



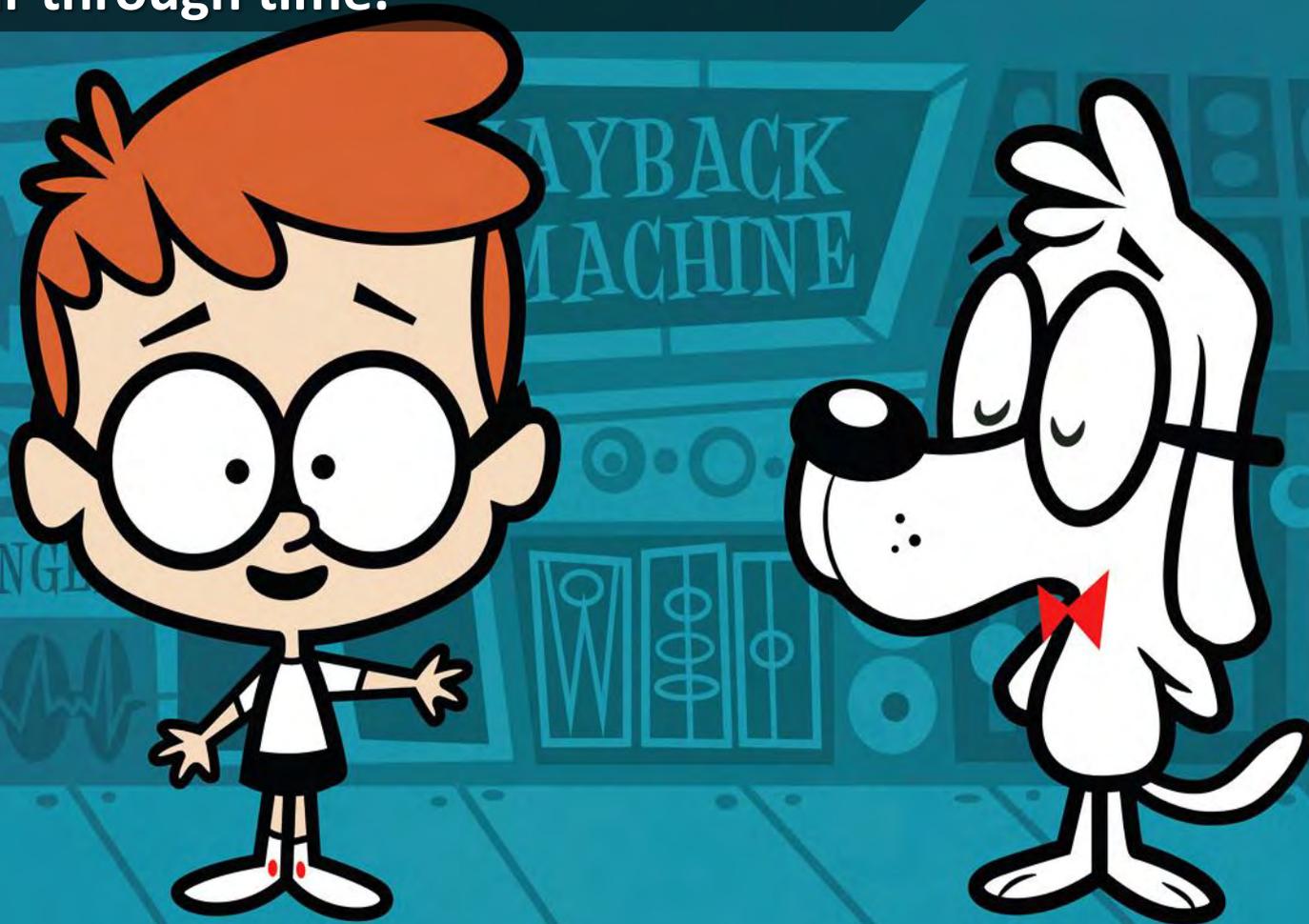
# Planning for Autonomous Vehicles in the Atlanta Region

