

State of 911 Webinar

NATIONAL 911 PROGRAM

FEBRUARY 9, 2016



State of 911 Webinar Series

Designed to provide useful information about Federal and State participation in the planning, design, and implementation of Next Generation 911 (NG911) coupled with real experiences from leaders overseeing these transitions throughout the country

Webinars are held every other month and typically include presentations from a Federal-level 911 stakeholder and State-level 911 stakeholder, each followed by a 10-minute Q&A period

For more information on future webinars, access to archived recordings and to learn more about the National 911 Program, please visit 911.gov

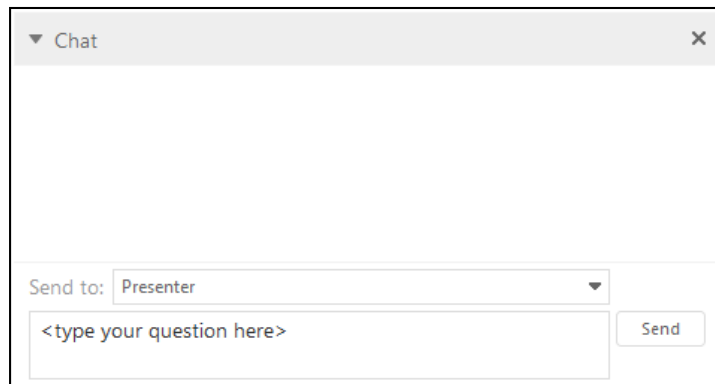
Feedback or questions can be sent to: National911Team@mcp911.com



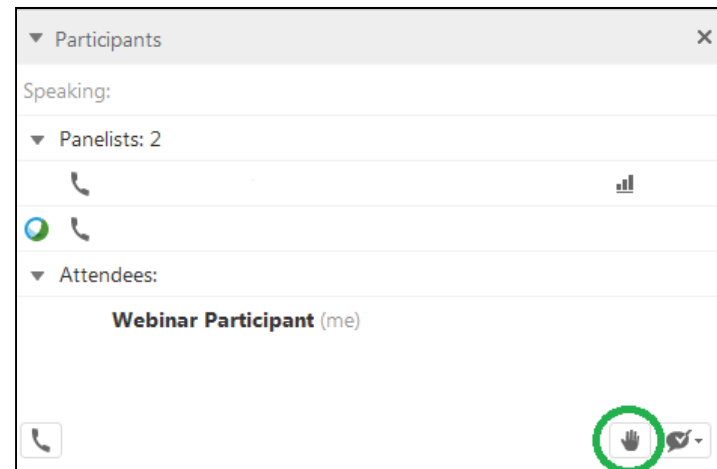
Questions?

For WebEx Technical Assistance, please call: (866) 229-3239, Option 1

To ask a question, please use WebEx's "Chat" feature located on the right-hand side of your screen.



During the Q&A portion of the webinar, please click on "Raise Hand" and your phone will be unmuted.



National 911 Program Update

Laurie Flaherty
Coordinator

Goals of the National 911 Program



1. Enable & promote coordination among public and private 911 stakeholders at local, State and Federal/national levels
 2. Collect & create resources for state/local 911 Authorities
 3. Administer a grant program for the benefit of 911 Public Safety Answering Points (PSAPs)
-
- Provide a Federal “home” for 911
 - Promote and support 911 services

Job #1: Coordination & Collaboration

Federal:



- » Emergency Communication Preparedness Center
 - Steering Committee
 - Grants Focus Group
 - 911 Focus Group
- » FCC – Public Safety and Homeland Security Bureau
 - Communications Security, Reliability and Interoperability Council
 - Task Force on Optimal PSAP Architecture
- » DHS – Office of Emergency Communications
 - Liaison
- » Department of Defense – Public Safety Communications Working Group
- » Coast Guard

- » FirstNet

Job #1: Coordination & Collaboration



National Facilitator:

- ❖ Recommended Guidelines for Minimum Training for the Telecommunicator
- ❖ Interstate Play Book
- ❖ National 911 Education Coalition

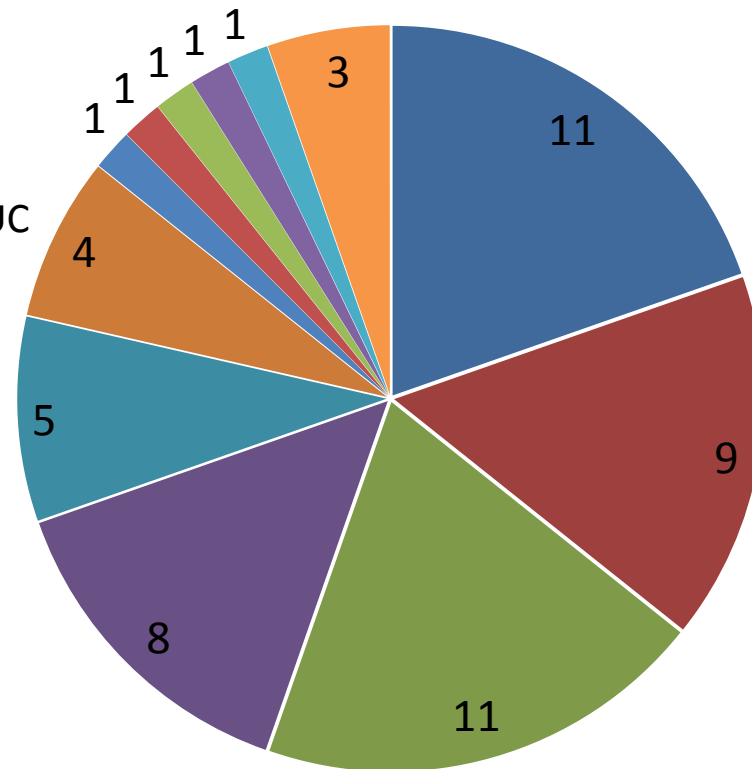


www.know911.org



Where State 911 Agencies are Located

- Homeland Security/Public Safety
- Emergency Management
- Emergency Communication
- Admin/Management/Finance/PUC
- 911 Board/Office
- IT
- Association of Counties
- Resource Center
- Commerce Commission
- Coordinating Council
- State Police
- NA



Job #2: Resources



- National Profile Database
- NG911 Standards ID & Review
- Assessment of a Statewide 911 System
- 911 Legislative Tracking Database
- "911 Connects" Newsletter
- NG911 Video
- "State of 911" Webinar series

