2022 ANNUAL REPORT AND AUDIT

ATL ATLANTA-REGION TRANSIT LINK AUTHORITY

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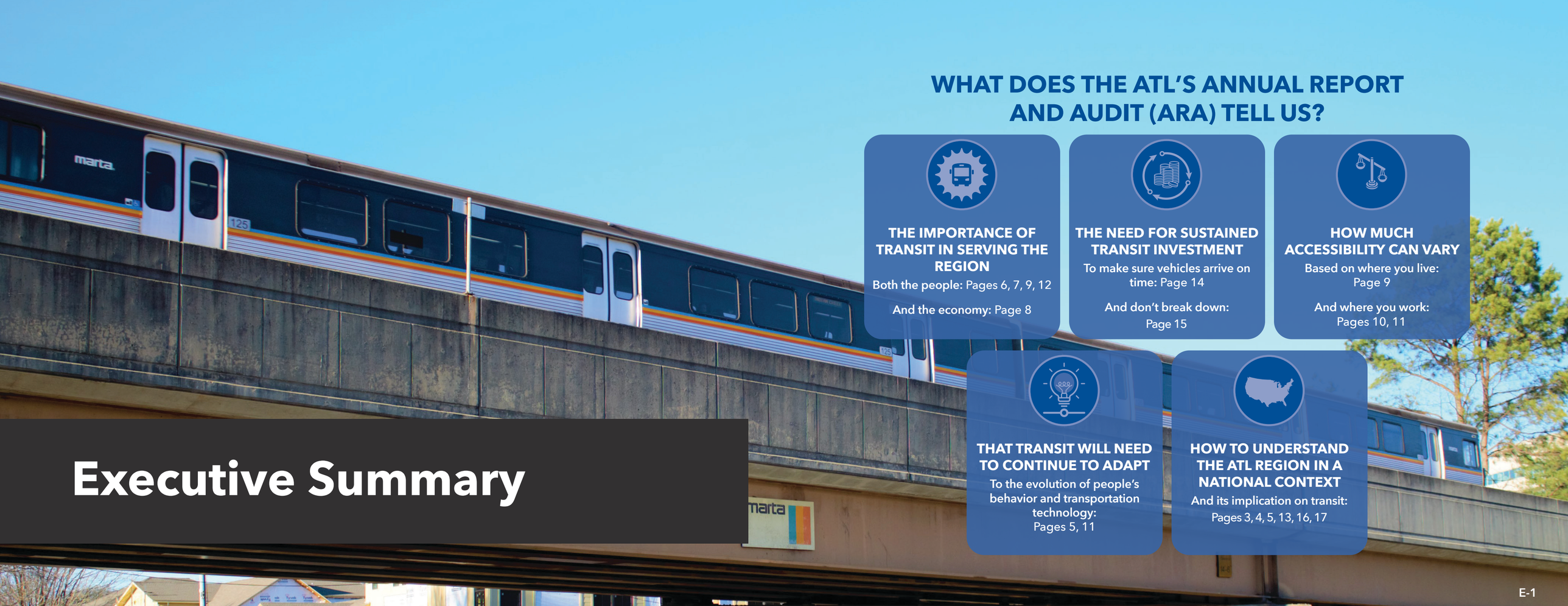
Acronyms

Annual Report and Audit	ARA
Atlanta-Region Transit Link Authority	ATL
Atlanta Regional Commission	ARC
Center for Pan Asian Community Services	CPACS
Cherokee Area Transportation System	CATS
Commercial Driver's License	CDL
Community Improvement District	CID
Comprehensive Transportation Plan	CTP
Consumer Price Index	CPI
Coweta County Transit	Coweta
Federal Transit Administration	FTA
Fiscal Year	FY
Forsyth County Dial-a-Ride or Link Forsyth	Forsyth
General Transit Feed Specification	GTFS
Georgia Department of Transportation	GDOT
Gwinnett County Transit	GCT
Key Performance Indicator	KPI
Mean Distance Between Failures	MDBF
Metropolitan Atlanta Rapid Transit Authority	MARTA
National Transit Database	NTD
On-Time Performance	OTP
Rebuilding American Infrastructure with Sustainability and Equity	RAISE
State Match Advancing Regional Transit	SMART
Transit Development Plan	TDP
Transit Master Plan	TMP
Transportation Network Company	TNC
Useful Life Benchmark	ULB
Vehicle Revenue Hour	VRH
Vehicle Revenue Mile	VRM



Executive Summary

WHAT DOES THE ATL'S ANNUAL REPORT AND AUDIT (ARA) TELL US?

THE IMPORTANCE OF TRANSIT IN SERVING THE REGION

Both the people: Pages 6, 7, 9, 12

And the economy: Page 8

THE NEED FOR SUSTAINED TRANSIT INVESTMENT

To make sure vehicles arrive on time: Page 14

And don't break down: Page 15

HOW MUCH ACCESSIBILITY CAN VARY

Based on where you live: Page 9

And where you work: Pages 10, 11

THAT TRANSIT WILL NEED TO CONTINUE TO ADAPT

To the evolution of people's behavior and transportation technology: Pages 5, 11

HOW TO UNDERSTAND THE ATL REGION IN A NATIONAL CONTEXT

And its implication on transit: Pages 3, 4, 5, 13, 16, 17

WHAT IS THE ARA?

The Atlanta-Region Transit Link Authority (ATL) Annual Report and Audit (ARA) provides an overview of **transit planning, funding, and operations in the Atlanta region.** Covering Fiscal Year (FY) 2022, which ran from July 1, 2021, through June 30, 2022, as well as historical trends, the ARA uses key performance indicators (KPIs) and analyses to evaluate how well the Atlanta area's transit network serves the region.

The ARA not only highlights the performance of the transit network across 11 operators but also evaluates the contributions of public transportation to economic competitiveness and its role in enhancing equity in access to jobs, services, and opportunities in the region.

The ARA:

- **Heightens** the region's understanding of the strengths and weaknesses of its transit network.
- **Informs** decision-making regarding investments in public transportation.
- **Enhances** transparency and holds the region accountable for effectively meeting people's mobility needs.

This year, the region's operators **maintained or improved performance on most KPIs compared to 2021. Regardless, there is room for improvement, and the region can do more to enhance performance and make transit more attractive to riders.**

The 2022 ARA can be found online at: atltransit.ga.gov/ara.

ABOUT ATL

ATL was established in 2018 as the regional transit agency for the 13-county region of Atlanta. The creation of ATL enables a more unified regional transit system by improving coordination, integration, and efficiency of transit in the Atlanta region. ATL has five key functions:

- Coordinate Regional Partners
- Advance Strategic Transit Investments
- Strengthen Regional Transit Planning and Performance
- Enhance Customer Experience
- Deliver Innovative and Best Practice Technology

WHO LIVES AND WORKS IN THE 13-COUNTY ATL REGION?

5.3 million
Total population

The region's **four most populous counties**—Cobb, DeKalb, Fulton, and Gwinnett—account for **over two-thirds of its total population.**

$74,000
Median household income in 2020

About **one-third of families make less than $50,000** and **14 percent earn less than $25,000** annually.

43%
White (non-Hispanic or Latino)

36%
Black

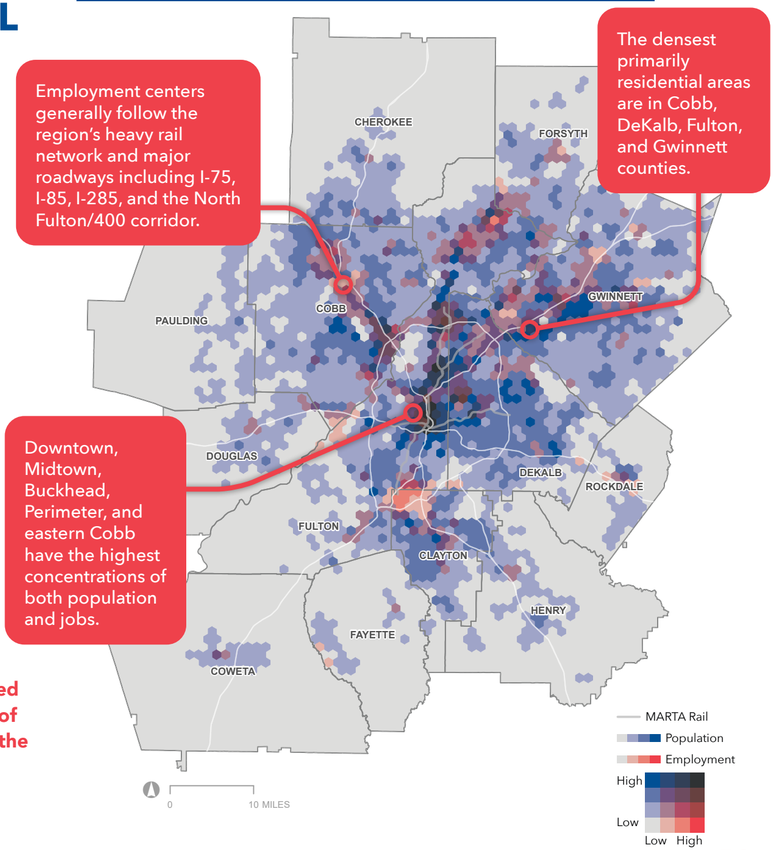
12%
Hispanic or Latino

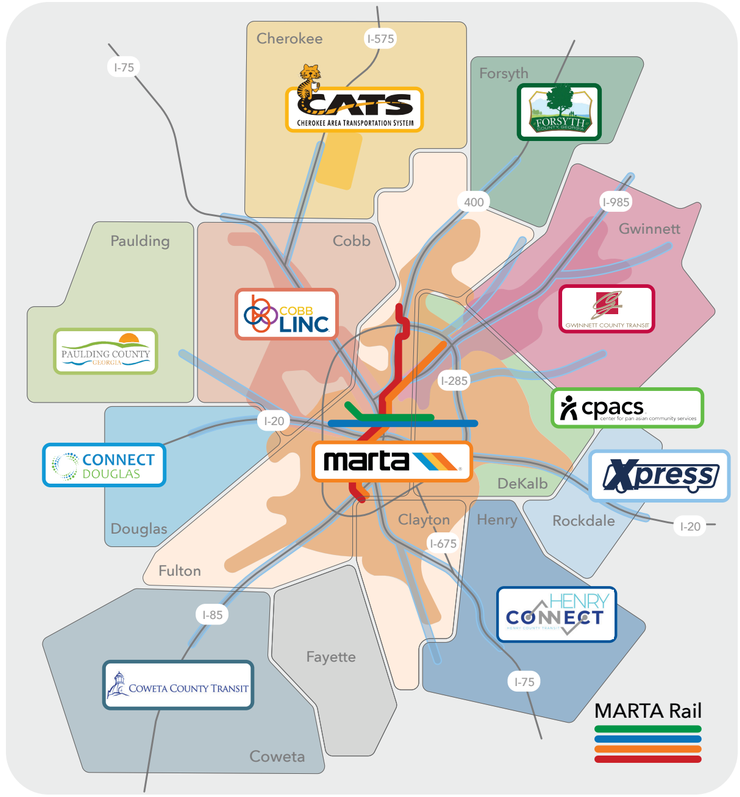
7%
Asian

2%
multiple or other races

The region is projected to diversify in terms of race and ethnicity in the coming decades.

ATL REGION POPULATION AND EMPLOYMENT DENSITY





WHO ARE THE OPERATORS?

The region's 11 transit operators create a multimodal transit network that offers bus, heavy rail, demand response, commuter bus, vanpool, and streetcar service.

Together, the 11 operators provided

Over 57 million
Trips in 2022

Across six modes of transit:

Commuter Bus
- 33 routes
- 472,000 trips

Demand Response
- 10 services
- 777,000 trips

Fixed-Route Bus
- 6 systems
- 679 buses
- 29.6 million trips

Vanpool
- 1 service
- 290,000 trips

Heavy Rail
- 46 miles
- 38 stations
- 25.9 million trips

Streetcar
- 3-mile loop
- 12 stations
- 138,000 trips

WHAT NATIONAL TRAVEL TRENDS ARE WE SEEING?

REBOUND OF TRAVEL, TRANSIT STILL RECOVERING

People are taking more non-transit, non-commute trips than they did pre-pandemic.

104%
Trips on any mode in December 2021, relative to December 2019

57%
Transit trips in December 2021, relative to December 2019

TRIPS ARE GETTING SHORTER

People are substituting commute trips with more and significantly shorter trips.

18% ▲
More trips under 1 mile FY 2022 than in FY 2019

ALL ACTIVITIES EXCEPT WORK TRIPS RETURNED TO PRE-PANDEMIC LEVELS

In FY 2022, people returned to leisure activities at nearly the same rates as they did in 2019—but not the office. These are the rates of various in-person activities in 2022 relative to 2019:

90%
OpenTable reservations

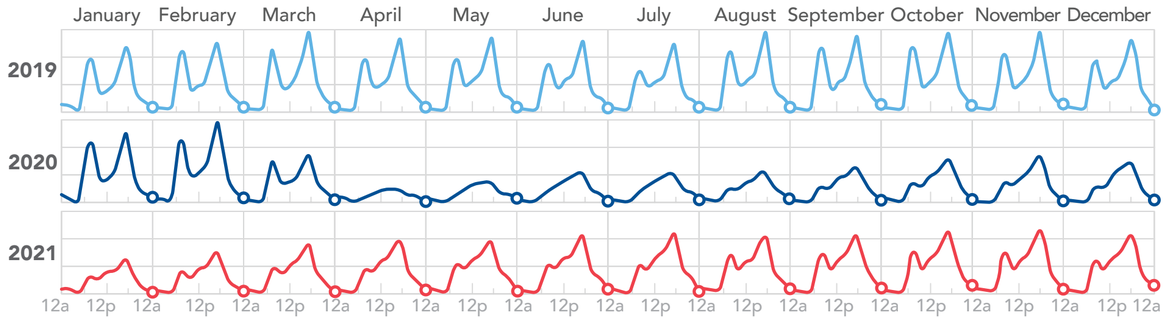
88%
TSA checkpoints

44%
Office building swipe-ins

MODEST RETURN OF THE PEAK, BUT FULL RETURN OF MIDDAY TRIPS

In the first year of the pandemic, travel was much less peak-focused (i.e., work-related). By the end of 2021, the peak had somewhat returned, representing about 80 percent of pre-pandemic peak trips. By contrast, **the volume of midday trips at the end of 2021 fully matched pre-pandemic levels.**

AVERAGE NUMBER OF TRIPS IN THE ATLANTA REGION BY TIME OF DAY



Above: CobbLinc Bus. Below: GCT and Paulding aim to implement multimodal transit strategies.

WHAT ARE OPERATORS DOING?

TRANSIT & TRANSPORTATION PLANS

CATS, with Cherokee County, is working to complete a comprehensive transportation plan (CTP). The results of the CTP will assist CATS in transit planning for the next five years. Construction of a new facility will allow for growth of the system over the next 25 to 30 years.

The **Cobb County** Board of Commissioners adopted an update to its CTP, CobbForward, in February 2022. The update will result in a series of project lists that are prioritized for implementation over time.

+7 BRT routes
Upon implementation of the CTP

GCT is implementing three new local bus routes and two microtransit zones in 2023, which will provide additional mobility options to residents currently without transit access. The county is also developing a Transit Development Plan (TDP) as well as a CTP.

The **Henry County** Board of Commissioners adopted the **Henry Connect** Transit Master Plan (TMP) in January 2022. This plan provides a 30-year roadmap for transit in Henry County.

+6 local bus routes
Upon implementation of the TMP

Paulding County is currently updating its CTP with a vision that by 2050, the county will boast a safe, connected, and reliable multimodal transportation network that enables all to access opportunity, promotes economic development, and enhances the community's unique character and quality of life.

COMMUNITY INITIATIVES

Connect Douglas celebrated the three-year anniversary of fixed-route bus service by offering free fares all summer, travel training events, weekly highlights of area businesses, as well as participating in multiple community events and festivals.

Coweta implemented Samsara, a system that provides real-time maintenance information for each of its vehicles.

Forsyth provided affordable transportation to community members experiencing homelessness.

MARTA expanded its popular "StationSoccer" program to fields at five rail stations, providing a citywide network of affordable and easily accessible community soccer programs, plus the addition of community gardens and murals.

Xpress increased public awareness in innovative ways, including sponsoring the Georgia High School Football Championship with logo placement and advertisements during the live broadcasts, and conducting outreach at Georgia State University and Georgia Tech.

MARTA's StationSoccer program (top) provides access to community soccer programs.

Xpress is reaching out to potential new customer bases through high school and college campuses.

WHY MEASURE THE ECONOMIC IMPACT OF TRANSIT EXPENDITURES?

Measuring the economic impact of transit expenditures helps us convey how investments have multiplicative effects beyond transit operators—creating jobs and supporting business activity throughout the region.

AIR QUALITY AND SUSTAINABILITY

In 2022, transit saved the region **$2.8 million in social costs** of emissions, based on estimated avoided greenhouse gases and other hazardous pollutants. The total CO_2 emissions avoided is the equivalent of planting **268,000 trees.**

HOW DOES TRANSIT ENHANCE THE ECONOMY AND THE ENVIRONMENT?

The money transit operators spend to deliver transit services and projects ripples out through the economy, supporting regional businesses and jobs not just within transit agencies, but throughout the economy.

DIRECT IMPACTS

61%
Of operating costs allocated to worker salaries, wages, and benefits in FY 2021

$257 million
Invested by transit agencies in capital projects in FY 2021

TOTAL IMPACTS

13,000+ jobs
In FY 2021

Nearly
$1 billion
Added to the gross regional product (GRP)

Through multiplier impacts of supplier purchases and employee spending:

Every $1 directly invested in ATL Region transit

Generates $2 in regional business sales

METHODS OF TRANSIT'S ECONOMIC IMPACT

Directly Supported Activity
Transit agencies employ workers, pay them wages, and invest in equipment and supplies.

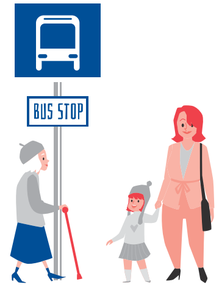
Supplier Activity (Indirect)
Transit agencies purchase goods and services from companies who in turn employ and pay workers.

Spending of Worker Income (Induced)
Transit agency and supplier employees spend their income, generating additional activity in the regional economy.

HOW ACCESSIBLE ARE FIXED-ROUTE AND FREQUENT TRANSIT?

Access to fixed-route transit has significant implications for mobility and equity. Areas with fixed-route transit provide much greater access to opportunity for their residents, which is especially critical for those who do not have access to other forms of transportation.

Although access to fixed-route transit stayed the same since 2021, **access to frequent transit declined for all populations in 2022.** Due to workforce shortages, eight MARTA routes had frequency changes from 15 minutes or better throughout the day to 20 minutes during the midday, resulting in decreased access to frequent transit in the region.

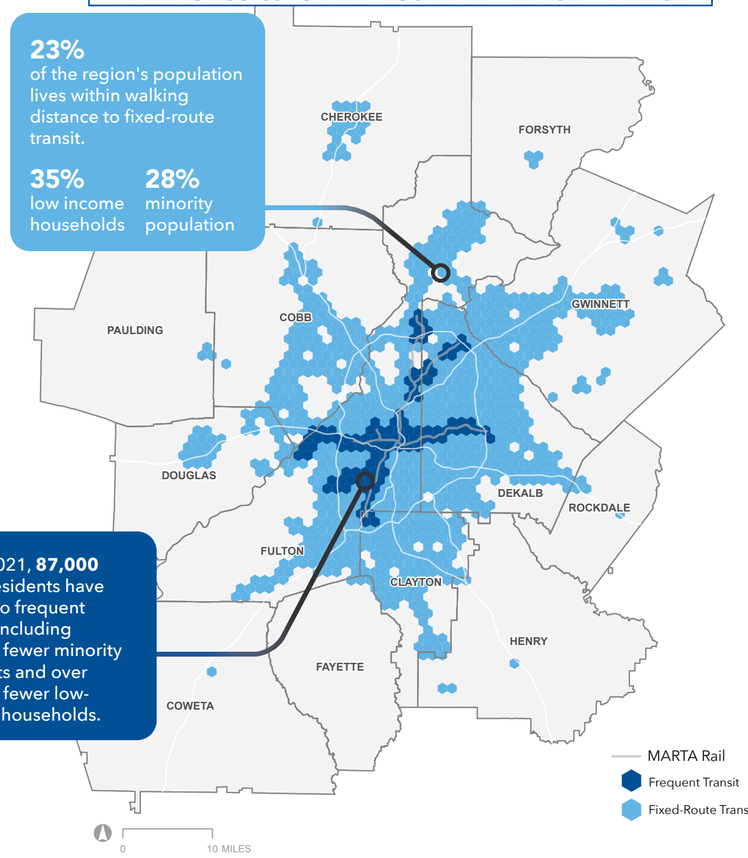


WALKING ACCESS TO FIXED-ROUTE AND FREQUENT TRANSIT

23% of the region's population lives within walking distance to fixed-route transit.

35% low income households

28% minority population



Since 2021, **87,000** *fewer* residents have access to frequent transit, including **58,000** fewer minority residents and over **14,000** fewer low-income households.

TRANSIT ACCESS BY DEVELOPMENT PATTERN

Business centers in the region's core have the greatest access to labor within 45 minutes by fixed-route transit, followed by those in regional employment corridors and maturing neighborhoods.

The business centers located in the suburbs have much more limited transit access. Business centers on the periphery of the region face the greatest barriers in reaching potential workers by transit.

HOW WELL DOES TRANSIT CONNECT BUSINESSES AND WORKERS?

ABILITY FOR EMPLOYEES TO REACH WORKPLACES BY TRANSIT

The region's economic success depends on the ability of businesses to access a qualified workforce. The number of working-age people who can reach the 25 business centers across the region using fixed-route transit is slim.

The average employer in one of the region's business centers can be reached within 45 minutes on fixed-route transit by:

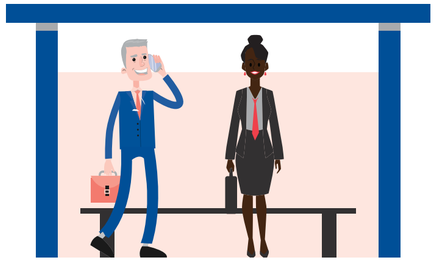
3%
Of all potential workers

18%
Of all potential workers from zero-car households

These accessibility rates are consistent in both the morning peak and early evening. They go down slightly for trips taken at other times of the day.

There remain substantial opportunities to expand the ability of fixed-route transit to connect jobs and businesses with their needed talent.

At a time when employers are struggling to hire and maintain workers, breaking down transportation barriers is key.



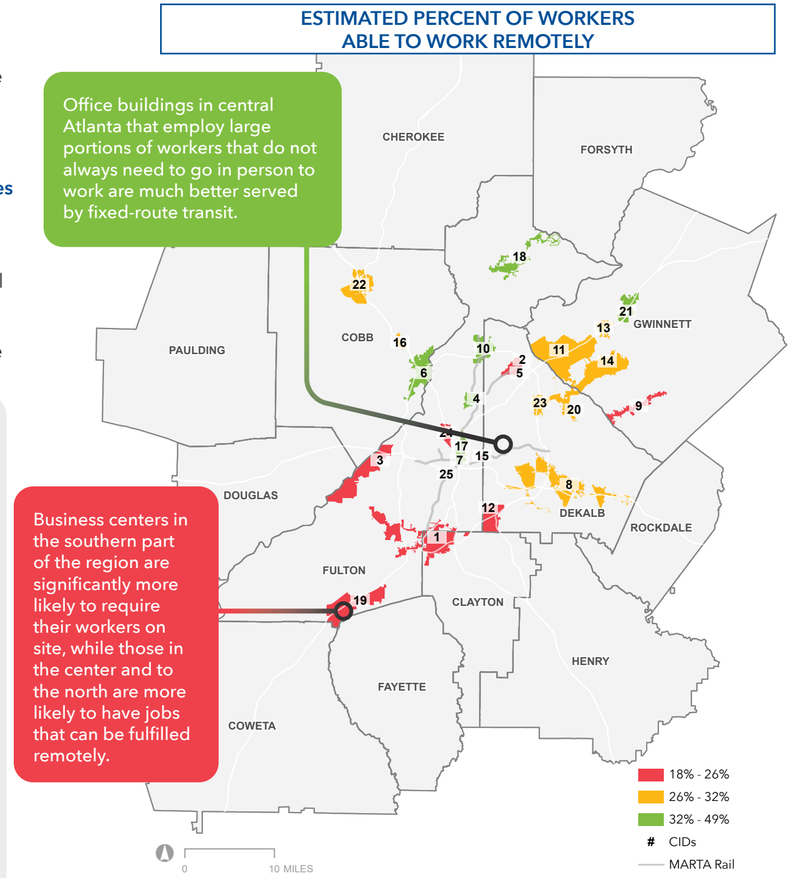
TRANSIT ACCESS TO JOBS WITH TELEWORK POTENTIAL

While the pandemic resulted in many people shifting to full- or part-time remote work, impacts are uneven, as some jobs require in-person presence, while others do not.

There is a misalignment between the places easiest to access via transit and those that are more likely to require in-person work. Business centers with the highest percentages of jobs with telework potential have the greatest labor market access by transit. Conversely, transit access is much worse in the business centers that are more likely to require in-person work.

COMMUNITY IMPROVEMENT DISTRICTS

1. Airport
2. Assembly
3. Boulevard
4. Buckhead
5. Chamblee Doraville
6. Cumberland
7. Downtown Atlanta
8. East Metro DeKalb
9. Evermore
10. Fulton & DeKalb Perimeter
11. Gateway85 Gwinnett
12. Greater Conley Industrial
13. Gwinnett Place
14. Lilburn
15. Little 5 Points
16. Marietta Gateway
17. Midtown
18. North Fulton
19. South Fulton
20. Stone Mountain
21. Sugarloaf
22. Town Center Area
23. Tucker-Northlake
24. Upper Westside
25. West End



COMMUTER BUS IN THE SPOTLIGHT

Commuter bus ridership, which experienced the sharpest decline between 2019 and 2021, experienced the **greatest increase – 72 percent – between 2021 and 2022.**

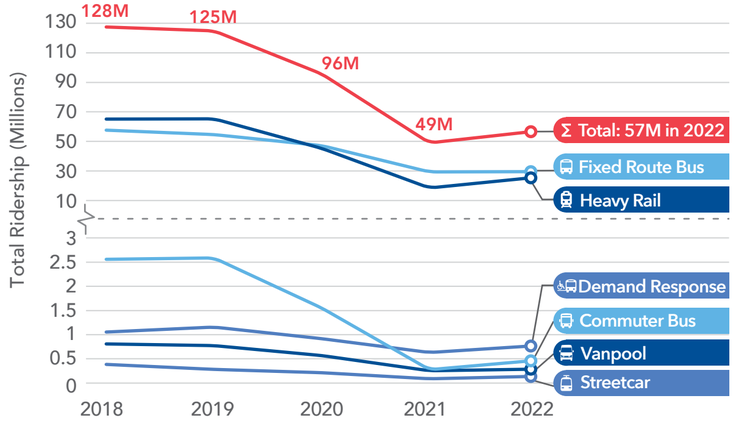
HOW IS TRANSIT RIDERSHIP RECOVERING?

While ridership has not yet rebounded to pre-pandemic levels, ridership increased on each mode between 2021 and 2022.

57 million
Trips regionwide in 2022

16% ▲
Increase from 2021

TOTAL RIDERSHIP BY MODE



HOW MUCH DOES THE REGION INVEST IN TRANSIT?

The amount of money invested in transit operations and capital projects in the prior fiscal year reveals the relative level of priority placed on transit compared to other public priorities.

$587 million
Operating expenditures in 2021

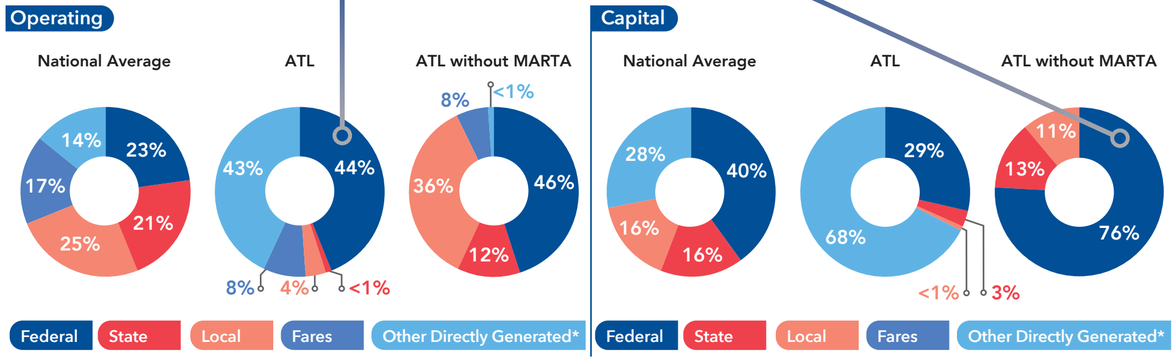
$258 million
Capital expenditures in 2021

Federal funds make up a larger portion of operating expenditures in the region compared to the national average. In addition, for all operators except MARTA, federal funds also make up a significantly larger portion of capital expenditures. This is due to relatively lower local and state investment in providing transit service and constructing new transit infrastructure projects compared to other states and regions in the U.S.

Operating expenditures include the costs of labor and benefits, vehicle maintenance, materials (e.g., fuel, tires), utilities, and insurance.

Capital expenditures include the costs of new vehicles, stations, transit priority treatments, maintenance of other facilities, equipment, information and fare collection systems, or other one-time procurements.

REVENUE BY SOURCE



** "Other Directly Generated" is predominantly from sales tax revenue.*

Transit riders are sensitive to on-time performance, which has a profound impact on customer experience. If transit is unreliable, trust in the service erodes and riders will shift to other transportation modes.

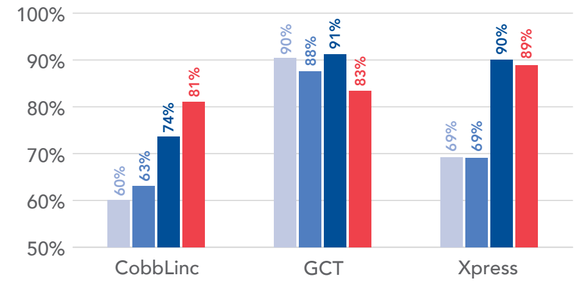
ARE TRANSIT VEHICLES ARRIVING ON TIME?

Given increasing post-pandemic roadway congestion, **many fixed-route transit operators consequently began to see their on-time performance fall** from the peaks in 2021.

Investing in transit priority treatments, such as dedicated bus lanes, priority/express lanes, and transit signal priority, is likely to be critical to enhancing on-time performance to or above the levels seen in 2021.

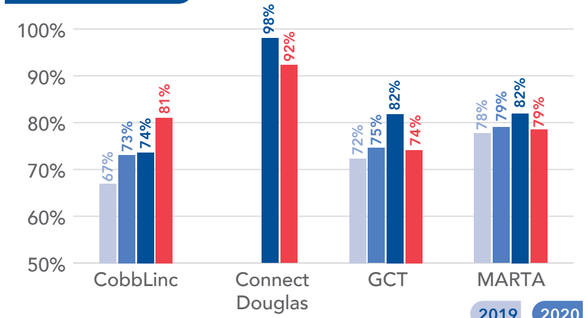
ON TIME PERFORMANCE

Commuter Bus

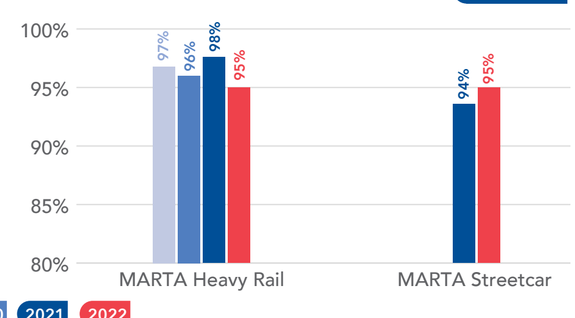


CobbLinc's commuter bus and fixed-route bus and the Atlanta Streetcar are the only fixed-route services that saw an improvement in on-time performance between 2021 and 2022.

