

“I would like to see us rework
Marta and expand - especially
into Cobb County.”

- JACKSON H.



I think the BeltLine is a great project
and I think so many different people’s
lives have been improved because of
it, and it’s allowed for folks to become
more engaged in their community and
have a better civic life. The suburbs are
trending towards that. We have a long
way to go.

- JESUS R.



I always think about the youth and
folks that live at the very end of
the bus line and still have to walk
a mile to get to their apartment.
We know that bus lines are extra
important, because not everyone is
going to have a train station near
their house. So really expanding
buses would be more helpful.

- ABIODUN H.



Source: Ryan Barrett Photography

PERFORMANCE

Evaluating the performance of the RTP projects on the regional transportation system helps us better understand their impact and the extent to which these investments achieve desired outcomes and provide the best return on our investments.

OVERVIEW OF PERFORMANCE-BASED PLANNING

As described in the Governing Laws and Legal Definitions section at the beginning of the RTP, The FAST Act established national performance goal areas and USDOT established national performance measures through a rulemaking process.

Federal rules require MPOs to link investment priorities to the achievement of national performance targets in key goal areas such as road and transit safety, bridge and pavement condition, congestion, reliability, air quality and transit asset management. It also established that MPO transportation planning processes use a performance-based approach to decision-making in support of these national goals, reflect those targets in the RTP, and monitor progress. Tables 5 and 6 depict statewide and regional targets for all FHWA and FTA required performance measures.

The rules also require the production of various coordination agreements, baseline reports, and progress reports for each of the established performance measures and associated targets. Appendix K is a comprehensive library of these technical documents.

ARC'S PERFORMANCE-BASED

APPROACH TO THE RTP

The federal performance-based planning and programming framework (Figure 10) helps states, regions, and cities better understand the consequences and benefits of their transportation investments. ARC's performance-based approach to the RTP mirrors that of FHWA. ARC recognizes that the Atlanta region faces increasing funding limitations coupled with increasing infrastructure demands and therefore needs accountable and transparent decision-making processes.

It is imperative that transportation investments recommended in the RTP contribute to achieving the goals and objectives set forth in the Policy Framework. Maintaining our existing system, ensuring that it functions as efficiently and safely as possible, and making strategic investments to expand travel options and increase system capacity is no guarantee of complete success.

Reporting the evaluation findings of RTP investments against our goals, performance measures, and targets communicates to the public, our stakeholders, and our project sponsors how well these investment priorities achieve desired outcomes.