Georgia Planning Association Fall Conference  
September 28, 2017

42-24

**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?





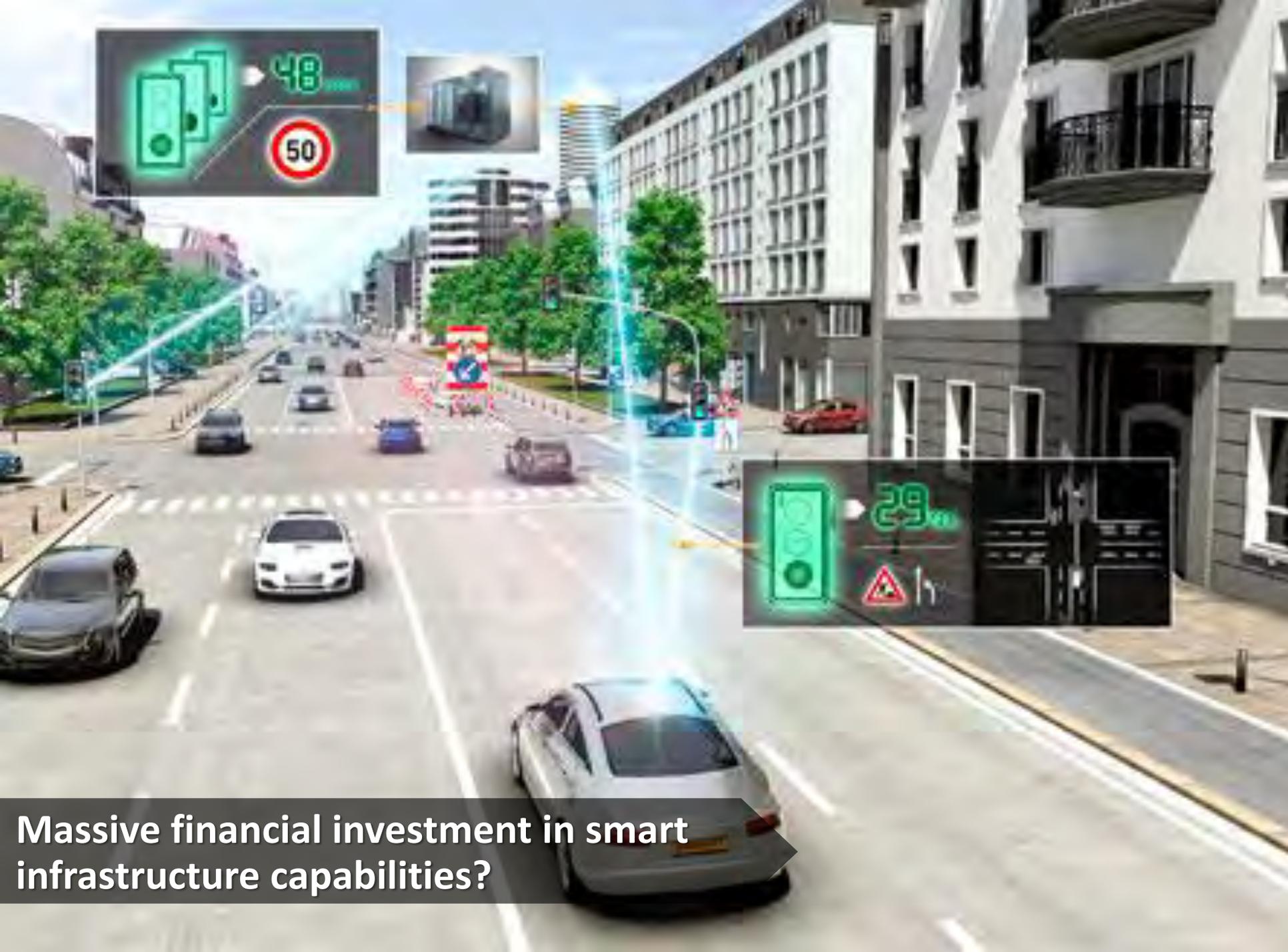
**Less need for new roads due to more efficient use of existing capacity?**



**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 indicate motion.

**How will it change the delivery industry?**



A digital overlay in the top left corner. It features a green speed limit sign with the number '48' and a red circular sign with the number '50'. To the left of these signs are three green rectangular icons representing smart infrastructure components. A blue beam of light extends from the '48' sign towards the center of the street.



A digital overlay in the bottom right corner. It features a green speed limit sign with the number '29' and a red triangular warning sign. To the left of these signs is a green rectangular icon representing a smart infrastructure component. A blue beam of light extends from the '29' sign towards the center of the street.

Massive financial investment in smart infrastructure capabilities?





i love you  
more than  
tomorrow.

What do we do with all those unnecessary parking garages?



