



Homeland Security
and Emergency Services

State Interoperable & Emergency Communication (SIEC) Board Meeting

November 20, 2019

Welcome and Opening Remarks

Michael A. Sprague,
Director, Office of
Interoperable &
Emergency
Communications,
Chair, SIEC Board



Roll Call

Approval of Minutes

Approval of Agenda

Roll Call; Approval of the Meeting Agenda;

Approval of Minutes from July 31, 2019 Meeting

Approval of Agenda for November 20, 2019



NCSWIC State Interoperability Markers New York Workshop

November 20, 2019

PERFORMANCE MANAGEMENT & ENTERPRISE ANALYTICS



CISA
CYBER+INFRASTRUCTURE

Mark Grubb
November 2019

CISA Overview

Cybersecurity And Infrastructure Security Agency (CISA)

Emergency Communications Division

Enhances public safety interoperable communications at all levels of government, providing training, coordination, tools and guidance to help develop emergency communications

Infrastructure Security Division

Provides strategic guidance to public and private partners, promotes a national unity of effort, and coordinates Federal efforts to promote the security and resilience of the Nation's critical infrastructure

Cybersecurity Division

Offers cybersecurity programs and services to improve cybersecurity postures, including training, and technical assistance.

Integrated Operation Division

Provides tools and training to partners to help partners in government and industry manage the risks to their assets, systems, and networks.

Stakeholder Engagement Division

Leverages partnerships to build capacity for resilience across the Nation's critical infrastructure and the cybersecurity community.

National Risk Management Center

A planning, analysis, and collaboration center that identifies and addresses the most significant risks to the Nation's critical infrastructure

- Created by the *Cybersecurity and Infrastructure Security Agency Act of 2018*
- Leads the Federal Government's cyber security, critical infrastructure protection, and emergency communications efforts
- Unites efforts from across government and industry to understand and manage risks together



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What CISA Does

Emergency Communications Core Competencies



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National and Statewide Planning & Execution

Develop and implement nationwide emergency communications policy and plans, including the National Emergency Communications Plan (NECP) and 56 Statewide Communications Interoperability Plans (SCIPs)



National Governance

Support nationwide sharing of best practices and lessons learned through facilitation of the SAFECOM and Emergency Communications Preparedness Center (ECPC) governance bodies



Technical Assistance & Outreach

Build capacity with Federal, State, Local, Tribal, and Territorial stakeholders by providing technical assistance, training, resources, and guidance



Federal Grant Coordination

Manage funding, sustainment, and grant programs to support communications interoperability



Priority Telecommunications Services (PTS)

Provide PTS over commercial networks to enable national security and emergency preparedness personnel to communicate during congestion scenarios across the nation



Assessment and Reports

Assess the Nation's progress regarding interoperable emergency communications to identify remaining gaps

The True Cost and Scope of Emergency Communications

Emergency Communications Iceberg Graphic

What Most People See

911 

- Voice Systems (Telephone)
- Computer Aided Dispatch (CAD) Systems
- Transition to Next Generation 911 (NG911)

What People Don't See



Radio Communications Systems

- Mobile and Portable Land Mobile Radio (LMR)
- Interoperability Maintenance Costs
- Communication Towers
- Tower Equipment Sheds



Broadband & Data Systems

- Mobile Data Terminals (MDT)
- FirstNet
- Government Emergency Telecommunications Service (GETS)
- Wireless Priority Service (WPS)



Alerts & Warnings

- Outdoor Warning Systems
- Emergency Alert System (EAS)
- Wireless Emergency Alerts (WEA)
- IPAWS (including silver/amber alerts)
- TV/Radio/Website/Media Updates
- Social Media Outlets

Governance

- SWIC / Communications Champion
- Statewide Communications Office
- Strategic Planning

