



FUTURE

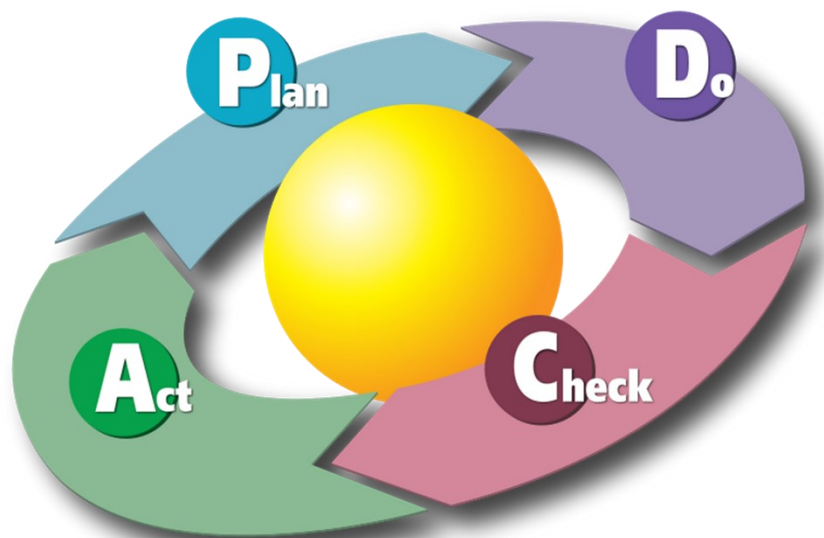
Every plan leave certain questions unresolved, due to late-emerging trends, insufficient data or the need for more in-depth analysis. Learn what's on the horizon for the next update of The Atlanta Region's Plan RTP.

The Evolution of The Atlanta Region's Plan	191
Exploring Alternate Futures	197
Improving Program Delivery	205
Leveraging Other Planning Initiatives	207



The Evolution of The Atlanta Region's Plan

The Atlanta Region's Plan is more than a static document which is updated every four years. This *Transportation Element* is no exception. While it does lay out a clearly defined set of policies, projects and programs which are intended to help our Region to Win the Future, it does so from the perspective of a single point in time, the middle part of the second decade of the 21st century. What seems practical, cost-effective and desirable today may not be in 10, 20 or 30 years, for any number of reasons.



The true value of a plan is not to articulate every single action to be undertaken over an extended period of time, but rather to define a general vision and put us on what seems to be a reasonable path forward from where we stand today. While the path may have unexpected obstacles, the vision should remain constant. The commitment to creating world-class infrastructure, competitive economy and healthy livable communities should not change, although

the most appropriate means to achieve that vision might. And even the very definition of what each of these outcomes means may be different for somebody looking back from a distant point in the future compared to us looking forward from today.

The Atlanta Region's Plan is intended to be adaptable and responsive to change. Course corrections will be made regularly as needed. New approaches and strategies will be tried. Those which become obsolete will be retired. The plan will undoubtedly evolve considerably in coming years, which is the way the process should and must work if we truly hope to Win the Future. This section explores some of the ways future versions of the plan may evolve to stay timely, relevant and effective.

Nurturing Strong Partnerships

ARC is committed to producing a “best in class” plan for the Atlanta Region. But in order for citizens, elected officials, business leaders, implementation agencies, and other stakeholders to embrace the plan and advocate effectively for its implementation, it must be developed through strong partnerships. While ARC manages several programs and initiatives, makes direct financial commitment for certain funding sources, and is responsible for assuming the lead role on regional planning efforts, it cannot implement the plan by itself. This is particularly true for transportation issues, where projects are built, operated and maintained by a host of state and local agencies.

To build support and momentum for the plan, focusing the resources and energy of advocacy groups, service organizations, civic groups, business associations, foundations, charities, and non-profit agencies will be vital. Transportation may not be a core function for many of these

partners, but the issue may have strong impacts on the ability to achieve their mission. Many of these relationships already exist through regular engagement and outreach efforts, so a solid foundation upon which to build already exists. The key will be to transition these conversations, which currently focus mainly on sharing information and discussing issues, into deeper commitments where roles and responsibilities are explicitly defined, assigned and completed.

Refining the Unconstrained Vision

The federally required emphasis of an RTP is on developing a fiscally constrained program, meaning only those projects for which a reasonably available source of revenue is available can be included. But plans may also identify a fiscally unconstrained vision as well, which enables our Region to better define what is truly needed to Win the Future. This concept was demonstrated throughout the Solutions section of this plan, where a broader set of investments was presented concurrent with those which are actually feasible under current revenue sources. Additional efforts will be made throughout the next plan update cycle to ensure projects and programs identified for inclusion in the unconstrained portion of the plan are consistent with the plan's overall goals, objectives and policies. Issues and future work activities related to the various modal components of the plan's unconstrained vision element are described in this section.

Transit

As discussed in the Process section, the Concept 3 transit vision was originally conceived in 2008. Much has changed since that time, such as the landscape of transit project financing. While traditional federal funding sources remain flat, new state funding for certain capital components of transit projects are now available through the Transportation Investment Act of 2010 and the Transportation Funding Act of 2015. At the local level, in 2014 voters in Clayton County approved



a 1% sales tax to become full participants in the MARTA system, injecting approximately \$48 million into the agency each year and representing the first expansion in over four decades of the MARTA system into a new county. In 2016, Atlanta voters approved a measure to add 0.5% to the existing 1% sales tax dedicated to MARTA, which will provide an additional \$2.5 billion in revenue over the next 40 years.

The landscape in which transit operators provide service has changed significantly as well since 2008. Seven transit expansion projects recommended by Concept 3 have either concluded or began environmental and engineering studies, which sets each expansion initiative in competition against each other for the same limited pool of federal implementation funds. New services have also emerged, such as the new Atlanta Streetcar line, numerous shuttle bus circulator services and transportation network companies (TNCs) such as Uber and Lyft. Even the municipal landscape of the Atlanta Region has evolved, as voters have approved the incorporation of several new cities in Fulton County, DeKalb County and Gwinnett County since Concept 3 was adopted.

ARC is currently updating the Concept 3 transit vision to reflect the Atlanta Region's current transit planning and operating environment. Major areas of emphasis for this effort could include:

- Evaluating existing and emerging corridors in which high capacity transit options can operate competitively
- Identifying opportunities to implement initiatives which increase transit service efficiency and passenger utility
- Incorporating project delivery risk assessment into the process of project identification and selection
- Establishing candidate capital improvement projects to be implemented by newly available local funding sources
- Aligning transit project recommendations with *The Atlanta Region's Plan Policy Framework*

In addition to addressing these pragmatic aspects of a vision, the effort is also investigating the impacts which rapid changes in technology are having on how transit services are delivered, and even the very nature of those services. Questions which the new vision will tackle include

- How can transit operators act as integrators of mobility, facilitating connectivity between fixed route services and other mobility options such as walking, biking, carpooling/vanpooling, taxis and TNCs?
- How can a focus on the total journey experience improve the transit offering? The total journey experience includes elements of the door-to-door transit experience, such as online information, wayfinding on the street, payment processes, and transfers between transit providers or with other modes.



Photo credit: Winnipeg

- How can transit agencies balance their role in the changing mobility landscape with broader societal needs for social equity, environmental protection, and economic development?
- How can transit operators invest funding most effectively, partner with others, and adopt technology in such a way that the region's overall mobility will be enhanced?
- What might the mobility landscape be like in 5, 10, or 20 years? How can transit agencies be active participants in changes over time? How can they look into the future to see trends and interpret what the future holds for passenger service?

This effort to refresh the Region's transit vision began in late 2016 and is anticipated to be complete in early 2018.

Roadways

Currently, *The Atlanta Region's Plan (Transportation)* recognizes approximately 600 miles of arterial widenings, about two dozen new or upgraded interchanges and 30 miles of additional managed lanes as part of the unconstrained vision. These projects are listed in Appendix (L).

The need for some of these projects may change over time as a result of county CTP recommendations, corridor studies, other transportation system improvements completed in the vicinity, recent changes in the roadway's functional classification, shifting travel patterns as a result of unanticipated population, employment and commercial growth, the loss of public or elected official support, or any number of other reasons. Likewise, other priorities may have also been identified which should be added to the vision. The outcomes of the transit visioning effort may also necessitate changes to this unfunded list of roadway improvements.

Bicycling and Walking Facilities

The vast majority of sidewalks, bike lanes and similar facilities do not rise to level of regional significance where a comprehensive list of projects is an appropriate way to articulate a vision. One exception, however, would be the regional multi-use trail network identified as a core recommendation of *Walk! Bike! Thrive!*, the bicycling and walking component of *The Atlanta Region's Plan (Transportation)*. Refining this conceptual network by identifying strategic linkages and how local facilities should interface with the regional network will be a key next step as we begin developing the work program for the next major plan update.