**Who owns the data and how is it used?**

# Winning the Future



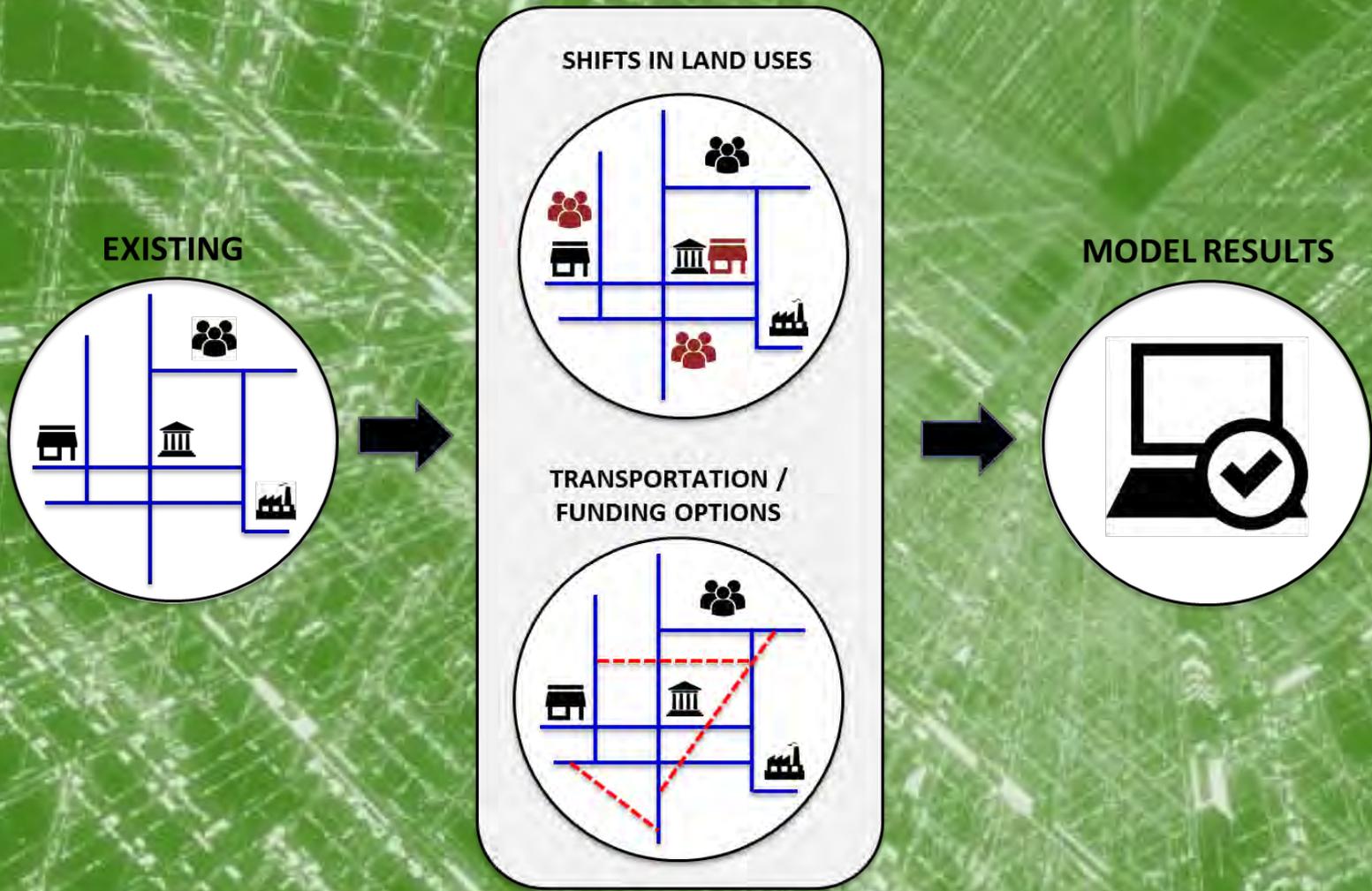
**Atlanta is one of the world’s most dynamic metropolitan areas, competing globally on the strength of our diverse population, robust economy, myriad cultural assets and attractive lifestyles. We will “win the future” through intensive collaboration that honors and leverages the uniqueness of our communities.**



