

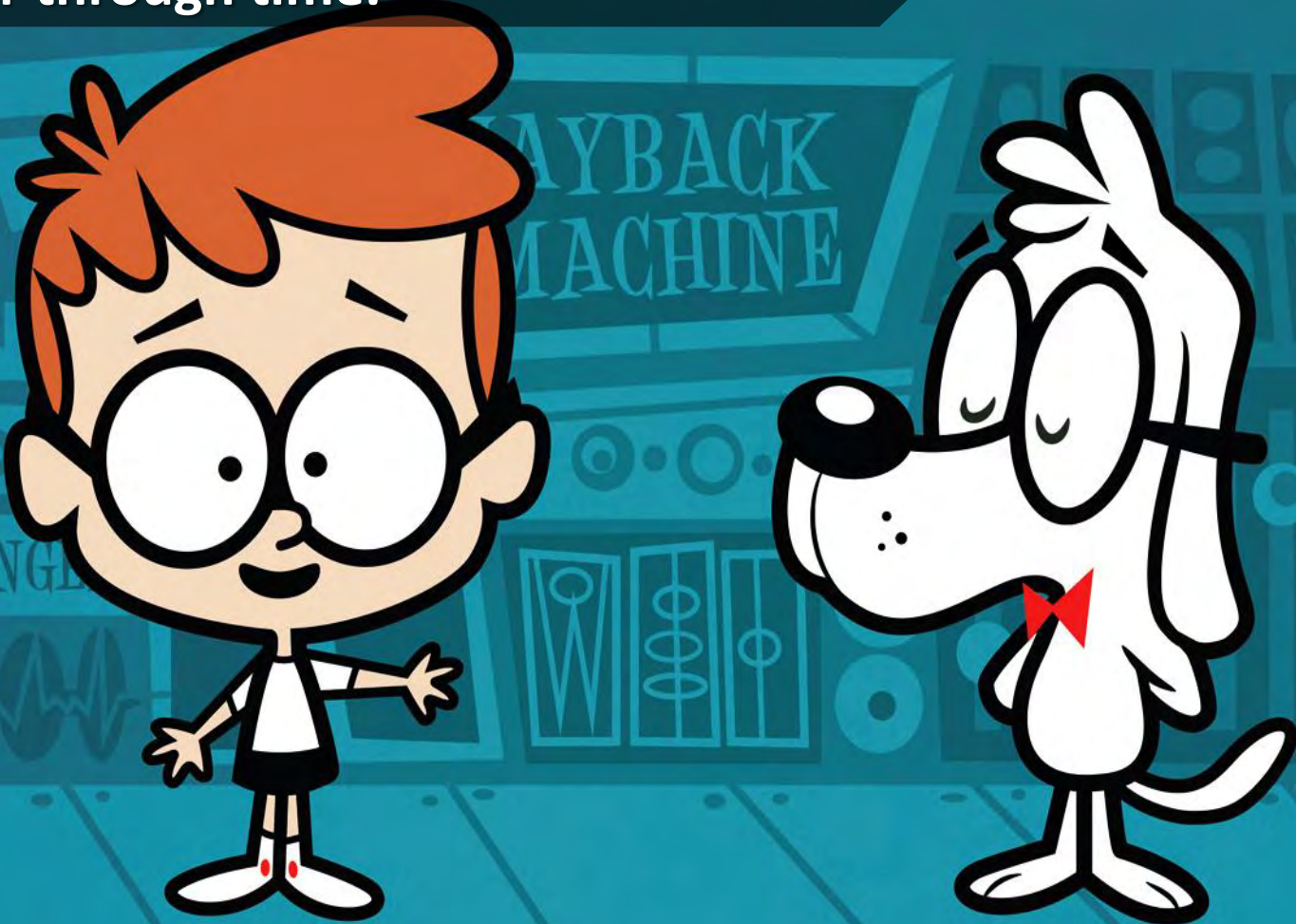


Planning for Autonomous Vehicles in the Atlanta Region

Georgia Planning Association Fall Conference
September 28, 2017

ARC

Before we begin, let's take a brief detour through time.





Peachtree Street (1907)

Peachtree Street, Atlanta, Ga. A23



Peachtree Street (1930s)



Suburbia (1950s)



Downtown Atlanta (1950s)



The Downtown Connector (1961)



Lenox Square (1961)



The Downtown Connector (1980s)



The Atlanta Region (Present Day)

Will the impact of autonomous vehicles on our world be as dramatic?