Image credit: Atlanta Beltline, Inc.

Monitoring and Reporting System Performance

The Performance section of this plan presented key findings on how our transportation system is currently operating and how conditions are forecast to change by 2040. Because of the nationwide orientation of this process and the wide variation in budgets, data accessibility, and technical capabilities of planning agencies, the mandated measures are relatively basic in nature, as described in the Performance section of this document. Since the RTP was developed within the broader multi-disciplined context of *The Atlanta Region's Plan*, ARC believes there is a need to go above and beyond the federal minimum requirements. Many

supplemental metrics included in this document already demonstrate how the transportation system supports the various economy and community oriented objectives and goals of the *Policy Framework*. Continuing to refine those relationships, identifying the best available data and methodologies for assessing performance, and establishing methods to present those findings to a variety of audiences are all part of a major ongoing work program effort. Where feasible and appropriate, targets or desired trends will be identified for those additional measures as well.



Extending Ladders of Opportunity

Throughout Metro Atlanta, communities in economic need are often cut off from or experience limited access to transit facilities. This limited connectivity impacts residents as they seek to connect to job opportunities, access services and community amenities, and navigate an increasingly complex region. The *Building Opportunity Workshop Series*, initiated in 2014, was created to engage leaders and community groups that represent Equitable Target Areas in authentic, thoughtful ways about how growth and development takes place. Forums have focused on transportation access and poverty, livability through an equitable lens, and economic opportunity.

Input from these sessions tells us that communities want to be included in the dialogue early and in significant ways. Residents see chances to remove barriers to opportunity, link investments and plan them for maximum community benefit. Planners can learn from this on-the-ground perspective. ARC seeks to harness the energy from this series and its Poverty Equity Opportunity (PEO) Committee to create chances for community leaders to engage in meaningful conversations around the transportation network and specific projects.

This committee will bring together elected officials, non-profit leaders and the business community to discuss issues of economic opportunity, infrastructure, and resources and address each community's specific challenges.

As our region prepares to welcome an additional 2.7 million residents in the next 25 years, we must bring together the components of community development, transportation, education, and workforce development in our planning. Community health is determined by these interconnected disciplines. When one is lacking or not addressed, it impacts the whole. Ladders of Opportunity gives ARC a framework to unite these areas of planning to work with local governments to build healthy places that provide residents the connections, quality of life and opportunity that they want.



Exploring Alternate Futures

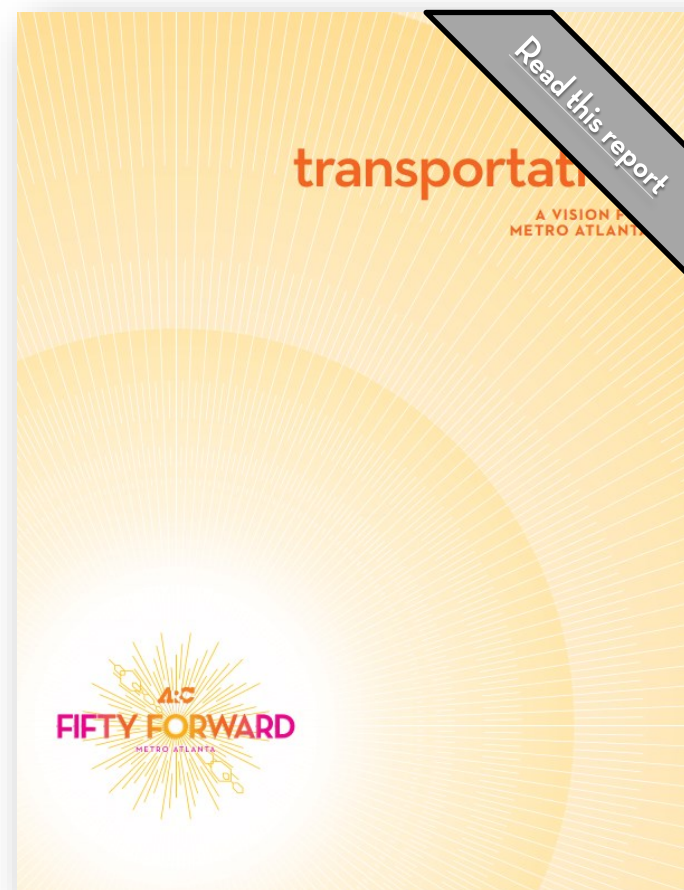
Visioning and scenario planning plays an important role in the long-range planning process. It can promote strategic thinking about the future, dealing with uncertainty, and best position ourselves for adopting to the changing environment through better decision-making. The world is changing. Technology is rapidly evolving and could change the way we live our daily lives, from where and how we work, move around, and socialize. To be visionary, we cannot assume the trends of the past, but rather we must explore underlying social, technological, economic and political drivers of change and their impacts so that we can prepare for and adapt to them.

Scenario Planning

In previous efforts, ARC has used scenario planning to test many different land use and transportation scenarios to help policy and decision makers better understand the impact of growth on the Region. The Fifty Forward Initiative was a 50-year visioning effort undertaken in 2008 that engaged the Region's political, civic, and business leadership, as well as the general public in a broad dialogue about the shaping of the future of the Atlanta Region. Three basic conclusions were reached from the Fifty Forward effort:

- The world, and the Atlanta Region with it, is changing rapidly—whether we want it to or not
- Defining a preferred future for our Region is an imperative
- Taking bold action to bring about the preferred future is mandatory

In 2008, Fifty Forward laid the groundwork for an ongoing discussion about our rapidly changing world and how the Region must prepare itself. ARC has continued to build on Fifty Forward's outcomes and has used long range scenario planning to explore the implications of












advancements in technologies and other disruptive changes that could have significant impacts on the way residents live, work, and move around the Region.

During development of *The Atlanta Region's Plan*, three scenarios were considered: technological advancement, autonomous vehicles, and transit connected regional centers. The exercise attempted to determine likely or possible outcomes of: 1) advancements in communication technology for work, residential, and transportation decisions of residents, businesses, and transit providers in the Atlanta region; 2) potential effects of new vehicle technology to help revise and prioritize what types of transportation investments are made in the region; and 3) potential outcomes of focusing growth around transit connected

regional centers to inform future efforts to revise and prioritize the regional unconstrained vision for transit expansion. Furthermore, in collaboration with the Environmental Protection Agency (EPA), ARC was also able to explore emission reduction strategies that are more difficult to analyze with travel modes, such as pricing strategies, travel demand management strategies, transit efficiency, and land use strategies.

Throughout 2016 and into 2017, leveraging the help of a USDOT SHRP2 grant, ARC undertook a scenario planning process to further explore global and regional drivers of change. This work began with the identification of nine key disruptive influences or "drivers of change" which are most likely to have major implications on our ability to win the future.

