Community: Gwinnett County
Project Title: Connected Vehicle Technology Master Plan
Partners: Georgia DOT, Cities of Berkeley Lake, Duluth, Norcross, and Suwanee

Gwinnett County by the Numbers:
- 437 sq. miles
- 900,000+ Population
- 2,600+ County road miles
- 736 Traffic Signals
- 32 Fire Stations
- 821 Transit Stops
- 12 Transit Routes
- 32 min avg. commute

“The (GA Smart) research into connected vehicle applications and input from stakeholders has helped Gwinnett County staff refine and focus our efforts to better serve our citizens and road users.”

- Tom Sever, Deputy Director, Traffic Engineering, Operations and Maintenance, Gwinnett County

Project Description:
This study will bridge the gap between the Gwinnett Co. Integrated Technology System (ITS) Master Plan Update and the Peachtree Industrial Boulevard (PIB) Smart Corridor project scheduled to begin in 2019. The project is evaluating seamlessness and compatibility between various ITS technologies and systems, assessing costs and benefits, and performing public outreach. The PIB Smart Corridor project is envisioned to be the backbone of a smart technology roadway network which is envisioned to ultimately cover the entire Atlanta region. The pilot project will cover 50 intersections over a 20-mile stretch of roadway through areas which experience some of the highest traffic counts in the region.

Implementation Focus Areas:
- Emergency vehicle travel time reduction through signal preemption
- Public transit and freight travel time optimization through signal priority
- Mobile accessible pedestrian signaling system

Georgia Tech Research Collaboration:
Georgia Tech research partners in the school of Civil and Environmental Engineering are working with Gwinnett County to outfit 20 Fire and EMS vehicles with a Georgia Tech designed sensor package that will provide data to be used in optimizing signal phasing for improved travel times for emergency vehicles throughout the county.

A Model for Georgia:
Gwinnett County is working with GDOT and the City of Atlanta to implement compatible systems throughout the entire region. Georgia has the most Dedicated Short Range Communication (DSRC) Vehicle to Infrastructure (V2I) roadside units installed or planned in the USA. The project has broad stakeholder and community involvement including City Mayors, City Managers, Fire, Police, EMS, Dept. of Transportation, and Public Transit.