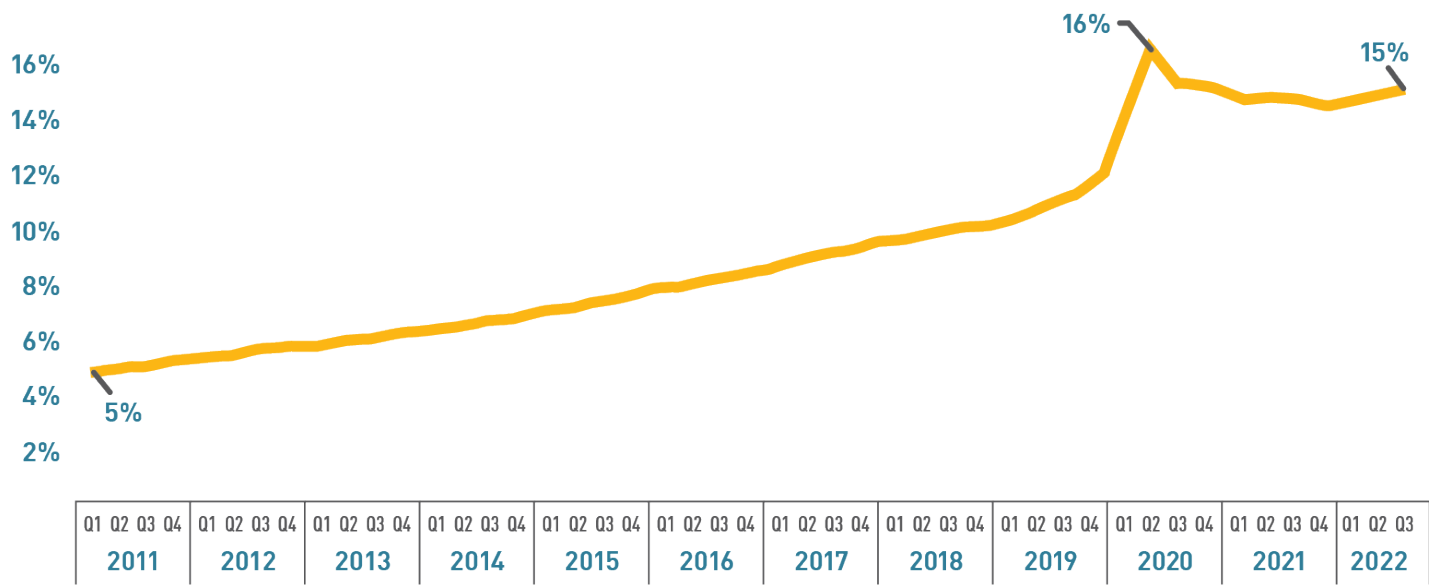


TRENDS INFLUENCING FREIGHT

As seen in **Figure 8**, over the past two decades, e-commerce sales in the United States have consistently increased. In the third quarter of 2020, it surged to approximately 16 percent of total retail sales. By 2022, national e-commerce sales reached around \$1.04 billion, accounting for approximately

15% of total sales (approximately \$7.10 billion). This represents a significant growth compared to a decade earlier, showing an increase of about 350% in total e-commerce sales (from approximately \$231 billion) and a 200% rise in the share of total retail sales (from around 5%).

Figure 8: US Quarterly E-commerce Sales as a Percentage of Total Retail Sales.



Source: Federal Reserve Bank of St. Louis data, 2023

SAMPLE TIP PROJECT

I-75 at Bethlehem Road Interchange. The I-75 corridor in Henry County connects to the Port of Savannah via I-16. Henry County is the closest county to the port in the Atlanta region, making it a key destination for goods arriving from Savannah. With growth at the port, there has also been significant growth in industrial development in Henry County over the past 20+ years. This has caused significant traffic congestion near the industrial development, particularly at the I-75 at SR 155 interchange. This project will involve the construction of a new

interchange along I-75 at Bethlehem Road between SR 155 and Bill Gardner Parkway. Proposed improvements also include realigning and widening Bethlehem Road to four lanes on the project corridor. Along with the new interchange, this will help address traffic congestion at the I-75 at SR 155 interchange and other nearby roadways. As shown in **Figure 9**, this new interchange will also be located near the northern extent of the I-75 Commercial Vehicle Lanes planned from north of Macon to southern Henry County.