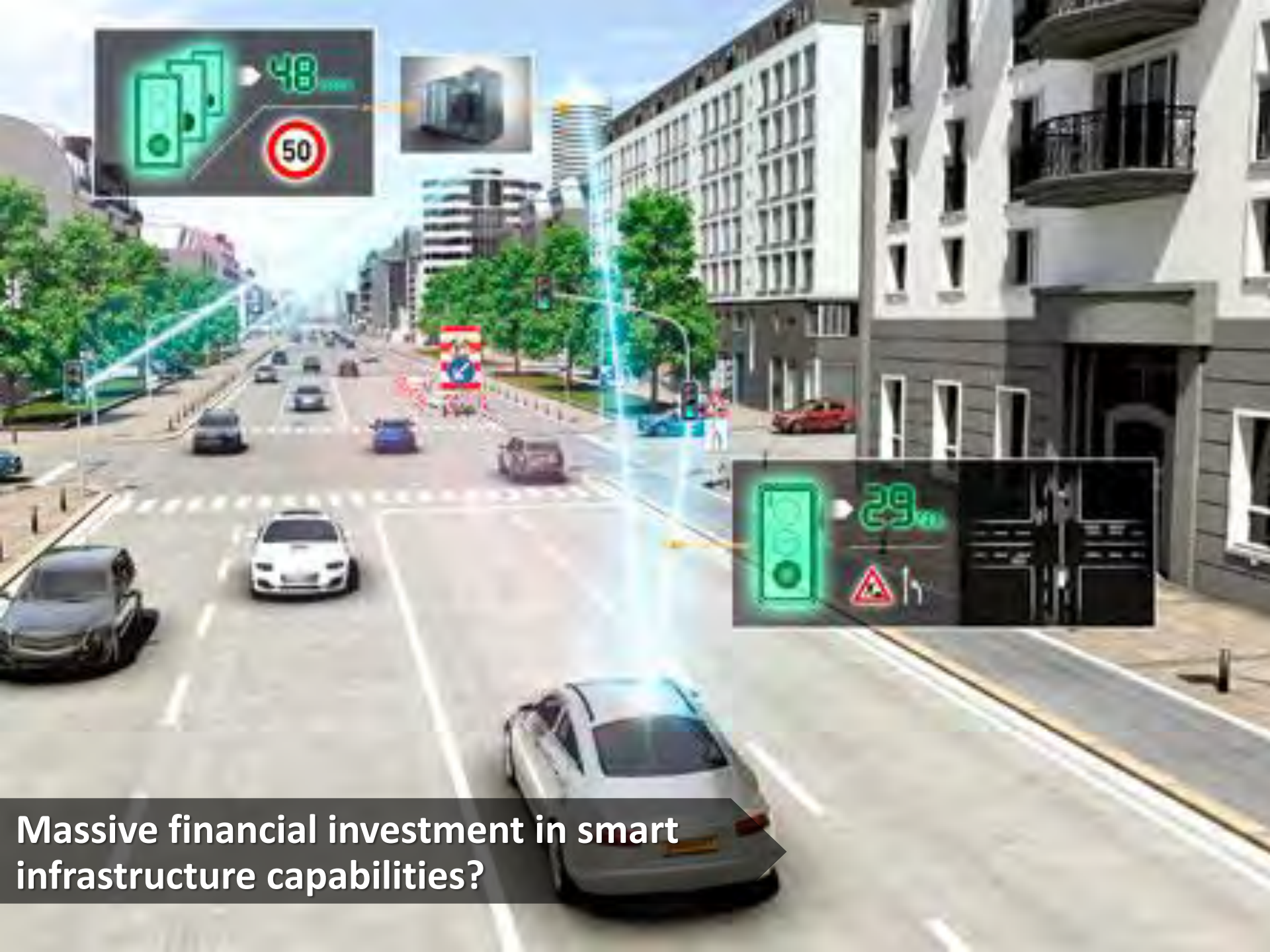
Less need for new roads due to more efficient use of existing capacity?



Or greater demand for road capacity due to new and longer trips?