Figure 10

FHWA PERFORMANCE-BASED PLANNING AND PROGRAMMING FRAMEWORK

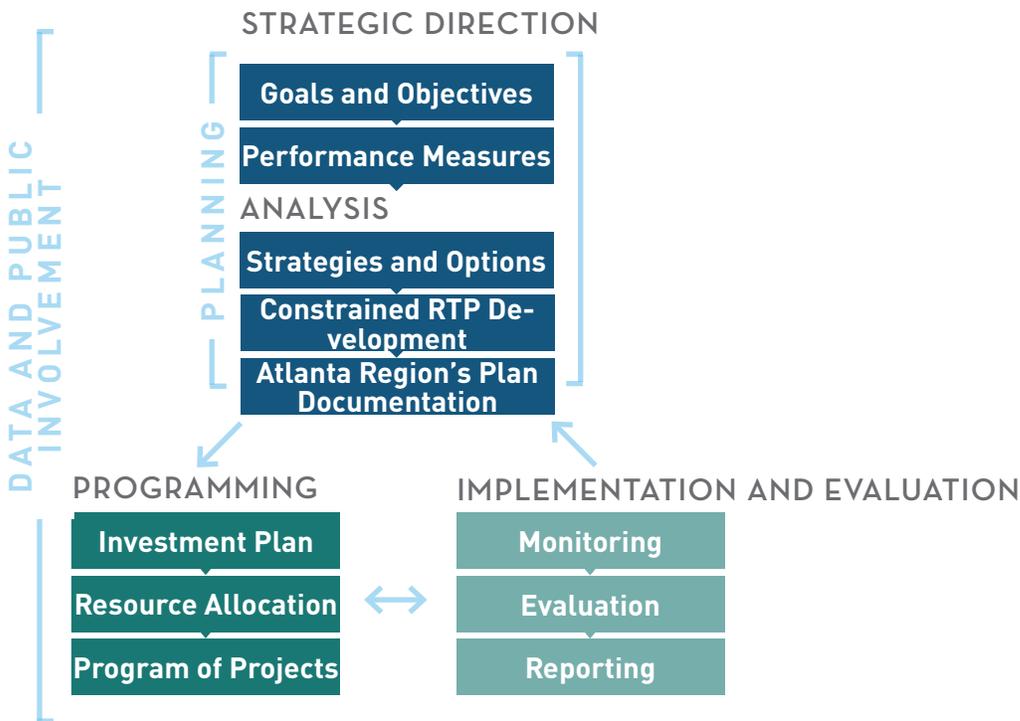


Table 5

FEDERALLY REQUIRED TRANSIT PERFORMANCE MEASURES AND TARGETS

Performance Measure	Atlanta Region Target	2019 Performance
EQUIPMENT (TARGETS LAST UPDATED IN 2020)		
Percent service vehicles (by type) meeting or exceeding useful life benchmark	Automobile: $\leq 50\%$	58%
	Truck / Other rubber tire vehicles $\leq 50\%$	68%
FACILITIES (TARGETS LAST UPDATED IN 2020)		
Percent of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale	Passenger: $\leq 50\%$	9%
	Passenger parking: $\leq 50\%$	10%
	Maintenance: $\leq 50\%$	0%
	Administrative: $\leq 50\%$	0%
INFRASTRUCTURE (TARGETS LAST UPDATED IN 2020)		
Percent of track segments (by mode) that have performance restrictions	Heavy rail: $\leq 5\%$	3%
	Streetcar: 0%	0%

Performance Measure	Atlanta Region Target	2019 Performance
ROLLING STOCK (TARGETS LAST UPDATED IN 2020)		
Percent revenue vehicles (by type) meeting or exceeding useful life benchmark (ULB)	Automobile: $\leq 22\%$	67%
	Over the road bus: $\leq 30\%$	1%
	Bus: $\leq 30\%$	22%
	Cutaway bus: $\leq 50\%$	42%
	Heavy rail passenger car: $\leq 20\%$	0%
	Light rail vehicle: $\leq 25\%$	0%
	Van: $\leq 25\%$	32%
SAFETY (TARGETS LAST UPDATED IN 2021)		
Fatalities (Total / Rate per 100K Vehicle Revenue Miles)	Fixed Route Bus	0 / 0
	Demand Response	0 / 0
	Commuter Bus	0 / 0
	Light Rail	0 / 0
	Heavy Rail	0 / 0
Injuries (Total / Rate per 100K Vehicle Revenue Miles)	Fixed Route Bus	210 / 0.772
	Demand Response	14 / 0.188
	Commuter Bus	8 / 0.4
	Light Rail	5 / 0.03
	Heavy Rail	28 / 0.12
Safety Events (Total / Rate per 100K Vehicle Revenue Miles)	Fixed Route Bus	94 / 0.346
	Demand Response	11 / 0.143
	Commuter Bus	38 / 1.97
	Light Rail	5 / 0.08
	Heavy Rail	32 / 0.14
System Reliability (Vehicle Revenue Miles Between Failures)	Fixed Route Bus	7,500
	Demand Response	15,000
	Commuter Bus	16,000
	Light Rail	2,700
	Heavy Rail	23,000

Note: Individual operators must provide annual targets to FTA through the National Transit Database (NTD) reporting process. Regional targets do not have to be updated annually, but must be reassessed as necessary whenever TIPs and RTPs are updated.

