# Smart Cities Stakeholder Workshop and Responder Technology Showcase

Session 3A: Urban Resilience

2 May 2018

Track A: Needs and Objectives

Discussion Lead: Robert Gaskill-Clemons

Rapporteur: George Percivall

There were about 10-12 individuals in attendance

Robert started the conversation by reviewing a slide that was presented in the plenary session: “Resilient Los Angeles.” (The graphic is included at the end of these notes.) The graphic shows “shocks” and “stresses”. The previous discussions of the workshop have focused on “shocks” that cause emergencies and disasters. The workshop has not focused on the stresses.

The question posed in the plenary before the break out session was “Can Smart City Technologies improve Urban Resilience?” In plenary the discussion was can the information technologies that are typically discussed as Smart Cities apply to reducing the stresses as listed in the graphic. Discussion in the breakout session was “How could the answer be no?” We need to consider how stressors in how we prepare for disasters and how we recover. This is a different perspective that the focus on public safety. Also, we can use technologies as identified in the plenary session such as Big Data and predictive modeling to assess the effect of stresses. After this introductory discussion, the main discussion was about how public safety responses are modified when considering stresses.

So, how can First Responders activities be modified to account for societal stresses? While the use cases may be focused on shocks, we should include modifications in the use cases when considering different stressors. For example, there was mention of the variable public response to Body-worn cameras, plusses and minuses.

One example of Public Safety and Stressors is the role of Equity as a stressor before and after a riot, e.g., riots in city of Ferguson, Missouri in 2017. What is the effectiveness of response considering stresses? What are the technology and architectures that are the most effective? How can variations in technology be made based on stressors? Considerations of stresses in Public safety must be considered through the disaster and emergency preparedness lifecycle: Planning through recovery

Some particular effects of stressors were discussed: How do stressors affect alerting and response? An example of alerting was to teach grandma how to text, give her your old phone. First responders can identify the presence of variations when responding, e.g. of TV, dogs, mobile phones – which one is not tracked – its mobile phones. Brief discussion of IPAWS for alerting is less targeted – saturated. Message needs to be targeted to audience. Handing out phones in advance to alert people. Assessing the risk and variability. Some people don’t answer the door for a cop but would open for a fire fighter. To reduce stress, keep the tactical unit out of view.

To prepare for these variations in altering, work with the community on how to engage them. How do you want us to reach you? Under what conditions do you want to reach you? It was commented that First Responders will sometime rescue you even if you don’t want it. Fire department will search a building even if it is reported to be “empty”.

This led to a discussion about how to Tailor the architecture models. Implementation of architecture is varied in each city and perhaps neighborhood. The architecture needs to be Modular, scalable, adaptable. It was asked if SCIRA will be part of a larger architecture – project leader answered: Yes, it will be consistent with broader architectures, e.g., JTC 1/WG11 – Smart Cities.

The architecture should identify items that are needed everywhere, common. Then provide for methods to Align architecture to risk for a specific city. Provide tailoring guidance - if you have this risk, take that action. Consider the 80/20 rule: Don’t let perfect get in the way of good. Typical cases that can be translated: High risk neighborhoods; environmental hazards. Define as set of Architecture templates.

It was suggested to define and use template approach. For example, for sensing use the template of Collect, Connect, Compute. Also need to connect sensing and observations back to decision and dissemination. Beyond sensing also need to address records management as critical data in smart cities.

Need architecture with practical functionality – not just technology for technology sake. Need to test: Prototypes are the validation. Have a reasonable horizon of 2-3 years. Develop the Deployment Guides approach to make the architecture practical.

These outcomes were reported out to a plenary workshop session.



Source: <http://100resilientcities.org/wp-content/uploads/2018/03/Los-Angeles-Resilience-Strategy-PDF.pdf>