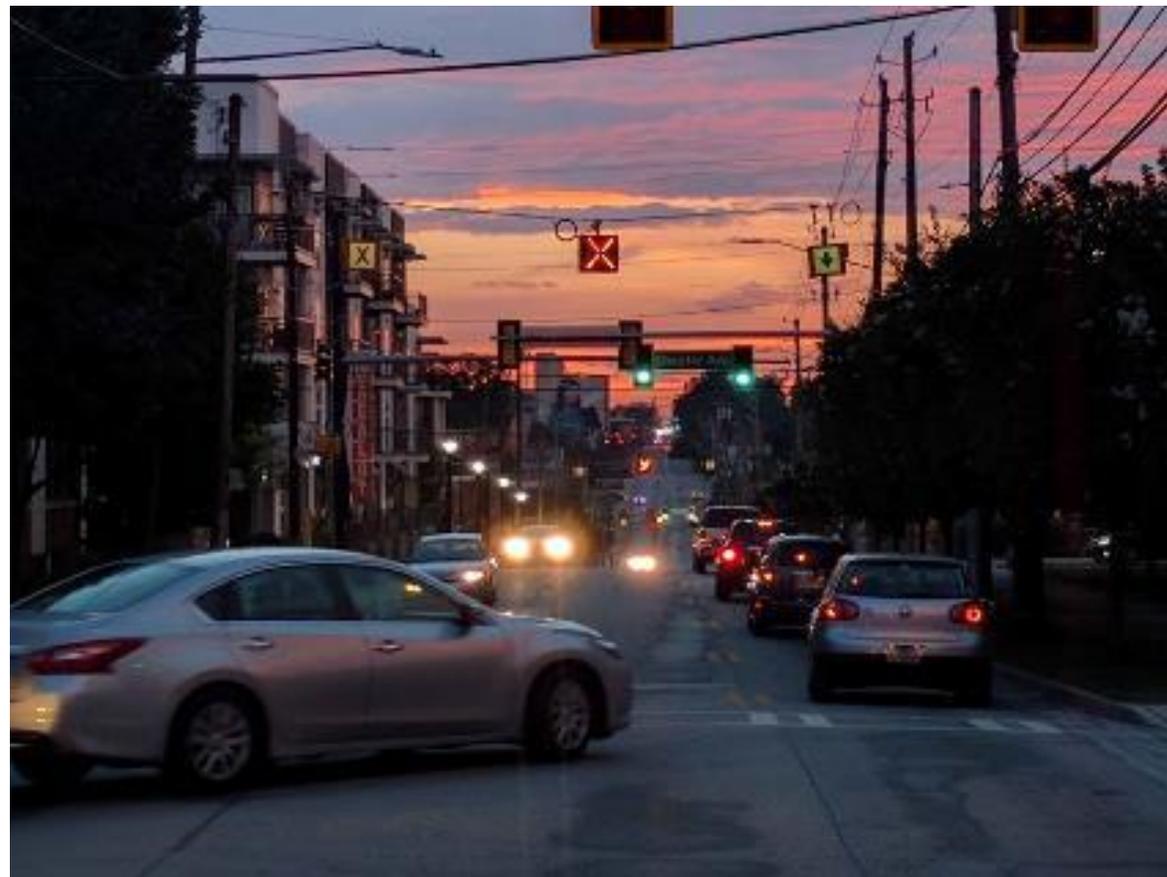




# ARC CV Project Update

December 11, 2020



# GDOT Connected Vehicles

## A Brief Timeline

### 2017: AASHTO SPaT Challenge

- 54 Intersection Pilot
- Systems Engineering
- First deployment live June 2018
- Traffic signal based application demonstration

### 2018: Regional Operations Expansion

- Not just a pilot: a programmatic deployment to equip infrastructure across the region
- Target of 1,600 intersection in the metro Atlanta region
- Expanded application implementation to first responder and transit vehicle priority/preemption