Key drivers of change for the Atlanta Region

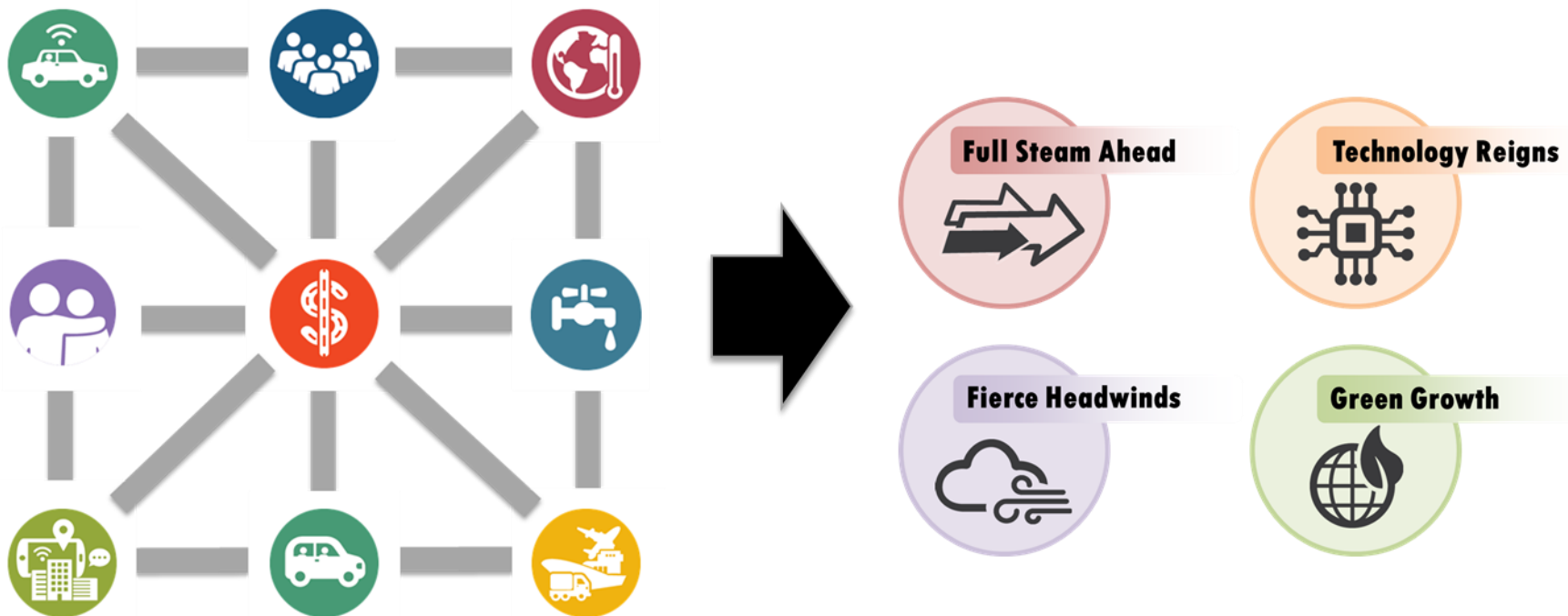
 <p>Autonomous Vehicles</p>	 <p>Spatial, Racial and Economic Equity</p>	 <p>Climate Change Regulations</p>
 <p>Aging of the Population</p>	 <p>Transportation Finance Structure</p>	 <p>Water Supply</p>
 <p>Intelligent Infrastructure & Technology</p>	 <p>Ridehailing Services</p>	 <p>Port Traffic</p>

The next step in this exploratory scenario process involved identifying plausible relationships between these nine drivers of change and weaving them into four distinct alternate futures, which were then analyzed for transportation impacts using a variety of modeling tools. The intent was not to attempt to predict a precise future and determine its relative likelihood, but merely to present a set of possibilities to help inform future policy discussions. In addition to the scenario narratives and the analysis results, a key deliverable of the effort was an online gaming tool which will allow individuals to indicate their viewpoints on the likelihood of various trends. After completing the exercise, the user will be informed on which alternate future most closely aligns with their responses and to explore that scenario (as well as the other three) in more detail. This tool, as well as all associated SHRP2 documentation,

will be launched concurrent with the community engagement process leading to the next major update of *The Atlanta Region's Plan*.

Work under the SHRP2 grant was completed in the summer of 2017. ARC possesses a strong desire to build on the momentum this work has prompted. The level of engagement and interest from committee members and other stakeholders related to drivers of change and alternate futures is at a level rarely seen around any initiative undertaken by the agency. We consider submittal of final SHRP2 documentation to USDOT to be a point of transition, not a conclusion, on our work in these areas. While many questions remain on how to best proceed and where those paths may ultimately lead, there are numerous opportunities available to us moving forward.

Relationships between the nine drivers were used to develop four alternate futures



Sample narrative summary of an alternate future

Full Steam Ahead was one of the four alternate futures which ARC analyzed under the SHRP2 grant. Each scenario was presented as a rich narrative and analyzed using a variety of models. ARC will continue to build on this work in the coming years by incorporating these scenarios, and the concepts of drivers of change and exploratory planning in general, into many of its regular planning functions.

WINNING THE FUTURE
A SHARPER FOCUS
2050 ALTERNATE FUTURE

FULL STEAM AHEAD

Metro Atlanta continues to exhibit strong, steady growth. With a population of 9.2 million, the region has overtaken San Francisco, Washington and Houston to become the sixth-largest metro area in the country. Trends that were present in the first two decades of the 21st century continue, though at a moderately accelerated rate.

The young and well-educated, seeking walkable neighborhoods with easy access to transit, are flocking to trendy intown neighborhoods such as Midtown, Inman Park, West End, and Oakland City. The recently-completed Atlanta BeltLine features dense housing and a popular light rail line along its entire 26-mile loop.

A firm commitment to the provision of affordable housing within the city remains elusive, so families in search of affordable housing continue to look primarily outside the Perimeter. Once-rural areas in Forsyth and Bartow counties are now bustling bedroom communities. The rise of Uber, Lyft and other ride-hailing services enables many intown dwellers to get by with one car; however, the average time drivers spend commuting to work each day still continues to increase due to housing and land use patterns.

In-migration greatly surpasses natural population growth as more people are marrying later in life and are having fewer children. Older adults continue to make up an ever-increasing proportion of the region's population, forcing local governments to boost spending on senior centers and specialized transportation services. Many older adults are putting off retirement in order to afford increasing health care costs and keep up with the rising cost of living. And "active living" communities have cropped up across the region, from Cumming to Conyers.

Use of autonomous vehicles is limited to tightly controlled environments. They zoom around the parking lots at Stone Mountain and provide last-mile connectivity from major transit hubs to business centers, but widespread adoption still seems many years away.

As we continue to rely on the existing transportation network, tolling is the preferred method of paying for road construction and maintenance. Managed toll lanes exist along nearly every major highway in the region. A toll is even required to use major arterials like Peachtree Industrial Boulevard and Tara Boulevard.

The forward momentum in the region has positively benefitted the environment. Private-sector investments in alternate energy sources continue to grow, though its progress is modest and limited economic benefits are seen. Periodic dry spells strain Lake Lanier and the Chattahoochee River, but thankfully the Water Wars between Georgia, Florida and Alabama have been resolved.

ARC Alternative Futures | Full Steam Ahead

KEY DRIVERS
FULL STEAM AHEAD



Autonomous Vehicles
Human operated vehicles continue to dominate on most roadways due to safety and security concerns. Autonomous vehicles are limited to tightly controlled environments and on certain designated roadways.



Aging of the Population
Longer life expectancies keep adults employed into old age. The desire to stay in their existing homes remains strong in suburban environments, but many wealthy empty nesters have moved into urban areas for ease of travel.



Intelligent Infrastructure/Technology
Gas powered transportation still dominates in rural areas and for long-distance travel, but electric and hydrogen fuel cell vehicles are common in urban areas where supportive infrastructure exists. Fuel prices continue to be volatile, but improvements in technology have kept major increases in check. Teleworking is available to some workers, but it is not widespread.



Spatial, Racial and Economic Equity
Intown, walkable living continues to be trendy, which drives up housing costs. Families in search of affordable housing continue to look outside the Perimeter. The availability of entry level jobs continues to erode due to mechanization and offshoring of industry.



Transportation Finance Structure
Federal and state transportation revenues stabilize, yet tolling of freeways and other major roadways become has common practice as public private partnerships thrive. Focus is on maintaining state of good repair, but transportation spending remains insufficient to keep pace with growth.



Ridesharing/Carsharing
Congestion and declining roadway expansion has led to increased funding for rideshare/carshare programs. Ridesharing services such as Uber and Lyft are expanded, so fewer young adults have driver's licenses. As a result, the demand for transit growth is also curbed.



Climate Change Regulations
Investment in renewable energy continues to eclipse fossil fuels, but market barriers prevent wind and solar generation from becoming the primary energy sources. Meanwhile, modest progress is made on climate change legislation. Suburban development patterns continue, and the consumer-driven economy remains strong.



Water Supply
Water supply continues to be a concern due to the increasing frequency of dry periods, but legal challenges related to access to sources have been resolved.



Port Traffic
Truck traffic from the Port of Savannah and other ports has increased significantly. The Atlanta Region is the most important freight location in the southeast because of the size of its economy, manufacturing base, and its role as a multistate distribution hub.

