BEYOND IMAGINE 2040
PLANNING FOR AN UNCERTAIN FUTURE
WITH GAMING STRATEGIES
“EVEN IF YOU’RE ON THE RIGHT TRACK, YOU’LL GET RUN OVER IF YOU JUST SIT THERE.”

- Will Rogers

ATLANTA TODAY
5.6 million people
2.9 million jobs

ATLANTA 2040
8.1 million people
4.0 million jobs
The Region’s success rests on our ability to achieve three related outcomes

Atlanta is one of the world’s most dynamic metropolitan areas, competing globally on the strength of our diverse population, robust economy, myriad cultural assets and attractive lifestyles. We will “win the future” through intensive collaboration that honors and leverages the uniqueness of our communities.

Atlanta Region’s Plan Policy Framework
August 2015
There is no single path to “Win the Future”
“Normative” scenario development process

EXISTING

SHIFTS IN LAND USES

TRANSPORTATION / FUNDING OPTIONS

MODEL RESULTS
The value of exploratory scenario planning

Looking at a wide range of issues from multiple “what if” perspectives...

...helps ensure our plans are resilient and responsive to change.
The pace of change is accelerating

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

- **ELECTRICITY**: 46 years (1873 - 1876)
- **RADIO**: 31 years (1897 - 1926)
- **PERSONAL COMPUTER**: 16 years (1975 - 1983)
- **WORLD WIDE WEB**: 7 years (1991 - ?)
- **TELEPHONE**: 35 years (1873 - 1897)
- **TELEVISION**: 26 years (1873 - 1975)
- **CELL PHONE**: 13 years (1873 - 1991)

Credit: NCHRP Report 750 Series – Informing Transportation’s Future
Identifying our region’s key drivers of change

Universe of Drivers of Change

Social

Technology

Economic

Environmental

Political

National Expert Review Process

Stakeholder Survey

ARC Board Work Session
Autonomous Vehicles

Spatial, Racial and Economic Equity

Climate Change Regulations

Aging of the Population

Transportation Finance Structure

Water Supply

Intelligent Infrastructure & Technology

Ridehailing Services

Port Traffic
How do the drivers fit together?
Plausibility is the key to building alternate futures

**plau·si·ble**
/ˈplôzəb(ə)l/

adj

(of an argument or statement) seeming reasonable or probable.
"a plausible explanation"

*synonyms:* credible, reasonable, believable, likely, feasible, tenable, possible, conceivable, imaginable; convincing, persuasive, cogent, sound, rational, logical, thinkable
"a plausible explanation"
If the potential of autonomous vehicles matches the hype and they become commercially viable and readily available within the foreseeable future....
Will older adults be early adopters of this new form of transportation which allows them to maintain their personal independence? Or will they be intimidated by the technology?
If an autonomous fleet is available “on call”, will people need to own their own vehicle? How would this change our spending habits? What happens to local governments with budgets that depend on traffic violations as a major source of revenue?
Would an autonomous vehicle fleet drive traditional transit services out of business? Or would it serve a much needed “last mile” connectivity function? Will lower income individuals be able afford access to the fleet?
Developing alternate futures
Sample alternate future narrative

Wining 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 Mottown, Inman Park, West End, and Oakland City. The recently-completed Atlanta BeltLine features dense housing and a popular light rail line along its entire 24-mile loop. A firm commitment to the provision of affordable housing within the city remains elusive, as tensions 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 benefited 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.

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.

Key Drivers

Full Steam Ahead

Autonomous Vehicles
Human operated vehicles continue to dominate 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.

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

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

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. Taxis are available to some workers, but it is not widespread.

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 their license. As a result, the demand for transit growth is also curtailed.
The actual future? Nobody knows.
Results of online gaming beta tests with committees

- **Full Steam Ahead**: 43%
- **Technology Reigns**: 31%
- **Fierce Headwinds**: 10%
- **Ecotopia**: 16%

More likely: Full Steam Ahead
Less likely: Fierce Headwinds
Online alternate future exploration tool
What now?
Developing policy direction

Driver

2017

Positive Direction

Policy Support

Incentives

Negative Direction

Policy Interventions
Policy actions must weigh the likelihood and potential direction and magnitude of impacts.
Incorporate the use of technology into project prioritization and programming processes. Give priority or higher score rankings to projects that demonstrate applications of new technologies.

Address options for adaptive reuse of parking structures for both existing parking structures and newly planned structures.

Identify and develop programs to support access to new mobility services (such as Uber and Lyft) by unbanked and low-income households and reduce the likelihood of not being picked up due to driver based on race and/or gender discrimination.

Create a regional task force dedicated to regional collaboration and development of pilot projects for technology deployment. Work with key partners, such as the Metro Atlanta Chamber of Commerce, universities, and lead private sector firms to develop this group and spearhead program efforts.
Teeing up the “next phase” conversation within ARC

What is your reaction to the alternate futures?

Will they be helpful in your planning efforts and initiatives?

What about exploratory planning in general?

What drivers of change are most relevant to your work?

How much control or influence do we actually have over the drivers of change?

What policies could help/hinder achieving your work program goals?

How should this work be integrated into the Atlanta Region’s Plan?