### 2019: USDOT ATCMTD

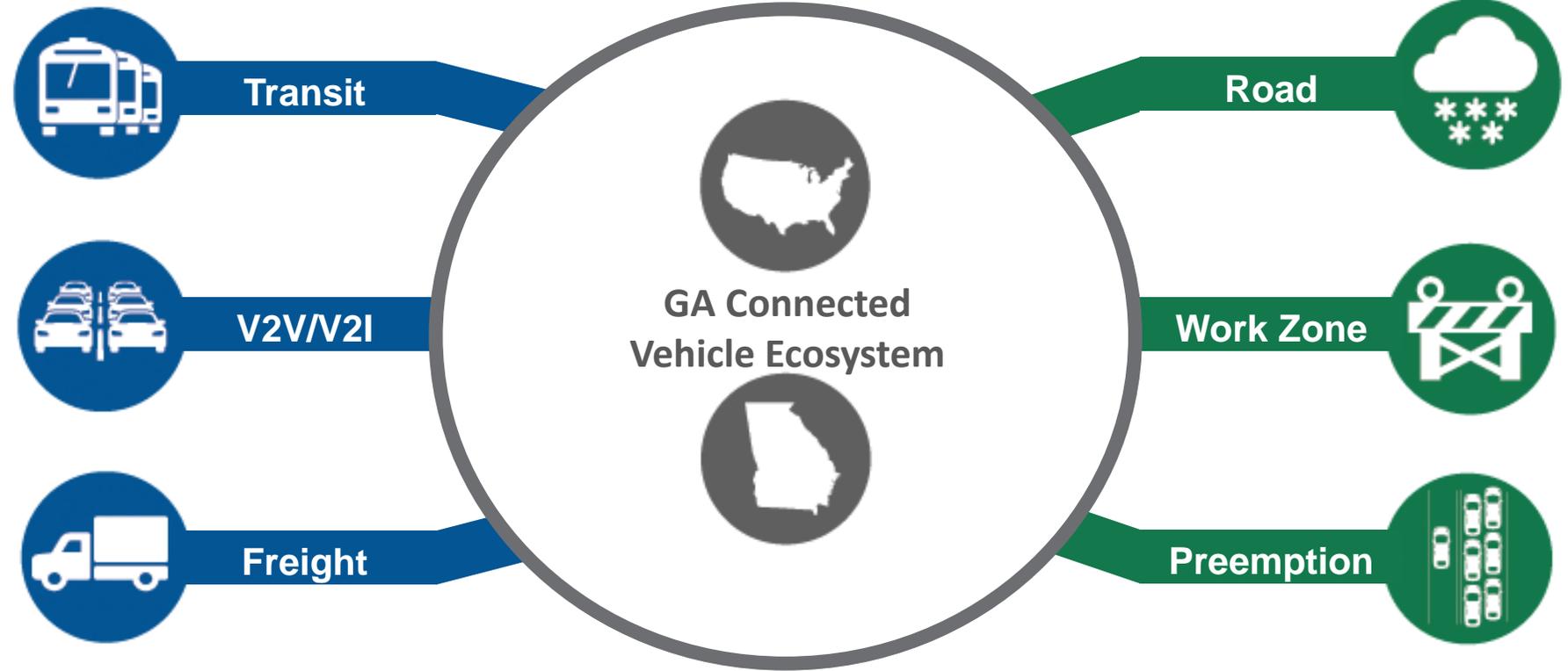
- Added funding to expand regional deployment
- Federal partnership for continued infrastructure build-out

### 2020: Atlanta Regional Commission (ARC) Partnership

- Local participation for additional infrastructure deployment
- Additional 1,000+ intersections across the metro Atlanta region
- Public sector fleet vehicle application focus

