

# Creating a New Framework for Smart City Big Data Exchange

## Background

Cities are deploying key components needed to deliver Smart City services, including advanced networks, sensors, and edge computing capabilities. Given the rapid growth of Smart City applications, cities are still developing expertise in data platforms needed to efficiently analyze and share information, including real-time data. Effective sharing of Smart Cities data can be a great equalizer for communities of different sizes, demographics, income-levels and geography. This challenge grows greater as sensors, vehicles, and other sources grow in their ability to provide increasingly sophisticated real-time data. Without a strategy for sharing data across municipal boundaries, it will become increasingly harder for cities to fully realize their return on investments in Smart Cities technology.

- While replication of “best in class” solutions is driving some commonality, a great deal of questions and uncertainty surround the exchange and sharing of data across city boundaries and between diverse data platforms. there is a unique opportunity at this stage of Smart Cities development to define a set of specifications and data structures that can promote interworking, interoperability, value creation and evolution to robust data exchanges and data marketplaces. This work would supplement current industry initiatives focused on promoting innovative applications and the development of application frameworks. And it could advance both the education and appreciation of Smart Cities on the value proposition of the data that cities generate, collect and analyze.



US Ignite and ATIS are heavily committed to promoting continued investments in Smart Cities and public/private partnerships that will lead to solutions.

- US Ignite has established relationships with an extensive list of cities through its Smart Cities Gigabit Communities and Application Summit.
- ATIS has been working with the industry and its broad membership across the ICT landscape and related verticals to deliver Smart City technology assessments and interoperable frameworks to city CIOs/CTOs and mayors' offices.

## Opportunity for Partnering on Data Sharing

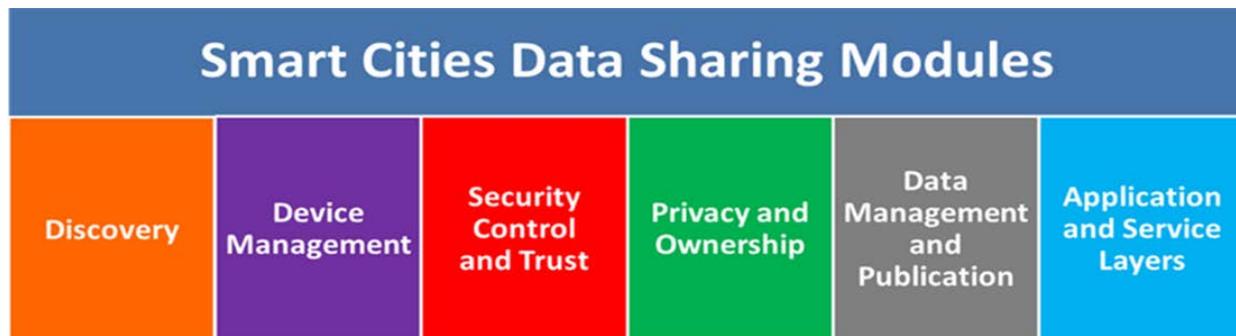
US Ignite and ATIS will jointly launch a Technical Working Group (WG) to focus on a consistent approach for the sharing of Smart City data between and among cities, state and federal government, trusted agencies, citizens and application developers.

This work will initially focus on data exchanges but will support the evolution path to data marketplaces. The timeline for the initial set of specifications should be approximately six months, starting development in September 2018 and targeted for completion in the spring of 2019.

- **Cities:** A core group of cities would contribute to the development of a Data Sharing Blueprint that can be adopted by a wide range of cities. Cities will articulate a baseline set of city data-centric requirements and needs.
- **Industry:** Partners will develop a rich set of specifications covering data formats, protocols, data structures as well as a set of business models that provide cities with alternative approaches to data ownership, brokering, privacy, and related areas.

### Deliverable:

Smart Cities Data Exchange specification that includes a data sharing reference framework, data formats and protocols, security and privacy requirements and common APIs. This specification will also include representative use cases and a template of business alternatives, which will allow cities to evolve to data marketplaces including data brokering, federations, value creation and data exchange with the private sector.



### Logistics:

- Bi-weekly virtual Go-To-Meeting calls (90 minutes) to present and discuss contributions, achieve agreements and develop the working text for the specification.
- All agendas, contributions, meeting notes and working documents will be posted on a participant-accessible workspace.
- Final specification will be published and will be openly accessible on ATIS/US Ignite website(s).
- Pilot test between cities will be considered at the end of the specification phase.