We are very auto-centric, very auto-oriented. We certainly need to invest more in other modes and other facilities to accommodate other modes – complete streets, obviously, transit – yes. Atlanta and the region are doing so much better, but we definitely have room to do more.

- STEVE C.

“We’re on the right track - getting rid of fossil fuel burning vehicles that we currently have. Anything will help.”

- JEAN-CLAUDE B.

I think we need more sidewalks...on every street and more street lights would make the city safer as a whole. If we could get more heavy rail and expanded bus services that would be great.

- CAMERON D.
RECOMMENDATIONS

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 healthy and livable communities.

A VISION FOR 2050

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. This ambitious list of recommendations addresses the varied challenges faced across the region and provides a higher quality of life for everyone.

An in-depth report on the Plan’s entire set of recommendations can be found in Appendix A: RTP Project List. Additionally, ARC’s interactive online mapping tool showcases the locations of individual infrastructure projects across the region and more details about each project.

LEARN MORE:

- Online Map of RTP Projects
Figure 5
PERCENT OF PROJECTS BY PROGRAM AREA AND PROGRAM SUB-AREA

See Finance Chapter for a breakdown of project cost by program area and program sub-area

Legend

Inner Ring: Program Area
- Demand Management
- Expansion
- Maintenance & Modernization

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 Replacement
- Road System Optimization and Safety
- Road and Bridge Preservation
MAP 14: RTP PROJECTS BY PROGRAM AREA

Legend
- Red: Demand Management
- Green: Maintenance and Modernization
- Blue: Expansion

- Major Roads
- Expressways
- Counties
- MPO Boundary

[Map showing RTP projects by program area with various road types and colors indicated by the legend.]
**PROJECTS BY PROGRAM AREA**

**DEMAND MANAGEMENT**

The demand management program area includes those programs and projects that fulfill the demand for transportation by promoting non-single-occupancy-vehicle modes and comprehensive infrastructure. LCI program funding is reflected here, as is funding for Transportation Demand Management (TDM) projects that enhance the region’s air quality. Last-mile connectivity projects that enhance the transportation network for people walking and bicycling can help to shift trips that otherwise would have taken place in a car to more active modes, providing both public health and roadway congestion benefits.

There are approximately 80 projects and programs under the demand management program area, and these programs and projects account for about 14% of the recommendations.

**EXPANSION**

The expansion program area includes those programs and projects that build on existing infrastructure to prepare the region for the expected and unexpected rigors of tomorrow. Ongoing projects like the expansion of the managed lanes network and the construction of the Beltline fall into the expansion program area. New projects that provide premium and high-capacity transit service and those that add capacity to the roadway system are also included here.

There are approximately 300 projects and programs under the expansion program area, and these account for about 52% of the recommendations.

**MAINTENANCE & MODERNIZATION**

The modernization program area includes those programs and projects that focus on maintaining the safe and efficient operation of the existing transportation network. The modernization programs and projects included in the RTP span both roadway and alternative modes of transportation. Bridge replacements and signal upgrades are contained in the modernization project list, as are investments in clean fuel transit vehicles.

There are approximately 200 projects and programs under the modernization program area, and these programs and projects account for about 34% of the recommendations.
REDUCING DEMAND ON OUR TRANSPORTATION SYSTEM

The most cost efficient and sustainable way to leverage maximum value from our existing infrastructure is to reduce the number and length of trips it serves. TDM seeks to reduce roadway congestion and demand for single occupancy vehicle (SOV) travel by redistributing travel demand to non-single occupancy-vehicle modes, times, and routes. The Mobility Services Group of ARC heads the region’s TDM efforts with the focus of changing travel behavior in the region. As such, the program markets incentives and programs that encourage SOV drivers to take transit, telework, carpool, vanpool, walk or bike to and from work.

MOBILITY SERVICES OVERVIEW

ARC established the first regional TDM program in 1994, providing outreach to employers and commuters. Through these efforts, metro Atlanta has become a leader in the use of TDM strategies to minimize peak hour commuter congestion. In 2013, ARC adopted the Atlanta Regional TDM Plan which is a long-range plan that defines a strategic framework for developing and integrating TDM strategies into planning, project development, and system operations investment decision-making.

The Georgia Commute Options (GCO) program, managed by ARC and funded by GDOT, operates on a regional scale, providing commuter incentives, no-idling education, and programs for schools and employer assistance in the adoption of alternative commuting. ARC also provides significant grant funding to Transportation Management Associations (TMAs), shown on Map 15, to conduct commuter and employer outreach in seven regional activity centers.

In 2018, the Regional TDM Program, consisting of GCO and 7 TMAs, had 635 employer partners with a total of 342,296 employees. In addition, there were 110 Property Manager Partners. Employer Partners in the regional TDM network purchased 186,806 transit passes in 2018, accounting for $14,300,351 in revenue to the regional transit partners.

Additionally, ARC funds a free commuter ride matching and a safety net program, Guaranteed Ride Home, in which commute alternative participants receive a free ride home in the case of an unexpected event.

Figure 6
TMA PURCHASED TRANSIT PASSES

<table>
<thead>
<tr>
<th>Year</th>
<th>TMA Purchased Transit Passes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$9,904,192</td>
</tr>
<tr>
<td>2017</td>
<td>$12,854,411</td>
</tr>
<tr>
<td>2018</td>
<td>$14,300,351</td>
</tr>
</tbody>
</table>
One of the central intentions of the TDM Plan is to better integrate travel planning with transportation planning, system operations, land use, economic development, and healthy communities. The effective implementation of the Regional TDM Programs results in spreading peak period congestion, decreased SOV trips, reduced vehicle miles traveled (VMT), and reduced emissions throughout the region. These efforts support and are integrated with the larger aims of the region as outlined in The Atlanta Region’s Plan.