ARC Alternative Futures | Full Steam Ahead

Transportation Technology

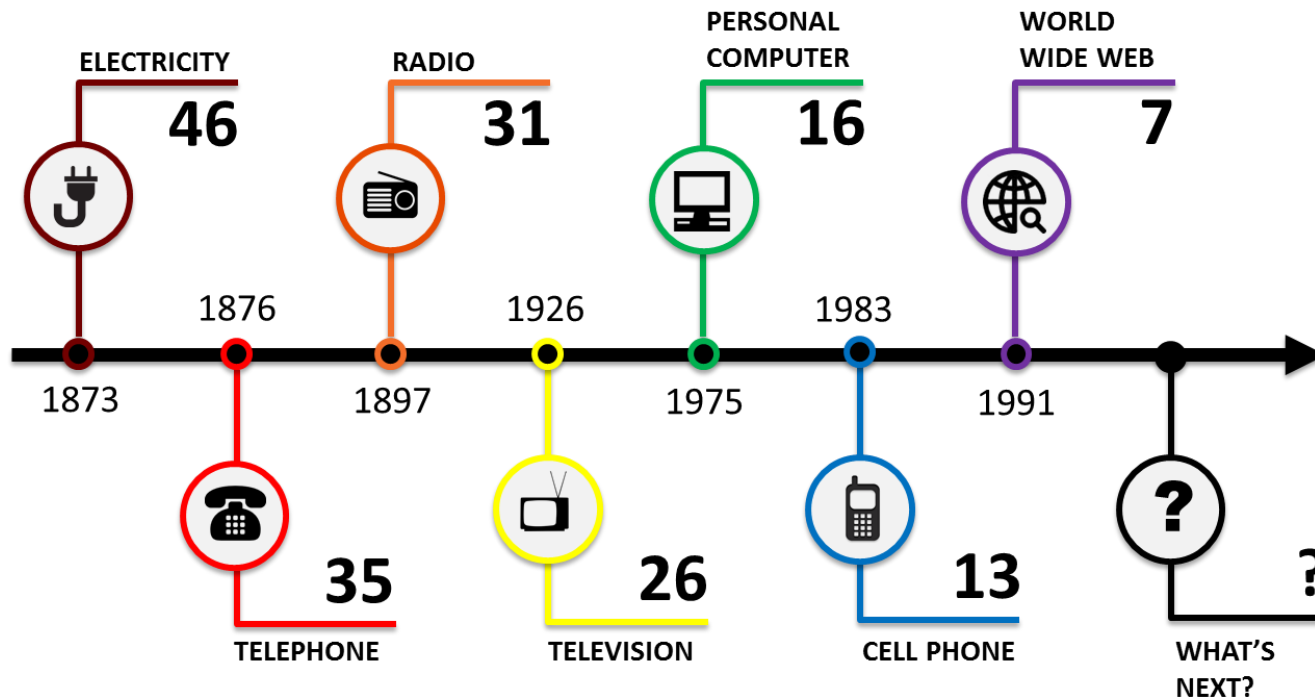
Several of the key drivers of change identified in ARC's SHRP2 scenario planning work are related to the impacts which technology will have on mobility options and how we interface with them. In few places is technological advancement more evident than in the transportation industry, where the promise of technologies such as autonomous vehicles moves seemingly overnight from a science fiction writer's dream to a near-future reality.

Even the timelines themselves for delivery of such technologies are subject to rapid and unpredictable change. Can we even rely on past

paradigms to predict the large-scale deployment of this technology or will widespread adoption of these vehicles occur even more quickly than the smartphone? How will such technologies begin to transform the Atlanta Region and how does this morph our long-term vision for transportation?

Recognizing the importance that technology has on future (and current) travel behavior, ARC began a robust review of technological trends in 2016. The resulting *Regional Transportation Technology Policy Report* includes a detailed look at how these trends might influence national

Number of years until technology was used by one-fourth of Americans

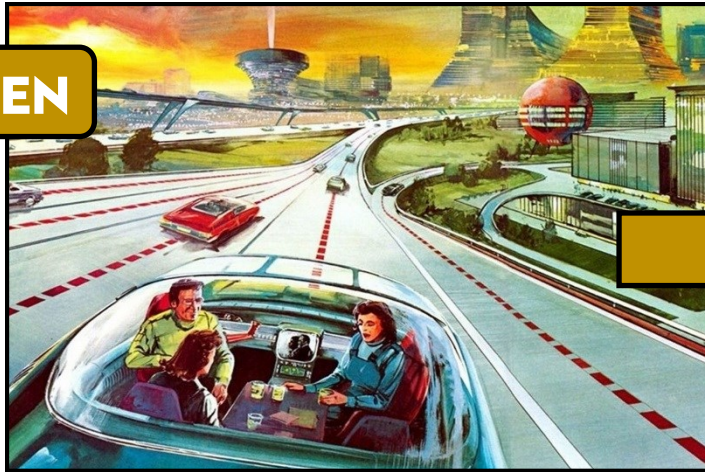


Credit: Adapted from NCHRP Report 750 Series – Informing Transportation's Future

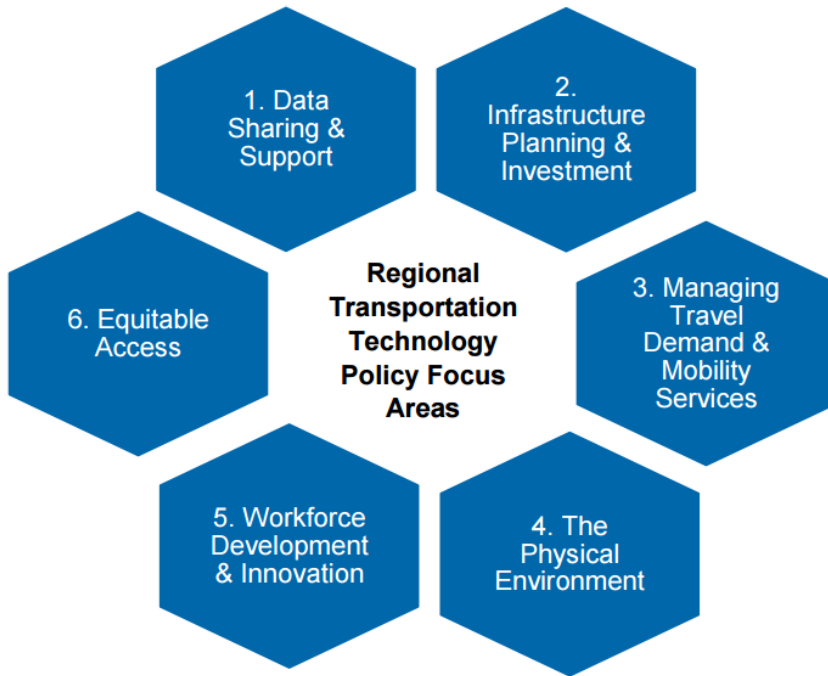
The Impacts of Technology on Travel

What once was purely the realm of science fiction and fantasy is now rapidly becoming part of our everyday lives. An effective plan must be flexible and responsive to dramatic shifts in the way we may travel in the future.

THEN

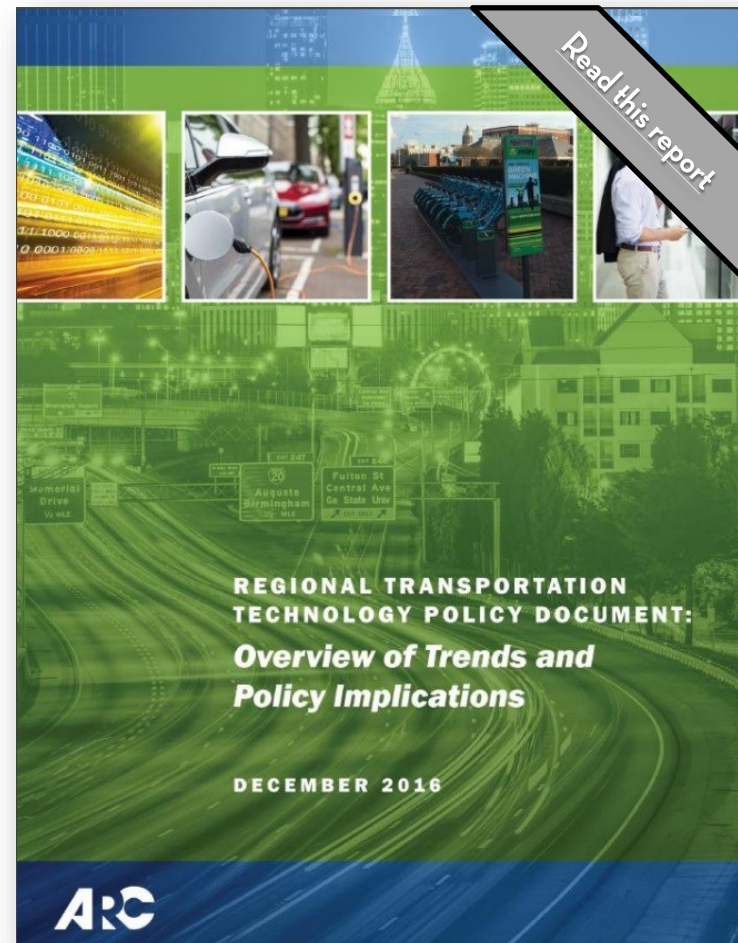


and regional travel behavior and the implications for current policy. The report also recommends policy responses to adapt to and guide these changes towards positive outcomes. These policies are grouped into six areas of focus and future updates to *The Atlanta Region's Plan (Transportation)* will draw increasingly from this policy analysis.