Figure 9: Location of new Interchange at Bethlehem Road on I-75



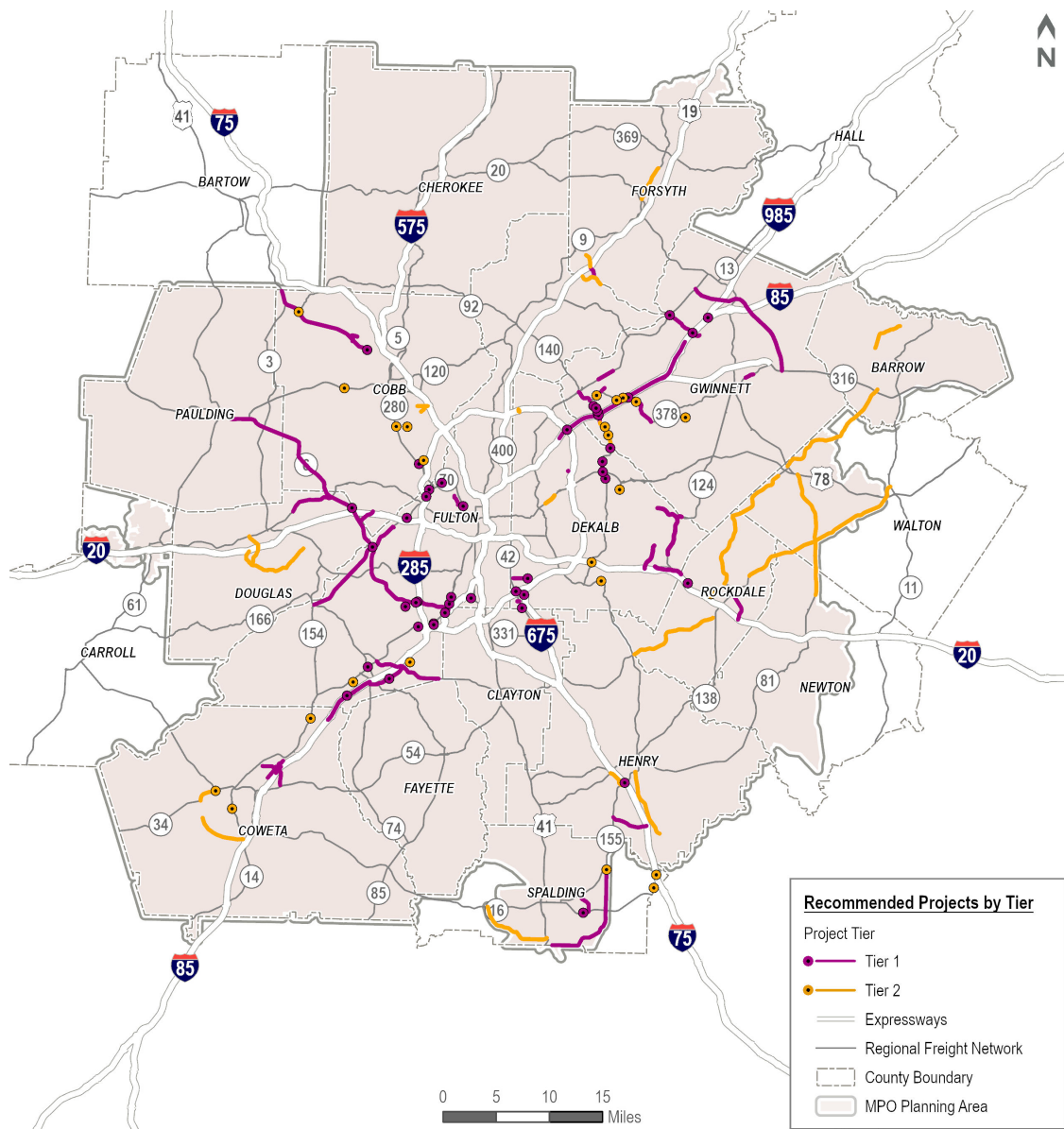
Source: GDOT, <https://i75-bethlehemrd-gdot.hub.arcgis.com/>

