CAV TECHNOLOGY—MORE QUESTIONS THAN ANSWERS?

A CITY’S PERSPECTIVE

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What infrastructure can be added now that will best anticipate the gradual evolution of CAV technology?
1. Conduit/fiber for interconnectivity/traffic signal control hub?
2. Adding smart technology—or the capability to add it later—to signals, streetlight poles, pavement marking, etc.
3. Prioritize projects that are compatible w/ future CAV tech

What policies can/should be put into place to position ourselves for the future?
2. Will street designs in 40 years be unrecognizable (narrower, less robust, no parking needed), especially if the freight industry moves to CAV technology?
3. How do we incorporate bike/ped safety and accessibility as CAV technology advances?
FLEET

1. How does CAV relate to electric/hybrid vehicles, charging stations, etc.?

2. How do we balance the risks of new technology (higher up-front cost, charging infrastructure, performance in a northern climate, smaller/more specialized workforce) with the opportunity (fuel efficiency, emissions, staffing, maintenance, lower insurance, information tracking)?

3. Which vehicles in our fleet provide the greatest opportunity for electric or CAV technology?
1. How can cities provide the 5G network that will be needed to support this sea change?

2. How do we ensure security and privacy as automation becomes more widespread and detailed?

3. What changes can be made gradually—as time and budgets allow—to prepare for future technology? “Early” improvements w/ ped/school zone crossings, wrong way driving, icy roads, flooded roads, height restrictions, intersection conflicts?

4. There’s risk in changing our approach now, as the path technology will take is uncertain. What if investments we make now... are never needed?

5. New technology will require—and provide—incredible amounts of data; how do we make that happen, and how do we best use the data we get?

6. Who provides and updates essential maps?
1. How do cities, especially smaller ones, attract companies that rely more and more on connectivity, smart features, etc.?
2. How does a region position itself to be a leader in this area?
3. Will current parking needs become obsolete as CAV technology takes hold?
4. How will technology changes affect land-use, zoning, site plans, employment opportunities, comprehensive plans, etc.?
5. Educate the public & potential partners.
LEGAL/LAW ENFORCEMENT

1. What information do officers need when responding to an accident involving a CAV?
2. How can mountains of CAV data be studied to determine causes of—and liability for—accidents?
3. As vehicles provide more information or guidance to its drivers, does this create a false sense of security/inattentiveness? How does this affect fault/liability?
4. Is CAV tech too invasive into personal data?
1. How can initiatives like this be funded?
2. What policies or ordinances can/should be enacted to position our communities for success?
3. Which parts of this movement should be government-led, versus private industry or partners?
4. How do we protect individual choice about transportation options if/when CAVs become clearly the cleanest, safest option?
NEXT STEPS?

1. Look for potential partnerships at local, regional levels.
2. Work with event organizers to use/showcase CAVs as shuttles.
3. Account for future CAV tech to be added to street projects, traffic signals, street lights, pavement markings, etc.
4. Look to add charging stations to our communities and the I-41 corridor
5. Commission needs/opportunities study?