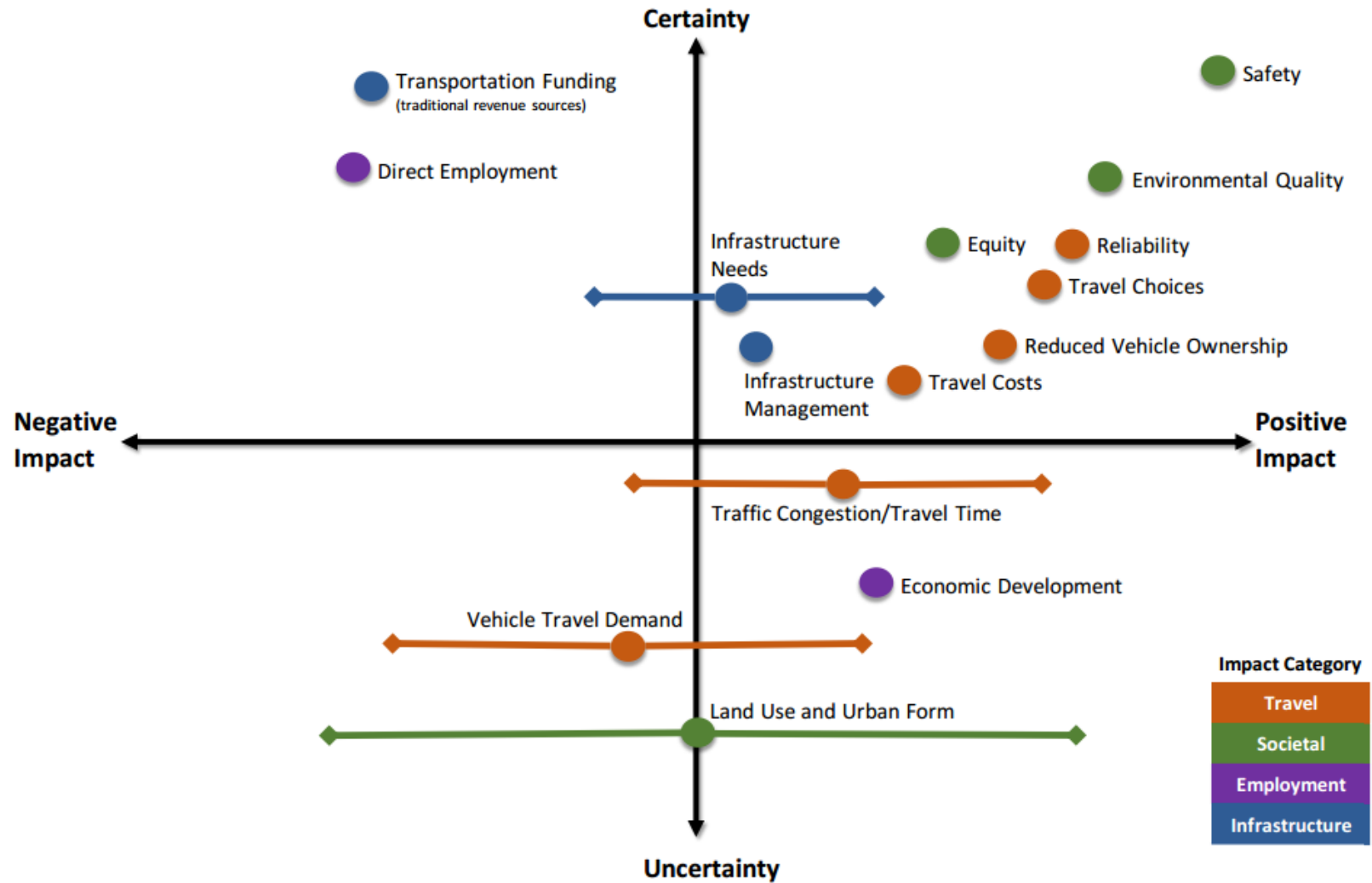


The growth of technology, like all trends we attempt to forecast into the future, is uncertain and ultimately unforeseeable. Just as the RTP responds to changes in land use and travel patterns, so too will the *Regional Transportation Technology Policy Report* respond to changes in the technological landscape. The trend areas we consider important and transformative today may have minor roles to play in the future. Likewise, topics that have not yet risen into our field of view may come to dominate the landscape in years to come. For this reason, a major product of the analysis was an assessment of the direction and certainty of certain technological changes.

The direction of the impact is important to understand in order to assess which trends may contribute to positive outcomes, negative outcomes, and where outcomes might vary or have no or little effect. Technology trends with potentially negative outcomes may be a cause for concern and a focus area for policy intervention. Another dimension of importance relates to how certain the impact is: highly certain, somewhat certain, or uncertain. The certainty of the impact is partly determined by whether the impact is a direct result of the technology or an indirect result, influenced by external factors.



Framework for assessing the implications of transportation technology trends



Improving Program Delivery

Since the early 2000s, ARC has been monitoring the Region's performance in delivering projects in the TIP by phase. The actual responsibility of delivering projects belongs to multiple agencies, including the Georgia Department of Transportation, State Road and Tollway Authority, Georgia Regional Transportation Authority, community improvement districts, local transit operators, and numerous local governments. The results of monitoring the Region's performance has traditionally been published annually in ARC's Breaking Ground report which is currently an online dashboard. The Breaking Ground Dashboard is designed for the general public to better understand project delivery rates in the metro Atlanta Region. Projects are measured based on whether they have advanced, delayed, or dropped. A detailed analysis is also included based on service type, sponsor, or phase.

ARC, in collaboration with our planning partners and project implementation agencies, created the Project Delivery Task Force (PDTF) in 2014 as directed by its Board of Directors to identify the barriers to more effective and timely transportation project delivery in metro Atlanta.

MAP-21* strongly encourages state and metropolitan planning organizations to seek ways to expedite project delivery as a means to maintaining the economic competitiveness of the United States. More specific to Georgia, streamlining project delivery is also tied to several state and regional goals related to relieving traffic congestion, improving access to jobs, reducing fatalities, injuries, and crashes, and providing more travel options for people and goods.

* *The federal MAP-21 legislation in effect at the time was superseded by the FAST Act in December 2015.*

The PDTF was tasked with conducting a more in-depth examination of project concept development requirements, identifying specific, actionable options to improve project delivery rates, and improving the overall transparency of the processes and decisions that impact project delivery performance.

Members of the PDTF included federal agencies (FHWA and FTA), state agencies (GDOT and GAEPD), regional agencies (ARC and MARTA), numerous local governments, and planning partners such as community improvement districts, non-profit organizations, and adjacent MPOs. In its formative stages, the PDTF focused on barriers to project implementation, prioritized identified issues and barriers, reviewed peer case studies, developed recommendations, and formalized a development plan.

The PDTF identified and prioritized a list of specific issues negatively impacting project delivery that fell into five major categories: streamlining environmental analysis, project feasibility and programming, dealing with change after a project starts, delivering 'smaller' or 'less complex' projects, and cross-cutting issues that pertain to two or more of the other categories. Some of the recommendations were short-term in nature, while others were more complex and long term challenges.

Regular meetings of the PDTF concluded in 2016 and ARC has now transitioned into implementing the group's recommendations through ongoing collaboration with planning partners and development of regional policies and programs to support project delivery. It's likely the group will be reconvened at some point in the future to assess progress and identify any necessary course corrections.