*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**

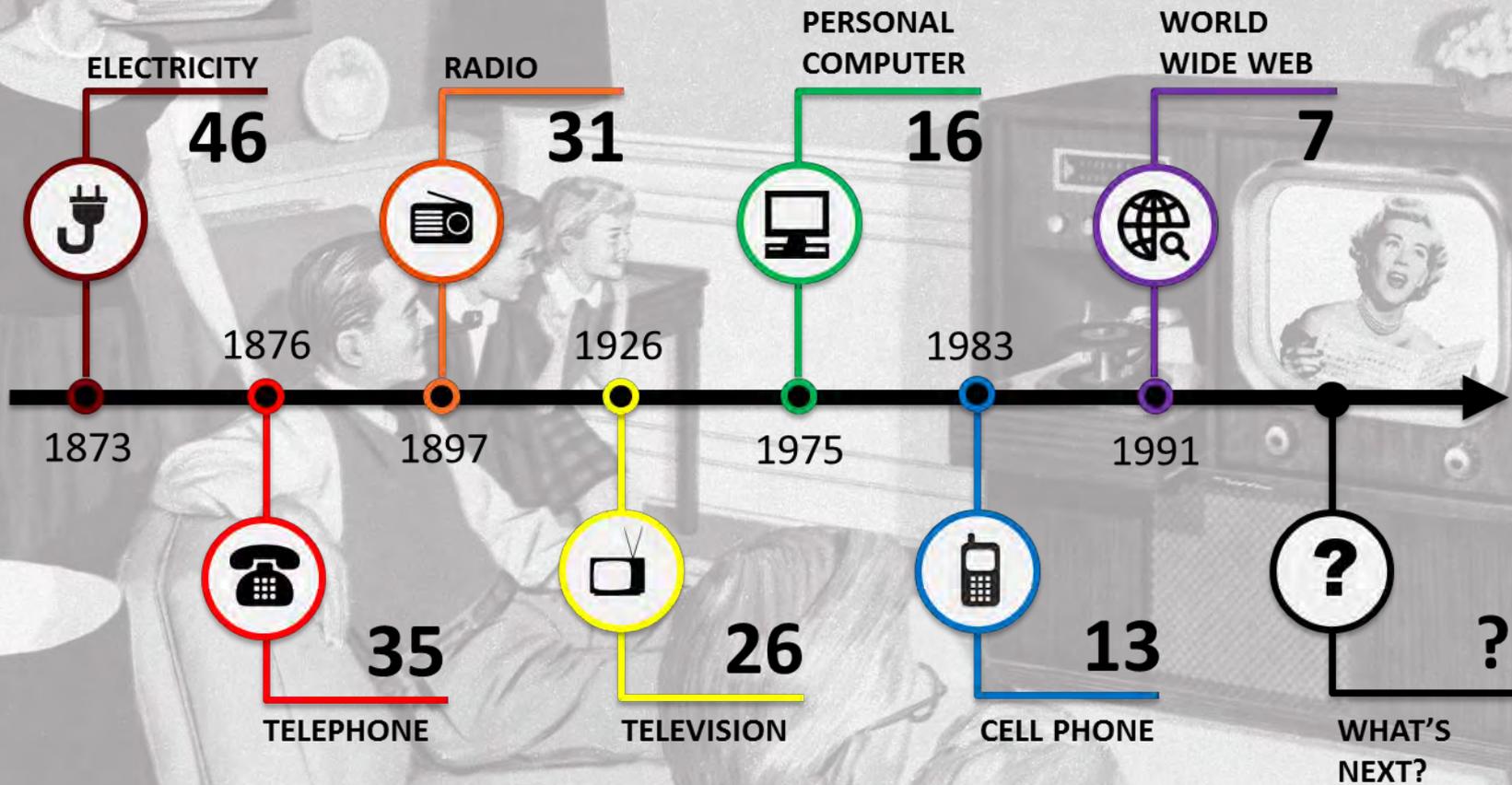


**Ridehailing  
Services**



**Port  
Traffic**

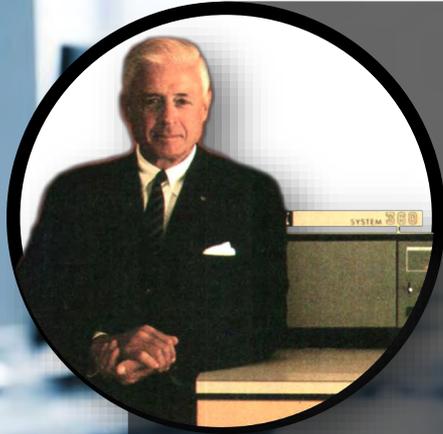
**Key drivers of change for the  
Atlanta region**



