Planning for Better Mobility

ITS GEORGIA CHAPTER MEETING

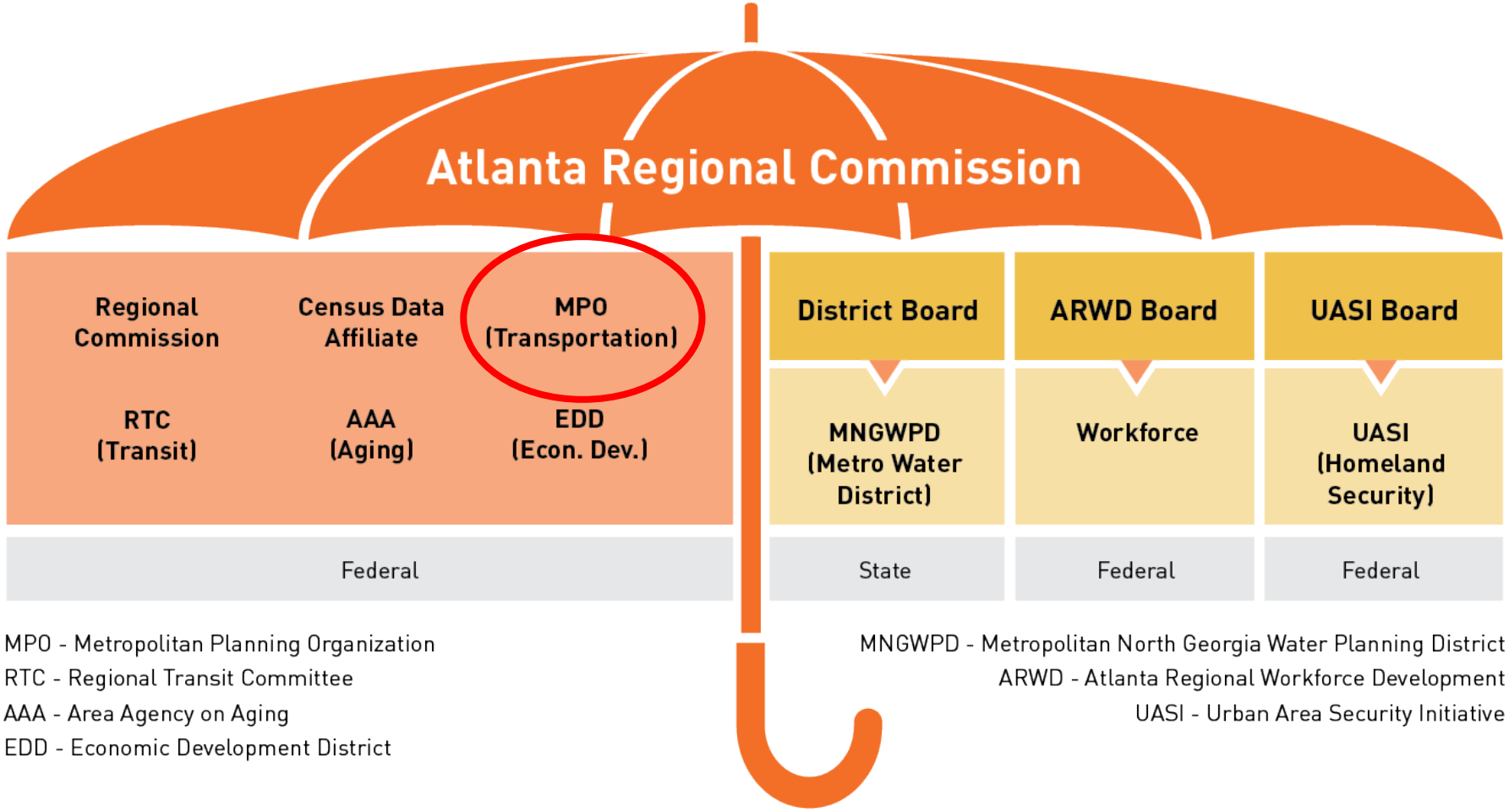
MAY 30, 2018

ARC OVERVIEW

Kofi Wakhisi

ITS Georgia
Intelligent Transportation Society

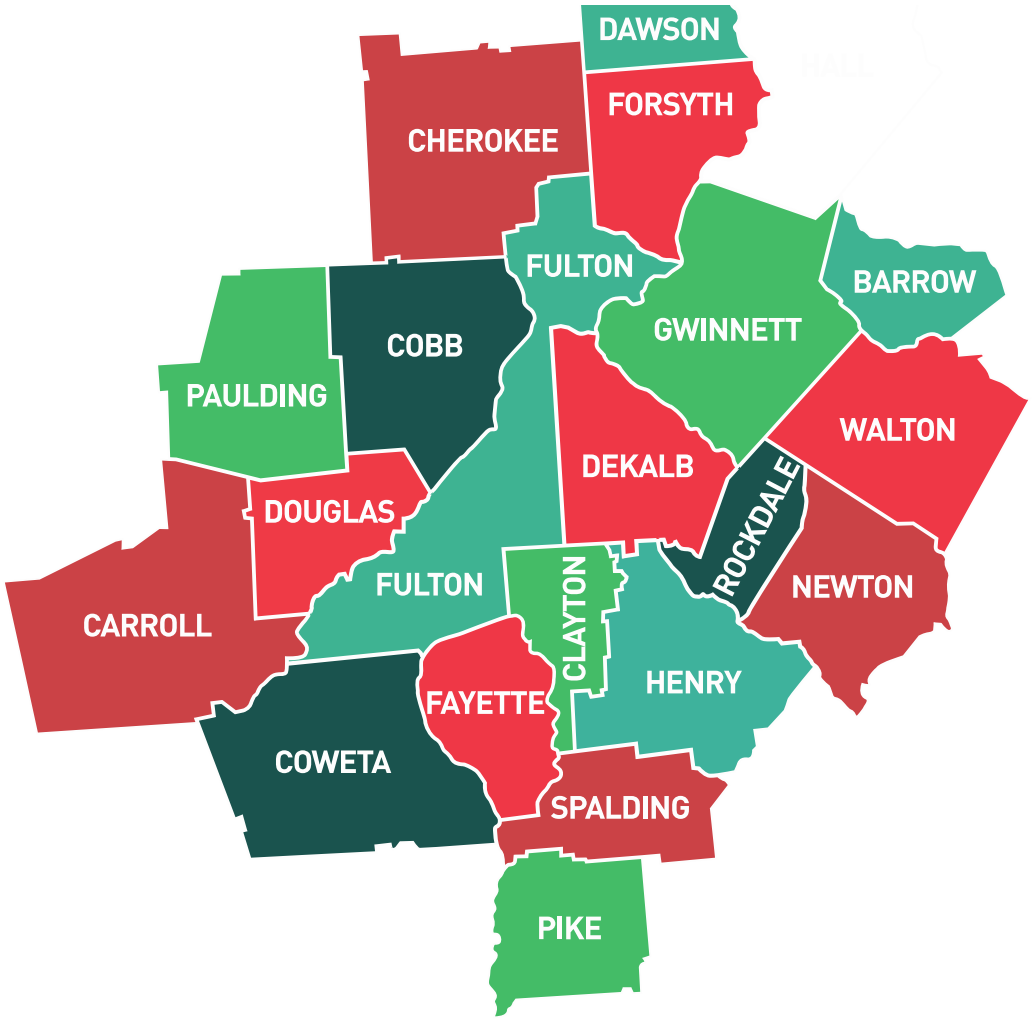
ARC Legal Designations



MPO - Metropolitan Planning Organization
RTC - Regional Transit Committee
AAA - Area Agency on Aging
EDD - Economic Development District

MNGWPD - Metropolitan North Georgia Water Planning District
ARWD - Atlanta Regional Workforce Development
UASI - Urban Area Security Initiative

ARC IS THE METROPOLITAN PLANNING ORGANIZATION (MPO)



The ARC 20 county region represents **50% of Georgia's population**

METROPOLITAN PLANNING ORGANIZATION (MPO)

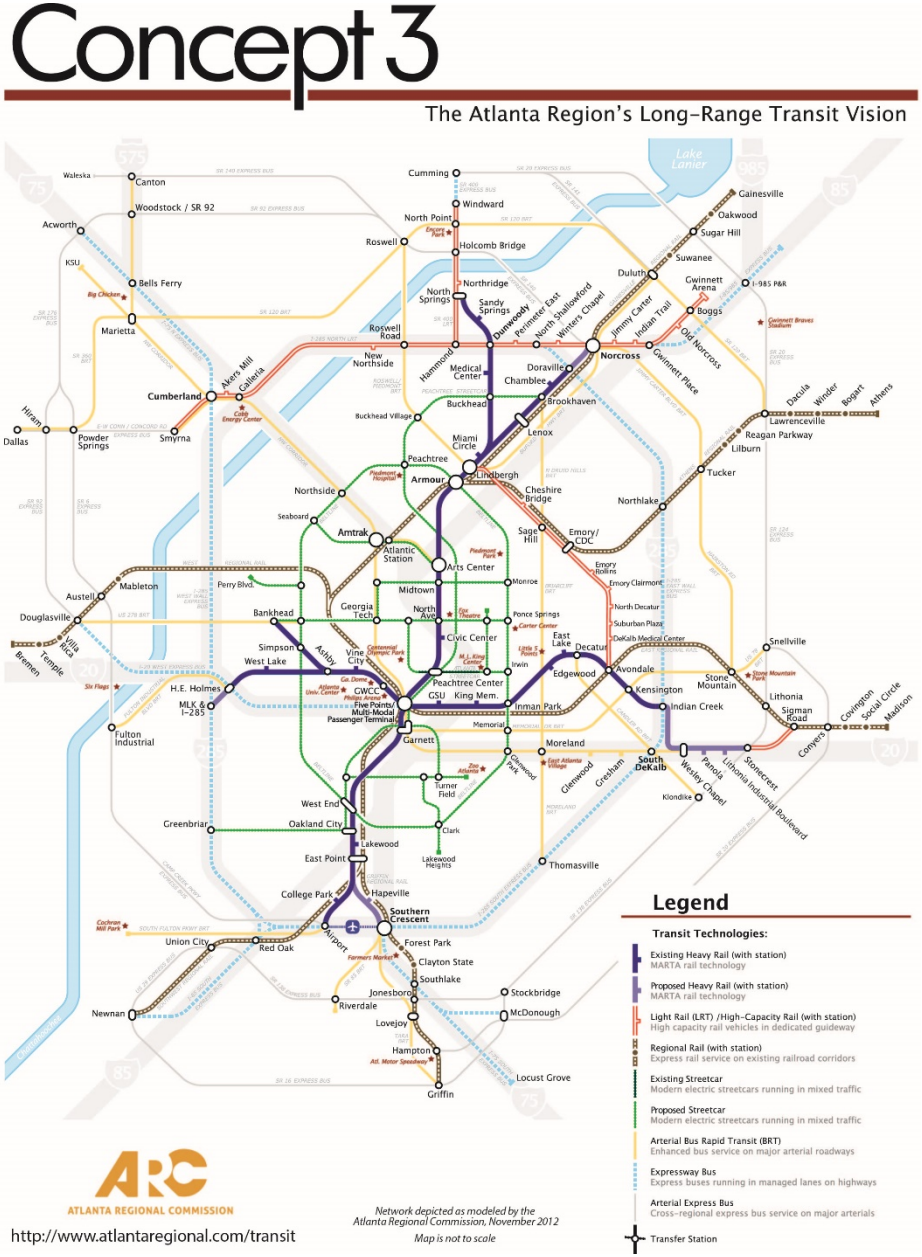
- MPOs are designated in urban areas with 50,000+ people, to carry out the **federally required** metropolitan transportation planning process, including the **Regional Transportation Plan** and the **Transportation Improvement Program**
- There are 16 MPOs throughout Georgia
- Georgia Association of MPOs - www.gampo.org