Read this report

ACTION PLAN: 2014-2015

PROJECT DELIVERY TASK FORCE



Final Report
November 2014

In cooperation with
Georgia Department of Transportation &
Federal Highway Administration



Prepared by Gresham, Smith and Partners
In cooperation with Metropolitan Planning and Engineering

BEGIN PROJ. NO. NHE-16(45) R.O.W.
S.P. 02005-2244-14
STA. 609+60.54 S.R. 16 (U.S. 41-A)
N 405511.6040
E 1876356.0460

Leveraging Other Planning Initiatives

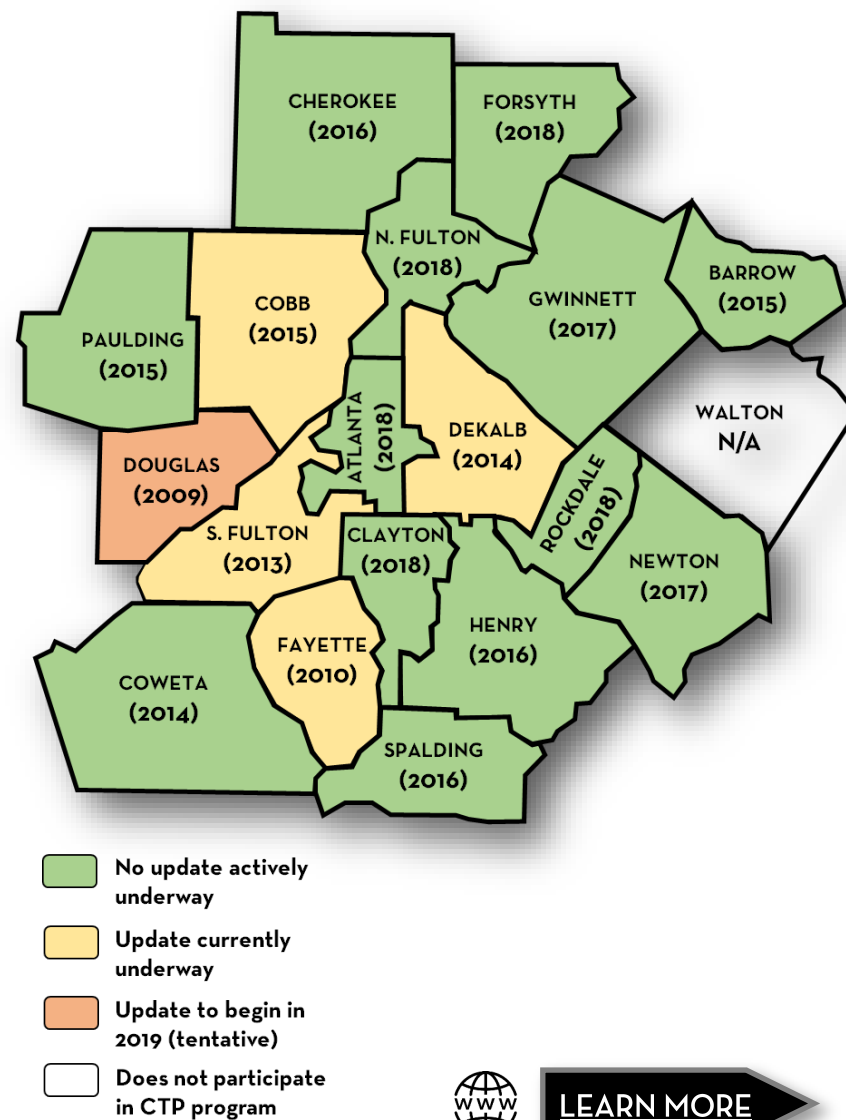
In addition to the major initiatives highlighted previously in this section, there are a number of ongoing work program activities led by ARC which will impact the direction and recommendations of future updates to The Atlanta Region's Plan (Transportation). Many of these efforts will require close coordination with and development of partnerships with other agencies and stakeholder groups to realize their full potential in helping the Region to Win the Future.

Comprehensive Transportation Plans

When the last major update of *The Atlanta Region's Plan (Transportation)* was in its final stages in late 2015 and early 2016, several CTPs were still actively being revised. That schedule overlap increased the challenge of ensuring local transportation needs and priorities were fully integrated into recommendations of the regional plan. Key recommendations of those CTPs have since been integrated in the regional through a series of amendments.

Future CTP updates should be completed with the RTP development cycle in mind, preferably well in advance of the initiation of ARC's project evaluation and modeling activities. With this goal in mind, eleven CTP updates will have been completed prior to the summer of 2019. Completion on this schedule will allow sufficient time for ARC to thoroughly synthesize these plans into the next RTP update which must be completed by early 2020. It is expected, however, that three of the four CTP updates currently underway (as of May 2019) will not be fully complete in time to be integrated into the pending RTP update, so additional work remains to be done related to aligning CTP and RTP update cycles.

CTP Adoption Dates and Update Status (as of May 2019)



LEARN MORE

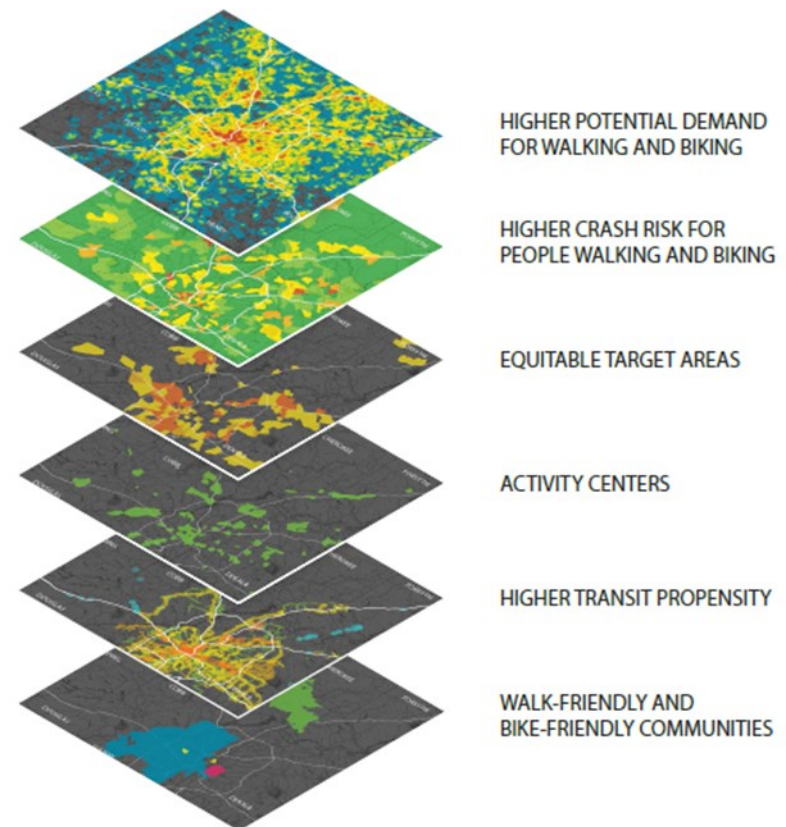
Bicycling and Walking Planning

As described in the Solutions section, an update to the bicycling and walking component of *The Atlanta Region's Plan (Transportation)* was completed in 2015 in conjunction with the overall plan update. With this work completed, efforts have pivoted towards assisting city, county and state implementation agency partners with the project and programmatic recommendations outlined in *Walk! Bike! Thrive!* Some of the specific activities in which it may be appropriate for ARC may take a lead role include:

- Establishing a Walk Friendly and Bike Friendly Communities resource center
- Developing a technical assistance program
- Convening an annual Walk Friendly and Bike Friendly Communities forum
- Identifying high crash corridors and a safety action plan that could include securing Highway Safety Improvement Program (HSIP) funds for improvements
- Aligning scoring criteria for federal Transportation Alternatives Program (TAP) with plan recommendations
- Providing performance measuring and reporting assistance for local governments
- Offering training on bicycling and walking issues for elected officials
- Providing regional trail development and coordination assistance

Development of a bicycle and pedestrian safety action plan was completed in 2018. This plan identified critical safety issues and developed specific actions to improve safety for people walking and bicycling within the region. It focused on outcomes for walking and bicycling transportation and incorporated recommendations for motorized modes, land use, regional trails, regional transit, or other elements as necessary for creating a comprehensive mobility vision.

Walking and Biking High Priority Focus Areas



Freight Planning

The *Atlanta Regional Freight Mobility Plan*, which serves as the freight component of *The Atlanta Region's Plan (Transportation)*, was completed in 2015 in conjunction with the overall plan update. Following this update, freight planning efforts over the next four years will focus on integration of freight planning in the overall transportation planning process, new studies and initiatives, and determining what role technology changes may have on freight transportation.

The freight component analyzed regional freight data and used previous plans to identify and prioritize freight projects in the region. One of those previous plans was the *Fulton Industrial Boulevard CID Master Plan*, completed in 2013 by the Fulton Industrial Boulevard CID with support from ARC. Master plans like this provide the opportunity for more detailed analysis than regional planning efforts, identifying improvements such as intersection operations projects, wayfinding



Photo credit: Go By Truck

signage needs, and other local transportation enhancements. Detailed analysis can also be conducted in plans focused on specific issues or initiatives such as truck parking or off-hours freight delivery. To serve regional planning efforts and conduct detailed analysis, ARC may pursue additional cluster area master plans and/or plans focused on specific issues in future years.

Technological innovations, such as connected vehicle technology and similar initiatives, may make moving freight safer and more efficient. Changes to the supply chain and logistics industry may also help more effectively manage freight movements and demand of existing infrastructure. Private and public sector organizations are conducting research and pilot initiatives in these areas, including in our region at private companies as well as at the Physical Internet Center at Georgia Tech. ARC will stay informed of the potential impact that changing technology may have on freight transportation and help identify efforts that may reduce traffic congestion in our region.