# Georgia Connected Vehicle Ecosystem

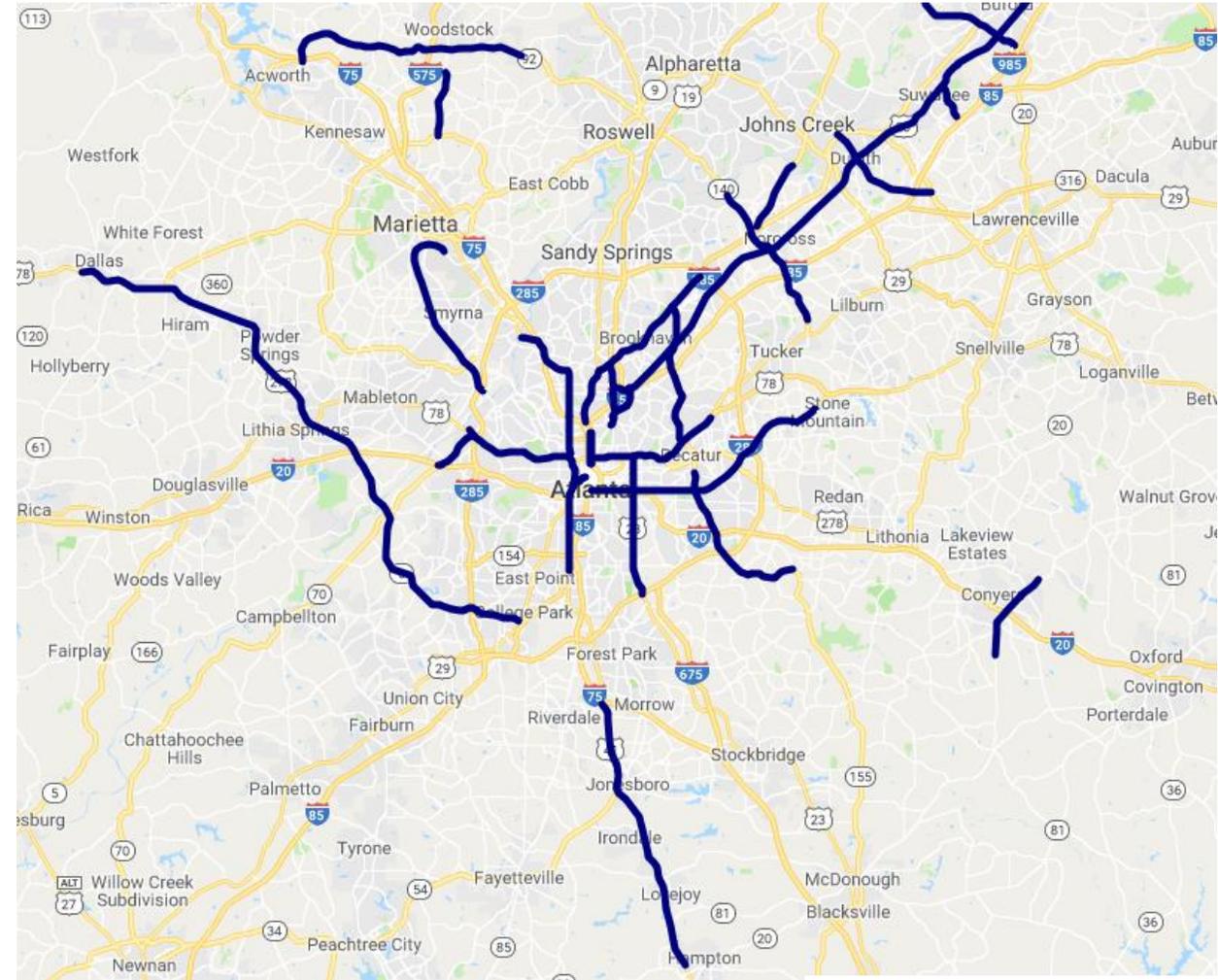
- Enabling infrastructure for broad applications
- Designed around interoperability
- GDOT funded and supported
- Conformity to national standards
- Open access through 5.9 GHz Safety Spectrum



# GDOT Connected Vehicles

## Current Deployments

- **As of 12/10/2020:**
  - 565 RSUs licensed and installed
    - DSRC - all channels and ch.180 only
    - DSRC + C-V2X – 6 locations (The Ray Highway)
  - 454 DSRC RSUs being installed and licensed now
  - Future deployments will be DSRC + C-V2X
- **Active Pilot Applications:**
  - Emergency Vehicle Preemption Pilot: Gwinnett County
  - Transit Signal Priority Pilot: Midtown Atlanta with State Rail and Tollway Authority (SRTA) and Cisco/MARTA
  - In-progress: freight-centered pilots with Georgia Ports Authority in Savannah, GA
  - Incident Responder interchange preemption: Metro Atlanta