RECOMMENDED TIERED FREIGHT PROJECTS

The 2024 ARFMP has developed a comprehensive roadmap for projects that will benefit the region by improving freight mobility, extending beyond the scope of the current Transportation Improvement Program (TIP) programmed by ARC. The projects encompass capital initiatives such as bridge improvements or replacements, additional roadway capacity, new interchanges, new alignments, grade separations at road intersections or rail crossings,

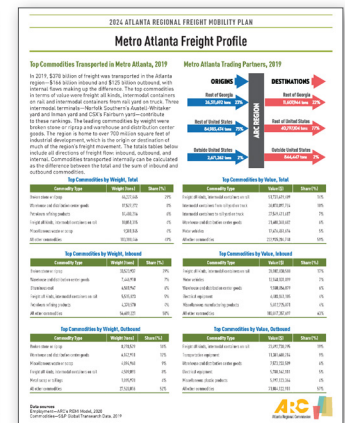
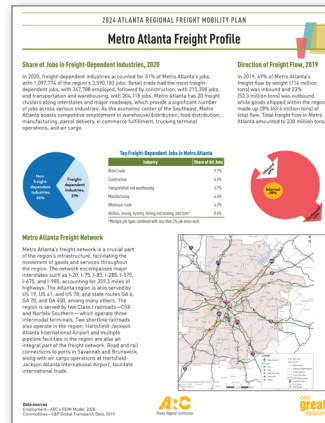
and operations and safety enhancements such as corridor improvements, intersection modifications, multimodal upgrades, wayfinding and signage, as well as technology and sustainability projects. These 147 projects were evaluated based on their potential to advance the goals of The Atlanta Region's Plan by enhancing freight performance. The projects are classified into two tiers as shown in **Figure 10**.

Figure 10: Tiered Freight Projects



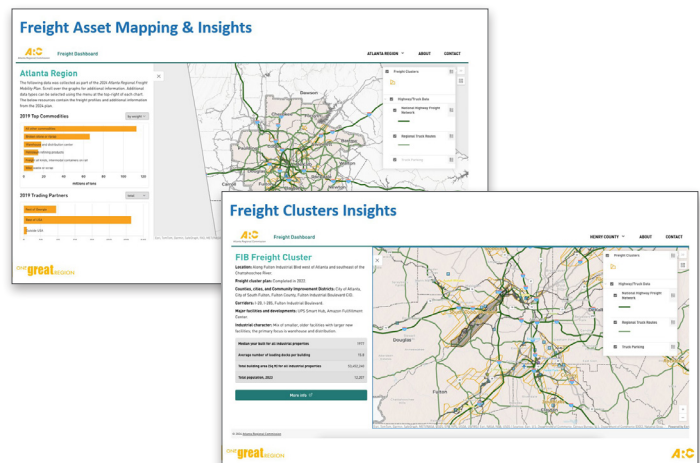
FACTSHEETS

Factsheets were developed for each of the 20 counties in the ARC region, as well as the ARC region as a whole, providing a snapshot of the commodity flow and jobs within each county and the region. Factsheets are a two-page summary of the freight profile for each county. They are designed to be a resource for planners, engineers, and public and private sector leadership in Metro Atlanta, providing essential data for planning purposes. They can assist in the development of Comprehensive Transportation Plans, Freight Cluster Plans, Comprehensive Plans, and other local planning initiatives.



INTERACTIVE WEBSITE

The Freight Dashboard is a dynamic visualization tool designed to provide stakeholders with insights into the region's freight transportation system. The dashboard integrates comprehensive data from throughout the planning process on freight volumes and economic contributions with maps that showcase freight infrastructure throughout the region. Data, while variable by source, is available on multiple scales including region-wide, county-level, and freight cluster specific. This tool can be used by regional and industry leaders for informed decision-making on issues and plans related to freight.