By promoting, raising awareness of, and incentivizing the use of alternative transportation modes, the regional TDM program aims to maximize the value, connectivity, and efficiency of the existing regional transportation infrastructure. Ensuring a comprehensive transportation network requires the promotion of transit, car/vanpool, biking, walking, and teleworking in order to maximize the potential of these infrastructural networks. In 2017, the Atlanta region was number two in the nation for businesses that telework according to Forbes. As companies try to attract and retain entry-level employees, they are providing more options that foster work-life balance.

The Atlanta region has seen tremendous growth in TDM over the past three years. In addition, the region has identified several areas that offer potential to continue to make gains in reducing single occupant vehicle trips, each of which are described on the following pages.

Xpress bus 410 on I-85
TDM AND CONSTRUCTION MITIGATION
As the region continues to struggle with challenges around congestion and impacted mobility, major construction projects will be necessary to ensure the long-term mobility of our community and the Atlanta region. An example of how TDM can positively impact construction projects is demonstrated through the Transform 285/400 TDM and Communications Project. Facilitated by ARC, public and private companies from across the region convene regularly to discuss commuter challenges due to the ongoing interchange reconstruction project. Some strategies include providing incentives to commuters that carpool and vanpool, promoting transit ridership, and working with companies to offer or enhance their telework program.

TELEWORKING IS ON THE RISE
Companies across the region are learning that offering flexible work options such as working from home, compressed work schedules, and flexible hours results in increased productivity and enhanced quality of life for their employees. GCO offers telework and flexible work counseling, FlexWork, to hundreds of employers in the region. Year after year, GCO has received support from the Georgia Governor’s Office in promoting telework and designating a full week each year to “Telework Week.” Employers across the state are encouraged to start or fine-tune their existing telework program in efforts to reduce emissions, vehicle miles traveled, and congestion on our roadways during peak hours. As the region continues to grow and the state continues to attract more businesses, telework will likely follow suit.
BICYCLING IS ON THE RISE
Over the past several years, metro Atlanta has increased investments in bicycle infrastructure, which is both a response to and a cause for increased bicycling activity. Infrastructure expansion has consisted of on-road bike lanes and cycle-tracks, as well as separated multi-use paths. In addition, ARC has developed the annual Atlanta Bike Challenge: Biketober as part of GCO’s suite of programs promoting alternative transportation modes. This broad and inclusive approach to growing the region’s share of people bicycling is based on a behavior change model that recognizes the fact that people are not likely to go straight from never riding a bike to riding one to work. Instead, they are likely to begin with a recreational trip on the weekend and then, once they get comfortable on a bike, move on to cycling for daily errands and, eventually, to work.

REGIONAL TRANSIT PROMOTION AND AWARENESS
Increasing public awareness of available transit services and encouraging non-riders to try transit are focal areas of ARC’s TDM program. Since 2016, Mobility Services has launched the regional Try Transit promotion working with GCO employer partners and transportation management associations. Thousands of commuters have participated in the program resulting in a growing number of people who have changed their commute option to transit. Through a robust social media campaign, blog posts, outdoor billboards, video content, and targeted digital ads, GCO is able to reach a wide audience and share transit messaging. In early 2019, GCO played a major role in educating nearly 10,000 Super Bowl LIII volunteers on various commute options, including transit.
NATIONAL MODEL FOR INFUSING TDM AT SPECIAL EVENTS

Mobility Services launched a Super Bowl version of Try Transit in response to this large-scale event in a heavily populated urban environment. The potential to have dramatic impacts on traffic and congestion before, during, and after the event is well documented in location after location. The influx of event organizers and staff, media, set up crews, food and supply deliveries, and general logistical needs often negatively impact mobility in the period prior to the event. Of course, attendees create additional congestion, and the breakdown of the event continues those impacts for more time with street closures for loading and removing materials from the venue and surrounding areas.

Based on past experience, GCO determined that a multi-pronged approach to this challenge would provide the best results. A strong focus on promoting telework at a regional scale, encouraging the use of transit for anyone needing to access downtown Atlanta, and working closely with all transit organizations, employers, and partners in the region to spread these messages were the key elements of the overall program.

REGIONAL TDM EVALUATION FRAMEWORK

A Regional TDM Evaluation Framework that sets forth Guiding Principles was established by the GCO Evaluation Team following a series of workshops and input sessions with the Employer Service Organizations (ESOs). The TDM Evaluation Framework Guiding Principles will:

- Estimate and emphasize the value of TDM investment
- Connect TDM program goals to regional plans and goals
- Measure performance against key steps that influence behavior change
- Assess performance by outcomes not inputs

LEARN MORE:

- Regional TDM Evaluation Framework
GROWTH AND DEVELOPMENT SOLUTIONS

Rapid growth in the Atlanta region has both amplified issues and created opportunities over the past several decades. While growth brings new and better job opportunities and an improved quality of life, it can also result in situations where the transportation infrastructure has not been able to keep pace or was ill-suited to meet the types of demands placed on it. The Atlanta Region’s Plan recognizes the direct relationship between how land is used and what transportation services will be most effective. This section explores programs and initiatives where proactive decisions can help the region grow in a more sustainable manner without compromising the health of our economy.

Livable Centers Initiative (LCI)

Since the program’s start in 2000, the Livable Centers Initiative (LCI) has played a substantial role in mobilizing the region to action on issues including better street design and land use policy, increased density, and a growing appetite for transit. Capitalizing on the growing support for livable communities and tighter integration of transportation and land use planning, The Atlanta Region’s Plan continues efforts to focus growth in established communities through LCI. The program prioritizes funding studies in TOD Centers which are areas with a direct connection to the high-capacity regional transit system, and Local Centers, which are areas that are traditional main street and downtown communities. The goals of the program are consistent with the vision of world class infrastructure, healthy livable communities, and a competitive economy laid out in the Policy Framework:

- Encourage a diverse mixture of land uses, including residential, employment, shopping, and recreation options, which are accessible by people of all ages, abilities, and income levels.
- Enhance access to a range of travel modes including transit, roadways, walking, and biking, and increase roadway connectivity to provide optimal access to all uses within the study area.
- Foster public-private partnerships and sustained community support through an outreach process that promotes the involvement of all stakeholders, including those historically under-served or underrepresented.

