



THE ATLANTA REGION'S PLAN

REGIONAL TRANSPORTATION PLAN

EXECUTIVE SUMMARY

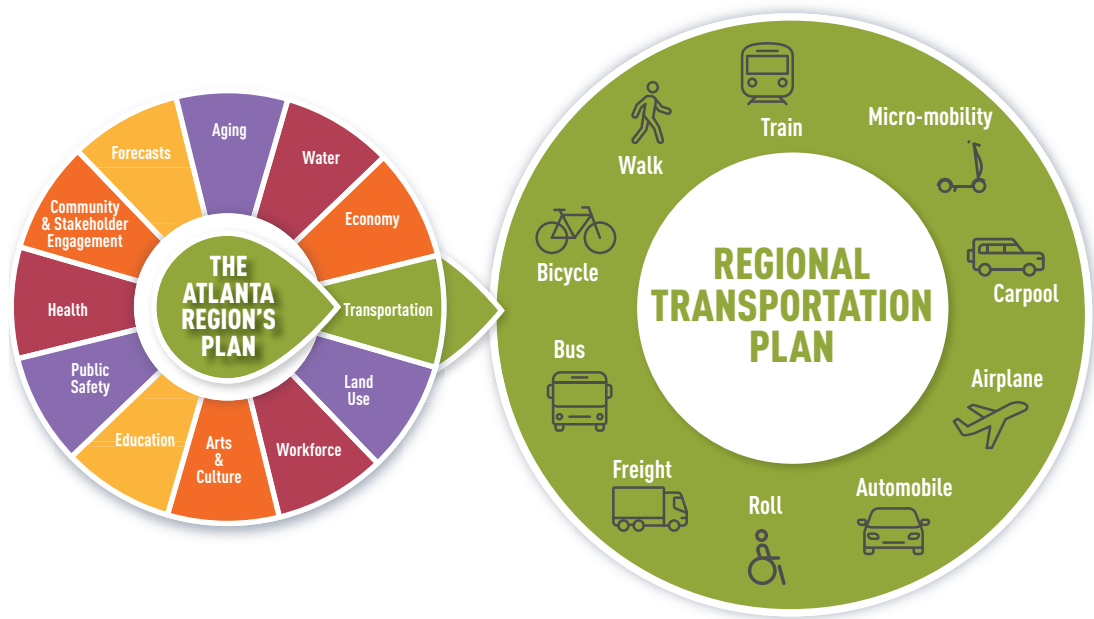


Atlanta Regional Commission

April 2020

How the Regional Transportation Plan Fits into The Atlanta Region's Plan

The Regional Transportation Plan (RTP) is one piece of The Atlanta Region's Plan. The RTP focuses on current transportation conditions, expected trends that will impact the transportation network, and documents the strategies and investments necessary to meet the multi-modal transportation needs of all residents and visitors of the Atlanta region through 2050.



Regional Growth & Trends



GROWING POPULATION

The region's population is projected to grow by 2.9 million through 2050, becoming increasingly diverse.



MORE EXTREME & FREQUENT WEATHER EVENTS

The region is expected to face more frequent flooding, droughts, and other weather events in the coming years.



DYNAMIC EMPLOYMENT SECTOR

The region is expected to add 1.2 million jobs through 2050, with the top sectors including health care and construction.



