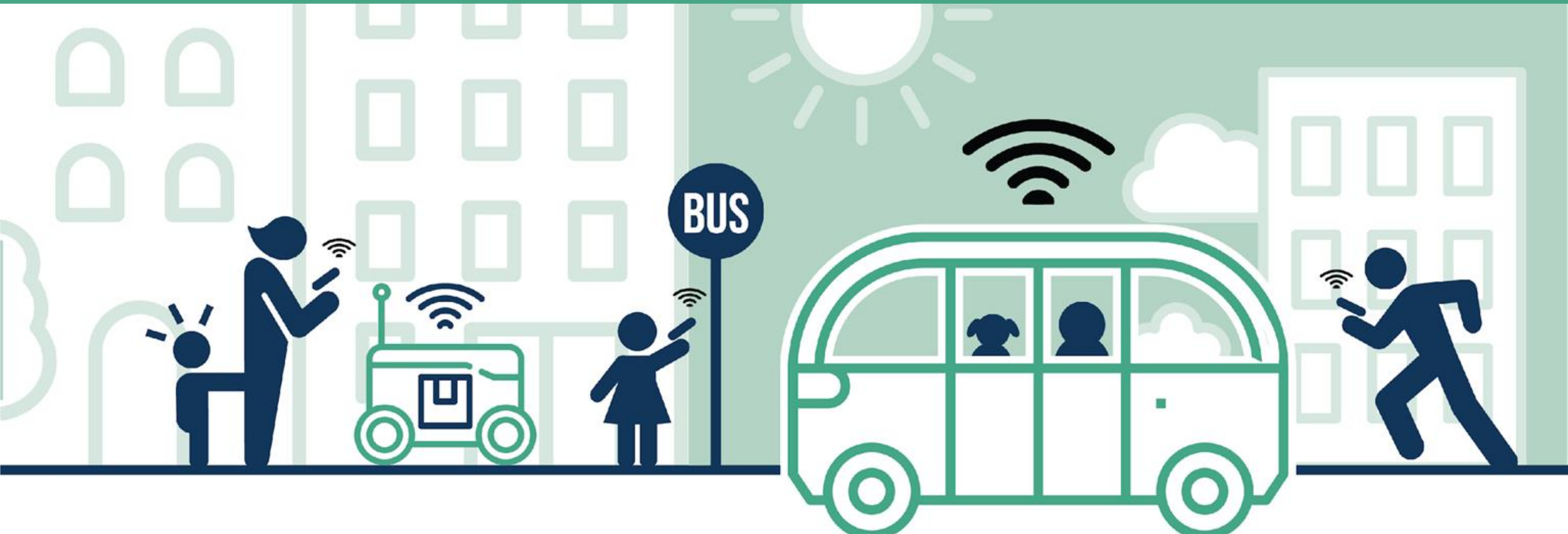




**BALTIMORE
METROPOLITAN
COUNCIL**

Connected and Automated Vehicle (CAV) Integration for Local Governments



MDOT: Connected & Automated Vehicle Toolkit

Baseline Investment

- Get familiar with terms and resources
- Clearly establish agency roles and responsibilities
- Join the national dialogue

Medium Investment

- Understand community vision and needs
- Assess land use and zoning
- Review workforce readiness
- Attract CAV deployment

High Investment

- Assess physical or digital infrastructure needs

Project Need

Provide guidance specific to Baltimore region on planning for Connected and Automated Vehicles (CAVs)



Impacts of CAVs



Best practices in CAV
planning



Actionable
recommendations for local
agencies to prepare

Project Overview



CAV Steering Committee



CAV Lit Review

Introduction

What are Automated Driving Systems?

How are Automated Driving Systems being used?

Why do we need to plan for CAVs?