Fixed Route Bus



Rail



2019 2020 2021 2022

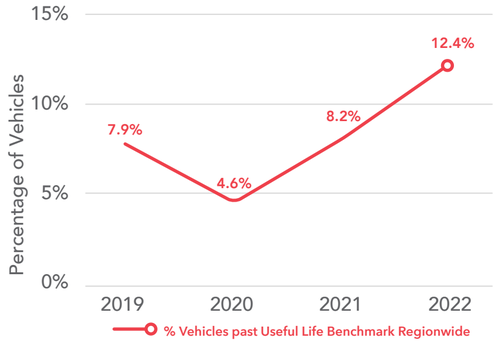
ARE TRANSIT VEHICLES IN A STATE OF GOOD REPAIR?

When a vehicle's age exceeds its useful life benchmark, it is more likely to incur maintenance costs and experience failures. This does not necessarily make a vehicle unsafe to operate, but mounting maintenance costs add up quickly, and continued service disruptions push away passengers.

This year, over 12 percent of vehicles exceeded that benchmark, the highest in the four years that the ARA has tracked this metric. It is possible that supply chain challenges, specifically related to vehicle replacements, contributed to the increases since 2021.

The changes over the last four years, with performance improving in 2020 and worsening over the last two years, illustrate the **need for sustained, annual capital investment to maintain fleets in a state of good repair.**

PERCENTAGE OF VEHICLES PAST USEFUL LIFE BENCHMARK



Some modes are maintained in a better state than others:

26%
Commuter buses that exceeded their useful life benchmark in FY 2022

0%
Fixed-route buses that exceeded their useful life benchmark in FY 2022

State of good repair refers to the quality of an operator's assets, which for many operators consists predominantly of their fleet. An operator that invests in its fleet tends to have more reliable service, as vehicles break down less frequently.

HOW CAN TRANSIT REMAIN AFFORDABLE AND COMPETITIVE?

In addition to the workforce shortage, price pressures are also affecting the region's transit operators' ability to deliver projects and services.

IMPACTS OF COST INFLATION

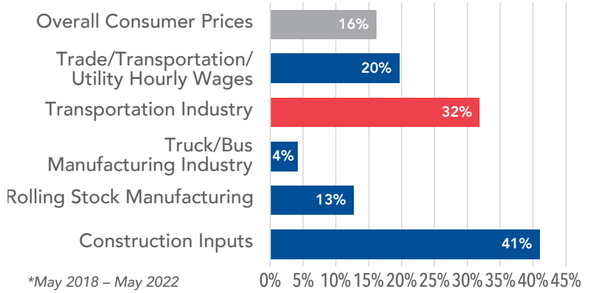
16% ▲
Consumer prices increase from May 2018 to May 2022

20% ▲
Hourly wages for workers in the transportation, trade, and utility industries

41% ▲
Inputs to construction in sectors that build transit stations and rail costs

Enhanced investment in transit will be needed simply to maintain the status quo.

CHANGE IN PRICES BY CATEGORY



**May 2018 – May 2022*

TRANSIT WORKER SHORTAGE

96%
Transit agencies who are experiencing a workforce shortage, according to a national survey

84%
Agencies who say the shortage is affecting their ability to provide service

Addressing the transit workforce shortage will be critical to maintaining service for customers.

COST-EFFECTIVENESS OF TRANSIT

Transit continues to provide an affordable travel option for thousands of the region's residents to access work and other key destinations. Using transit can save households who reduce their car ownership over $7,000 per year.

$8,000–$11,000
Total cost of car ownership per year

$1,140
A year's worth of 30-day MARTA passes

Transit continues to provide an affordable transportation option that is important for many of the region's residents.

WHAT IS THE ATL DOING?

SMART PROGRAM

The ATL and the region's transit operators have an opportunity to work together to increase Georgia's competitiveness in federal discretionary grants. To that end, in Spring 2022, the ATL Board made its first-ever State Match Advancing Regional Transit (SMART) Program recommendation for two projects on the FY 2023 ATL Priority Investment List.

- This resulted in a $25 million RAISE grant award to MARTA for its Five Points Station Transformation.
- FTA provided encouraging feedback on how to improve GCT's Gwinnett Place Transit Center Bus and Bus Facilities application for the next cycle.

REGIONAL FLEET TRANSITION PLAN

The ATL is actively preparing a Regional Fleet Transition Plan, which is designed to create a clear path forward for fixed-route public transit operators to fully transition their bus fleets to zero-emission buses. It will also position the region's six participating operators to better compete for federal funding as significant new funding opportunities now require a zero-emission transition plan.

FAST FORWARD: THE ATL REGIONAL TRANSIT PLAN

Fast Forward: the ATL Regional Transit Plan will establish a prioritized and phased approach to building a regional transit system, one that synthesizes discrete projects and initiatives across all counties and all operators into an action plan for implementation.

ATL and its partners are working closely together to create a true regional vision for transit planning, responding to the region's needs now and in the future.

This approach helps to eliminate silos between jurisdictions and between transportation providers. It also moves outside of the project-by-project approach to affect change, instead prioritizing investments based on their regional impact.

And many more initiatives to coordinate regional planning and advance a sustainable future. See atltransit.ga.gov/planning/ for more.

Preamble

A MESSAGE FROM THE CHAIR AND EXECUTIVE DIRECTOR

The Atlanta-Region Transit Link Authority (ATL) is pleased to present the 2022 Annual Report and Audit, which demonstrates the important role that transit plays in metro Atlanta. We believe the data and stories contained herein demonstrate the resilience of our region's transit operators in continuing to provide service in a challenging time.

This ARA provides a comprehensive picture of transit planning, funding, and operations in the 13-county ATL region, illustrating the performance and benefits of the collective transit network. This report contains extensive data on key performance indicators such as ridership, level of transit investment, on-time performance, level of service, customer satisfaction, and productivity within the Atlanta region.

We are particularly grateful to the transit operators and our other partners throughout the region for their crucial assistance in compiling the information in this report. ATL is proud to serve as a collaborative body with the technical professional expertise to produce valuable resources for policymakers, researchers, and the public.

The 2022 Annual Report and Audit covers the ATL and the State of Georgia's 2022 fiscal year, spanning from July 1, 2021, through June 30, 2022, regardless of the varying fiscal years of each operator. This report covers a year during which our region and country have worked to reimagine what efficient and effective transit services look like in a post-pandemic world. With broad telework policies still in place, operators in Georgia and across the country have risen to this new challenge and implemented creative and adaptable initiatives and schedules to ensure that services meet local needs. Still, despite these obstacles, transit investments added $933 million dollars to the gross regional product in 2021. In short, the Atlanta region needs transit services to succeed.

Despite new challenges like inflation and workforce shortages, our operators have worked diligently to ensure we connect our communities with job and business centers, healthcare centers, and grocery stores. The next few years will be critical to the sustained economic growth of the Atlanta region and the State of Georgia, and transit must be an integral component of that success. We stand ready at ATL to support state and regional leaders as they confront these challenges with the type of transit analysis presented here.

Sincerely,

Charlie Sutlive

Charlie Sutlive
Chair, ATL Board of Directors

Heather Aquino

Heather Aquino
Interim Executive Director

Acknowledgements

ATL would like to thank the partner organizations listed at right, who provided the data used to develop this ARA.

In addition to these partners, the ATL Board provided critical insight into the development of the ARA.

ATL would also like to thank the transit staff and customers who provided content for this report and recognize the contributions of the region's frontline transit workers for providing customers with critical access to destinations and services.

Atlanta Regional Commission
CATS Cherokee Area Transportation System
COBB LINC
CONNECT DOUGLAS
Coweta County Transit
cpacs center for pan asian community services
Forsyth County, Georgia
Gwinnett County Transit
HENRY CONNECT
marta
Paulding County Georgia
Xpress

Coordinate Regional Partners

Advance Strategic Transit Investments

Strengthen Regional Transit Planning and Performance

Enhance Customer Experience

Deliver Innovative and Best Practice Technology

ABOUT THE ATLANTA-REGION TRANSIT LINK AUTHORITY

The Atlanta-Region Transit Link Authority was established by the state in 2018 as the regional transit governance agency for a 13-county area in Greater Atlanta. The creation of ATL enables a more unified regional transit system by improving coordination, integration, and efficiency of transit in the area. ATL has five key functions, shown at left.

ATL is governed by a 16-member board. This board consists of 10 members elected by state legislators and local government leaders to represent each of the 10 ATL transit districts; five appointed members (two by the Georgia House Speaker, two by the Lieutenant Governor, and one by the Governor); and one non-voting member (the Georgia Department of Transportation, or GDOT, Commissioner). The current Board makeup covers a wide range of perspectives, geographies, and professional backgrounds, with members demonstrating experience in both the public and private sectors.

All board members serve on one or more ATL committees:

- The Administrative Committee
- The Regional Technology Committee
- The Legislative Committee
- The Regional Transit Planning Committee
- The Marketing and Communications Committee
- The Xpress Operations Committee.

The ATL Board is unified around a common goal of increasing mobility options for metro Atlantans through increased coordination of existing services and strategic investments in future transit service, utilizing technology and innovation to maximize return. ATL's governing principles are shown at right.

Since ATL's establishment, additional funding for the region's transit has been identified through various bonds and general funds in the state budget. The establishment of ATL enabled $100 million in bonds in Georgia's FY 2019 budget for transit projects. In addition, under the agency's enabling legislation, counties in the region can levy sales taxes of up to 1 percent for up to 30 years to finance new transit construction and operations within that county.

In addition to the transit funding options made available through ATL's enabling legislation, in August 2020, Governor Brian Kemp signed House Bill 105, which levies a user fee on ground transportation, such as taxis, shared rides provided by transportation network companies (TNCs), limousines, and transportation referral services. Since it was implemented in 2021, this fee has provided nearly $40 million toward the statewide Transit Trust Fund, which can finance infrastructure projects for transit agencies across Georgia.

Economic Development and Land Use
Create or enhance connectivity and access to job centers, activity centers, and economic centers in line with regional development and growth objectives.

Environmental Sustainability
Offer new or enhanced services as alternatives to personal vehicles and promote the use of alternative fuels to build environmentally sustainable communities.

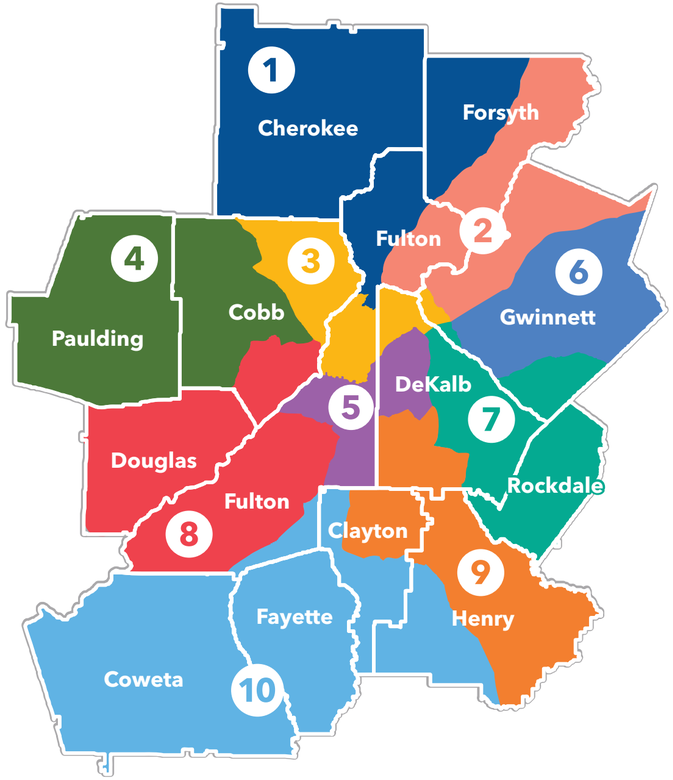
Equity
Provide new or expanded service to and from low- and moderate-income areas to improve connectivity and focus on investments that better enable people to meet their day-to-day needs.

Innovation
Use innovative solutions to improve rider experience, fare collection, cost savings, integration with transit alternatives, and more.

Mobility and Access
Use cross-jurisdictional services to create regional connectivity for population centers, recreation, and employment.

Return on Investment
Ensure that project financing plans are feasible and promote cost-efficient alternatives for new or enhanced service that enable regional economic opportunity and growth.

MAP OF ATL TRANSIT DISTRICTS



ABOUT THE ATL REGION

The 13-county ATL region includes Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties, which have a combined total population of 5.3 million residents.

The U.S. Census-defined Metropolitan Statistical Area (MSA) of Atlanta-Sandy Springs-Alpharetta is the most populous metropolitan area in Georgia and the eighth most populous MSA in the country.

The map on the left shows the 13 counties that make up the ATL region. They are divided into 10 transit districts, each of which has a representative on the ATL board. District boundaries were intentionally drawn to extend across county boundaries to foster proactive transit planning and coordination activities that advance a more seamless, regional transit network.

The Atlanta region's transit network includes...

Commuter Bus
- 33 routes
- 472,000 trips

Demand Response
- 10 services
- 777,000 trips

Fixed-Route Bus
- 6 systems
- 679 buses
- 29.6 million trips

Vanpool
- 1 service
- 290,000 trips

Heavy Rail
- 46 miles
- 38 stations
- 25.9 million trips

Streetcar
- 3-mile loop
- 12 stations
- 138,000 trips

ABOUT THE OPERATORS

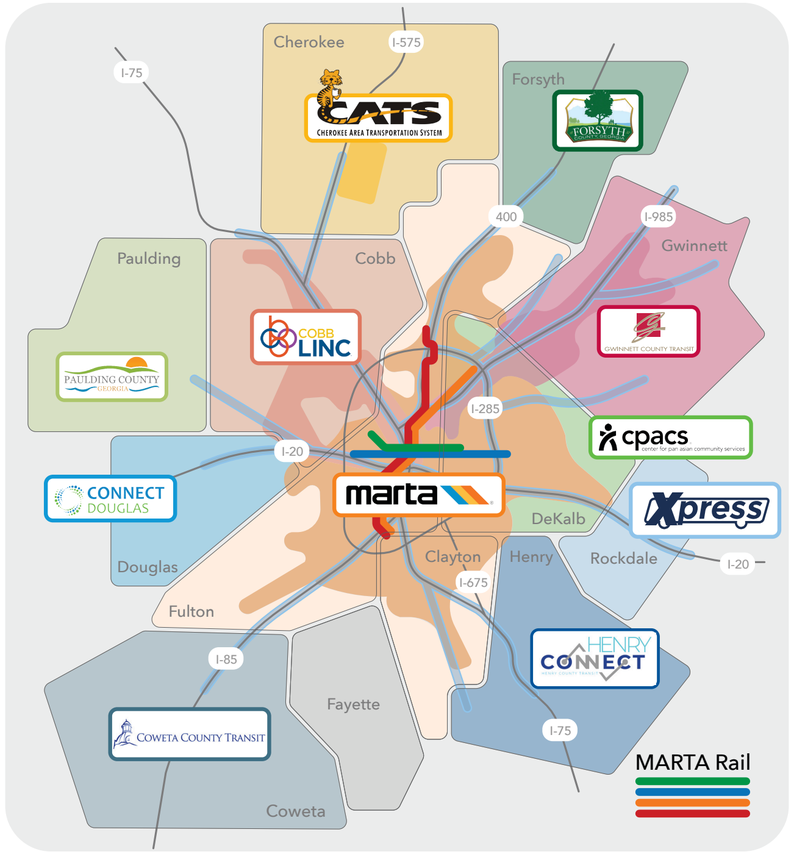
ATL's transit operator partner agencies covered in this report include:

- Cherokee Area Transportation System (CATS)
- The Center for Pan Asian Community Services (CPACS)
- CobbLinc
- Connect Douglas
- Coweta County Transit (referred to as Coweta)
- Forsyth County Dial-a-Ride (referred to as Forsyth)
- Gwinnett County Transit (GCT)
- Henry Connect
- The Metropolitan Atlanta Rapid Transit Authority (MARTA)
- Paulding Transit (referred to as Paulding)
- Xpress, which is an ATL service.

CPACS was unable to report any data for 2022. Unless otherwise noted, data for CPACS is shown through 2021. Regional totals for FY 2018 through FY 2021 include CPACS, while the regional total for FY 2022 does not.

These operating agencies are shown in the graphics on the opposite page.

ILLUSTRATIVE MAP OF THE REGION'S TRANSIT OPERATORS



Introduction

ABOUT THE ANNUAL REPORT AND AUDIT

As a requirement of its enabling legislation, ATL must develop this Annual Report and Audit of transit planning, funding, and operations within the region and submit it to the State Senate and House of Representatives Transportation Committees and the local governments within the region. The ARA provides a comprehensive picture of transit in the region, illustrating the performance and benefits of the region's transit services.

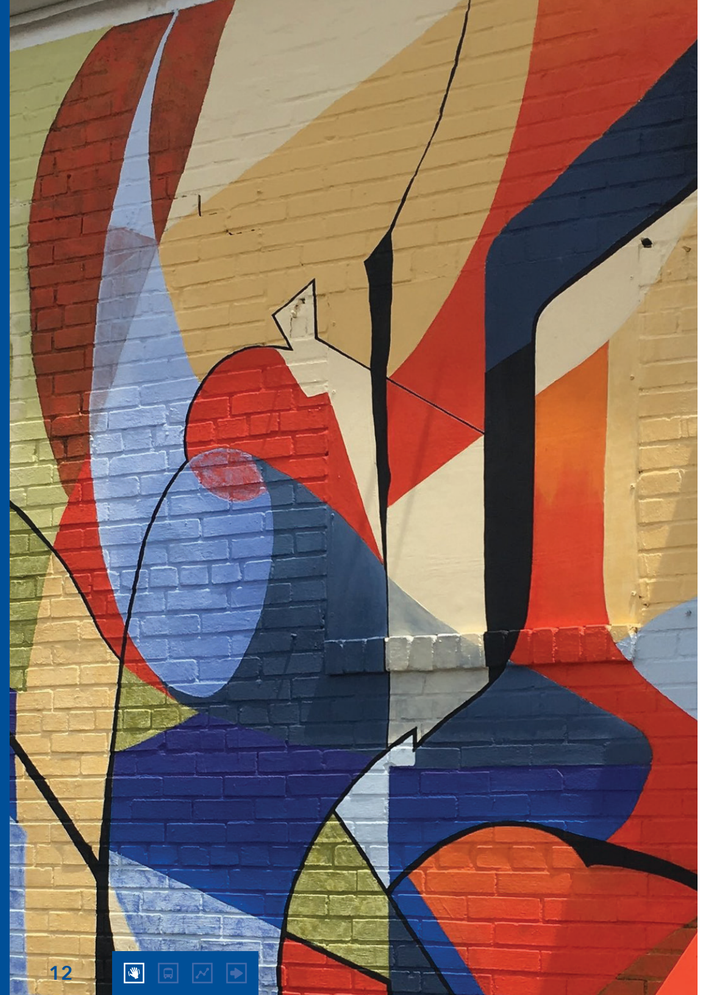
This ARA evaluates system performance, finances, and planning activities during ATL and the State of Georgia's FY 2022, which runs from July 1, 2021, through June 30, 2022. Data showing transit system trends for the past five years enable trend analysis.

The foremost purpose of the performance tracking that this ARA provides is to understand whether the region is providing a high-quality, reliable, efficient, equitable, and safe service to riders. By evaluating performance over time, operators and the region can identify trends, as well as areas for improvement and/or strategic investment. Performance tracking also enables the region to remain accountable for effectively meeting the region's mobility needs with the public resources afforded them.

In general, data shown in the 2022 ARA for FY 2018 through FY 2021 reflect the figures reported to the National Transit Database (NTD). Operators report data to the NTD based on their fiscal years, not ATL's. Data for FY 2022, unless otherwise noted (with financial data being a key exception), are according to ATL's fiscal year.

FY 2022 data are preliminary in the sense that they have not yet undergone the rigorous review of the Federal Transit Administration (FTA). For this reason, in a few cases, data for FY 2021 shown in the 2022 ARA differ from the figures shown in the 2021 ARA, because operators provided updated, audited data.

This ARA, together with *Fast Forward: The ATL Regional Transit Plan*, will guide investments in Greater Atlanta's transit system to promote innovative and regional solutions to improve mobility for all ATL residents.



THE 2022 ARA

ATL developed this ARA between June and November of 2022. ATL partner agencies—both the operators and the Atlanta Regional Commission (ARC)—provided crucial support by providing the data used to conduct the key performance indicator (KPI), accessibility, and spending analyses in Chapters 2 and 3 and provided feedback on draft KPI analyses to confirm the accuracy and, in some cases, explain performance trends. The operators and the ATL Board also provided input regarding the ARA's contents through meetings with the project team between September and November 2022.

Organization of the ARA

This ARA is organized into the following sections.

- Chapter 2: Operator Profiles highlights key features and initiatives of the transit operators included in this report.
- Chapter 3: Transit Performance and Trends presents performance trends for the transit services in the region.
- Chapter 4: Looking Ahead summarizes the ARA contents and highlights key issues for the region to address in order to enhance the value transit brings to the region's residents.

ABOUT THE ATLANTA REGION

5.3 million
Total population

The region's **four most populous counties**—Cobb, DeKalb, Fulton, and Gwinnett—account for **over two-thirds of its total population.**

$72,000
Median household income in 2019

About **half of households earn less than $50,000** and **16 percent earn less than $20,000** annually.

43%
White (non-Hispanic or Latino)

36%
Black

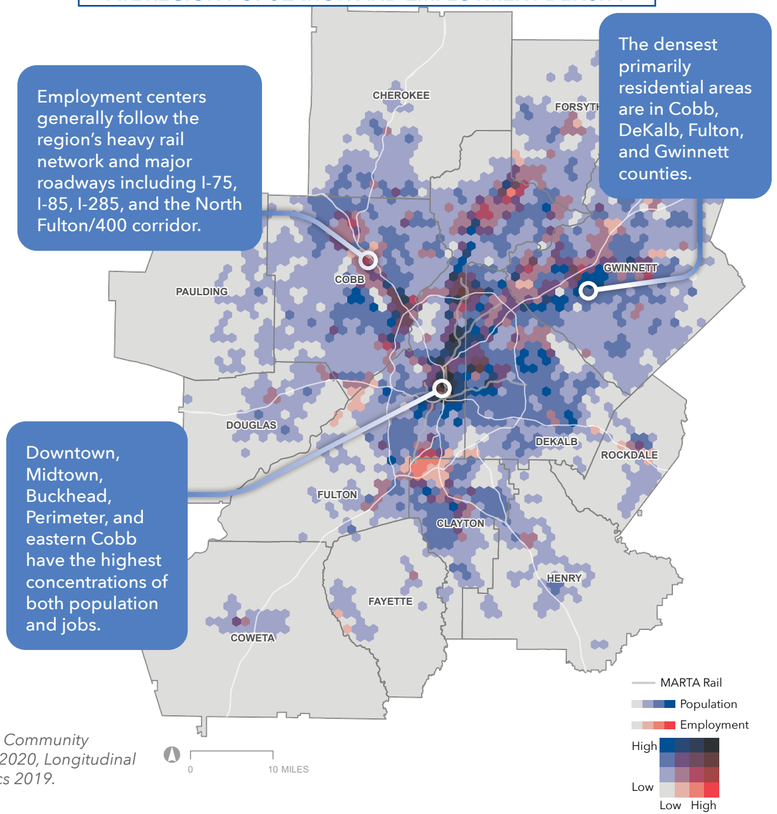
12%
Hispanic or Latino

7%
Asian

2%
multiple or other races

The region is projected to continue to diversify in terms of race and ethnicity in the coming decades.

ATL REGION POPULATION AND EMPLOYMENT DENSITY



Source: U.S. Census American Community Survey 5-year estimates 2016-2020, Longitudinal Employer-Household Dynamics 2019.

Operator Profiles

This section introduces the operators in the ATL region. The profiles offer a high-level glance at operator services and missions, 2021 expenditures, and 2022 service data.

CATS
CHEROKEE AREA TRANSPORTATION SYSTEM

KEY STATS

51,944
2022 Ridership

$1,098,908
2021 Operating Expenditures

19
Fleet Size (All Modes)

Offering
Demand Response and Fixed-Route Bus
Service

ATL District Served

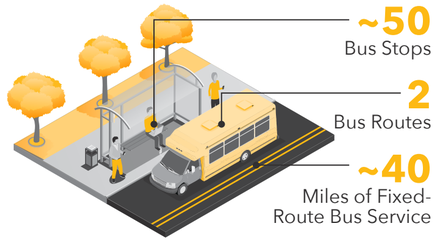
The mission at CATS is to provide excellence in all areas of service that CATS provides to the citizens of Cherokee County.

HIGHLIGHTS

Cherokee County and CATS are working to complete a Comprehensive Transportation Plan (CTP) for the CATS system, including a fare study, a plan to implement microtransit, and a future administrative building. The CTP results will assist CATS in transit planning for the next five years, and a new facility will allow the system to grow for the next 25 to 30 years. CATS also successfully competed for a federal Low-No Grant, which it used to purchase three new propane vehicles.

"Your driver was so nice to my father. The CATS driver got out of her vehicle and greeted my father and was willing to help him with his needs. I hope to see her again and wish that everyone treated my father with the care that your driver did."

– Satisfied CATS customer



~50
Bus Stops

2
Bus Routes

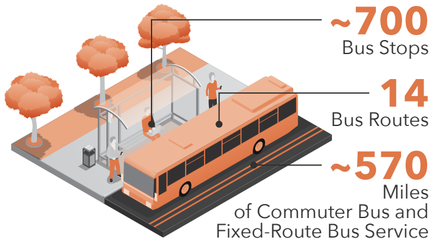
~40
Miles of Fixed-Route Bus Service

HIGHLIGHTS

CobbLinc completed most of its *Regional Bus Route Signage Upgrade* project in February 2022; new signs include system logos and route information. The Cobb County Board of Commissioners adopted the update to its CTP, *CobbForward 2050,* in February 2022. The update will prioritize projects for implementation.

"CobbLinc provides essential transportation service in the Cobb County area, including Marietta, Acworth, and Kennesaw. In addition to benefits such as reducing traffic congestion and improving environmental conditions, our bus service provides mobility options connecting people to jobs, medical facilities, shopping and other essential places within the county and to MARTA's bus and rail system."

– Theo Letman, Transit Division Manager



~700
Bus Stops

14
Bus Routes

~570
Miles of Commuter Bus and Fixed-Route Bus Service

KEY STATS

1,094,115
2022 Ridership

$29,504,256
2021 Operating Expenditures

117
Fleet Size (All Modes)

Offering
Commuter Bus, Demand Response, and Fixed-Route Bus
Service

COBB LINC

ATL Districts Served

CobbLinc provides safe, effective, and efficient fixed route, paratransit, demand response, and commuter bus service in Cobb County, connecting the community to MARTA in the Fulton County area.

CONNECT DOUGLAS

KEY STATS

30,275
2022 Ridership

$2,621,261
2021 Operating Expenditures

24
Fleet Size (All Modes)

Offering
Demand Response and Fixed-Route Bus
Service

ATL Districts Served

"Our mission with Connect Douglas is to connect our residents and visitors with the people, places, and events that are important to them."

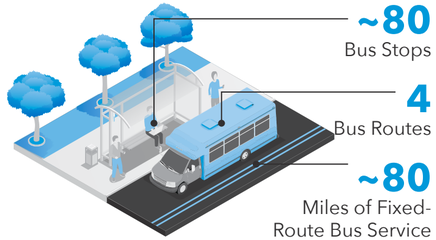
Dr. Romona Jackson-Jones, Douglas County Commission Chair

HIGHLIGHTS

To celebrate the three-year anniversary of its fixed-route bus service, Connect Douglas offered free fares all summer, hosted travel training events, posted weekly highlights of area businesses and commuters, participated in community events, and hosted a family-friendly community event at the Connect Douglas Multimodal Transit Center.

"As a four-term commissioner and 32-year resident of Douglas County who is legally blind, I am committed to Douglas County's efforts to address the mobility needs of all its residents. As we conclude our three-year Transit Pilot program, we will fulfill the goal of having a transit system that meets the social and economic needs of our county. Regionalism is key to our success and that principle should be embedded in our future plans."

– Kelly Robinson, Vice Chair and Commissioner of Douglas County, Second District



~80
Bus Stops

4
Bus Routes

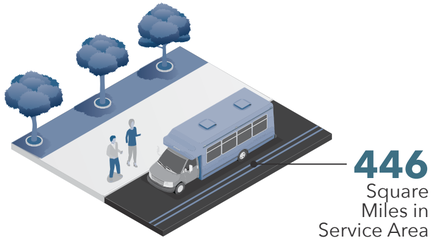
~80
Miles of Fixed-Route Bus Service

HIGHLIGHTS

The Coweta fleet has been outfitted with a connected operations platform to provide real-time fleet maintenance information.

"I've been using transportation services since 2011 after my husband passed away. It's the best thing that could have happened to me. It helps me save money and gets me to my destination in a timely manner. As a frequent user, I have gotten to know the drivers and have met some very interesting people, some of whom have become my best friends. It's such a great asset, I give it a gold star."

– Debra Parks, Coweta customer



446
Square Miles in Service Area

KEY STATS

30,521
2022 Ridership

$412,992
2021 Operating Expenditures

6
Fleet Size (All Modes)

Offering
Demand Response
Service

COWETA COUNTY TRANSIT

ATL District Served

Coweta's mission is to provide affordable access to citizens for education, employment, medical, retail, and recreation purposes throughout Coweta County.

cpacs
center for pan asian community services

KEY STATS

7,954
2021 Ridership*

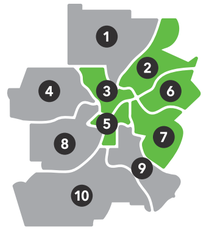
$671,598
2020 Operating Expenditures*

12
Fleet Size (All Modes)*

Offering
Demand Response and Fixed-Route Bus
Service

**2022 ridership and fleet size data and 2021 operating expenditures data were not available.*

ATL Districts Served



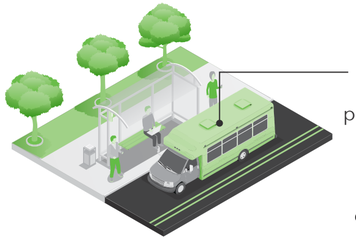
The mission at CPACS is to promote self-sufficiency and equity for immigrants, refugees, and the underprivileged through comprehensive health and social services, capacity building, and advocacy.

HIGHLIGHTS

With funding from the Community Transportation Association of America, CPACS and its partners are developing a multilingual rider-facing app and making its services more culturally, linguistically, and age-appropriate.

"CPACS Transportation provides the best service with the best drivers. I have so many doctors appointments because of my medical conditions and I don't know how I would be able to get to my appointments without CPACS."

– Mike Lau, CPACS customer



12
Buses providing service across

3
counties

HIGHLIGHTS

Forsyth offers services that are transformative to the lives of individuals and the community at large. For example, Forsyth worked with an unhoused man by providing him with affordable transportation. He now has a job and has found more stable shelter.

"If it weren't for Forsyth, I would never get out of the house."

– 96-year-old Forsyth customer

247
Square Miles in Service Area

KEY STATS

21,443
2022 Ridership

$1,310,790
2021 Operating Expenditures

9
Fleet Size (All Modes)

Offering
Demand Response
Service

FORSYTH COUNTY, GEORGIA

ATL Districts Served

Independence: that's what Forsyth offers in the form of transportation. The county provides transportation for medical appointments, shopping, employment, education, personal errands, and more. The system benefits the local community by promoting local businesses and services.

GWINNETT COUNTY TRANSIT

KEY STATS

866,255
2022 Ridership

$19,579,858
2021 Operating Expenditures

92
Fleet Size (All Modes)

Offering
Commuter Bus, Demand Response, and Fixed-Route Bus
Service

ATL Districts Served

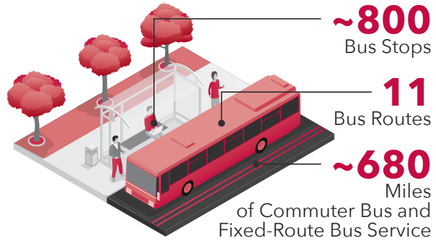
Since 2001, GCT has provided commuter express bus, local bus, and paratransit service as part of its mission to enhance quality of life by facilitating the mobility of people and goods safely and efficiently.