REGIONAL TRANSIT PLANNING INITIATIVES

Shayna Pollock

ITS Georgia
Intelligent Transportation Society

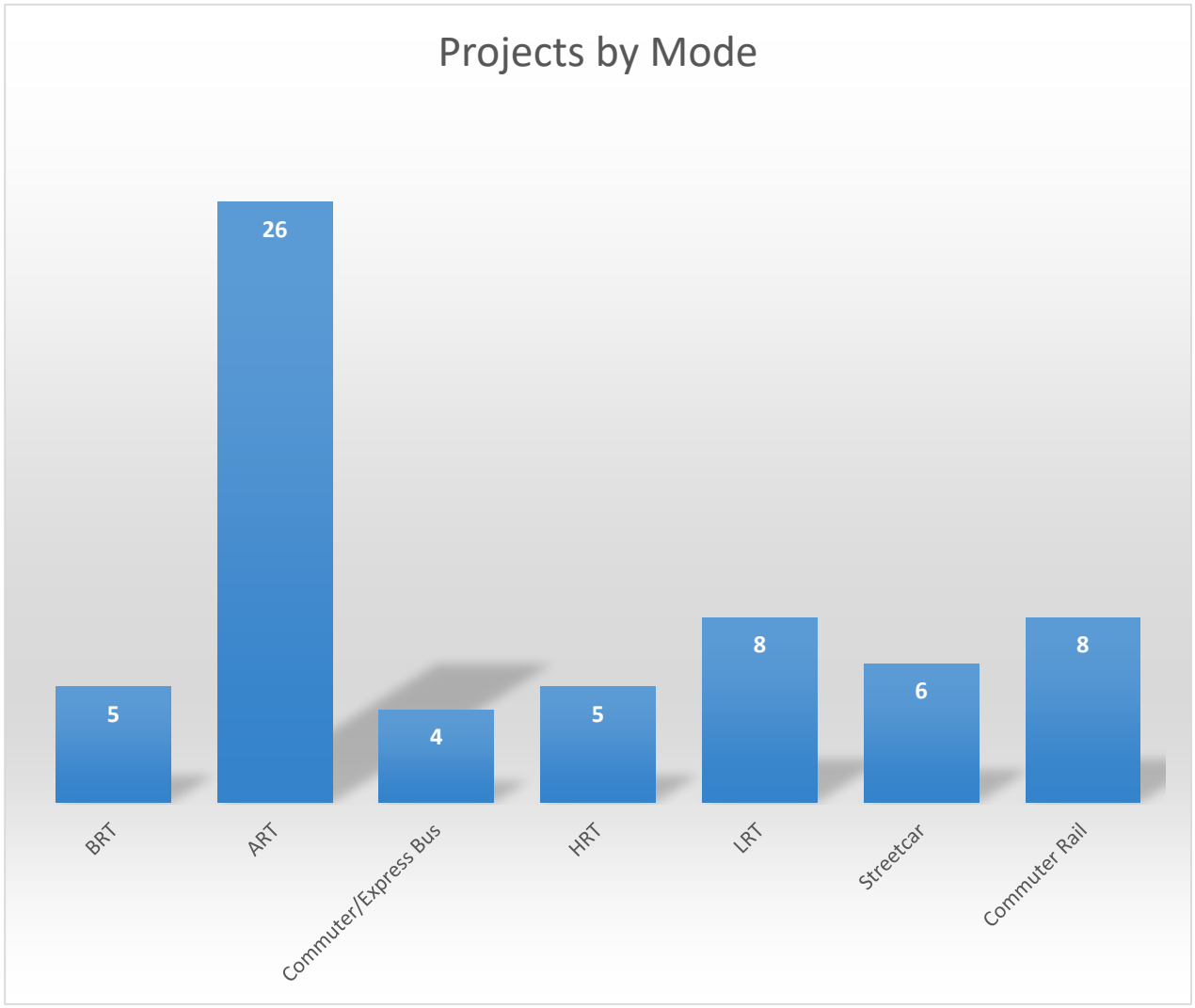
REGIONAL TRANSIT VISION



- Around 61 projects
- All-Encompassing Project List
  - Previous Concept 3 List
  - Local Transit Plans
  - More MARTA
  - Other state, local and regional plans
- Reviewed by stakeholders
- Reduced/Combined down to current list

- Draft Project Map
  - Project Name
  - Mode
  - To/From
  - Project Sponsor

REGIONAL TRANSIT VISION (CONT'D)



Preliminary Mode Definitions

- BRT – includes in-line stations, pay before boarding, travels in managed or dedicated lanes
- ART – travels in mixed traffic, includes technology for signal prioritization, queue jumping design
- Commuter Bus/Express Bus – travels in managed lanes, minimal stops, pay as you board
- HRT – MARTA heavy rail service
- LRT – Powered by overhead electric lines, runs in dedicated ROW
- Streetcar – Powered by overhead electric lines, runs in mixed traffic
- Commuter Rail – Travel at higher speeds, longer distances between city centers and suburbs, regional service

LOCAL PLANNING STUDIES

FULTON COUNTY
TRANSIT MASTER PLAN

DeKalb County
GEORGIA

CONNECT
GWINNETT
TRANSIT
PLAN

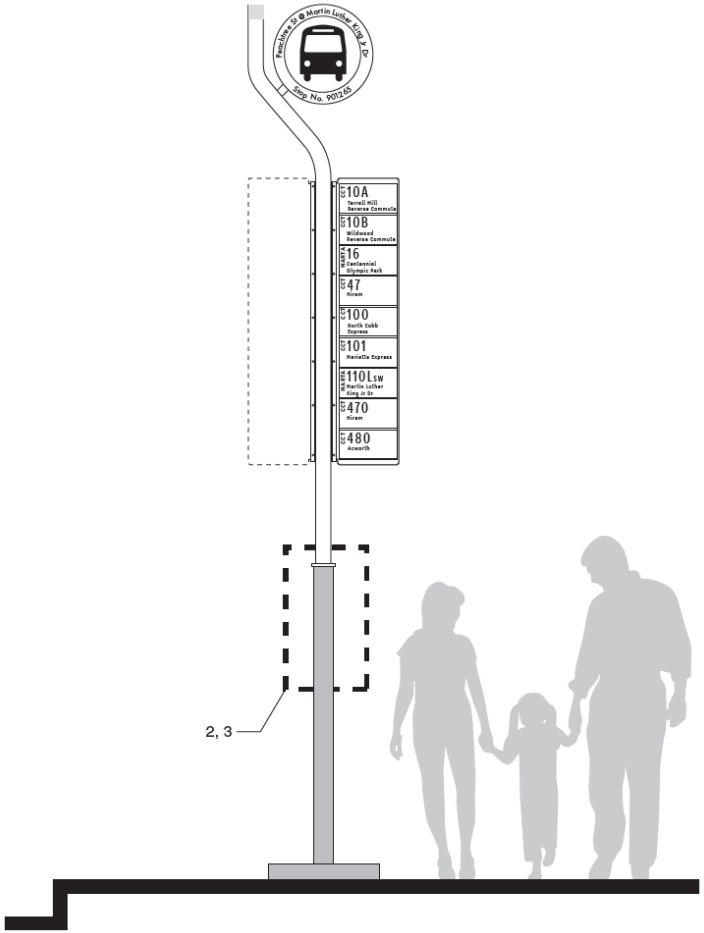
OPERATOR TECHNOLOGY COORDINATION

remix

breeze™

CCT GRTA marta

OPERATOR TECHNOLOGY COORDINATION (CONT'D)