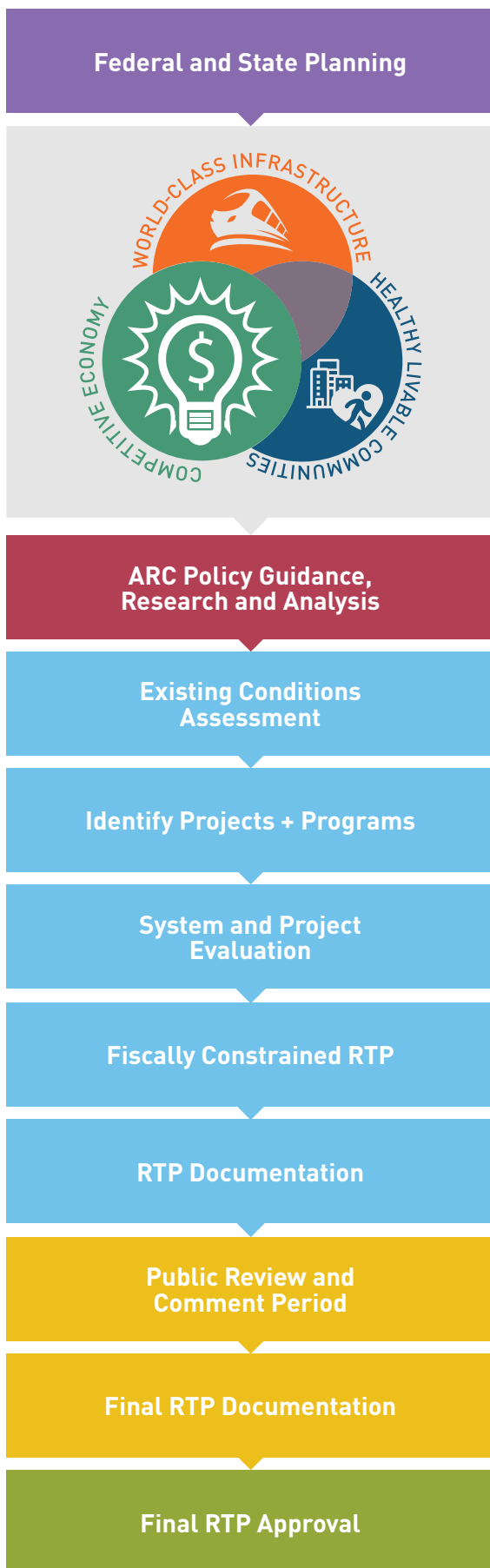
SHIFT IN TRAVEL CHOICES

The region is planning for ever growing opportunities to walk, bike, take transit, and telework.

Metro Atlanta is an ever-evolving region of urban, suburban, and rural landscapes that provides a diverse collection of homes, jobs, and communities for residents. Over the next 30 years, the region expects to add 2.9 million people for a total of 8.6 million.

By understanding the likely trajectory of growth from this point forward, the RTP can more readily plan for transportation investments that respond to the needs of residents and deliver the kind of communities they desire.

Planning Process & Public Engagement



ARC does not develop the RTP in a vacuum. Federal and state priorities are considered alongside local research and analysis, then a draft plan is created and revised with public input. Finally, the RTP is approved in a five-step process. The flowchart to the left outlines the overall RTP development and approval process, building off the previous regional plan last updated in 2016.

ARC HAS AN ONGOING PUBLIC ENGAGEMENT PROGRAM, WITH EFFORTS RANGING FROM POP-UP OPEN HOUSES TO CIVIC DINNERS.

6 OPEN HOUSES

WERE HELD ACROSS THE REGION, ENGAGING

300 PEOPLE

ABOUT THE ATLANTA REGION'S PLAN.

.....

350 PEOPLE

HAD A CONVERSATION ABOUT THE FUTURE OF THE REGION AT CIVIC DINNERS.