A line of drones flying in a diagonal path across a clear blue sky. Each drone is a quadcopter with four rotors, carrying a white gift box with a yellow ribbon. The drones are arranged in a descending line from the top left towards the bottom right, creating a sense of depth and movement. The gift boxes are wrapped in white paper with a prominent yellow vertical stripe. The drones themselves are silver and black, with their rotors blurred to suggest motion.

How will it change the delivery industry?



48%
50



29%
Warning sign

Massive financial investment in smart infrastructure capabilities?



Will we even need signs and traffic signals?



What do we do with all those unnecessary parking garages?



Who owns the data and how is it used?

Winning the Future



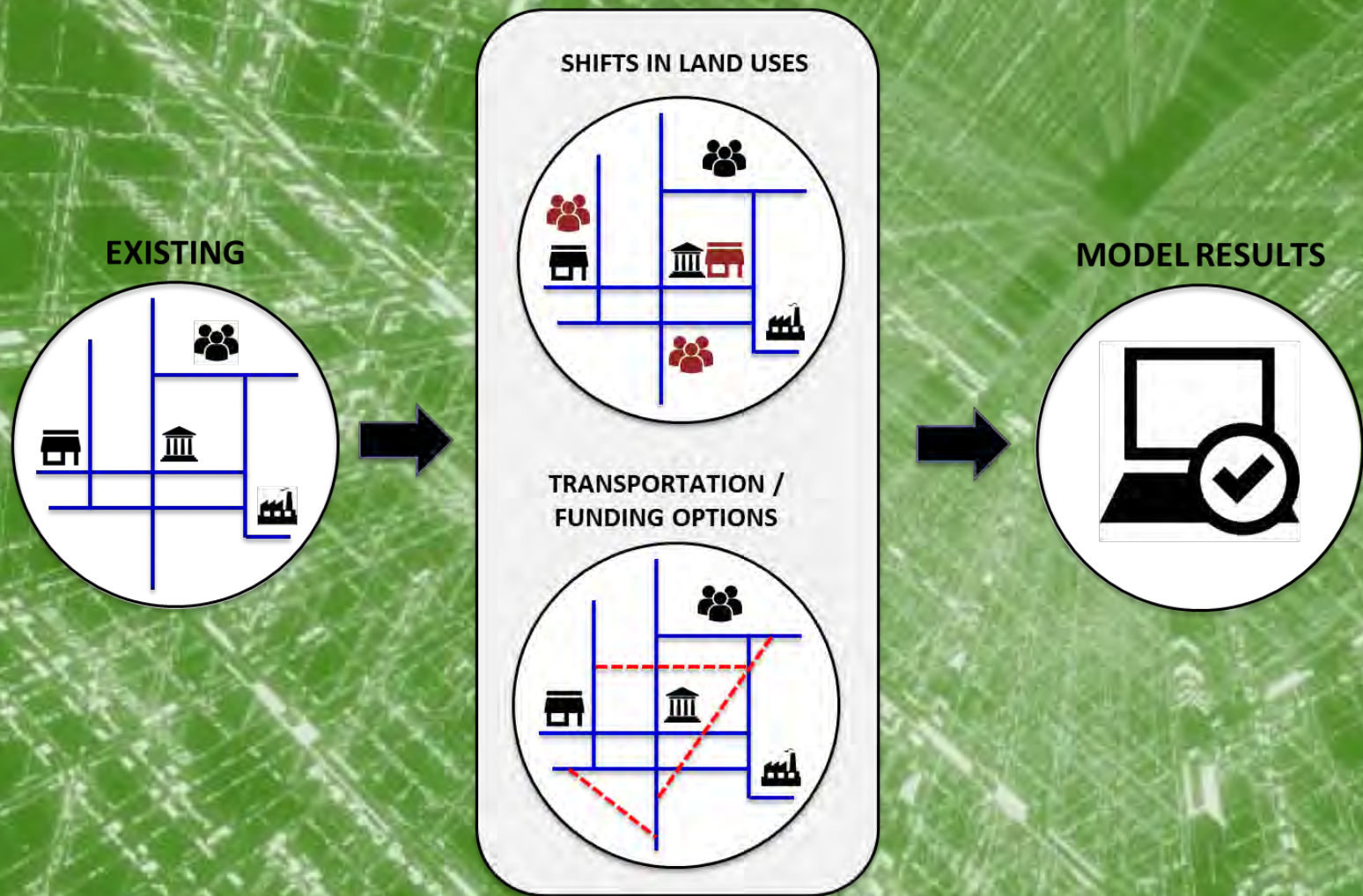
Atlanta is one of the world’s most dynamic metropolitan areas, competing globally on the strength of our diverse population, robust economy, myriad cultural assets and attractive lifestyles. We will “win the future” through intensive collaboration that honors and leverages the uniqueness of our communities.



