



# Smart Cities Resources in DC

Regulatory simplicity and unparalleled access to policymakers coupled with technological advances in cloud computing, machine learning, internet of things, and sensor technologies have helped make DC the #6 smartest city in the world. The smart cities and civic solutions sector includes leading companies and entrepreneurs working on infrastructure, energy, mobility, sustainability, municipal service delivery, civic engagement and more.

The Business Development Unit at the Office of the Deputy Mayor for Planning and Economic Development (DMPED) helps businesses navigate resources to help them grow and thrive in DC. We consistently hear from our stakeholders a need for a central location to view resources available to support businesses and individuals interested in different industry areas. This document strives to list the key organizations and resources in DC’s smart cities ecosystem. We included all organizations and resources we are aware of. Inclusion in this document does not convey endorsement. This document will be updated periodically. The date on the bottom of this page denotes the date of the last update. Please email [katie.baskett@dc.gov](mailto:katie.baskett@dc.gov) with any organizations or resources we may have missed.

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## EXAMPLES OF SMART CITY INNOVATIONS AND PROGRESS IN DC

- DC earned the U.S. Green Building Council’s [first LEED for Cities Platinum certification](#) and is on track to derive at least 50% of the city’s electricity from renewable sources by 2023.
- DC installed North America’s [first smart wastewater pumping system](#)
- DC launched a pilot program for dockless bike and scooter share programs. DC also [passed permanent legislation](#) to allow for more food delivery bots.
- Every underground Metro station now has [free public wifi](#)
- DC is analyzing criminal code reform, evaluating gun intelligence, and recently completed [a comprehensive study](#) on body-wear cameras to promote public safety.



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- OCTO, in partnership with US Ignite and WeWork Labs, will kickoff GigbitDCx Challenge, a two-phase reverse pitch competition in which competitors will submit proposals to develop and demonstrate gigabit app solutions in two focus areas – city mobility and environmental solutions.
- Mayor Bowser announced DC government's new Data Policy. Under the new Data Policy, District agency data will be open to the public by default to the fullest extent consistent with safety, privacy, and security. OCTO released the [Enterprise Dataset Inventory](#) of all DC government data in March, 2018.
- In 2016, DC was selected from more than 1,000 cities around the world to become part of the 100 Resilient Cities network. DC's resilience strategy will be a holistic, action-oriented plan to build partnerships and alliances as well as financing mechanisms and will pay particular attention to meeting the needs of vulnerable populations.
- In October 2017, Completed Phase I of [Pennsylvania 2040](#) project, which delivered gigabit public Wi-Fi and LED-based intelligence lighting for a 3x3 block area. Currently planning Phase II which will include new technologies that measure the performance, volumes, and flows of city traffic.
- In April 2018, Uber announced a first-of-its kind [partnership to share rider data with DC](#) in partnership with DFHV and DDOT.
- In February 2018, Mayor Bowser [established an Interagency Autonomous Vehicle working group](#) to proactively prepare the District for AV technologies.
- In April 2017, [DC was chosen as one of 5 global cities](#) by Bloomberg Philanthropies and the Aspen Institute to prepare for the future of driverless or AV technologies in a pilot program.
- In January 2017, DC hosted the first [MobilityTalks International conference](#), a forum designed for governments from around the world to exchange ideas on best practices related to the emerging trends in transportation surrounding connected and autonomous vehicles.

## **UNIVERSITIES WITH URBAN PLANNING PROGRAMS**

### **Georgetown University**

[Master of Professional Studies in Urban & Regional Planning](#) prepares students to solve the critical challenges facing urban communities around the world through a combination of academic theory and applied studio work.

### **Catholic University**

[Master of City and Regional Planning](#) prepares students with the foundation to become generalist and steward planners and works at the intersection of design, policy, and social and environmental responsibility.

### **George Washington University**



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[Master of Professional Studies in Sustainable Urban Planning](#) offers a cross-disciplinary curriculum in urban planning with an emphasis on sustainability and climate change. Students study cities through the lens of economic, social, and environmental sustainability.

[Sustainable Urban Planning Graduate Certificate](#) teaches the fundamentals of urban planning with a keen focus on sustainability across economic, environmental and social frameworks. Key areas of study include urban growth, land use, agricultural impact and transportation engineering.

[Walkable Urban Real Estate Development Graduate Certificate](#) provides the necessary skills, insights and connections for future career opportunities in mixed-use, walkable urban development and place management.

## **University of District of Columbia**

[The Urban Architecture & Community Planning](#) program teaches students to utilize design as a tool for creating sustainable urban environments. The program offers both a Bachelor of Science in Architecture and a Master of Science in Architecture.