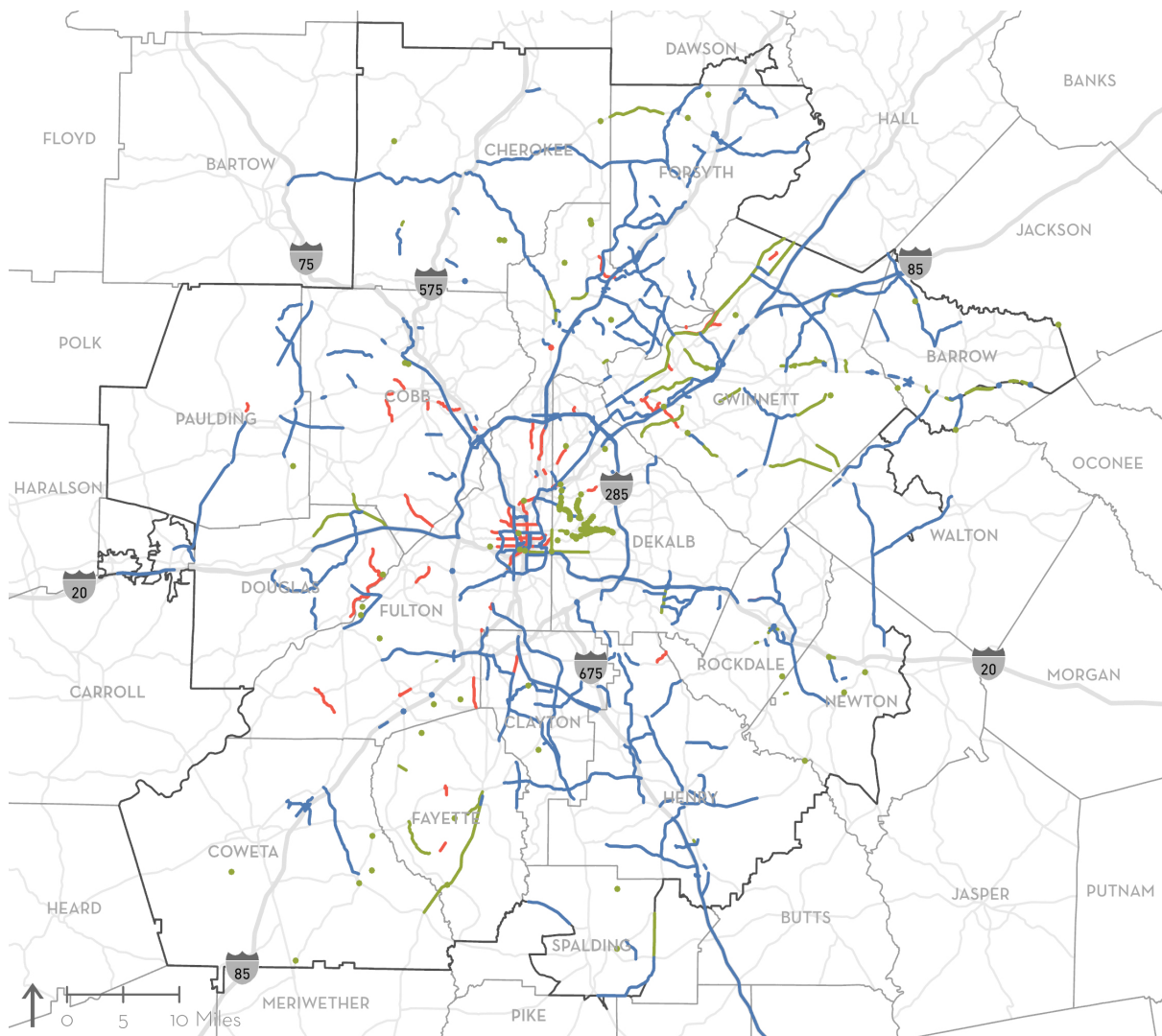
Investments to Improve Mobility, Access, and Safety

The Atlanta region must invest in projects and programs that modernize, expand, and maintain our transportation infrastructure. The recommendations envision a world-class, multimodal network designed to support our economy and quality of life.

The RTP contains robust transportation infrastructure investments – from pedestrian safety measures to congestion management – designed to improve mobility, access, and safety for all of the Atlanta

region’s residents and visitors. The recommendations are grouped into three program areas — Demand Management, Expansion, and Maintenance & Modernization — and eight corresponding subareas.