Live music in downtown College Park
The award of federal funding for LCI transportation projects to communities that have demonstrated implementation of their plans has incentivized many of the current 120 LCI communities to enact policies that support the goals and objectives of their plan (i.e. by adopting new zoning or design guidelines).

ARC will continue to support the creation of livable centers and the implementation of existing and future LCI studies. Overall funding for the LCI program is projected at approximately $1.1 billion through the year 2050. The program is one of the key emphasis areas identified for Surface Transportation Block Grant Program (STBGP) and Transportation Alternatives Program (TAP) funding available each year in the TIP.

Funded projects will support multimodal travel, more livable and affordable neighborhoods, and the development of jobs and housing in existing town centers and near transit. Encouraging future growth within LCI areas increases transit ridership, promotes more bicycle and walking trips, and shortens the length of automobile trips, thus helping to reduce both vehicle miles traveled and emissions of carbon dioxide and other pollutants.
Transit Oriented Development (TOD)

Transit Oriented Development (TOD) is a type of pedestrian-friendly development that includes a mixture of housing, office, retail, and/or other amenities closely integrated with transit. Some of the benefits of TOD include increased transit ridership, reduced congestion and greenhouse gas emissions, walkable communities that accommodate healthy lifestyles, expanded mobility choices and improved access to jobs, and increased property values.

Because development around transit can attract high-income populations and have a considerable impact on property values, planning for equitable TOD (ETOD) is crucial. ETOD attempts to address critical community needs, weaving them into the fabric of transit development and creating mixed-income communities that make connections to employment opportunities, healthy food, affordable housing, quality schools, parks, arts and cultural activities, and healthcare for everyone.

In 2010, MARTA created TOD Guidelines to provide a framework for designing and constructing successful projects based on four principles: relative density, a mixture of land uses, a great public realm, and a new approach to parking. Following publication of the Guidelines, MARTA published station profiles with information on demographics, current surrounding land uses, and development potential.

The TransFormation Alliance at ARC – a collaboration between public, private, and nonprofit groups dedicated to creating mixed-income communities integrated into transit – has also created station profiles to provide an understanding of the communities surrounding stations and offer specific ETOD strategies for each station area. This information underscores the importance of understanding and addressing specific community needs, which vary based on the surrounding area and should dictate the type of development at each station.

While the region has been slow to fully leverage the potential of land adjacent to transit, there are notable examples where a concerted effort to reshape development patterns have proven successful. For instance, the Lindbergh MARTA station was initially planned over 20 years ago, making it one of the first and most comprehensive examples of TOD in metro Atlanta. MARTA is working to take advantage of underutilized space and parking lots at stations around the region, creating residential, commercial, and office space at stations including Edgewood, Chamblee, Avondale Estates, and King Memorial. Residential development will include a mixture of income levels, with some units set aside for low income and/or senior residents.

As the LCI program prioritizes communities served by high-capacity transit, a growing number of communities in the region have plans in place which are generally consistent with the principles of successful TOD.
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. Many longer trips can pair walking or bicycling with public transit for regional connectivity. Walking and bicycling continue to grow in importance as the region pivots towards increased urban growth, individuals pursue healthier activities, and communities seek to become more competitive in attracting businesses and supporting residents.

ARC’s regional walking and bicycling plan – titled Walk. Bike. Thrive!: A regional vision for a more walkable, bikeable, and livable metropolitan Atlanta – envisions a region of livable communities where walking, bicycling, regional trails, and transit are safe, convenient, and normal.

The Atlanta region has seen continual growth in the numbers of people walking and bicycling but also more people being injured or killed while traveling. More can be done to encourage active transportation by making these trips safer and more convenient.

Walk. Bike. Thrive! recommends five actions to increase walking and bicycling in the region:

- Support community-scale walking and bicycling networks.
- Address the region’s growing transportation safety and equity issues.
- Provide first- and last-mile connections to regional transit systems.
- Promote complete streets for urban centers and multimodal thoroughfares.
- Connect and complete a regional-scale trail network.

Each of these actions are detailed in a series of plan supplements: Regional Trail Report (2016) outlines regionally-significant trail connections; Bike to Ride (2017) lays out regional transit-access strategies; Safe Streets for Walking & Bicycling (2018) is a safety action plan for additional insights into systemic safety issues. The Complete Streets Workbook and forthcoming Regional Bicycle Connectivity Assessment (pending) inform project development and prioritization decisions to support more walking and bicycling.

All of these strategies revolve around three main goals to improve the mobility, safety, and economic competitiveness of both individuals and communities within the region.
Focus investments to support walkable communities
A metropolitan area is boosted by having more walkable and bikeable communities. The region uses transportation and development tools to support active trips along connected street grids with access to parks, schools, commercial areas, transit service, and a mix of housing types.

Address safety and equity issues
The region uses every investment to help decrease pedestrian and bicyclist fatalities and serious injuries as well as providing sidewalks and bikeways for populations that rely on walking and biking out of necessity.

Connect regional trail system
Multi-use paths and trails serve as comfortable “walking and bicycling superhighways” at a regional scale. The region develops partnerships between state, local, and non-profit organizations to make critical regional trail connections.

Build complete streets
Walkable communities are best supported by complete streets. Suburban arterial roads need to be multi-modal thoroughfares. The region identifies barriers to walking and biking and relentlessly works to address them as opportunities arise.

Improve access to transit
Longer regional trips are best served by walking and bicycling combined with transit. The region works to improve walking and biking access to transit stops and improve the quality and quantity of regional transit service.