*Atlanta Region’s Plan Policy Framework
August 2015*



There is no single path to win the future



Traditional scenario modeling process



**Looking at the world differently through
exploratory scenario planning**

Identifying drivers of change





**Autonomous
Vehicles**



**Spatial, Racial
and Economic
Equity**



**Climate
Change
Regulations**



**Aging of the
Population**



**Transportation
Finance
Structure**



**Water
Supply**



**Intelligent
Infrastructure &
Technology**

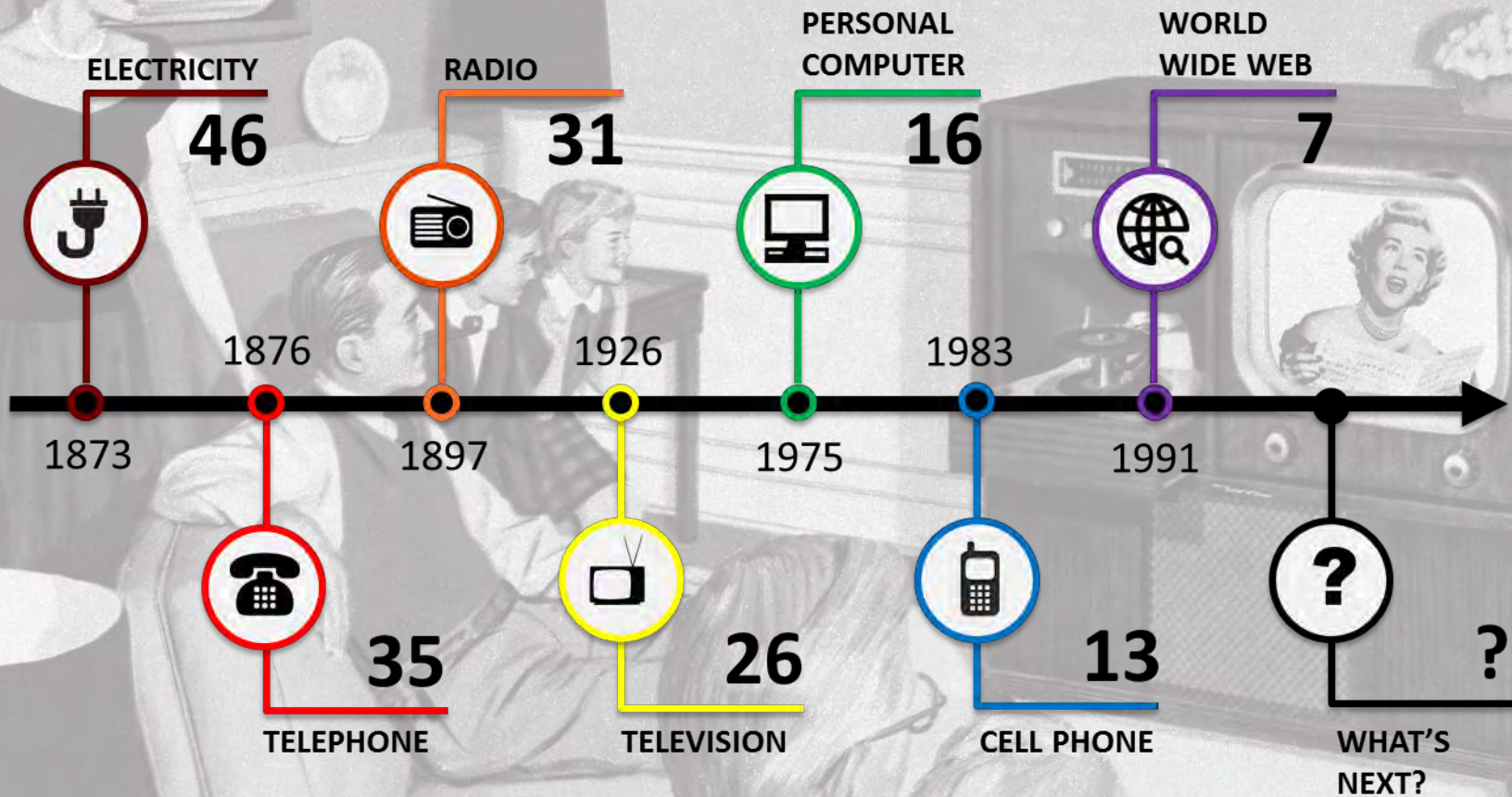


**Ridehailing
Services**



**Port
Traffic**