**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**



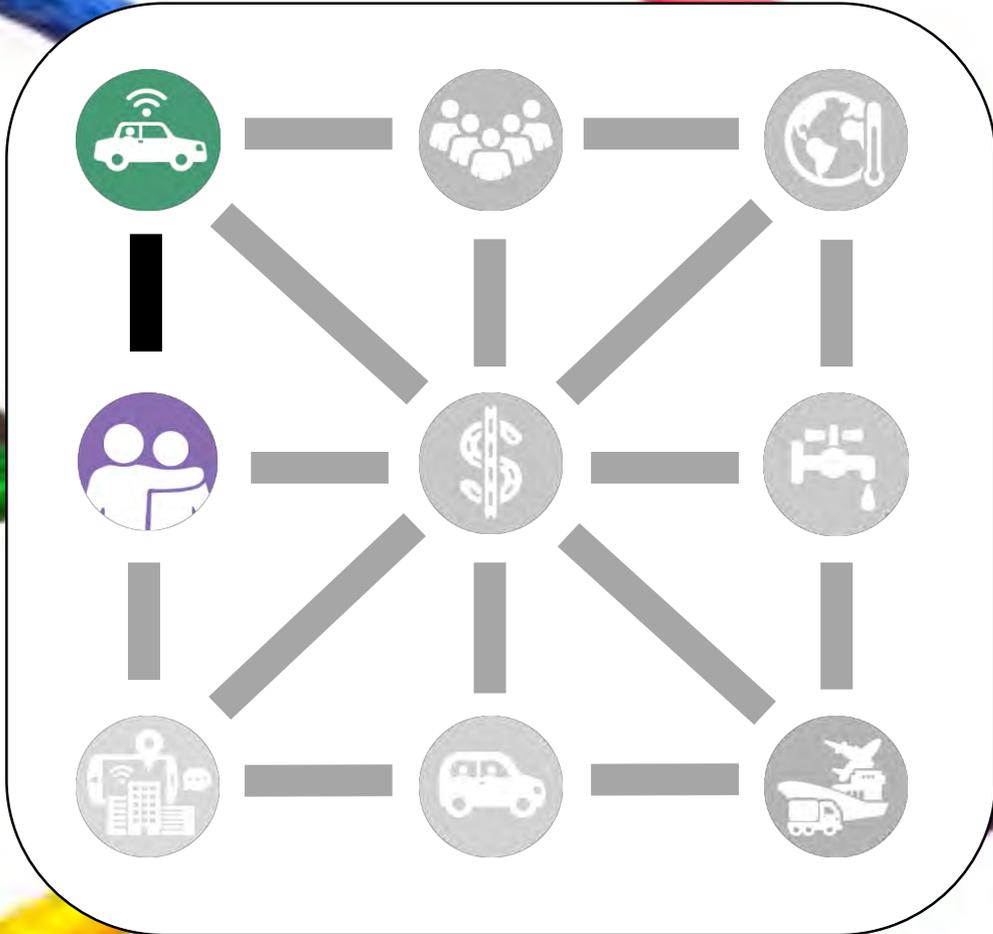


Fitting the drivers of change together



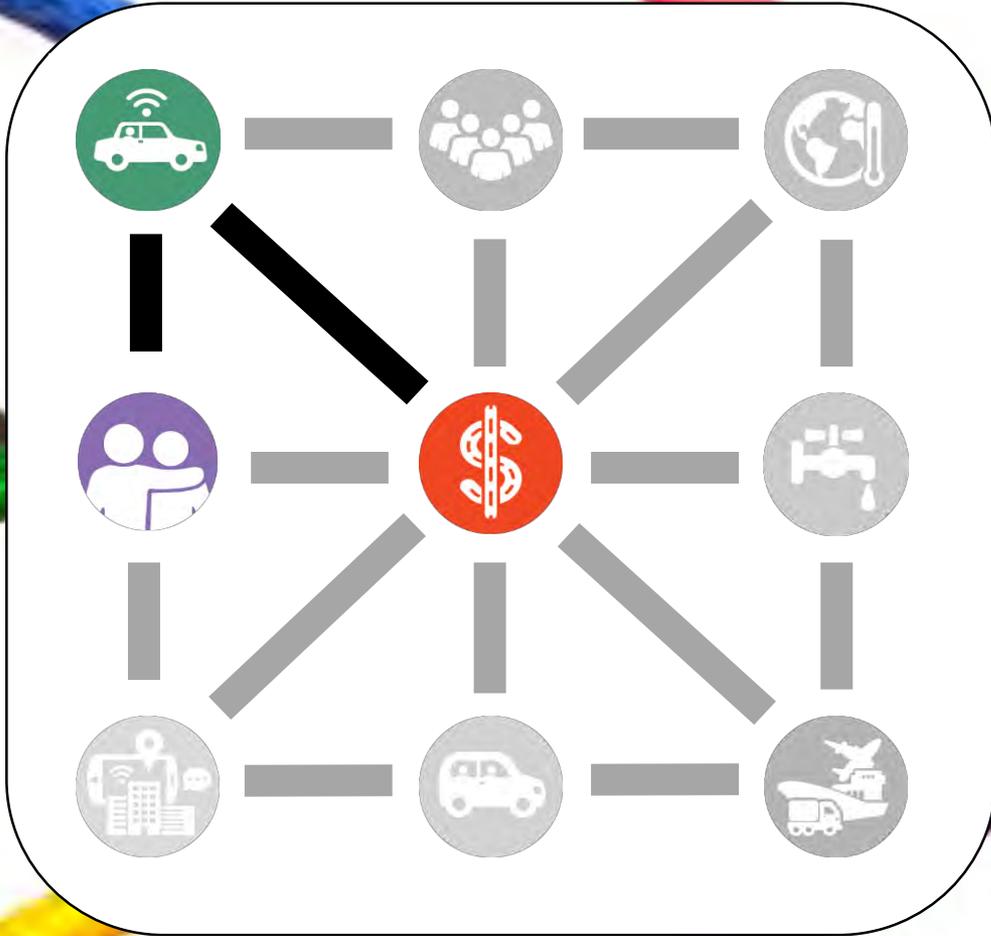
If the potential of autonomous vehicles matches the hype and they become commercially viable and readily available within the foreseeable future....