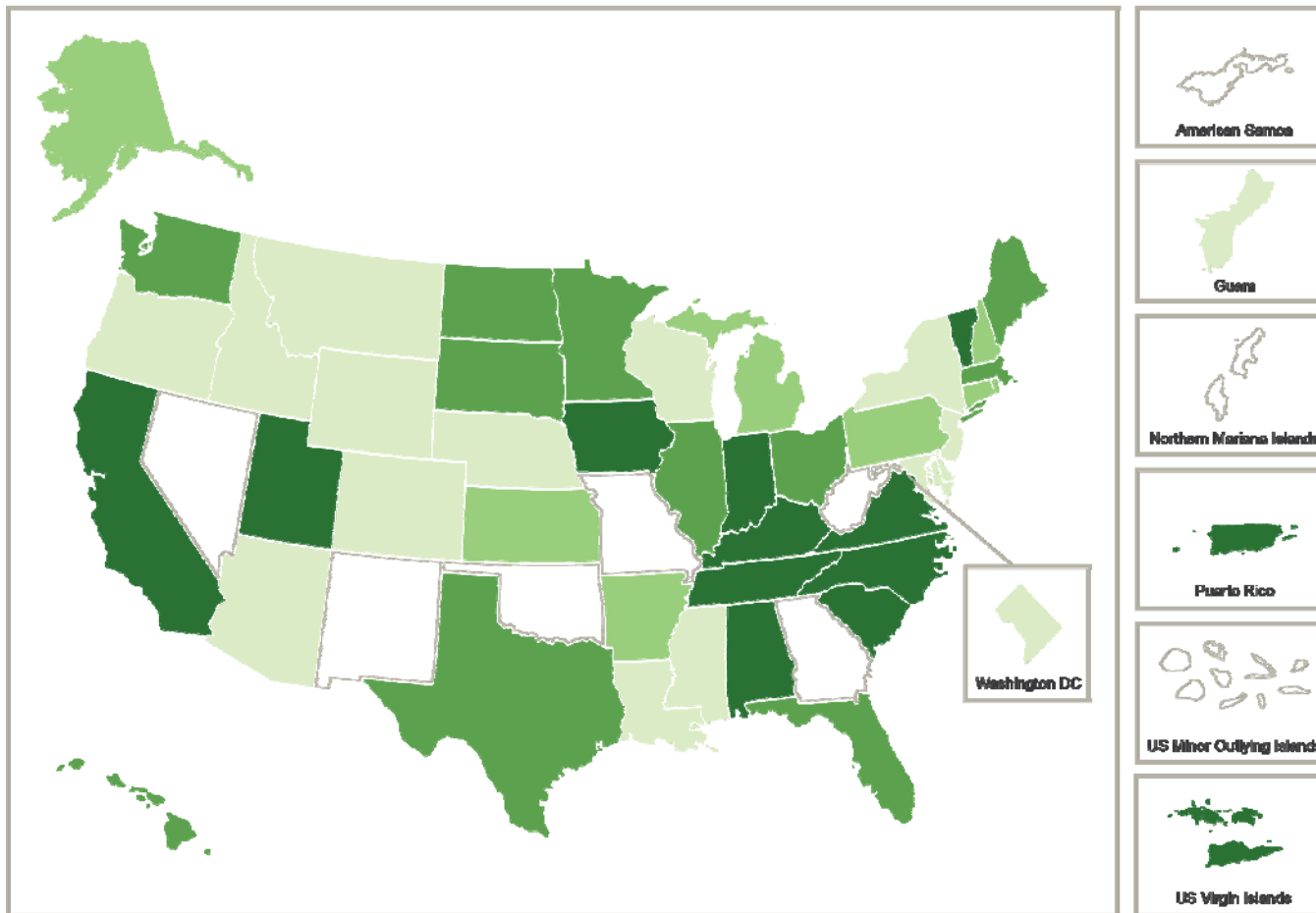
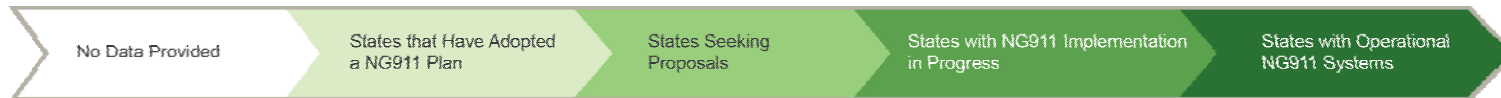
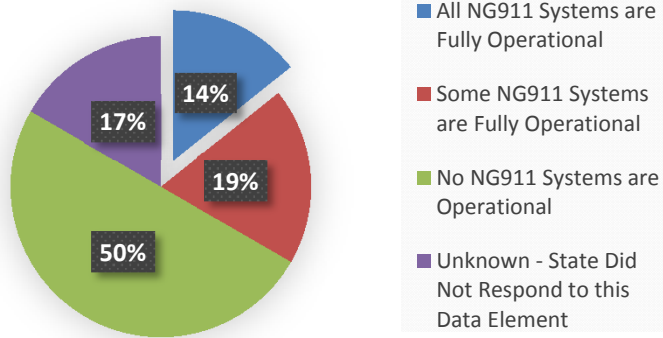


Figure 3. NG911 Systems by Reporting States



(“fully operational” defined as systems using NG911 infrastructure to process voice calls, including ANI & ALI)

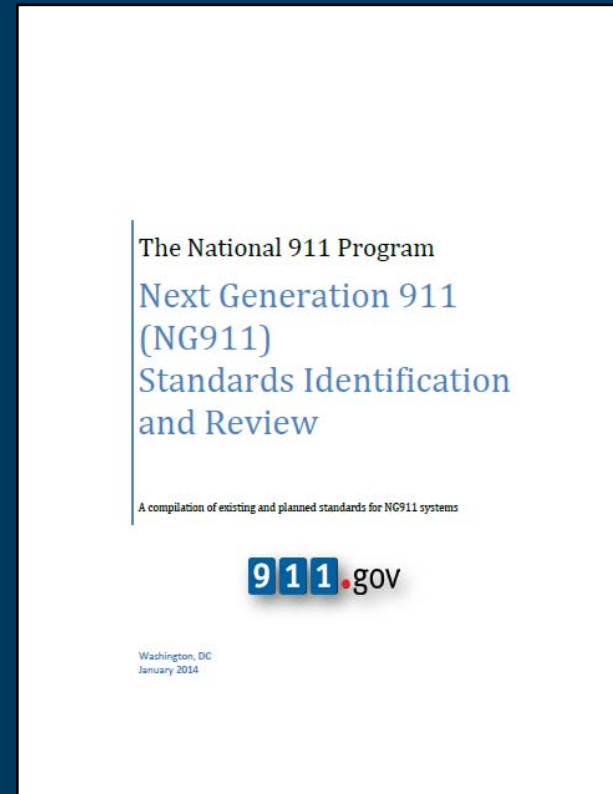
Table 2. Implementing Next Generation 911

Data Element	2011 Data by Reporting States	2013 Data by Reporting States	2014 Data by Reporting States
Statewide NG911 Plan Adopted	9 of 27	15 of 39	19 of 42
Statewide NG911 Concept of Operations Developed	3 of 27	12 of 39	16 of 42
Statewide Request for Proposal Released	Not Reported	13 of 36	18 of 42
State Contract Has Been Awarded	Not Reported	13 of 29	16 of 42
Statewide Installation and Testing	Not Reported	9 of 30	11 of 42

Job #2: Resources – Standards ID & Review

Types of Standards:

- Product
- Interface
- Data
- Test
- Performance
- Operations



National Conference of State Legislatures **911.gov**

Online 911 Legislation Tracking Database

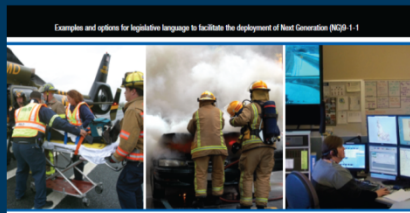
The screenshot shows the homepage of the National Conference of State Legislatures (NCSL) 911 Legislation Tracking Database. The page features the NCSL logo and navigation tabs for 'About Us', 'Legislators & Offices', 'News & Research', 'State Federal Committees', 'Legislative Staff', 'Meetings', 'Resources', 'Magazine', 'Resources & Directories', and 'Press Room'. The main content area is titled '9-1-1 Legislation Tracking Database' and includes a search bar, a list of legislative topics (e.g., 9-1-1 Administration, Plans, Boards & Commissions), and a brief description of the database's purpose. A sidebar on the right contains sections for 'Resources', 'Related Documents', 'Issues & Resources', and 'Members'. The footer provides contact information for Denver and Washington offices.