[Bachelor of Arts in Urban Sustainability](#) offers students a highly interdisciplinary degree that prepares students for career success in the fast-emerging sustainability field that cuts across careers such as construction, law, health, planning management,

[Professional Science Master's Degree](#) is a graduate degree designed to allow students to pursue advanced skills in Urban Agriculture, Urban Sustainability, and Water Resources Management.

***See Data Science and Cybersecurity Ecosystem Maps for Tech education programs, bootcamps, and meetup groups***

## **WORKFORCE TRAINING PROGRAMS**

[Solar Works DC](#) is a low-income solar installation and job training program spearheaded by DOEE and DOES. GRID Alternatives Mid-Atlantic is responsible for implementing the first year of the program, preparing participating District residents to enter careers in solar and related industries while reducing energy costs for qualified low-income District homeowners by installing solar systems in their home.

[DC Infrastructure Academy](#) is a partnership between DC Government and Utility, union, university, and private sector partners that will provide a pipeline to in demand infrastructure jobs. The Academy will provide high-quality, specialized trainings and other workforce development programs that help District residents secure high-paying, long-term employment in the infrastructure industry.

## **KEY EVENTS**

[Smart Cities Week Conference and Exhibition](#) – October 2<sup>nd</sup> – 4<sup>th</sup> 2018



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This 4<sup>th</sup> annual event hosted by the Smart Cities Council will highlight the benefits of innovative collaborations to solve all manner of urban challenges – from financing and capacity building to urgent infrastructure needs.

[Mobility Talks International](#) – April 2<sup>nd</sup> – 4<sup>th</sup>, 2019

This conference gathers government policy makers from around the world to exchange ideas on best practices related to the development and regulation of connected and autonomous vehicles.

## **KEY DC GOVERNMENT INITIATIVES**

[Smarter DC](#) is a collection of DC government smart city initiatives.

[Resilient DC](#) was established to build DC's resilience to shocks and stresses through the development and implementation of a comprehensive resilience strategy.

[Vision Zero](#) aims to improve pedestrian and bicycle transportation safety. The goal is to reach zero fatalities and serious injuries to travelers in DC through more effective use of data, education, enforcement, and engineering by the year 2024.

[The Lab @ DC](#) uses scientific insights and methods to test and improve policies and provide timely, relevant, and high-quality analysis to inform the District's most important decisions.

## **SMART CITY INNOVATION HUBS IN DC**

[Center for Green Urbanism](#) caters to entrepreneurs and companies that want to create green businesses.

[Open Gov Hub](#) is a co-working community and a network of organizations promoting transparency, accountability, and civic engagement around the world.

[Alley Powered by Verizon](#) is a co-working space focused on technology companies. They are hosting a series of workshops and events to empower a new narrative on the possibilities of 5G.

[1776](#) is a hub for startups tackling challenges in education, energy, health care, government, and other critical industries. 1776 startups gain access to a global network of connections with established institutions and corporations, influencers, expert mentors, and investors. 1776 also has a seed fund where they make seed-stage investments in startups that combine a massive opportunity for financial success and the potential to transform the industries most important to lives as citizens.

## **Regional Programs**

[Smart City Works @ Herndon](#) is a program focused exclusively on early-stage companies with products that serve the needs of smart cities. The actuator will focus on growing early-stage



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businesses to the point of commercialization and installation in global urban environments. The program is located at the [Gramery District](#), the first smart city in the region.

## **PROMINENT DC-BASED SMART CITIES COMPANIES**

[Open Data Nation](#) helps to aggregate data about commercial businesses and individual behaviors from across cities, enabling its clients to anticipate key issues from data using various machine learning models.

[Aquicore](#) provides a suite of energy related software and hardware designed to minimize real-estate operational costs and improve recoverable expense capture. By monitoring real-time energy consumption of a building using proprietary hardware and software, the company is able to empower users to make better investment and operational decisions regarding the building.

[Measure](#) develops drone programs designed to provide turnkey solutions to acquire, process, and deliver cost-effective, actionable aerial data to enterprise customers

[Clean Choice Energy](#) provides renewable electricity intended to make clean energy accessible for everybody. The company supplies clean renewable energy from mostly wind and some solar farms without installing solar panels at home, apartment or business space to reduce your impact on the environment, providing clean energy for everybody.

[Arcadia Power](#) offers a digital utility platform designed to remove the complexity and unnecessary fees related to home energy usage. The company's platform connects with a users' local utility account to access automatic savings, ensure the electricity usage supports renewable energy sources and a dashboard to track bills and usage, providing renters and homeowners access to clean energy and savings.

[SparkFund](#) provides an online energy subscription platform intended to provide access to latest energy technology without buying it. The company's energy subscription platform provides financing alternatives for organizations looking for off-balance-sheet solutions and service models to implement new energy technology like lighting, HVAC and building controls, providing them with a system at no upfront cost.