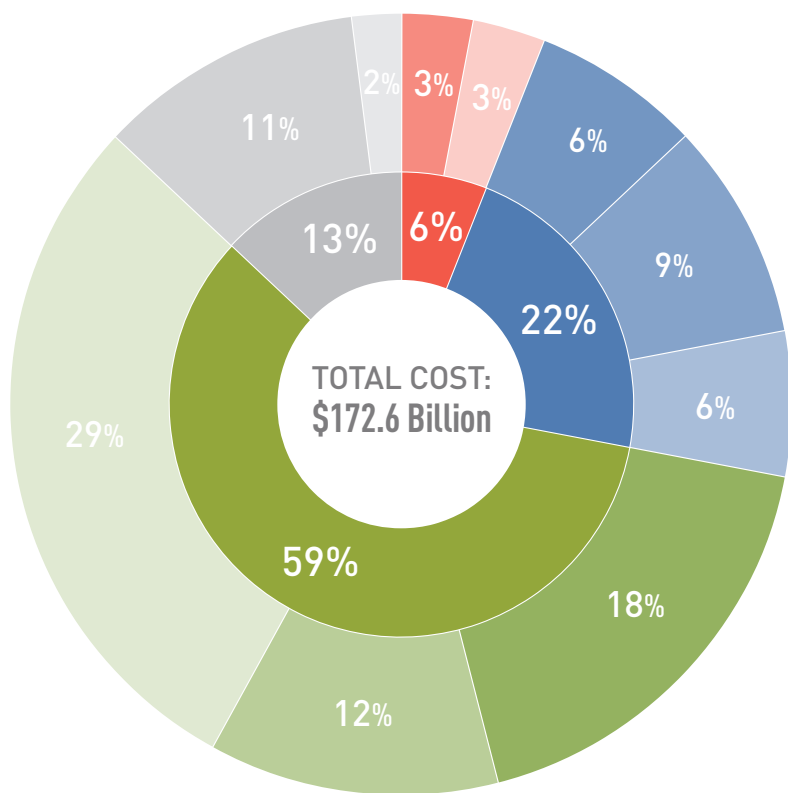
ARC’s interactive online mapping tool showcases the locations of individual infrastructure projects across the region and more details about each project. The figure on the following page provides a breakdown of the cost of projects by program area and sub-area.



Legend

- Demand Management
- Maintenance and Modernization
- Expansion
- MPO Boundary
- Counties
- Major Roads
- Expressways

Investments by Program Area



Legend

Inner Ring: Program Area

- Demand Management
- Expansion
- Maintenance & Modernization
- Other

Outer Ring: Program Sub-Area

- Walking, Bicycling, and LCI
- TDM and Other Programs and Initiatives
- Interchange and Highway Capacity
- Managed Lanes
- Transit Expansion
- Transit Operations and Capital Management (All Systems)
- Road System Optimization and Safety
- Road and Bridge Preservation
- Administrative Costs
- Unprogrammed Funding

DEMAND MANAGEMENT

Includes programs and projects that promote non-single-occupancy-vehicle modes and comprehensive infrastructure, such as the Livable Centers Initiative (LCI), Transportation Demand Management (TDM) projects that reduce the number and length of trips, and last-mile connectivity projects that expand walking and bicycling opportunities.

Investment: \$9.8 billion (approx. 79 projects)

EXPANSION

Includes programs and projects that build on existing infrastructure, such as the expansion of the managed lanes network, the construction of the BeltLine, and other projects that provide premium and high-capacity transit service and those that add capacity to the roadway system.