The screenshot shows a specific legislative page for H.R. 2362, titled '2011 Enacted 9-1-1 Legislation'. The page includes a search bar, navigation tabs, and a detailed description of the bill. The bill's title is 'To amend the Federal Communications Act to improve public safety emergency communication services to operate in today's digital mobile society, and for other purposes'. The page also includes a sidebar with 'Resources', 'Related Documents', 'Issues & Resources', and 'Members'. The footer provides contact information for Denver and Washington offices.

Safer cars. Safer Drivers. Safer roads.



Job #2: Resources



Guidelines for
STATE NG9-1-1
Legislative Language



Model
State
911 Plan



NG911
A LEADER'S GUIDE TO
NEXT GENERATION 911
FOR LAW ENFORCEMENT

5 Ways That
NG911 Can Improve
Your Agency

911.gov

About the Program | 911 Issues | Program Initiatives | National 911 Coordination

The "State of 911" Webinar Series

Home / 911 Issues / The "State of 911" Webinar Series

2015 Webinars | 2014 Webinars | 2013 Webinars | 2012 Webinars

Click [HERE](#) to sign up to receive updates on the State of 911 Webinar Series.

December 2015

FCC Activities & Statewide Management Information Systems Updates
Hear about FCC 911 and public safety task force activity updates and discussion of statewide Management Information Systems (MIS) in Utah.

Speakers Include:

- Federal Update: Tim May, Policy and Licensing Division, FCC Public Safety and Homeland Security Bureau
- Stakeholder Update:



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Job #2: Resources



NG911 Cost Study

...to serve as a resource for Congress as it considers creating a coordinated, long-term funding mechanism for NG911.

7 parts:

1. How costs would be broken out geographically & allocated among PSAPs, broadband service providers, and third-party providers of NG911 services
2. Assessment of the current state of NG911 readiness among PSAPs
3. How PSAP access to broadband may affect costs
4. Technical analysis & cost study of delivery platforms, e.g., wireline, wireless and satellite
5. Assessment of architectural characteristics, feasibility and limitations of NG911 service delivery
6. Analysis of the needs of persons with disabilities
7. Standards and protocols for incorporating VoIP & "Real-Time Text" standards.

Period of performance: October 2016 thru September 2018

Job #3: 911 Grant Program: \$115 Million

- “(A) Migration to an IP-enabled emergency network, and adoption and operation of Next Generation 911 services and applications;
- “(B) Implementation of IP-enabled emergency services and applications enabled by Next Generation 911 services, including the establishment of IP backbone networks and the application layer software infrastructure needed to interconnect the multitude of emergency response organizations; and
- “(C) Training public safety personnel

(For info as it is available: <http://www.911.gov/911grants.html>)

Job #3: 911 Grant Program



The screenshot shows the 911.gov website with a navigation menu including 'About the Program', '911 Issues', 'Program Initiatives', 'National 911 Coordination', and 'Resource Center'. The main content area is titled '911 Grant Programs' and contains the following text:

Home / National 911 Program Initiatives / 911 Grant Program

The advances in telecommunications technology are changing the every portion of the emergency communications ecosystem. The 911 Grant Program provides grant funding to support local and state 911 Public Safety Answering Points (PSAPs) in upgrading their 911 systems.

In September 2009, the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) and the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) awarded more than \$40 million in grants for the implementation and operation of Phase II enhanced 911 services and for the migration to an Internet-Protocol (IP) enabled emergency network. Grantees used funds to upgrade their 911 systems to comply with Phase II wireless E911 requirements, implemented Next Generation 911 (NG911) technologies, and make significant improvements in technology and emergency communication. Go to the [E911 Grant Program](#) page to learn more and read the full report online [here](#).

In November 2014, the FCC conducted the AWS-3 spectrum auction which generated approximately \$44.8 billion in revenue. Of that total, \$115 million has been set aside for the 911 Grant Program. See below to gain a general understanding of the activities that will be completed as part of the 911 Grant Program.

- Stage 1: FCC conducts AWS-3 spectrum auction
- Stage 2: Auction proceeds transferred to Public Safety Trust Fund
- Stage 3: Public Safety Trust Fund transfers funds to 911 Grant Program
- Stage 4: NHTSA & NTIA draft joint grant regulations
- Stage 5: Public provides comments on draft regulations
- Stage 6: Final regulations are published and grant applications accepted
- Stage 7: Grants are awarded

Click [here](#) to sign up to receive updates on the NHTSA/NTIA 911 Grant Program.

On the right side of the page, there is a search bar, a 'Need to call 911?' button, and several resource sections: '911 Program Initiatives' with a 'Read More' button, 'Resources for 911 Systems' with a 'Shared Tools & Documents' link, 'Receive National 911 Program Updates', and 'State 911 Resources' with links to 'Document Resource Center', 'Model Legislation Guidelines', and 'Profile Database'.

Safer cars. Safer Drivers. Safer roads.



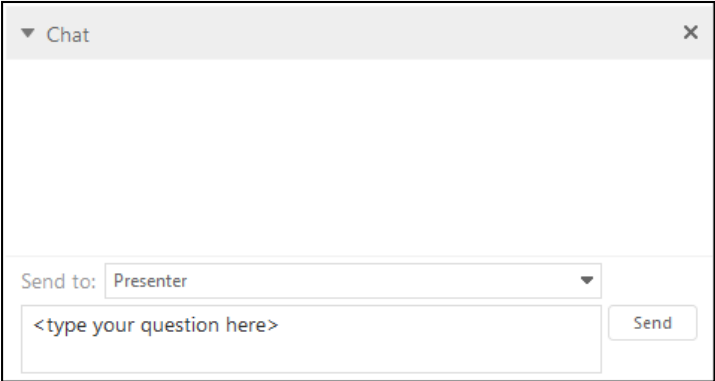


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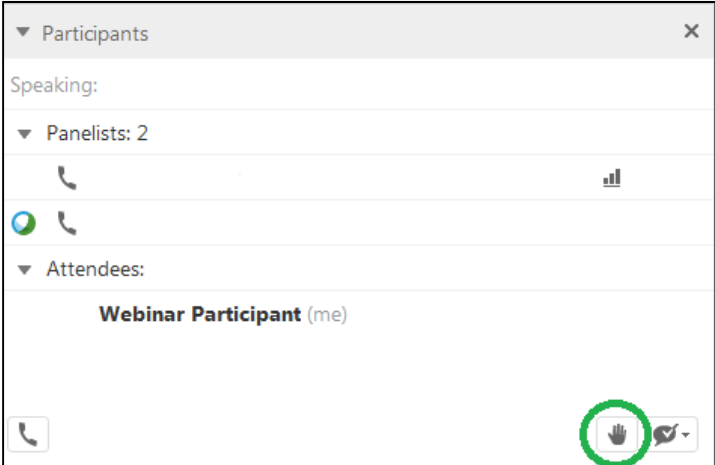