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



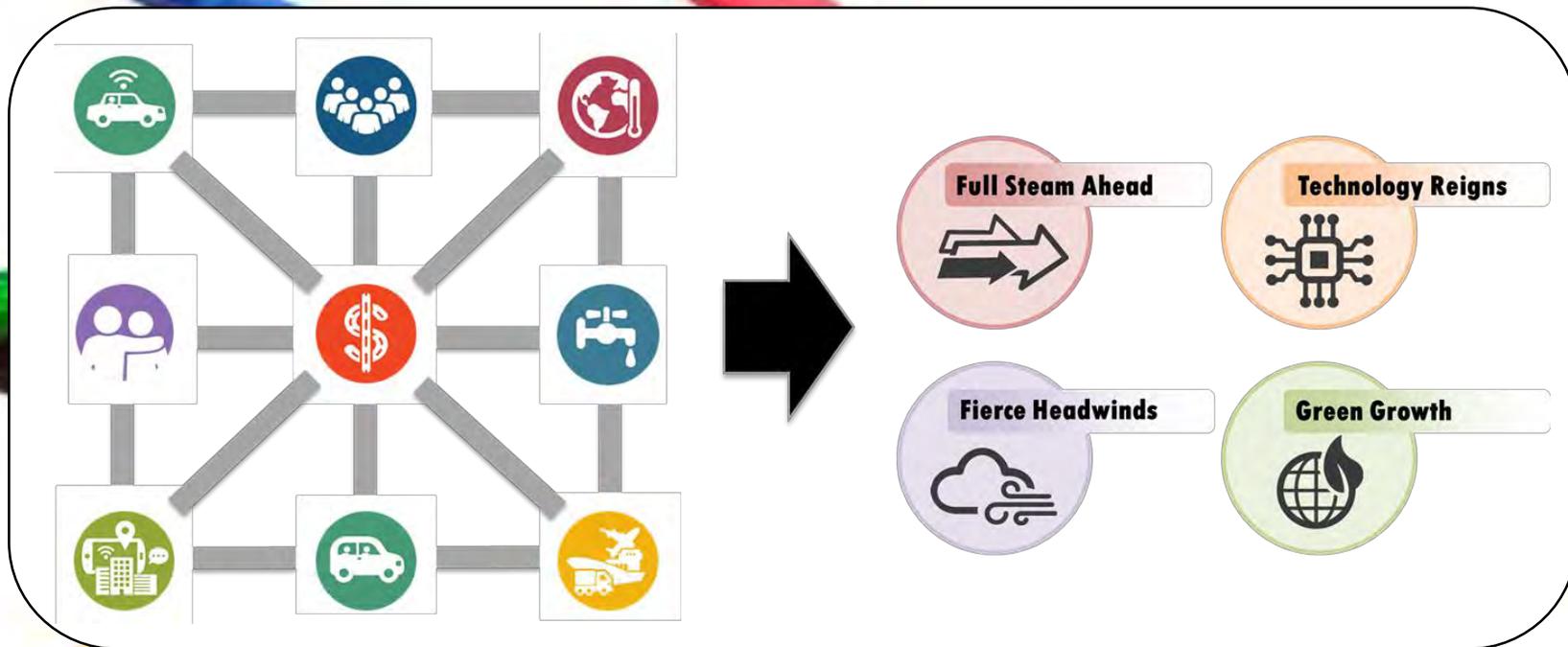
If an autonomous fleet is available “on call”, will people need to own their own vehicle? How would this change our spending habits? What happens to local governments with budgets that depend on traffic violations as a major source of revenue?