HIGHLIGHTS

In 2022, GCT began a Transit Development Plan (TDP), which will enhance public transit options and create more convenient transit service as the county grows and diversifies. In the first phase, the project team is assessing the existing state of transit in the county, including extensive community engagement and feedback.

"It is imperative to provide public transit to our Gwinnett County residents. Doing so allows essential workers to get to work, students to go to classes, and vulnerable populations to make it to medical appointments. By responding to the pandemic with appropriate safety measures and staying committed to providing quality service, GCT is helping keep our economy strong and our residents secure."

– Nicole L. Hendrickson, Gwinnett County Chairwoman



~800
Bus Stops

11
Bus Routes

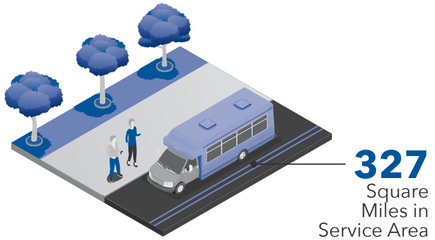
~680
Miles of Commuter Bus and Fixed-Route Bus Service

HIGHLIGHTS

The Henry County Transit Master Plan (TMP) was adopted by the Henry County Board of Commissioners in January 2022. This plan provides a 30-year roadmap for transit within Henry County. Additionally, the public selected a new logo for Henry, shown at right.

"Henry has been a lifesaver during these times of uncertainty. I truly appreciate their courtesy. The staff and drivers have made my scheduling and riding experiences very easy and comfortable. They have been able to accommodate all of my essential needs while keeping me safe. Prices are at an all-time high for all services, yet they have continued to be able to serve the entire county. Kudos to Team Henry."

– Henry Connect customer



327
Square Miles in Service Area

KEY STATS

44,477
2022 Ridership

$2,013,519
2021 Operating Expenditures

29
Fleet Size (All Modes)

Offering
Demand Response
Service

HENRY CONNECT
HENRY COUNTY TRANSIT

ATL Districts Served

The goal of Henry Connect is to provide safe, reliable, accessible, and affordable transportation for the citizens of Henry County.

marta

ATL Districts Served

KEY STATS

54,303,613
2022 Ridership

$510,081,699
2021 Operating Expenditures

1,134
Fleet Size (All Modes)

Offering
Demand Response, Fixed-Route Bus, Heavy Rail, and Streetcar
Service

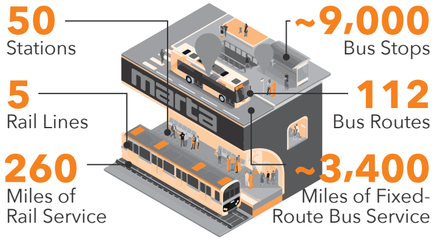
MARTA's mission is to advocate for and provide safe, multimodal transit services that advance prosperity, connectivity, and equity for a more livable region.

HIGHLIGHTS

MARTA, in partnership with Soccer in the Streets and the Atlanta United Foundation, recently expanded the StationSoccer program to its fifth location at the Kensington rail station. MARTA also partnered with the Georgia Institute of Technology to develop an on-demand rideshare service called MARTA Reach, which was piloted in 2022.

"The StationSoccer partnership provides communities around MARTA stations access to safe spaces to play and social mobility options to those that need it most. The project is gaining traction through community gardens and mural art, adding to the social infrastructure. With MARTA at the core, the public and private sectors serve communities to provide health equity in an innovative way."

– Sanjay Patel, Director of Strategic Projects, Soccer in the Streets



"Rail" refers to combined Heavy Rail and Streetcar statistics.

HIGHLIGHTS

Paulding is currently updating its CTP, which envisions supporting a safe, connected, and reliable multimodal transportation network to promote economic development, enhance Paulding County's unique character and quality of life, and allow everyone in the county to access opportunity.

"I am very pleased with Paulding; my husband is bedridden and this is our lifeline to his medical appointments. Our bus driver is amazing and helpful. She always has a smile and makes our day better when we ride the bus."

– Satisfied Paulding customer

314
Square Miles in Service Area

KEY STATS

12,561
2022 Ridership

$152,459
2021 Operating Expenditures

5
Fleet Size (All Modes)

Offering
Demand Response
Service

PAULDING COUNTY GEORGIA

ATL District Served

It is Paulding's honor and privilege to service the citizens of Paulding County. The county's goal is to maintain an effective and efficient transportation network for the public. The system is safe, clean, reliable, and responsive to the travel needs of all Paulding County residents.

KEY STATS

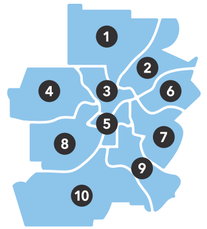
659,159
2022 Ridership

$23,039,564
2021 Operating Expenditures

147
Fleet Size (All Modes)

Offering
Commuter Bus,
Vanpool
Service

ATL Districts Served



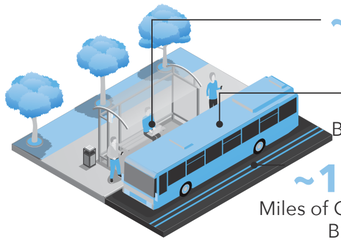
Xpress seeks to make the region's interstates safer and more efficient, while improving quality of life for all customers. Xpress also works to make the ATL region more attractive to employers and seeks to provide an extraordinary return on investment to the taxpayers supporting the service.

HIGHLIGHTS

Xpress advertised with Georgia Public Broadcasting and digital platforms to promote the region's high school sports programs. Xpress also sponsored the Georgia High School Football Championships, which included logo placements and mentions on live broadcasts.

"While alleviating congestion on Georgia's highways, Xpress gives commuters throughout Metro Atlanta a valuable transportation option. Our riders save money, are more productive at work, have less stress, and enjoy an improved quality of life. Soon, we'll launch a study to make sure we understand the longer-term shifts in consumer behavior as a result of COVID. With that knowledge, we'll continue to provide an extraordinary return on investment to the region."

– Gail Franklin, Chief Transit Officer



~100
Bus Stops

25
Bus Routes

~1,800
Miles of Commuter Bus Service

Transit Performance and Trends

INTRODUCTION

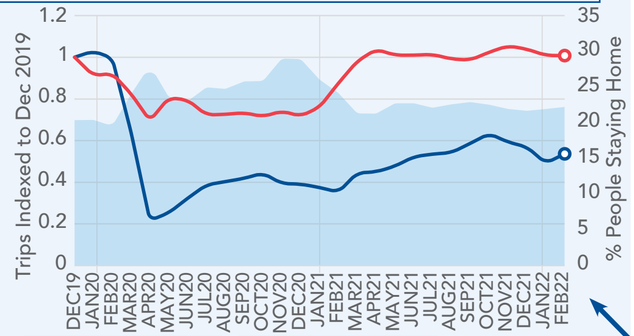
The KPIs used in this ARA provide a comprehensive snapshot of the region's transit services and their performance. They were selected based on data quality and availability and cover many aspects of transit service including ridership, finances, operations, productivity, equity, customer satisfaction, state of good repair, and safety.

As data are available, and as applicable, trends are shown at the regional level as well as by mode and by operator. Data are typically shown for 2018 to 2022 to allow for a better understanding of trends over the past five years. The ARA makes note of both one-year and five-year trends. Look for these icons to signal the observation period of the trend: 1yr 5yr

Not all operators in the region were able to provide data, or data broken out by mode, for all KPIs or for all five years. Details regarding data sources and availability are provided in the Appendix.

People are taking at least as many trips, if not more, as they did pre-pandemic.

ALL TRIPS AND TRANSIT TRIPS INDEXED TO DECEMBER 2019



National Transit Ridership | National Trips (all modes) | Percent Staying Home

THE NEW NORMAL

While the 2021 ARA told the story of the region's transit ridership declining significantly due to the COVID-19 pandemic, in 2022, the prevailing theme is recovery. Ridership and level of service have not rebounded to pre-pandemic levels, but trendlines for metrics across the board are increasing after dropping sharply last year. Still, as a result, transit usage has not reverted to pre-pandemic trends, most notably when it comes to commuting during peak periods. Here are some of the national and regional trends related to travel since the pandemic began and the implications for the KPIs that follow:

Rebound of Travel, But Not Transit Trips

The chart at left shows the number of transit trips and the number of trips by any mode, indexed to a December 2019 baseline.

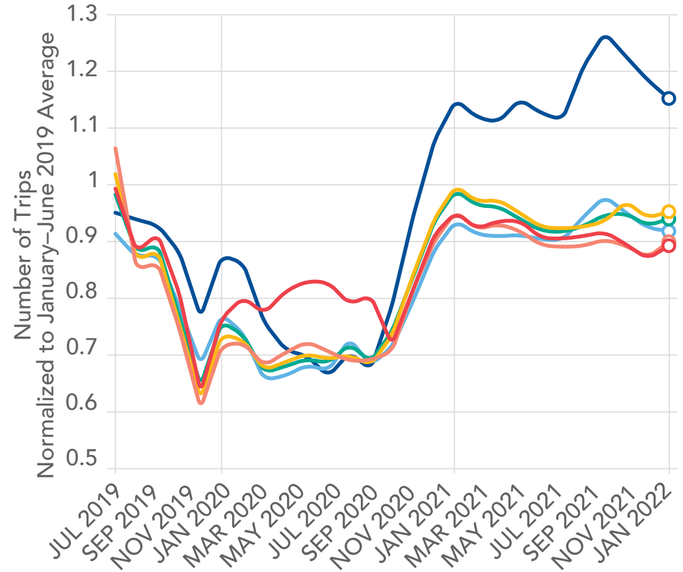
- While overall travel has rebounded to pre-pandemic levels, the chart at left shows transit trips over the last year have represented at most 60 percent of the baseline.

Trips are Staying Shorter

This chart shows the number of trips of different lengths, indexed to a baseline of the average from January through June 2019. These are national trips by any mode.

- The largest growth has been in trips of under one mile, with between 11 and 27 percent more trips of this length in 2022 than in 2019.
- In summer and fall of 2020, long trips (of 25 to 50 miles) had declined the least compared to pre-pandemic travel, but by January 2022, they were the trip length that had grown the least.

AVERAGE TRIP LENGTHS



Avg. Trips <1 Mile | Avg. Trips 1-3 Miles | Avg. Trips 3-5 Miles
Avg. Trips 5-10 Miles | Avg. Trips 10-25 Miles | Avg. Trips 25-50 Miles

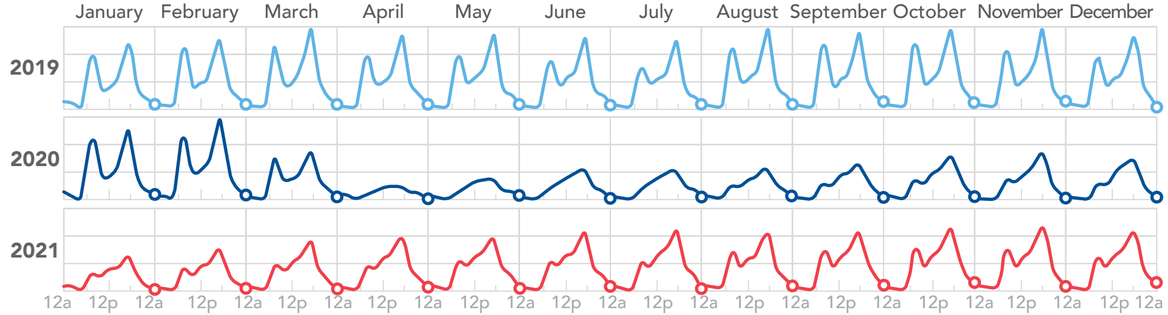
People are continuing to substitute longer (often commute) trips with more frequent and significantly shorter trips.

People are Going Everywhere—Except the Office

This shows the monthly average number of trips by hour of day, by any mode of travel, in Atlanta.[1]

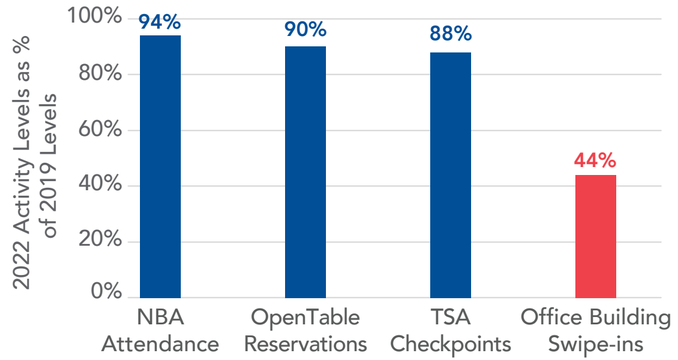
- In the first year of the pandemic, travel was much less peak-focused (i.e., work-related). This suggested that increases to ridership on transit, particularly employment-oriented transit services and particularly during peak hours, would be highly dependent on return-to-office trends.
- Transit operators who may be accustomed to planning for 9-to-5 commute schedules should pay closer attention to planning for midday riders, whose travel patterns have rebounded in full.
- By the end of 2021, the peaks of travel, particularly in the evening had begun to reemerge, representing on average about 80 percent of pre-pandemic peak trips. **By contrast, the volume of midday trips at the end of 2021 matched pre-pandemic levels.**

AVERAGE NUMBER OF TRIPS BY HOUR OF THE DAY (ANY MODE)



Source: TomTom

ACTIVITY LEVELS (PERCENTAGE OF 2019 LEVELS)



Source: Kastle Back to Work Barometer

People are returning to leisure activities at nearly the same rates as well: flying, dinner reservations, and even NBA game attendance are all around 90 percent of 2019 levels. The one activity that doesn't begin to come close to pre-pandemic levels is office building swipe-ins.[2]

Apart from commuting, data indicate most Americans have returned to their pre-pandemic daily activities.

TRANSIT OPERATOR WORKFORCE SHORTAGE

Besides the impacts of the pandemic, a national shortage of transit operators is hindering transit agencies' ability to win back riders. Nationally, 71 percent of agencies reported that they have had to cut service or delay service increases as a result of the labor shortage.

In the Southeast U.S., **83 percent of transit operators reported workforce shortages** were affecting their operations, with nearly 40 percent saying their operations were substantially impacted.

ACCESSIBILITY AND EQUITY

WHY DID ACCESS TO FREQUENT TRANSIT DECLINE?

Due to workforce shortages, some MARTA bus routes that previously had frequent service underwent service reductions between Spring 2021 and Spring 2022. These eight routes had changes in average frequency from 15 minutes or better throughout the day to 20 minutes during the midday.

Access to Fixed-Route and Frequent Transit

Access to fixed-route transit (commuter bus, fixed-route bus, heavy rail, or streetcar) has significant implications for mobility and equity. Areas with fixed-route transit provide much greater access to opportunity for their residents, which is especially critical for those who do not have access to other forms of transportation.

The light and dark blue areas shown in the map on the opposite page are those within walking distance to fixed-route transit stops. People in the dark blue areas have access to high frequency fixed-route transit, which is defined as having 15-minute average service frequency or better throughout the day. The table below shows the total number and percentage of different population groups with access to fixed-route transit and frequent fixed-route transit.

ACCESS TO FIXED-ROUTE AND FREQUENT TRANSIT

Population Group	ATL Region Total	Access to Fixed-Route Transit		Access to Frequent Transit	
		Number	Percent	Number	Percent
Low-Income Households	487,185	172,495	35.4%	18,085	3.7%
Minority Population	2,948,900	837,868	28.4%	71,381	2.4%
Total Population	5,156,884	1,178,775	22.9%	116,187	2.3%

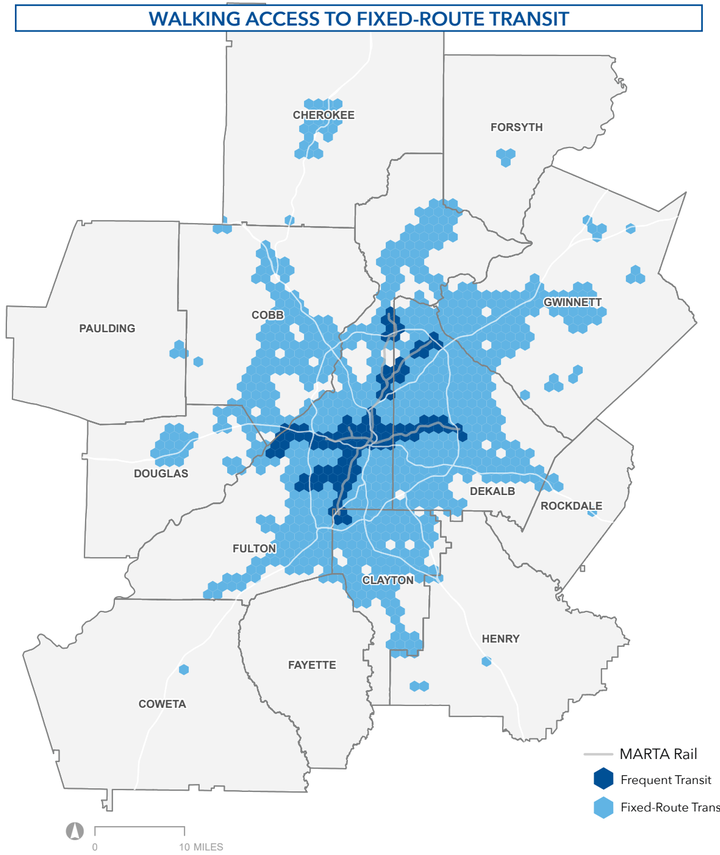
About one-quarter (23 percent) of the region's population lives within walking distance of fixed-route transit. Greater proportions of low-income households and minority residents have access to fixed-route transit (35 and 28 percent, respectively).

- **A very small proportion of the region's total population, 2.3 percent, have access to frequent transit within walking distance.** Among low-income and minority groups, this figure rose to 2.4 and 3.7 percent, respectively.
- This is a significant year-over-year decrease from 2021, with access to frequent transit falling by over 87,000 residents, **with nearly 58,000 fewer minority residents and over 14,000 fewer low-income households having access to frequent transit.**
- Although this analysis is based on the presence of a street network, it does not take the quality of the pedestrian network into account. **The presence and quality of pedestrian infrastructure such as sidewalks and safe crossings impacts the safety of transit users.** Where such infrastructure is lacking or insufficient, people are less likely to use transit.

A map visualizing the places that experienced a decline in frequent transit service can be found in the Appendix.

Walking access along the road network measured at ¼-mile from bus stops and ½-mile from rail stations using May 2022 General Transit Feed Specifications (GTFS).

WALKING ACCESS TO FIXED-ROUTE TRANSIT



Access to Regional Business Centers by Transit

The region's economic success depends on the ability of businesses to access a qualified workforce. Research has shown that greater access to labor means greater economic productivity, as businesses can better match their needs to worker skills.[3] When people lack quality and affordable transportation, they may struggle to find and maintain employment. Employers, in turn, can experience absenteeism or lateness, employee turnover, difficulty in filling positions, and unreliability in worker arrival times.[4] Transit provides affordable connections between people and businesses to support overall economic vitality in the Atlanta region.

This section addresses the following questions as they apply to fixed-route transit access in the ATL region:

- How well does transit connect businesses and workers?
- How well served are workers in households that don't own a car?
- How does access differ across areas with different land development patterns?
- How well does transit serve business centers providing jobs with high versus low telecommuting potential?
- How does access to business centers by transit vary by time of day?

The analysis evaluates the number of working age people (16+ years old), including those who do not have a personal vehicle, who can travel to each of 25 Community Improvement Districts (CIDs) across the region within 45 minutes using fixed-route transit. CIDs are self-taxing districts composed of businesses committed to joint investments and improvements. They are significant focal points for economic development in the region. The analysis uses transit schedule data for each of three key commuting departure times by transit: early morning (5:00 a.m.), morning peak (8:00 a.m.), and early evening (6:00 p.m.).

REGIONAL FINDINGS

- **The average employer in one of the region's business centers can be reached within 45 minutes on fixed-route transit by:**[5]

3%
Of all potential workers

18%
Of all potential workers from zero-car households

- Access to CIDs by transit is nearly as strong in the early morning and early evening hours (5:00 a.m. and 6:00 p.m.) as during the morning peak commute (8:00 a.m.). This is especially valuable for workers who work outside of a 9-to-5 work schedule.

- Across all three commute times, fixed-route transit provides relatively better connectivity to CIDs for potential workers living in zero-car households compared to overall potential workers.
- There remain substantial opportunities to expand the ability of fixed-route transit to connect people with jobs and businesses with their needed talent.
- At a time when employers are struggling to hire and maintain workers, breaking down transportation barriers is key.

POTENTIAL WORKERS WITHIN 45 MINUTES OF BUSINESS CENTERS BY FIXED-ROUTE TRANSIT

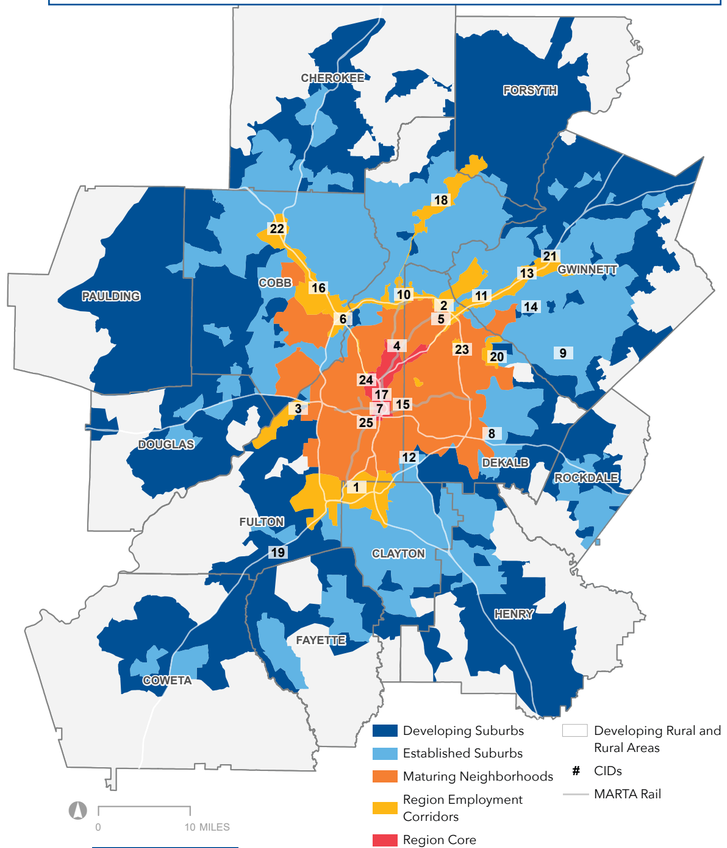
All Workers

Departure Time	5 AM	8 AM	6 PM
Share of Workers	2%	3%	3%
Workers Accessible	92,185	109,652	107,110

Workers in Zero-Car Households

Departure Time	5 AM	8 AM	6 PM
Share of Workers	16%	18%	18%
Workers Accessible	9,905	11,237	11,087

REGIONAL BUSINESS CENTERS (CIDS) BY DEVELOPMENT PATTERN CATEGORY



TRANSIT ACCESS BY DEVELOPMENT PATTERN

ARC has identified seven general categories of development patterns in the Atlanta region.[6] The region's CIDs are primarily located in the region core, maturing neighborhoods, and region employment corridors, with a handful located in established and developing suburbs.

COMMUNITY IMPROVEMENT DISTRICTS

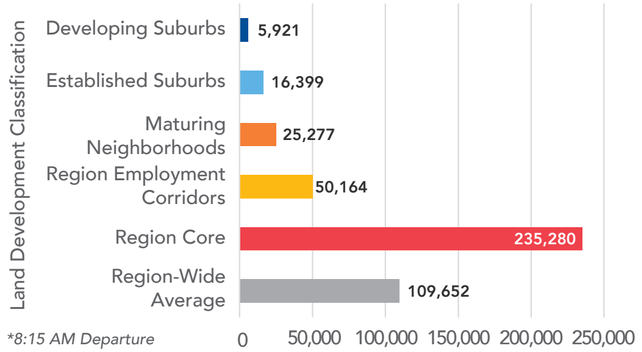
1. Airport
2. Assembly
3. Boulevard
4. Buckhead
5. Chamblee Doraville
6. Cumberland
7. Downtown Atlanta
8. East Metro DeKalb
9. Evermore
10. Fulton & DeKalb Perimeter
11. Gateway85 Gwinnett
12. Greater Conley Industrial
13. Gwinnett Place
14. Lilburn
15. Little 5 Points
16. Marietta Gateway
17. Midtown
18. North Fulton
19. South Fulton
20. Stone Mountain
21. Sugarloaf
22. Town Center Area
23. Tucker-Northlake
24. Upper Westside
25. West End

Looking at how accessibility to workers varies by development patterns indicates the following for all three commute times:

- CIDs in the region core have the greatest access to labor within 45 minutes by fixed-route transit, followed by those in region employment corridors and maturing neighborhoods.
- The few CIDs located in the established suburbs and developing suburbs have much more limited transit access.
- These patterns are true both for all potential workers and for potential workers in zero-car households.

CIDs on the periphery of the region and outside of major employment corridors face the greatest barriers in reaching potential workers by transit.

POTENTIAL WORKERS WITHIN 45 MINUTES OF BUSINESS CENTERS BY FIXED-ROUTE TRANSIT BY DEVELOPMENT PATTERN CATEGORY



TRANSIT ACCESS BY TELECOMMUTING POTENTIAL

Another increasingly important topic is the impact of telecommuting on travel patterns and transit needs. While the pandemic resulted in many people shifting to full or part-time remote work, impacts are not universal, as some jobs require in-person presence, while others do not. **The map on the right shows the CIDs in the Atlanta region by the relative telecommuting potential of the jobs they offer.**

- CIDs in the southern part of the region are significantly more likely to require their workers on site, while those in the center and to the north are more likely to have jobs that can be fulfilled remotely.

COMMUNITY IMPROVEMENT DISTRICTS

1. Airport
2. Assembly
3. Boulevard
4. Buckhead
5. Chamblee Doraville
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8. East Metro DeKalb
9. Evermore
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18. North Fulton
19. South Fulton
20. Stone Mountain
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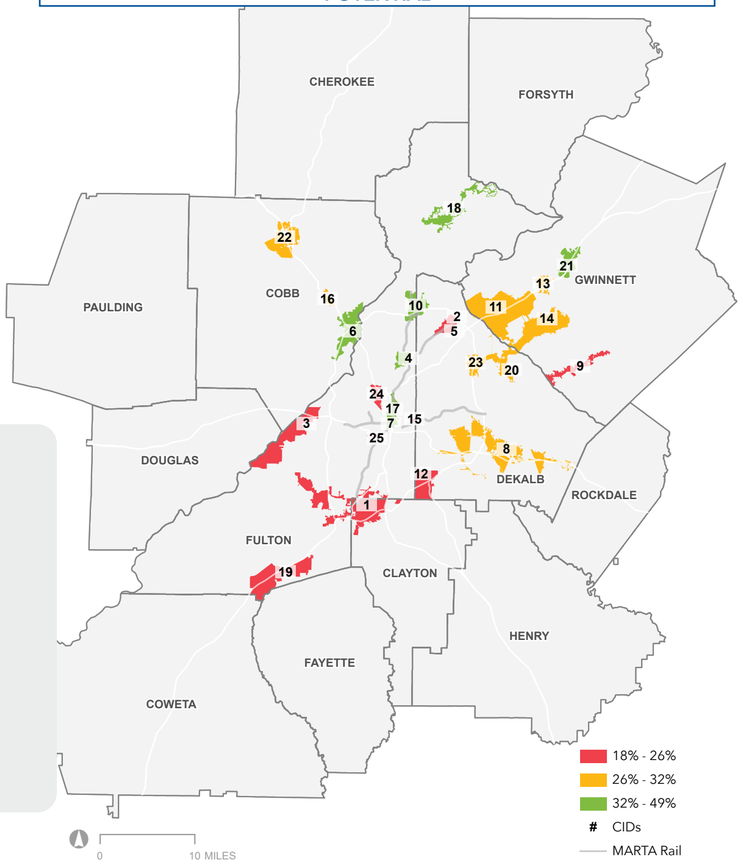
25. West End

REGIONAL BUSINESS CENTERS (CIDS) BY TELECOMMUTING POTENTIAL

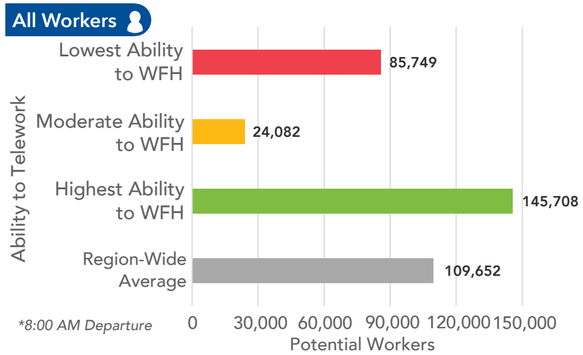


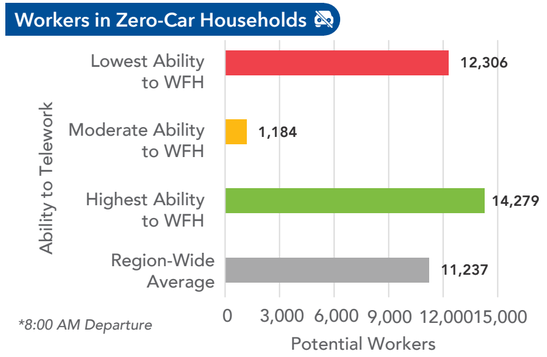
Looking at how accessibility varies based on a CID's telework potential indicates the following:

- **CIDs with the highest percentages of jobs with telework potential have the greatest labor market access by transit. For example, office buildings in central Atlanta that employ large portions of workers that do not always need to go in person to work are much better served by fixed-route transit.**
- **The CIDs with jobs with the lowest levels of ability to work from home have access to approximately 40 percent fewer workers on average than those with the highest telework potential.**
- **CIDs whose workers have a moderate ability to work from home have the most limited transit access to potential workers.**
- Looking at potential workers **without cars** reveals patterns of access that are more equal between CIDs with high and low telecommuting potential (see the second chart below), but access is still limited relative to the size of the available workforce.

Transit operators will want to more heavily consider telecommuting potential in planning their service in the future.

POTENTIAL WORKERS WITHIN 45 MINUTES OF BUSINESS CENTERS BY FIXED-ROUTE TRANSIT – BY TELECOMMUTING POTENTIAL





TELECOMMUTING IN THE REGION

According to the August 2021 "Metro Atlanta Speaks" survey, respondents worked from home due to COVID-19:

21% Occasionally

17% Most of the time

17% All the time

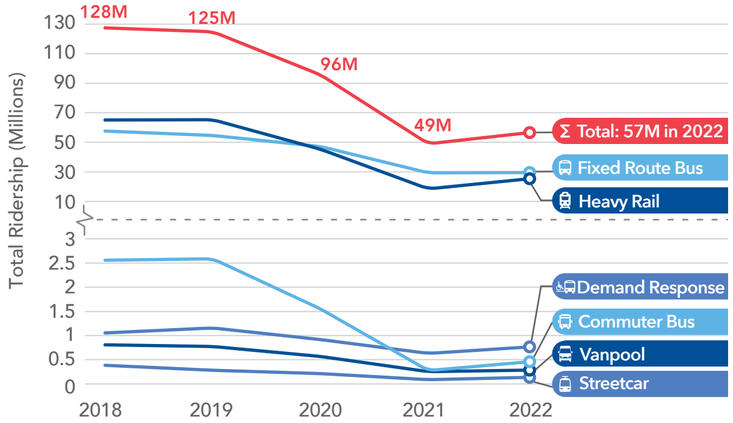
42% Not at all

4% Have always worked from home

RIDERSHIP

Transit ridership, measured in unlinked passenger trips, significantly influences both short- and long-term planning decisions. Many factors influence transit ridership including land use and density, socioeconomic and demographic characteristics, fares, perceptions about transit, and external economic factors such as gas prices and the state of the economy.