Q&A Period

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INFRASTRUCTURE UPGRADE

ESInet Deployment



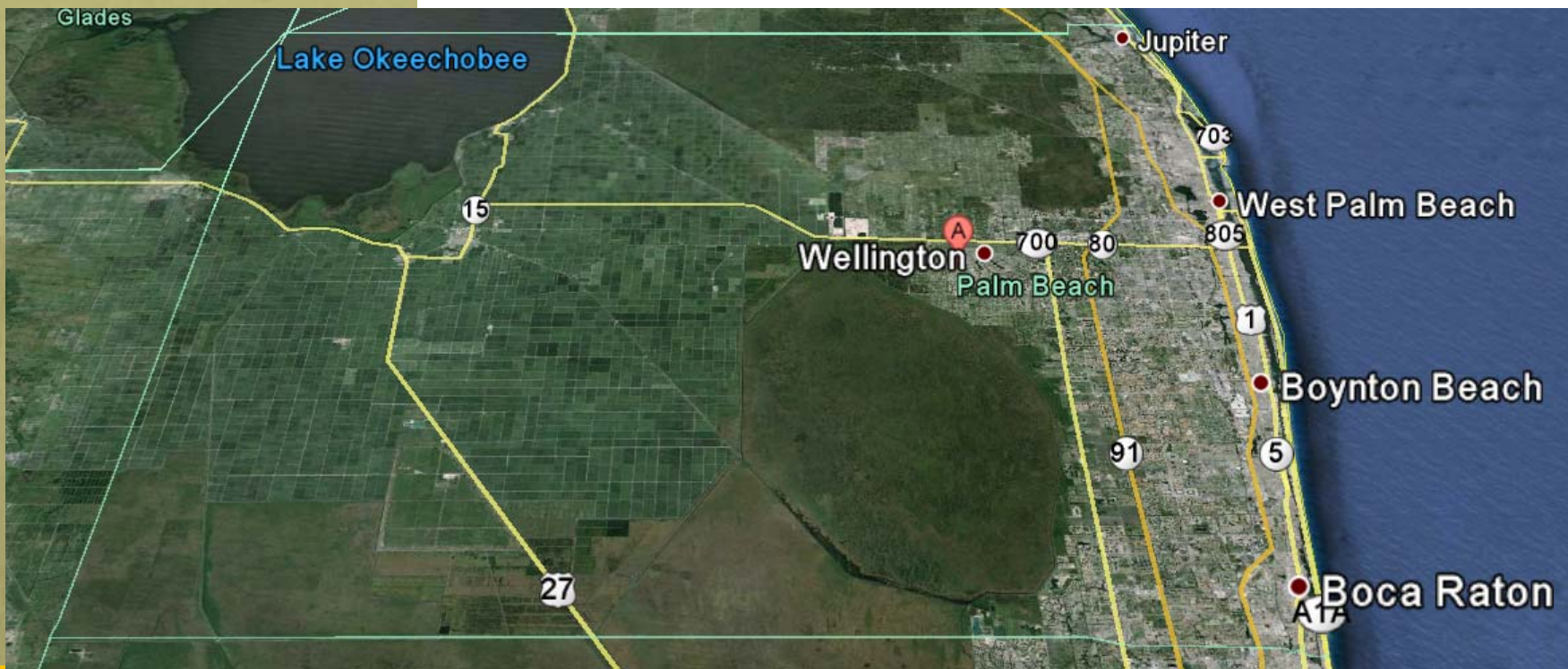
Palm Beach County

Chuck Spalding

9-1-1 Director

2,000 SQ MILES 1.4 MILLION

Palm Beach County



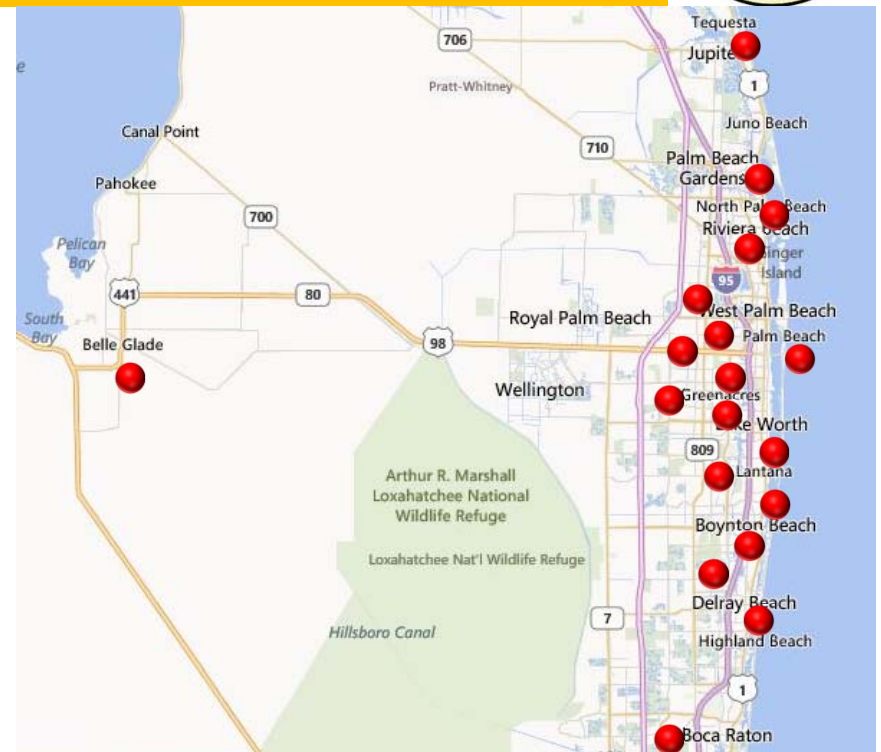
36 MUNICIPALITIES

PUBLIC SAFETY ANSWERING POINTS Composition



18 PSAP's

- 16 Municipal
- 2 Palm Beach Sheriff's Office
- Palm Beach Fire Rescue
- 1.2M 9-1-1 Calls Annually



38 MUNICIPALITIES

DDoS Event



Distributed Denial of Service Attack

- Public Announcement
- Intended Target Provided an Option
- Identified Specific Target