Training & Exercises

- Telecommunicator/Dispatch Training and Retention
- Agency LMR, Telephone, Alerts/Warning procedures
- Agency System Maintenance staff (technicians, engineers)
- Incident Communications Training
- Communications Exercise (tabletop, functional)
- Technical Emergency Response Training (TERT)
- Incident Communications Unit staff training, including:
 - Communications Unit Leader (COML)
 - Communications Technician (COMT)
 - Incident Tactical Dispatcher (INTD) Training
 - Radio Operator (RADO) Training
 - Information Technology Service Unit Leader (ITSL)
 - Audio Gateway Information and Training
 - Cybersecurity Training and Awareness

Cybersecurity

- Expertise and Planning
- Tools and Solutions
- Risk and Vulnerability Management
- Prevention Equipment and Training



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Framework Development Process

1

Resource Analysis

CISA analyzed numerous resources to identify markers that could indicate interoperability “health” at the state/territory level. Some included:

- SCIPs
- ICCAP observations
- After Action Reports
- Lessons learned from *Enhancing Public Safety Governance Workshops* (2018 CISA & NGA effort)

2

Collaboration

CISA worked collaboratively to discuss research trends and gather feedback. This collaboration helped identify what measures were the most important.

3

Groups Defined

Based on all the gathered information, CISA developed the markers and defined three categories to distinguish the state/territory level interoperability health:

Initial

Defined

Optimized

4

Language Developed

Official language for the state markers was developed based on input from:

- NCSWIC Executive Committee
- Full NCSWIC in PA & OK
- 14 States participating in two Pilot Meetings



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Benefits for States and Territories



Understand impacts of interoperability efforts



Improve coordination and buy-in from lawmakers and executive branch staff



Reduce workload by eliminating Statewide Communication Interoperability Plan (SCIP) Snapshots and reducing time to gather data



Improve strategic planning and implementation aligned to ecosystem



Justify grant funding and state budget requests



Enhance the SCIP planning process



Improve coordination with locals



Enhance governance body participation and membership



Benefits for CISA



Understand state/territory interoperability capabilities and gaps and assist in improving the SCIP process



Improve alignment to the 2019 National Emergency Communications Plan (NECP)



Improve Technical Assistance (TA) offerings to better meet state/territory needs

Justify resource requirements to DHS leadership, the Office of Management and Budget (OMB), Congress, and the President