RIDERSHIP BY MODE

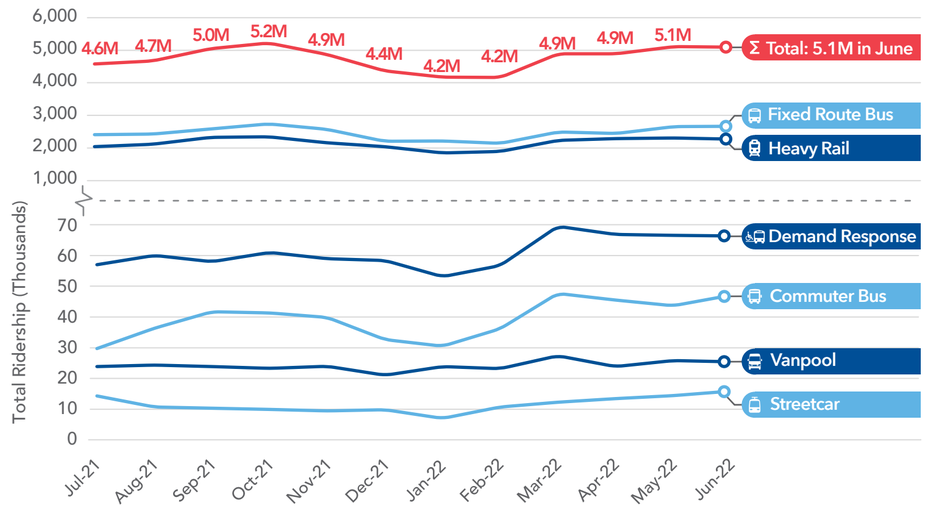


Ridership by Mode

- **Ridership totaled 57 million trips regionwide in 2022. This is an increase of 16 percent from 2021.** Still, it represents a decline of 55 percent between 2018 and 2022.
- Modes geared toward commuters, which experienced the sharpest declines between 2019 and 2021, experienced greater increases between 2021 and 2022: commuter bus ridership increased 72 percent and heavy rail ridership increased 40 percent.
- Ridership increased on each mode between 2021 and 2022.
- Fixed-route bus ridership had the lowest ridership increase of all modes between 2021 and 2022, at 1 percent. In 2021, fixed-route bus trips represented 60 percent of all transit trips; this proportion decreased to 52 percent in 2022.

- Ridership reached its lowest points in January and February 2022, coinciding with the spread of the COVID-19 Omicron variant in Georgia. Some seasonal fluctuation would be expected, but the decrease here is greater in magnitude.
- Ridership at the end of FY 2022 was over 10 percent higher than the previous summer.

MONTHLY TRANSIT RIDERSHIP BY MODE IN FY 2022



KEY FINDINGS

Modes geared toward commuters experienced greater increases between 2021 and 2022, indicating the return of a portion of in-person work.

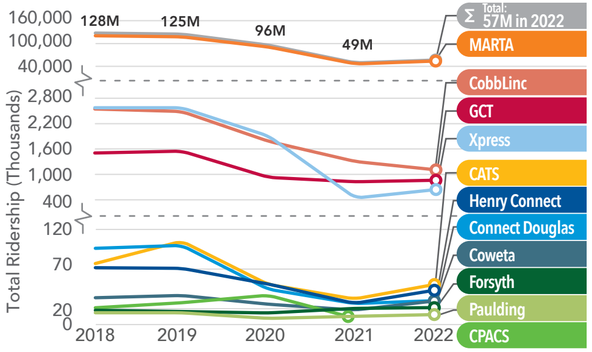
Ridership has not yet rebounded to pre-pandemic levels, but ridership increased on each mode between 2021 and 2022.

Ridership by Operator and Service

Ridership for all operators except CobbLinc increased between 2021 and 2022. This is likely driven by equipment issues with CobbLinc's Flex service that adversely affected demand-response service levels.

Forsyth exceeded its pre-pandemic ridership with a 20 percent increase in ridership since 2018, driven by the introduction of a new service in 2020. Coweta and Paulding are close to reaching pre-pandemic ridership levels. All three operators operate only demand response, which often serves those who are transit-reliant, contributing to their rebounding ridership.

RIDERSHIP BY OPERATOR



Largely driven by a 93 percent increase in Xpress between 2021 and 2022, commuter bus ridership increased by 72 percent.

Demand response ridership declined 27 percent between 2018 and 2022, the lowest decline of all modes over the five-year period. Henry Connect, CATS, and Coweta all had sharp ridership increases in the last year.

CATS ridership increased 81 percent between 2021 and 2022.

Henry Connect and Coweta ridership increased 67 percent between 2021 and 2022.

Fixed-route bus ridership declined 49 percent between 2018 and 2022, but performance varied significantly by operator between 2021 and 2022.

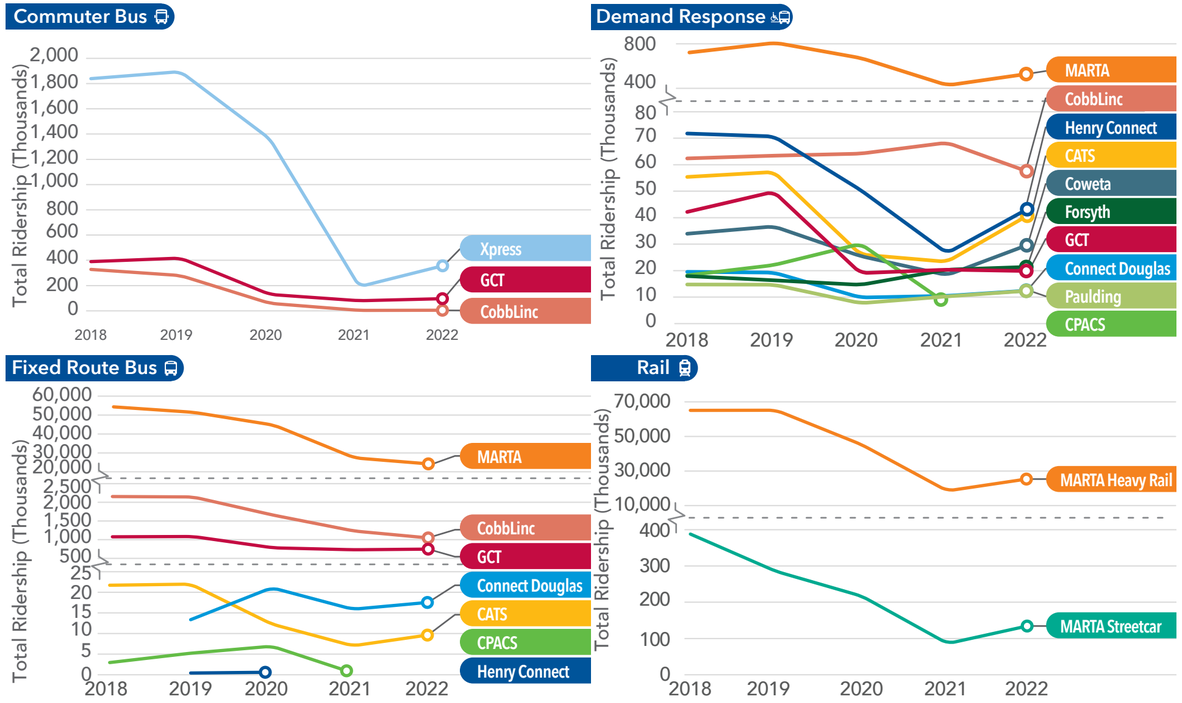
CobbLinc's ridership declined by 16 percent between 2021 and 2022. MARTA and GCT had modest ridership increases of 1 percent and 3 percent, respectively.

Connect Douglas and CATS had sharper ridership increases between 2021 and 2022 of 11 and 40 percent, respectively.

MARTA heavy rail ridership declined by over 60 percent between 2018 and 2022, but is bouncing back from the pandemic; MARTA experienced an increase of 40 percent between 2021 and 2022.

MARTA Streetcar makes up a very small percentage of all transit ridership in the region, though it saw an increase of 60 percent in the last year.

RIDERSHIP BY OPERATOR AND SERVICE



KEY FINDINGS

Ridership for nearly all services increased between 2021 and 2022.

ATL'S SMART PROGRAM

Despite being the 8th most populous state, Georgia currently ranks 35th in federal discretionary transit grant dollars largely because projects cannot identify the local match these programs require.

In 2020, Georgia's General Assembly created the first-ever Transit Trust Fund by implementing a fee of up to $0.50 on rideshare trips, generating nearly $40 million in revenue in two years.

ATL's SMART Program is a historic opportunity to increase Georgia's competitiveness in discretionary grants by identifying projects that should receive this state funding, which can in turn be matched by up to four ($4) federal dollars for every state dollar invested.

In May, the ATL Board recommended two local projects for use of SMART Program dollars as a local match to generate federal investment in the region. This resulted in a successful $25 million award from the FTA for MARTA's Five Points Station rehabilitation project.

MICROMOBILITY AND TRANSIT

Transportation network companies (TNCs) and micromobility operators in the ATL region include Uber, Lyft, Bird, Lime, Spin, and Veo. The latter four offer e-bikes and/or scooters for short-term rental. **In FY 2022 there were over 1.7 million trips taken and 2.7 million miles traveled on e-bikes and scooters in the ATL region.**[7]

1 mile
Median trip distance on both e-bikes & scooters

1.7 miles
The average trip distance on both

10 minutes
The median trip duration on both e-bikes and scooters

19 minutes
The average trip duration on both

2012
First TNC company enters the Atlanta market.

2013
Additional TNC company enters the market.

2014
Introduction of shared TNC trips.

2016
Expansion of shared TNC trips.

2018
Introduction of dockless micromobility (shared bikes).

2019
Various micromobility operators enter and leave the Atlanta market.

2020
- Introduction of sit-down scooters.
- New micromobility regulations.
- Atlanta's micromobility program temporarily suspended.
- Statewide introduction of ridesharing fee.

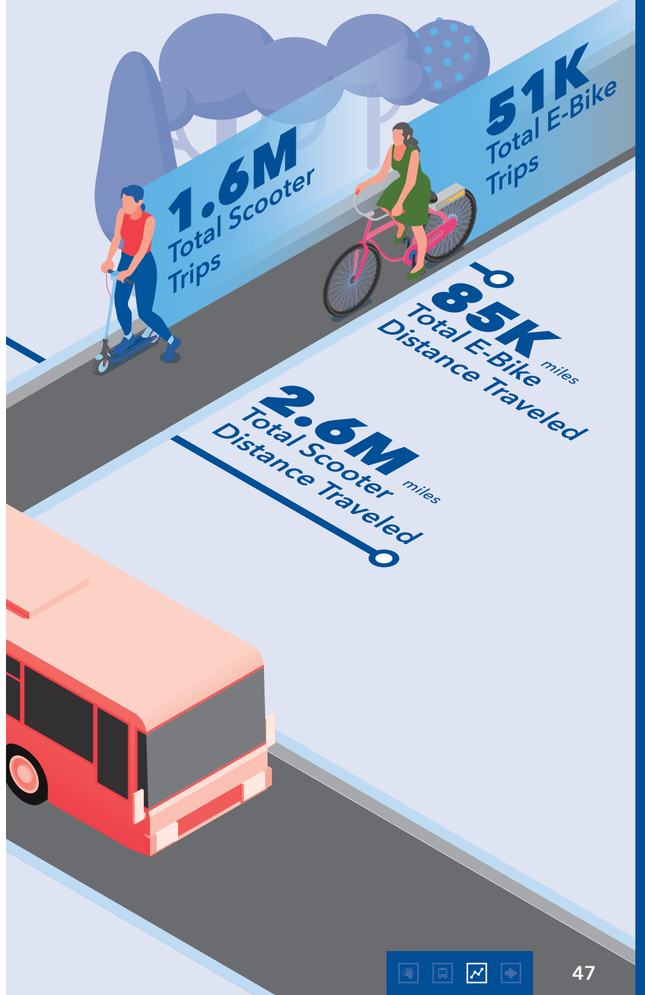
2021
- Slow recovery of micromobility trips.
- City of Peachtree Corners pilots and implements micromobility device permit program.

2022
Atlanta City Council begins drafting legislation to establish age restrictions on micromobility usage.

- In FY 2022, there were about **140 e-bike trips taken** each day and about **4,500 scooter trips taken each day.**
- The busiest e-bike corridor by far is the Atlanta BeltLine Eastside Trail between Piedmont Park and the Krog Street Tunnel. Peachtree Street, 10th Street, and Ponce de Leon Avenue also see significant e-bike ridership.
  - The More MARTA Atlanta Program has identified the BeltLine as a future light rail corridor and Ponce de Leon Avenue as a future frequent local bus corridor.
- Scooter ridership is more evenly spread throughout central Atlanta, but corridors with high ridership include the Atlanta BeltLine Eastside Trail, Peachtree Street, 10th Street, Ponce de Leon Avenue, Ferst Drive and 5th Street near the Georgia Institute of Technology, Techwood Drive, North Avenue, and Marietta Street.
  - In addition to the corridors described above, the More MARTA Atlanta Program has identified North Avenue as a future BRT corridor.

The data above suggest that while the region's micromobility operators experienced a drop in usage during the pandemic, ridership is slowly recovering.

Micromobility usage and transit ridership have a complex relationship. While it is likely some riders use e-bikes and e-scooters to make short trips they could otherwise have made on transit, it is also true that these vehicles can also make transit an easier mode to access, particularly for longer trips. The presence of micromobility increases the number of modes people have at their disposal and increases their sense that they can mix and match non-auto mobility options based on their travel needs.[8]



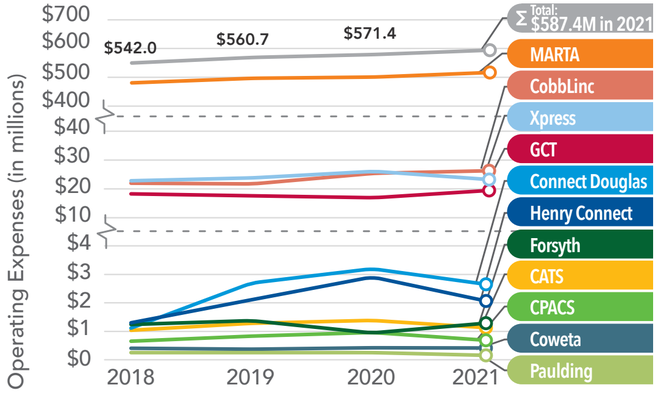
LEVEL OF TRANSIT INVESTMENT

Operating Expenditures

Measuring the total amount invested in operating transit service in a region enables an understanding of the robustness and extent of a region's transit services and the relative level of priority placed on transit compared to other public priorities. Additionally, looking at trends can provide insight into how consistent this investment is.

Operating expenditures include the costs of labor and benefits, vehicle maintenance, materials (e.g., fuel, tires), utilities, and insurance. The 2018 to 2021 expenditures are the sums of the total operating expenses by mode as indicated in NTD submissions.

OPERATING EXPENDITURES BY OPERATOR (IN MILLIONS)



OPERATING EXPENDITURES BY OPERATOR (IN MILLIONS)

Operator	FY 2018	FY 2019	FY 2020	FY 2021
CATS	$1.0	$1.3	$1.4	$1.1
CobbLinc	$22.0	$21.8	$25.4	$26.4
Connect Douglas	$1.1	$2.7	$3.2	$2.6
Coweta	$0.4	$0.4	$0.4	$0.4
CPACS	$0.7	$0.8	$1.0	$0.7
Forsyth	$1.2	$1.4	$0.9	$1.3
GCT	$18.3	$17.6	$16.9	$19.6
Henry Connect	$1.3	$2.1	$2.9	$2.0
MARTA	$473.0	$488.6	$492.8	$510.1
Paulding	$0.3	$0.2	$0.3	$0.2
Xpress	$22.8	$23.8	$26.1	$23.0
Total	**$542.0**	**$560.7**	**$571.4**	**$587.4**

KEY FINDINGS

Most operators saw fairly steady increases in their operating expenditures from 2018 to 2020. Many saw their expenditures decline in 2021, likely as a result of having reduced service.

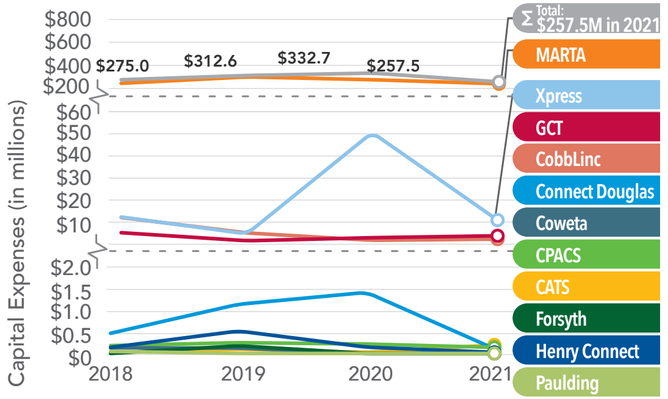
Capital Expenditures

Capital expenditures include the costs of new vehicles, stations, transit priority treatments, maintenance of other facilities, equipment, information and fare collection systems, or other one-time procurements. Capital expenditures from 2018 to 2021 are as indicated in NTD submissions.

CAPITAL EXPENDITURES BY OPERATOR (IN MILLIONS)

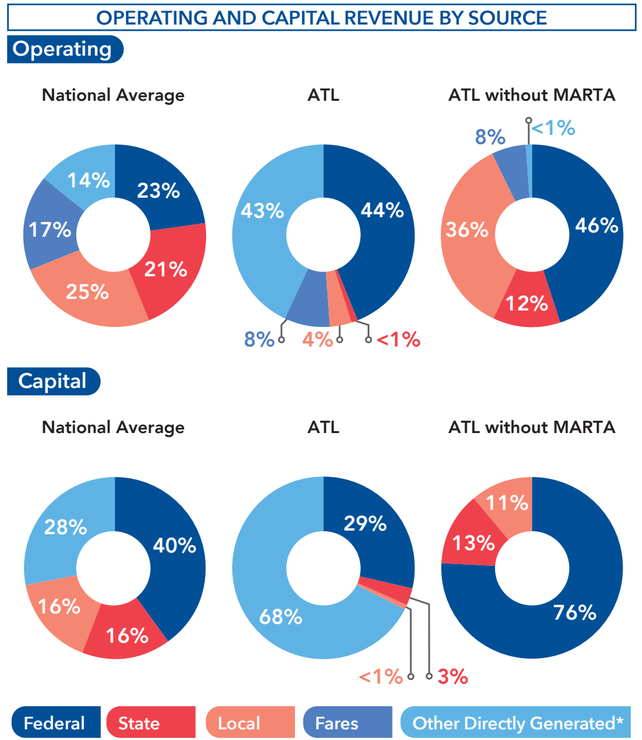
Operator	FY 2018	FY 2019	FY 2020	FY 2021
CATS	<$0.1	<$0.1	<$0.1	$0.2
CobbLinc	$12.1	$5.1	$1.8	$2.3
Connect Douglas	$0.5	$1.2	$1.5	$0.1
Coweta	$0.1	$0.1	$0	$0
CPACS	$0.2	$0.3	$0.2	$0.1
Forsyth	$0	$0.2	$0	$0
GCT	$5.2	$1.6	$2.9	$3.8
Henry Connect	$0.1	$0.5	$0.1	<$0.1
MARTA	$244.4	$298.9	$275.6	$240.1
Paulding	$0.1	$0	$0	$0
Xpress	$12.3	$4.6	$50.6	$10.9
Total	**$275.0**	**$312.6**	**$332.7**	**$257.5**

CAPITAL EXPENDITURES BY OPERATOR (IN MILLIONS)



KEY FINDINGS

Overall, the regional total resembles MARTA's figures and show a mostly flat trend from 2018 to 2021. It is possible that supply chain challenges, specifically with vehicle replacements, contributed to the declines in 2021.



Revenue Sources

Operating and capital revenues can be grouped into four source categories: federal, state, local, and directly generated. The first three sources refer to the level of government from which the funding originates. Fares typically represent a substantial share of the directly generated revenues applied to operations. Other directly generated funds include sales tax revenues, advertising revenues, donations, and bond proceeds.

- **Operators in the region rely more on federal funds for operations than the national average.** Except for MARTA, providers in the region also dedicate significantly higher share of federal dollars to capital projects compared to the national average, indicating heavier reliance on federal funding for transit compared to other operators throughout the U.S.
- **The share of state funding is vastly lower in the Atlanta region compared to the national average, making up less than 1 percent of the operating and 3 percent of capital funds in 2021.**
- Local funds represent only 4 percent of the operating revenue and less than 1 percent of the capital revenue in the region, compared to 25 and 16 percent on average in the nation for operating and capital funds, respectively.
- The region relies heavily on other directly generated funds, mostly the sales tax levied in MARTA's jurisdiction.

Operating and Capital Expenditures per Capita

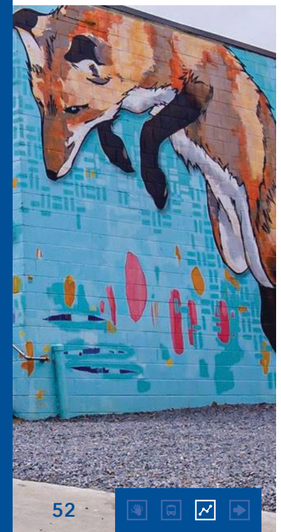
Operating and capital expenditures per capita are measures of the total investment in transit operations and capital projects, respectively, relative to the population of a region.

	FY 2018	FY 2019	FY 2020	FY 2021
Operating	$91.17	$93.16	$93.83	$95.60
Capital	$46.26	$51.94	$54.64	$41.91

- While the Atlanta region's operating expenditures per capita have increased slightly each year until 2021, **the rate of inflation outpaced the growth in operating expenditures per capita.**
- The region's capital expenditures per capita were growing until 2020 but dropped in 2021. This decline can be explained in part because of supply chain disruptions caused by the pandemic.

WHY MEASURE THE ECONOMIC IMPACT OF TRANSIT EXPENDITURES?

Measuring the economic impact of transit expenditures helps us convey how investments have multiplicative effects beyond transit operators—creating jobs and supporting business activity throughout the region.



Regional Economic Impact of Expenditures

UNDERSTANDING DIRECT AND MULTIPLIER IMPACTS

Transit operators' expenditures create jobs and generate business activity throughout the Atlanta region. The total economic impacts of transit operations, maintenance, and capital expenditures include activity directly supported by transit agencies as well as additional multiplier effects on suppliers in the region and on businesses where workers spend their income.

Each type of impact is quantified using the measures of jobs and value added (business revenue minus the cost of purchased goods and services). Value added impacts also reflect transit's contribution to GRP.

DIRECT AND MULTIPLIER (INDIRECT AND INDUCED) IMPACTS GENERATED BY TRANSIT AGENCY EXPENDITURES

Directly Supported Activity
Transit agencies employ workers, pay them wages, and invest in equipment and supplies.

Supplier Activity (Indirect)
Transit agencies purchase goods and services from companies who in turn employ and pay workers.

Spending of Worker Income (Induced)
Transit agency and supplier employees spend their income, generating additional activity in the regional economy.

DIRECT IMPACTS

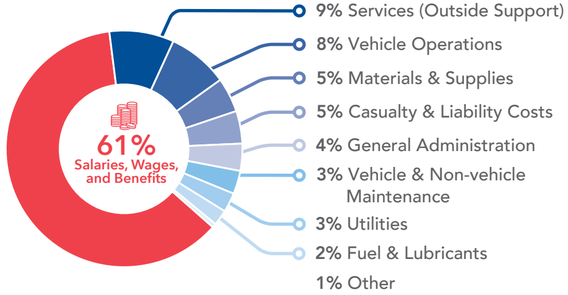
In FY 2021, transit agencies within the ATL region invested a total of **$846 million in operating, maintaining, and improving the regional transit network**. Of this total investment, operating expenditures for transit in the region were approximately $587 million in FY 2021, summarized by type of expenditure in **the figure to the right.**

- **Sixty-one (61) percent of operating costs were allocated to worker salaries, wages, and benefits.** Transit agencies are first and foremost service providers and therefore rely significantly on their workforce to deliver safe and effective service. Agencies provide their employees with stable and good living wage jobs that are accessible to residents with a wide range of skills. These employees then in turn support regional businesses when they spend their income.

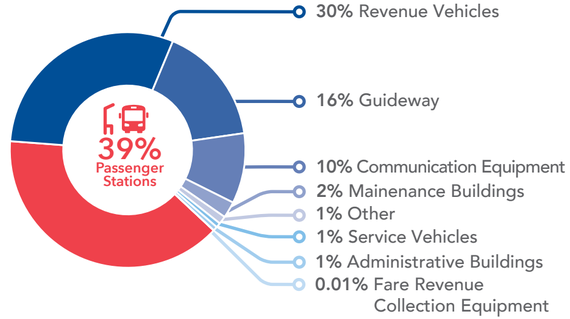
Transit agencies in the ATL region invested approximately $257 million in capital projects in FY 2021, summarized by type of expenditure in the following figure.

- The majority of capital expenditures were used to maintain stations, purchase vehicles, and maintain guideway infrastructure (such as rail in a tunnel or on an elevated viaduct).
- In FY 2021, 39 percent of capital expenditures were allocated toward passenger stations alone, including projects such as MARTA's station and roofing rehabilitation projects.
- Labor-intensive expenditures such as station and guideway maintenance are particularly effective at stimulating local economies during economic downturns. On the other hand, vehicle purchases, while critical to transit operations, are more likely to "leak out" of the region and generate economic impacts in the locations where workers manufacture them.

DISTRIBUTION OF TRANSIT AGENCY OPERATIONS AND MAINTENANCE EXPENDITURES BY CATEGORY (FY 2021)



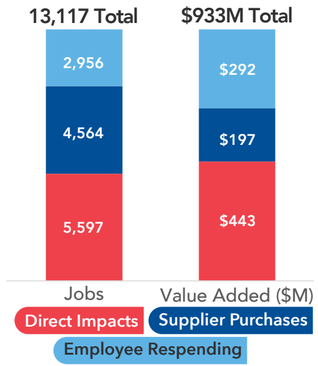
DISTRIBUTION OF TRANSIT AGENCY CAPITAL EXPENDITURES BY CATEGORY (FY 2021)



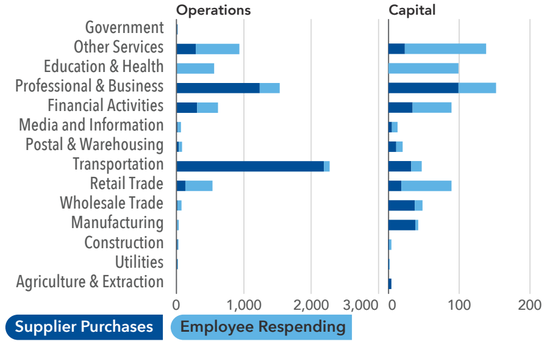
Every $1 directly invested in transit in the Atlanta region generates $2 in regional business sales.

This is in addition to the ways in which transit services more broadly support the regional economy, like by helping people to save money and connecting people with jobs.

TOTAL ECONOMIC IMPACT OF TRANSIT OPERATIONS, MAINTENANCE, AND CAPITAL EXPENDITURES (FY 2021)



MULTIPLIER JOBS BY SECTOR FY 2021



TOTAL STIMULUS IMPACTS ON THE REGIONAL ECONOMY

The figure below summarizes the economic impact of transit operator expenditures in FY 2021.

- **Operations and maintenance expenditures supported 11,300 jobs in the region, contributing over $770 million to the GRP.**
- **Capital expenditures supported over 1,800 jobs and contributed an additional $160 million in value added (GRP).**

Direct expenditures support jobs in transportation and construction. The multiplier impacts of supplier purchases and employee spending extend to other industries within the Atlanta economy, as shown in the figure below.

- Retail, education, health, and other service businesses are supported by employee spending (shown in light blue).
- Additional jobs are supported in sectors that provide materials (such as cleaning supplies) and services (such as engineering or accounting) to operators (shown in red).

Similarly, transit expenditures and their multiplier effects support jobs in a broad range of occupations across the region, including transportation, administration, sales, construction, maintenance and repair, management, business and finance, food preparation and serving, security, and healthcare.

DBE/MBE Participation

To ensure that public funds support equity and result in investment in businesses owned by historically marginalized populations, many transit agencies set goals for proportion of funds going to DBEs/MBEs. Operators set their own DBE/MBE goals using a methodology provided by the FTA, which considers the history of DBE/MBE participation and the number of DBE/MBE businesses in the area.

Fiscal Year	CATS		CobbLinc		Connect Douglas		GCT		MARTA		Xpress	
	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual
2018	-	-	7%	13%	15%	0%	5%	4%	16%	23%	8%	16%
2019	-	-	7%	12%	15%	9%	6%	3%	25%	30%	8%	4%
2020	11%	32%	7%	4%	15%	7%	7%	3%	25%	31%	8%	6%
2021	11%	15%	7%	9%	2%	0%	7%	16%	23%	26%	10%	9%
2022	9%	41%	7%	5%	2%	0%	7%	14%	23%	TBD	10%	14%*

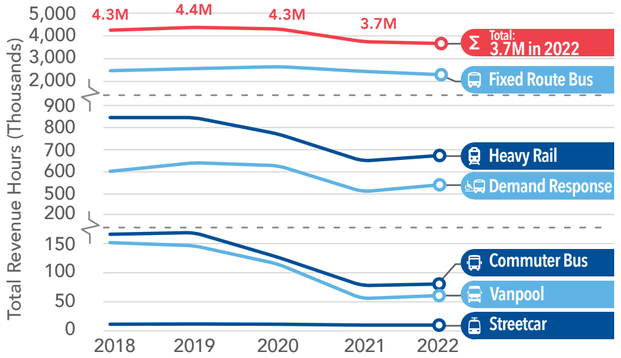
**Data provided by Xpress covers October 2021-March 2022*

- CATS, GCT, and Xpress all exceeded their DBE/MBE goals in 2021, with CATS exceeding its goal by more than a factor of four.
- **MARTA, the largest operator in the region, exceeded its DBE/MBE goal in all four years for which data were available.**
- Five operators—CATS, CobbLinc, GCT, MARTA, and Xpress—exceeded their goals in at least two years of the five-year period.

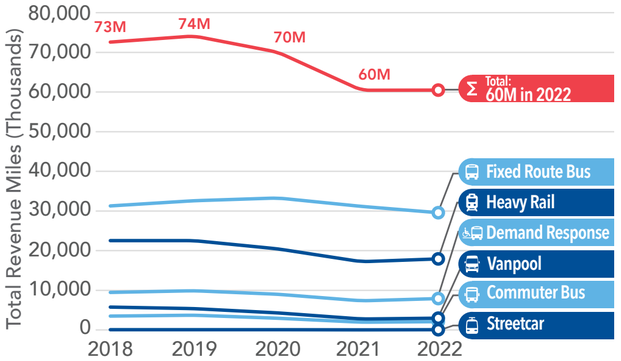
Disadvantaged Business Enterprise (DBE) and Minority Business Enterprise (MBE) refer to businesses that are majority owned and managed by historically marginalized populations, including people who are "African-Americans, Hispanics, Native Americans, Asian-Pacific and subcontinent Asian-Americans, and women" according to the U.S. DOT.

Operators in the Atlanta region continue to support economic equity by investing in businesses owned by historically marginalized populations.

TOTAL VEHICLE REVENUE HOURS BY MODE



TOTAL VEHICLE REVENUE MILES BY MODE



LEVEL OF SERVICE

Level of service measures the amount of transit service provided, typically in terms of vehicle revenue hours (VRH) and vehicle revenue miles (VRM).

Compared to 2021, levels of service provided in 2022 remained steady.

Level of Service by Mode

- Across all modes, operators in the region provided 3.7 million revenue hours of service in 2022, a decline of 2 percent from 2021 and a decline of 14 percent from 2018. Operators provided 60 million revenue miles of service in 2022, no change from 2021 and a decline of 17 percent from 2018.