Collateral Damage

- Damage Inflicted on an UNINTENDED Target



https://www.youtube.com/watch?v=C6Rn9d0T_V4

DDoS Event

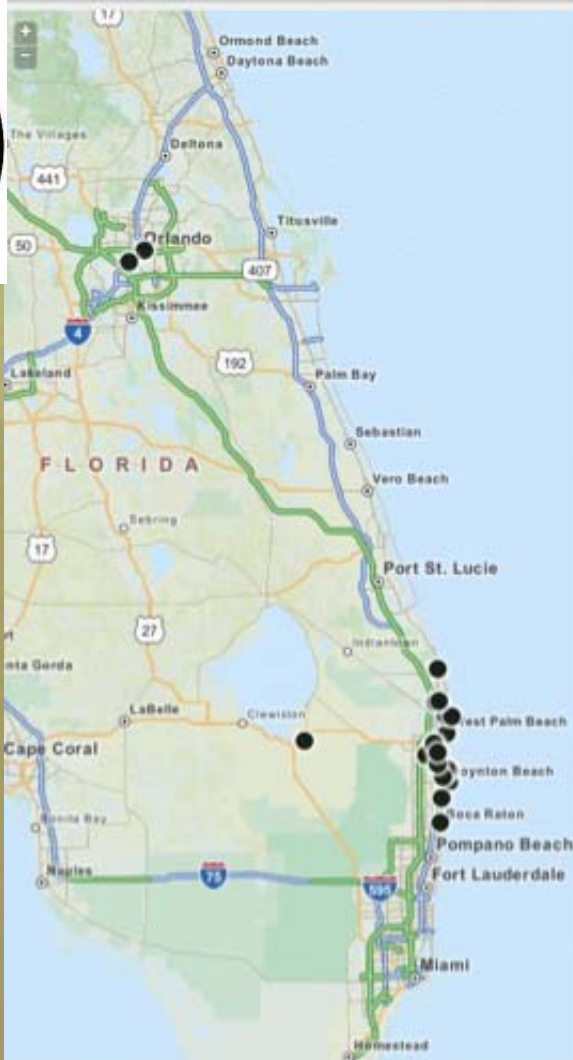


Connectivity to Three PSAP's Overwhelmed

- 9-1-1 Calls Routed to Other PSAP's

Network Management Tool

- Provided IMMEDIATE indication of Connectivity Issues



DOWN SENSORS (PBC 911 SYSTEM -

Sensor	Status	Last Value	Priority	Fax	Probe Group Device	Message
-	-	-	-	-	-	-

PBC 911 System

Probe Device

Position and Server Monitoring

Boca Raton

29 devices

Intrado Core Servers

Group 1 VIPER - EOC

8 devices

Group 2 VIPER - IDC

8 devices

LVR - RECORDER - EOC

6 devices

LVR IDC - RECORDER - IDC

6 devices

HOST EOC

3 devices

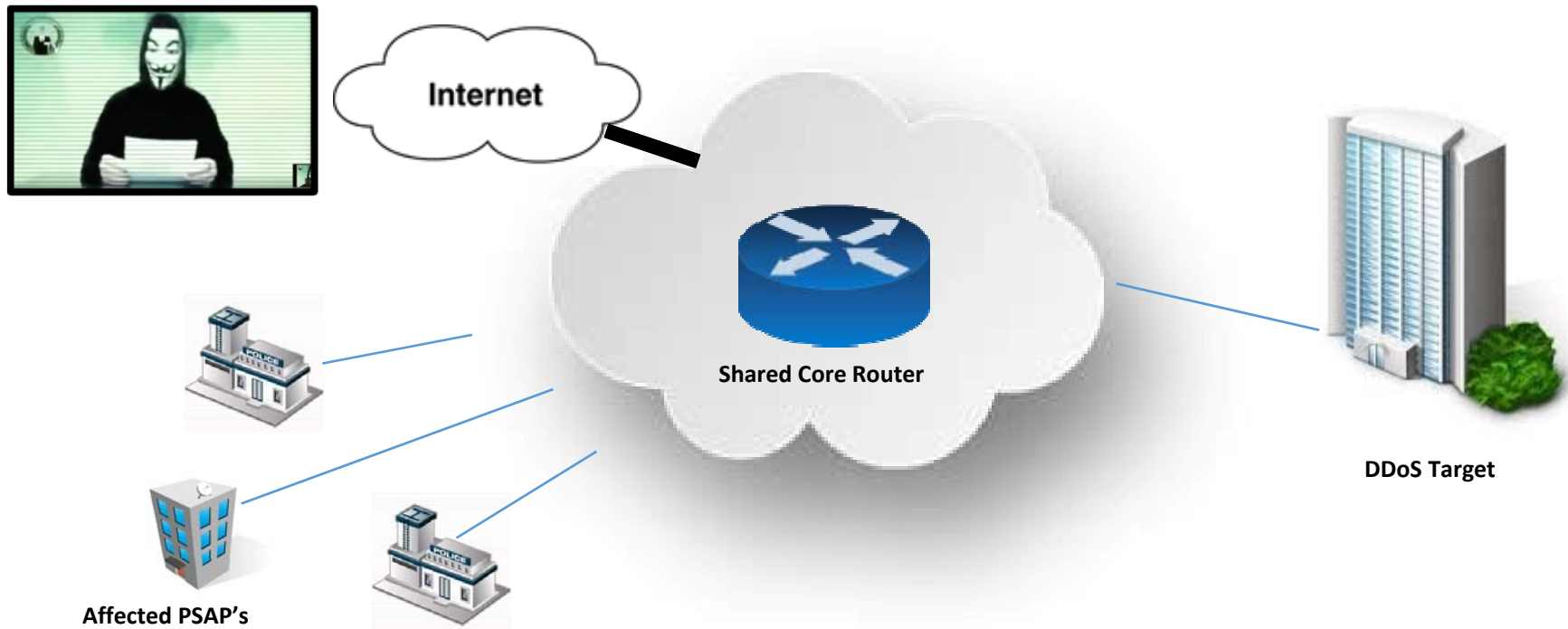
HOST IDC

3 devices

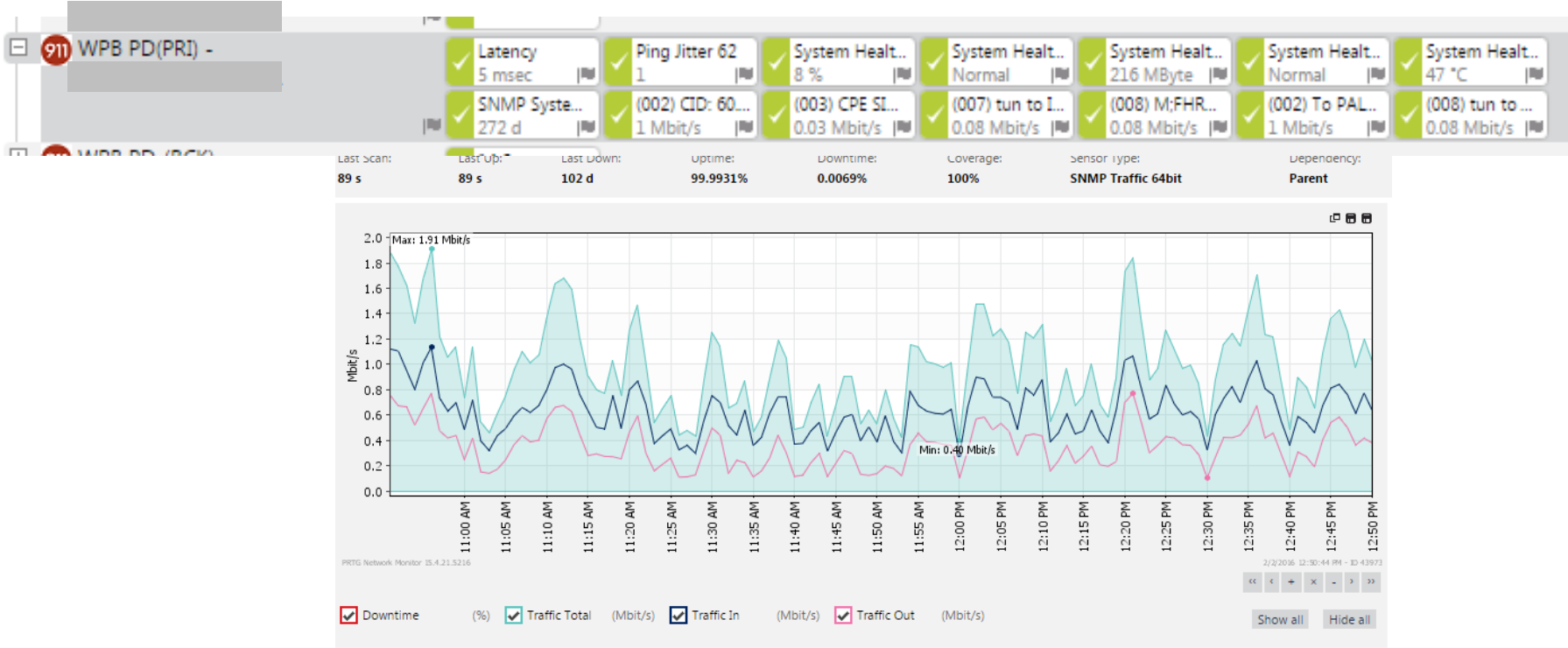
911 Circuits

- PALM SPRINGS PUBL...
- ATLANTIS PD - 911...
- BOCA RATON PSAR...
- BOCA RATON PSAR...
- BOYNTON BEACH P...
- BOYNTON BEACH P...
- DELRAY BEACH PD...
- DELRAY BEACH PD...