Best Practices for Planning CAV Impacts

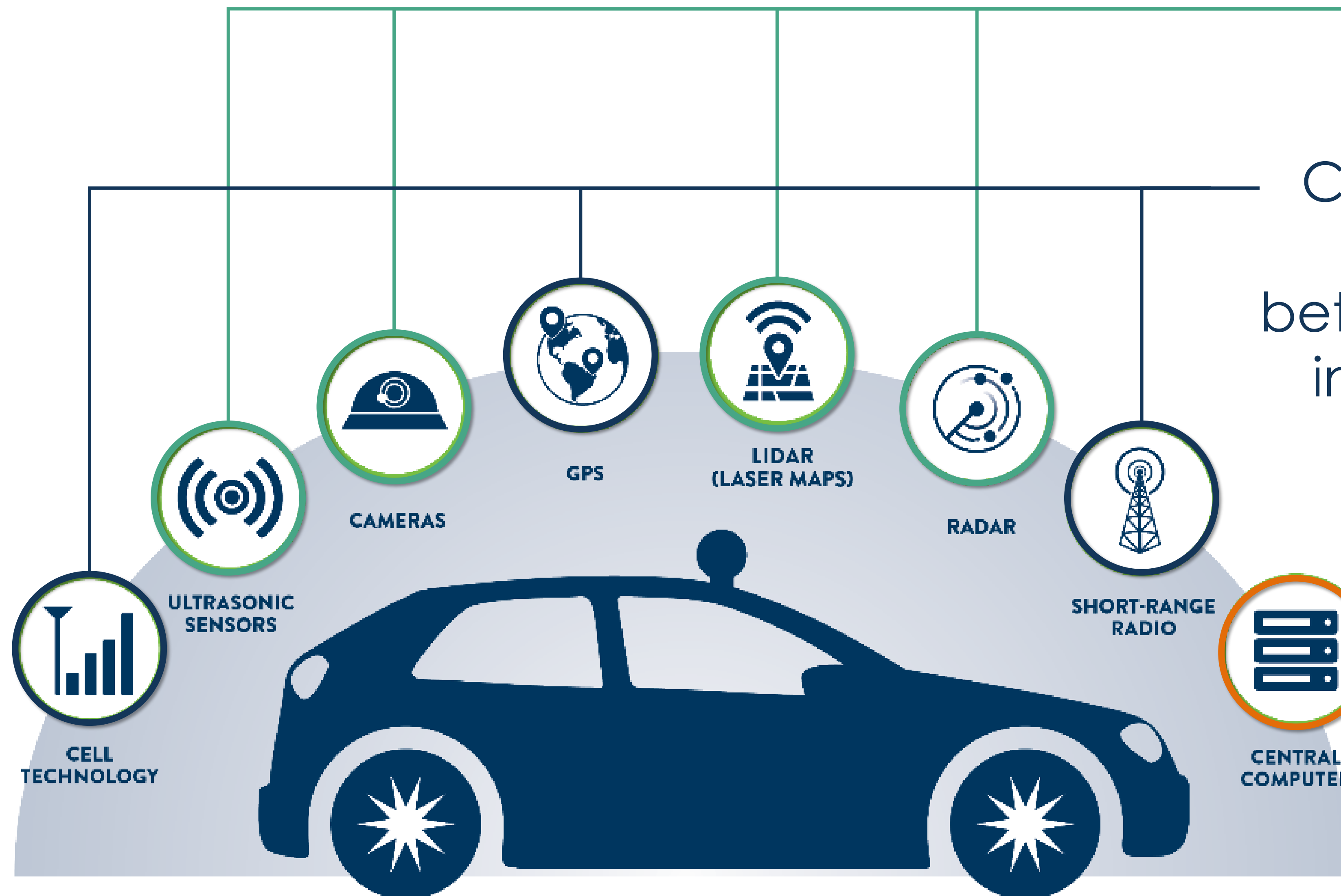
Top Take-Aways from Literature Review

What are CAVs?