Figure 7
FIVE STRATEGIES TO ACHIEVE A MORE WALKABLE AND BIKEABLE METRO ATLANTA
Mobility is the ability for people to move around. Metropolitan Atlanta is geographically large with long distances between destinations. The region’s low density and dispersed land use patterns mean walking and bicycling are often inconvenient for many trips. Region-wide averages for bicycling and walking travel are generally low, but areas with concentrations of destinations – city cores, town centers, activity centers, and denser neighborhoods – or better access to regional transit tend to have rates of walking, bicycling, and transit higher than the regional average. Even within walkable communities, the quality of pedestrian or bicycling infrastructure determines trip levels – comfortable facilities enable trips while lack of comfort discourages travel. Walking and bicycling, especially paired with regional transit options, can be convenient when supported by compact communities and high-quality facilities.

Safety is often cited as a significant barrier for people to choose walking or bicycling for regular trips. This is understandable as metropolitan Atlanta suffers crash, injury, and fatality rates significantly higher than national averages. While the region must focus on making walking and bicycling safer, risk is not equally distributed in the region. Core centers and neighborhoods have generally lower risk per miles traveled while suburban arterials and commercial areas have significantly higher risks. Across the region several consistent factors – including roadway width and automobile speeds – predictably contribute to injuries and fatalities for people walking and bicycling. Reducing dangerous roadway features by building complete streets and multimodal thoroughfares will contribute to eliminating injuries and fatalities from metropolitan Atlanta’s roads.

Walking and bicycling are increasingly critical to the success of competitive urban areas. The economic health of the region and its residents is tied strongly to business opportunities and access to jobs. Metro Atlanta businesses and employers are competing with cities around the country to attract talent. Quality-of-life projects and supporting walkable communities (as well as investments in education) are two of the most valuable economic investments for the region. Conversely, long commute times are the best predictor of economic immobility so ensuring convenient transit and low-cost transportation options is vital to ensuring the economic success of employees. Walking, bicycling, transit, and trails help attract and retain talented employees while providing affordable options for everyone. Removing mobility and safety barriers to make walking and bicycling normal is essential for improving regional economic competitiveness.
To address walking and bicycling travel needs, ARC has routinely used federal Surface Transportation Block Grant Program (STBGP) funds and Transportation Alternatives Program (TAP) funds to develop bicycle and pedestrian projects as well as first- and last-mile transit access projects. Between FY 2016 and FY 2019, ARC awarded $312 million in federal STBGP-Urban funds and $25.2 million in federal TAP funds towards regionally significant bicycle, pedestrian, and multi-use trail projects across the region.

ARC plans to continue maximizing available federal funds for advancing regionally-significant pedestrian, bicycle, trail, and transit-access projects while maintaining the focus of TAP funds on completing a regional trail network. Overall funding for bicycle and pedestrian infrastructure in the region is projected at approximately $5.5 billion through the year 2050. This includes projects directly funded and sponsored at the local level and LCI program spending. The LCI program, discussed earlier in this section, is another regional use of federal funds to develop pedestrian and bicycle infrastructure as part of its program focus to advance multi-modal transportation corridors that support livable communities.

The adjacent map depicts the regionally significant walking, bicycling, and LCI projects included in the RTP project list. The map does not show the significant additional investments being made using local funds.
This map depicts the regionally significant walking, bicycling, and LCI projects included in the RTP project list. The map does not show significant additional investments made using local funds.
SAFETY SNAPSHOT OF THE ATLANTA REGION

27% of fatal crashes involved alcohol

69% of all crashes occurred on roadways with less than 4 lanes

81% of all crashes occurred on roadways with posted speed limits of 35 MPH or greater

On average, more than 276,600 crashes occur every year in the Atlanta region, resulting in 642 deaths and 7,777 serious injuries. That's almost 2 deaths and 21 serious injuries per day.
SAFETY SOLUTIONS FOR ALL ROADWAY USERS

These numbers inspire us to do better.

Crashes resulting in people dying or becoming seriously injured are a preventable transportation, public health, and equity issue in the Atlanta region. ARC is committed to a regional safety approach to eliminate fatal and serious injury crashes that is data-driven, proactive, and aggressive.

Figure 8
BICYCLE & PEDESTRIAN FATALITIES AS A PERCENT OF ALL FATALITIES

2 ARC's Activity Based Model - 2015 Mode Share
SAFE SYSTEM APPROACH

Safety and a person’s perception of safety significantly influence their choice of transportation, travel behavior, and sense of comfort. We know that this is especially true for people walking and bicycling as they are more vulnerable than people inside a motor vehicle. We also know that the burdens of traffic violence and the benefits of traffic safety measures are unequally distributed throughout our region. To work towards an ambitious target of zero fatalities by 2030, ARC is embracing a Safe System approach.

A complete description of the Safe System approach and strategies in which ARC can influence regional safety as it relates to ARC’s bicycle and pedestrian program are detailed in Safe Streets for Walking and Bicycling. This report serves as a model for applying the Safe System approach, including careful data analysis of risk factors and identification of evidence-based solutions. ARC looks to develop this data-driven all-modes safety strategy as part of its next work program with guidance from the Regional Safety Task Force.

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.
HOW IS SAFETY REFLECTED IN ARC’S WORK?

PROJECT DEVELOPMENT

Influencing project development and design is a challenge for ARC given our position upstream from a project’s design and engineering, and the fact that ARC does not manage projects throughout their lifetime. Plus, there is no consistent agreement between agency partners about what “great projects” look like, but illustrating typologies and connecting design elements to regional goals is critical to moving the needle on safety and mobility. This is especially true considering some of the smallest pieces of transportation projects have outsized impacts on travel options, particularly for vulnerable roadway users.

One tool that has enabled ARC to tie specific design elements that promote safer mobility to bigger regional safety goals and policies is the TIP Project Evaluation Framework. This data-driven prioritization process, which includes LCI projects and feasibility studies, allows ARC to prioritize design elements, including evidence-based safety measures, and to anticipate project development needs.

Ultimately, safe design and prioritizing safety need to be integrated across the full range of ARC’s planning work, including CTPs and mode-specific plans. Future work programs should also consider regular safety progress reports to understand what improvements have occurred and for whom, and where opportunities to address safety still exist.