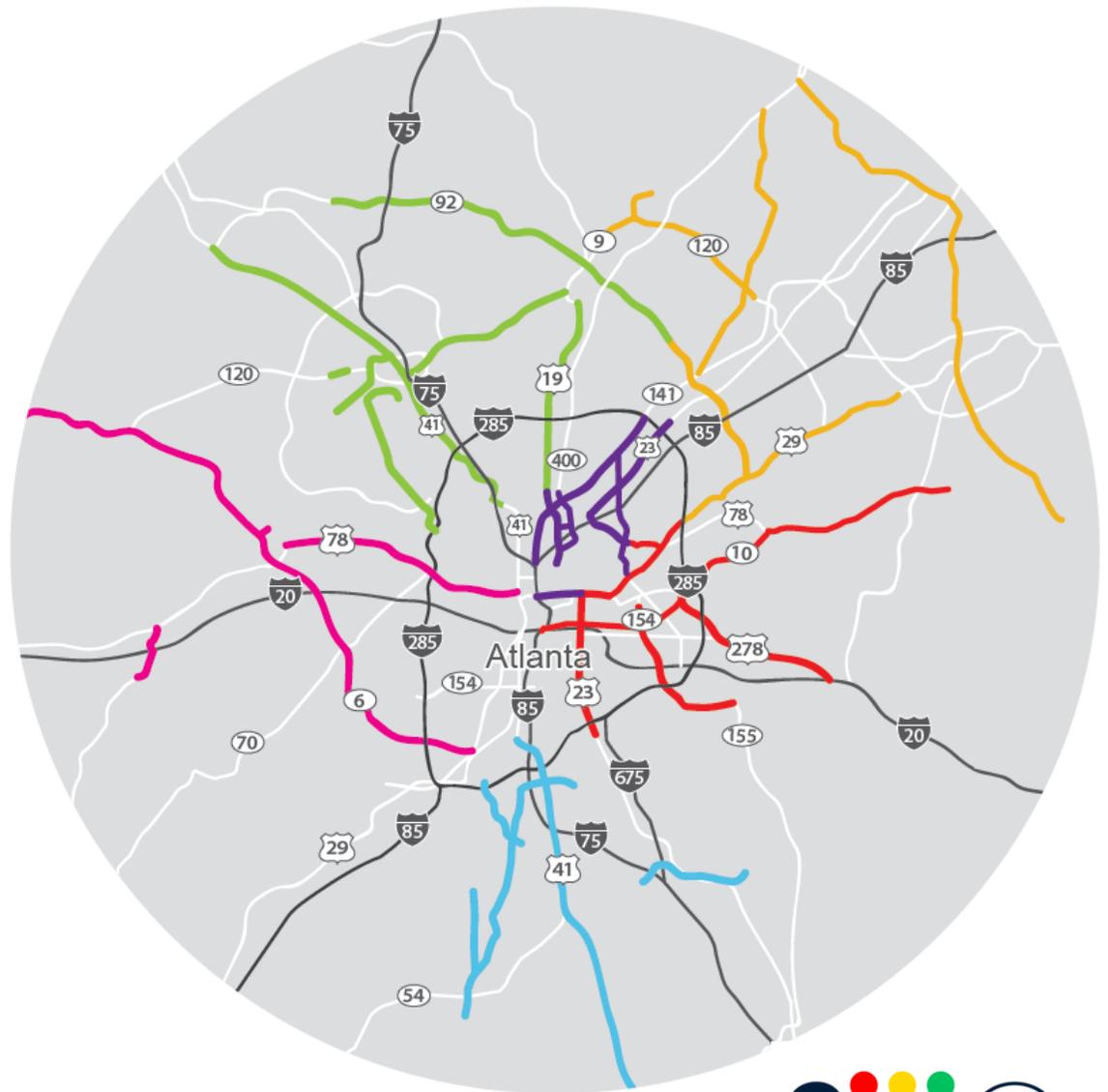
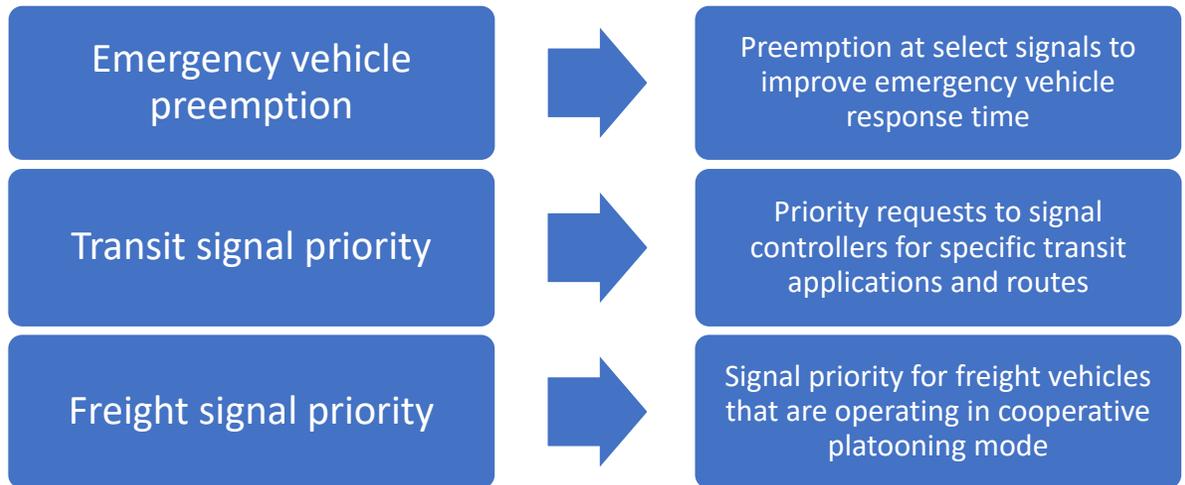
# GDOT Connected Vehicles

