

BATTELLE AND THE SMART CITY

Turning vision into reality for
tomorrow's urban environments.

BATTELLE



What makes a Smart City?

It's connected. Responsive. Intelligent. It's an environment that understands and responds to the needs of the people who live, work and play within it.

At Battelle, we're bringing this vision to life.

From cutting-edge transportation technologies to new solutions for environmental resilience, we are advancing Smart City innovation and moving new technologies from concept to commercialization.

Here are just a few of the ways Battelle is already making our cities smarter.



FUTURE STARTS HERE.

PLANNING FOR THE CITIES OF THE FUTURE

At Battelle, we bring together subject matter expertise across a broad range of disciplines to address real challenges for citizens, municipalities, businesses and the environment. Our subject matter experts provide strategic planning, implementation, human design, management, oversight, analysis and technology development support for city planners, technology developers and policy makers working toward Smart City applications.

ANALYTICS



TRANSPORTATION



HEALTH



ENVIRONMENT



PUTTING DATA TO WORK

Data lies at the heart of the Smart City. Battelle is putting data to work with advanced analytical capabilities that support innovative technologies and better program and policy decisions. We bring together more than 120 statisticians, data scientists, mathematicians, computer scientists, data managers and database and applications developers with hundreds of subject matter experts to develop specialized Smart City applications and analytic insights, from transportation technologies to health.

- Machine learning
- Predictive analytics
- Natural language processing
- Application and database development
- Knowledge management
- High performance computing



SMART TRANSPORTATION SOLUTIONS

In the Smart City, vehicles, infrastructure, public transit and people all work together as part of a connected transportation system that improves both mobility and safety. Battelle develops, tests and validates technologies that improve traffic flow, increase driver and pedestrian safety, and enable more efficient public transit systems.

- Advanced mobility strategies and planning
- Development of new mobility technologies and systems
- Connected Vehicle technologies and applications, including Vehicle-to-Vehicle and Vehicle-to-Infrastructure technologies
- Human needs design
- Safety applications for transit vehicles and pedestrians
- Rail safety and automation, including Positive Train Control and Communication-Based Train Control



BUILDING HEALTHIER COMMUNITIES

Smart Cities are healthy and sustainable. Battelle uses state-of-the-art analytics, monitoring, analysis and communication technologies to help cities respond to environmental health challenges, improve healthcare access and efficacy and help older adults stay healthy, independent, mobile and active in their communities.

- Environmental health monitoring, risk and vulnerability assessment, and planning
- Connected medical devices and mHealth apps
- Healthcare analytics and quality measure management systems
- Aging population research, planning and technology development



CREATING RESILIENT URBAN ENVIRONMENTS

Innovation helps Smart Cities stay strong in the face of changing environmental, economic or political conditions. Battelle is on the front lines of research and technology development to help cities safeguard energy and infrastructure assets, prepare for natural or human-caused disasters, and anticipate and respond to potential threats.

- Critical infrastructure protection policy and program support
- Emergency management and public health preparedness and response
- Infrastructure resiliency analysis
- Risk assessment and management
- Coastal and watershed management

Who is Battelle?

We are the world's largest independent research and development organization, operating at the forefront of scientific discovery. Our people apply cutting-edge research methods and technologies to make today's urban environments safer, healthier and easier to navigate. We deliver:

Experience: We are already working on Smart City things across the country, including in states like Ohio and Massachusetts.

Expertise: Our team includes deep expertise in a range of disciplines relevant to Smart City solutions, including aging, environmental health, transportation system design, data analytics, emergency management and more.

Objectivity: We can provide objective third-party evaluation and analysis of Smart City technologies and strategic plans.

Need smarter solutions for your city?

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Every day, the people of Battelle apply science and technology to solving what matters most. At major technology centers and national laboratories around the world, Battelle conducts research and development, designs and manufactures products, and delivers critical services for government and commercial customers. Headquartered in Columbus, Ohio since its founding in 1929, Battelle serves the national security, health and life sciences, and energy and environmental industries. For more information, visit www.battelle.org.

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It can be done