Table 6

FEDERALLY REQUIRED ROADWAY PERFORMANCE MEASURES AND TARGETS

Performance Measure	Statewide Target	Atlanta Region Target	Target Duration (Years)
AIR QUALITY (FOR PERFORMANCE PERIOD 2022-2025)			
Total emissions reduction	≥ 139.2 kg/day VOC	Concurred with GDOT statewide targets	2
	≥ 280.5 kg/day VOC		4
	≥ 456.0 kg/day NO _x	Concurred with GDOT statewide targets	2
	≥ 930.1 kg/day NO _x		4
BRIDGE CONDITION (FOR PERFORMANCE PERIOD 2022-2025)			
Percent of NHS bridges classified as in good condition	$\geq 50\%$	Concurred with GDOT statewide targets	2
	$\geq 60\%$		4
Percent of NHS bridges classified as in poor condition	$\leq 10\%$	Concurred with GDOT statewide targets	2
			4
CONGESTION (FOR PERFORMANCE PERIOD 2022-2025)			
Annual hours of peak-hour excessive delay per capita	≤ 23.7 hours	Concurred with GDOT statewide targets	2
	≤ 27.2 hours		4
Percent of non-single occupant vehicle travel	$\geq 22.7\%$	Concurred with GDOT statewide targets	2
			4
PAVEMENT CONDITION (FOR PERFORMANCE PERIOD 2022-2025)			
Percent of pavement on Interstate NHS in good condition	$\geq 50\%$	Concurred with GDOT statewide target	4
Percent of pavement on Interstate NHS in poor condition	$\leq 5\%$	Concurred with GDOT statewide target	4
Percent of pavement on non-Interstate NHS in good condition	$\geq 40\%$	Concurred with GDOT statewide target	4
Percent of pavement on non-Interstate NHS in poor condition	$\leq 12\%$	Concurred with GDOT statewide target	4

Performance Measure	Statewide Target	Atlanta Region Target	Target Duration (Years)
RELIABILITY (FOR PERFORMANCE PERIOD 2022-2025)			
Percent of person miles traveled on Interstate System that are reliable	$\geq 73.9\%$	Concurred with GDOT statewide targets	2
	$\geq 68.4\%$		4
Percent of person miles traveled on non-Interstate NHS that are reliable	$\geq 87.3\%$	Concurred with GDOT statewide targets	2
	$\geq 85.3\%$		4
Truck travel time reliability index	≤ 1.62	Concurred with GDOT statewide targets	2
	≤ 1.65		4
SAFETY (2023 - TARGETS ARE SET ANNUALLY)			
Number of fatalities	$\leq 1,680$	≤ 595	1
Fatality rate per 100 million VMT	≤ 1.36	≤ 0.998	1
Number of serious injuries	$\leq 8,966$	$\leq 2,719$	1
Serious injury rate per 100 million VMT	≤ 7.679	≤ 4.557	1
Number of non-motorized fatalities and serious injuries	≤ 802	≤ 393	1

MPOs have three options for setting their annual safety performance targets:

- Option A - Concur with State DOT targets
- Option B - Establish targets for their respective metropolitan planning area
- Option C - Concur with State DOT targets **and** establish targets for their respective metropolitan planning area

Beginning in 2020, ARC pursued Option C in order to effectively track and reflect conditions specific to the Atlanta region, as well as to respond to guidance from the Regional Safety Task Force and ARC leadership on initiating an aggressive or Vision Zero approach. In setting region-specific targets, ARC coordinated with and followed GDOT's methodology as closely as possible.

PROJECT EVALUATION

The project evaluation process aims to ensure that our investments connect to and advance the regional goals of world-class infrastructure, healthy livable communities, and a competitive economy.

OVERVIEW OF THE EVALUATION PROCESS

As a key technical function of an MPO, ARC continually refines its methods for project evaluation as new data sources and policies emerge, and public opinions shift. ARC's current project technical evaluation is twofold, incorporating both quantitative and qualitative approaches. On the quantitative side, the project evaluation process utilizes national datasets, data derived from our planning partners, and modeled data developed in-house. ARC uses this data in planning scenarios and visualization tools to test project performance across a variety of measures and metrics. This analytical approach is paired with policy and community support considerations to paint a comprehensive understanding of whether a project will fulfill regional goals of world-class infrastructure, healthy livable communities, and a competitive economy.