RTOP – March 2021

## GDOT Investment + USDOT ATCMTD Grant

- 1,600 traffic signals in metro Atlanta
- **Regional deployment - Not a pilot program: a deliberate inter-agency deployment across the entire metro Atlanta region**

### MOBILITY APPLICATIONS

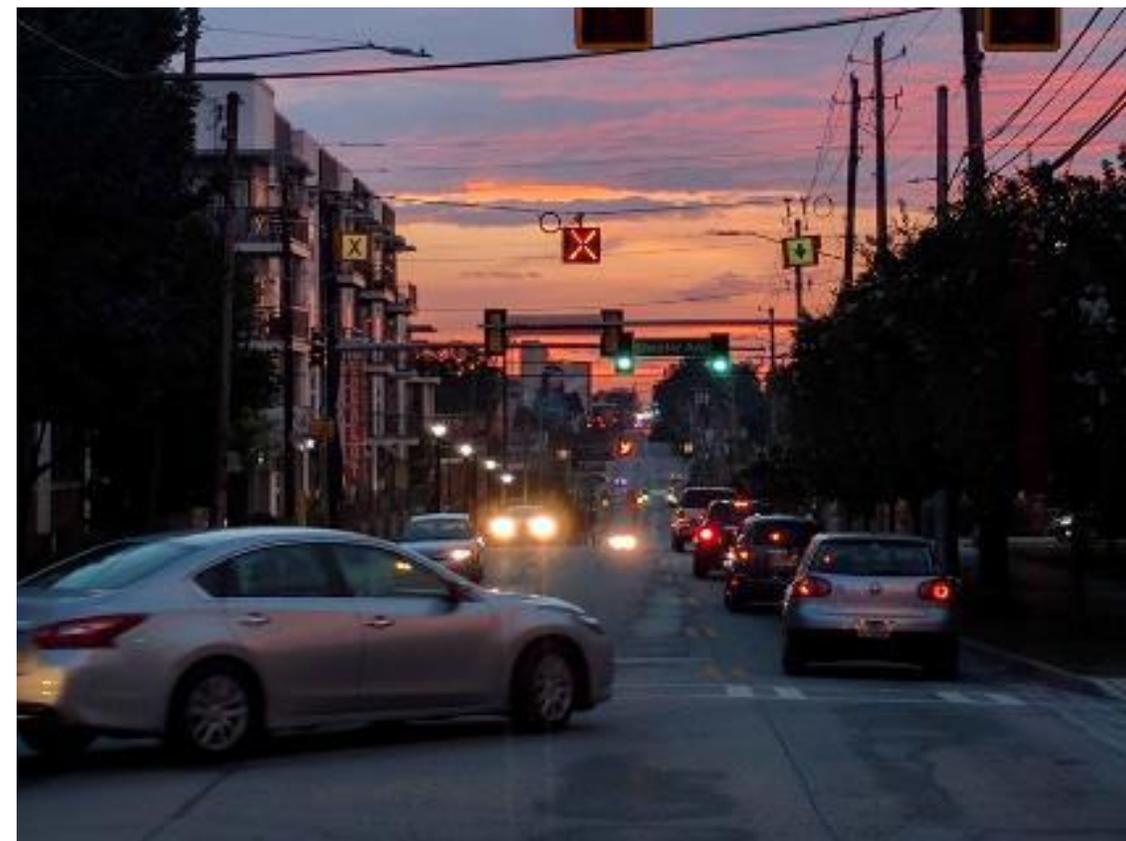




# Regional Connected Vehicles

## Project Team, Status, and Current Partners

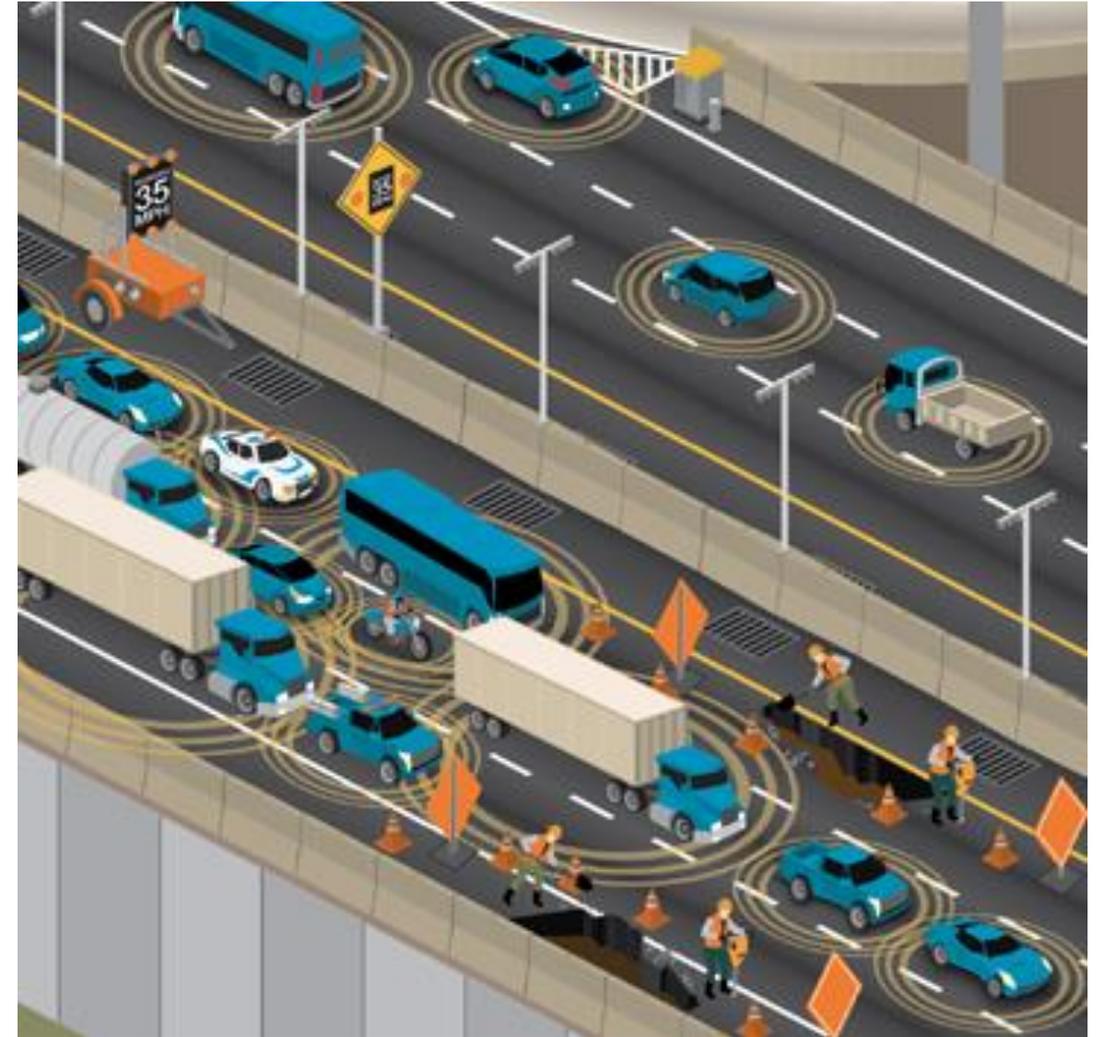
- Atkins team introduction
- Current Partners
  - Johns Creek
  - Cobb County
  - South Fulton
  - Hapeville



# Regional Connected Vehicles

## Project Overview

- Project Kick-off
- Device Procurement
- Field Surveys
- FCC Licensing
- Device Configuration
- MAP Message Creation
- Device Deployment
- Validation and Testing



Source: <https://www.its.dot.gov/infographs/index.htm> (edited)

# Regional Connected Vehicles

## Sample Schedule – 100 Intersection Agency

- 10 Month deployment: NTP to Final Acceptance

<b>Turn Key Deployment in Local Jurisdictions</b>		<b>11-Jan-21</b>	<b>17-Dec-21</b>
A1030	Device Procurement	11-Jan-21	28-May-21
A1040	FCC Licensing	11-Jan-21	10-Aug-21
A1050	Device Testing & Configuration	01-Jun-21	17-Nov-21
A1060	Map Message Creation	11-Jan-21	14-May-21
A1070	Device Deployment	22-Jun-21	03-Nov-21
A1080	Validation & Testing	04-Nov-21	17-Dec-21

