

WASHINGTON SIEC FIRSTNET ROAD MAP PRESENTATION, SURVEY and DISCUSSION
Report from April 18, 2019
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Background

At the regular Washington State Interoperability Executive Committee (SIEC) meeting of April 18, 2019, Bill and Kristi presented and discussed various capabilities that use mobile wireless networks and are potentially useful to responders. They also did a paper survey of the people in the room. Here are the results of the survey and discussion.

Survey Respondents - Current Job Function	Number
Law Enforcement	5
Fire-and-Rescue	2
Emergency Management	1
Communication (Radio) Manager	1
Infrastructure Provider/Design	1

Job titles specified by respondents on their survey cards:

- Intersection of Infrastructure Provider and Design for 911 and Emergency Management
- Special Agent WSGC (Law Enforcement)
- Information Technology CIO (Emergency Management)

Does your Agency Issue Smart Phones to Responders?	Number
Yes, All Sworn Personnel	4
Yes, Selected Personnel (e.g. command staff)	6
No	0

Comments:

One respondent said their agency issues smart phones to all personnel, sworn and civilian.

Mobile Apps in Use

App Name	Used Personally
Mapping	9
Email	8
Search	5
Social Media	3
Messaging/SMS	2
Waze	1
Finance	1
Smart Home Device	1
Call alerting	1

App Name	Used for Work
Mapping	7
Search	5
Chat	2
Push-to-Talk Radio	2
Messaging/SMS	2
Communications	1
News	1
Info	1
Database	1


App Name	Used Personally
Radio broadcast	1
Microsoft Office Suite	1
VPN Access	1
GPS Tracking	1
Video	1
Real-time Monitoring Active Incidents	1

App Name	Used for Work
Remote File connection	1
Call alerting	1
Radio broadcast	1
AVL	1
Pulsepoint	1
CAD Access	1
Cellular Voice	1
Email	1

First Responder Network Authority Roadmap Discussion


The Roadmap is a first-of-its-kind document under development by the FirstNet Authority with input from the public safety community, industry and government, along with the FirstNet network contractor, AT&T. The Roadmap will provide a view of public safety’s operational needs and technology trends for mobile broadband communications over the next five years. It will help guide the growth, evolution and advancement of the FirstNet network. The FirstNet Authority will use the Roadmap to prioritize its programs, activities and investments to help develop the communications tools First Responders need to save lives and protect communities. The FirstNet Authority is engaging public safety agencies and discussing capabilities within the six “domains” or areas of interest shown in the graphic below:

FirstNet Authority Roadmap “Domains” to Discuss




Core

- EPC
- IMS Core
- Services Platforms
- App Servers
- Service Enablers




Coverage & Capacity

- Macro Coverage
- Capacity
- In-building Solutions
- Temporary/On-Demand Coverage
- Range Extension
- Device-to-Device
- Air-to-Ground
- Maritime Operations
- Availability/Reliability/Resiliency/Hardening




Situational Awareness

- Location Services
- Sensors
- Wearables
- Cameras/Video
- Mapping/Geographic Information System (GIS)
- Data Analytics/Artificial Intelligence




Voice Communications

- Mission Critical Push-to-talk (MCPTT)
- PTT Interworking




Secure Information Exchange

- Data Access
- Data Sharing
- Cybersecurity
- Identity, Credential and Access Management (ICAM)/Single Sign-On