## Identifying plausible relationships



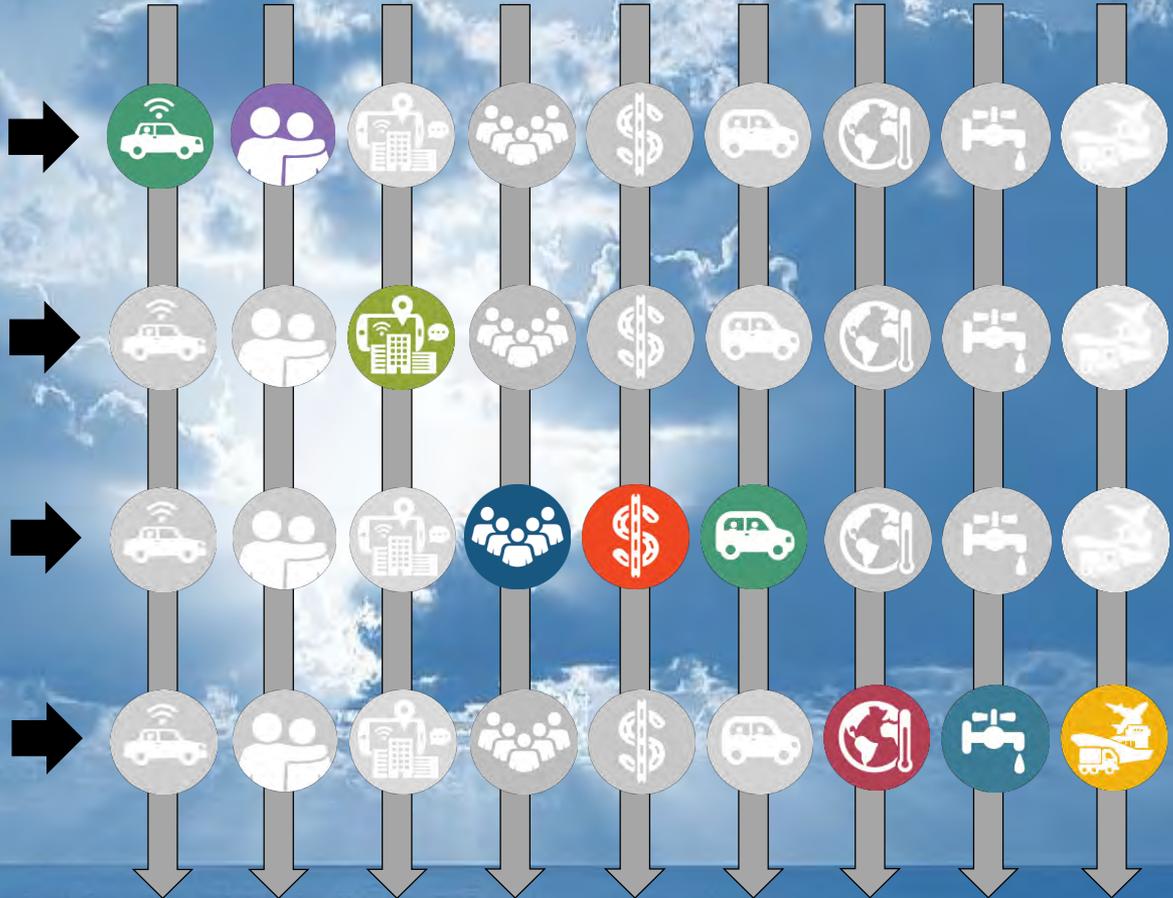
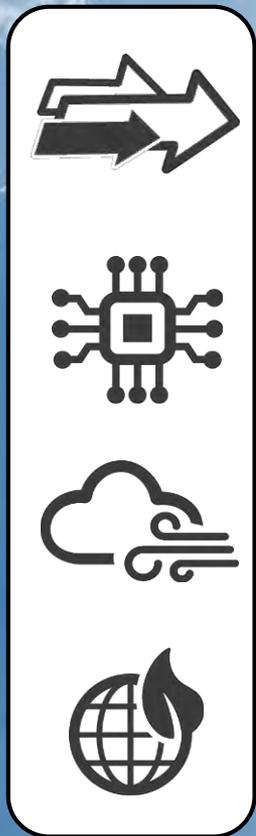
Would an autonomous vehicle fleet drive traditional transit services out of business? Or would it serve a much needed “last mile” connectivity function? Will lower income individuals be able afford access to the fleet?