FREIGHT PLANNING & TRUCK PARKING

Daniel Studdard

ITS Georgia
Intelligent Transportation Society

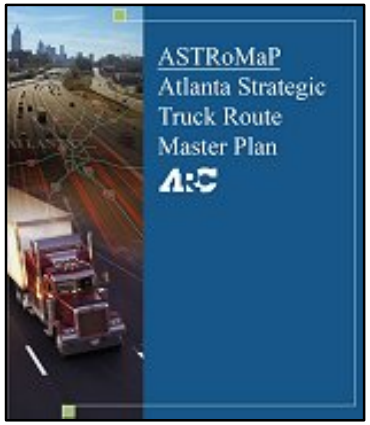
HISTORY OF ARC FREIGHT PLANNING

Freight Advisory Task Force Formed

2003

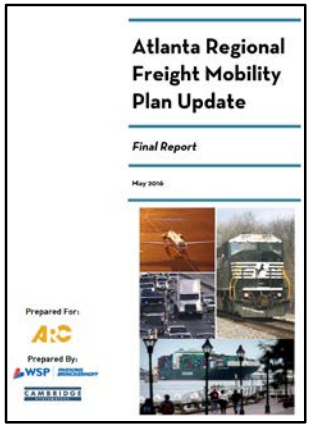
Atlanta Regional Freight Mobility Plan

2005-2008



ASTROMaP

2010

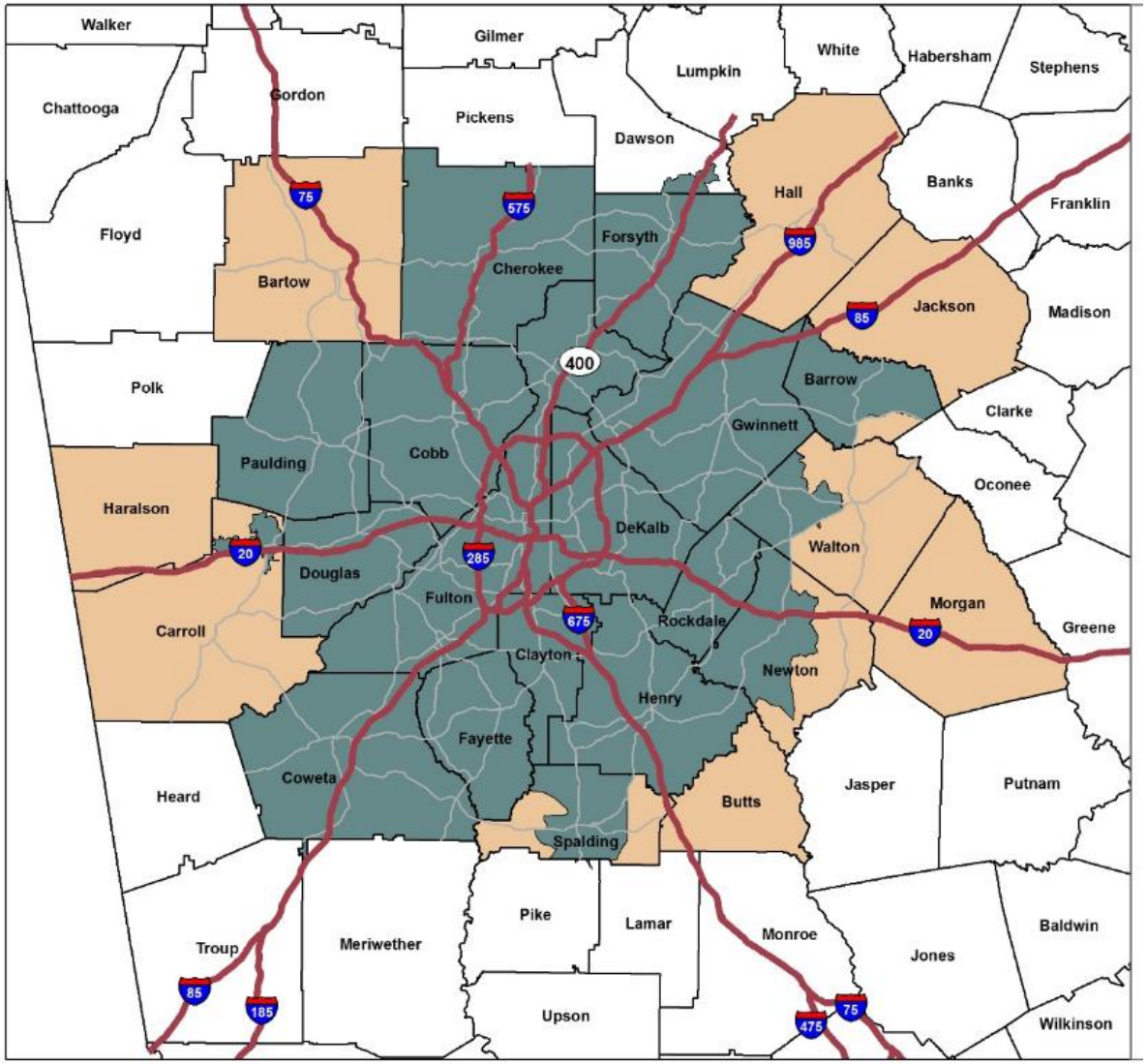


Atlanta Regional Freight Mobility Plan Update

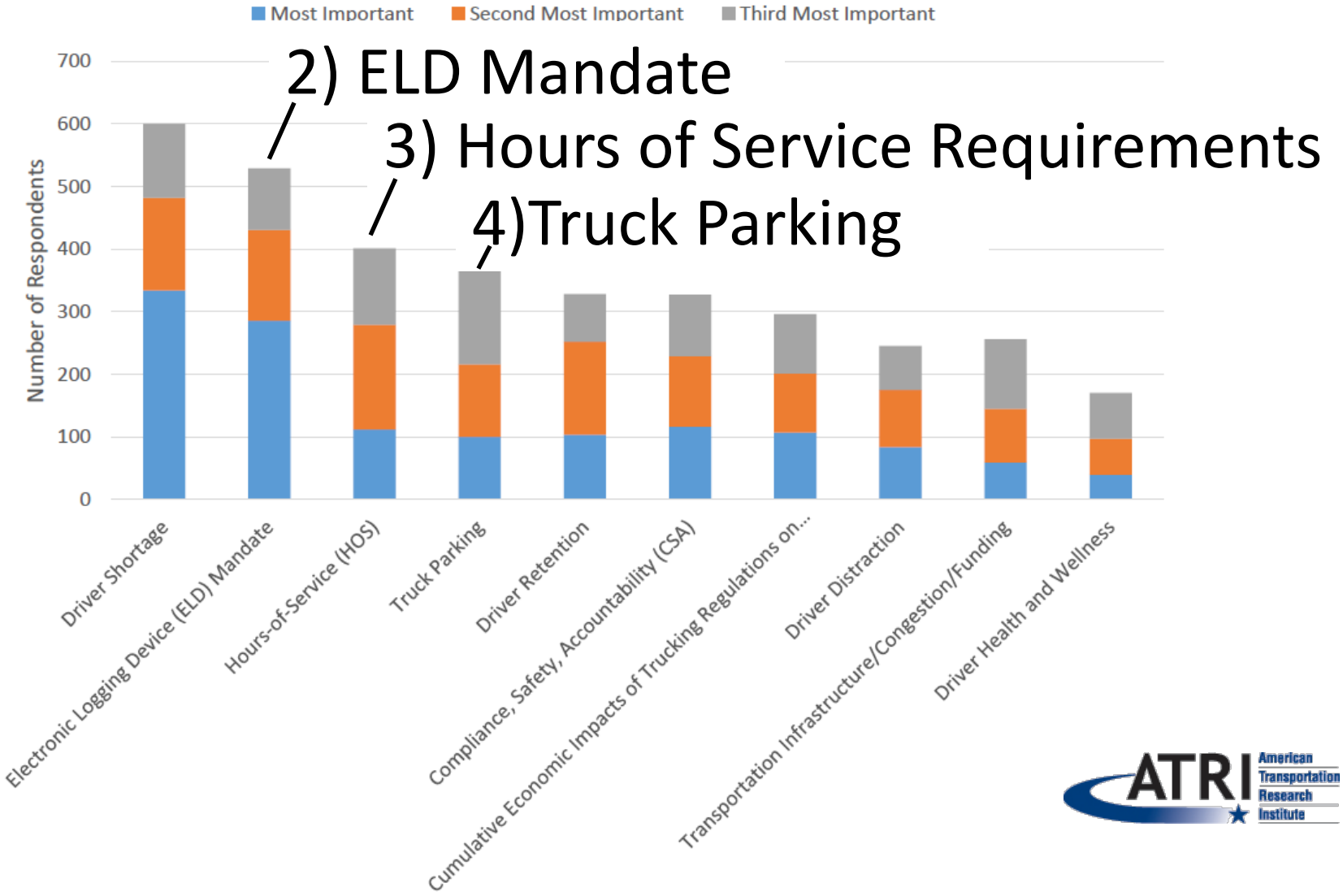
2015-2016

ATLANTA REGIONAL TRUCK PARKING ASSESSMENT STUDY

- Existing and Future Truck Parking Needs
- Study Completion: Spring 2018
- Study Area:
  - ARC MPO
  - Key Adjacent Counties



