District of Columbia: Planning for Autonomous Vehicles

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DC is leaning into mobility innovation

- 3rd busiest metro system, 6th busiest bus system in the US
- Most bikeshare stations per capita of a major US city
- First digital dispatch TNC regulatory framework
- Pilots: curbside management, smart cities, performance-based parking, dockless bikeshare & scooters
- Paratransit & TransportDC

Six levels of automation

Level	Name	Who is Driving?	Who is Monitoring?	Who Intervenes?
0	No Automation	😀	😀	😀
1	Driver Assist	😀🤖	😀	😀
2	Partial Automation	🤖😀	😀	😀
3	Conditional Automation	🤖	🤖	😀
4	High Automation	🤖	🤖	🤖😀
5	Full Automation	🤖	🤖	🤖

Source: Costa Samaras, Carnegie Mellon University, adapted from NHTSA and SAE J3016

DC & Autonomous Vehicles

Leading

- Early adopter of legislation allowing AVs: 2013

- SharedStreets

- DC acts as a city, a county, and a state

Testing

- 2nd Ford AV city

- Starship Robots sidewalk delivery pilot

- SW BID RFI

- Curbside management

Learning

- Bloomberg / Aspen Global Initiative on Autonomous Vehicles

- AV Working Group

- Impact Study

District Autonomous Vehicles Working Group

Executive
- Deputy Mayor for Planning & Economic Development
- Office of the [Mayor's] Chief of Staff
- Office of the City Administrator

Public Safety
- Metropolitan Police Department
- Fire and EMS
- Homeland Security & Emergency Management Agency

Transportation
- District Department of Transportation
- Department of For-Hire Vehicles
- Department of Motor Vehicles

Equity & Labor
- Office of the Deputy Mayor for Greater Economic Opportunity
- Department of Employment Services

Special Pop.
- Office on Aging
- Office of Disability Rights

Technical
- Department of Energy and Environment
- Office of the Chief Technology Officer
- Department of General Services

Liability
- Department of Insurance, Securities and Banking

DC's AV priorities

- **Safety** - Reduce driver, passenger, and pedestrian injuries and fatalities, ensure security

- **Equity** - Improve access across geographies and populations, improve accessibility

- **Efficiency** - reduce the inefficiencies and negative externalities of congestion, reduce costs, reduce pollution, improve movement

- **Sustainability** - improve environmental impacts, be financially sustainable, adapt to changes