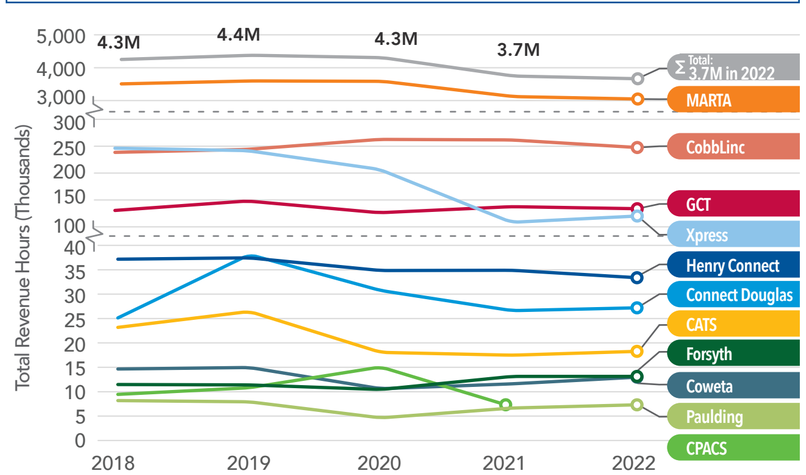
All modes saw an increase in service provided between 2021 and 2022 except fixed-route bus. **Fixed-route bus provided 6 percent fewer revenue hours and revenue miles of service in 2022; much of this decrease has been attributed to the worker shortage.**

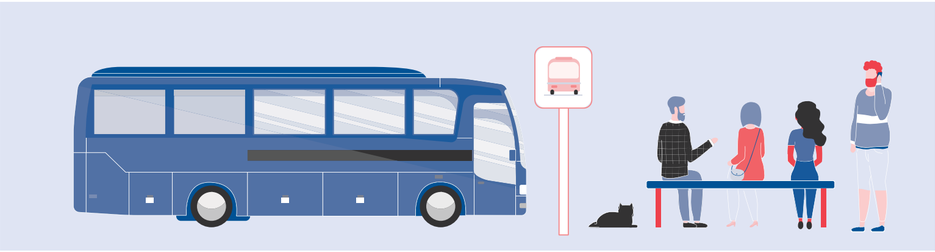
Level of Service by Operator

Compared to 2021, MARTA experienced a decrease in 6 percent of revenue hours, while **three operators provided more than a 5 percent increase in service in 2022**: Paulding with 10 percent, Xpress with 11 percent, and Coweta with 12 percent.

With the exception of Xpress, the percent change in VRH from 2018 to 2022 is less than the change in ridership in the same time period.

TOTAL VEHICLE REVENUE HOURS BY OPERATOR





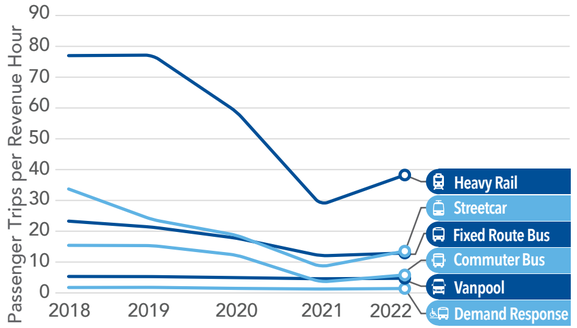
KEY FINDINGS

With the exception of fixed-route bus, all modes saw an increase in service provided between 2021 and 2022.

OPERATIONAL PRODUCTIVITY

Operational productivity is most commonly measured in passenger trips per revenue hour. Maximizing operational productivity results in the most efficient use of resources. Passenger trips per vehicle revenue hour is influenced heavily by factors that also influence ridership such as land use and density, demographics, fares, and external economic factors such as gas prices and economy strength.

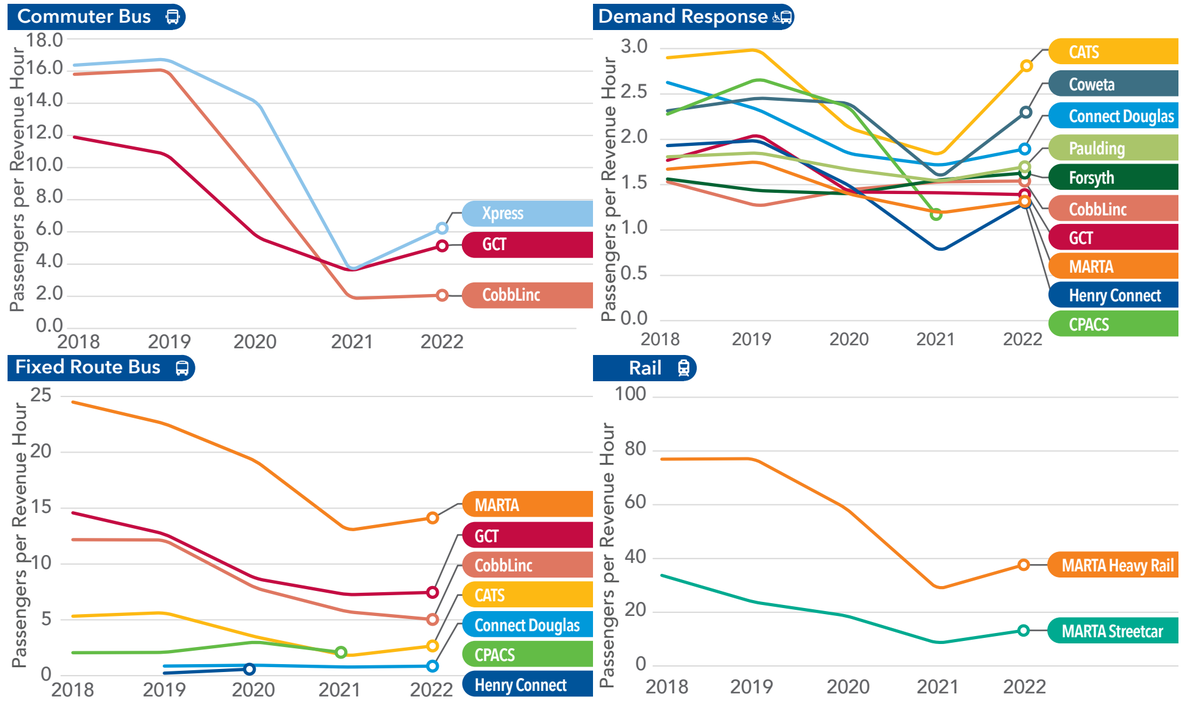
PASSENGER TRIPS PER VEHICLE REVENUE HOUR BY MODE



Passenger Trips per Vehicle Revenue Hour

- Regionwide, across all modes, transit vehicles served 16 passengers per revenue hour in 2022, a 19 percent increase from 2021 and a 48 percent decline from 2018. This reflects the fact that transit ridership declined more sharply than level of service during the pandemic.
- The modes with the greatest increase in trips per revenue hour between 2021 and 2022 are the same as those with the sharpest decline between 2020 and 2021: heavy rail, commuter bus, and streetcar.
- Passenger trips per revenue hour for commuter bus increased 65 percent from 2021 but declined 62 percent from 2018.
- Demand response passengers per revenue hour declined 19 percent from 2018; however, CobbLinc, Coweta, and Forsyth saw modest gains over the five years.
- Passengers per revenue hour for fixed-route bus declined 44 percent from 2018 to 2022. Each operator of fixed-route bus, with the exception of Connect Douglas, saw a decrease in passengers per revenue hour between 42 and 60 percent. Connect Douglas has only a 1 percent decrease in passengers per revenue hour since 2019, when it started offering fixed-route bus service.
- Heavy rail and streetcar had a decline of over 50 percent of passengers per revenue hour since 2018, but an improvement since 2021 of 34 percent and 60 percent, respectively.

PASSENGER TRIPS PER VEHICLE REVENUE HOUR BY SERVICE



KEY FINDINGS

Heavy rail, commuter bus, and streetcar experienced the greatest increase in trips per revenue hour between 2021 and 2022.

In the ATL region, commuter bus ridership in 2022 was:

18%

Of commuter bus ridership in 2019.

PEER COMPARISON: COMMUTER BUS OPERATIONAL PRODUCTIVITY

Commuter bus was the mode in the ATL region hit hardest in the pandemic, with ridership falling by 89 percent from 2019 to 2021. In the last year, as some 9-to-5 employees returned to in-person work, commuter bus started to recover some of its lost ridership, **increasing by 72 percent from 2021 to 2022.**

In response to the lower demand, the region's three commuter bus providers (CobbLinc, GCT, and Xpress) significantly reduced service, operating about 50 percent as much (both revenue hours and miles) in 2022 as they did in 2019.

Commuter bus providers across the country are facing the same issues. The charts on the opposite page look at eight commuter services in Atlanta's peer regions and compare 2019 to 2022 metrics.

The operators have differing fiscal years. On these two pages, the years reference their own fiscal years.

These operators offered differing volumes of service, both pre-pandemic and in 2022.

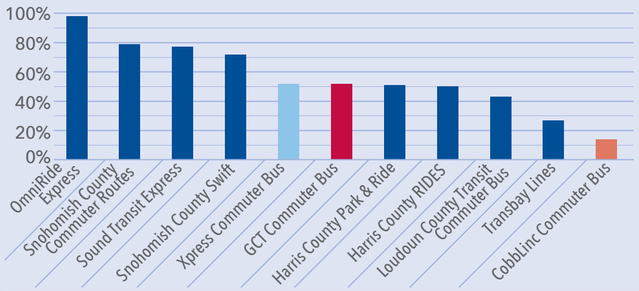
- OmniRide Express in Northern Virginia provided nearly the same amount of revenue hours in 2022 as it did in 2019.
- Xpress and GCT fall around the median of the 11 services, with 52 percent of VRH compared to 2019.
- CobbLinc offered the least amount of service relative to pre-pandemic.

Because of these differing service levels, it is more informative to look at operational productivity: the number of passengers per revenue hour. To understand how these operators performed in 2022 relative to pre-pandemic service, the chart at the lower right shows the rate of recovery of operational productivity, which divides 2022 operational productivity by 2019 operational productivity. For example, an operator with a rate of recovery of 50 percent has half as many passengers per revenue hour now as it did pre-pandemic.

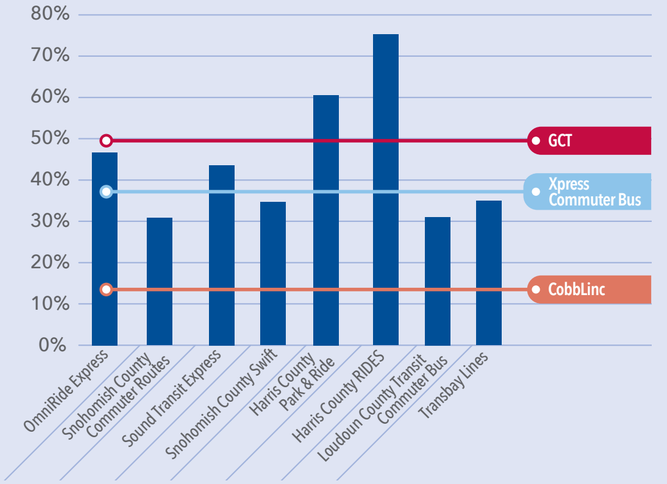
- GCT has the highest recovery rate of the region's three operators (50 percent). Among peers, only the Harris County services have higher recovery rates.
- Xpress's recovery rate (37 percent) is the median of the 11 peers studied.
- CobbLinc has the lowest rate of recovery among its peers, but it is also offering a significantly lower percentage of its pre-pandemic service levels compared to other operators.

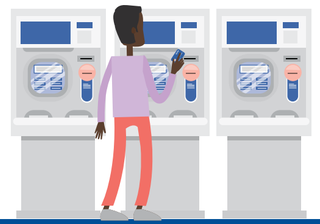
Xpress is preparing to conduct a "Return to Ridership" effort to attract more customers. For more information, see the "Looking Ahead" chapter, page 101.

FY 2022 VRH AS A PERCENTAGE OF FY 2019



FY 2022 RIDERSHIP PER VRH AS A PERCENTAGE OF FY 2019





KEY FINDINGS

In the Atlanta region, fixed-route bus and demand response are the modes with the lowest operating costs per VRH, and, with few exceptions, they did not see significant fluctuations between 2019 and 2021 during the COVID-19 pandemic. While the region's rail operators have higher operating costs per VRH, they also did not see significant fluctuations during that time.

The region's commuter bus operators saw significant increases in operating costs per VRH, rising from only slightly higher than fixed-route buses in 2018 to costs approaching those of rail in 2021.

FINANCIAL PRODUCTIVITY

Transit operators with higher financial productivity offer more service for every dollar spent. A strong market for transit service often correlates with higher financial productivity, as do other metrics such as ridership.

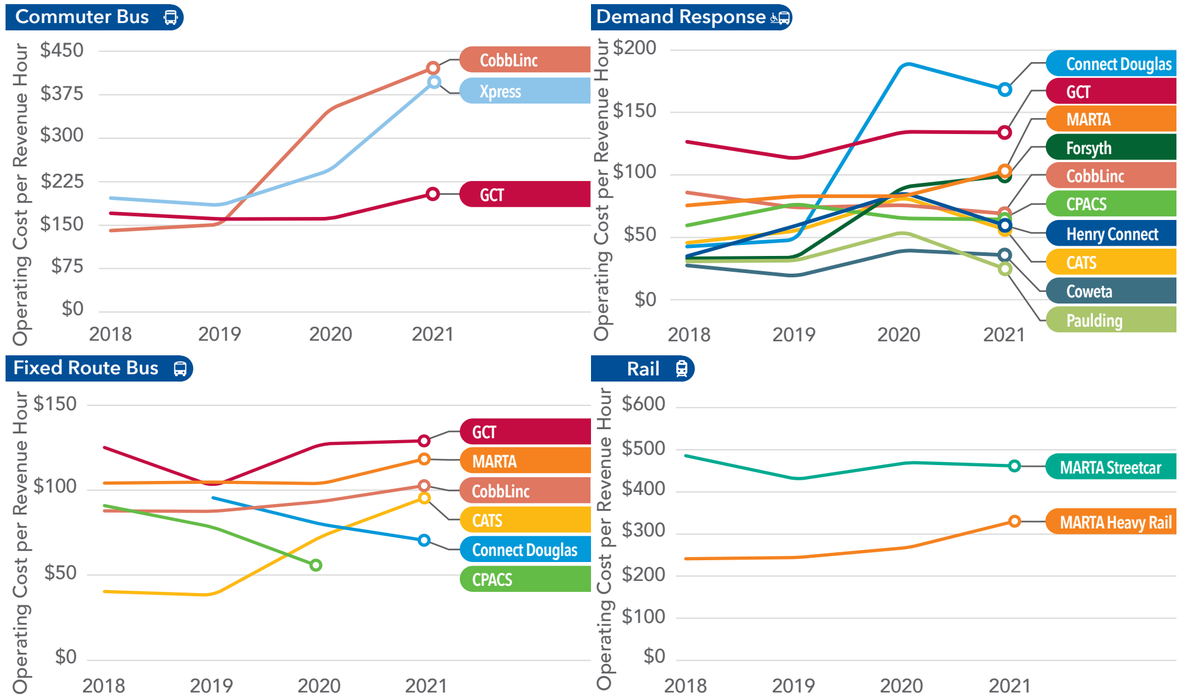
Operating Cost per Vehicle Revenue Hour

This KPI measures the cost for one person to provide an hour of service on one vehicle. The operating cost per VRH is influenced by multiple factors including operating speed, operator and staff wages, and general operating expenses. This metric varies by mode. Operating cost per VRH is highest for rail services, followed by commuter bus, and then by demand response and fixed-route bus services.

Operating cost per VRH is also affected by economies of scale and labor-related requirements. The data shown on the facing page has not been adjusted for inflation, which cause modest growth each year.

- Between 2020 and 2021, operating cost per VRH continued to increase for all commuter bus operators, as it also did between 2019 and 2020.
- For demand response, most operators saw operating cost per VRH increase from 2019 to 2020 and then decrease or remain flat from 2020 to 2021.
- Operating cost per VRH remained fairly constant between 2019 and 2021 for most fixed-route bus operators. Connect Douglas saw moderate decreases after 2019, while CATS saw moderate increases after 2019.
- Operating cost per VRH on MARTA's streetcar service saw only minor fluctuations. Meanwhile, after remaining flat between 2018 and 2019, cost per VRH began increasing on MARTA's heavy rail service in 2019.

OPERATING COST PER VEHICLE REVENUE HOUR BY SERVICE



Operating Cost per Passenger Trip

This KPI is another measure of financial productivity, and it examines how much a transit operator is spending on revenue service relative to the number of passengers using the service.

If a transit operator's ridership increases at a rate faster than its growth in operating expenditures, its performance on this metric improves. Contrarily, if an operator's ridership falls but its operating expenditures do not decline at the same rate, their performance on this metric suffers. During the pandemic, most operators did not cut service at a rate proportionate to their ridership decreases, resulting in upward trends for this metric.

KEY FINDINGS

As expected, this metric increased between 2020 and 2021 for all the modes that declined more in terms of ridership than in level of service.

Commuter bus operators, as well as MARTA's downtown-centric streetcar service, were significantly affected by ridership declines and saw the sharpest increases in operating costs per passenger trip.

1½ Commuter bus operators saw their operating cost per passenger trip increase significantly from 2020 to 2021 as ridership fell, after a few years of relatively steady figures.

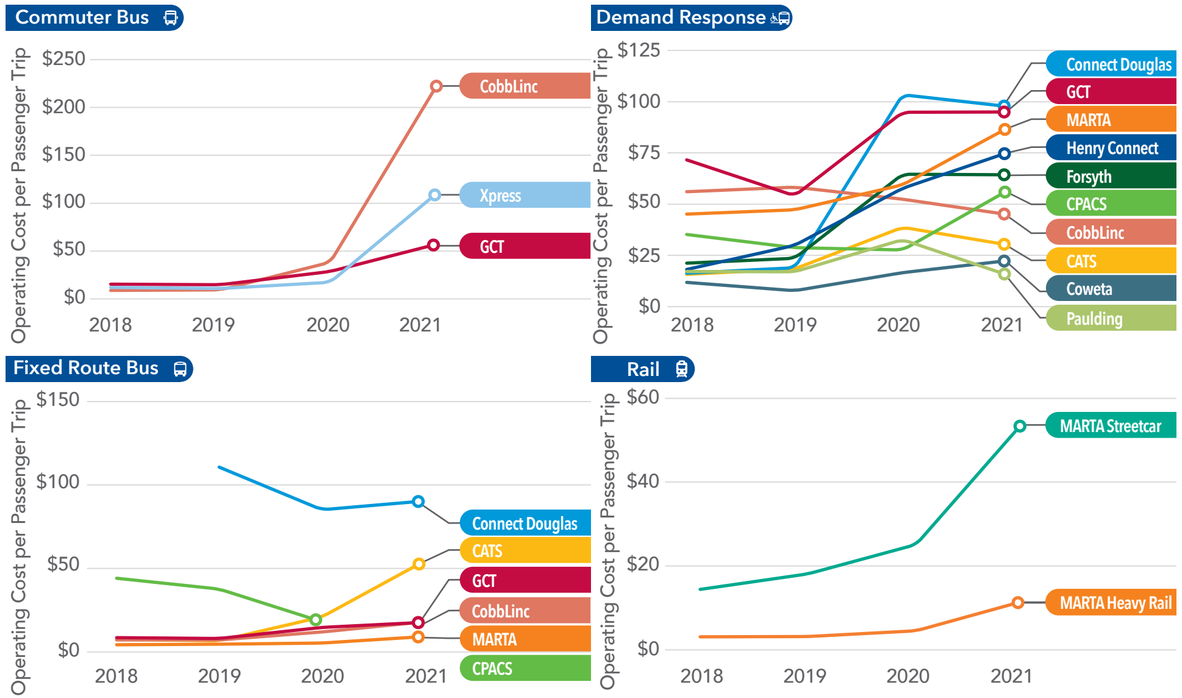
1½ Trendlines are mixed for demand response operators. From 2020 to 2021, four demand response operators saw increases while costs remained flat or began declining for the rest. Unlike other modes, the level of demand response service is easier to adjust in response to demand, leading to less consistency in this metric across operators; still, some decline would be expected as fixed operating costs were divided across a smaller number of trips.

- As ridership declined from 2020 to 2021, operating cost per passenger trip increased slightly for most fixed-route bus operators. Trends prior to 2020 were mixed.

5½ MARTA heavy rail service was flat from 2018 to 2020, with a moderate increase in 2021 due to significant ridership declines.

- MARTA's streetcar service saw moderate increases from 2018 to 2020, followed by a significant increase from 2020 to 2021.

OPERATING COST PER PASSENGER TRIP BY SERVICE



Farebox Recovery

Farebox recovery measures how much of a transit service's operating cost can be covered by fare payments. While this metric is informative, it should not be considered in isolation. A low farebox recovery is not necessarily a sign of poor financial productivity, because other priorities, such as keeping fares low to ensure accessibility for low-income residents, may be more important.

The drop in ridership induced by the COVID-19 pandemic affected farebox recovery for most of the region's transit operators. Because most operators kept some service available, operating costs did not decline as much as fare revenue did, so farebox recovery fell as a result. In addition, some operators provided zero-fare service in fiscal years 2020 and/or 2021, although most had returned to regular fares by FY 2022.

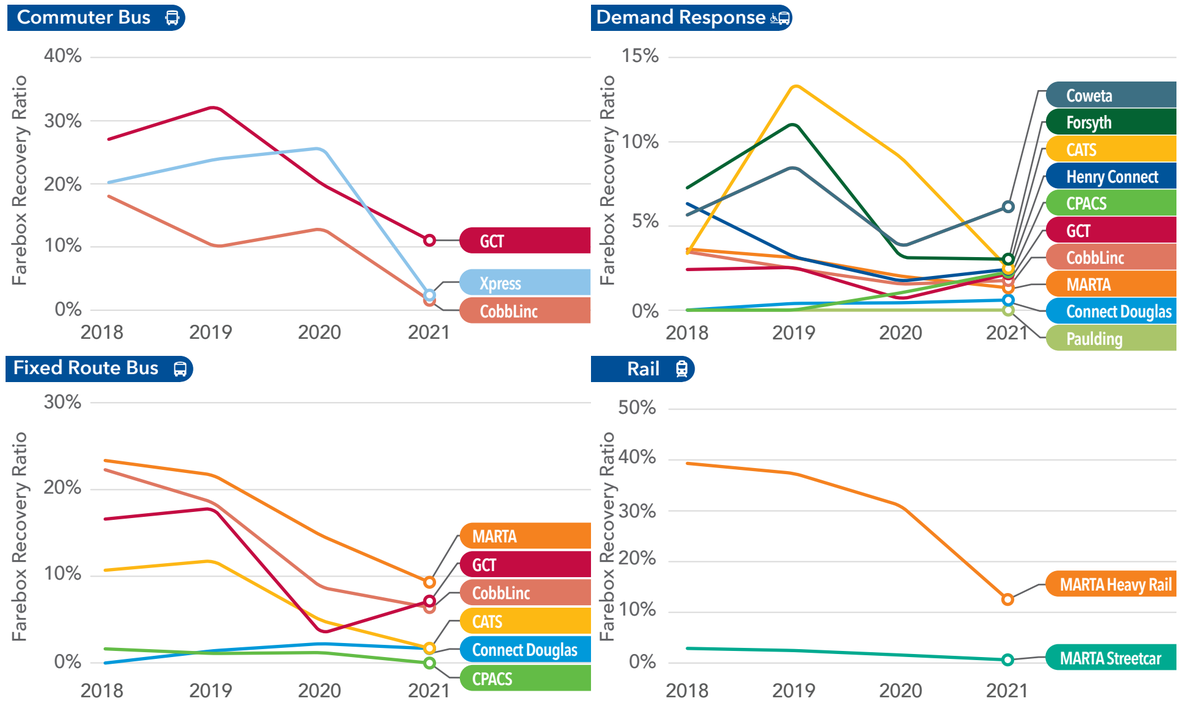
- Farebox recovery declined significantly for all commuter bus operators between 2020 and 2021, falling from 26 percent to 11 percent, respectively.
- Demand response operators reported a different trend: many operators saw declines in farebox recovery from 2019 to 2020 before the COVID-19 pandemic, but these declines leveled off for most operators after 2020. CATS is an exception: it continued to see declines from 2020 to 2021.
- Fixed-route bus operators saw declines in farebox recovery before the pandemic, and these continued during the pandemic. The upper bound for recovery fell from 22 percent in 2019 to 9 percent in 2021. Only GCT saw an increase in its farebox recovery from 2020 to 2021.
- MARTA's heavy rail saw its farebox recovery decline from 37 percent in 2019 to 13 percent in 2021. MARTA's streetcar service has historically had a very low farebox recovery.

KEY FINDINGS

While the COVID-19 pandemic's effect on farebox recovery is readily apparent, most operators began seeing declines in farebox recovery in 2019 (or earlier) before the pandemic, which is partially due to declines in ridership that began before the pandemic despite relatively constant or increasing operating expenditures. This can also be the case when operators do not increase fares in a way that is commensurate with inflation, which is often true.

Most significantly, heavy rail and commuter bus services, which have historically had higher farebox recoveries in the range of 20 to 40 percent, saw their farebox recovery fall to around 10 percent or less.

FAREBOX RECOVERY RATIO BY SERVICE



FARE STRUCTURE

The table below compares the base fare structures of the region's transit operators. No operators reported fare changes from 2021 to 2022. More detailed fare information can be found in the Appendix.

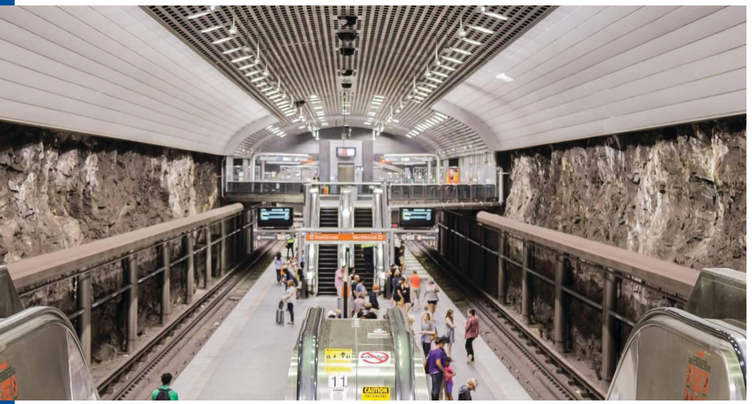
BASE FARE STRUCTURE			
Operator	**Fixed Route (Bus, Heavy Rail, Streetcar)**	**Commuter Bus**	**Demand Response**
CATS	$1.25	N/A	$1.50 for the first 5 miles; $0.30 per additional mile
CobbLinc	$2.50	$5.00	$2.50 (FLEX); $4.00 (paratransit)
Connect Douglas	$2.50	N/A	$1.00
Coweta	N/A	N/A	$3.00
CPACS	$2.00 or free for qualifying riders	N/A	$2.00 or free for qualifying riders
Forsyth	N/A	N/A	$2.00
GCT	$2.50	$3.75 to $5.00	$4.00
Henry Connect	N/A	N/A	$4.00
MARTA	$2.50 (bus and heavy rail); $1.00 (streetcar)	N/A	$4.00
Paulding	N/A	N/A	Free
Xpress	N/A	$3.00 to $7.00	N/A

- While $2.50 is the most common base fare for fixed-route services in the region, there are some lower fares: CATS riders pay $1.25 per trip and MARTA streetcar riders pay $1.00 per trip.
- Commuter bus fares vary between the three providers and range from $3.00 to $7.00 based on distance, though CobbLinc charges a flat $5.00.
- MARTA charges the same fare for fixed-route bus and rail service and does not vary the fare by distance.
- Fares vary considerably among the region's demand response operators, ranging from free (for qualifying paratransit riders) to $4.00. CATS charges distance-based fares for demand response trips over 5 miles.

KEY FINDINGS

Given the wide variety in fares and the challenges posed to riders transferring between different services across the region, ATL is currently developing a unified regional fare policy and exploring regional opportunities related to MARTA's next generation automated fare collection system (AFC 2.0) implementation. These efforts will simplify the fare payment process and improve the rider experience, all of which will enhance the connectivity of the region's transit network.

A single fare card used on all the region's transit providers will be a critical ingredient in creating a more seamless and cohesive regional transit system.



KEY FINDINGS

Low monthly pass usage among fixed-route bus riders supports the finding that pre-COVID travel patterns have changed significantly after 2020.

In response to the high usage of single-trip fares, operators should explore future fare offerings that are economical and easy to purchase for riders who may no longer be commuting by transit every day.

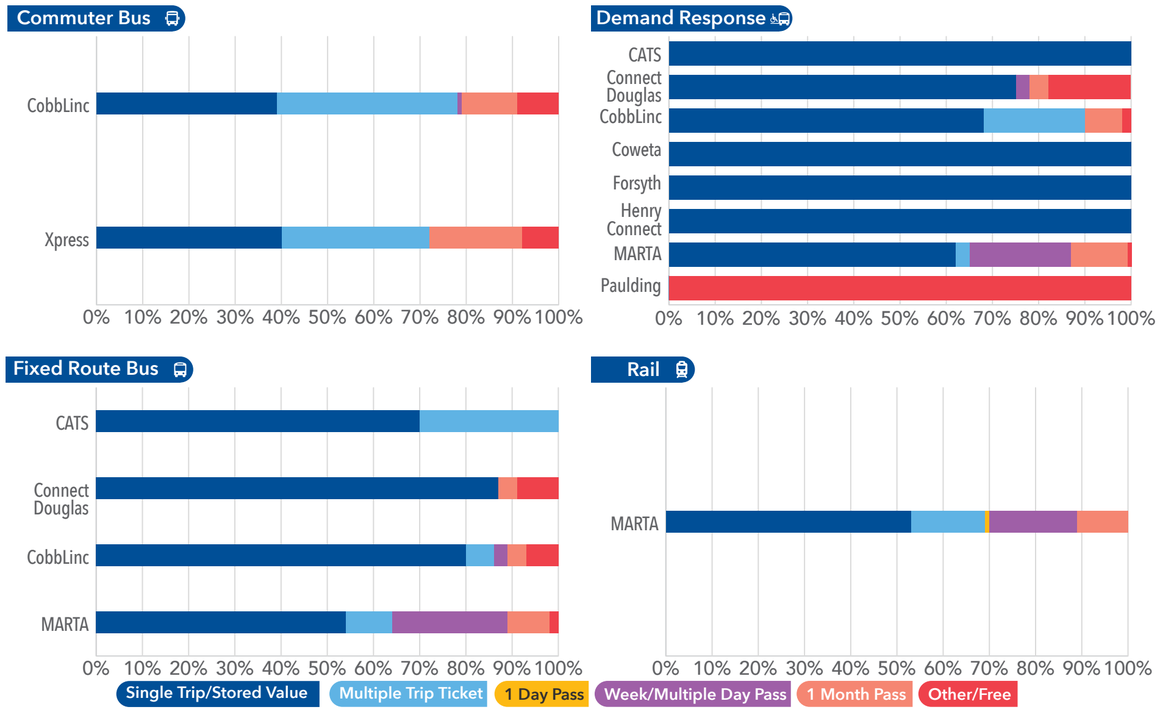
TRIPS BY FARE TYPE

This section explores how riders on the region's transit systems are paying fares. Comparing fare data across operators is imperfect given differences in both fare structures and data availability; more detailed information can be found in the Appendix. Not all operators were able to provide data.

The charts at right show the ticket or pass types riders are using on transit trips by mode and operator.