The evaluation process is conducted through two temporal lenses: current need and future impact. Separating projects into these two dimensions has enabled ARC to fine tune the accuracy of the evaluation methodologies and better reflect differences in regional priorities.

The current need lens considers the necessity of the project to move the needle on safety, congestion, accessibility, equity, reliability, air quality, and goods movement. This approach uses a "fused" centerline roadway network or "Key Network" that contains a myriad of data including ARC's policy networks and travel speed to analyze congestion and crash rates. The future impact lens considers the effect on the transportation network from an air quality, congestion, accessibility, goods movement, deliverability, impact, and use perspective.

Table 7: Project Evaluation - Current Need Measures

Variable	Measure	Calculation	Source
Accessibility	Opportunity to reach TAZs	Regional accessibility build scenario - regional accessibility no build scenario	VISUM
Air Quality	Particulate matter (PM)	Average level of PM by project	Atlanta Roadside Emissions Exposure Study (AREES)
Congestion	Travel time index (TTI)	Average TTI by project	INRIX
Equity	Environmental justice communities	Intersects most concentrated census tracts	ARC's environmental justice analysis
Freight	Truck network	On or off network	ASTRoMaP
Reliability	Buffer index	95th percentile for average travel time	INRIX
Safety	Crash rate	Crash rate/average crash rate by facility type	Georgia Electronic Reporting System (GEARS)
Use	Percent Traffic Volume	Flow bundle analysis	VISUM

Table 8: Project Evaluation - Future Impact Measures

Variable	Measure	Calculation	Source
Accessibility	Opportunity to reach TAZs	Regional accessibility build scenario - regional accessibility no build scenario	VISUM
Air Quality	Particulate matter (PM)	PM kg/year 2040 build scenario - PM kg/year 2040 no build scenario	AREES
Congestion	Vehicle Hour Delay (VHD)	Regional VHD build scenario - regional VHD no build scenario	VISUM
Deliverability	Environmental impacts	Average number of environmental resources	Environmental resources data
Freight	Truck VMT	Regional truck VMT build scenario - regional truck VMT no build	VISUM
Impact	Volume/mile	Number of trips/length of project	VISUM
Use	Percent Traffic Volume	Flow bundle analysis	VISUM

SYSTEM EVALUATION

The system evaluation process is composed of two primary elements: the regional travel demand model and the regional air quality assessment. Figure 11 details how these elements interact with each other.

TRAVEL DEMAND MODELING

ARC's Activity-Based Model (ABM) is the current regional travel demand model used to assess system performance. The ABM models both household-level and person-level travel choices including intra-household interactions between household members. The ABM reflects and responds to detailed demographic information, including household structure, age, income, and other key attributes. The model is calibrated using data from household travel surveys, transit on-board surveys, and observational data from partners like GDOT. To learn more about ARC's travel demand modeling process, see the ARC's Model Documentation.

The ABM analyzes three scenarios – current conditions of the region's transportation system, as well as the system with and without RTP investments.

AIR QUALITY ASSESSMENT

The Clean Air Act requires the EPA to set limits on how much of a particular pollutant can be in the air anywhere in the United States by establishing National Ambient Air Quality Standards (NAAQS). EPA sets these standards then designates areas as either in attainment of the NAAQS or as nonattainment

of the NAAQS. EPA tasks states with creating a plan to reach attainment of the NAAQS. The projects recommended in the RTP must be shown to conform to the purposes of the state's implementation plan to attain the NAAQS. To demonstrate conformity, the system is subjected to technical analysis (among other requirements) to determine future emissions resulting from projects recommended by the RTP.

The Atlanta region is currently designated as a maintenance area for the 1997 8-hr. ozone NAAQS and the 2008 8-hr. ozone NAAQS. The region is currently designated as a marginal nonattainment area for the 2015 8-hr. ozone NAAQS. By interagency agreement, ARC performs the technical analysis for the neighboring MPOs in Cartersville-Bartow County and Gainesville-Hall County. Parts of the territory of these MPOs are included in the Atlanta maintenance and nonattainment areas. See Map ii - Air Quality Boundaries.

