Global City Teams Challenge
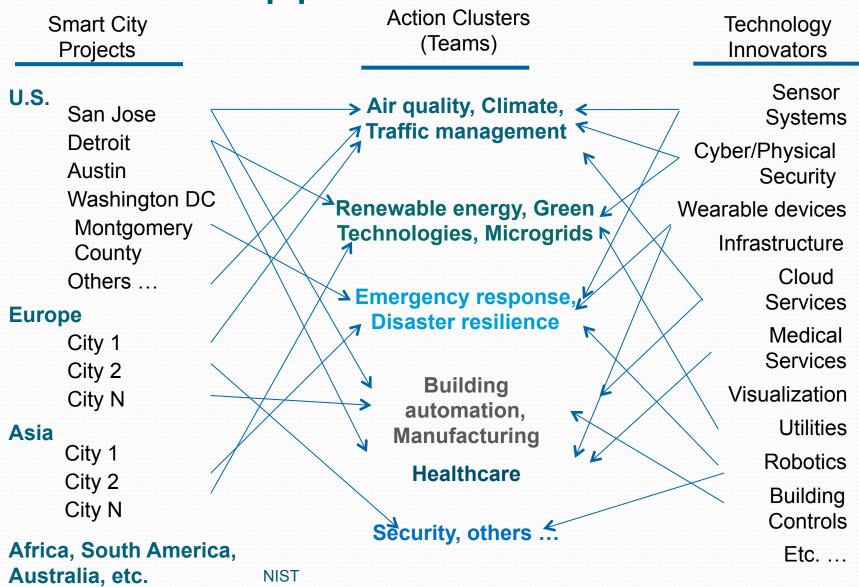
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The Opportunity

- Smart Cities/Communities are increasingly turning to advanced technologies to improve services, promote economic growth, and enhance the quality of life.

- Many IoT/CPS innovators already have technologies (i.e., building blocks) and their impact can be maximized by fostering collaboration among the innovators to create interconnected solutions to provide tangible benefits to end users.

- Current deployments of IoT/CPS are fragmented lacking interoperability and standards.

- Many smart community efforts are one-off projects with heavy emphasis on customization and inadequate consideration for future upgradability and extensibility, which end up causing increased cost and inefficiency. As a result, many Smart Cities/Communities deployments are isolated and do not enjoy the economy of scale.

The Approach

Smart City Projects

Action Clusters (Teams)

Technology Innovators

U.S.
San Jose
Detroit
Austin
Washington DC
Montgomery County
Others …

Europe
City 1
City 2
City N

Asia
City 1
City 2
City N

Africa, South America, Australia, etc.

Air quality, Climate, Traffic management

Renewable energy, Green Technologies, Microgrids

Emergency response, Disaster resilience

Building automation, Manufacturing

Healthcare

Security, others …

Sensor Systems
Cyber/Physical Security
Wearable devices
Infrastructure
Cloud Services
Medical Services
Visualization
Utilities
Robotics
Building Controls
Etc. …

NIST

Current Partners include:

- US-Ignite
- National Science Foundation
- International Trade Administration
- US Department of Transportation
- US Department of Health and Human Services
- US Department of Energy
- IBM, Intel, Qualcomm, Cisco, ARM Holdings, GE, Juniper Networks, Extreme Networks

Current Status

- Kick-off Event was attended by over 350 participants around the world (200 onsite and 150 remote attendees)

- Currently more than 25 teams
  - Project implementations are under way with the goal of city/community deployment by June 2015

- An online platform for additional team forming and participation
  - US-Ignite to provide an online platform to host the profiles of participants and action clusters, and also repository/links to one-pagers and video clips.
  - Additional features are planned to enable online partnership, matchmaking, and project discussions

- Working to initiate the discussions on Smart City and IoT Global Connectivity Fabric framework

Example of Action Clusters

- SCALE: Safe Community Alert Network (Montgomery County)
- PA 2040 (DC)
- Human Population Mapping and Information Sharing Platform for Enhanced Community Resilience (Annapolis, MD)
- Remotely Caring for Our Most Vulnerable Citizens In-Place During A Pandemic
- Modular Micro Grid Model (NY)
- Geolocated Allergen Sensing Platform (Chattanooga)
- Connected, Intelligent Transit (Portland)
- A-Taxi Shuttle Project (Greenville, SC)
- Intelligent Connectivity & Water Resource Management (Cincinnati)

Future Events

- Webinars for Q&A and additional team forming
- Potential regional meetings/events
- Winter 2015: Tech-Jam
  - Present the progress of the teams/clusters
  - Form additional teams/clusters
  - Collect the needs on standardization and metrics
  - Discuss Smart Cities Framework, IoT Global Connectivity Fabric Framework
- June 2015: Global City Teams Festival(s)

For More Information

- Contact
  - Sokwoo Rhee (sokwoo.rhee@nist.gov)

- Meet and join the action clusters
  - www.globalcityteams.org

- NIST information site
  - http://nist.gov/cps/sagc.cfm

- Social Media
  - Twitter #globalcityteams

- Webinar replay – Introduction to Global City Teams Challenge
  - http://www.nist.gov/cps/global-city-teams-challenge-webinar.cfm

- Webcast replay of the kick-off event
  - http://www.nist.gov/cps/global-city-teams-challenge-webcast.cfm

- SmartAmerica Round One web site
  - http://www.smartamerica.org/