Sensors support automation

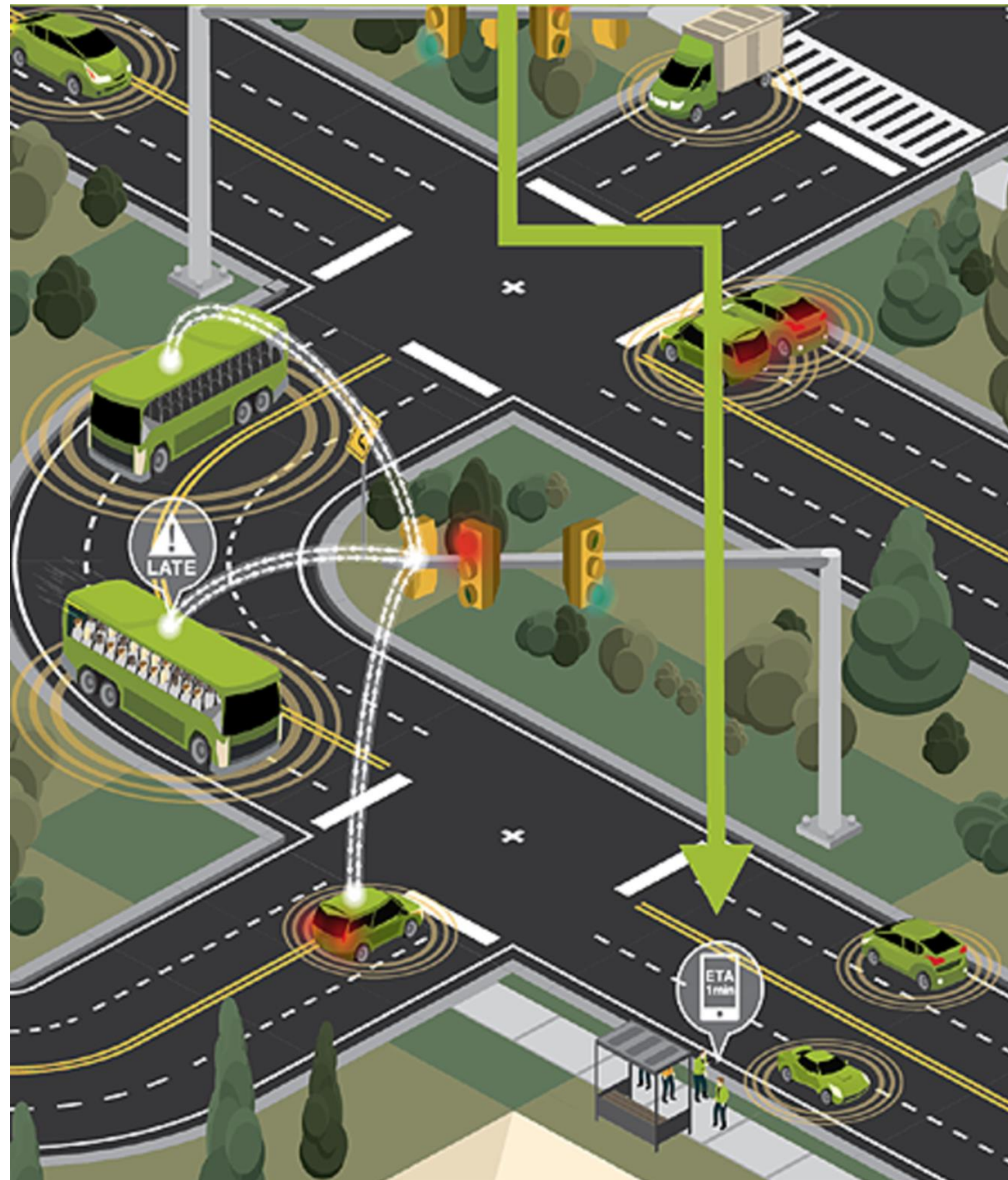
Connectivity lets CAVs share information between other vehicles, infrastructure, network

Automated Driving System (ADS) is the “brain” driving a CAV



Connected Infrastructure

Transit Signal Priority (TSP)



Connected Vehicle Pilot



**US 1 Innovative
Technology Deployment
Corridor**

Passenger Shuttles



National Harbor

Automated Ridehail & Trucking



Small Package Delivery



**Stevenson
University**

**Morgan State
University**

Why do we need to plan for CAVs?

Local policies can incentivize impacts or guide development to meet local goals.

Safety

Mobility

Accessibility

Congestion

Environmental

Land-Use

Equity

Labor and Workforce

Data and Privacy

Equitable & Accessible Deployment

Local agencies could consider:



Vehicle & Ride Affordability

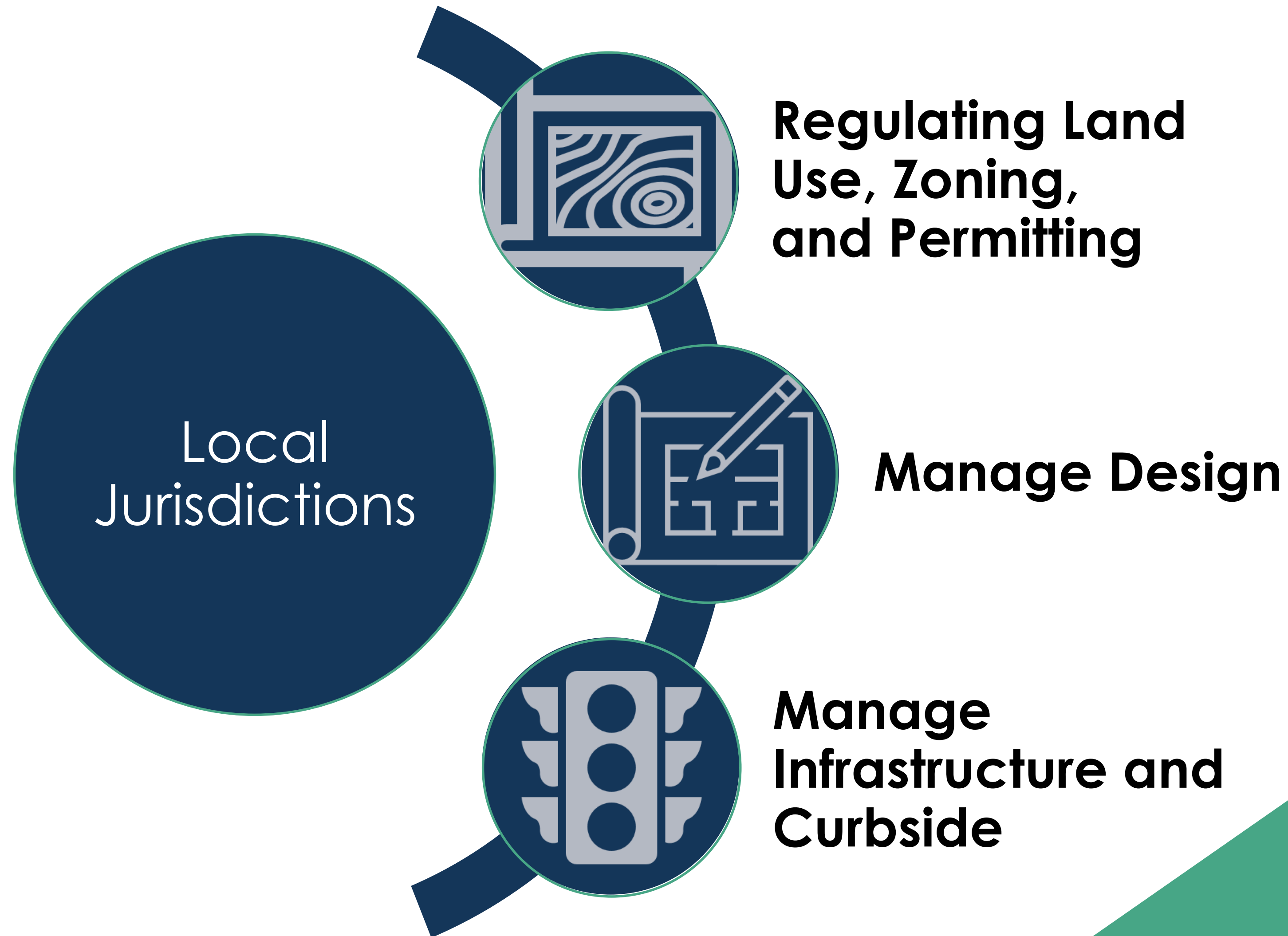


Accessibility



Deployment Location

What role do local jurisdictions play?



How are agencies planning for CAVs?