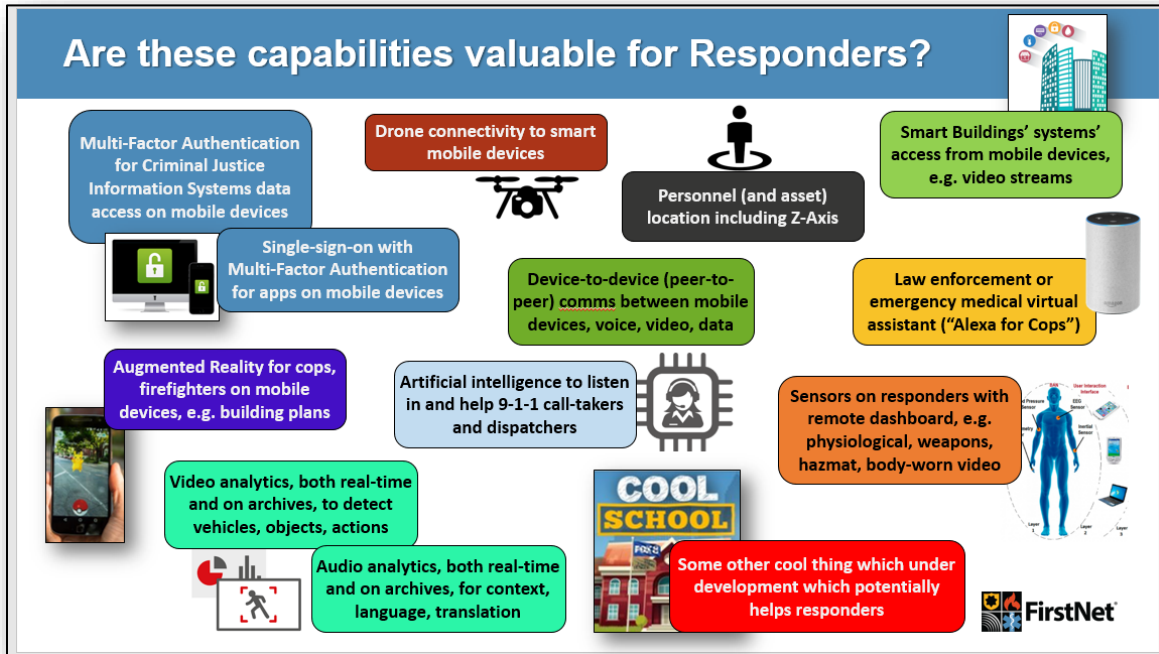


User Experience

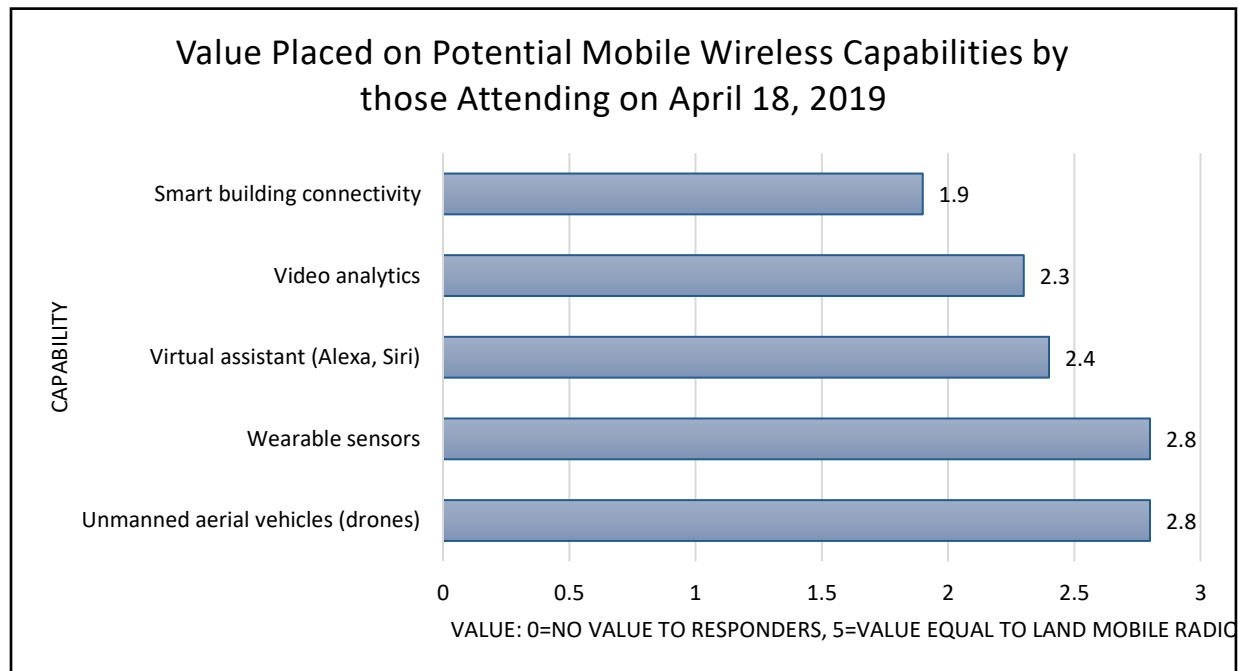
- Priority Services
- Applications
- Devices
- Accessories
- Hands Free Operations
- Augmented Virtual Reality
- Heads-Up Display

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We discussed a number of specific capabilities inside these domains, as shown on the image below:



On survey cards, the SIEC respondents were asked to rate these capabilities on a scale from 0 (not valuable at all) to 5 (as valuable as land mobile radio today). Here are the results of the ratings:



Additional capabilities mentioned by respondents on their survey cards:

- Real Time Video Monitoring
- Push-to-Talk with enhanced features
- Direct Device-to-Device Communications
- Personnel location
- Common Operating Picture (COP)
- Phones communicate in areas without normal cell coverage (or no coverage after a disaster)
- Small LTE deployables
- Van deployable cell sites (such as Satellite Cell-on-Light-Trucks SatCOLTs or cell-on-wheels COWs)

Discussion of the Roadmap and Survey:

- Drones (Unmanned Aerial Vehicles or UAVs). Both DNR (Department of Natural Resources) and WSP (Washington State Patrol) both reported using drones in operations. DNR uses UAVs for bridge inspections. WSP uses UAVs for collision investigation and to help shorten the time, in serious collisions, it takes to get a highway re-opened for traffic. WSP intends to deploy UAVs with all of its trained accident investigation technical specialist troopers.
- Wildfire Management Technology Advancement Act. This act, which just passed Congress, requires, by the 2020 fire season, large wildfires will be mapped in real time using a network of drones carrying infrared sensors – an improvement over wildfire maps that are usually updated once a day. Additionally, by the 2021 fire season, all local, state and federal firefighters assigned to large wildfires must be equipped with personal GPS devices so commanders can know the real-time locations of personnel and resources. [More information here](#).
- Corrections officer biometrics. Jose Zuniga described biometrics for DOC (Department of Corrections) officers. Information is funneled through the command post to know where guards are located in the building, including Z axis (vertical location). Jose commented that GPS does not currently work well within their buildings.
- Data analytics for Emergency Communications Centers (PSAPs). Keith Flewelling reported a current hot topic within the ECC community: how to manage large amounts of data with analytics. The discussion includes potentially using a centralized fusion center.
- Washington is currently working on the second generation of its ESInet. There are 79 emergency communications centers to move to the new network.