A regional truck parking study was completed in 2018. The *Atlanta Regional Freight Mobility Plan* identified inadequate truck parking as an issue for the Atlanta Region. Truck drivers must frequently park in unofficial and unsafe locations due to hours-of-service regulations or while waiting for scheduled pickup/delivery appointments. With total freight movement in the Atlanta Region expected to grow by 76% between now and 2040, finding parking solutions that work for both the freight movement industry and local communities is an important endeavor.

Human Services Transportation (HST) Planning

The most recent HST Plan for the Atlanta Region was updated in early 2017. The plan is driven by a few key concepts explained in the “Process” section of the RTP. These key concepts include 1) people and diversity of needs, 2) individual decision making processes, 3) effect successful HST has on both non-HST and HST populations, 4) the planning process itself, and 5) verifying results. The plan includes a variety of strategies as outlined in the “Strategies” section of the RTP in order to pinpoint regional priorities.

A key element of the 2017 HST Plan is a new focus on training local staff and consultants who work on HST Plans (county and municipality levels) on planning and implementing HST. In addition, achievement levels will be established for HST that enable local-level entities to define their own, contextually appropriate HST targets.

Because the HST plan was completed after the original adoption of *The Atlanta Region’s Plan* in February 2016, its recommendations will be thoroughly integrated into this document during the next update.

Resiliency Planning

The transportation system is vulnerable to extreme weather events. Flash flooding, extreme heat, snow and ice all have negative impacts on the movement of people and goods in the Atlanta Region. It is important to protect our citizens, particularly those most at risk of isolation, as well as our infrastructure investments by ensuring the system is adaptable and resilient.

As the I-85 bridge fire and collapse demonstrated in 2017, extreme weather is not the only threat. Fortunately, the Region proved its resiliency through enactment of alternate routes for drivers, modifying

and enhancing transit services to reduce roadway traffic, and providing regularly updated information to all system users on travel conditions and options.

Resiliency programs involve evaluating existing infrastructure for vulnerability to a variety of events, whether they be natural or caused by deliberate action. A well-prepared region will have a plan in place to ensure existing vulnerable infrastructure is proactively redesigned to minimize risk whenever possible. The plan will also identify redundant infrastructure, services or programs which will be necessary if a portion of the system is rendered inoperable for an extended period of time.

ARC is currently assessing what a cost effective vulnerability and resiliency assessment program for the Region should include. It will be impossible for any plan to identify and safeguard against any possible threat to every single piece of infrastructure, so the analysis will focus on those elements which are most at risk and would also have the greatest impact on mobility, safety and access if they were to be lost. Initial recommendations on the form that a long-term program should take were completed in 2017.

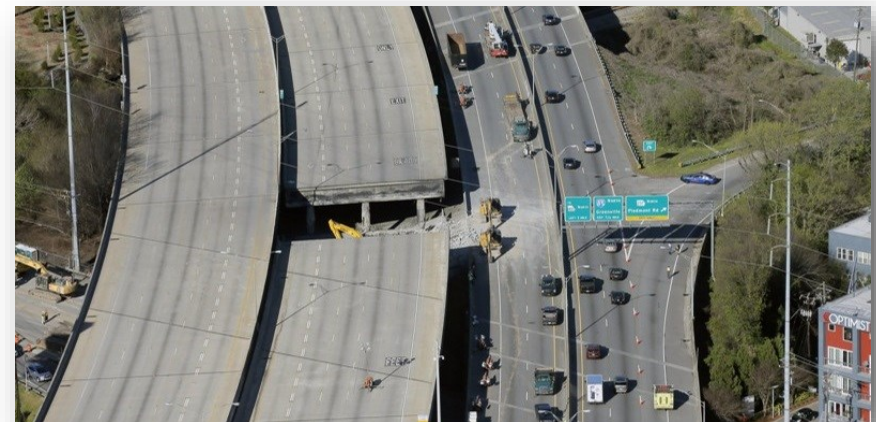


Photo credit: Atlanta Journal Constitution

Updating Priority Networks

With the completion of numerous county CTPs and corridor studies in recent years, as well as a comprehensive update of the Region's roadway functional classification designations completed in 2015, the Regional Strategic Transportation System (RSTS) and Regional Thoroughfares Network (RTN) must be reconsidered. Since these facilities receive priority consideration for federal funding, assessing whether these networks still represent the most important corridors for regional mobility will be an important undertaking.

Aerotropolis Blueprint Implementation

ARC has formed a partnership with the Aerotropolis Atlanta Alliance (AAA) to develop a strategic vision for the area around Hartsfield-Jackson Atlanta International Airport (ATL), the busiest airport in the world. The Alliance includes businesses, local governments, nonprofits and other interested parties located near Hartsfield Jackson and beyond. In total, more than 20 entities are currently involved in the effort.

Despite the critical importance of ATL to the Atlanta region, the surrounding area has often lagged behind the metropolitan area as development has occurred in a spontaneous fashion producing results in some areas that detract from its economic efficiency, aesthetic appeal, and social and environmental sustainability. The purpose of *The Aerotropolis Atlanta Blueprint* is to provide a well thought out and coordinated plan of action that can be utilized for future development and reinvestment, transportation improvements, and greater economic development in the study area. The Blueprint was completed in late 2015 included an analysis of transportation and land use issues in the area, identified potential catalyst development sites, recommended marketing and brand development strategies, and put forth an action plan for the

Aerotropolis Atlanta Alliance and other planning and implementation partners.

With the initial Blueprint complete, efforts can now pivot to implementation of recommendations. Because the Blueprint is a high level analysis, few specific transportation projects are defined, but the plan does clearly indicate several challenges and opportunities for transportation in the area. These include improved transit accessibility, more intuitive circulation patterns in the airport vicinity, convenient access via arterials and freeways, greenway connections to improve the appeal of surrounding communities for redevelopment, and better delineated truck routes to serve consolidated cargo handling facilities on the south side of the airport property. ARC is now working with the AAA to identify the need for any in-depth studies to turn concepts into more specific proposals that can be positioned for future transportation funding opportunities.