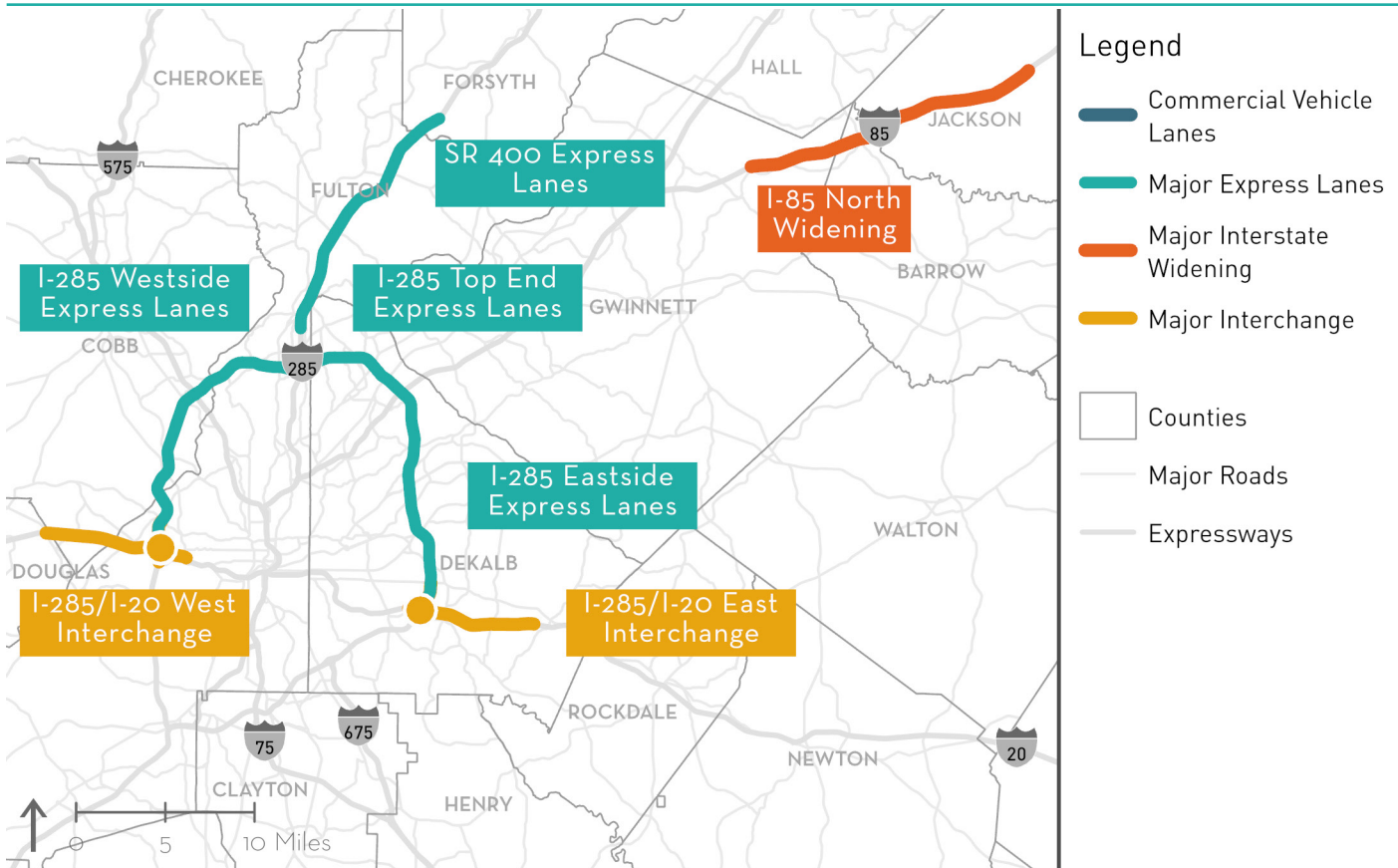
Investment: \$38.3 billion (approx. 289 projects)

