Interoperability Update

ISICS Deployment is essentially complete
  ◦ Final System Acceptance Coming Soon
  ◦ Development and verification of policies

FirstNet Deployment in Iowa is speeding up.
  ◦ Roaming agreement with USCC
  ◦ Tower builds across the state

New Members to ISICSB
  ◦ Committees are always open to membership
The ISICS Platform

The ISICS P25 Phase II, 700 MHz network is nearly completed.

◦ Last site at Rock Rapids is being constructed.
◦ No user fees.

Coverage testing is nearly wrapped up.

Continue work to further enhance interoperability across Iowa and our surrounding states.

System feature and functionality testing.
ISICS Mobile Coverage Map

Non-shaded areas don’t meet specs.
On to FirstNet...

Two national groups

- FirstNet Authority (government)
- AT&T (carrier)
# FirstNet Stats

**BY THE NUMBERS**

<table>
<thead>
<tr>
<th>FirstNet connections</th>
<th>Public safety agencies and organizations subscribed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.2M+</strong></td>
<td><strong>11K+</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Apps in the FirstNet App Catalog</th>
<th>FirstNet Ready™ devices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100+</strong></td>
<td><strong>100+</strong></td>
</tr>
</tbody>
</table>

**FASTER than any commercial network**

<table>
<thead>
<tr>
<th>Square miles of LTE coverage nationwide</th>
<th>Square miles of LTE coverage added in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.61M+</strong></td>
<td><strong>120K+</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dedicated deployable network assets, including Flying COWs™ and FirstNet One.</th>
<th>Markets with Band 14 spectrum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>76</strong></td>
<td><strong>~700</strong></td>
</tr>
</tbody>
</table>

**75%+** Band 14 coverage completion; ahead of schedule

---

1 Based on AT&T analysis of Ookla® SpeedTest Intelligence® data average download speeds for all quarters in 2019. Ookla trade marks used under license and reprinted with permission. Markets defined by FCC Data.
FirstNet’s Origins

Recommendation 27:

- Congress should support pending legislation which provides for the expedited and increased assignment of radio spectrum for public safety purposes...
FirstNet Nationally

All 50 states and six territories/districts opted-in to the FirstNet network and buildout.

Focus in 2020 on expanding the network
  ◦ 99%+ population and 99%+ geographic coverage by State Plan requirement for Iowa

Continually driving innovation to leverage new data capabilities that didn’t previously exist
Iowa’s Opt-In to FirstNet

“By partnering with FirstNet, we will be able to expand coverage for first responders. As a result, this will also help to expand coverage for rural Iowans, providing access to a reliable, high speed wireless connection in areas with little or no connectivity today.” – Governor Kim Reynolds
FirstNet In Iowa

Nationwide mobile broadband network
Leverages Long Term Evolution (LTE)
Priority and preemptive services for public safety and public service agencies using it.
  ◦ Band 14

Built by AT&T via nationwide contract.
  ◦ Roaming agreement with US Cellular during build-out
  ◦ Over 210 new or updated FirstNet/AT&T sites in Iowa
FirstNet In Iowa (cont)

A network purpose-built for public safety & public service

Coverage commitment for rural, tribal and U.S. territories specifically for public safety

No throttling on the network.

A dedicated public safety core that will route and encrypt network traffic, creating the highly secure environment

An ongoing state consultation process to achieve collaboration with Public Safety Advisory Committee (PSAC)

Quality of service-priority and preemption (QPP), exclusive core, application ecosystem, deployables, and mission critical services

All required by the 25 year federal government contract
What is QPP?

Quality of service-priority and preemption (QPP) is a means of ensuring that certain users get service ahead of others.

- Getting moved up to the front of the line.
- If the line is completely full, you can move other users out of the line.

First preference is for FirstNet phones to use Band 14.

- Then they go into other consumer bands if Band 14 starts getting full.

It actually works too.
What is Band 14?

Dedicated set of frequencies for public safety phones to use
Very little if any competition with consumer phones
It’s like having your own highway...
What is Band 14?

Dedicated set of frequencies for public safety phones to use
Very little if any competition with consumer phones
It’s like having your own highway...

As opposed to...
Overall Goals for Iowa

Day-to-day operations and supporting large events such as RAGBRAI.

LTE coverage that actually works during natural disasters.

Enhance network coverage in rural areas.

Drive infrastructure investments and create jobs across the State.

Create an ever-evolving set of life-saving tools for public safety.

Future integration with NG 9-1-1 networks and Smart Cities' infrastructure.
Specialized App Catalog

Applications undergo a higher level of scrutiny to check for vulnerabilities.

Not every app in the Google or Apple app stores will be in there.
FirstNet Deployable Program

Agencies that use FirstNet can request a mobile LTE vehicle if needed.

No cost for this service.

Previously carriers would maybe deploy 12 mobile LTE vehicles a year for a region.
  ◦ Now it is not uncommon for 12 deployments daily.
More on the Apps

FirstNet Listed

<table>
<thead>
<tr>
<th>Relevancy</th>
<th>Security</th>
<th>Privacy</th>
<th>Availability</th>
<th>Mobility</th>
<th>Resiliency</th>
<th>Scalability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vetted and deemed relevant for use by first responders</td>
<td>Inspected and adheres to security practices that help protect data sources and users from intrusions and malicious attacks</td>
<td>Inspected and uses security mechanisms designed to avoid unauthorized data access and use</td>
<td>99.99%</td>
<td>Demonstrate that app's use of devices resources and network is optimized</td>
<td>Demonstrate that mechanisms are in place to enable service and data recovery after a failure</td>
<td>Demonstrate that mechanisms are in place to accommodate surges and other changes in demand and use</td>
</tr>
</tbody>
</table>

Availability: 99.99%

Demonstrate availability of four 9s (99.99%)
New FirstNet Sites April 2020
Other Priority Services

GETS (Government Emergency Telecommunications Service)
- Landline end to end priority by dialing a special set of codes assigned to you.

WPS (Wireless Priority Services)
- Like GETS but for cellular phones.
- Elevates your line and the line you are calling to priority.
- Spans across carriers.
Questions?

Lt. Tom Lampe – ISICSB Chair, SPOC
Email: lampe@dps.state.ia.us
Office: 515-725-6113
Cell: 515-250-0998

Chris Maiers – Statewide Interoperability Coordinator
Email: maiers@dps.state.ia.us
Office: 515-725-6108
Cell: 515-201-7478