



What is a Smart Community: All About the Data

Introduction and Challenges

The definition of what makes a community “smart” varies greatly, but the common denominator is technology-led development that leads to greater efficiencies. And the backbone of the technology-led development is data. A smart community can optimize its performance by collecting data across relevant sources and deriving intelligence through real-time analytics. The result will be unprecedented insight and situational awareness that can make the community safe, well-run, livable, healthy, prosperous, and sustainable.

However, the challenges to smart community data initiatives are as varied as the benefits. Some of the key challenges cited include affordability, cybersecurity, privacy, data silos, data integration, citizen demand, and proven return on investment. When data are collected and stored in silos or different departments, it presents huge challenges to seeing the bigger picture and ultimately realizing the vision of a smart community. Making the data open, transparent, and available for a wide range of audiences will prove to be a great benefit. At the same time, protecting the increasingly pervasive Smart Community data is of paramount importance. Cybersecurity is a top concern in the development of Smart Community data initiatives that rely on digital infrastructure and information. Additionally, agencies face hurdles in negotiating data sharing agreements with vendors that result in unproductive arrangements.

Case Studies

- **Columbus Integrated Data Exchange (IDE) Project:** Columbus, Ohio is building a dynamic platform that integrates data from deployed smart technologies and community partners offering an open-source information portal intended to facilitate better decision-making and problem solving for all users. It is more than just a database; it is an approach to data that includes policies, governance, and security. The IDE will be designed to ensure the data are properly documented, cataloged, and protected. Link: <https://www.columbus.gov/WorkArea/DownloadAsset.aspx?id=2147489293>
- **The Shared Madison Data Platform:** Madison, Wisconsin adopted an Open Source Data ordinance that allows public data to be transferred and shared among agencies, private sector businesses, and the general public. The proposed Shared Madison Data Platform will receive and share information from Madison’s Smart City projects and other sources. Tech innovators are encouraged to create applications based on the Platform data. For example, Madison BusRadar, developed by a local entrepreneur, enables Metro riders to see the location of buses in real time. Link: <https://data-cityofmadison.opendata.arcgis.com/>
- **Ho Chi Minh City Green Transport Development Project, Vietnam:** In 2015, the World Bank approved this project that is expected to improve the traffic management system and introduce smart cards for public transportation. In addition, the city itself plans to implement thousands of security and traffic cameras, to enable smart systems of traffic management at a cost of US\$300m. Link: <http://projects.worldbank.org/P126507/ho-chi-minh-city-green-transport?lang=en>

How ITE Can Help

- Create a repository of case studies and easy access to lessons learned regarding data issues (hosted vs. cloud, security, data sharing, data access, data rights & liability, etc.), so as an area gets ready to implement, they can build off of lessons learned by other implementers.
- If you have questions or would like more information on the ITE Smart Communities initiative, please contact the ITE Smart Communities Task Force (SCoTF) at smartcommunities@ite.org.