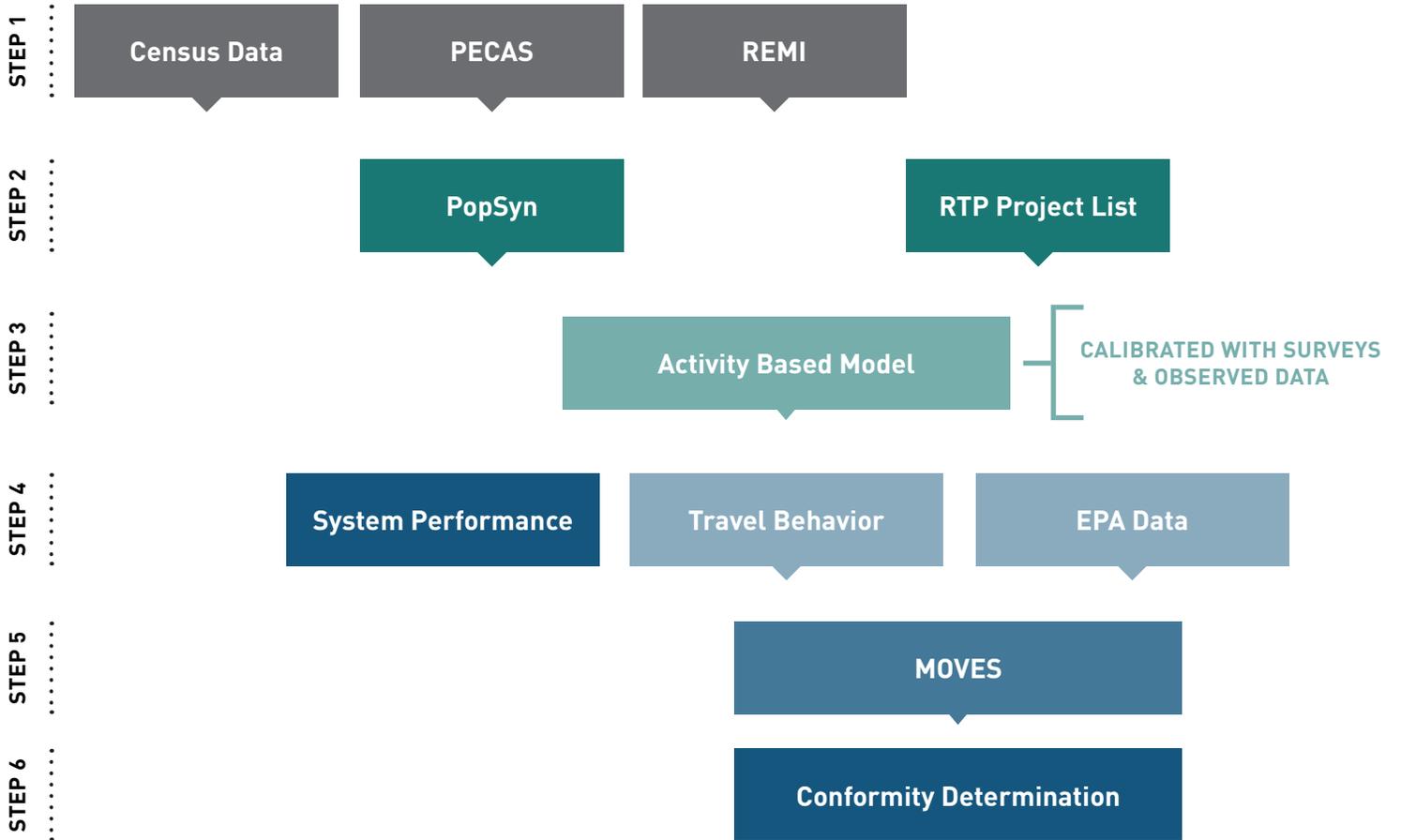
This RTP conforms to EPA air quality requirements and all pollutants are within budgets established in the SIP. To learn more about the conformity process, see the Conformity Determination Report produced concurrently with this RTP.

