CAV TECHNOLOGY—MORE QUESTIONS THAN ANSWERS?

A CITY'S PERSPECTIVE

April 26, 2019

Jordan Skiff
Director of Public Works
City of Fond du Lac
920-322-3472
jskiff@fdl.wi.gov

ENGINEERING/ TRAFFIC

- 1. 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
- 2. What policies can/should be put into place to position ourselves for the future?
- Will street designs in 40 years be unrecognizable (narrower, less robust, no parking needed), especially if the freight industry moves to CAV technology?
- 4. 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?

INFORMATION TECHNOLOGY

- 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?
- 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?
- 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?
- 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?

PLANNING/ECONOMIC DEVELOPMENT

- 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?
- 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?

ELECTED OFFICIALS

- 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?