REGIONAL SAFETY TASK FORCE

In 2019, ARC started convening a Regional Safety Task Force (RSTF) in order to lead the region towards zero traffic deaths. RSTF will help ARC: establish a regional safety vision; identify actionable strategies and resources; track our progress toward meeting regional safety targets; promote better transportation project development; and promote a culture of safety.

To date, RSTF has provided input on crash data challenges, helped ARC refine the safety criteria in the TIP Project Evaluation Framework, and supported the development of ARC’s own regional safety targets. In 2020, RSTF will continue to influence the transportation planning processes of ARC, GDOT, MARTA, and other transportation agencies, guide the development of a regional safety strategy for all modes of transportation, and convene some of the brightest and most progressive multi-disciplinary professionals to catalyze positive safety outcomes in the Atlanta region.
ROADWAY SOLUTIONS

All transportation users interact with the Atlanta region’s extensive roadway network at some point during their trip, whether commuting on the interstate, crossing a street, or riding a bus. Keeping the network well maintained is crucial for reliability and the safety of all its users. This section of the RTP highlights a variety of different types of planned major roadway investments which will make travel by roadway more reliable and efficient.

ROAD AND BRIDGE PRESERVATION

Maintenance is crucial to supporting our roadway infrastructure. Keeping up with maintenance can prevent larger, more disruptive problems as infrastructure ages. ARC’s 2015 Transportation Assessment found that approximately 95% of RSTS roads had pavement in good condition and approximately 95% of bridges are also currently in good condition. These figures are higher than the national average of 70 to 75% and 90% respectively. Conditions, however, vary significantly based on the functional classification of the roadway and by jurisdiction.

The RTP commits $49.2 billion through 2050 to regionally significant resurfacing, bridge upgrades, bridge replacements, and other routine maintenance roadway projects. This investment includes both the regionally significant projects in the RTP project list ($17.8B) as well as local and state funded projects which are not in our database (roughly estimated at $34.4B).

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. Many solutions are part of the TSMO toolbox including Intelligent Transportation Systems (ITS) and roadway design. 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

The Atlanta region has a demonstrated commitment to management and operations solutions. For example, prior to the 1996 Olympics, the Advanced Transportation Management System, NAVIGATOR, was developed. It uses video detection, radar detectors, and more than 450 closed-circuit television cameras to monitor traffic flow and upgraded more than 400 traffic intersections to improve signal coordination in the region.
The region’s utilization of new technologies continues today under the program sub-area Road System Optimization and Safety. The RTP includes 140 of these projects, 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.

Local governments are also taking advantage of technology solutions as a cost-effective strategies for increasing safety, reliability, and mobility. Connected Vehicle/Autonomous Vehicle (CV/AV) projects are being increasingly utilized to improve transit services, create safer and faster routes for emergency vehicles, and to give better information to roadway users.

Some of the connected and autonomous vehicle projects happening around the region include:

- DeKalb County, MARTA Local Bus - Transit Signal Priority
- City of Atlanta, MARTA Summerhill Bus Rapid Transit - Transit Signal Priority
- City of Atlanta North Ave Corridor - Transit Signal Priority, DSRC, Automated Shuttle
- Gwinnett County Peachtree Industrial Boulevard Smart Corridor - DSRC and Cellular, Emergency Vehicle Pre-emption, Transit Signal Priority, Remote School Zone Beacon Control
- City of Marietta - Fire/EMS Signal pre-emption
- City of Chamblee - Automated Shuttle
- Peachtree Corners - Automated Shuttle
- Aerotropolis - Virginia Avenue Automated Shuttle

ARC is currently undergoing a regional TSMO planning process to ensure everyone in the region sees the value of using TSMO solutions and to create a regional vision to guide investment in technology. The Regional TSMO Plan will be complete in March 2020 and will include a Strategic plan and a Deployment Guide that will be used to prioritize projects.

**LEARN MORE:**
- RTOP
- Regional TSMO Plan
INTERCHANGE BOTTLENECKS

As the region’s population and economy grows, sometimes the existing infrastructure is unable to accommodate the growth. One fail point that can have a large regional impact is bottlenecks at interchanges, especially when it is near a major roadway or employment center. As part of the Congestion Management Process (CMP), ARC analyzes the major bottlenecks in the region on DASH, a visualization tool for Federal and agency specific performance measures. The Regional Policy Framework also includes addressing major bottlenecks as a strategy for both goods and people movement.

Programmed interchange improvements include upgrades or expansions to existing interchanges and in some cases, building new ones. Interchange upgrade/reconstruction projects typically involve the reconfiguration of existing lanes, rehabilitation or replacement of an existing bridge, or reconfiguration of the on/off ramps to help make traffic flow more efficiently. Interchange expansions can involve the addition of through lanes or expanding the possible movements available to drivers.

The following is a partial list of interchange projects which are expected to be delivered in the next ten years:

- I-285 North at SR 400 in Fulton County – Interchange Reconstruction
- I-285 West at I-20 West in Fulton County – Interchange Reconstruction
- I-285 East at I-20 East in DeKalb County – Interchange Reconstruction
- I-85 South at SR 74 and SR 138 in Fulton County – Interchange Reconstructions
- I-85 North at North Druid Hills Road in DeKalb County – Interchange Reconstruction
- I-85 North at McGinnis Ferry Road in Gwinnett County – New Interchange
- I-20 East at SR 20/138 in Rockdale County – Interchange Reconstruction
- SR 316 at SR 11, SR 53, SR 211, Kilcrease Road and Winder West Bypass in Barrow County – New Interchanges
- SR 316 at US29 and Drowning Creek Road in Gwinnett County – New Interchanges
- SR 400 at SR 369 and McGinnis Ferry Road in Forsyth County – New Interchanges

LEARN MORE:

- DASH
**EXPANDING ROADWAY CAPACITY STRATEGICALLY**

While there are many solutions to mitigating congestion, expanding capacity is sometimes necessary. ARC understands that the Atlanta region’s roadway network is expansive and serves many purposes and modes. As such, many policies in the Policy Framework outline what kind of roadways would be considered appropriate for capacity expansion and what accommodations need to be made for non-motorists in an expansion project. Several policy networks exist for prioritization purposes including the Regional Strategic Transportation System (RSTS), the Regional Thoroughfare Network (RTN), and the Atlanta Strategic Truck Route Map (ASTRoMap). Several other considerations guide capacity expansion considerations including:

- Focus on the most congested corridors where additional capacity can provide positive long-term impacts.
- Encourage multi-jurisdictional and key sub-regional priorities.
- Consider the location of key emergency evacuation routes.
- Support the movement of freight.
- Emphasize cost effectiveness.
- Limit investment in rural areas, except to connect regionally significant employment and commercial centers.