- FIRE/EMS (BCK) - 91...
- FIRE/EMS(PRI) - 911...
- GREENACRES PD(PR...
- GREENACRES PD (B...
- LANTANA PD - 911...
- MANALAPAN PUBL...
- NCC-ESNET-PALM ...
- OCEAN RIDGE PUBL...
- PISO-GLADES(PRI) ...
- PISO-GLADES(BCK)...
- PB GARDENS PD(PR...
- PALM BEACH SHOR...
- RIVIERA BEACH PD ...
- RIVIERA BEACH PD...
- VIPER-EOC - 911NE...
- WARNING POINT C...
- WPB PD(PRI) - 911...
- WPB PD-(BCK) - 911...
- Town of Palm Beach...
- Town of Palm Beach...
- BOYNTON BCH CO...
- BOYNTON BCH CO...
- PB GARDENS PD(BCK...
- TEQUESTA PD - 911...
- RCC Secondary - 91...
- RCC Primary - 911D...
- ALL-Colonial NCC P...
- ORL-Colonial NCC S...

DDoS Event



Network Monitoring



9-1-1 Palm Beach County



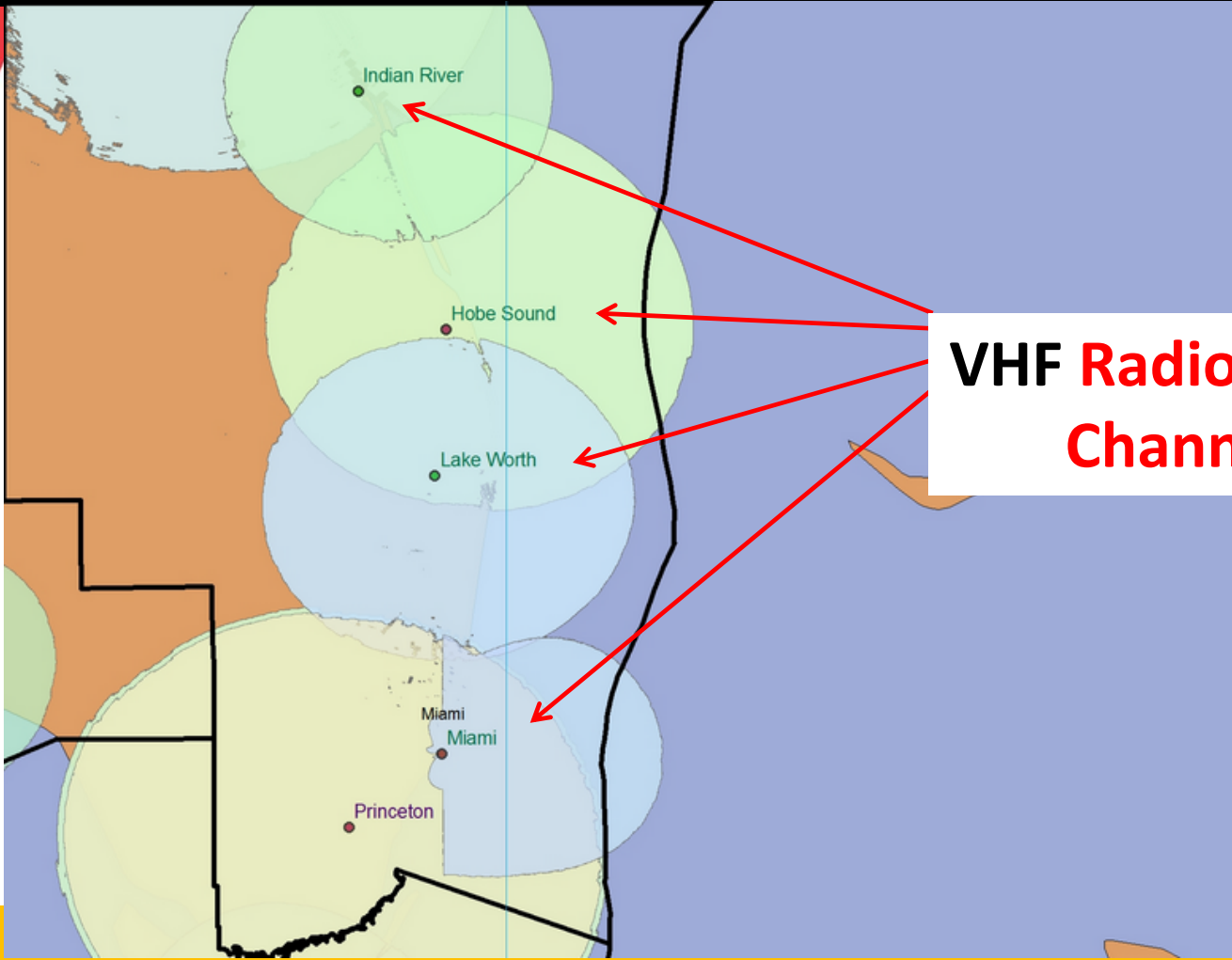
U.S. Coast Guard Collaboration Project

ESinet Text-to-911 Geospatial Routing Evolving Standards

USCG S A R S Radio System



Nautical Miles 0 5 10 20
+++++



**VHF Radio Antenna
Channel 16**



DSC Radio – Needs GPS



911 ASSOCIATIONS



And Then...