Self-Assess



**Understand
Regulatory Roles**



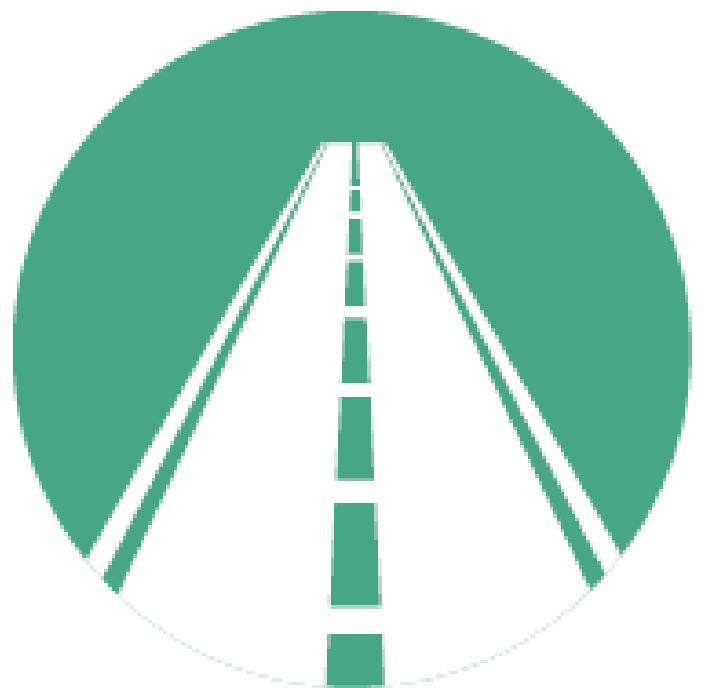
**Rethink Your
Workforce**



**Build Partnerships &
Champions**



**Plan for Multiple
Future Scenarios**



**Prepare
Infrastructure**



**Develop
Policies**

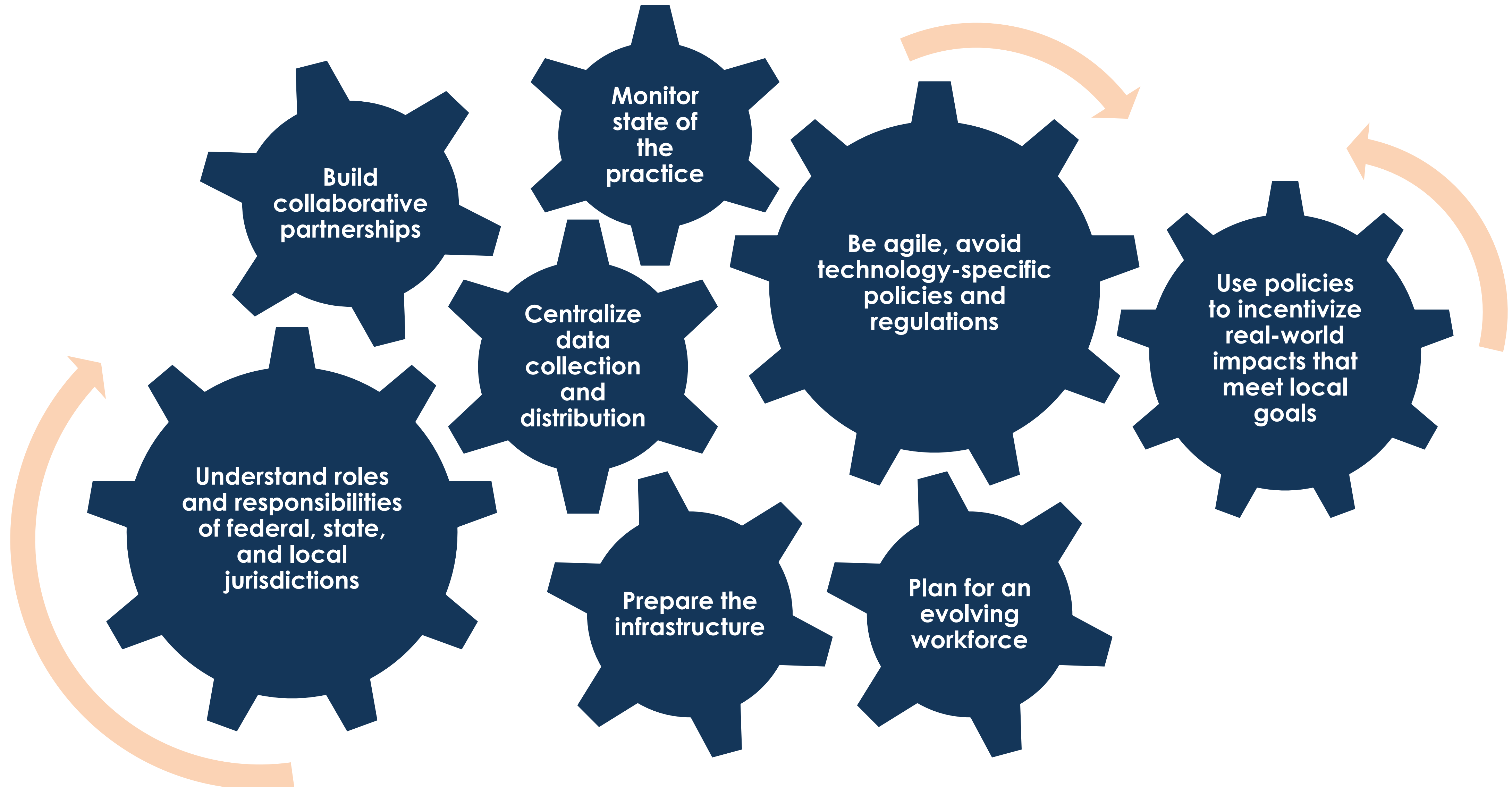


**Collect and
Share Data**



**Monitor State of the
Practice**

Top Takeaways From Lit Review



Next Steps

Literature Review developed and shared with Steering Committee (SC) for informational purposes

November