ATRI Critical Issues in the Trucking Industry 2017

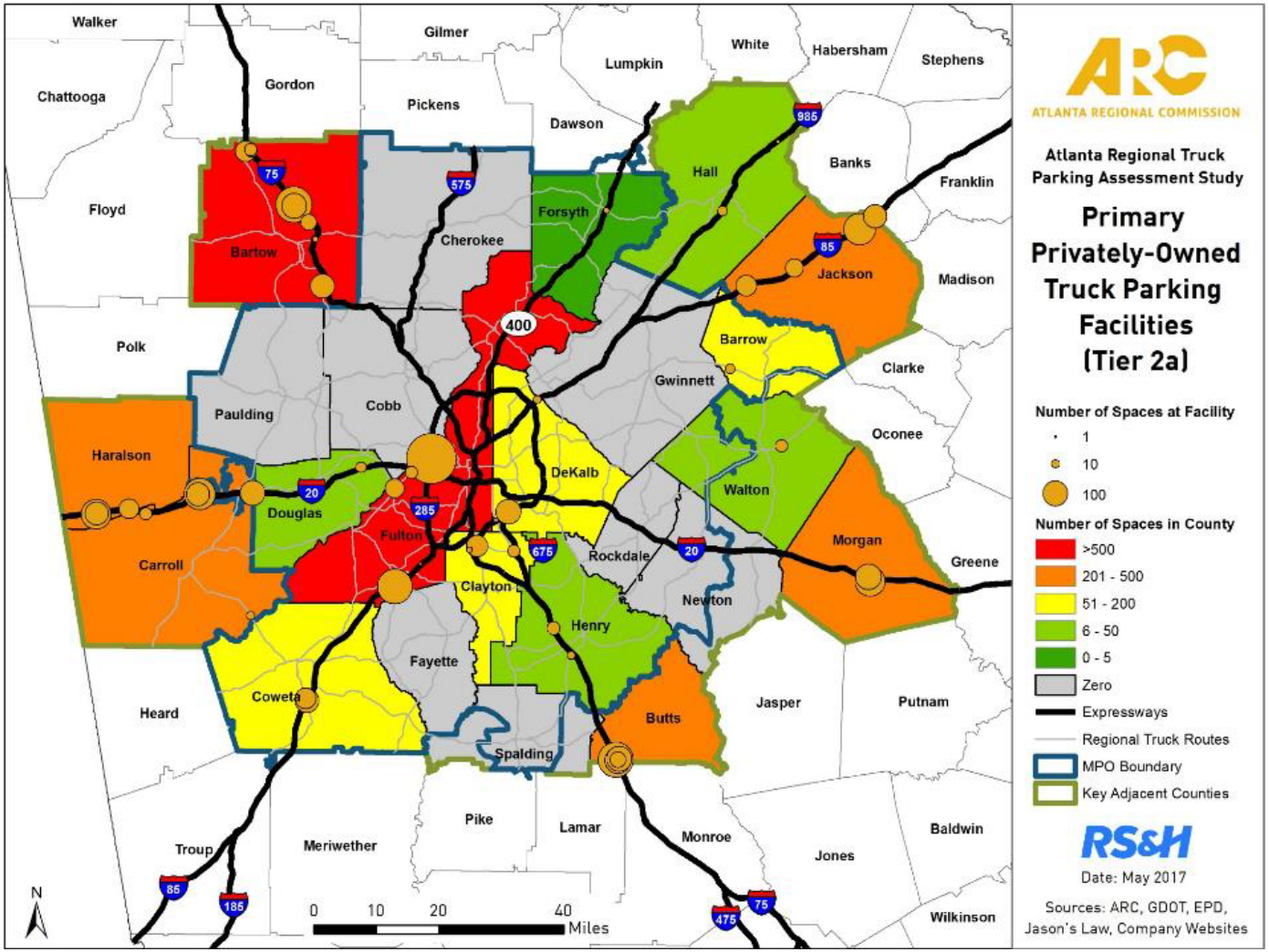


ATRI American Transportation Research Institute

ATLANTA REGIONAL TRUCK PARKING ASSESSMENT STUDY

Private Spaces by County

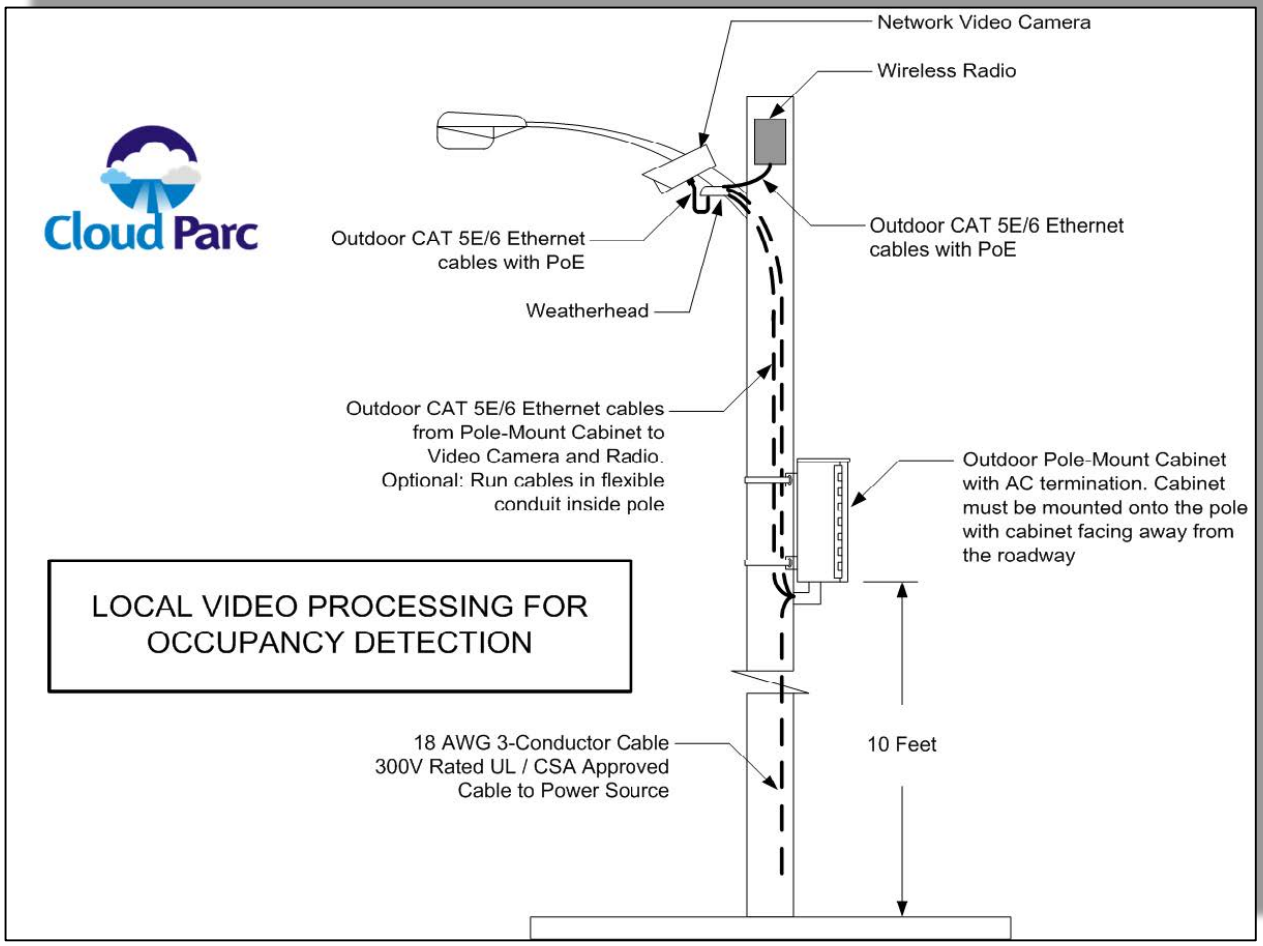
County	Spaces
Fulton	698
Bartow	575
Butts	450
Carroll	360
Haralson	332
Jackson	309
Morgan	259
Coweta	165
DeKalb	114
Clayton	105
Barrow	85
Henry	40
Walton	25
Douglas	20
Hall	19
Forsyth	5
Total	3,561



PARKING DETECTION TECHNOLOGY

FDOT

Cloud Parc



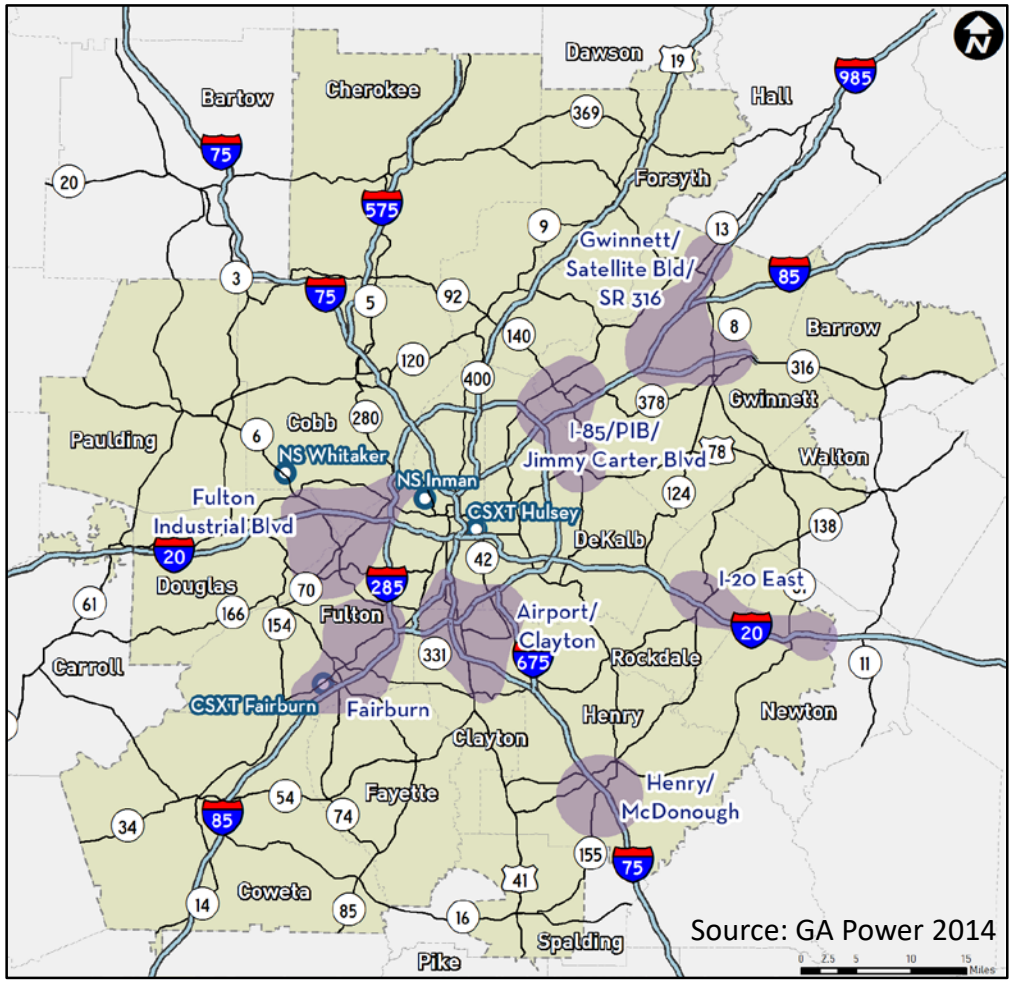
ARC FREIGHT CLUSTER PLANS

First Round of Applications in 2017

- Aerotropolis Atlanta CIDs
- Gateway 85 CID
- Spalding County
- Stone Mountain CID

Detailed plans of freight cluster areas

- Work with local jurisdictions and CIDs
- Identify first mile/last mile projects



CLUSTER PLAN PROCESS

Plan Elements

- Existing Conditions/ Needs Assessment
- Traffic Study
- Recommendations
- Prioritized Project List
  - Includes ITS, CAV, etc.
  - On-Deck Projects with more detailed analysis
  - What projects will be implemented next?
- Extensive Outreach Efforts

ConnectATL
Takeaways and Next Steps

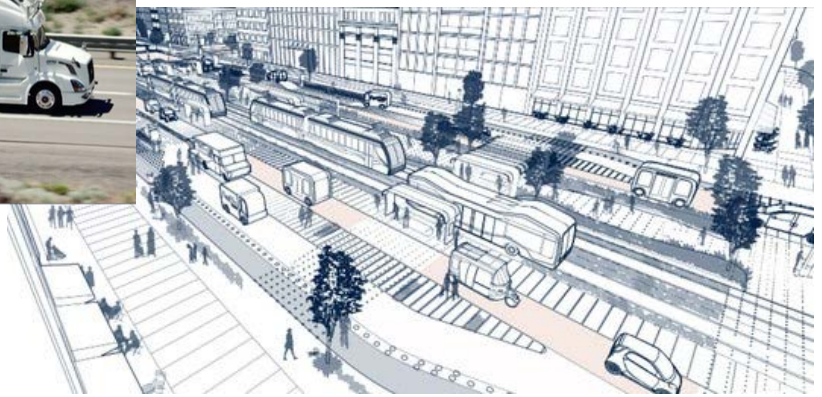
Leslie Langley

OUR CITY AS LIVING LABORATORY.

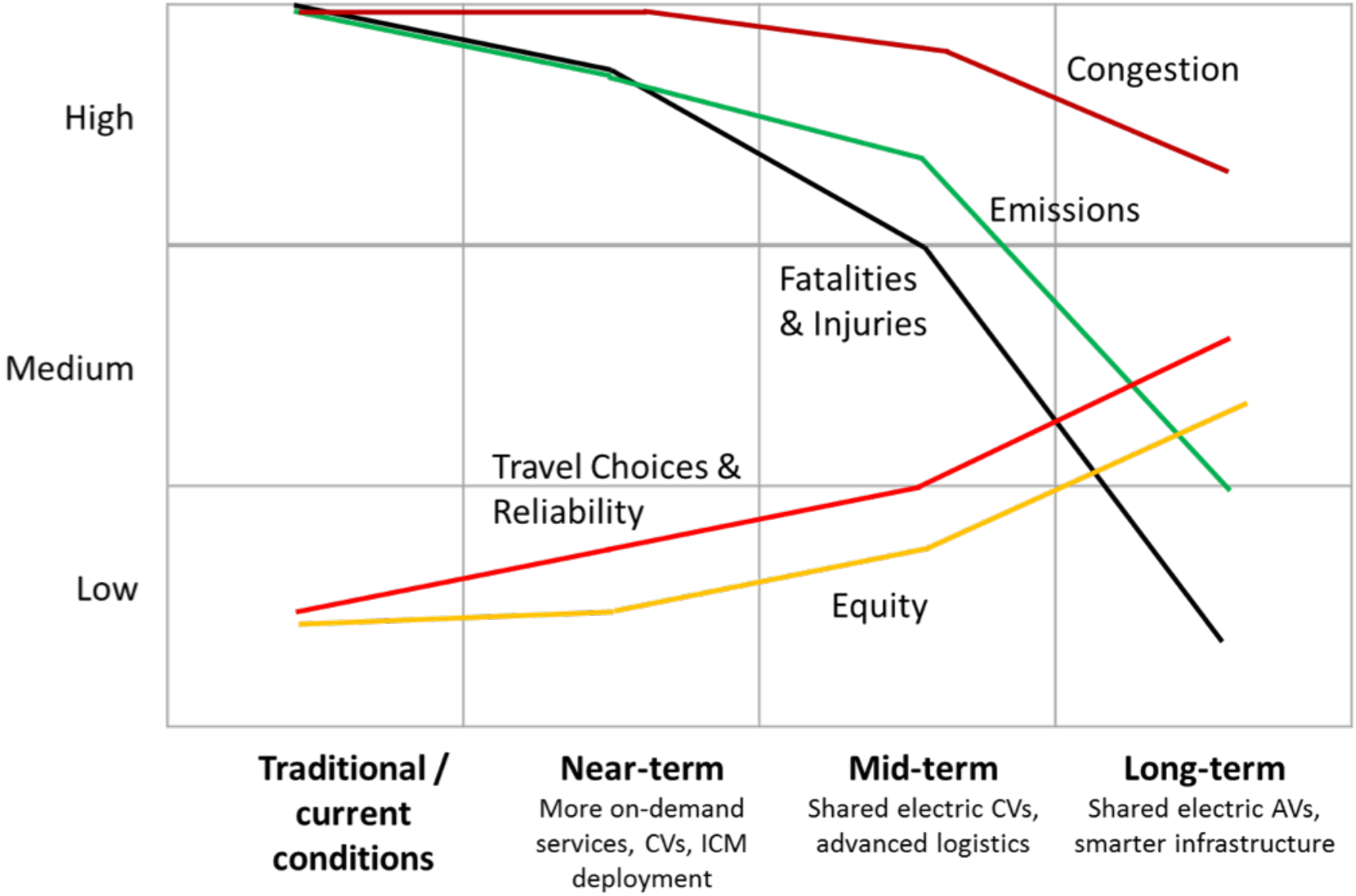
TEST, LEARN, ITERATE.