TRUCK PARKING MODEL ORDINANCE

The lack of truck parking within the Atlanta region has been identified as a major challenge for the trucking industry and local communities. In order to address this issue and encourage the development of additional truck parking facilities within the region, this planning process included the development of a Truck Parking Model Ordinance along with other zoning changes. Based on guidance from the Federal Highway

Administration (FHWA) *Truck Parking Development Handbook*, stakeholder input, and existing zoning within the region, the model ordinance and zoning language are designed to increase the ease of developing truck parking facilities, include amenities desired by the trucking industry, and address potential impacts to nearby communities.

FREIGHT DESIGN GUIDE

Based on industry best practices and tailored to the needs of the Atlanta region, the Freight Design Guidelines serve as a reference and resource for planners, zoning administrators, engineers, private developers, and others impacting transportation and development in the region. The purpose of the guidelines is to improve planning and design for freight in the public space and in the early stages of private development. The Freight Design Guidelines cover topics related to transportation infrastructure, curb management, loading docks, alleys, multimodal needs, and more. The guidelines prioritize the safety of all roadway users while also considering the specific design and operational needs of freight activity. The

guidelines cover both the public and private realm for three primary character areas: Industrial Areas, Downtowns and Small Regional Centers, and Major Activity Centers. Industrial Areas are focused on freight activity but must effectively design for the needs of all roadway users, safe access to jobs, and the needs of the surrounding community. Downtowns and Small Regional Centers, as well as Major Activity Centers, are not freight-centric areas, but are typically mixed-use areas focused on office, retail, residential, and other uses. Effective planning and design for freight in these areas can improve freight operations and safety, while also mitigating the negative impacts that freight activity can have in these areas.

NEXT STEPS

The ARC developed a list of project recommendations to enhance freight mobility in Metro Atlanta, identifying potential funding sources for implementation. Additionally, a key takeaway from the *2024 ARFMP* is a list of resources, policy strategies, and studies intended to further enhance the efficiency, safety, and sustainability of the Atlanta region's freight transportation network. These resources are provided to assist in integrating freight considerations into broader land use and transportation planning processes, ensuring that freight mobility supports economic growth while minimizing environmental impacts.

Next steps for the ARC include continuing partnerships with counties, cities, and community improvement districts in the ARC region to conduct Freight Cluster Plans. Freight Cluster Plans focus on facilitating efficient movement of freight, improving access to jobs, reducing traffic congestion, changes in the freight industry, and improving safety, mobility, and access for all roadway users. Two types of Freight Cluster Plans were awarded as part of the 2024 application process – Standard Freight Cluster Plans and Sustainability-Focused Freight Cluster Plans. Standard Freight Cluster Plans will focus on resolving freight-related issues around safety, congestion, reliability, bottlenecks, employee access, and other

topics. Sustainability-Focused Freight Cluster Plans will address sustainability in truck movement (e.g., electrification and alternative fuels), employee access and supply chain configuration. Four Freight Cluster Plans are expected to kickoff in 2025.

Additionally, the ARC will begin developing a Regional Medium- and Heavy-Duty Alternative Fuels Plan. This plan will align strategies with the Joint Office of Energy and Transportation's (U.S. DOE and U.S. DOT) *National Zero-Emission Freight Corridor Strategy*. It will identify infrastructure needs, assess current technologies, and outline coordination for deployment. The plan will assess potential locations for zero-emissions vehicle infrastructure in the region, including examining key corridors, intermodal facilities, and freight clusters, and identify energy needs and grid considerations. Outreach on the plan will be conducted with the private sector and other stakeholders to identify one or more potential pilot projects for the implementation of zero-emission trucks in the region. Conducting this plan is also a recommendation in the ARC *Regional Transportation Electrification Plan*.



The Factsheets, Freight Dashboard, Truck Parking Model Ordinance, and Freight Design Guidelines are available on the 2024 ARFMP page on the <https://atlantaregional.org/2024-freight-plan>.