Connected & Automated Vehicle (CAV) Integration for Local Governments presentation to BMC Technical Committee

January



Finalization of customized recommendations for Baltimore Region

March

Customized CAV Recommendations for Baltimore Region and User Guide presentation for BMC Technical Committee

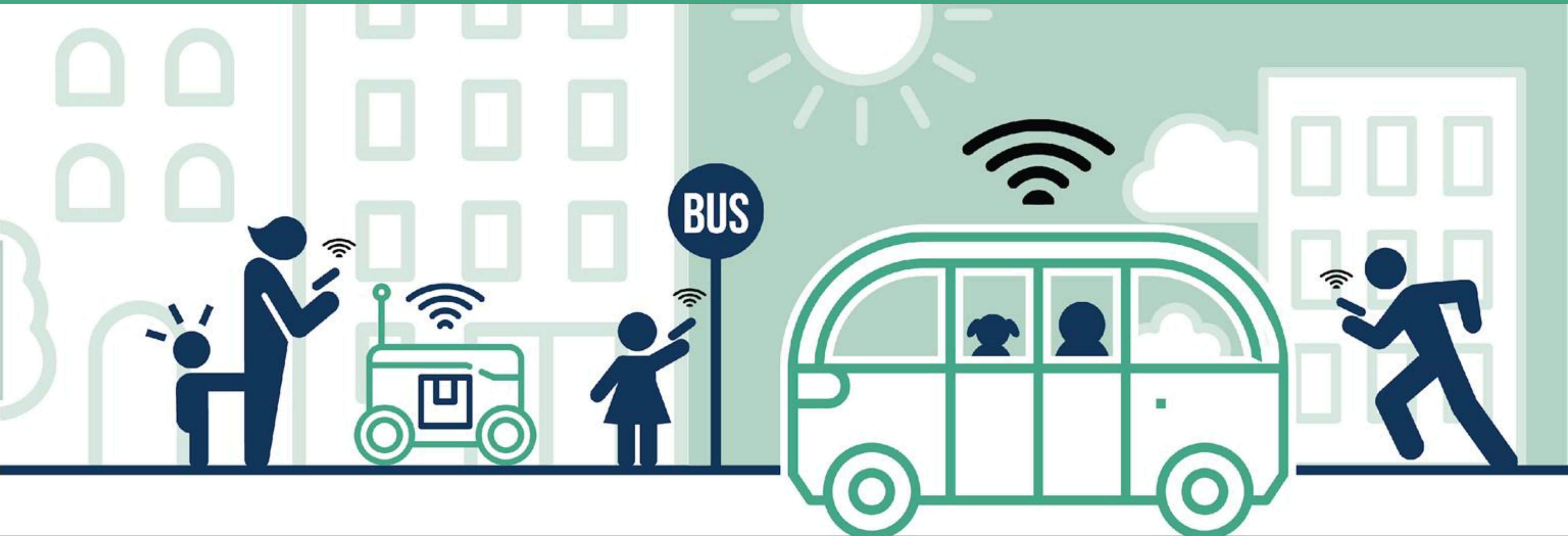
June

Executive Summary for Leadership

July



CAV Integration for Local Governments Steering Committee Kickoff



John Hicks, Kittelson & Associates, Inc.
jhicks@kittelson.com