SMRT COLUMBUS

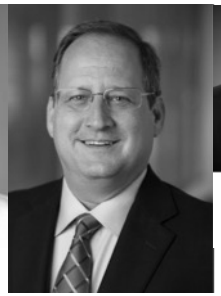
GEORGIA SMART COMMUNITIES CHALLENGE

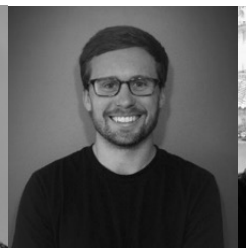


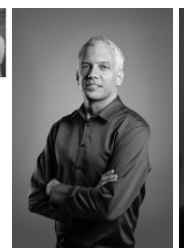
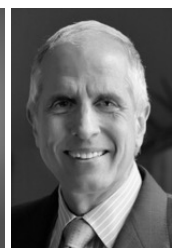
PURPOSE


High
Medium
Low
Congestion
Emissions
Fatalities & Injuries
Travel Choices & Reliability
Equity
Traditional / current conditions
Near-term
More on-demand services, CVs, ICM deployment
Mid-term
Shared electric CVs, advanced logistics
Long-term
Shared electric AVs, smarter infrastructure

WHO



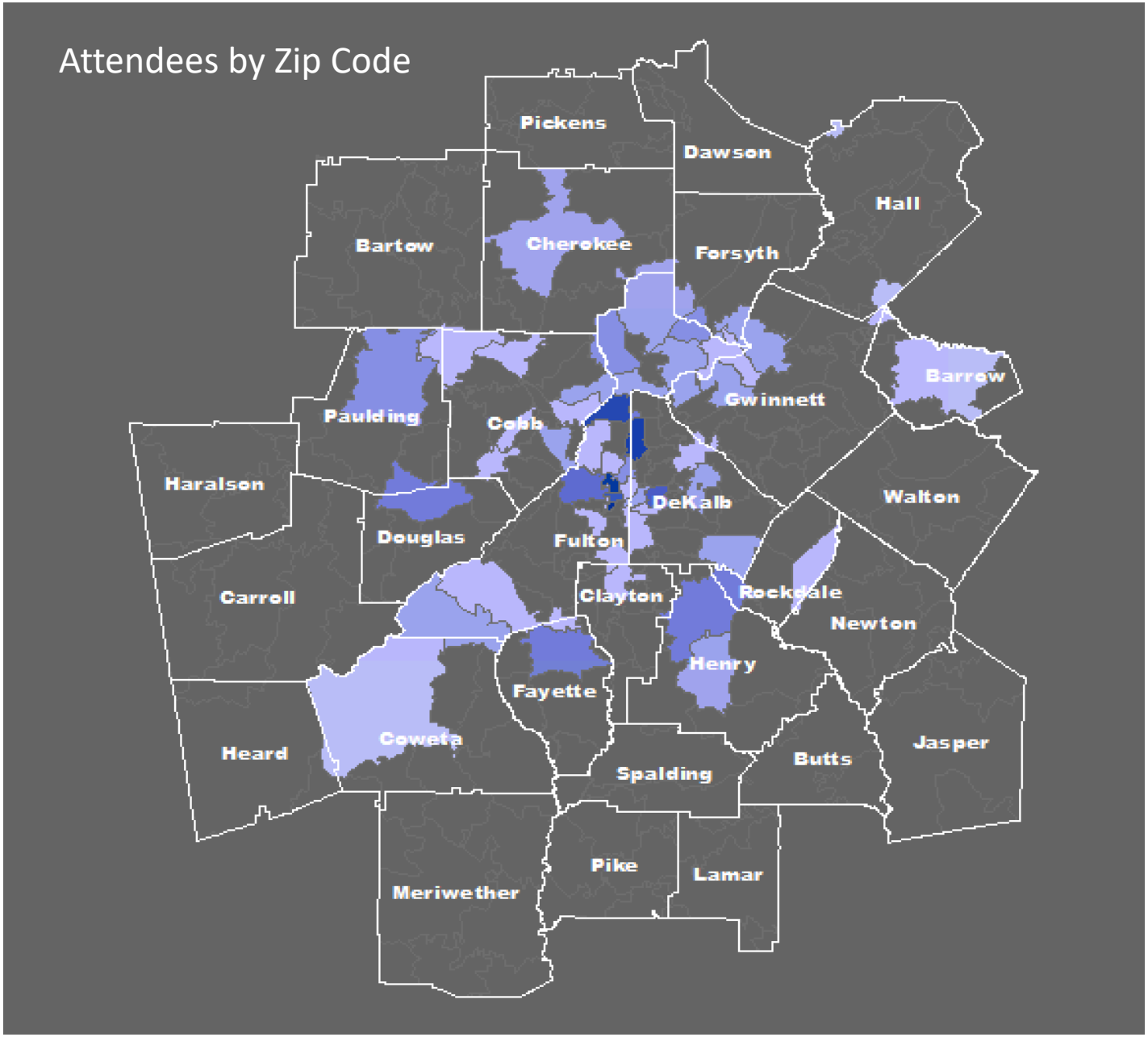


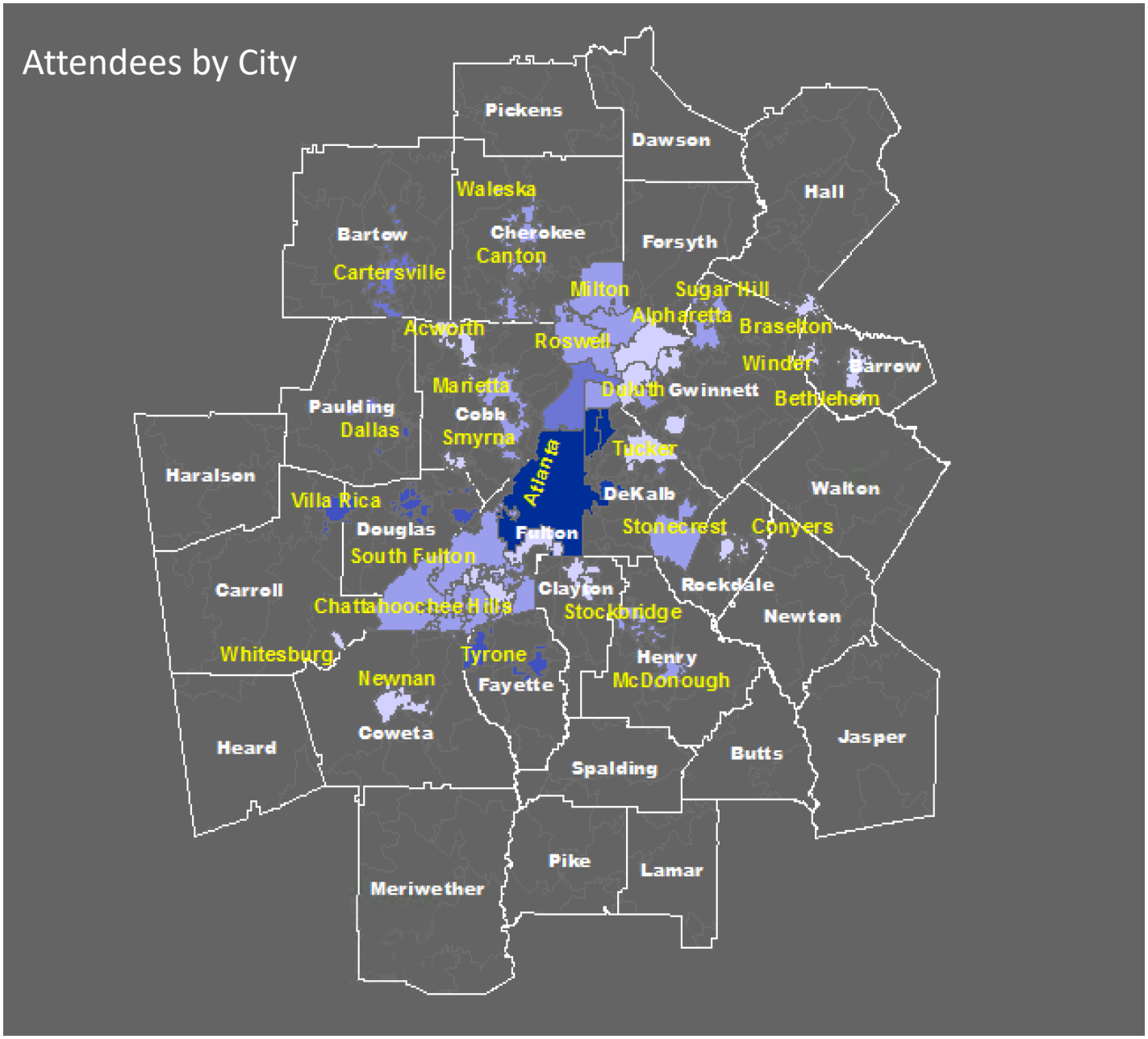
Over 300 People

10 Exhibitors
11 Sponsor Agencies
25 Volunteers
36 Speakers
118 Industry Leaders
152 Local Gov’t/Transit Agency/Non-Profit Org.

WHO (cont'd)


Attendees by Zip Code
Pickens
Dawson
Hall
Bartow
Cherokee
Forsyth
Barrow
Gwinnett
Paulding
Cobb
Haralson
DeKalb
Walton
Douglas
Fulton
Carroll
Clayton
Rockdale
Newton
Henry
Fayette
Coweta
Heard
Jasper
Butts
Spalding
Pike
Lamar
Meriwether

WHO (cont'd)


Attendees by City
Pickens
Dawson
Hall
Waleska
Bartow
Cherokee
Forsyth
Canton
Cartersville
Milton
Sugar Hill
Alpharetta
Acworth
Roswell
Braselton
Winder
Barrow
Marietta
Duluth
Gwinnett
Bethlehem
Paulding
Cobb
Dallas
Smyrna
Tucker
Haralson
Atlanta
Walton
Villa Rica
DeKalb
Douglas
Fulton
Stonecrest
Conyers
South Fulton
Carroll
Clayton
Rockdale
Chattahoochee Hills
Stockbridge
Newton
Whitesburg
Tyrone
Henry
Newnan
Fayette
McDonough
Heard
Coweta
Jasper
Butts
Spalding
Pike
Lamar
Meriwether

TRENDS

1. IT'S NOT JUST CARS
2. FREIGHT MAY BE FIRST TO AUTOMATE
3. IN THE AUTONOMOUS FUTURE, TRANSIT REMAINS KEY
4. EQUITY CONSIDERATIONS SHOULD BE PART OF THE PLANNING PROCESS
5. USE THE TECHNOLOGY…OR RISK LETTING IT USE YOU
6. GET READY TO MOVE BEYOND THE ONE-PERSON, ONE-CAR MODEL
7. SMART TECHNOLOGY CAN HELP EVEN THE PLAYING FIELD
8. IN THIS NEW WORLD, DATA SECURITY IS PARAMOUNT

ConnectATL
Summit 2018
The Future of Mobility and Communities

SEPTEMBER 07, 2018
8:30 am - 6:00 pm
Georgia Tech Hotel & Conference Center

UPCOMING TOPICS

- Keynote by Ashley Hand, Co-founder of CityFi
  - Smart City Visioning, Transportation Happiness Index, AV's CV's in our communities
- Cybersecurity
- Curb space management
- Building today while designing for tomorrow
- The shared economy
- Public Engagement in the digital age
- 2 workshops

For Updates, visit: connectATL.org

it last September was a resounding success thanks to the rich dialogue created by

partners have been hard at work planning for and implementing solutions to prepare future of our communities.

ork for how community leaders, civic leaders, and business leaders can work er connected, and more prosperous Atlanta region. This event will serve as a signal a leader in planning for the future of mobility and smart cities and regions.