To ensure all capacity expansion projects accommodate all roadway users, ARC also requires arterial projects be implemented as complete streets. A complete street project ensures that the design of the roadway is context-sensitive. This can include amenities to support transit services, provisions of pedestrian and bicycle facilities, and the provision of safe crossings and intersections. This policy is key to ensuring our residents and visitors can move safely around the region.

The RTP includes 215 arterial widenings and new alignment projects which will collectively add almost 600 lane-miles of capacity to the arterial network by 2050. The following is a partial list of arterial projects which are expected to be delivered in the next ten years:

- SR 237 (Piedmont Road) from Lenox Road to SR 141 in City of Atlanta (Peachtree Road) - Widening
- Winder West Bypass from SR 211 to SR 53 in Barrow County – New Alignment
- Villa Rica Bypass from SR 61 Bypass to SR 101 in Carroll County – New Alignment
- SR 20 from I-575 in Cherokee County to SR 371 (Post Road) in Forsyth County – Widening
- US 23 from SR 138 to I-675 in Clayton County – Widening
• US 19/41 from Tara Road to SR 54 (Fayetteville Road) in Clayton County – Widening
• SR 92 (Dallas Acworth Road) from Paulding County Line to US 41 in Cobb County – Widening
• SR 154 (Sharpsburg McCollum Road) from SR 54 to US 29 in Coweta County – Widening
• Panola Road from US 278 (Covington Highway) to Snapfinger Woods Drive in DeKalb County – Widening
• Lee Road / South Sweetwater Road from Vulcan Drive to Skyview Drive in Douglas County – Widening
• East Fayetteville Bypass from Corinth Road to County Line Road in Fayette County – New Alignment
• Various Segments of SR 9, SR 120 and SR 141 in Fulton County – Widening
• SR 9 from Fulton County Line to SR 306 (Keith Bridge Road) in Forsyth County – Widening
• Sugartloaf Parkway from SR 316 to I-85 in Gwinnett County – New Alignment
• US 23 from Downtown McDonough to SR 138 in Henry County – Widening
• SR 162 (Salem Road) from Old Salem Road to Brown Bridge Road in Newton County – Widening
• Various Segments of SR 92 in Paulding County – Widening

• Sigman Road from Lester Road to Old Covington Highway in Rockdale County – Widening
• SR 20 from North Sharon Church Road to US 78 in Walton County – Widening

For freeways, GDOT’s policy is that new capacity added within the Atlanta region be managed through a combination of vehicle occupancy and tolling restrictions. There are two exceptions to this policy:
1. Where there are currently only two lanes in each direction and
2. Auxiliary “add/drop” lanes between interchanges to create longer and safer weave zones.

One major non-managed capacity project fits these criteria and is proposed for the freeway network in the RTP:
• I-985 from I-85 North in Gwinnett County to SR 53 in Hall County – Widening
INCREASING RELIABILITY THROUGH MANAGED LANES

Another strategy to ease highly congested freeways is to build managed lanes. A managed lane, or express lane, is typically a “freeway-within-a-freeway” where a set of lanes is separated from the general-purpose lanes by usage restrictions such as time of day, vehicle occupancy, pricing, or some combination of these. Limiting the usage of these facilities helps to regulate demand, increase reliability and improve transit and other forms of ride sharing.

There are a number of managed lanes currently in operation across the Atlanta region. Some examples include:

- High Occupancy Vehicle (HOV) lanes: no single occupant vehicle can use this lane
- High Occupancy Toll (HOT) lanes: single occupant vehicles and 2-person carpools pay a toll
- Express Toll Lanes (ETL): all vehicles except registered buses pay a toll
- Reversible Express Toll Lanes (ETL): all vehicles except registered buses pay a toll, direction of lanes alternate through the day based on traffic volumes

GDOT is committed to creating a managed lane network through the Atlanta region. As part of the Major Mobility Investment Program (MMIP) announced by the Governor in 2016, several express lane projects were accelerated. For more information about the impacts of managed lanes on the Atlanta region see GDOT’s Managed Lanes System Plan (MLSP) from 2010 and the Managed Lanes Implementation Plan (MLIP) from 2013. The constrained RTP includes over 140 miles of new express lane corridors that will be built by 2050.

▲ LEARN MORE:
- Major Mobility Investment Program
- Managed Lanes System Plan
- Managed Lanes Implementation Plan
This map depicts the regionally significant projects included in the RTP project list. The map does not show significant additional investments made using local funds.
This map depicts the regionally significant projects included in the RTP project list. The map does not show significant additional investments made using local funds.
GOODS MOVEMENT SOLUTIONS

The Atlanta region is a global leader in freight and logistics, forming a key component of the region’s economic base. In 2018, freight dependent jobs were responsible for about $514.8 billion of economic output, or 38% of the total regional output. This is projected to increase to about $1.2 trillion in 2050. These industries include transportation/warehousing, manufacturing, wholesale, construction, and retail. Jobs in transportation/warehousing, manufacturing, and other goods movement/logistics roles can play a role in ladders of opportunity, as many of these jobs provide a livable wage but typically do not require a college education.

