



Rethinking Cities

Cities across the globe are growing. Today, 50 percent of the population lives in cities. This growth – combined with other urban challenges like infrastructure, energy, water usage, traffic, safety, health, and waste – drives the need for innovation.

To meet this need, cities are using technology to enhance their livability, workability, and sustainability. They're called smart cities, and Urbanova is one of the innovators in this movement.

Urbanova brings together leaders in utility infrastructure, smart metering and communications, higher education, energy efficiency, population health, and urban planning – all to create a smart city technology proving ground in the heart of Spokane, Washington. The founding partner team includes Avista, the City of Spokane, Itron, McKinstry, the University District Development Association, and Washington State University.

A Living Laboratory

Urbanova is a living laboratory where, right now, companies and innovators are working on smart city solutions that could ultimately be replicated around the world.

Urbanova is harnessing data to gain insights, empower people, and solve urban challenges. Ultimately, this will enable:

- Healthier Citizens: data, research and tools that will positively impact public health
- Safer Neighborhoods: tools and data that will support public safety and livability
- Smarter Infrastructure: systems that work better and more efficiently
- A More Sustainable Environment: projects that help to increase conservation and support a healthy environment
- A Stronger Economy: increased investment in the region and opportunities for developers, entrepreneurs, researchers, and community partners

Bringing “Smart” to Life

This collaborative effort is already yielding smart city results.

Smart and Connected Streetlight Pilot

- The Project: The Smart and Connected Streetlight Pilot is the first of Urbanova's smart city projects and will play a key role in defining how to develop and design a living

laboratory, from establishing a data governance platform to understanding how to architect a shared information platform – while also working through issues such as who owns the data, who controls it, and how it is secured and shared.

- **The Goal:** The pilot aims to intelligently manage and control streetlights to increase energy efficiency, among other goals. It will also feature a human-scale urban air quality R&D component, measuring the quality of the air at different sensor points throughout the district and assessing its role in a healthy city.
- **The Partners:** Avista, the City of Spokane, Itron, McKinstry, the University District Development Association, and Washington State University.

Shared Energy Economy Model Pilot

- **The Project:** Avista has been awarded a grant from the Washington Department of Commerce and Governor Jay Inslee's Clean Energy Fund. The Shared Energy Economy Model will allow various energy assets – from solar panels and battery storage to traditional utility assets – to be shared and used for multiple purposes, including system efficiency and grid resiliency.
- **The Goal:** To demonstrate how a Shared Energy Economy can benefit Washington energy consumers.
- **The Partners:** Avista's partners in this endeavor include UniEnergy Technologies, McKinstry, Schweitzer Engineering Laboratories, Pacific Northwest National Laboratory, the U.S. Department of Energy, Washington State University, and Itron.

Smart City Research Grant

- **The Project:** Researchers in the Voiland College of Engineering and Architecture at Washington State University (WSU) are leading a five-year, \$1.5 million initiative to develop a framework to monitor, predict, and control energy and air quality in an urban environment and to record resulting health impacts in Spokane's University District.
- **The Goal:** The multi-disciplinary initiative is part of WSU's Grand Challenges in smart systems, which aims to harness technology to improve quality of life. The grant funding is broadly intended to further develop smart city research capacity and coordination at WSU.
- **The Partners:** The initiative will link researchers in WSU's Energy Systems Innovation Center, the Laboratory for Atmospheric Research, and the Institute for Sustainable Design with Urbanova and its public and private sector partners.



Investment and Partnership Opportunities

Urbanova offers a powerful combination of benefits for researchers, entrepreneurs, companies, and citizens interested in exploring smart cities technologies.

Why Should You Invest in or Partner with Urbanova?

- **Expertise:** Urbanova is made up of global leaders in each of the partners' respective industries. For more than two years, those partners – Avista, the City of Spokane, Itron, McKinstry, the University District Development Association, and Washington State University – have been working to create a living laboratory to design cities of the future.
- **Collaboration:** Urbanova's shared governance model means the partners are committed to working together to create integrated solutions that will have a much higher impact than if those entities were working in silos.
- **Location:** Urbanova's defined geographic footprint provides an ideal setting to test more diverse applications that might be more difficult or costly to test in a larger-scale setting. It also means we can be more agile, move faster, and apply what we learn.
- **Mixed-Use Land:** Urbanova is located in the 770-acre University District and is composed of mixed-use urban land, including academic and mixed-use buildings, residential neighborhoods, and both undeveloped and underdeveloped land. The area is truly a blank canvas of opportunities for developers, entrepreneurs, and researchers.
- **Open Data Platform:** Urbanova is establishing a shared data governance platform to understand how to best share data, while also working through issues such as who owns the data and who controls it. Ultimately, a shared platform could allow users to explore, visualize, and download location-based open data and drive innovation.
- **Health Sciences Hub:** The location of Urbanova is adjacent to the largest health care hub between Seattle and Minneapolis, providing unique opportunities for collaboration and research.

For more information about working with Urbanova, contact Kim Zentz at kzentz@wsu.edu.