LEARN MORE:

- [ARC's Model Documentation](#)
- [Conformity Determination Report](#)

Figure 11

SYSTEM EVALUATION PROCESS FLOWCHART



ARC'S PERFORMANCE MEASURES AND WHAT THEY SEEK TO DO

Performance measures are the critical link between the RTP project list and our vision to *Win the Future*. They are also a powerful tool ARC can use to comprehensively evaluate projects, communicate tradeoffs between investment scenarios, and ultimately build confidence in our stakeholders and the public if these strategic investments indicate they will be beneficial and impactful.

In the future, ARC looks to expand and re-focus its performance measures to better align with our overarching transportation goals of multi-modalism, safety, livability, access, equity, and resiliency. ARC will also look to add performance targets with each performance measure to set quantifiable goals for achieving the Atlanta region's desired outcomes.

HOW TO READ THE PERFORMANCE MEASURE ANALYSIS

The performance measures listed in this section provide an "at-a-glance" overview of how the RTP project list as a system performs. These performance measures are centered around cost incurred due to congestion (measured in time and dollars), mode choice, impact on environmental justice communities, transit ridership, and performance of the managed lane system. Each performance measure includes the desired trend, current conditions, and then system performance with and without investing in the RTP project list.

The arrow underneath the investment scenario indicates which way the trend will continue in the future. The color of the arrow indicates the severity of the change. If the trend without investments is the opposite of the desired trend and worse than the scenario with investments, the arrow will be red. If the trend with investments is the opposite of the desired trend but better than the without investments scenario, the arrow will be orange.

Similarly, if the trend without investments follows the desired trend but is not as high performing than the investment scenario, the arrow will be yellow. If the trend with investments follows the desired trend and also performs better than the without investments scenario, the arrow will be green.

SUMMARY OF HOW THE RTP SYSTEM OF PROJECTS PERFORM

Of the performance measures ARC uses to evaluate system performance, there is not a single indication that the region will be better off in 2050 without these recommended investments than with them.

In particular, this system of projects supports dramatic increases in transit ridership across the region and between activity centers. The system of projects also supports positive mode share trends for the region for walking, bicycling, and transit use.

The RTP system of project recommendations shows that while it may not achieve the desired trend for some performance measures, particularly those related to personal vehicle travel time and congestion costs, it does always show an improvement over not investing in our future. This outcome is to be expected in a rapidly growing region with a strong economy and is not unique to Atlanta.

The recommended project list through 2050 contains robust and varied projects intended to provide Atlanta region residents and visitors with travel choices that are reliable, safe, and efficient. This Plan, and the transportation system of 2050, will sharpen our collective ability to *Win the Future*.

A Note on Performance Analysis

Any analysis of system performance is limited by available data and tools, which are rarely adept at considering the impacts of disruptive technologies, economic shocks, or evolving social attitudes and preferences. With the inability to accurately forecast national and global conditions 20+ years in the future, system performance metrics largely represent what to expect if current trends continue.

Any number of factors could dramatically alter the reality of what travel conditions in 2050 will actually be like and how that impacts our economy and the health of our communities. See the Future Chapter to learn more about how ARC is taking these variables into consideration as part of its ongoing planning process.

Average Commute Travel Time in Minutes by Personal Vehicle

With 8.6 million residents expected in the region by 2050, roadway capacity projects for personal vehicles alone will not be able to meet the demand for a safe, accessible, and convenient transportation system. The RTP projects reflect solutions intended to mitigate worsening commute times while also pivoting to solutions that are multi-modal, providing residents and visitors with more travel options.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	31 minutes	 35 minutes 13% increase	 33 minutes 7% increase

Supporting Objective: Maintain and operate the existing transportation system to provide for reliable travel.

Total Surface Transportation Congestion Cost Per Person

Atlanta residents incur a hidden expense of both their time and fuel when sitting in roadway congestion. Lost time means we have less time for work productivity and fewer opportunities for recreation and social connections. It also means increased pollutants from vehicle emissions, increased goods movement costs, increased unreliability, increased stress, and more frequent crashes.¹

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	\$1,403	 \$2,671 90% increase	 \$1,916 37% increase

Supporting Objective: Maintain and operate the existing transportation system to provide for reliable travel.