8:25 a.m.
istration Open

8:55 a.m.
come Address
senters: Doug Hooker & Mike Alexander

9:40 a.m.
note

0-10:10 a.m.
working break + Exhibit Visit

5-11:20 a.m.
onary Panel

0-12:55 p.m.
ch

2:30 p.m.
akouts Round 1

2:55 p.m.
working Coffee Break & Exhibition Visit

4:30 p.m.
akouts Rounds 2 + Workshop Option

5:30 p.m.
p-up and Cocktail Hour

ConnectATL 2018 Sponsorship Packet

VIEW

From our News Center

The Future of Mobility has Arrived: Riding in a Self-Driving Car
ARC NewsCenter

Eight Takeaways from ConnectATL, ARC's Summit on the Future of Mobility
ARC NewsCenter

ARC's ConnectATL Summit to Help Region Prepare for Future of Mobility
ARC NewsCenter

REGIONAL TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS (TSMO) AND REGIONAL ITS ARCHITECTURE UPDATE

Maria Roell

ITS Georgia
Intelligent Transportation Society

TSMO/ITS FEDERAL REQUIREMENTS FOR MPOs

- Identification of *operational and management strategies* to improve the performance of existing transportation facilities to *relieve vehicular congestion* and *maximize the safety and mobility* of people and goods;

- The development, update, and ongoing maintenance of the *Atlanta Regional ITS Architecture*;

- Addressing congestion management through the Congestion Management Process ("CMP"), including *coordination with TSMO activities and consideration of ITS technologies* related to the architecture.

TSMO/ITS RFP

- Goals:
  - Stakeholder Committee
  - State of the Region
  - Initial Review of Data Governance
  - ITS Architecture Update
  - Initial Review of Potential Pilots
  - Local Agency Guide
  - Strategic Plan
- Proposals are due Wednesday, June 6, 2018
- atlantaregional.org/procurement/

BICYCLE AND PEDESTRIAN PLANNING AND SAFETY

Byron Rushing

ITS Georgia
Intelligent Transportation Society

WALK BIKE THRIVE:
STRATEGIES FOR BUILDING A WALK & BIKE FRIENDLY REGION

@ARCbikewalk

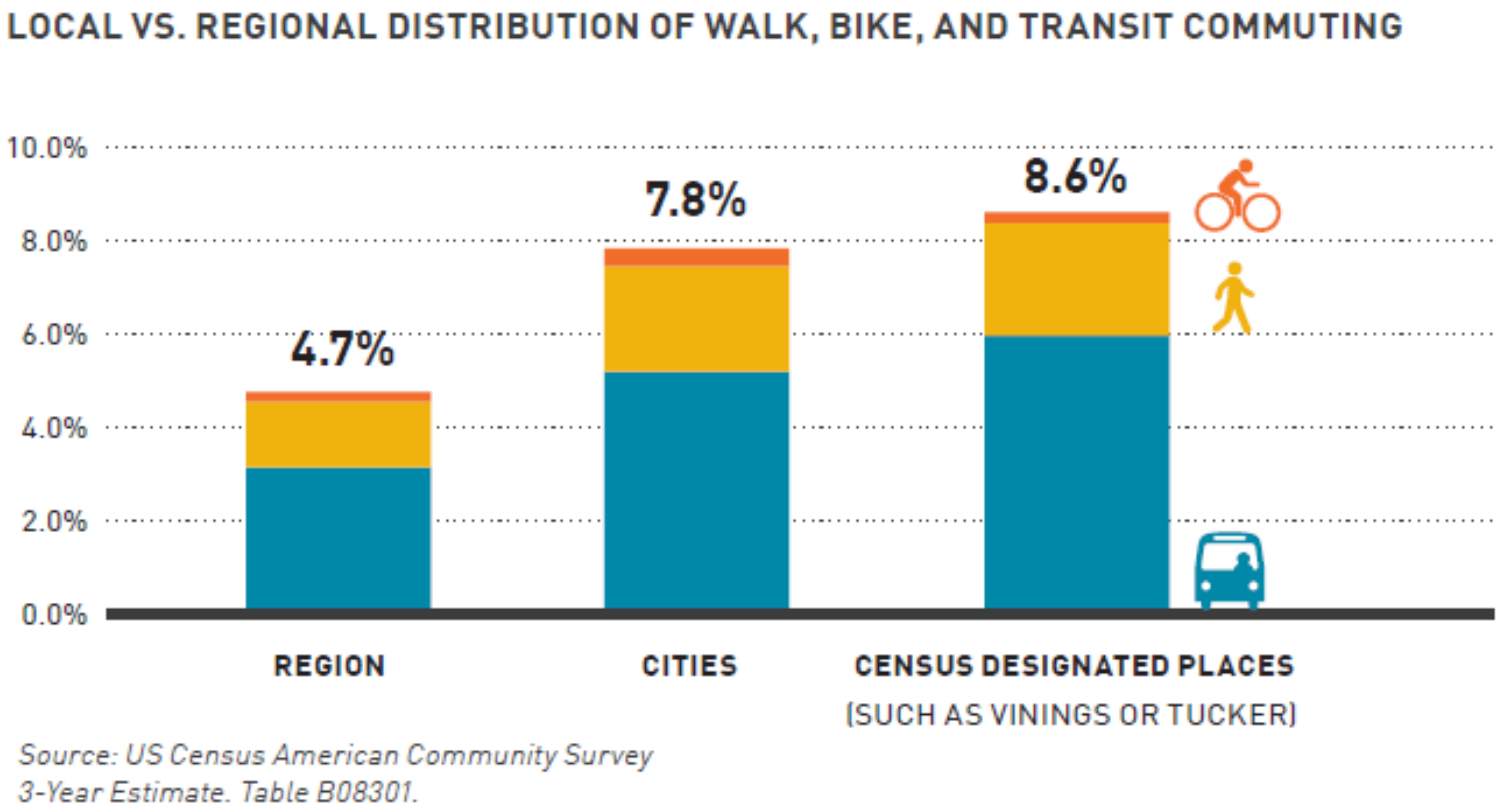
Photo:
Christopher Jarrett; @slimwonder

PEOPLE-ORIENTED PLANNING

WHY DO PEOPLE WALK, BICYCLE, or RIDE TRANSIT?

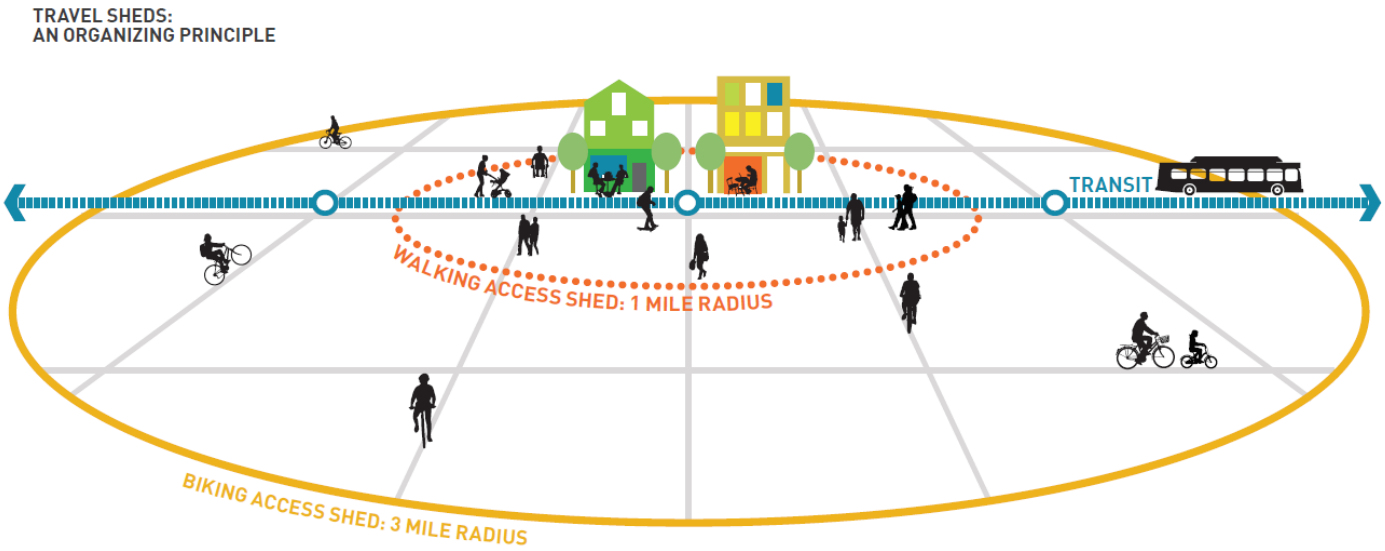
DATA-DRIVEN PLANNING

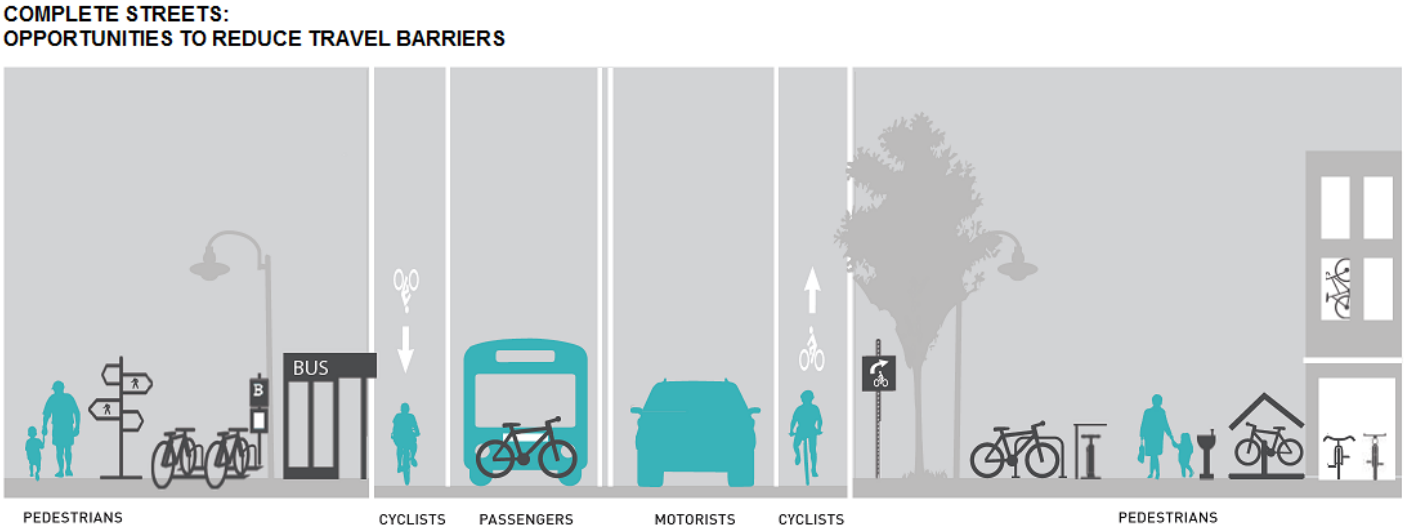
WHERE DO PEOPLE WALK, BIKE, or RIDE TRANSIT?