Metro Atlanta is the third largest inland port in the United States behind only Chicago and Dallas. This global logistics presence is built on world class infrastructure in four modal pillars:

TRUCK
Approximately 25% of the U.S. population is within a one day truck drive from Atlanta, and more than 80% of the U.S. commercial and consumer markets can be reached within two days. The RTP seeks to balance the growing importance of regional and national truck travel, recognizing that truck access and connectivity are paramount to our economic vitality.

RAIL
With CSX and Norfolk Southern facilities and rail lines, metro Atlanta is served by two Class I railroads, three intermodal terminals, multiple classification and bulk rail yards and direct service to the Port of Savannah.

SEA
The region benefits from being only 250 miles from the Port of Savannah, the fourth busiest port and fastest growing container port in the US. At 1,200 acres, the Port of Savannah’s Garden City terminal is the largest container facility in the nation. In fiscal year 2018 the Georgia Ports Authority handled a record 4.2 million Twenty-foot Equivalent container Units (TEU), an 8% increase from the previous year. At 1,700 acres, Colonel’s Island at the Port of Brunswick is the nation’s largest autoport and handled 1.25 million tons of roll-on/roll-off in fiscal year 2018.

AIR
Hartsfield-Jackson Atlanta International Airport is the 14th busiest cargo airport in the US by landed weight, has 1.3 million square feet of total on-airport air cargo warehouse space, and its cargo services features operations by more than 100 licensed customs brokers and 200 domestic and international freight forwarders.
Freight is vital to the regional economy and is central to the Atlanta region’s growth. According to the FHWA Freight Analysis Framework Version 4, freight tonnage moving to, from, and within Metro Atlanta is projected to increase by 43% across all modes between 2017 and 2045. To successfully accommodate this growth, significant new capacity will need to be developed and increased efficiencies from existing freight infrastructure will be needed.

The Atlanta Regional Freight Mobility Plan (2008) and the Atlanta Truck Route Master Plan (2010), have provided the guiding input for ARC’s freight policies. From 2015-2016, ARC undertook an update to the Atlanta Regional Freight Mobility Plan, which involved revisiting data, assumptions, and recommendations from the original plan document.

The 2016 Atlanta Regional Freight Mobility Plan Update identifies numerous projects in the RTP which directly support freight and goods movement. These projects, along with additional programs, policies and recommendations on future planning initiatives to support this important component of our region’s economy, are detailed in that document.

A key need identified in the plan was the need for a local freight planning program. The locations of seven freight clusters and related freight cluster plans that have received funding are shown in Map 20. The 2016 Atlanta Regional Freight Mobility Plan Update, the Atlanta Regional Truck Parking Assessment Study, and each of these freight cluster plans will continue to provide guidance for freight planning and project and policy implementation in the coming years.

**LEARN MORE:**
- Atlanta Regional Freight Mobility Plan
- Atlanta Truck Route Master Plan
- Atlanta Regional Truck Parking Assessment Study

Freight trains headed south of Atlanta
MAP 20: FREIGHT CLUSTERS

Legend
- Teal: Freight Clusters
- Orange: Freight Cluster Plans
- Blue: Intermodal Yards
- Gray: Regional Truck Routes
- Light Gray: Expressways
- White: Counties
- Dark Gray: MPO Boundary

2. Aerotropolis CIDs (2017)
4. Spalding County (2017)
5. Tucker Summit CID (2017)
6. Downtown/Midtown (2019)
7. Fulton Industrial Blvd CID (2019)
8. Metro South CID (2019)
TRANSIT SOLUTIONS

STATE OF THE REGION
Transit continues to be a centerpiece of transportation solutions in the Atlanta region. Recent legislation shows the importance of transit to the region with the City of Atlanta approving More MARTA and the Georgia General Assembly focusing on metro Atlanta transit in recent legislative sessions. Meanwhile several Atlanta region counties have recently started fixed route bus service while others are studying what type of bus service or emerging technologies could meet the mobility needs of residents and visitors.

REGIONAL PLANNING AND COORDINATION
ARC & THE ATL
Regional transit planning and coordination is evolving with the creation of new operators and the passage of new legislation. The Georgia legislature passed HB 930 in 2018 establishing the Atlanta-region Transit Link Authority (The ATL). The ATL and ARC coordinate with the regional transit operators to plan and program funding for transit projects in the Atlanta region.

ARC developed Concept 3, which is fiscally unconstrained and represents any and all possible expansion projects that have been studied. The ARTP represents projects with momentum or a desire by an operator to implement the project within the horizon of the RTP. ARC then fiscally constrains that subset of projects and includes them in the RTP project list to reflect funding realities and likely implementation priorities.

EXTERNAL COORDINATION
Both ARC and The ATL work with transit operators in the region to facilitate dialogue on planning coordination. The two agencies co-host a bi-monthly Transit Operators Group focused on planning collaboration. The agencies both lead diverse transit studies focused on the entire region as well as studies focused on single transit entities. For example, ARC is leading a Regional Demand Response Coordination Study for the MPO region and also assisting several counties outside of the ATL region utilize funds for transit feasibility studies. Similarly, the ATL is anticipating focusing on items of regional significance such as a regional transit fare study. The ATL is also the region’s Designated Recipient and responsible for working with the MPO to disperse FTA formula funds to eligible transit operators in the region.
EXISTING TRANSIT SERVICE

**TRANSIT PROVIDERS**

Multiple transit providers serve metropolitan Atlanta utilizing rail, fixed route bus service and a variety of demand response transportation services. MARTA is the largest transit provider serving Clayton, Dekalb and Fulton counties. MARTA operates two heavy rail lines as well as fixed route bus routes and paratransit service. Several other metro Atlanta counties operate both fixed route bus service and the required complementary paratransit service. This includes Cherokee Area Transportation System, CobbLinc, Connect Douglas, Gwinnett County Transit and Henry County Transit. SRTA also operates the Xpress commuter bus service to park-and-ride lots in participating metro Atlanta counties.