Identifying plausible relationships



Four plausible futures for the Atlanta region

Plausible Futures



Actual Future



The actual future? Who knows?

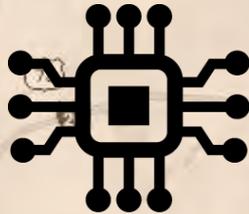
## Full Steam Ahead

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?



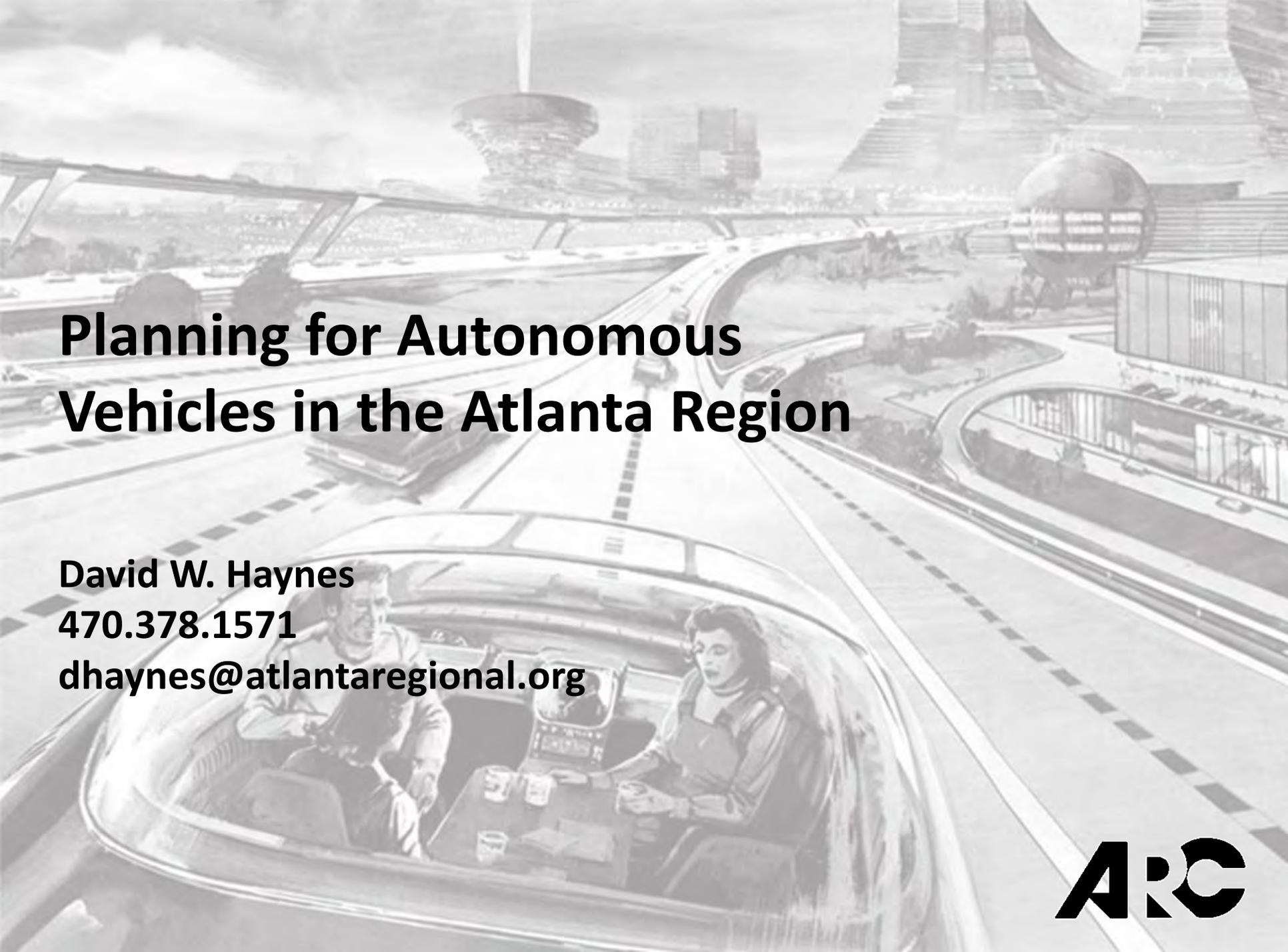
Supporting local and state initiatives



**Developing policy direction**



**Integrating into the ARC work program**



# Planning for Autonomous Vehicles in the Atlanta Region

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**ARC**