STRATEGY-BASED PLANNING

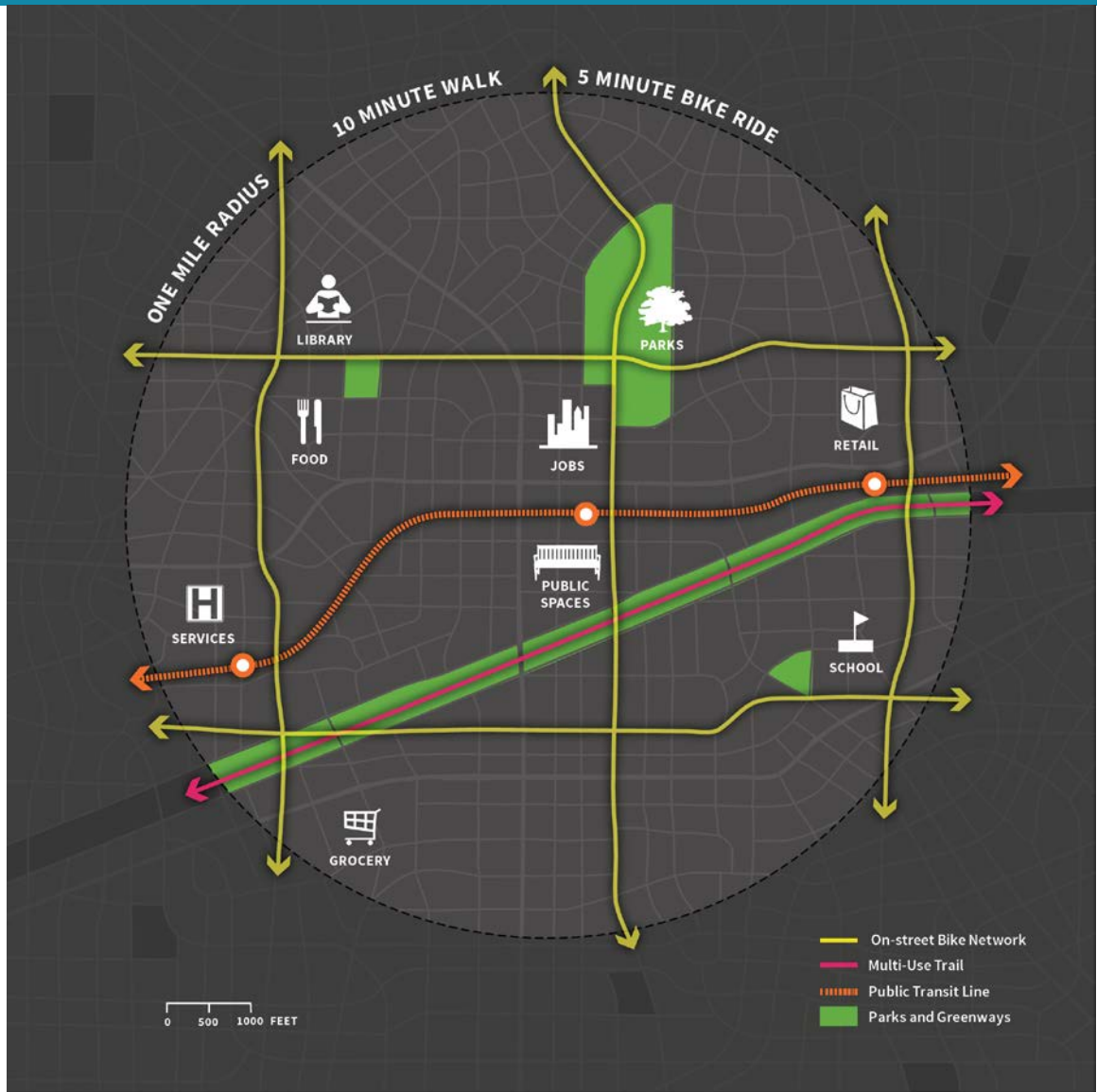
BUILDING BLOCKS OF ACTIVE COMMUNITIES





1) INVEST IN COMMUNITIES
"20-MINUTE NEIGHBORHOODS"

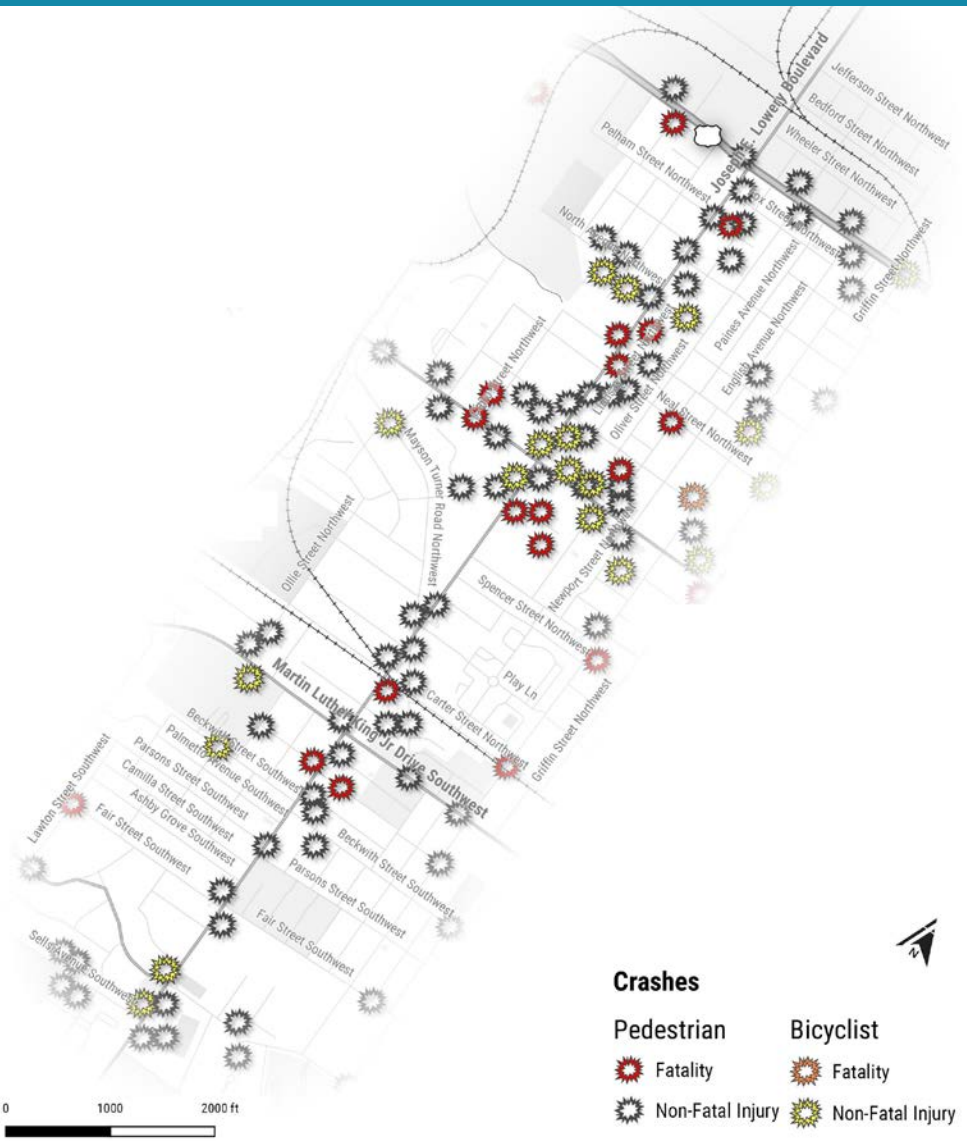
- **Fine-grained** mix of uses including parks, schools, commercial areas, and a variety of housing
- **Connected** street grid with 300-600 foot block lengths
- Bicycle **network** featuring bikeways ¼ - ½ miles
- **Convenient** connections to trails and transit



2) FOCUS ON SAFETY & EQUITY

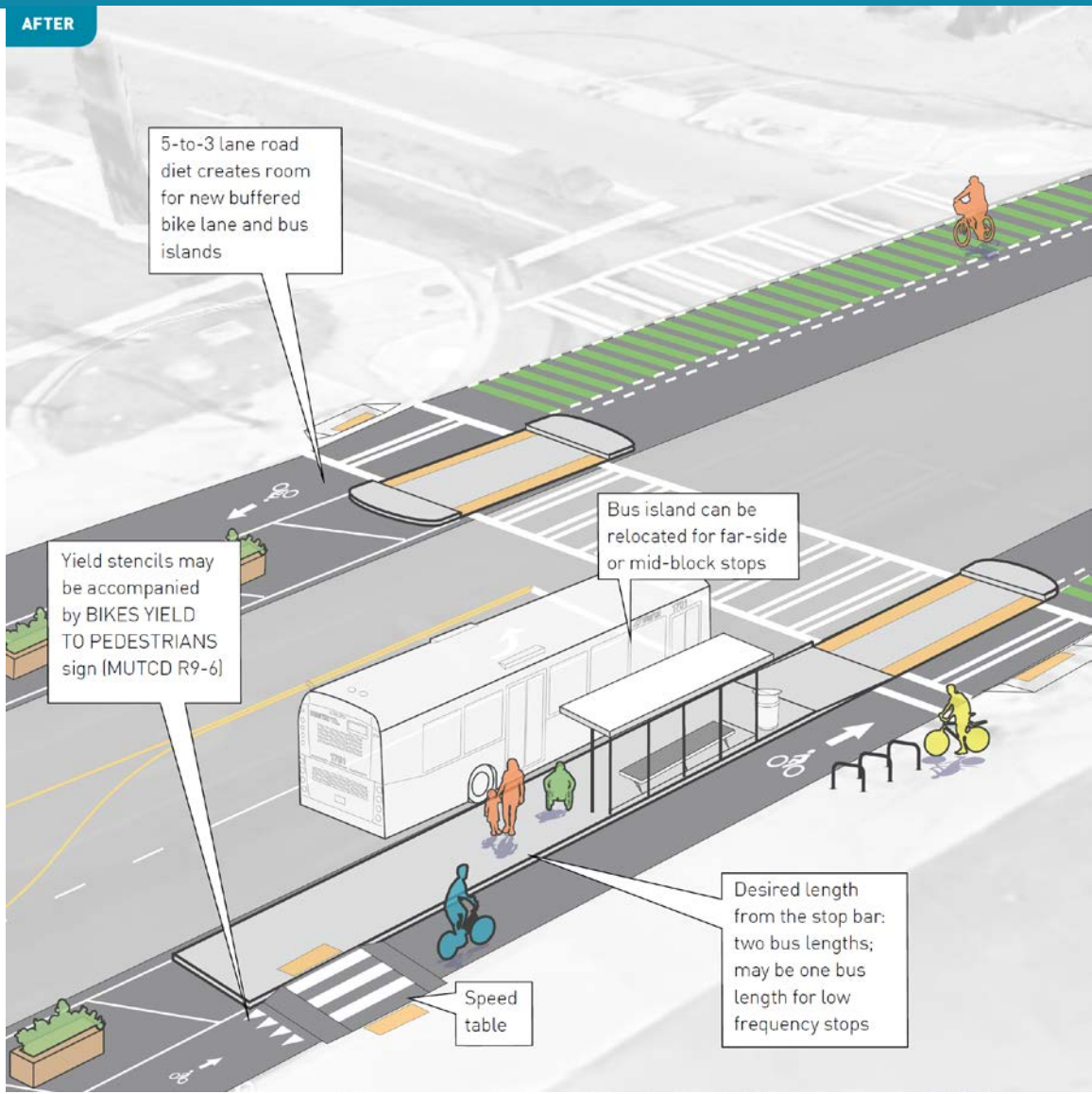
ELIMINATE TRAFFIC DEATHS

- **Safe systems** of streets, speeds, vehicles, and people
- Use **systemic approaches** to connect risks to cost-effective designs
- Data-driven solutions and evidence-based **countermeasures:**



