“Demystifying How Broadband Technologies, Next Generation 911 and SAFECOM protect Public Safety”
Pershing County 6,500 residents/Burning Man 2014-70,000 participants
EMBRACE
NG9-1-1
Evolution of the 911 System

1968
- Basic 9-1-1
  - Copper Land Line
  - Analog Technology

1980’s
- Enhanced 9-1-1
  - ANI/ALI

1990’s
- Wireless E9-1-1
  - Phase I
  - Phase II

2000’s
- Voice over IP,
  Images, Video,
  Text, Telematics
i3 is the NENA architecture for a system of 9-1-1 services, functional elements and databases that run on an Emergency Service IP Network (ESInet). 9-1-1 calls will be routed via geospatial databases. It will replace E9-1-1 capabilities eventually while retaining the functions in place today.
NG9-1-1

- Connects citizens to Public Safety
- Connects Public Safety agency to Public Safety Agency
- Puts real times events in the hands of 1st Responders
- An IP based technology
- Allows of Text Messaging
- Pictures
- Video
- Medical Telemetry
Today’s 9-1-1 versus NG9-1-1

<table>
<thead>
<tr>
<th>Today’s 9-1-1</th>
<th>Next Generation 9-1-1</th>
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<tbody>
<tr>
<td>Virtually all calls are voice callers via telephones using analog lines to access PSAP.</td>
<td>Voice, text, or video information, from many types of communication devices, sent over IP networks</td>
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<td>Most information transferred via voice</td>
<td>Advanced data sharing is automatically performed</td>
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<td>Callers routed through legacy selective routers, limited forwarding / backup ability</td>
<td>Physical location of PSAP becomes immaterial, callers routed automatically based on geographic location, enhanced backup and resiliency</td>
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<td>Limited ability to handle overflow situations, callers could receive a busy signal</td>
<td>PSAPs able to control call congestion treatment, including dynamically rerouting callers</td>
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Challenges in deploying NG9-1-1

- Cost
- Managing Public Expectations
- Dispatcher Training
- Data Storage
- Regional PSAP MOU's
- 9-1-1 consolidations
- Governance
- Migration from legacy equipment
Next Steps / Future

- Develop strategic plan
- Identify funding
- Look for grant opportunities
- Develop governance model
- Discuss PSAP consolidation
- Manage public expectations
- **NG9-1-1 is an evolutionary process**
Night time takes a different look at Burning Man
NACo Technology Innovation Summit
Our Strategic Roadmap

Milestones

- Begin Formal State Consultations
- Initiate Public Notice and Comment
- Draft Requests For Proposals

FirstNet created

Released Strategic Roadmap – March 2014

Begin formal consultations

Programmatic Environmental Impact Statement (PEIS) Public Scoping Meetings

Public Safety Advisory Committee (PSAC)

FirstNet Board Meeting

Network Implementation

Draft RFP Documents

Consultations

- SPOC Calls & Webinars
- State/Territory Consultation
- Federal Consultation
- FirstNet created
- Released Strategic Roadmap – March 2014
- Begin formal consultations
- 1st public notice and comment
- 2nd public notice and comment
- Draft RFP Documents
- Network Implementation
Key Milestones – Phase II
- Public Notice(s) & Comment
- Expand Outreach and Consultation
- Leverage PSAC Recommendations and Early Builder Results
- Release Final RFP
Consultation, Outreach, & State Plans
Middle Class Tax Relief and Job Creation Act of 2012

“Upon the completion of the request for proposal process...the First Responder Network Authority shall provide to the Governor of each State, or his designee—

(A) notice of the completion of the request for proposal process;
(B) details of the proposed plan for buildout of the nationwide, interoperable broadband network in such State ("State Plan"); and
(C) the funding level for the State as determined by the NTIA.”
Under the Act, the Governor has 90 days to choose whether to

1. Participate in the FirstNet proposed radio access network (RAN) deployment or

2. Assume responsibility to conduct its own state RAN deployment
Things to consider

What do you expect from FirstNet?

How much are you willing to spend?

What technologies will be replaced?

Will there be sufficient coverage?
2016 National Association of Counties Legislative Conference

National Association of Counties Legislative Conference
February 20, 2016

Chris Essid
Deputy Director
Office of Emergency Communications
OEC’s Creation

- Lack of national and statewide plans
- Lack of governance
- Lack of standard operating procedures
- Limited training and exercises
- Limited technical standards

Office of Emergency Communications
Created in 2007 to address public safety interoperability gaps

Interoperability: Ability of emergency responders to communicate among disciplines, jurisdictions, frequency bands, and levels of government as needed and as authorized.
SAFECOM and Its Priorities This Year

- 65 members representing 31 public safety and intergovernmental associations
- Works to improve multi-jurisdictional and intergovernmental communications interoperability
- 2016 Priorities include:
  - Strengthen governance
  - Develop best practices for using encryption, standard channel names, and federal and non-federal interoperability channels on LMR systems
Achieving Interoperable Communications

- What is required to achieve and sustain reliable interoperable emergency communications?
  - Governance
  - Standard Operating Procedures
  - Technology
  - Training & Exercises
  - Regular Usage
OEC Today

- **National Emergency Communications Plan (NECP)**
  - Released in 2008 as first national strategic plan for emergency communications
  - Updated in 2014 to account for broadband technology

- **Statewide Communications Interoperability Plans (SCIPs)**
  - 53 out of 56 States have revised SCIPs
  - 20 SCIP Workshops completed in 2015 to update plans; 25 SCIP Workshops planned for 2016

- **State-Requested Technical Assistance (TA)**
  - Completed 163 TA requests in 2015

- **Grants**
  - Drive implementation of NECP priorities and recommendations through DHS grant guidance (e.g. SAFECOM)

- **Priority Telecommunications Services (GETS/WPS/TSP)**
  - Public safety users register to receive priority access to landline & cellular networks in times of increased network congestion
In Watertown police asked residents to remain indoors, and so-called “reverse 911” calls were made to every house advising residents, many of whom were just waking up, to stay put.

Immediately after the announcement, the FBI.gov website received more traffic than it has ever seen, an official said, as well as a “sizable” jump in calls to their tip line. The FBI set up a new site, bostonmarathontips.fbi.gov, to report tips.

“Our two-way radio systems performed well, and our communications plan saw first responders through those chaotic hours after the blast”

Steve Staffier (MA SWIC and Event COML)