OBE_Override by event



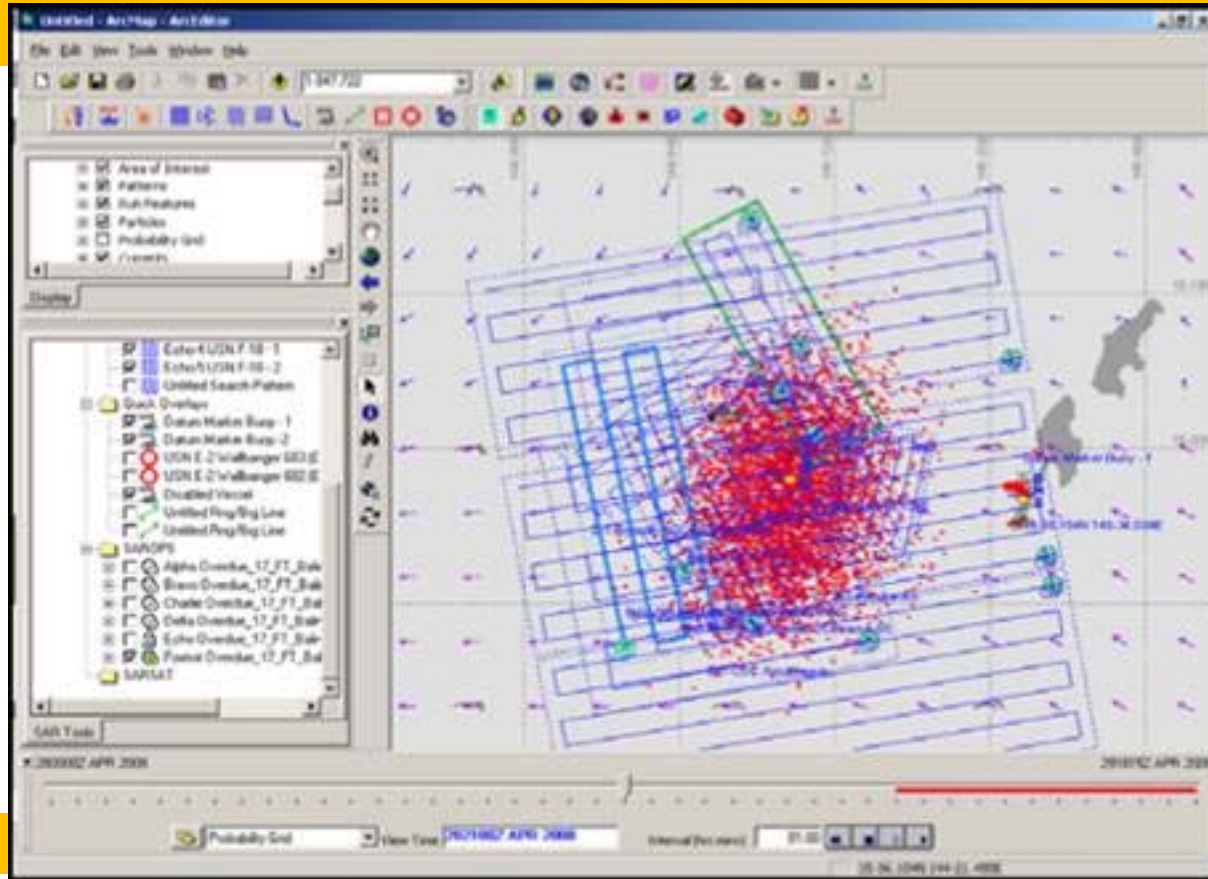
USCG Challenge



- **Today- 60% of Mariners Dial 9-1-1 in an Emergency**
- **9-1-1 Calls are Answered by Local 9-1-1 Agencies, Transferred to USCG**
- **USCG Only Receives the Audio**
- **Locating Mariner in Distress Can Be Challenging**