- Single trip payments (including stored value) were most common among almost all modes and operators, with multi-pass tickets making up the second most common fare apart from multi-day passes, which only make up a large portion of fares for MARTA.
- While no trend information is available yet, it seems likely that with many riders taking transit less frequently, the usage of monthly passes has declined. **In fact, MARTA had the highest usage of monthly passes in FY 2022 at only 9 percent.**

TICKET OR PASS TYPE BY MODE AND OPERATOR (FY 2022)



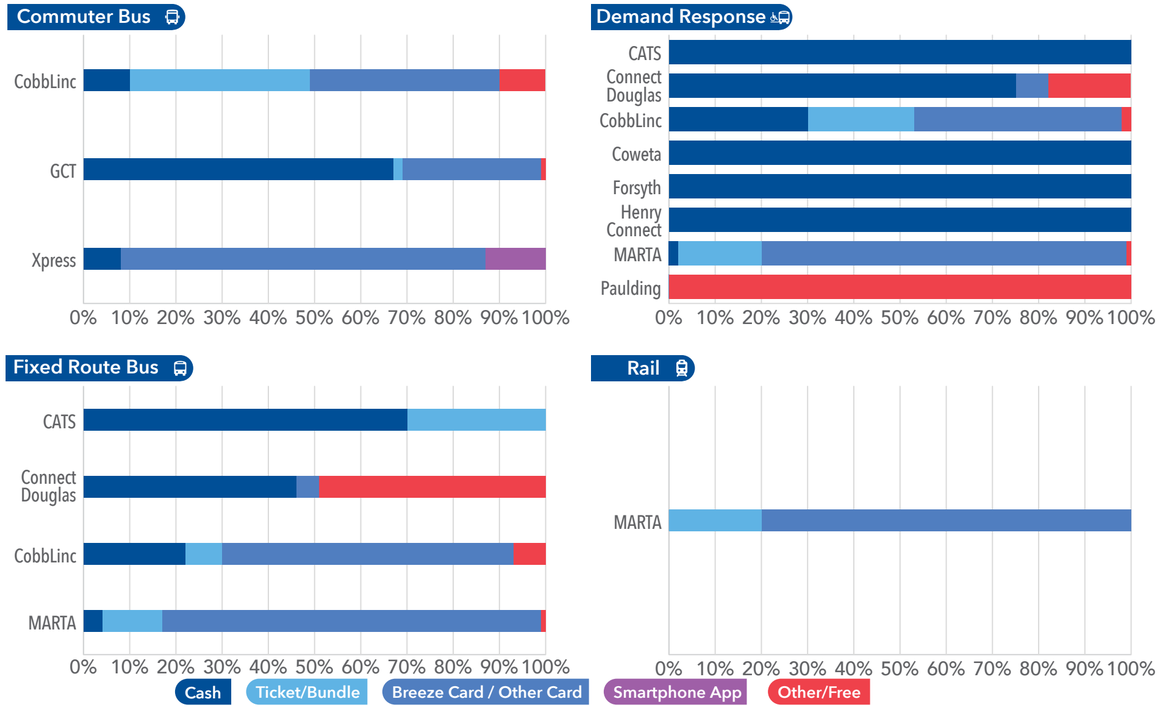
It is important to note not all of these providers offer all of these fare types.

FARE PAYMENT METHOD

This metric explores the medium riders are using to pay for transit trips: cash, paper tickets or ticket bundles, physical passes/cards, smartphone apps, or some other method, including transfer vouchers or traveling for free.

- Among commuter bus riders, GCT stands out with a high proportion of riders paying cash fares. Tickets and passes are the most common fare payment methods for CobbLinc and Xpress commuter bus riders.
- Cash is the most common fare payment method for riders on several demand response services, especially for smaller demand response operators that lack other fare payment technologies.
- Among fixed-route bus riders, cash still plays an important role (again, especially for riders on smaller operators) but Breeze Cards and other passes dominate among riders on larger operators. Sizable majorities of CobbLinc and MARTA riders, for example, use some form of the Breeze Card.

FARE MEDIA USAGE BY MODE AND OPERATOR (FY 2022)



It is important to note not all of these providers offer all of these fare types.

KEY FINDINGS

Given increasing post-pandemic roadway congestion, many fixed-route transit operators are consequently beginning to see their on-time performance fall from the peaks in 2021.

Investing in transit priority treatments, such as dedicated bus lanes, priority/express lanes, and transit signal priority, is likely to be critical to enhancing on-time performance to or above the levels seen in 2021.

ON-TIME PERFORMANCE

Transit riders are sensitive to on-time performance (OTP), which has a profound impact on customer experience. If transit is unreliable, trust in the service erodes and riders will shift to other transportation modes.

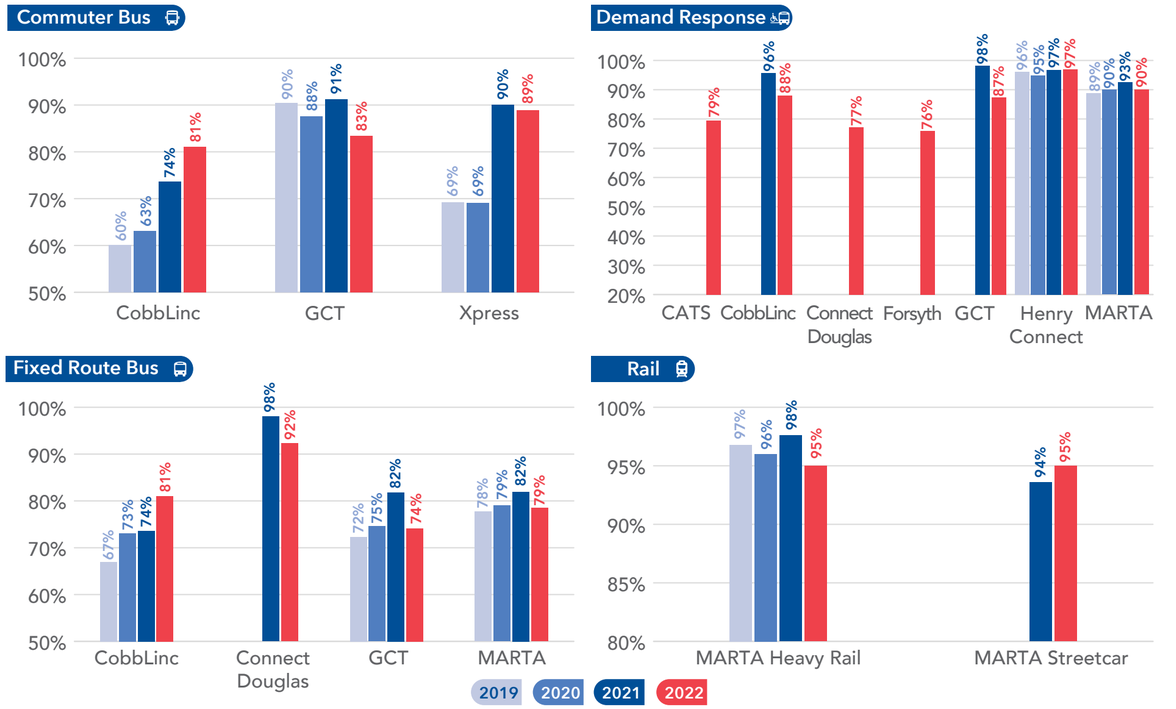
Most of the ATL region's fixed-route bus, commuter bus, and rail operators define "on time" as between zero minutes early to five minutes late from a scheduled departure.[9] Most of the region's demand response operators define "on time" as within a 30-minute window of the scheduled pick-up time.

Comparing OTP across operators can be challenging because there can be variations in how missed runs are accounted for, as well as in methods and technologies used to monitor OTP.

In 2021, OTP improved for all operators, reaching the highest levels since tracking began due in large part to reduced traffic congestion during the COVID-19 pandemic. However, by 2022 OTP began falling again. Still, many operators reported only minor or moderate drops in OTP from 2021 to 2022.

- Among commuter bus operators, CobbLinc continued to see significant OTP improvement, a trend that has continued since 2019. Xpress saw its high level of OTP remain nearly the same, while GCT saw a moderate decrease.
- There was little OTP fluctuation among demand response services, with the exceptions of CobbLinc and GCT. Notably, several demand response operators began reporting OTP for the first time in 2022, including CATS, Connect Douglas, and Forsyth.
- CobbLinc's fixed-route bus service saw a significant OTP improvement in 2022. The region's other fixed-route bus operators all reported minor to moderate decreases in OTP.
- There was little OTP fluctuation among rail services, with MARTA's heavy rail service reporting a small decrease and MARTA's streetcar service reporting a small improvement.

ON TIME PERFORMANCE BY SERVICE



HOW CAN ON-TIME PERFORMANCE BE INCREASED?

Although on-time performance levels declined in the last year, they are still higher compared to before the pandemic, indicating that transit vehicles can achieve high levels of on-time performance when they are not stuck in traffic. Additional improvements are possible by...

- **Reducing the impact of traffic** on transit vehicles by implementing fixed-guideway transit (including dedicated lanes for buses) and/or priority/express lanes that can be used by transit vehicles.
- Investing in and effectively deploying **transit priority technology.**
- **Employing effective headway management** and schedule adherence practices.
- **Ensuring adequate staffing** to avoid missed runs or updating schedules to reflect staffing levels.

MILES OF DEDICATED RIGHT-OF-WAY IN THE ATL REGION

65 miles Express Lanes

46 miles Heavy Rail

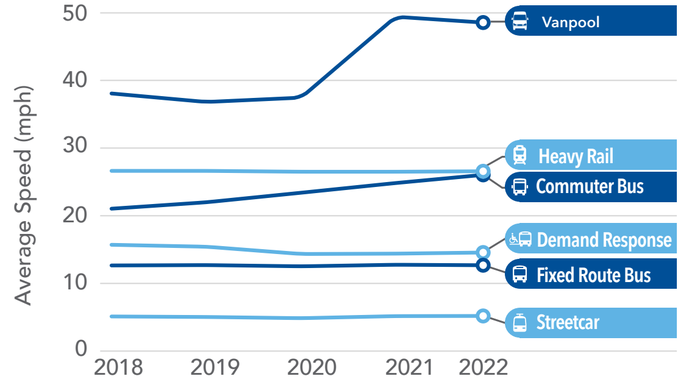
3 miles Streetcar

Average Travel Speeds

Average travel speed illustrates how quickly transit service carries passengers. It can be roughly estimated by dividing total VRM by total VRH. Operational speed is affected by numerous factors, including the frequency of stops and the presence of traffic congestion. Roadway priority, separated right-of-way infrastructure, fewer stops, and technology like transit signal priority can all increase transit travel speeds.

- Average speed remained fairly steady between 2021 and 2022 on all modes: all fluctuations were within a two mile per hour difference.
- The speed of the streetcar can be partially attributed to the fact that it operates in mixed right-of-way.

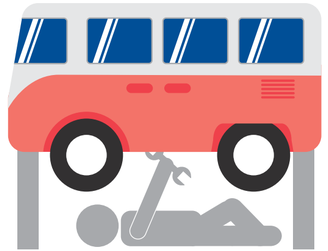
AVERAGE TRAVEL SPEEDS



ULB is the acceptable period of use for service for a capital asset, typically a vehicle. It is not necessarily unsafe to operate a vehicle beyond this benchmark, but operators should prepare a fleet replacement or refurbishment plan with ULB guidelines in mind.

This lifecycle varies by vehicle type, and the FTA provides guidelines for operators to adopt or adjust in either direction. Below are the ranges of benchmarks used by the operators in the ATL region; for a more detailed breakdown, see the Appendix.

Mode	ULB Range (years)
Commuter bus and Fixed-route bus	12-14
Demand response	5-12
Heavy rail	22-40
Streetcar	30



STATE OF GOOD REPAIR

State of good repair refers to the quality of an operator's assets, which for many operators consists predominantly of their fleet. An operator that invests in its fleet tends to have more reliable service, as vehicles break down less frequently.

The ARA covers three KPIs related to state of good repair: share of a fleet past its useful life benchmark (ULB) and average vehicle age, both of which are found in this section, and mean distance between vehicular failures (MDBF), found in the Appendix.

A younger fleet and a high MDBF are signs that an operator is adequately investing in state of good repair and thereby minimizing deferred maintenance costs and disruptions to service.

Average Vehicle Age and Share of Fleet Past Useful Life Benchmark

When a vehicle's age exceeds its ULB, it is more likely to incur maintenance costs or accumulate failures. A low average vehicle age and, more importantly, a low share of a fleet past its ULB are indicators that an operator is investing more in state of good repair.

The latter KPI can be more telling as operators can extend a vehicle's ULB by performing a rehabilitation or midlife overhaul. This process is less expensive than the capital cost of purchasing a new vehicle.

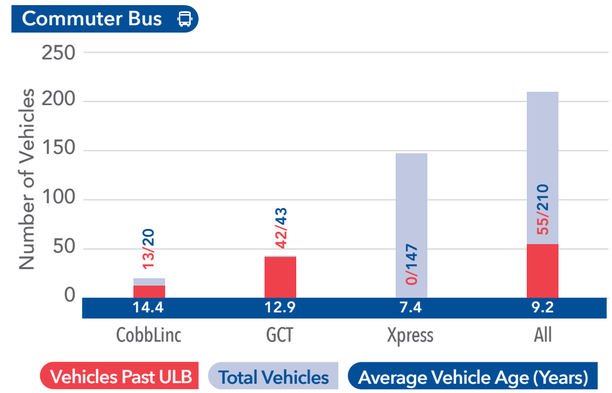
Across the region, there is a lot of variation between operators in terms of the condition of commuter buses.

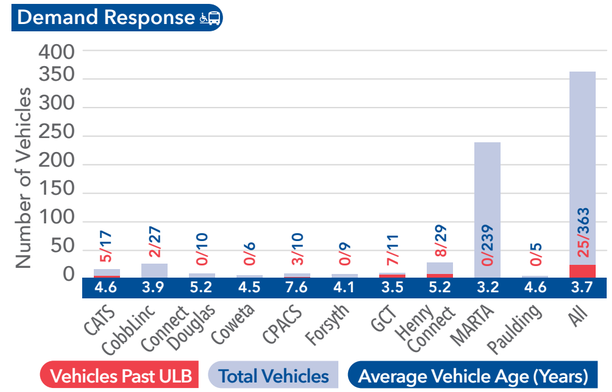
- Over a quarter (26 percent) of the region's commuter bus fleet exceeds its ULB, including more than half of CobbLinc's vehicles and all but one of GCT's. This is a significant increase from 11 percent in 2021.
- Xpress has worked to keep its entire commuter bus fleet within its ULB by performing midlife overhauls in 2016, which extended the ULB of 47 of its vehicles.

The vast majority of demand response vehicles in the region are within their useful life benchmarks.

- A total 7 percent of the region's demand response fleet exceeds its ULB. Five of the region's 10 demand response operators have no demand response vehicles that exceed their ULB.
- CATS, CobbLinc, GCT, and Henry Connect have all seen vehicles reach their ULB in the last year.

VEHICLES PAST ULB (COMMUTER BUS AND DEMAND RESPONSE)





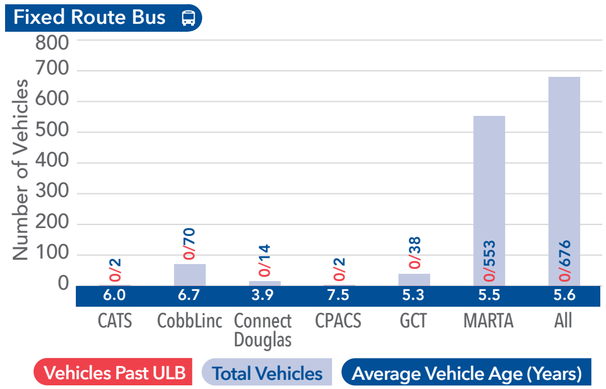
The fixed-route bus fleet has no vehicles that exceed ULB for the first time since the ARA began tracking this KPI.

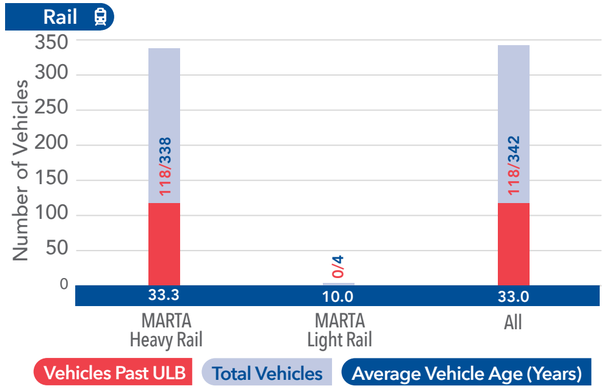
- Since 2019, investments in new buses across the region, especially by MARTA, have dropped this metric from 12 percent to 0 percent.

Thirty-six of MARTA's heavy rail fleet reached the end of their 40-year ULB in 2022, following another 36 passing that benchmark in 2021.

- There are plans for approximately 350 new rail cars to enter operation from 2023 to 2028, but passengers may feel the effects of the aging fleet before that plan can be fully implemented.
- The Atlanta Streetcar's four vehicles are not expected to reach the end of their ULB until 2042.

VEHICLES PAST ULB (FIXED ROUTE BUS AND RAIL)



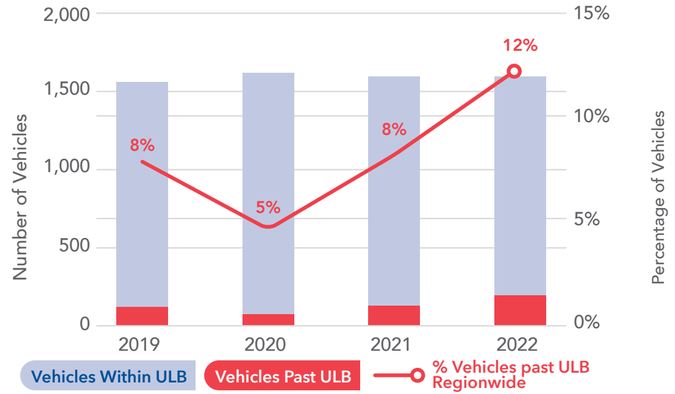


- In 2022, **12 percent of active revenue vehicles exceeded their ULB.** This increase, largely driven by the commuter bus and heavy rail fleet, continues a trend that began last year.
- Just like in 2021, five operators–Connect Douglas, Coweta, Forsyth, Paulding, and Xpress–did not operate any vehicles in 2022 that exceeded their ULB.

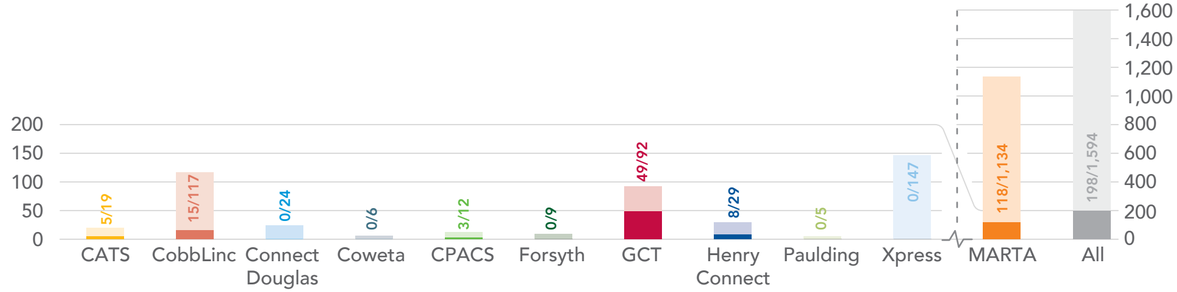
KEY FINDINGS

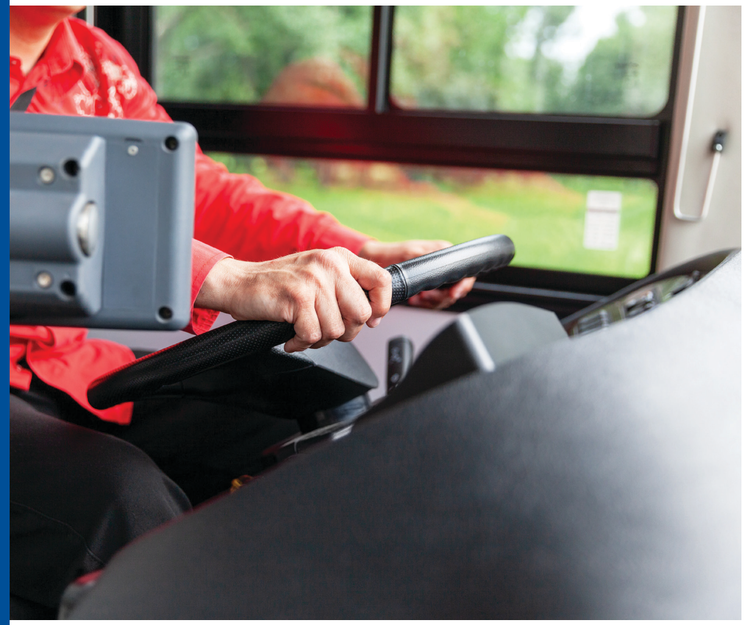
The changes in this metric over the last four years, with performance improving in 2020 and worsening over the last two years, illustrate the need for sustained, annual capital investment to maintain fleets in a state of good repair.

VEHICLES PAST ULB, REGIONWIDE, 2019-2022



VEHICLES PAST ULB BY OPERATOR





KEY FINDINGS

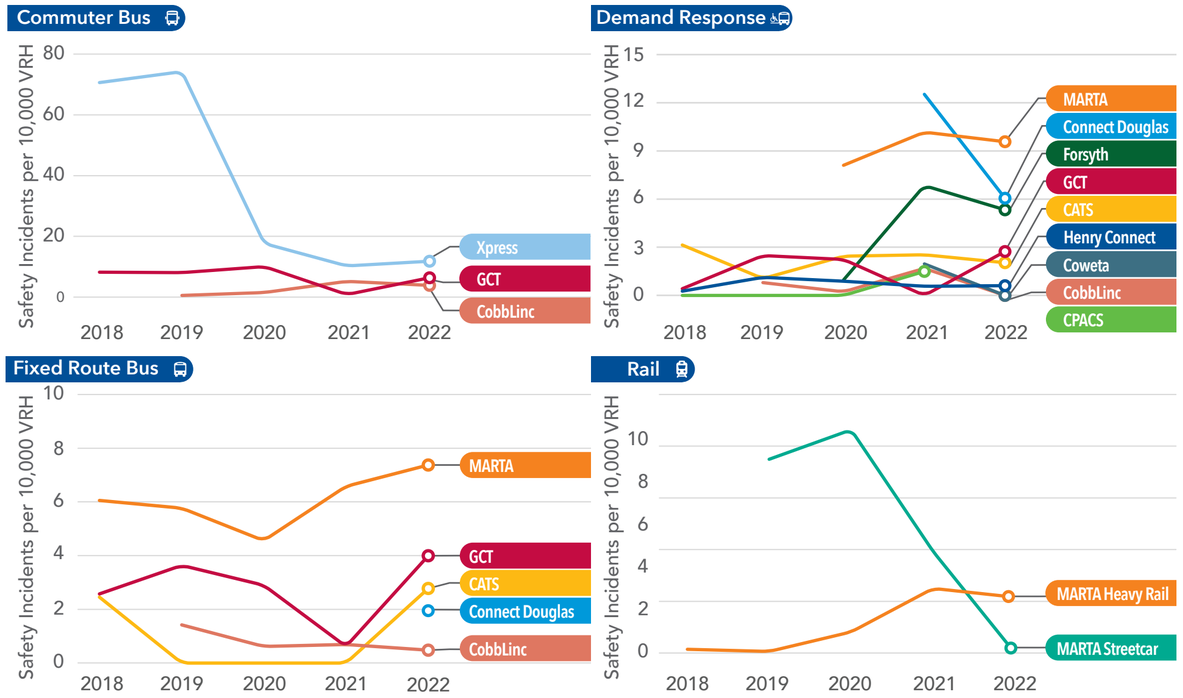
The safety of passengers and operators is a top priority for transit operators in the region. Safety rates have improved for some modes and worsened for others, highlighting the importance of continued attention to improving safety.

SAFETY

The safety of passengers, operators, and the public is the top priority for all operators. Safety incidents may include collisions, fires, derailments, evacuations, property damage, vandalism, assault or other crimes, injuries that require immediate medical transport, and fatalities. The following graphs show the number of safety incidents per 10,000 VRH.

- In 2022, CobbLinc commuter bus saw a slight improvement (i.e., decline) in its rate of safety incidents, while GCT and Xpress commuter bus had a slight increase in their rates.
- Demand response safety incident rates can fluctuate widely year to year, mostly due to the small number of incidents for this mode. In 2022, six operators–CATS, Connect Douglas, CobbLinc, Coweta, Forsyth, and MARTA–saw improvements to their safety incident rates.
- For fixed-route bus, only CobbLinc improved its safety incident rate in 2022 continuing a downward trend since 2019; other operators saw the highest levels they've had in the past five years.
- MARTA's streetcar greatly improved its safety incident rate, but MARTA heavy rail, saw its safety incident rate increase from less than one (per 10,000 VRH) in 2020 to over two in 2022.

SAFETY INCIDENTS PER 10,000 VEHICLE REVENUE HOURS



Transit operators in the Atlanta region want to provide the most positive experience possible for their passengers. Many have conducted customer satisfaction surveys in the past five years, and all keep track of customer comments and complaints. Of those that have conducted a customer survey, nearly all have received positive feedback overall.

CUSTOMER SATISFACTION

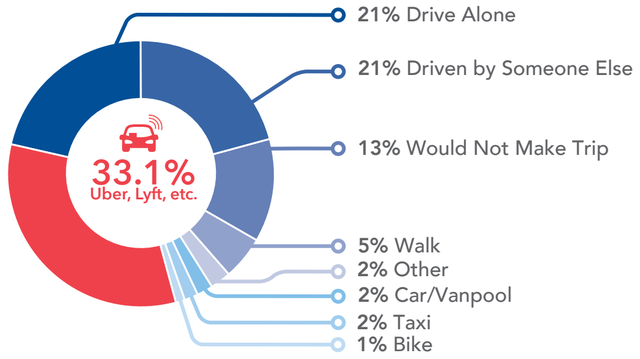
Transit agencies keep track of customer sentiments, including satisfaction and complaints, to understand their customers' experiences. Many agencies keep detailed logs of customer comments and complaints, including a record of the agency's response. Additionally, many agencies conduct customer satisfaction surveys. These surveys ask about the customer experience and quality of service and are often administered annually. For more detail, see the Appendix.

- CATS, GCT, MARTA, and Paulding all conducted surveys in 2022. Paulding and CPACS last conducted surveys in 2021 and 2018, respectively. The other operators did not report conducting a customer survey in the past five years.
- **In 2022 and 2020, 85 percent of survey respondents were satisfied with MARTA service, up from 76 percent in 2019.**
- In 2021, 80 percent of respondents to Xpress's survey were satisfied with Xpress service.

CUSTOMER SATISFACTION

Operator	Most Recent Customer Satisfaction Survey	Customer Complaint Log	Complaints are Addressed as They Arise
CATS	2022	✓	✓
CobbLinc	2020	✓	✓
Connect Douglas	–	✓	✓
Coweta	–	–	✓
CPACS	2018	–	✓
Forsyth	–	✓	✓
GCT	2022	✓	✓
Henry Connect	–	–	✓
MARTA	2022	✓	✓
Paulding	2022	–	✓
Xpress	2021	✓	✓

HOW WOULD YOU MAKE THE TRIP IF TRANSIT WERE NOT AVAILABLE?



Source: ARC 2019 on-board survey.

AIR QUALITY AND SUSTAINABILITY

Avoided Emissions

ATL works with its partners to provide more transit options in the region in support of environmental sustainability, one of its governing principles. Transit's environmental benefits can be understood by considering what would have happened if transit riders had driven vehicles instead.

The pie chart on the left summarizes the alternative modal options for Atlanta transit users.[10] Notably, the three largest alternative options—TNCs like Uber and Lyft, driving alone, and being driven by someone else—would result in increased vehicle miles on the road network. Using data on average transit trip length and ridership on rail and bus modes, an analysis finds that **transit is estimated to have helped the region avoid 155 million additional vehicle miles traveled on the roadways in FY 2022.**

The table below compares the emissions profile of avoided passenger vehicular travel to the emissions profile of fixed-route transit in 2022.

EMISSIONS AVOIDED DUE TO THE USE OF FIXED-ROUTE TRANSIT (US TONS AND $ OF SOCIAL COST IN 2022)

	Without Transit (Passenger Vehicle Travel)		With Fixed-Route Transit		Avoided Emissions	
Criteria Pollutant	Emissions Inventory	Social Costs of Emissions	Emissions Inventory	Social Costs of Emissions	Emissions Reduction	Social Benefit (Cost Savings)
CO	1,500	-	730	-	770	-
PM2.5	2.0	$1,715,400	0.8	$642,700	1.3	$1,072,700
PM10	2.3	-	0.8	-	1.4	-
NOx	140	$2,478,100	65	$1,157,500	75	$1,320,600
VOC	150	-	20	-	130	-
CO_2e	76,900	$4,491,400	69,800	$4,074,700	7,100	$416,700
Total		**$8,684,900**		**$5,874,900**		**$2,810,000**

In 2022, MARTA added six battery-electric buses to their fleet, the first all-electric local buses in the region. These new buses reduce the environmental impact of bus services.

$2.8M

In 2022, transit saved the region $2.8 million in social costs of emissions, based on estimated avoided greenhouse gases and other hazardous pollutants.

This represents a major savings in the region in terms of public health, environmental degradation, and quality of life.

The total CO_2 emissions avoided is the equivalent of planting 268,000 trees.[11]

SOFTWARE AND TECHNOLOGY

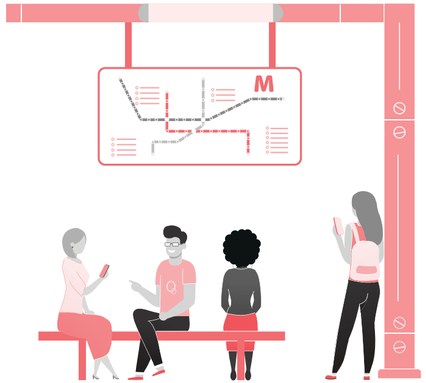
Running a transit system is a complicated operation, so transit operators use a variety of technologies to simplify their jobs. Transit agencies have technologies for use in scheduling, asset management, transit signal priority (TSP), automatic passenger counters (APC), automatic vehicle location (AVL), and camera systems onboard vehicles and at stops and stations. These technologies are useful for cost savings, safety, speed and reliability, improving the rider experience, and more.

- All operators use scheduling software and eight operators—CATS, CobbLinc, Coweta, Forsyth, GCT, Henry Connect, MARTA, and Xpress—use camera systems for customer and operator safety.
- Five operators—CobbLinc, CPACS, GCT, MARTA, and Xpress—use asset management systems to track vehicles and facilities.
- CobbLinc and MARTA use TSP technology to speed up trips and increase schedule reliability in congested areas on certain routes.
- Four operators—CobbLinc, GCT, MARTA, and Xpress—use APC and AVL technologies, which can help with tracking boardings and alightings, vehicle crowding, provide real-time arrivals, and more.

Investments in New Technology

Multiple operators made investments in new technologies in 2022. Investments in technology help ensure the region's transit operators are using the most up-to-date equipment, supporting higher performance and longer-term sustainability and competitiveness.

- CATS upgraded its scheduling software and camera systems.
- Connect Douglas upgraded its scheduling software.
- Xpress updated its APC technology.