MAINTENANCE & MODERNIZATION

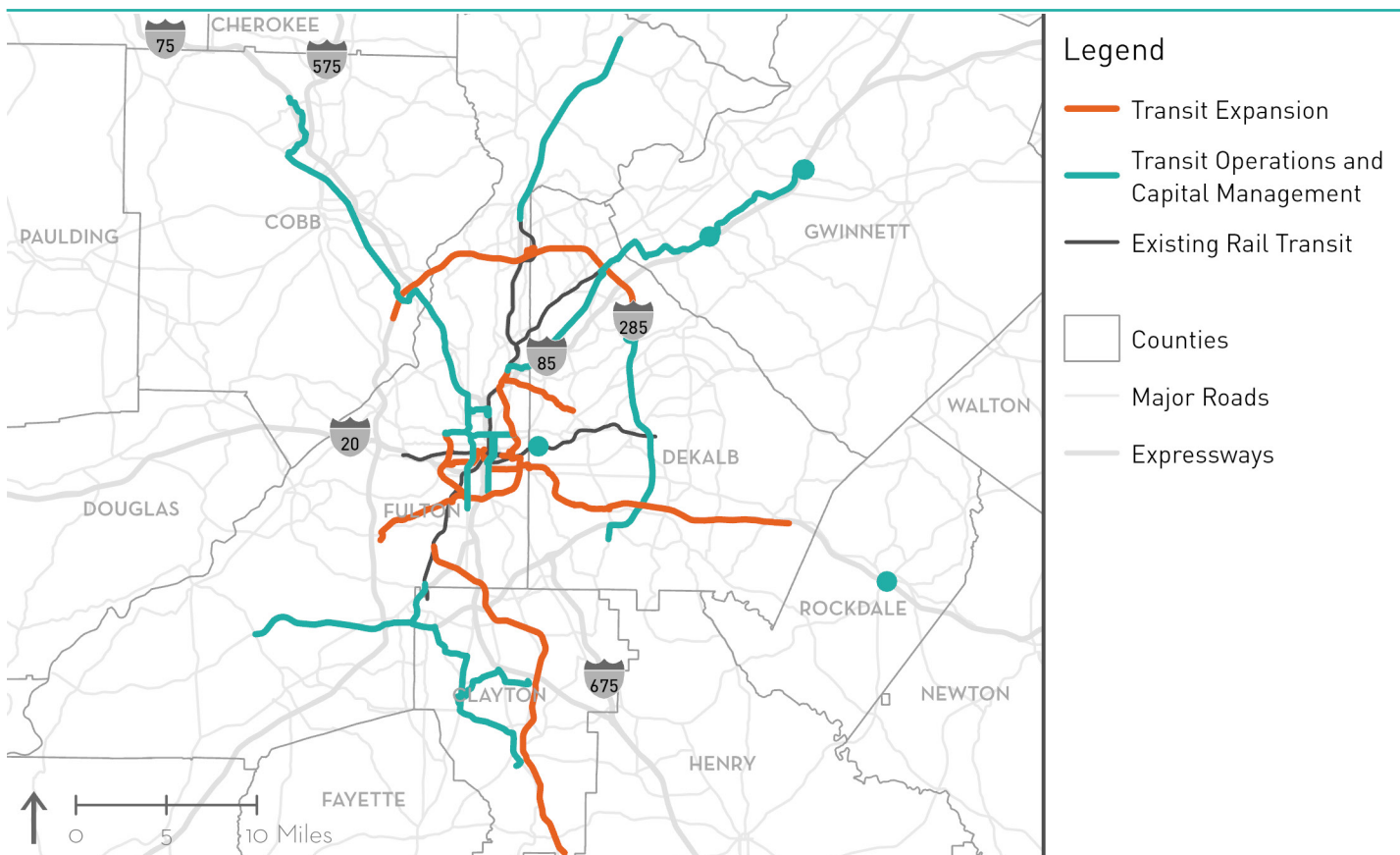
Includes programs and projects that focus on maintaining the safe and efficient operation of the existing transportation network, such as bridge replacements, traffic signal upgrades, and investments in clean fuel transit vehicles.