---

**Major Advances in Transit Since 2016**

- Creation of ATL Authority
- Passage of More MARTA sales tax in the City of Atlanta
- Fulton County Transit Master Plan
- Connect Gwinnett Transit Plan
- Dekalb County Transit Master Plan
- Clayton County High Capacity Transit Corridor Planning
- Transit Feasibility Studies in: Forsyth County, Newton County, and Spalding County (pending)
- Cobb County CTP Update (ongoing)
- Express Lanes System Implementation
DEMAND RESPONSE TRANSPORTATION

The five fixed route bus operators in the region also operate paratransit demand response service within at least a three-quarter mile buffer of their respective fixed route bus service as required by the Americans with Disabilities Act (ADA). Each operator sets their eligibility requirements that must adhere to ADA requirements. The service is typically focused on using sedans and vans with wheelchair lifts to provide mobility options to older adults and persons with disabilities.

Several counties in the Atlanta region do not have fixed route bus service but do offer demand response transit service for older adults and persons with disabilities. In addition to county run services, several nonprofits provide transit service in the region, each with their own service areas and eligibility criteria. For example, the Center for Pan Asian Community Services provides shuttle service that focuses on connecting immigrants in Dekalb and Gwinnett counties to employment opportunities and community resources.

The concept of demand response transportation is evolving to better meet individual’s mobility needs. Operators are exploring new technologies and route concepts that increase travel flexibility for all travelers. Gwinnett County Transit implemented a flex route pilot project in the City of Snellville that uses a smart phone app and phone call service to schedule shuttle trips along a deviating route in Gwinnett County. The microtransit pilot project received a lot of praise for using technology to meet both ADA and bus service delivery needs.

TRANSIT EXPANSION OPPORTUNITIES

MORE MARTA

City of Atlanta voters approved a half-penny sales tax in 2016 dedicated to expanding MARTA service in Atlanta under what is called the More MARTA program. The MARTA board gathered public input to refine the More MARTA project in the fall of 2018. The program is expected to generate approximately $2.7 billion in transit funding over the next 40 years. All of the More MARTA bus rapid transit and rail expansion projects are reflected in this Plan.

FULTON COUNTY

The Fulton County Transit Master Plan (2018) created a vision for transit expansion in Fulton County outside of Atlanta. In May 2019, Fulton County Commissioners refined the project list to determine which projects could be funded by additional voter-approved 0.20 cent sales tax increase. The two major high capacity projects on the list include bus rapid transit on GA 400 from the North Springs Station to Windway Parkway and bus rapid transit on South Fulton Parkway from the College Park Station to GA 92.

I-285 TOP END TRANSIT STUDY

The potential 0.2 cent sales tax funded Fulton County project list also includes bus rapid transit along the top end of I-285. Other planning initiatives include recommendations for bus rapid transit along I-285. Municipalities along the top end of I-285 are collaborating on transit feasibility studies on I-285 between West Paces Ferry Road in Cobb County to Northlake Mall in DeKalb County. The Dekalb County Transit Master Plan (2019) also includes bus rapid transit recommendations along I-285 from the Fulton-
Dekalb northern border at Perimeter Center to the Panthersville area south of I-20.

DEKALB COUNTY

DeKalb County wrapped up the DeKalb County Transit Master Plan in the second half of 2019. The goal of the plan is to establish project lists in the event that DeKalb County Commissioners decide to ask residents to approve an additional half-cent or full penny tax for transit expansion projects. The RTP project list assumes that the additional half-cent sales tax is put to a vote and passed by referendum sometime within the next several years, which is a reasonable assumption given the history. The project list will be updated as needed to reflect the results of the vote. Both the half-cent and full penny project lists focus on bus rapid transit projects that are geographically distributed throughout DeKalb County.

CLAYTON COUNTY

Clayton County is working with MARTA on finalizing plans for a commuter rail project to connect the City of Lovejoy to the East Point MARTA station. A bus rapid transit project would also run in the vicinity of the existing MARTA routes 191 and 196. The RTP reflects the current timelines and cost estimates available acknowledging that updates will be needed once the projects have finalized agreements.

GWINNETT AND COBB COUNTIES

Gwinnett and Cobb counties both have avenues per HB 930 to join MARTA if their respective citizens vote to join. Gwinnett County voted in March of 2019 not to join MARTA. Without a dedicated revenue source for transit the RTP only shows one BRT expansion project in Gwinnett County from the Doraville Station to Suglarloaf Mills. Cobb County may decide in the near future to ask voters if all or a portion of the county will join MARTA and implement an additional sales tax to fund transit expansion projects. Similar to Gwinnett, the RTP shows modest transit expansion in Cobb County with the approved alignment of the Connect Cobb BRT. The RTP will be updated as needed if Gwinnett and/or Cobb Counties approve additional funding for major transit expansion projects.

OTHER BUS EXPANSION

The RTP primarily reflects known high capacity fixed guideway transit projects. Additional fixed route bus expansion is anticipated to occur throughout the region. The Xpress commuter bus service is exploring how to better connect suburban areas to Hartsfield-Jackson International Airport and planning for additional park-and-ride locations focused on GDOT’s managed lane expansion. In addition, several urbanizing counties are studying how to better provide transit service, whether that be targeted towards aging populations or new fixed route bus service available to the public. Operators are also exploring how to utilize technology to operate microtransit/flex routes that better serve the public using apps and deviating bus service.

LEARN MORE:

- DeKalb County Transit Master Plan
The final mode of transit will be based on engineering and environmental studies, community engagement, and funding availability.
The final mode of transit will be based on engineering and environmental studies, community engagement, and funding availability.
The final mode of transit will be based on engineering and environmental studies, community engagement, and funding availability.
MAP 25: RTP TRANSIT EXPANSION AND TRANSIT OPERATIONS AND CAPITAL MANAGEMENT PROJECTS

Legend
- **Transit Expansion**
- **Transit Operations and Capital Management**
- **Existing Rail Transit**
- **Major Roads**
- **Expressways**
- **Counties**
- **MP0 Boundary**