**Key drivers of change for the
Atlanta region**



Timeframes for 25% market penetration



Plausible, not predictive



“I think there is a world market for maybe five computers.”

- Thomas Watson, IBM Chairman (1943)

Predicting the future is not easy

Developing alternate futures



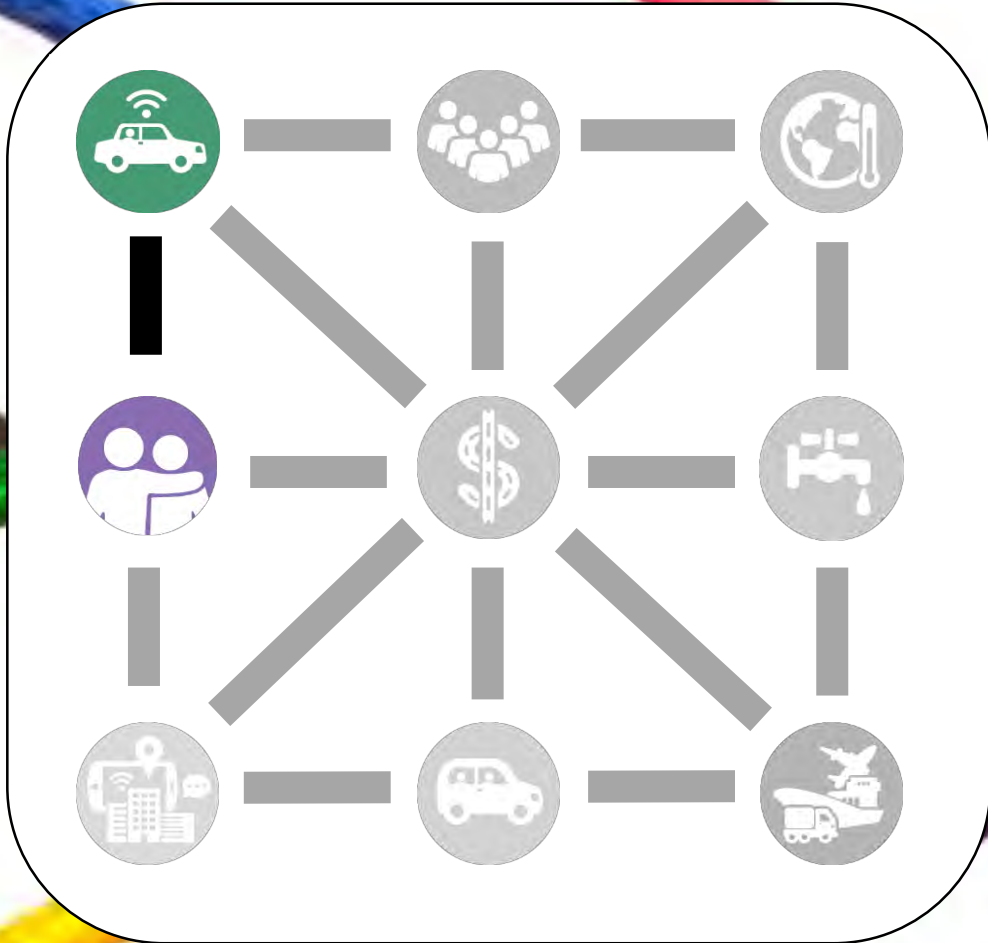


Fitting the drivers of change together



If the potential of autonomous vehicles matches the hype and they become commercially viable and readily available within the foreseeable future....

Identifying plausible relationships



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?