Investment: \$102.3 billion (approx. 191 projects)

Managed Lane and Interchange and Highway Capacity Projects



Transit Expansion, Operations, and Capital Management Projects



Walking & Bicycling Solutions



Walking and bicycling are essential transportation options for the health and vitality of metropolitan Atlanta. Many shorter trips can be accomplished on foot or by bike, including commuting to work, accessing transit, and traveling within regional activity centers. ARC's regional walking and bicycling plan – titled Walk. Bike. Thrive! – envisions a region of livable communities where walking, bicycling, regional trails, and transit are safe, convenient, and normal.



What is the safe-system approach?

The Safe System approach is a holistic, systems-based strategy that: accounts for all roadway users; anticipates that humans will make mistakes; and shares responsibility for safety between individual road users and system designers. What this means in practice is that roadways are designed to prevent crashes from happening at speeds and in situations

where the human body cannot physically survive the impact. For ARC, this means complementing our traditional approach by proactively identifying corridors and intersections based on risk factors, including locations with and without a crash history, and funding cost-effective strategies to address safety issues system-wide.

Roadway System Optimization and Safety

Transportation Systems Management and Operations (TSMO) is a set of strategies that focus on operational improvements that can maintain and even restore the performance of the existing transportation system before extra capacity is needed, such as Intelligent Transportation Systems (ITS) and roadway design.

The RTP includes many projects that utilize new technologies, from signal synchronization to autonomous vehicles. The Atlanta region is fast becoming one of the most connected in the country thanks to GDOT's Regional Traffic Operations Program (RTOP), which is deploying Dedicated Short Range Communications (DSRC), a form of vehicle to vehicle communication, to thousands of intersections.

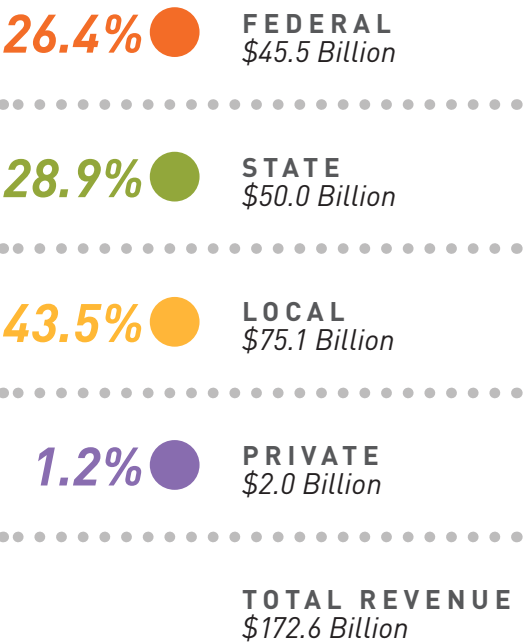
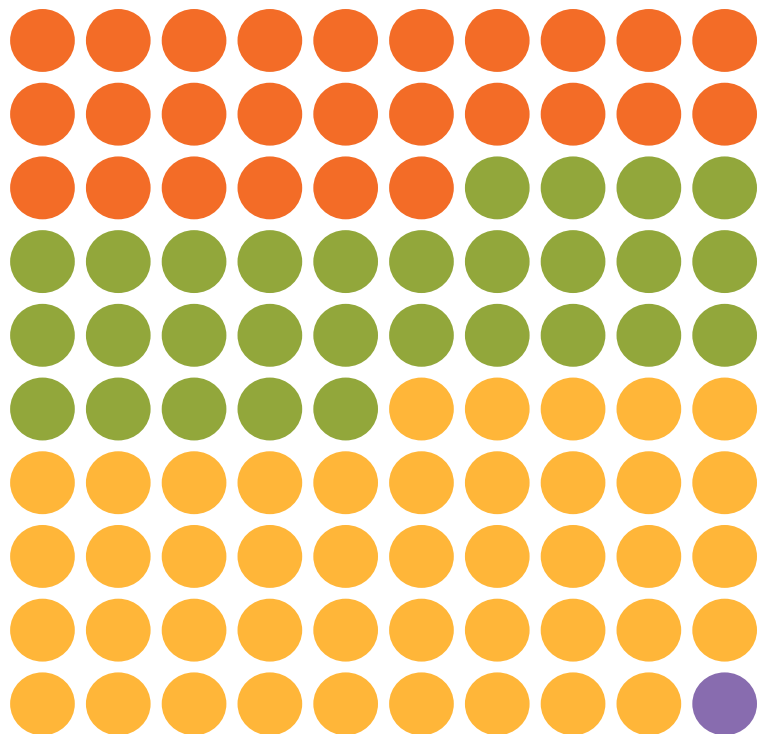
As technology improves, TSMO solutions continue to grow, with the ability to:

- Reduce injuries and fatalities resulting from vehicle crashes
- Alleviate congestion
- Safely and efficiently manage traffic during significant roadway incidents
- Improve travel time reliability
- Provide traveler information
- Facilitate improved travel conditions during special events
- Increase safety for people walking and bicycling
- Increase reliability and efficiency for transit

Where is this money coming from?

The RTP estimates that total expected revenues from all sources will be \$172.6 billion and total expected plan investments will be \$172.6 billion.

The RTP is required by law to be fiscally constrained, meaning that there will be enough revenue to cover the expected spending over the life of the plan. Revenue sources include federal funds from the USDOT, state funds collected from the motor fuel tax and other fees, local funds collected primarily from sales taxes, transit fares, private sector property tax assessments, and other sources.



Performance

It is imperative that transportation investments recommended in the RTP contribute to achieving the goals and objectives set forth in ARC’s 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.


Two levels of evaluation are used in the development of the RTP: individual project evaluations and system wide performance evaluations.

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.


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 Environmental Protection Agency (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




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




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

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

Future

The true purpose of this plan is not to articulate every action to be undertaken in the future, but rather to define a general vision and set us on a reasonable path forward. While the path may have unexpected obstacles, the vision should remain constant. The commitment to creating world-class infrastructure,

a competitive economy, and healthy livable communities should not change, although the most appropriate means to achieve that vision might. Even the definition of what each of these outcomes means may be different for somebody looking back from the future compared to us looking forward from today.

Ongoing work at ARC will enable the plan to evolve and to stay timely, relevant, and effective.

Highlights include:

RESILIENCY PLANNING

Planning to ensure a safe and reliable transportation system is a key objective outlined in the RTP. Resiliency planning works to minimize disruptions to the transportation system from increasingly extreme weather events like flooding, snow and ice storms, and heat waves, and from unpredictable and sudden disruptions like the I-85 bridge collapse in 2017.

IMPLEMENTING VISION ZERO

Implementing Vision ZeroARC is committed to a regional safety approach to eliminate fatal and serious injury crashes that is data-driven, proactive, and aggressive. To that end, ARC has convened the Regional Safety Task Force (RSTF) to lead the region towards zero traffic deaths. The RSTF will help ARC establish a regional safety vision, identify actionable strategies and resources, track progress toward meeting regional safety targets, promote better transportation project development, and promote a culture of safety.

MODELING AUTOMATED VEHICLES

The ARC Activity Based Model (ABM) is the region's Travel Demand Model that replicates household-level and person-level travel choices to model future travel in the region. The ABM is continuously updated to reflect the most up-to-date travel patterns in the region. The model will be updated to reflect the advent of automated vehicles and their potential to disrupt travel patterns in the future. Until AV's are publicly available and in widespread use, the model's AV features will be based on academic research and assumptions.

PLANNING FOR EQUITABLE OUTCOMES

ARC is careful to ensure that its policies and activities do not disproportionately impact members of the communities who, through federal guidance, have been identified as protected classes. The Transportation Equity Advisory Group (TEAG) is one component of ARC's efforts to work towards a more equitable process. TEAG connects subject-matter experts with transportation planners and agencies from around the region to help ensure that the voices of vulnerable populations are heard and considered throughout the planning process.