TECHNOLOGIES IN USE

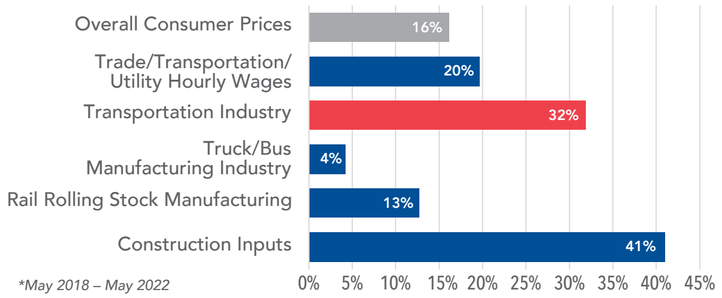
Agency	Dispatch/ Scheduling	Asset Management	TSP	APC	AVL	Camera Systems
CATS	TripMaster (2022)	–	–	–	–	Vestige (2022)
CobbLinc	Trapeze	InFor (contractor)	Applied Information (2019)	Clever Devices (2015)	Clever Devices (2015)	Apollo Systems (2016); Seon (2011)
Connect Douglas	QRyde (2019); Passio (2019); Paraplan (2022)	–	–	–	–	–
Coweta	QRyde (2018)	–	–	–	–	AngelTrax (2015)
CPACS	Rideschedule.com	Fleetio	–	–	–	–
Forsyth	QRyde	–	–	–	–	AngelTrax
GCT	Avail (2011)	Transtrack	–	Avail (2011)	Avail (2011)	TSI (2011)
Henry Connect	RouteMatch (2011)	–	–	–	–	Seon (2011)
MARTA	Trapeze (2020); BlockBuster (2020); Teledriver (2017); TransitMaster (2020)	Trapeze (2020)	Opticom	TransitMaster (2020)	TransitMaster (2020)	Apollo Systems
Paulding	QRyde	–	–	–	–	–
Xpress	Hastus Scheduling Software (2020)	InFor (contractor)	–	Clever Devices (2021)	Clever Devices (2020)	Apollo Systems (2017)

KEY FINDINGS

Technology facilitates transit operations and provides a more seamless and enjoyable experience for passengers. Transit agencies in the Atlanta region continue to upgrade and invest in the most up-to-date technology for all aspects of transit service for the benefit of passengers and operators.

Looking Ahead

PERCENT CHANGE IN PRICES MAY 2018 TO MAY 2022 (US)



*May 2018 – May 2022

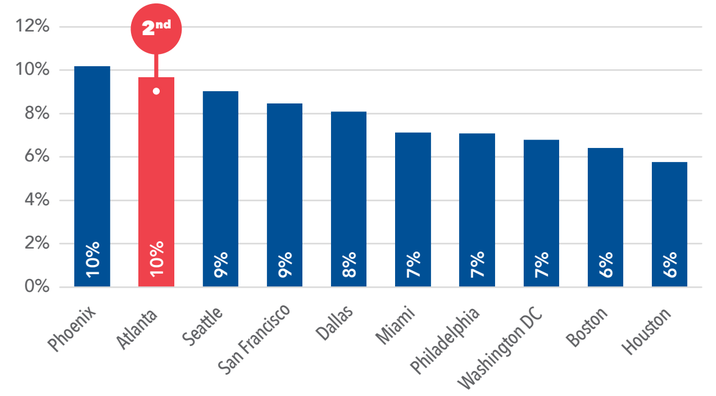
NATIONAL ECONOMIC AND LABOR TRENDS

Impacts of Cost Inflation

Inflation in industries that support transit operations will be a major consideration for transit agencies in the Atlanta region, as well as nationally, in the coming years. As shown in the figure below, overall consumer prices in the U.S. were up by 16 percent in May 2022 when compared with five years earlier in May 2018. Transportation has faced particularly strong inflationary pressures, driving up prices:

- Hourly wages for workers in the transportation, trade, and utility industries are up by 20 percent in five years. In the transportation industry overall, prices are up by 32 percent.
- **However, prices in industries that manufacture transit vehicles (rail and bus) are rising at a somewhat slower rate compared with overall consumer prices, at 13 percent and 4 percent respectively.**
- The Atlanta metro area has experienced a higher rise in consumer prices between 2018 and 2021 when compared with most of its peer regions.[12] The consumer price index (CPI)[13] rose by nearly 10 percent in Atlanta. The Phoenix metro area is the only region that experienced a higher increase in CPI, while Atlanta's eight other peers in the analysis had a lower rate of increase in CPI.
- **As a result, transit agencies can increasingly buy less with the same nominal budget.** At the same time people in the Atlanta region are seeing an overall increase in prices, exacerbating pre-existing transportation affordability challenges for many regional residents.

PERCENT CHANGE IN CONSUMER PRICE INDEX BY METRO AREA, 2018-2021



To continue to offer the service provided today, the ATL region will need to increase its investment in transit to keep up with these price pressures. An even higher level of investment is required to significantly advance transit service levels and quality.

Transit Worker Shortage

The entire nation is struggling with a worker shortage, and this is particularly true for the transit industry. This was a critical issue even prior to the pandemic, which only exacerbated it by accelerating retirement of older workers—particularly frontline vehicle drivers—and making it more difficult to replace them.

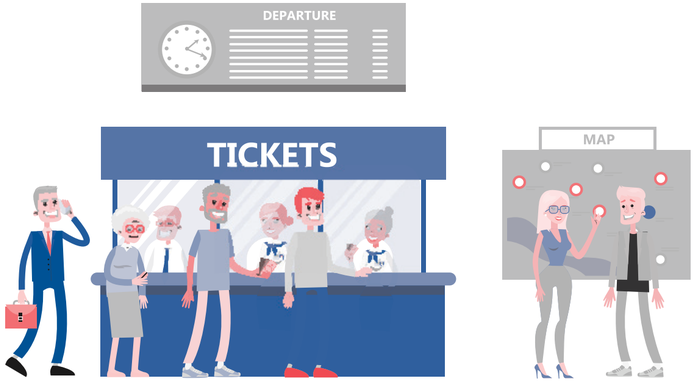
- A national survey of transit agencies found that **97 percent of respondents in urban areas are experiencing a workforce shortage; 90 percent of these agencies report that the shortage is affecting their ability to provide service.**
- **The roles with the highest vacancy rates nationally include: bus operators (17 percent), bus mechanics (13 percent), rail operators (10 percent), and rail mechanics (10 percent).**[14]

There are several factors that contribute to this difficulty:

- Job turnover and resignations increased during the pandemic.
- Increased turnover coupled with lower labor market participation has yielded a highly competitive labor market with fewer available workers.
- Transit agencies struggle to compete with private employers, particularly around compensation and benefits.
- Workers may also leave transit agencies for jobs with better hours or less weekend work.
- Occupational licensing requirements such as the Commercial Driver License (CDL) required to drive a bus can be a significant barrier for recruiting new workers to the transit industry.

Going forward, transit agencies need a comprehensive approach to successfully address these challenges. Strategies can include:

- **Updates to recruitment and retention practices** such as using technology and employee referrals to recruit appropriate candidates as well as finding ways to build partnerships with schools or other organizations to build a sustainable worker pipeline.
- **Providing competitive compensation and benefits packages**, as well as emphasizing clear paths to promotions and raises, is key—something that is only possible with sustainable transit funding. To retain employees, transit agencies are considering and testing a variety of strategies from increased pay to adjusted scheduling and a focus on worker safety.
- **Offering professional development including skills training and mentorship** as well as creating a positive and supportive work environment. For younger workers, professional development and advancement opportunities are particularly important.



Affordable Transportation and Pandemic Recovery

Transit provides value to residents of the Atlanta region by offering them a cost-effective mode to meet their travel needs:

- Transit, when available, provides a far more affordable transportation option, compared to car ownership. The American Automobile Association estimates the average annual cost of car ownership to be between $8,000 and $11,000[15] in 2021. Buying 12 30-day MARTA passes would cost much less, at $1,140.[16]
- According to a 2019 regional rider survey, 54 percent of transit users live in households with income below $30,000 per year and 64 percent report household incomes below $50,000.[17] (The federal poverty level for a family of four is $27,750.[18] Estimated living wage pre-tax income for a family of four with one adult working in the region is $77,854.[19])
- **For lower-income households, the availability of transit has a huge impact on the remaining household budget left for other essentials such as housing, food, childcare, health care, and a smartphone plan.**

Negative impacts from the COVID-19 pandemic—ranging from health issues to job loss and income reduction—have been particularly acute for low-income households.[20] National research conducted by United for ALICE defined an income threshold to identify households that do not make enough to cover a survival budget—including households in poverty and those that are **ALICE** (**A**sset-**L**imited, **I**ncome-**C**onstrained, **E**mployed). Surveys of people above and below this "ALICE" threshold found the following divergence in outcomes:

- By early 2021, 60 percent of households with incomes below the ALICE threshold experienced a loss of employment income, compared to 40 percent of households above the threshold.
- Survey respondents below the ALICE threshold were much more likely than those above to have difficulty covering their transportation needs (15 percent versus 3 percent).
    - People with income below the ALICE threshold were more likely to have trouble finding a new job. Seventeen (17) percent of jobseekers below the ALICE threshold reported that transportation is a barrier to securing employment, compared to 6 percent of those above the threshold.

Based on these figures, the provision of affordable transit is one important strategy to advance equitable regional recovery from the pandemic and its related economic challenges.

REGIONAL OPPORTUNITIES

Pursuit of More Funding

PRIORITY INVESTMENT LIST & SMART PROGRAM

The ATL and the region's transit operators have an opportunity to work together to receive further funding from the Bipartisan Infrastructure Law for major transit investments in the region. ATL's State Match Advancing Regional Transit (SMART) Program is a historic opportunity to increase Georgia's competitiveness in discretionary grants by identifying projects that should receive state funding, which can in turn be matched by up to four ($4) federal dollars for every state dollar invested. In spring 2022, the ATL Board made its first-ever SMART Program recommendation for two projects on the FY 2023 ATL Priority Investment List.

The recommendation to utilize state funding as the local match for discretionary grant applications resulted in a successful $25 million Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant award to MARTA for its Five Points Station Transformation and encouraging feedback from FTA on how to improve GCT's Gwinnett Place Transit Center Bus and Bus Facilities application for the next cycle. MARTA's award will rehabilitate above-ground portions of Five Points station by removing the aged station canopy, improving the bus bays, and revitalizing the station plaza and public space.

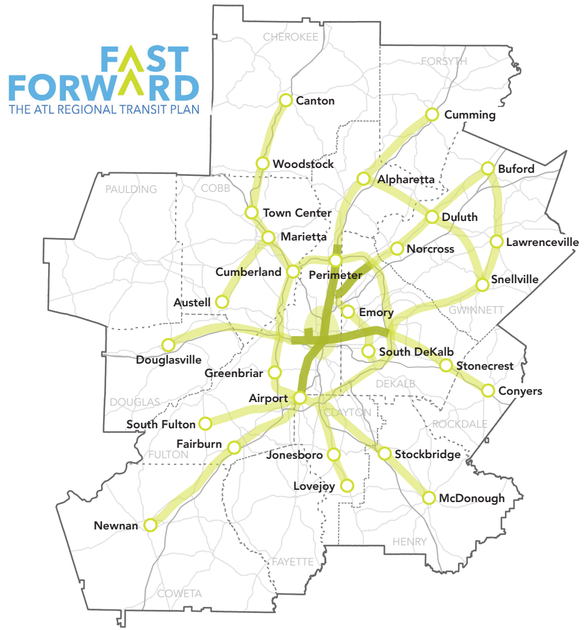
On September 1, 2022, the ATL Board approved the FY 2024 ATL Priority Investment List, comprising 19 project priorities across the region. The list also reflects a variety of project types—from supporting operators in achieving a state of good repair to implementing new critical transit service across all corners of the region.

The ATL Board will make similar SMART Program funding recommendations in 2023, helping to leverage federal funding for transit and expedite project delivery. The ATL will also continue to work closely with state partners to maximize non-discretionary dollars and advance project development from planning to implementation.

REGIONAL FLEET TRANSITION PLAN

The ATL is actively preparing a Regional Fleet Transition Plan, which is designed to create a clear path forward for fixed-route public transit operators to fully transition their bus fleets to zero-emission buses. The plan will meet operators where they are, recognizing there is not a one-size-fits-all solution for operators with varying fleet sizes, varying service types, and in varying stages of transitioning. **The resulting plan will also provide agency-specific recommendations as well as integrated regional recommendations that highlight areas for coordination and infrastructure investments among operators.**

In addition to moving the region towards cleaner energy and supporting regional sustainability goals, **the plan will position the region's six participating operators to better compete for federal funding as significant new funding opportunities now require a zero-emission transition plan.**



Priority Regional Transit Network

This illustrative network is a policy tool designed to:

- Promote regional connectivity + address transit needs
- Build upon utility of prior studies and active efforts
- Optimize project delivery

EXISTING MARTA RAIL
KEY CONNECTION
INTERSTATE
STATE HIGHWAY
COUNTY
ATL BOUNDARY

Data-Informed, Forward-Looking Planning

FAST FORWARD: THE ATL REGIONAL TRANSIT PLAN

Metro Atlanta has made major strides in embracing a data-informed and forward-looking approach to planning. The ATL and its partners are working closely together to create a true regional vision for transit planning, responding to the region's needs now and in the future. ***Fast Forward* will establish a prioritized and phased approach to building a regional transit system, one that synthesizes discrete projects and initiatives across all counties and all operators into an action plan for implementation.** This approach helps to eliminate silos between jurisdictions and between transportation providers. It also moves outside of the project-by-project approach to affect change, instead prioritizing investments based on their regional impact.

PRIORITY REGIONAL TRANSIT NETWORK

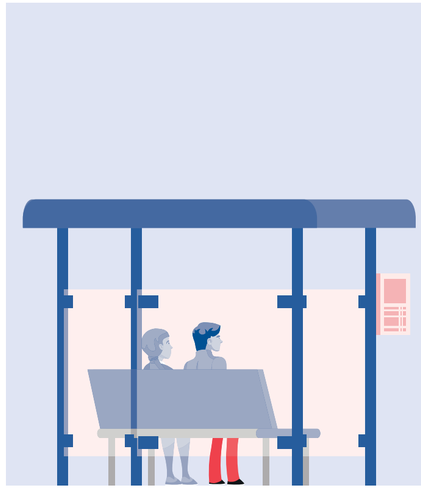
The ATL has worked with operators to create a Priority Regional Transit Network, which identifies key corridors for transit project investment. **This analysis demonstrates a long-term vision for a more connected region and aims to leverage federal, state, and local funding opportunities.** The Priority Regional Transit Network additionally builds upon the utility of prior studies and efforts and optimizes project delivery timeframes. This network will help inform funding and planning decisions and promote the implementation of *Fast Forward*.

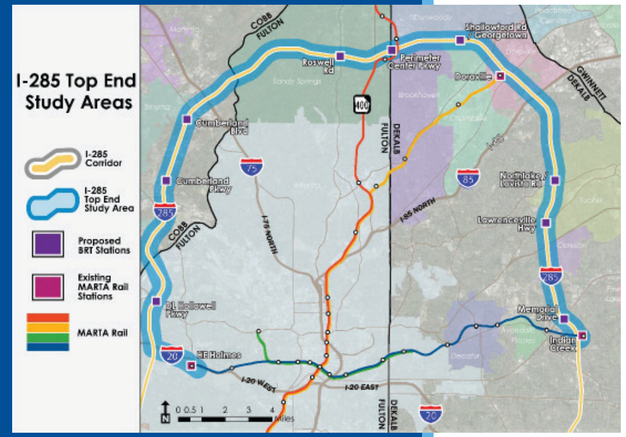
RETURN TO RIDERSHIP

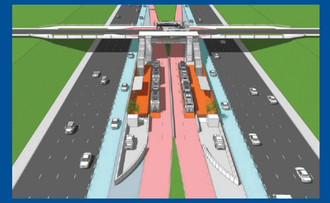
ATL Xpress is preparing to conduct a Return to Ridership effort focused on boosting Xpress ridership and meeting the needs of Xpress customers in a post-pandemic environment. The effort will examine how to get people back onto transit, from marketing and customer research to identifying future service adjustments. Return to Ridership will inform how to build rider confidence, appeal to riders, and re-engage with Xpress customers.

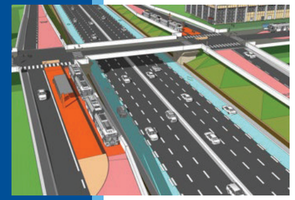
Branding

As required by its enabling legislation, the ATL is currently working with all operators to implement a unified branding effort across the region. By January 1, 2023, all vehicles and trains will incorporate the ATL logo alongside their own unique brand to demonstrate the coordination between the ATL and local operators. **This effort further realizes the vision lawmakers had when building the authority as an entity that unifies the metro Atlanta area across operators, counties, cities, and localities.**









Top End

The ATL was proud to facilitate an agreement with MARTA, GDOT, ARC, and Cobb, DeKalb, Fulton, and Gwinnett counties to study and plan for the incorporation of transit service into GDOT's planned Express Lanes. **This agreement represents a historic collaboration of MARTA and non-MARTA counties along with key state and regional agencies to explore next-generation multi-jurisdictional regional transit service that will utilize and leverage the State's planned expansion of Express Lanes on I-285.** Incorporation of bus rapid transit, or BRT, into GDOT's managed Top End Express Lanes project has been championed by a coalition of cities and CIDs along the I-285 Top End corridor. The I-285 Top End Express Lanes project is expected to greatly reduce congestion in the region for drivers, while also increasing on-time transit performance and accessibility.

The I-285 Top End Transit Initiative is now in its third phase of study with a focus on station planning and coordination with GDOT. Preliminary station design plans are expected to be completed later this year. The work conducted under this memorandum of understanding will build upon the earlier studies conducted by the Top End Executives Committee—a coalition of key local stakeholders comprised of the mayors of Brookhaven, Chamblee, Doraville, Dunwoody, Sandy Springs, Smyrna, and Tucker, along with leaders from Perimeter CIDs, Cumberland CID, Tucker CID, Chamblee Doraville CID, and DeKalb County. It also formally incorporates leaders from Cobb, Fulton and Gwinnett into the effort. The results of the work will help establish cost estimates and provide information to GDOT for use in its I-285 Top End Express Lanes P3 project discussions.

Appendix: Data Sources and Methodologies

This appendix provides an overview of data sources, data availability, analysis methodologies, and notes about assumptions that were made using data available to conduct analysis.

REPORTING CHANGE NOTE

Until FY 2018, CobbLinc reported data (e.g., ridership, VRH, VRM, etc.) on the Xpress-branded commuter routes it operates to NTD, while the State Road and Tollway Authority (SRTA) (which was formerly responsible for overseeing Xpress operations) omitted this data from reporting to NTD on the Xpress system. Beginning in FY 2019, Xpress began reporting data on these two routes to NTD, and CobbLinc no longer reported the data.

TRANSIT PERFORMANCE DATA SOURCES

To show trend data for the KPI analyses in **Chapter 3**, for relevant metrics, data from the NTD for 2018 through 2020, and data as reported to the NTD for 2021, were used. For 2022, operators provided current data directly from their tracking systems. In most cases, this data has not yet been audited of reviewed for adequacy for NTD submissions.

For a majority of operators, financial data for FY 2022 had not been finalized and audited at the time of publication; for this reason, financial metrics are shown only for 2018-2021. In addition, other FY 2022 data may yet be reviewed and, in some cases, undergo slight adjustments prior to FY 2022 NTD submissions.

The NTD allows operators to report data according to their own fiscal years. Seven of the 11 operators operate on a different fiscal year than the ATL. CobbLinc, CATS, Forsyth, and Paulding operate on an October to September fiscal year, Connect Douglas and GCT operate on a January to December fiscal year, and CPACS operates on an April to March fiscal year. For these operators, FY 2022 data was requested by month so that the totals could be calculated for the ATL's fiscal year. For example, GCT provided ridership data on a monthly basis and the totals from each month between July 2021 and June 2022 were added to develop GCT's 2022 total. **Because of these adjustments to data to fall within the ATL's fiscal year, the numbers will not match the agencies' NTD submissions.**

In addition, some operators in the ATL region—including CATS, Coweta, CPACS, Forsyth, Henry Connect, and Paulding—are classified by the FTA as reduced reporters, meaning they operate fixed-route service but operate 30 or fewer vehicles across all modes and types of service and do not operate fixed guideway and/or high intensity busway. Reporting requirements of reduced reporters are less intensive; for example, they are required to report data annually, not monthly, and they do not have to report some metrics, like vehicular failures.

Some data collected for the ARA, such as data on customer satisfaction, technologies used, and on-time performance, are not required for reporting to the NTD by any operator. For these data, additional information regarding methods for collecting data and definitions (e.g., of on-time performance) was also collected to enable assessment of whether comparing data across operators was appropriate.

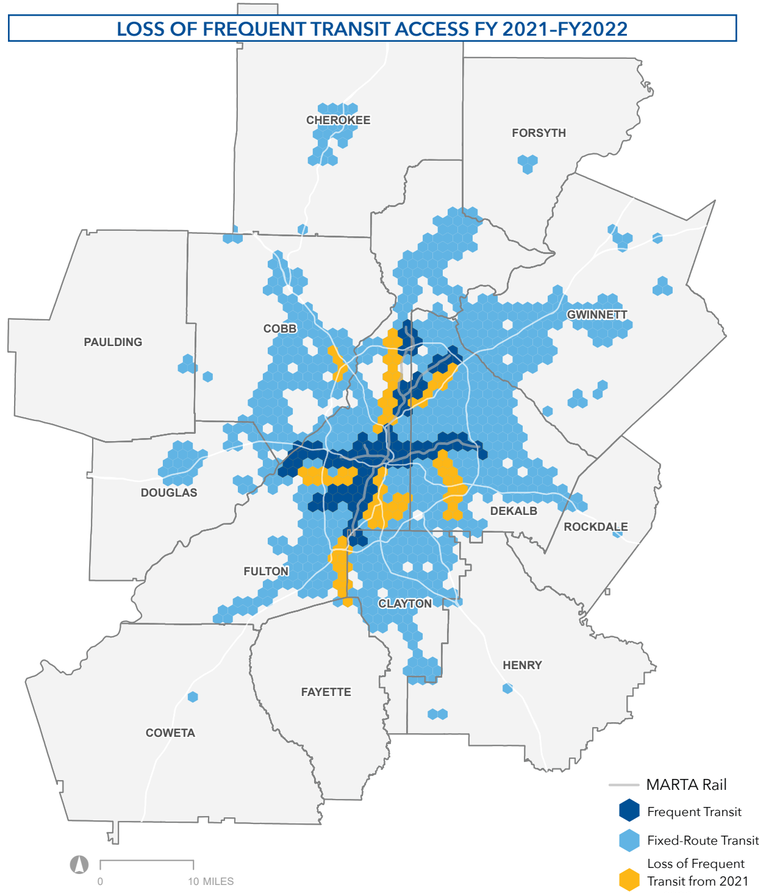
ADDITIONAL KPIs

This section includes additional KPIs that expand upon or supplement those listed in the main body of the ARA.

ACCESS TO FIXED-ROUTE AND FREQUENT TRANSIT

- Between 2021 and 2022, access to frequent transit in the ATL region declined significantly. According to MARTA's GTFS data, some bus routes which had average weekday frequencies of 15 minutes or better between 7:00 a.m. and 7:00 p.m. in 2021 no longer met that threshold by May 2022, due to schedule adjustments influenced by operator shortages. This map shows the corridors in Fulton, DeKalb, and Cobb counties which lost access to frequent transit as a result of those changes.

LOSS OF FREQUENT TRANSIT ACCESS FY 2021–FY2022



LEVEL OF SERVICE (VRM) BY OPERATOR

The figures on the opposite page show five-year trends for total VRM and passenger trips per VRM.

- Compared to 2021, levels of service provided in 2022 remained fairly steady. Four operators provided more than a 10 percent increase in service: Xpress with 11 percent, Paulding with 21 percent, Henry Connect with 24 percent, and Coweta with 34 percent.
- With the exception of Connect Douglas and Xpress, revenue hours of service provided in 2022 are more similar to those provided in 2018 than the number of trips in the same time period. This suggests that, despite the pandemic, riders are experiencing similar levels of service as they did pre-pandemic. For Connect Douglas, this decline can be attributed to the loss of vanpool service in addition to the pandemic.

PASSENGER TRIPS PER VEHICLE REVENUE MILE

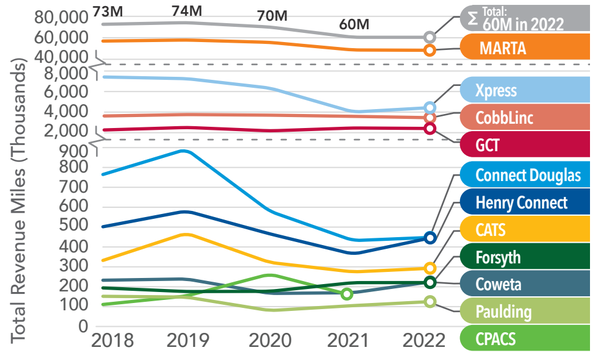
A higher value translates to more transit service provided per rider in the region.

- Regionwide, across all modes, transit vehicles served one passenger per revenue mile in 2022, a 16 percent increase from 2021 and a 46 percent decline from 2018. The declines reflect transit ridership declining more sharply than level of service during the pandemic.
- The modes with the greatest increase of trips per revenue hour between 2021 and 2022 are the same as those with the sharpest decline between 2020 and 2021: heavy rail, commuter bus, and streetcar.

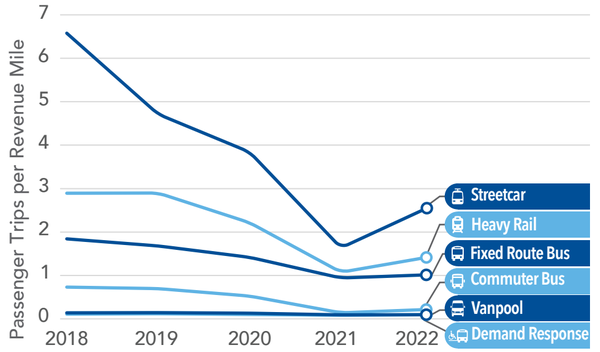
KEY FINDINGS

Passengers per revenue mile in 2022 increased 16 percent from 2021 but was 46 percent lower than 2018. This is due to transit ridership declining more sharply than level of service during the pandemic.

TOTAL VEHICLE REVENUE MILES BY OPERATOR



PASSENGER TRIPS PER VEHICLE REVENUE MILE BY MODE



HOW DOES OPERATING COST PER VRM DIFFER FROM OPERATING COST PER VRH?

For two operators providing the same amount of service in VRH at the same cost, one's operating costs per VRM could be higher if its vehicles travel shorter distances (e.g., due to operating in slower traffic conditions).

OPERATING COST PER VEHICLE REVENUE MILE

This KPI measures the cost to provide one mile of revenue service on one vehicle for each transit operator. The operating cost per VRM is closely correlated to the operating cost per VRH and is similarly influenced by factors such as operating speed.

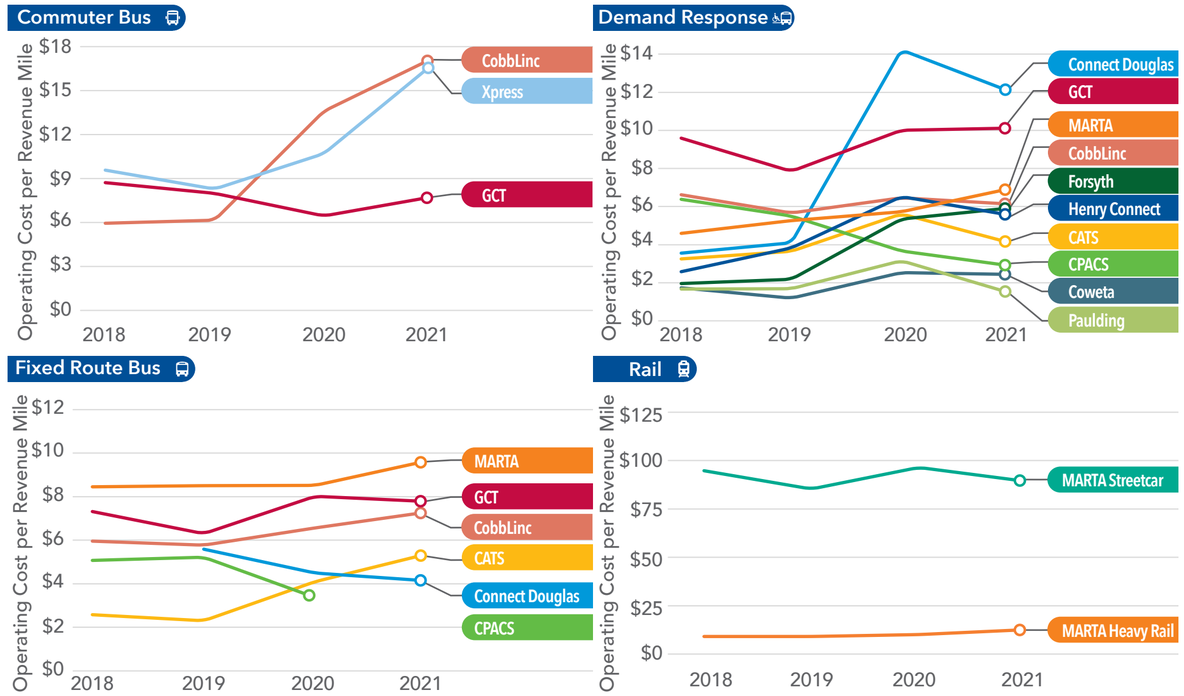
As with operating costs per VRH, operating costs per VRM are generally highest for rail services, followed by commuter bus, and then by demand response and fixed-route bus services. The data shown on the facing page has not been adjusted for inflation, which would be expected to cause modest growth each year.

- Between 2019 and 2020, operating costs per VRM rose for most commuter bus operators: while GCT saw a moderate decrease, Xpress saw a moderate increase, and CobbLinc saw a significant increase. Between 2020 and 2021, costs continued to increase for all commuter bus operators.
- Again, there was less fluctuation among demand response operators: between 2019 and 2020, most saw minor increases in costs, with Connect Douglas experiencing a significant increase. Between 2020 and 2021, costs remained flat or declined for most demand response operators.
- Costs remained fairly constant between 2019 and 2021 for most fixed-route bus operators. Connect Douglas saw moderate decreases after 2019, while CATS saw moderate increases after 2019.
- From 2018 to 2021, costs were relatively flat for both MARTA's heavy rail and streetcar services.

KEY FINDINGS

As with operating costs per VRH, the Atlanta region's fixed-route bus and demand response operators have the lowest operating costs per VRM, and, with few exceptions, they did not see significant fluctuations between 2019 and 2021 during the COVID-19 pandemic. The region's rail operators have higher operating costs per VRM, but they also did not see significant fluctuations between 2019 and 2021.

OPERATING COST PER REVENUE MILE BY SERVICE

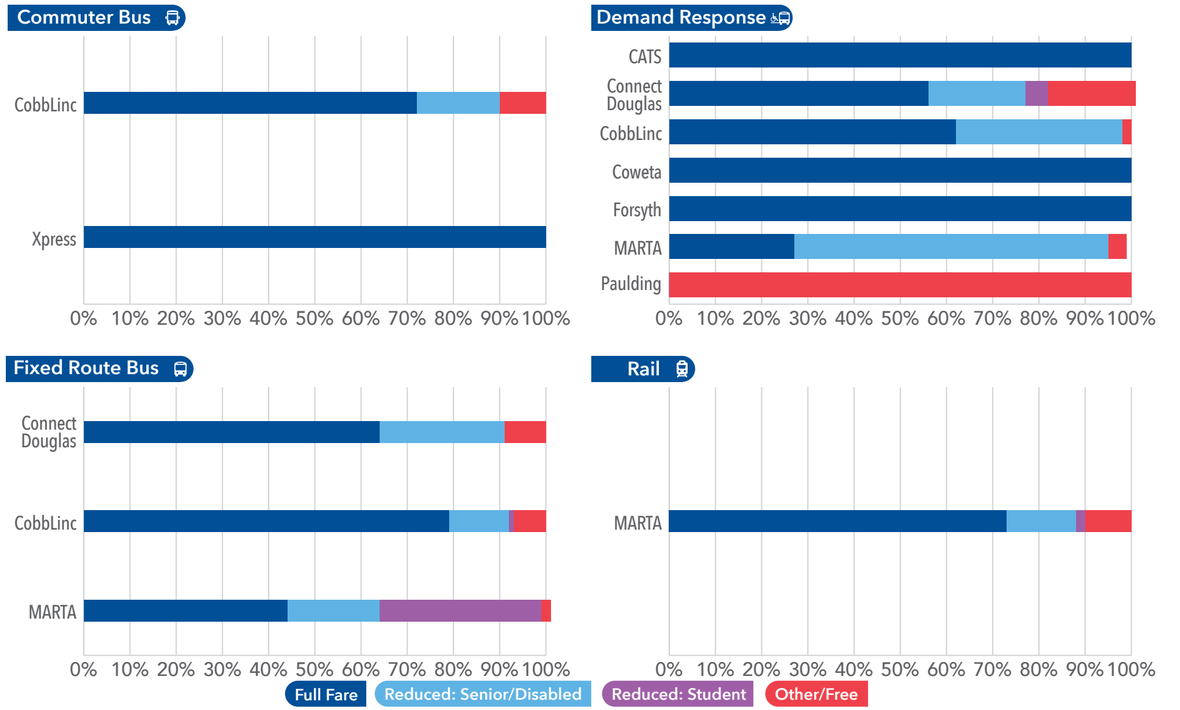


FARE STRUCTURE

The following table lists the discounted fares available for all the region's transit operators in 2022. There were no fare changes from 2021.

