In developing these principles, the District recognized the need to prepare for the opportunities and challenges of autonomous vehicles with a flexible approach – an approach that prioritizes learning lessons from our governmental peers and embraces innovation within our borders that benefits our residents and visitors.

Autonomous Vehicles Principles Statement

The District of Columbia Interagency Working Group on Autonomous Vehicles (AVs) believes that adhering to the principles laid out below as AVs are deployed and integrated into our transportation network will help ensure Washington, DC maximizes benefits and proactively addresses challenges. AVs are merely a means to achieve our broad goals.

We seek to put our District residents and visitors first, and therefore establish these principles for AV deployment in the District:

1. **Safety** - Reduce driver, passenger, and pedestrian injuries and fatalities, and protect consumer data

   DC Government should strive to ensure that AVs operating within the District account for human error and unpredictability to reduce driver, passenger, and pedestrian injuries and fatalities. AVs on DC streets should be equipped with tools that enhance the safety of people in and around the vehicles, and safety mechanisms should be continuously monitored to ensure their reliability and effectiveness. Operators and end users should have necessary training and education to ensure that AVs are used correctly and safely, in compliance with DC traffic laws and speed restrictions, and local authorities should be made aware of how to safely interact with AVs.

   Street design and infrastructure should continue to prioritize the safety of pedestrians and cyclists, and AVs should only travel on streets where they can operate without putting people at heightened risk. DC Government should monitor AV collision and malfunction incidents and respond with improvements to the AV safety environment.

   Cybersecurity is also a critical safety priority, and all AVs should have preventative mechanisms against cyber-attacks, as well as tools to detect and respond to cyber-attacks. DC Government should require that AVs be equipped with a minimum of industry standard cybersecurity technology. Government agencies should also be prepared to respond to AV cyber-attacks. By prioritizing safety in designs, speeds, cybersecurity measures, and monitoring tools, residents will be better able to benefit from AV technology.

   [Impact Matrix Areas: Driver & Passenger Safety, Pedestrian Safety, Cybersecurity, Technology, Data]

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

The rollout of AV technology should help decrease mobility inequity in DC. DC should strive to ensure that AVs have accommodations that can help improve the mobility of disabled populations, elderly populations, and other mobility-limited populations.

As AVs become more prevalent, there may be need to change the built environment, from street design to land use designations and parking. These are long-term decisions and changes, so should take into consideration the effects upon different populations of residents, including mobility options for different populations and the impacts on local businesses and community activity on the AV corridor.

In order to promote an equitable transition into AV usage, the effect of AVs on job loss should be carefully studied, monitored, and addressed in a timely fashion, to allow displaced workers new job opportunities of equal or greater desirability. DC Government should engage and assist drivers and other workers whose employment may be affected by the emergence of AVs, in order to foster a transition in which impacted people can help shape a fair and beneficial transition for all.

[Impact Matrix Areas: Mobility services for disabled population, Mobility services for elderly population, inclusivity & equity, Public realm, Data, Job Loss Impact & Workforce (re)training, Land Use & Design]

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

   AV transportation should reduce congestion and improve mobility in the District. AVs should integrate with, rather than displace, other modes of sustainable, healthy transportation in the District. AVs should reduce transportation costs, opening up new opportunities for businesses and services providers to deliver goods and services more efficiently and cost effectively.

   To the extent possible, DC Government should monitor the impact of AVs on both transportation costs and the carbon footprint of transportation in the District. DC should promote AV technology as a tool to increase transportation efficiencies in terms of reduced congestion, costs, and pollution.

   [Impact Matrix Areas: Service delivery efficiency, Opportunities for businesses, Transportation Systems Management, Transportation & Parking Demand Management, Data, Land Use & Design, Technology]

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

   Shifts in revenue streams should be accounted for, monitored, and adjusted to ensure that AVs do not inhibit the delivery of other government services. Environmental impacts should be tracked, and AVs should help reduce the carbon footprint of the District, and limit other forms of transportation-related pollution.

In order to promote the best overall outcomes, the DC Government should proactively consider long-term infrastructure needs, such as charging stations. It should also recognize that changes to infrastructure should be made with careful analysis and consideration of long-term needs, including the unpredictability of future transportation technologies. Sustainable infrastructure should continue to meet the needs of other public transportation options, pedestrians, and cyclists. While infrastructure should adapt, it must also continue to meet currently existing needs.

In order to create a sustainable AV system, there should be deliberate and ongoing coordination among District agencies, the public including vulnerable/underserved residents, and businesses. Tradeoffs between principles should be continually assessed and addressed, and regulations and plans should be crafted in a way that makes them inherently adaptive.

[Impact Matrix Areas: Liability, Job Loss Impact & Workforce (re)training, Environmental impacts & sustainability, Infrastructure & Capital Projects, Revenue streams, Data]

To achieve these principles, the DC Government should embody the following attributes:

- Adaptability. DC must be proactive but be prepared to adjust, to consider long-term impacts without making 100 year decisions for technology that is changing in 10 years. DC should adopt an approach that allows relevant research findings and observations to be easily incorporated into District policy, regulatory and operational efforts.
- Transparency and Privacy. DC must make data-driven decisions and engage residents and stakeholders wherever possible. DC must follow the framework established in the District of Columbia Data Policy, which includes an "open by default" standard for all government data and which sets strong privacy standards. The District should ensure that private sector data is shared when feasible, with protections for privacy, security, and trade secrets as needed. Requirements for data sharing should be built into regulations and partnerships. DC should also continue to learn from other jurisdictions and share best practices with other public and private sector peers and partners.
- Comprehensiveness. DC must endeavor to ensure various views, approaches, concerns and ideas are brought together and reconciled collaboratively with all stakeholders. In addition, DC should seek to ensure it stays abreast of and takes into consideration the effects of developments in related technologies, such as delivery bots, drones, and scooters.
- Alignment. DC must endeavor to ensure that existing plans (including the District's Comprehensive Plan, MoveDC, the Vision Zero Action Plan, Sustainable DC, Clean Energy DC, and other policies and guidance) are identified and leveraged in support of the above principles.