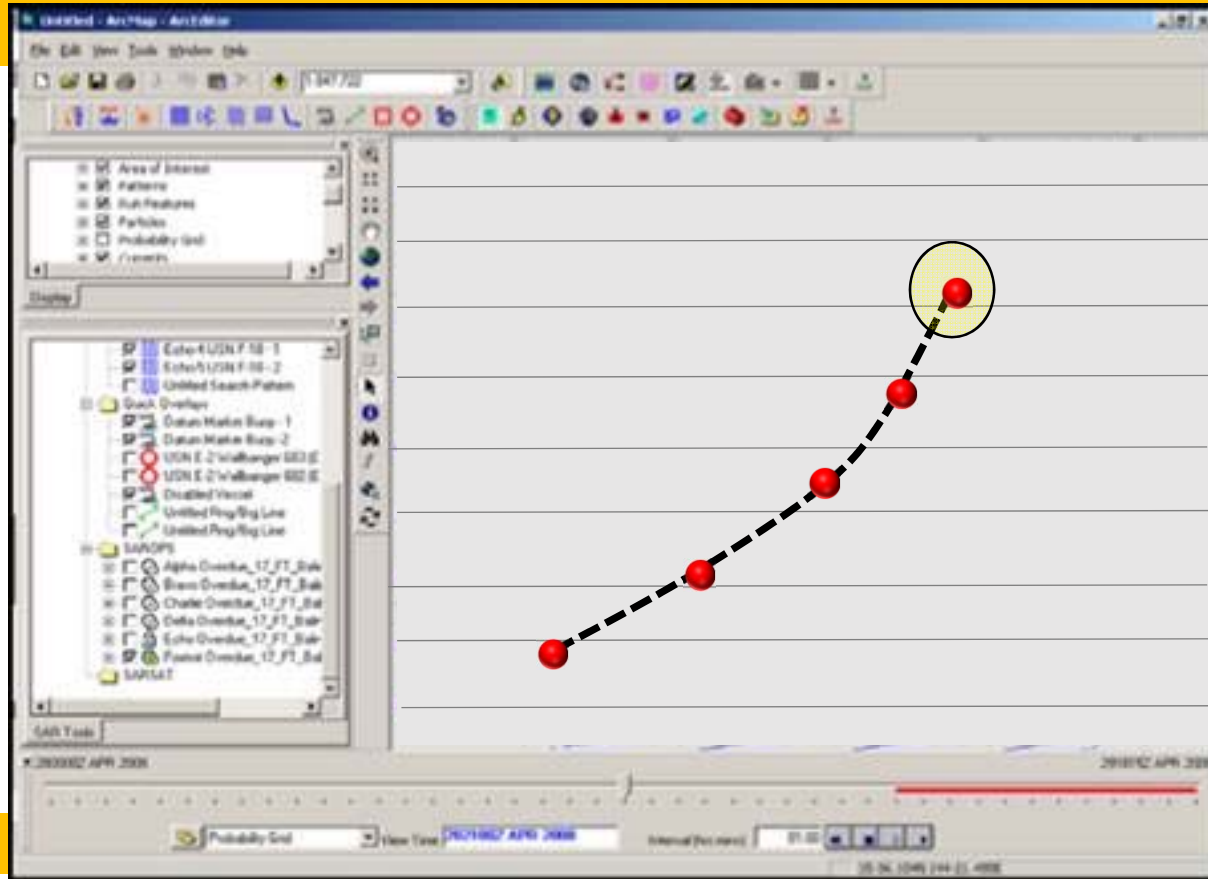


Today - Computer Modeling

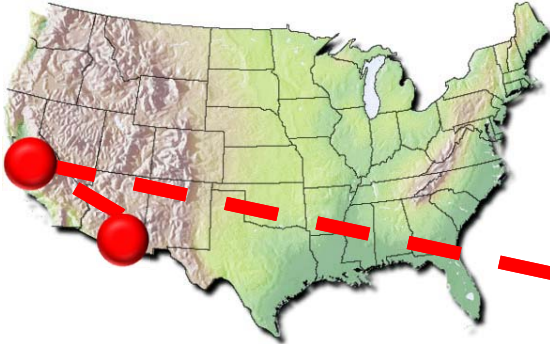




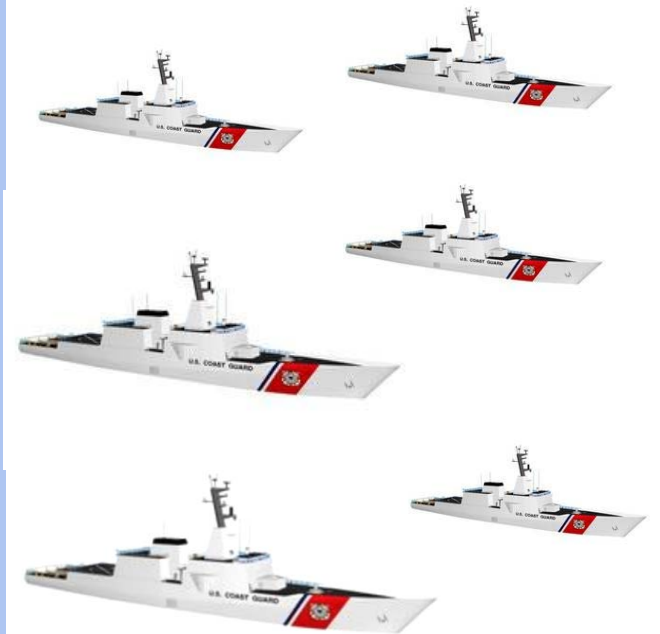
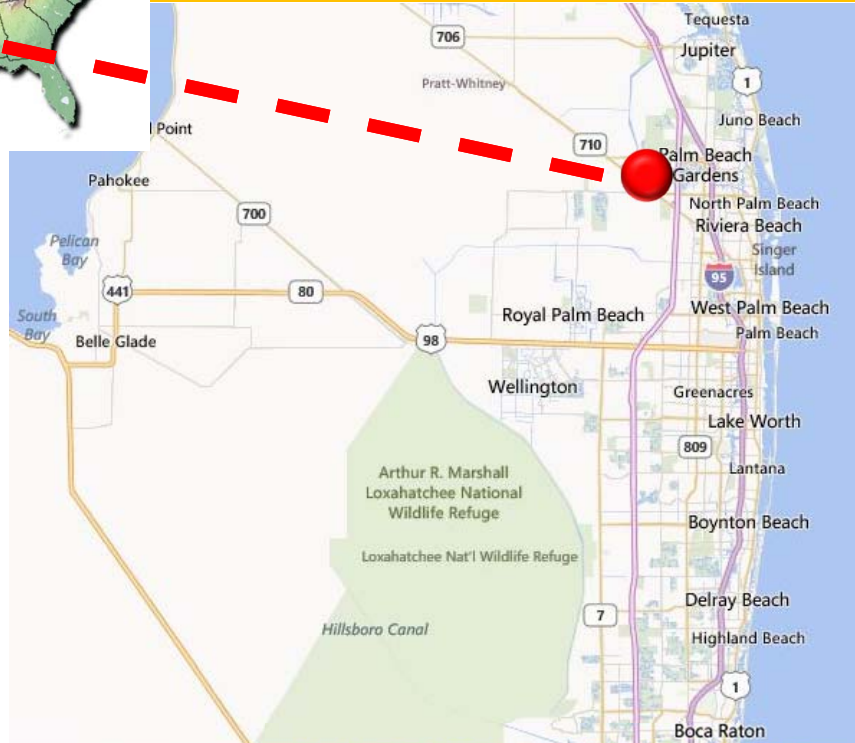
Future - Location Tracking



NEXT GENERATION 9-1-1



9-1-1 Field Event



38 MUNICIPALITIES



Results



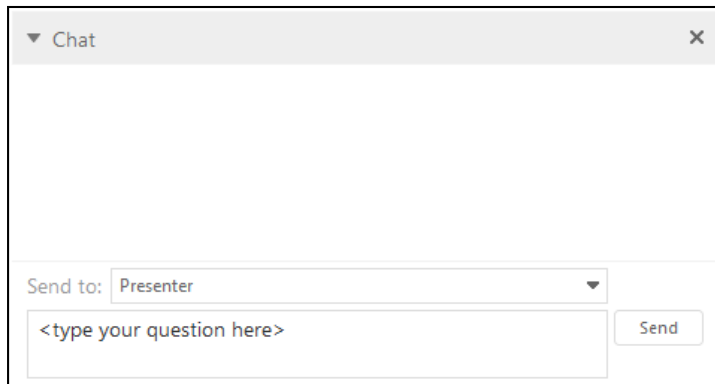
- **Successful Calls Made (Depending on Carrier) 10-14 Nautical Miles Offshore**
- **Data Collected for Potential System Integration**
- **Importance of PSAP Call Takers Providing Phase 2 Location Information to USCG on Call Handoff**

Questions?

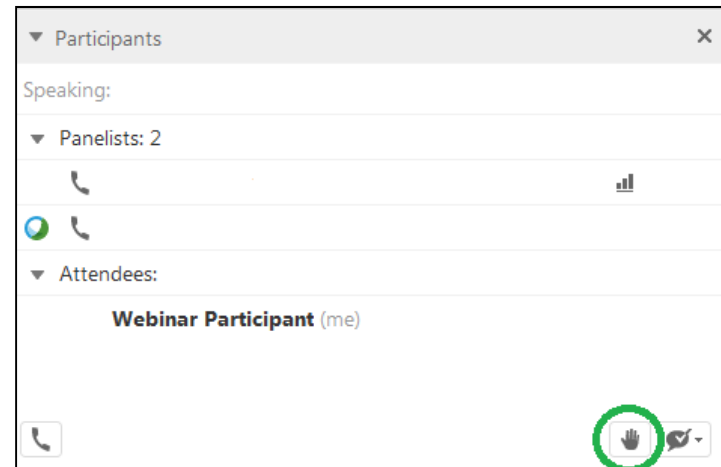


Q&A Period

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Future Webinars

Next Scheduled Webinar: Tuesday, April 12, 2016 at 12 noon ET

Presenters will be announced shortly and registration will be available early next month

To register, visit: <https://mcp911events.webex.com> and click on “2016 ‘State of 911’ Webinar Series”.

Visit 911.gov/webinars.html to access archived webinars



National 911 Program

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