**Smart Cities Stakeholder Workshop and**

**Responder Technology Showcase**

**May 1 and 2, 2018.**

**Center for Innovative Technology (CIT), Herndon, VA**

# Report Breakout Group Day 1: Connecting the City

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## Expectations

* Megacities
* Energy
* Smart Hub Architecture for first responders - sense of standards and platforms
* Connecting buildings with cities
* Solid foundation for smart cities
* Sea Cable - transportation and connecting autonomous vehicles
* Identify use cases that we can implement in future activities

## Use cases

**Parking**

Parking problem (part of Transportation) - Slovakia city not planned for high density of cars. Solution should allow cites to plan the resources. Transportation is one of  the main topics for smart cities. E.g. Columbus just got a grant with focus in transportation.

Communication network designed to move IoT data (e.g., NB-IoT) can be as cheapest as 10c per month per device.

**Video Analytics and integration**

Video can support lots of use cases. Video Analytics becomes important to identify patterns or future activities. Video integration with other sensors is key for learning more about an area of interest.

**Security of the data**

Important for cities to work on the security foundation. Issues integrating the data from sensor/solutions providers and hosting the data (locally or on the cloud).

**Utilities**

Use case: connect meters in real time. They fixed the problem by interconnectivity (peer-to-peer) connectivity to meters that connect to a hub. Technology to share the data is not open. We want to build open technologies.

**City Planning**

Need to get data about how citizens interact within a city to properly plan the future of a city. Todays cities are mixed spaces (e.g. building constructions, open space).

**Smart Buildings**

Need future discussion about what information are required form smart building to support public safety in smart cities (e.g. indoor maps, real time occupancy, and  possible shelter spaces). In addition to energy savings or other efficiency gains from sensor data, transforming tenant experiences is also critical for smart buildings. Existing smart buildings use multiple one-off solutions. Transforming tenant experiences requires interconnection of historical and real-time data.

## Solutions and expected outcome

Solutions should deal with explicit problems that cities encounter. Pilots are important to prototype the solution. We should be looking towards advancing open technologies that enable integration of data from different providers (e.g. multiple smarts trashcan bins providers). Idea is to expedite the process to: collect, connect and compute.

Need to identify where the standards are needed in the different layers of the architecture to allow interoperability of systems.

Integration of data (interoperability) is important for Computing (Analytics): descriptive (what), diagnosis (why), predictive (what will happen), and prescriptive (what should I do about it).