Regional Connected Vehicle Program Update (CV1K)

Source: USDOT

December 11, 2020
TCC

Concept

- Implement connected vehicle technologies operating in the 5.9 GHz safety spectrum at traffic signal intersections
  - DSRC (Dedicated Short Range Communications)
  - C-V2X (Cellular Vehicle-to-Everything)
- Pursue applications that improve safety and mobility, such as emergency vehicle preemption and transit signal priority
- Multi-year regional implementation, with initial phase beginning in FY 2020

Advances in Technology - Including 5G Networks - and Upcoming Vehicle Manufacturer Decisions Provide Opportunities to Improve Travel and Safety

Slide from Jovan Zagajac Presentation (Ford Motor Company) – June 2019

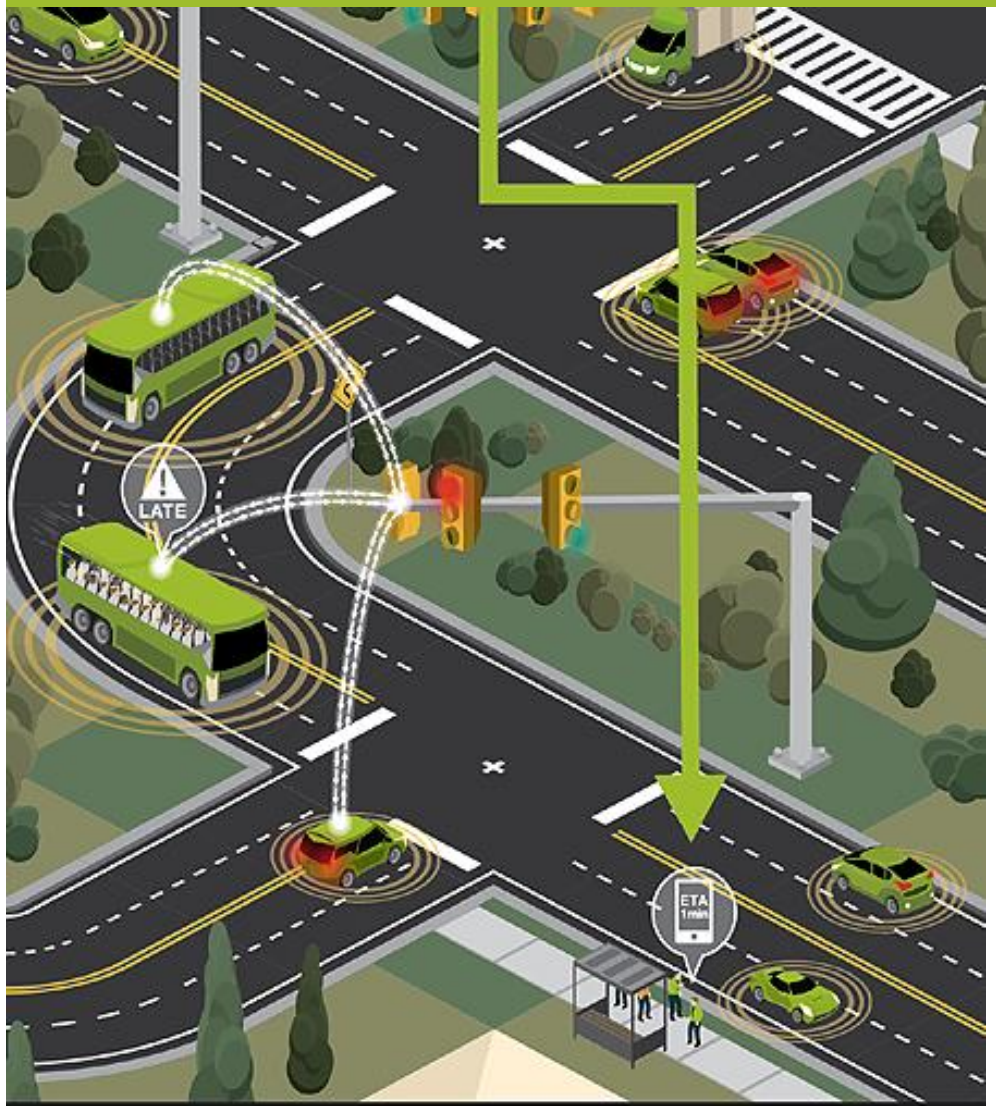
Emergency Vehicle Preemption

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

Gives signal preemption to emergency vehicles, allowing vehicles to respond more quickly and safely.

Equipping emergency responder vehicles and signals in the Atlanta region with the necessary radios and sensors will provide the capacity to save lives.

Transit Signal Priority



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

Gives signal priority to transit vehicles approaching a signalized intersection, taking into consideration the vehicle's location and schedule.

Due to congestion, many transit routes in the Atlanta region struggle to maintain on-time performance.

Equipping transit vehicles and signals with the necessary radios and sensors will provide the capacity to improve on-time performance, with the goal to increase transit use and improve regional air quality.

Pedestrian in Signalized Crosswalk

Warns drivers when a pedestrian is crossing the street as the vehicle is making a right or left turn.

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

Get Involved

- Any interested jurisdiction can participate
- 1,000 intersection goal
- TSMO Subcommittee
  - track and monitor local and regional impact of the deployment
  - provide guidance on future funding and desired outcomes of the technology