¹ USDOT Assessing the Full Costs of Congestion on Surface Transportation Systems and Reducing Them through Pricing (2009)

Transit Ridership between Activity Centers

The region's activity centers are centralized nodes where residents and visitors can live, work, and play. While increasing transit ridership on the whole is a desired outcome of the RTP project list, this performance measure underscores the importance of transportation and land use efficiency, supporting investments that promote connectivity amongst areas in the region with demonstrated regional significance.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	11,690 riders	 15,423 riders 32% increase	 20,956 riders 79% increase

Supporting Objective: Strategically expand the transportation system while supporting local land use plans.

Regional Transit Ridership

The region must continue to invest in modes like transit that move people efficiently, conveniently, and safely. The RTP project list includes transit expansion, operations, and capital management projects that have projected ridership productivity increases. This increase, even in a scenario without investments, is likely due to improved transit-supportive development and access, co-locating with population and employment density, and the general population increase in the region.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	510,520 riders	 738,038 riders 45% increase	 1,100,797 riders 116% increase

Supporting Objective: Improve transit and non-single-occupant vehicle options to boost economic competitiveness and reduce environmental impacts.

Average Speed during Morning Peak of General Purpose Lanes

Given the forecasted population and likely VMT increase for the region by 2050, it is unsurprising that the average speed during peak conditions for general lanes would worsen. Instead, the systems analysis showcases that conditions could be even worse in the future if the region does not make investments today. It is important to note that, consistent with the Safe Systems approach, performance measures related to a desired increase in speed are limited to interstates.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	49 MPH	↓ 41 MPH 16% decrease	↓ 45 MPH 8% decrease

Supporting Objective: Maintain and operate the existing transportation system to provide for reliable travel.

Average Speed during Morning Peak of Managed Lanes

Adding highway capacity is an unsustainable and costly method that temporarily relieves congestion. Managed lanes are one tool the Atlanta region employs to better manage the speed or flow of traffic, provide travel-time savings, and provide a more reliable trip time. While the RTP projects focused on improving the managed lane system show a slight decrease even with investments, the speed of people in cars and trucks using these lanes will be better off than without an investment.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	63 MPH	↓ 54 MPH 14% decrease	↓ 59 MPH 6% decrease

Supporting Objective: Maintain and operate the existing transportation system to provide for reliable travel.

Average Speed during Evening Peak of General Purpose Lanes

Given the forecasted population and likely VMT increase for the region by 2050, it is unsurprising that the average speed during peak conditions for general lanes would worsen. Instead, the systems analysis showcases that conditions could be even worse in the future if the region does not make investments today. It is important to note that, consistent with the Safe Systems approach, performance measures related to a desired increase in speed are limited to interstates.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	48 MPH	↓ 39 MPH 19% decrease	↓ 42 MPH 12% decrease

Supporting Objective: Maintain and operate the existing transportation system to provide for reliable travel.

Average Speed during Evening Peak of Managed Lanes

Adding highway capacity is an unsustainable and costly method that temporarily relieves congestion. Managed lanes are one tool the Atlanta region employs to better manage the speed or flow of traffic, provide travel-time savings, and provide a more reliable trip time. While the RTP projects focused on improving the managed lane system show a slight decrease even with investments, the speed of people in cars and trucks using these lanes will be better off than without an investment.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	61 MPH	↓ 52 MPH 15% decrease	↓ 59 MPH 3% decrease

Supporting Objective: Maintain and operate the existing transportation system to provide for reliable travel.

Mode Choice for Regional Population

The preference and behavior of people traveling in the Atlanta region is influenced by our regional transportation system. As a region facing increasing mobility demands and limited funding, we know the most efficient way to move people is outside of single occupancy vehicles. The RTP project list shows positive trends for walking, bicycling, and transit, but room for improvement for SOV and HOV.