Identifying plausible relationships



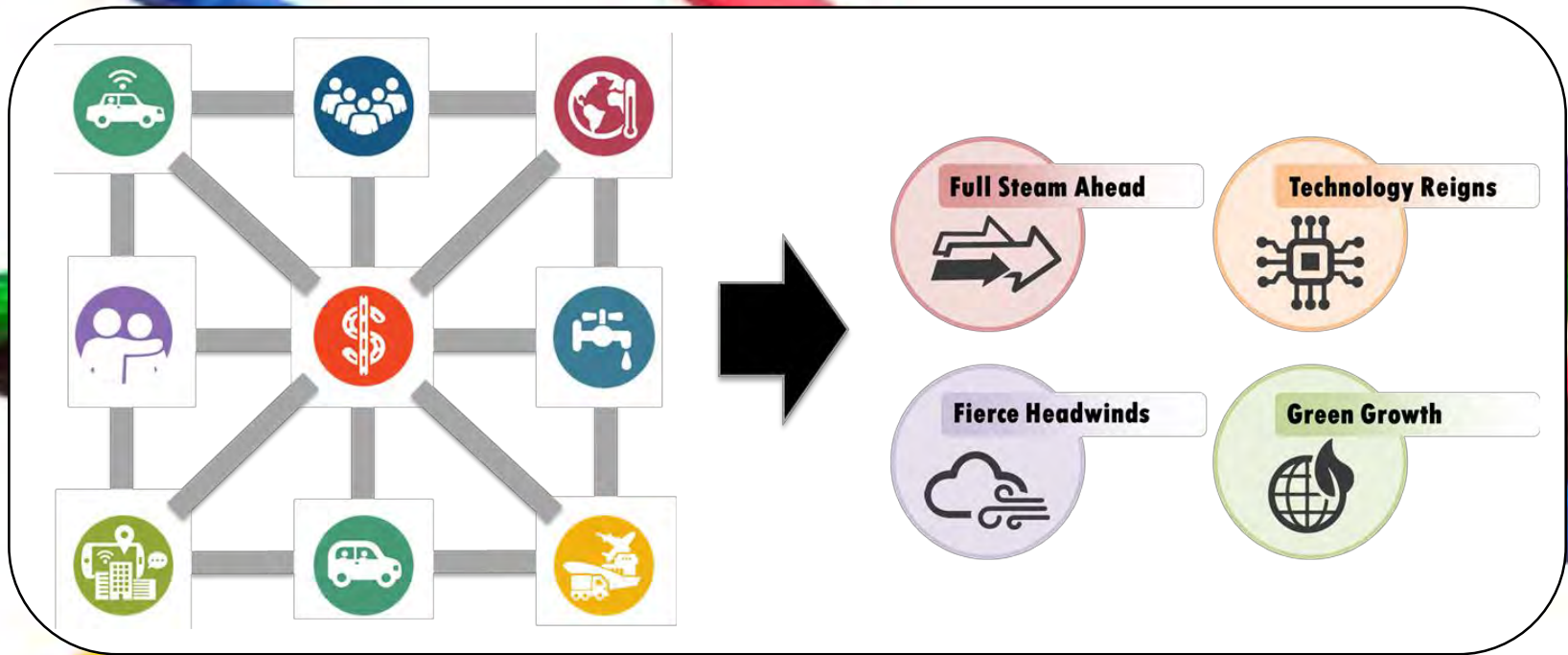
If an autonomous fleet is available “on call”, will people need to own their own vehicle? How would this change our spending habits? What happens to local governments with budgets that depend on traffic violations as a major source of revenue?

