

## TAKING IT TO THE STREETS: CREATING THE STRATEGIES TO BRING AN AV SHUTTLE TO THE REGION



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Help Create Strategies to Bring an AV Shuttle to the DMV by 2020 !

What will it take to move from demos, testing, and pilots to an on street AV shuttle/fleet service operating on the street the District-Maryland-Virginia? What are the hurdles? What will it take to harness the technological innovations of a new type of vehicle, a new method of transportation, and new service models focused on mobility? When will the technology be ready?

*Prepared by Kelley Coyner, Center for Regional Analysis, Schar School of Policy and Government, George Mason University & MobilityE3, and Lisa Nisenson, Alta Planning + Design and Greater Places for Eno's Capital Convergence session, **Taking it to the Streets: Creating the Strategies to bring an AV Shuttle to the Region** on January 26, 2017.*

## Setting the Scene

In June 2016, Local Motors a U.S.-based auto company successfully launched its self-driving electric bus, Olli at National Harbor in Maryland. In December, Local Motors piloted a driverless shuttle service on a semi-public campus in Berlin. Now, Local Motors' General Manager, David Woessner says, "Our plan is to expand our test, demo, and pilot the Olli in the District, Maryland, and Virginia ("DMV") beyond National Harbor in 2017 and 2018. "

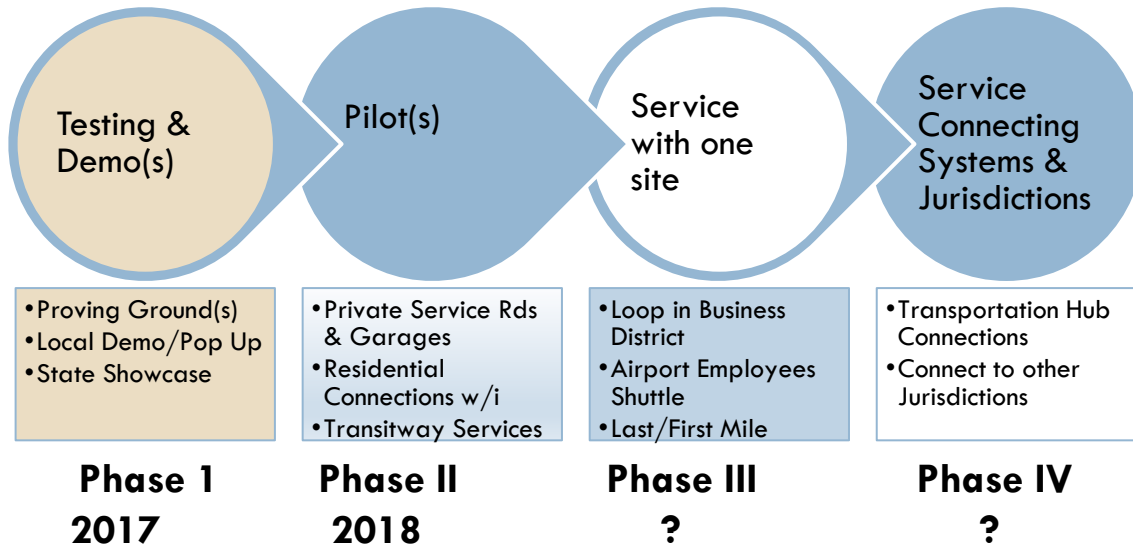
Woessner is not the only one who believes this area is great for autonomous vehicle (AV) testing. The Commonwealth of Virginia believes that Crystal City is an attractive location to pilot self-driving vehicles, as a compact dense urban community. Specifically, Crystal City offers complex urban environment with residential and employment areas as well an extensive transportation network – Metrorail, Virginia Rail Express (VRE), Reagan National Airport, Capital BikeShare, bus rapid transit and more.

The Crystal City Business Improvement District and Vornado/Charles E. Smith, Crystal City's largest commercial landowner, see AV shuttles as key to making a Crystal City a transportation tech hub that can redefine transportation-oriented development. Virginia sees Crystal City as a potential test bed for piloting various cases for AV shuttles/fleets across the Commonwealth. These use cases include circulators, mall and downtown revitalization, campuses use, and transit connections.

### **What benefits would an Olli Shuttle Service could bring?**

- Olli Shuttle Service could be the missing link to the existing network of transit including with Metrorail, Amtrak, the Virginia Rail Express, and Reagan National Airport.
- Olli Shuttle Service could give transportation network companies like Lyft a breakthrough approach to vehicle sharing.
- Olli Shuttle Service could strengthen connections to adjacent commercial, retail, and residential centers at Potomac Yards and Pentagon City and within Crystal City.

Choices that are made now will shape whether AVs improve mobility or create new kinds of congestion. Actions taken can influence whether AVs improve safety on our roads or become a menace to drivers, pedestrians, bicyclists. Alternatives selected now can harness the economic and transportation benefits of AVs or allow us to lose jobs and leave some communities behind.



## What are the issues and milestones fit in strategies in law and policy, funding and fiscal models, planning and safety need to be considered?

### Legal and Policy:

What legislative, regulatory, and legal issues need to be resolved and at what level of government?

Federal, state, regional or local levels?

Insurance and tort liability?

Operation without drivers on public roadways?

Does uniformity enable innovation or stymie it?

How does policy/law related to AVs in aviation, rail, and maritime relate to the same for AVs on the roads?

### Safety:

What safety issues need to be addressed and by whom?

### Funding and Business Models:

What business and funding models for AV service make the most sense?

Who pays for infrastructure upgrades and maintenance?

How do we offset lost revenues?

### Planning:

What planning is needed at the state, regional, and local levels?

What level of automation should a locality plan for?

What infrastructure investments and standards are required?

How do we integrate AVs into the transportation system including transit, shared mobility and bike and pedestrian modes?

How do AV fit in on roadways currently carrying non-AV cars, trucks, and buses?



Name:

Organization:

Contact Information:

**Top 3** What three things do you most want to make sure are included in guidance to federal, state, regional or local government? Is it an opportunity or a minefield? What is a way to take advantage of the opportunity or to address the concern?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_



Do you want to be contacted by Lisa Nisenson or Kelley Coyner either to ask questions, provide further comment to be incorporated in the report, or to suggest specific next steps?

Yes
  No
  Maybe later

What's your critical interest or expertise? (Check as many boxes as you wish)

| Strategy Area | National | State | Regional | Local |
|---------------|----------|-------|----------|-------|
| Policy/Law    |          |       |          |       |
| Funding       |          |       |          |       |
| Planning      |          |       |          |       |
| Safety        |          |       |          |       |

For more information on this scenario or fast action planning and innovation driven policy for AVs, contact: *Kelley Coyner*, Center for Regional Analysis, Schar School of Policy and Government, George Mason University & MobilityE3, [KelleyCoyner@gmail.com](mailto:KelleyCoyner@gmail.com) and *Lisa Nisenson*, Alta Planning + Design and Greater Places for Eno's Capital Convergence session, [lisa@greaterplaces](mailto:lisa@greaterplaces).