SINGLE OCCUPANCY VEHICLE (SOV)

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	51.1%	↑ 52.0% 0.9pp* increase	↑ 51.4% 0.3pp increase

HIGH OCCUPANCY VEHICLE (HOV)

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	39.7%	↓ 39.6% 0.1 pp decrease	↓ 39.6% 0.1pp decrease

*pp = percentage point

WALKING OR BICYCLING

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	4.1%	→ 4.1% 0.0 pp	↑ 4.2% 0.1pp increase

TRANSIT

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	0.9%	→ 0.9% 0.0 pp	↑ 1.2% 0.3pp increase

Supporting Objectives: Improve transit and non-single-occupant vehicle options to boost economic competitiveness and reduce environmental impacts.

Improve public health through the built environment.

Mode Choice in Census Tracts with High Concentrations of Environmental Justice Populations

A transportation system that works for everyone is characterized by a variety in travel choices, high-quality access, safety, and convenience, and equitably shared impacts and externalities.

SINGLE OCCUPANCY VEHICLE

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	46.4%	 46.8% 0.4pp increase	 45.5% 0.9pp decrease

HIGH OCCUPANCY VEHICLE

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	40.3%	 40.2% 0.1pp decrease	 39.9% 0.4pp decrease

*pp = percentage point

WALKING OR BICYCLING

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	6.0%	 6.1% 0.1pp increase	 6.7% 0.7pp increase

TRANSIT

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	2.6%	 2.9% 0.3pp increase	 3.7% 1.1pp increase

Supporting Goals: Improve transit and non-single-occupant vehicle options to boost economic competitiveness and reduce environmental impacts.

Improve public health through the built environment.

Promote an accessible and equitable transportation system.

Air Quality

Ground-level ozone causes visible smog conditions and results in poor health outcomes like asthma. The emissions of oxides of nitrogen (NOx) and volatile organic compounds (VOC) from the transportation sector are a direct precursor to the presence of ozone. ARC works with the US EPA to limit the amount of ozone precursors from vehicles on the road. The RTP recommendations are expected to produce ozone precursors well below the maximum limits set by the EPA.

NOx EMISSIONS

Desired Trend	Budget (Tons per Day)	2050 without RTP Project Investments	2050 with RTP Project Investments
	58 tpd	↓ 25.28 tpd 56.4% below max	↓ 25.32 tpd 56.3% below max

VOC EMISSIONS

Desired Trend	Budget (Tons per Day)	2050 without RTP Project Investments	2050 with RTP Project Investments
	52 tpd	↓ 25.26 tpd 51% below max	↓ 24.86 tpd 52% below max

Supporting Objective: Improve transit and non-single-occupant vehicle options to boost economic competitiveness and reduce environmental impacts.

Improve public health through the built environment.

Integrate sound environmental management principles that ensure the region's sustainability.

Commercial Vehicle Delay Cost

Freight logistics are dependent on a reliable and cost-effective trip in order to support the region’s economic growth. Delays in those trips happen for a variety of reasons - congestion, traffic incidents, bad weather, work zones, poor signal timing - but the demand for freight continues. The RTP project list, while not achieving the desired trend, minimizes the delay cost freight delivery would incur if investments were not made.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	\$25	 \$41 64% increase	 \$34 36% increase

Supporting Goal: Support the reliable movement of freight and goods

Walking and Bicycling Trips from Activity Centers

Promoting walking and biking trips is a key goal of the RTP. Investments in walking and biking infrastructure included in the RTP are effective as evidenced by the dramatic uptick in walking and biking trips from major activity centers in the region under the investment scenario. Activity centers include areas such as the airport, downtown, Buckhead, Cumberland, and other areas of dense development that include a wide variety of jobs, housing opportunities, and recreational facilities.

Desired Trend	Today	2050 without RTP Project Investments	2050 with RTP Project Investments
	121,441	 177,544 46% increase	 192,389 58% increase

Supporting Objective: Improve quality of life at the neighborhood, city, county and regional levels.

In partnership with local communities, equitably and strategically focus resources in areas of need and importance.