Operator	Fixed-Route Fare Structure					Response Fare Structure			
	Base	Seniors/ Medicare	People with Disabilities	Students/ Children	Transfer Discount	Base	People with Disabilities	Students/ Children	Seniors/ Medicare
CATS	$1.25 (adults and children over 42″)	$0.60	$0.60	Free (children under 42″)	None or unknown	$1.50 per one-way trip for the first 5 miles and $0.30 per mile over 5 miles			
CobbLinc	$2.50 (local) $5.00 (express) Free (circulator)	$1.00	Free (if certified for paratransit)	$1.50 (youth) Free (children under 42″)	Free with Breeze Card	$2.50 (FLEX one-way) $4.00 (paratransit adults) $3.00 (paratransit youth)			
Connect Douglas	$2.50	$1.00	$1.00	$1.00	Free paper ticket transfer to CobbLinc	$1.00 (one-way)			
Coweta	No fixed-route service					$3.00 (one-way)			
CPACS	$2.00 Free (qualifying riders)					$2.00 (one-way) Free (qualifying riders)			
Forsyth	No fixed-route service					$2.00 (one-way)			
GCT	$2.50 (local) $3.75 to $5.00 (express)	$1.25	$1.25	Free (children under 42″)	Free (built-in) based on ticket purchased; no external transfers	$4.00 (one-way) Free (qualifying riders)			
Henry Connect	No fixed-route service					$4.00 (one-way)			$2.00 (one-way)
MARTA	$2.50 (bus and heavy rail) $1.00 (streetcar)	$1.00	$1.00	Free (children under 46″)	Free with Breeze Card	$4.00 (qualifying riders)			
Paulding	No fixed-route service					Free (qualifying riders)			
Xpress	$3.00 to $7.00 (express)	$3.00 to $7.00 (express)	$3.00 to $7.00 (express)	Free (children under 42″)	Free with Breeze Card for internal and MARTA transfers; small charge for all other external transfers	No demand response service			

FARE BY COST CATEGORY



FARE PRICE CATEGORY

This charts on the opposite page show whether riders are paying full, reduced, or free fares when traveling. Common reduced fare categories include senior citizens, persons with disabilities, and students. Some of the region's transit operators offer fare-free travel to some of these demographic groups.

- Among commuter bus riders, a sizable majority paid the full fare, although 18 percent of CobbLinc commuter bus riders paid a reduced senior/disabled fare.
- Reduced fares were more common among demand response riders. Several demand response operators, including CATS, Coweta, and Forsyth, show full fare payments at 100 percent, but this is because these operators do not offer any known fare discounts for demand response riders.
- Reduced fares were somewhat less common, but still well represented, among fixed-route bus riders. Among Connect Douglas' fixed-route bus riders, 27 percent paid a reduced senior citizen/disabled fare, and this proportion was 13 percent and 20 percent for CobbLinc and MARTA, respectively.
- Notably, 35 percent of MARTA's fixed-route bus riders paid a reduced student fare.
- Roughly three-quarters of rail riders paid a full fare.

STATE OF GOOD REPAIR

The following table shows a more detailed breakdown of the ULB guidelines in use by the operators in the ATL region.

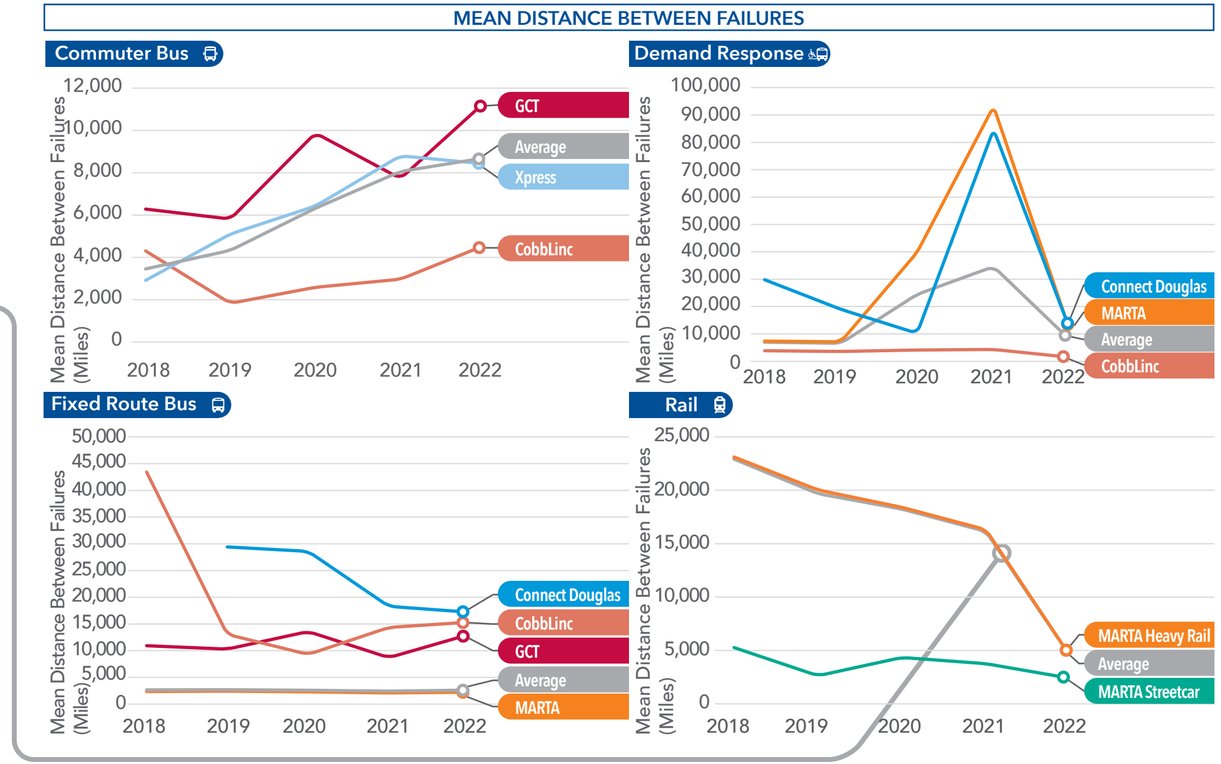
ULB GUIDELINES				
Operators	Bus[21]	Cutaway bus[22]	Heavy rail & Streetcar	Car/Van
FTA Default ULB (CATS, Connect Douglas, CPACS)	14	10	N/A	8
CobbLinc	14	12	N/A	N/A
Coweta & Paulding	N/A	5	N/A	N/A
Forsyth	N/A	7	N/A	N/A
GCT & Henry Connect	12	5	N/A	6
MARTA	12	5	*HR 310- and 311-Series:* 40 *HR 312-Series:* 22 *Streetcar:* 30	N/A
Xpress	12 years or 500,000 miles (whichever comes first)[23]	N/A	N/A	N/A

MEAN DISTANCE BETWEEN FAILURES

A failure is a mechanical issue that prevents a vehicle from completing a revenue trip or starting the next one. MDBF is total VRM divided by the number of failures. A high MDBF means vehicles are providing more reliable service, since they can travel further distances between disruptions to service.

- MDBF has generally improved for commuter bus in the five-year study period, but it has dropped for most other services, especially between 2021 and 2022.
- A change in the way that MARTA reports failures partially explains the steep drop in MDBF for both demand response and heavy rail. Since MARTA operates the majority of service in the region, the regional average is largely driven by MARTA's totals.

Surprisingly, commuter bus is the mode with the highest MDBF this year but also the most vehicles that aged beyond their ULB.



CUSTOMER SATISFACTION

The following table describes in more detail the methodology for evaluating customer satisfaction or complaints.

CUSTOMER SATISFACTION TRACKING MEASURES BY OPERATOR

Operator	Methodology for Evaluating Customer Satisfaction or Complaints	Customer Satisfaction Survey (Years)	Notable Survey Observations
CATS	Satisfaction survey asks about booking experience, quality of service, bus cleanliness, experience, driver safety, driver courtesy, and driver efficiency. Complaints are logged separately.	2019, 2020, 2021	In 2021, CATS asked customers to rank the quality of service on CATS on a scale from 1-5, with 5 being the best; 97 percent of respondents rated CATS 4 or 5.
CobbLinc	Tracks customer complaints via customer satisfaction surveys.	2020	Sample size too small.
Connect Douglas	Tracks complaints and how each was addressed.		
Coweta	Written complaints are addressed as they arise and documented. Informal customer complaints (verbal) are handled by the operator or staff.		
CPACS	Survey asks about satisfaction in 11 different areas. Overall satisfaction found by averaging rates.	2018	No survey in 2021 due to pandemic. In 2018, 98 percent of respondents were satisfied across the 10 categories.
Forsyth	Complaints were not tracked in FY 2021. A consulting firm conducted customer surveys for the ongoing master plan.		
GCT	Maintains log of all complaints, comments, and compliments.	2017	
Henry Connect	Quarterly report card reflects the number of complaints and how quickly they were addressed.		
MARTA	Conducts customer satisfaction survey and reports on the number of complaints, by topic, from each year per 1,000 boardings.	2017, 2018, 2019, 2020	In 2020, 85 percent of riders were satisfied with MARTA, up from 76 percent the year before. No customer satisfaction data were available for 2021.
Paulding	No customer surveys were available.		
Xpress	Conducts customer satisfaction survey and reports on the number of complaints, by topic, from each year per 1,000 boardings.	2018, 2021	In 2021, 80 percent of respondents were satisfied with Xpress service.

DATA AVAILABILITY AND SOURCES

This section highlights specific examples of limitations around data sources availability limitations. In some cases, data availability for a particular topic or KPI was limited for some operators because they do not collect the data. In other cases, data were available but were not tracked in a way that they could be broken out by mode. Connect Douglas's fixed-route bus was introduced in FY 2019, and Henry Connect's fixed-route bus operated only in FY 2019 and FY 2020, explaining the lack of data in other years for these modes.

As noted in the body of the report, CPACS was unable to provide data for FY 2022. Notes in this section about data availability are in addition to the lack of FY 2022 data for CPACS.

IMPACTS OF COVID-19 ON TRAVEL

- Data regarding the number of people staying home, total trip volumes, and trip lengths are from the U.S. Bureau of Transportation Statistics. For more information, see: https://www.bts.gov/daily-travel.

IMPACTS OF COST INFLATION

- Overall Consumer Prices: U.S. Bureau of Labor Statistics, CPI Inflation Calculator.
- Trade/Transportation/Utility Hourly Wages: Average hourly earnings of all employees, trade, transportation, and utilities, not seasonally adjusted. U.S. Bureau of Labor Statistics, Series CEU4000000003.
- Transportation Industry: PPI industry data for Transportation industries, not seasonally adjusted. U.S. Bureau of Labor Statistics, Series PCUATRANSATRANS.
- Truck/Bus Manufacturing Industry: PPI industry data for Heavy duty truck manufacturing, not seasonally adjusted. U.S. Bureau of Labor Statistics, Series PCU336120336120.
- Rail Rolling Stock Manufacturing: PPI industry group data for Railroad rolling stock manufacturing, not seasonally adjusted. U.S. Bureau of Labor Statistics, Series PCU3365--3365--.
- Construction Inputs: PPI Commodity data for Inputs to other misc. nonresidential construction, goods, not seasonally adjusted. U.S. Bureau of Labor Statistics, Series WPUIP2312341.
- Peer CPI Comparison: Bureau of Labor Statistics, Consumer Price Index (CPI) Databases, Data by Metro Area.

RIDERSHIP

- Henry Connect did not provide monthly ridership data for FY 2022.

FINANCIAL PRODUCTIVITY

- For operating costs per vehicle revenue hour, FY 2018 data were not available for Connect Douglas fixed-route bus. FY 2021 data for CPACS fixed-route bus was available, but it was significantly out-of-scale given the small size of the system, so it was omitted from the operating cost per vehicle revenue hour charts.
- For operating costs per vehicle revenue mile, FY 2018 data were not available for Connect Douglas fixed-route bus. FY 2021 data for CPACS fixed-route bus was available, but it was significantly out-of-scale given the small size of the system, so it was omitted from the operating cost per vehicle revenue mile charts.
- For operating costs per passenger trip, FY 2018 data were not available for Connect Douglas fixed-route bus. FY 2021 data for CPACS fixed-route bus was available, but it was significantly out-of-scale given the small size of the system, so it was omitted from the operating cost per passenger trip charts.
- FY 2022 fare structure data were confirmed directly by the operators except for CPACS, for which data was pulled from the operator's website.

TRIPS BY FARE TYPE AND MEDIA

- For many operators, the fare payment method, ticket or pass type, and fare price category breakdowns could not be calculated from the data provided.
- For Xpress commuter bus, the fare price category was assumed to be 100 percent full fare since the operator does not offer any known reduced fares.
- For CATS, Coweta, Forsyth, and Henry Connect demand response, the fare payment method was 100 percent cash-only, which implies 100 percent single trip/stored value for the ticket or pass type. For the first three, the fare price category was assumed to be 100 percent full fare since the operator does not offer any known reduced fares. For Henry Connect, all fares are paid in cash, so the operator does not track the proportion of full versus reduced fares.
- For Paulding demand response, the fare payment method, ticket or pass type, and fare price category were all shown as 100 percent other/free since fares are free for qualifying riders.
- Fare type and media data from MARTA did not separate heavy rail and streetcar modes, so the data in the applicable charts apply to both modes. For the fare payment method on all of MARTA's modes (fixed-route bus, demand response, and rail) the data provided did not indicate whether any of the fare media (cash, tickets, or passes) were used within an app.

ON-TIME PERFORMANCE

- FY 2022 CATS fixed-route bus OTP data were provided, but the format was not usable for this analysis.
- FY 2022 Paulding demand response OTP data were reported as 24 percent on-time, but this figure was omitted from the applicable charts and discussion since it differs so significantly from data from other demand response operators.
- CobbLinc's FY 2022 OTP data did not separate fixed-route bus and commuter bus data, so the 81 percent on-time figure was applied to both modes.
- FY 2022 OTP data were not available for Coweta demand response.
- The FY 2022 OTP figure for GCT commuter bus averages the separate OTP data reported for commuter bus Zones 1 and 2.

STATE OF GOOD REPAIR

- There are inconsistencies between operators in how failures are identified and incorporated into reporting. The level of detail that operators keep in their maintenance logs, such as whether a vehicular malfunction led to service impacts, can affect the way they calculate failures.
- Information related to state of good repair for vanpool has been excluded in the 2022 ARA. Connect Douglas is the only one of the three vanpool providers that maintains its own fleet, and Connect Douglas' vanpool was not operational in FY 2021. While CATS and Xpress provide vanpool service, these operators' access to specific details about their vanpool fleet rosters is limited.
- In addition to average fleet age, percentage of vehicles past their ULB, and MDBF, there are other measures of the state of good repair that are not reported in this ARA, including annual road calls and vehicle condition rating. These were both excluded because too few agencies were able to provide data. Additionally, operators are allowed track road calls differently internally than what they report to NTD; the inconsistency of the data across operators made it less useful as a regional metric.

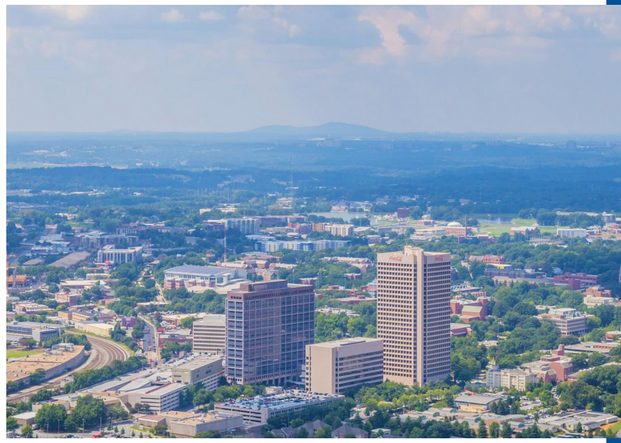
METHODOLOGIES

ACCESS TO REGIONAL BUSINESS CENTERS BY TRANSIT

The access to regional business centers by fixed-route transit analysis uses GTFS feeds from the region's operators for November 2021. It also uses data from the American Community Survey 2016-2020 5-year averages, the most recent year for which block group and tract level data is available, to estimate access to transit for the potential working population (population 16+ years), and the potential working population living in households with 0 vehicles. For the Remix analysis, access to business centers within 45 minutes by fixed-route transit was analyzed, and wait times were based on the average wait time of routes, while walking distance was based on the pedestrian network. The analysis departure times for the analysis were based on peak commute travel times for workers in the Atlanta region.

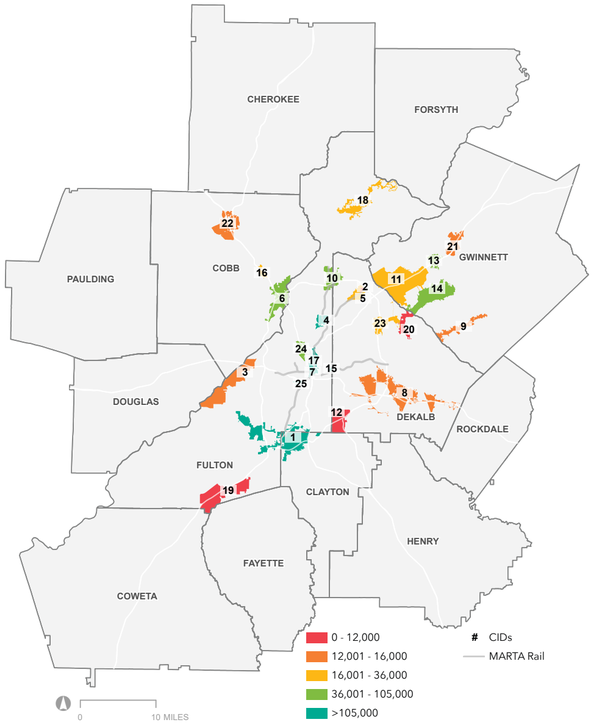
There are 29 CIDs in the Atlanta region, but two are outside of the 13-county study region (Highway 278 and Red Top CID), and one is beyond transit access (Braselton CID).[24] These three CIDs were excluded for the purposes of the study. Additionally, the "East Airport CID" and "West Airport CID" were combined to form a single Airport CID. As such, there were 25 CIDs used as points of interest for the accessibility analysis.

Accessibility was determined to each CID, and results were aggregated for the entire region, by the land development groupings that CIDs fell within, and by the telecommuting potential of each CID. The pre-aggregated results of access to CIDs for potential workers and potential workers living in households with zero vehicles are displayed on the next page.

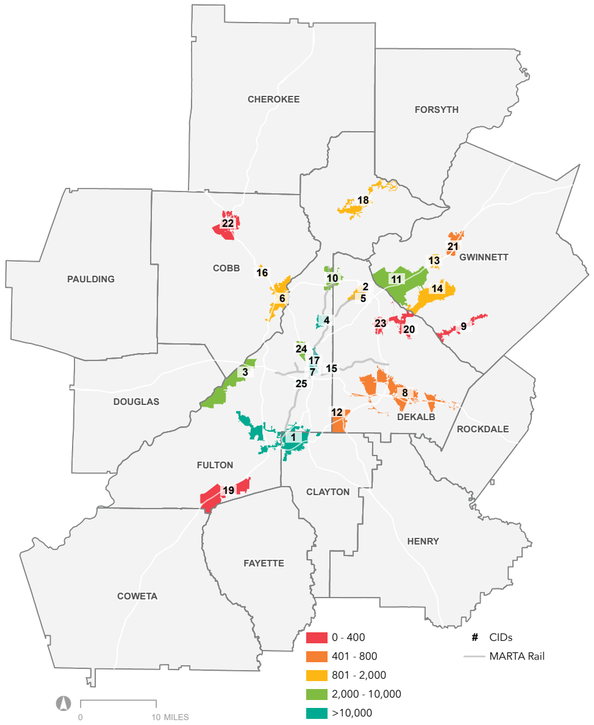


WORKERS ACCESSIBLE TO CIDS IN 45 MINUTES BY FIXED-ROUTE TRANSIT

All Workers



Workers in Zero-Car Households



The land development aggregations employ the Urban Growth Policy Map Areas (UGPM Areas) that were developed as part of ARC's regional forecasting process for the creation of PLAN 2040.[25] The designations and their respective definitions are as follows:

- Developing Rural – A UGPM Area that depicts the outer edge of the region where little or no development has taken place, but where there is development pressure.
- Developing Suburbs – A UGPM Area that depicts the outer edge of suburban development (generally post-1970s) where conventional suburban development patterns are present, but not set.
- Established Suburbs – A UGPM Area that depicts areas of the region of conventional suburban development (generally post-1970) characterized by strip commercial development, single-family subdivisions, and office in limited locations.
- Maturing Neighborhoods – A UGPM Area that depicts the older neighborhoods (generally pre-1970) that include both single- and multi-family development, as well as commercial and office uses at connected key locations.
- Region Core – A UGPM Area that depicts the major economic, cultural and transportation hub that is densest in terms of employment, residential and cultural offerings with the most developed transit service in the region.
- Regional Employment Corridors – A UGPM Area that depicts the densest development outside of the Region Core and are generally located around or adjacent to the major transportation corridors of the region.
- Rural Areas – A UGPM Area that depicts the outer edge of the region where little or development has taken place and where there is little development pressure.

The telecommuting potential aggregation was conducted using 2019 Longitudinal Employer-Household Dynamics (LEHD) data by block group for the 13-county region. Using industry classifications from a study conducted by Dingel and Neiman (2020), the industries represented within each block group were evaluated to determine the average percentage of jobs that were able to be done remotely.[26] The classification reflects the industry composition of each CID and estimates of which jobs can be performed remotely based on occupational profiles of workers in various sectors. These results were then aggregated to the CID level, and work from home ability was segmented into three groups: lowest ability to work from home, moderate ability to work from home, and highest ability to work from home. The results are depicted in the Accessibility and Equity section.

COMMUNITY IMPROVEMENT DISTRICTS (MAPS ON PAGE 124)

1. Airport
2. Assembly
3. Boulevard
4. Buckhead
5. Chamblee Doraville
6. Cumberland
7. Downtown Atlanta
8. East Metro DeKalb
9. Evermore
10. Fulton & DeKalb Perimeter
11. Gateway85 Gwinnett
12. Greater Conley Industrial
13. Gwinnett Place
14. Lilburn
15. Little 5 Points
16. Marietta Gateway
17. Midtown
18. North Fulton
19. South Fulton
20. Stone Mountain
21. Sugarloaf
22. Town Center Area
23. Tucker-Northlake
24. Upper Westside
25. West End

SPENDING IMPACTS ANALYSIS

The spending impacts analysis presented is based on the project team's analysis of operator budget reports. Expenditures are organized into categories based on those used for NTD reporting. Different categories of expenditures are mapped to specific industry sectors within the TREDTransit™ model, which is calibrated to the industry composition of the region. The team then uses the model to generate an estimate of total impacts, including multiplier (direct and indirect) effects, within the 13-county ATL region.

The research team used FY 2021 data for all operators in the analysis except for CPACS, for which FY 2020 data were used. Some labor expenses reported by CPACS and Henry Connect as capital expenditures have been reclassified as operating expenses for the purposes of this analysis. CobbLinc's operating expenditures include non-mode specific items reported in NTD. In some cases, jobs were imputed based on reported wage information.

AVOIDED EMISSIONS

The analysis is based on a median boarding-to-alighting distance of 4.04 miles as reported by the ARC On-Board survey. An additional 0.25 miles is added on each end of a trip to account for distances between actual origins/destinations and transit stops. Driving alone and being driven by someone else assumed to be the exact same length as the replaced transit trip. Car/vanpool assumes half the mileage of the replaced transit trip, to account for some efficiencies of sharing. Replacement by Taxis, Uber, and Lyft, etc. assume a 25 percent premium to account for deadhead mileage.[27]

The analysis uses emissions rates from EPA's MOVES3 model[28] and valuation factors from U.S. DOT.[29] The analysis also incorporates region specific parameters developed by the ARC. MOVES3 constitutes a significant update relative to the prior version of MOVES used in previous ARAs. MOVES3 is now the latest official version of MOVES and incorporates the latest data on emission rates as well as adjusted modeling to better account for vehicle starts and idling. Updates to emissions rates are particularly impactful for larger vehicles such as buses, which results in increased bus emissions relative to car emissions. This change highlights how important it is for transit agencies to focus on obtaining cleaner fleets.

U.S. DOT does not provide factors to monetize PM10 or CO emissions and so these are left out of the social cost calculations. Rail emissions are not included as these are dependent on emissions from the electrical generation process which vary based on fuel mix and geography. Numbers in the presented tabular results may not sum exactly due to rounding.

Because of data unavailability for FY 2022, the analysis uses information on ridership, VRM, and vehicle fleet for CPACS from FY 2021.

ASSUMPTIONS

Specific assumptions that were made in order to use the data provided by the operators are described below. In some cases, staff turnover led to some uncertainty about the accuracy of data and/or causes of significant year-over-year fluctuations.

FINANCIAL DATA

Forsyth's budget follows calendar years. The reported FY 2021 operating budget is the average of the CY 2020 and CY 2021 budgets due to lack of additional detail.

ON-TIME-PERFORMANCE

For demand response on-time performance, the 30-minute window in which a vehicle is considered on-time does not include the five-minute period beyond that window that drivers are instructed to wait for late passengers.

MEAN DISTANCE BETWEEN FAILURES

MDBF is defined for the purposes of the ARA as VRM divided by failures, each of which were provided by operators. For 2020, GCT provided an already-calculated MDBF based on total vehicle miles, as well as total vehicle miles. The consultant team calculated the number of failures from these two figures, and then recalculated MDBF using VRM. Data for GCT for years other than 2020 were calculated the ARA standard way (VRM divided by failures).

ENDNOTES

1 TomTom. "Atlanta in Traffic Index 2021." https://www.tomtom.com/traffic-index/atlanta-traffic/.

2 Kastle Systems. "Return to Normal. But Not to the Office. In-Person Activities as a % of Activities in 2019." Measures data from February 2020 to June 2022

3 Glen Weisbrod et al., Assessing Productivity Impacts of Transportation Investments, NCHRP Report 786 (Washington, D.C.: Transportation Research Board, 2014), http://www.trb.org/Publications/Blurbs/171356.aspx.

4 APTA. Supporting Late-Shift Workers. 2019. https://www.apta.com/wp-content/uploads/APTA_Late-Shift_Report.pdf.

5 When averaging results across CIDs, findings are weighted by the employment within each CID so that larger employment centers are given greater weight than those with fewer jobs.

6 ARC. Urban Growth Policy Map Areas. 2021. https://opendata.atlantaregional.com/datasets/GARC::urban-growth-policy-map-areas/about.

7 Data in this section is sourced from the City of Atlanta Department of Transportation's Ride Report open data portal: https://public.ridereport.com/atlanta

8 Ridership declines in the initial months of the COVID-19 pandemic were driven by Atlanta's suspension of all micromobility in March 2020 as a nonessential service. Micromobility returned to Atlanta in July 2020 as the city issued new operating permits and streamlined the number of micromobility operators.
Kelley, Collin. Atlanta Rolls Out New Guidelines as E-Scooters Return to Streets. Reporter Newspapers and Atlanta Intown, July 1, 2020.

9 For Xpress' drop-off-only stops, the definition is "No later than five minutes after schedule." Connect Douglas' OTP has been recalculated for the sake of the ARA to match the most common OTP definition in the region. This definition is more generous than Connect Douglas' in-house definition (zero minutes early/two minutes late).

10 Atlanta Regional Commission. On-Board Survey. 2019. https://etcinstitute.com/transit/transit-dashboards/ga_arc/.

11 Annual offsetting rate of 24 kg CO2/tree. (Encon. Calculation of CO2 offsetting by trees. https://www.encon.eu/en/calculation-co2-offsetting-trees.)

12 The most recent data available at the time of this analysis.

13 Constructed using the prices of a variety of items including food, housing, education, healthcare, and other goods and services,

14 APTA. Transit Workforce Shortage: Root Causes, Potential Solutions, and the Road Ahead. October 2022. https://www.apta.com/wp-content/uploads/APTA-Transit-Workforce-Shortage-Report.pdf.

15 American Automobile Association. Your Driving Costs. 2021. https://newsroom.aaa.com/wp-content/uploads/2021/08/2021-YDC-Brochure-Live.pdf.

16 $95 per 30-day pass. (MARTA. Fare Programs. https://itsmarta.com/fare-programs.aspx.)

17 Based on an analysis of ARC's 2019 on-board survey. Data exclude non-respondents.

18 American Council on Aging. 2022 Federal Poverty Levels / Guidelines & How They Determine Medicaid Eligibility. 2022. https://www.medicaidplanningassistance.org/federal-poverty-guidelines/.

19 Living Wage Calculator. Living Wage Calculation for Atlanta-Sandy Springs-Roswell, GA. https://livingwage.mit.edu/metros/12060.

20 United for ALICE. The Pandemic Divide: An ALICE Analysis of National COVID Surveys. October 2021. https://www.unitedforalice.org/covid2019.

21 Includes standard, articulated, and over-the-road buses. These buses are operated on commuter and fixed-route bus services.

22 Cutaway buses are operated mostly on demand-response services, as well as CPACS fixed-route service.

23 Xpress has conducted an extensive series of mid-life overhauls on its vehicles. This extends the ULB by six years.

24 ARC Community Improvement Districts. July 2021. https://opendata.atlantaregional.com/datasets/community-improvement-districts/explore?location=33.824536%2C-84.287900%2C10.41.

25 ARC. Urban Growth Policy Map Areas. 2021. https://opendata.atlantaregional.com/datasets/GARC::urban-growth-policy-map-areas/about; ARC Plan 2040 Framework. 2011.

26 Dingel, J. I., & Neiman, B. (2020). How many jobs can be done at home? (No. w26948). National Bureau of Economic Research. https://bfi.uchicago.edu/working-paper/how-many-jobs-can-be-done-at-home/.

27 Clewlow, Regina R., and Gouri S. Mishra. "Disruptive transportation: The adoption, utilization, and impacts of ride-hailing in the United States." (2017).

28 United States Environmental Protection Agency. Latest Version of Motor Vehicle Emission Simulator (MOVES). https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves.

29 U.S. Department of Transportation. Benefit-Cost Analysis Guidance for Discretionary Grant Programs. 2022. https://www.transportation.gov/sites/dot.gov/files/2022-03/Benefit%20Cost%20Analysis%20Guidance%202022%20%28Revised%29.pdf.

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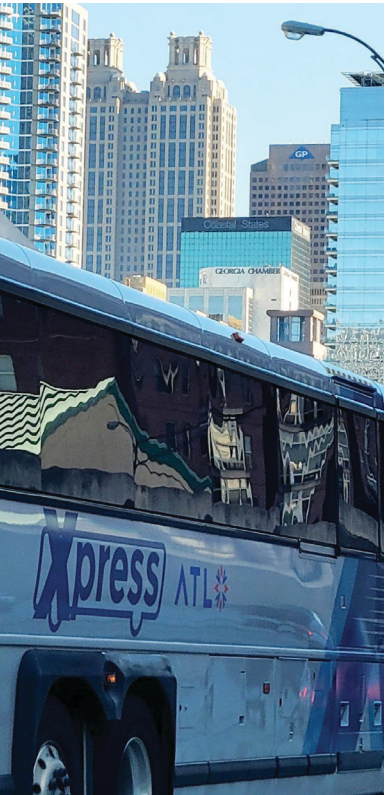

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