3) SUPPORT REGIONAL TRANSIT
EXPAND FIRST-LAST MILE ACCESS

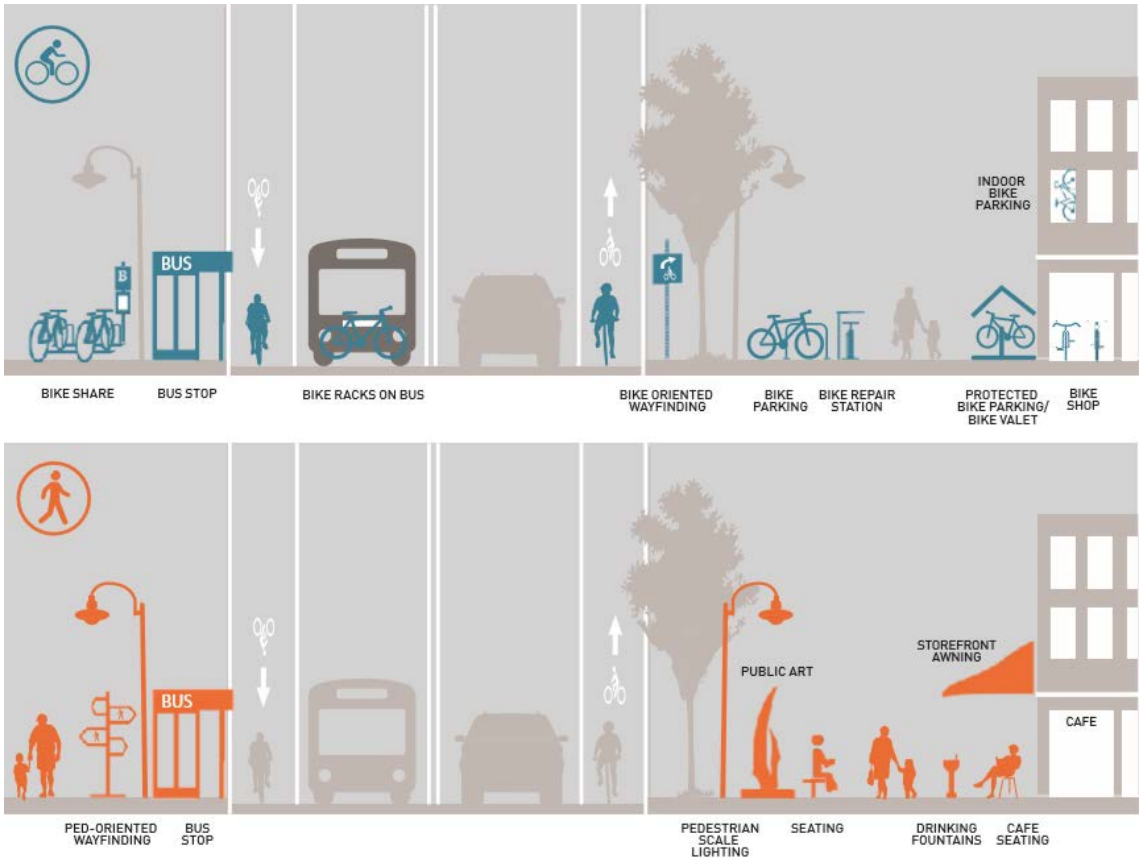
- **Improve roadways** around transit stops and stations
- **Improve access** to transit system at stops and stations
- **Mitigate conflicts** between transit and bikeways
- **Improve bike parking** at transit stops and stations



4) BUILD COMPLETE STREETS

DESIGN INFRASTRUCTURE FOR PEOPLE

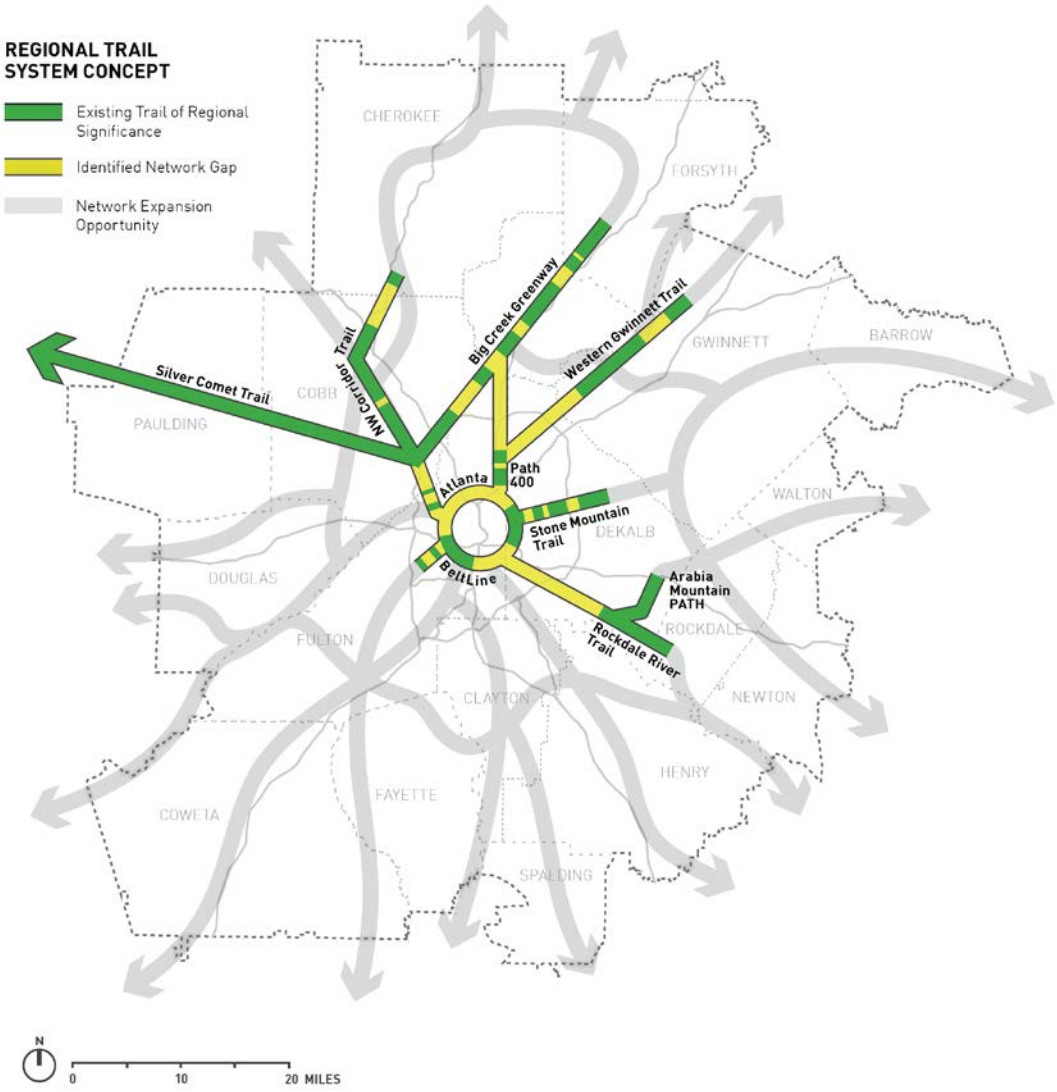
- **Increases connectivity** of the bikeway network
- **Provides convenient access** to destinations
- **Minimizes potential for bodily harm**: adequate operating space, visibility at intersections
- **Intuitive, context-appropriate design** promotes comfort and predictability for all roadway users



5) CONNECT A REGIONAL TRAIL NETWORK

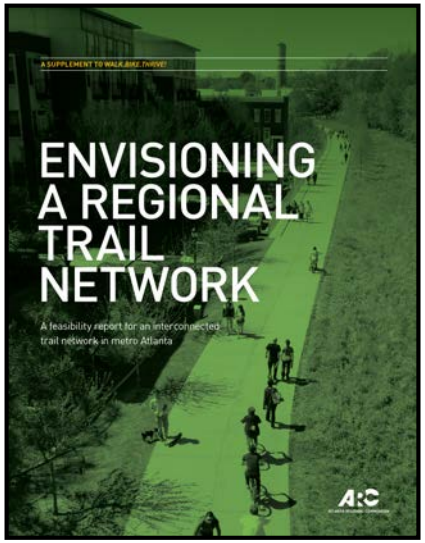
ACTIVE TRANSPORTATION "SUPER HIGHWAYS"

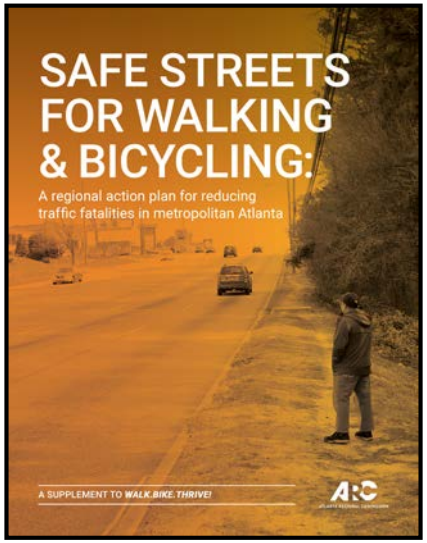
- Make walking and bicycling **safe, comfortable, and convenient**
- Follow **optimum desire lines** as closely as possible
- **Connect** and cross through municipalities
- Have uniform **high-quality** design throughout the route



ESTABLISHING A REGIONAL VISION

Walk. Bike. Thrive! and supplements





Byron Rushing

Bicycle & Pedestrian Program Manager

Atlanta Regional Commission

www.atlantaregional.org/bikeped

Questions/Follow-Up

- Regional Transit: Shayna Pollock – spollock@atlantaregional.org
- Freight and Truck Parking: Daniel Studdard, dstuddard@atlantaregional.org
- Bicycle and Pedestrian Planning: Byron Rushing, brushing@atlantaregional.org
- ConnectATL & Technology: Leslie Langley, llangley@atlantaregional.org (until Jun. 8, 2018); Melissa Roberts, mroberts@atlantaregional.org (beginning Jun. 11, 2018)
- Regional ITS Architecture Update & TSMO Action Plan: Maria Roell, mroell@atlantaregional.org