Atlanta Aerotropolis Blueprint Concept

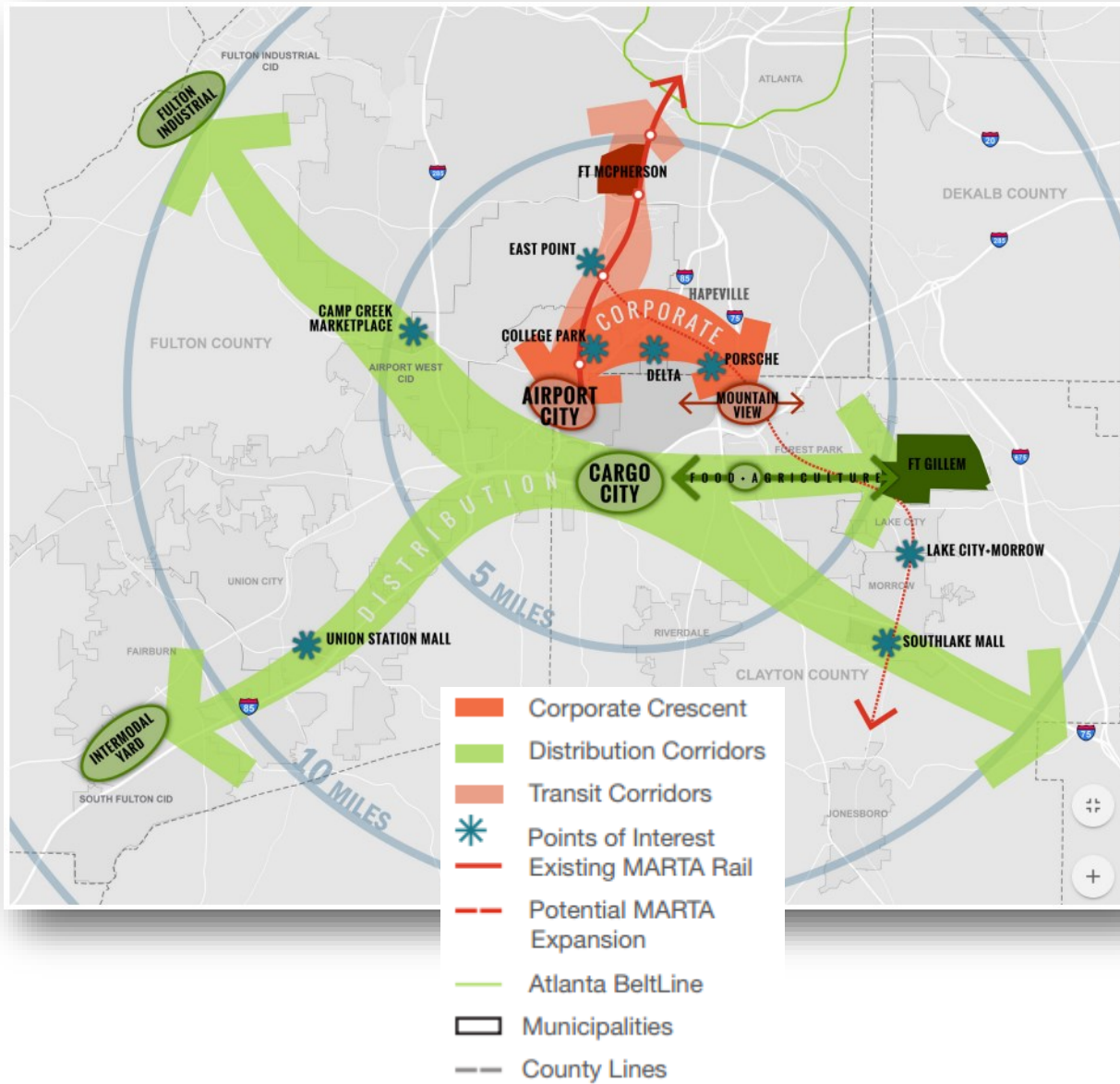


Image credit: Atlanta Aerotropolis Alliance

Greenhouse Gas Emissions and Climate Impacts

CO₂ emissions are directly related to the types of communities we have built in the Atlanta Region. Previous efforts by ARC to quantify greenhouse gas emissions focused at a regional level, with little detail about how community characteristics impact emissions directly. In 2014, ARC conducted a study to calculate the Atlanta Region's contribution to CO₂ emissions produced by transportation and household energy use, at a community scale.

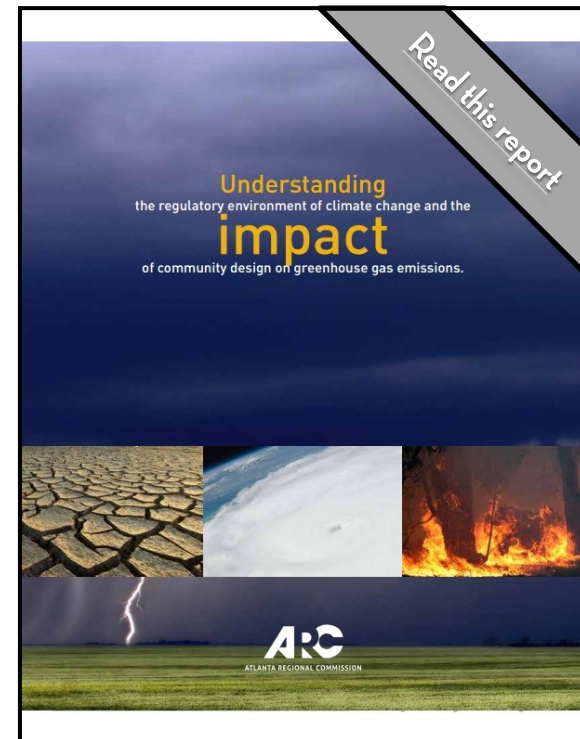
This report was designed to serve three primary goals. First, it briefly explained how greenhouse gas emissions are believed by the majority of scientists to be a major contributor to observed global climactic variability and change over the past several decades. Second, the report outlined some of the local, regional and federal policies enacted in recent years to address the issue of climate change and its potential impacts. Finally, the report detailed an analysis by ARC to develop a basic greenhouse gas inventory from residential electricity usage and automobile travel at a neighborhood level. This work was the primary focus of the paper.

The major finding of the research was that the presence of multifamily housing, the size of residences, a community's residential density, the community's walkability, multimodal accessibility, the distance to regional activity centers and a community's share of transit ridership were the most significant indicators of greenhouse gas emissions per household.

With improved knowledge of how planning and development decisions impact CO₂ emissions and patterns found throughout the Atlanta region, planners, policy-makers and citizens can make more informed decisions for future growth. Communities with sustainability goals that include greenhouse gas mitigation should consider the key findings in this

report when drawing up future changes to land use and transportation plans.

Whether or not Congress enacts federal climate change action remains to be seen. Other branches of the federal government, states, regions and cities across the United States have begun to investigate their greenhouse gas emissions and are devising plans to reduce their contribution to climate change. Regions that take steps to understand their greenhouse gas emissions, and provide their communities with policy options, are taking a seat at the climate change national table. These communities will help to inform federal policy on the issue in the future.



Atlanta Regional Commission

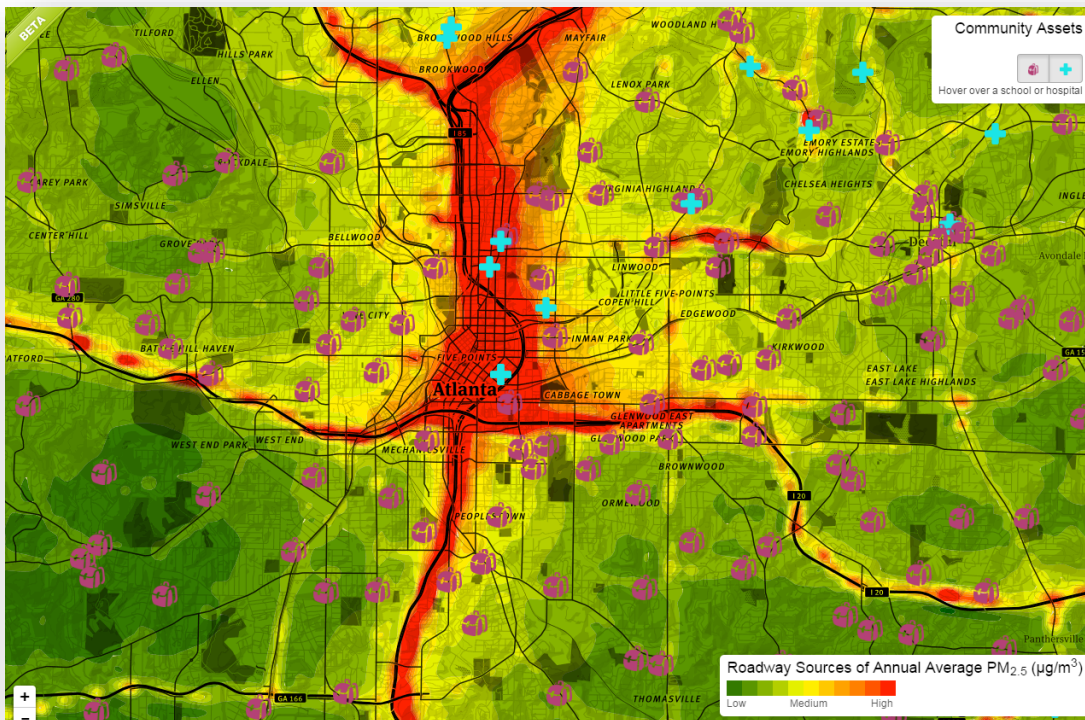
Atlanta Roadside Emissions Exposure Study (AREES)

The transportation system is a significant source of unhealthy atmospheric pollutants in the Atlanta Region. Research indicates that elevated air pollution is measurable up to several hundred meters from traffic. Factors like traffic volume, topography and weather all impact where that pollution spreads and how it affects neighborhoods in our Region. The growth of vehicle travel in the Atlanta Region and increasing population density make it more important than ever to understand how air pollution spreads throughout our Region. By understanding how pollution disperses, we can take steps to reduce exposure and improve public health.

Over the past three years ARC, in partnership with the Georgia Environmental Protection Division, has developed a new tool to evaluate how transportation projects impact local-scale emissions exposure. This tool, named AREES, will help planners better understand how decisions on land use and transportation intersect public health.

The resulting output data can then be crafted into an emissions exposure performance measure for use in transportation project evaluation, scenario planning and decision-making. Tying census and land-use data into the AREES outputs allows planners to evaluate a variety of additional topics such as: health risks among vulnerable populations, environmental justice, and siting of sensitive land uses such as hospitals and grade schools.

AREES Analysis Results for Downtown and Midtown Atlanta



Atlanta Regional Commission

The Atlanta Region has many strengths which has fueled its spectacular growth over the years. But we cannot rest on our laurels. To remain competitive in a 21st century global economy and provide a high quality of life for all of our citizens, both current and future, we must open ourselves to new ideas and new ways of thinking. Nowhere is that need more apparent than with transportation. This plan provides a path forward to ensure that we will, indeed...

Win the Future.