Identifying plausible relationships



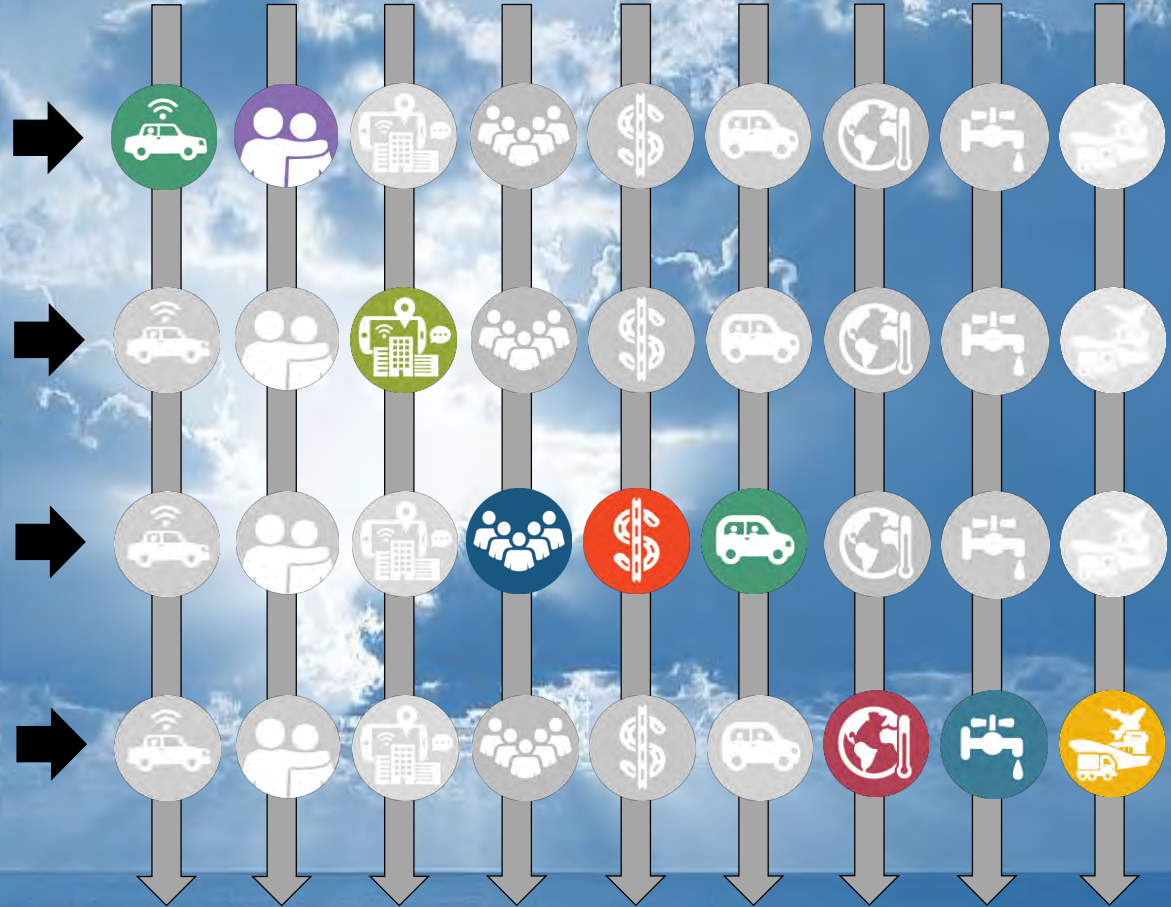
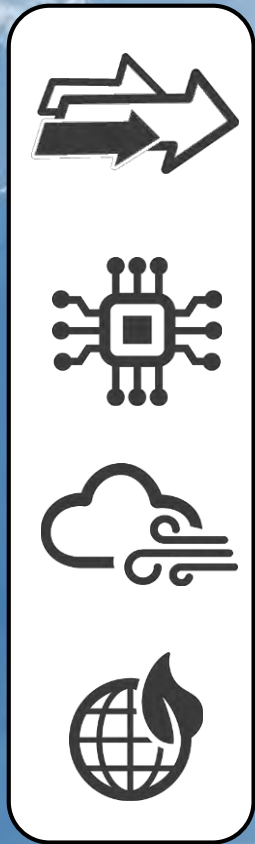
Would an autonomous vehicle fleet drive traditional transit services out of business? Or would it serve a much needed “last mile” connectivity function? Will lower income individuals be able afford access to the fleet?

Identifying plausible relationships



Four plausible futures for the Atlanta region

Plausible Futures



Actual Future



The actual future? Who knows?

Full Steam Ahead

43%



Technology Reigns

31%



Fierce Headwinds

10%



Green Growth

16%



MORE LIKELY

LESS LIKELY

What Atlanta's planners and officials believe

That was interesting, but...

So
What?





Supporting local and state initiatives

EZ10



Developing policy direction



Integrating into the ARC work program



Planning for Autonomous Vehicles in the Atlanta Region

David W. Haynes

470.378.1571

dhaynes@atlantaregional.org

ARC