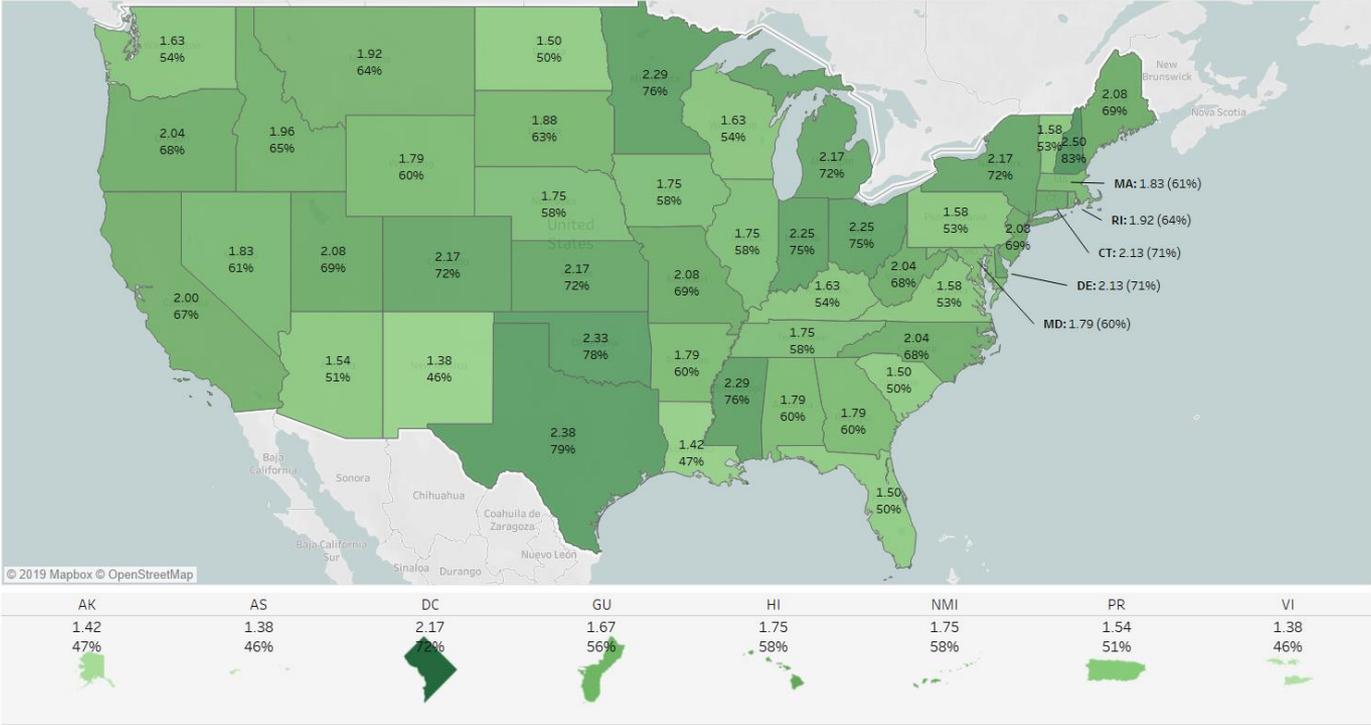


Respond to Congressional, Government Accountability Office and OMB requests for ECD program impacts



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State Marker Status Map



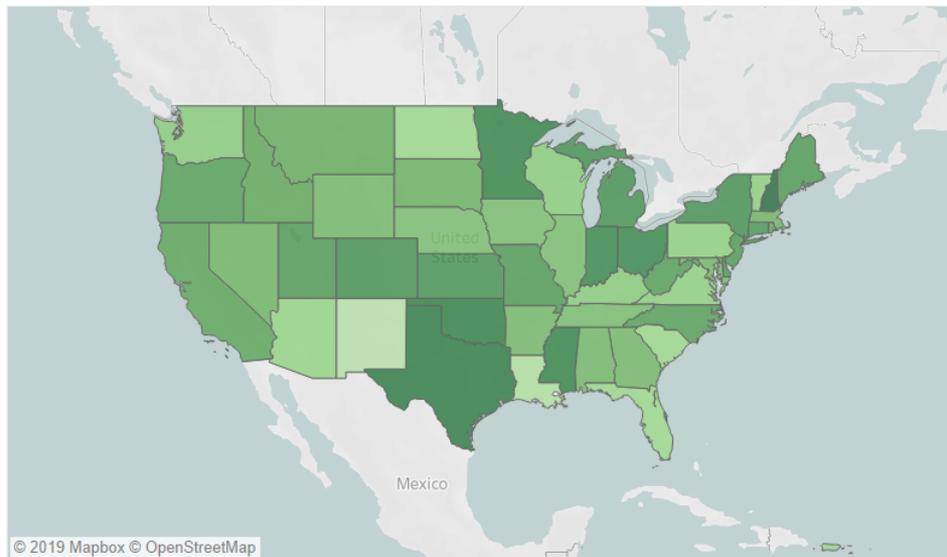
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New York vs. National Average

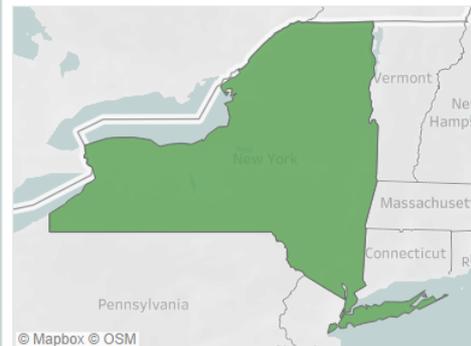
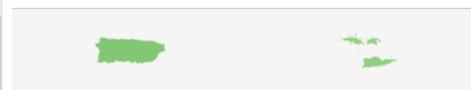
1.87

National Average Marker Score



1.79

Region II Average Marker Score



2.17

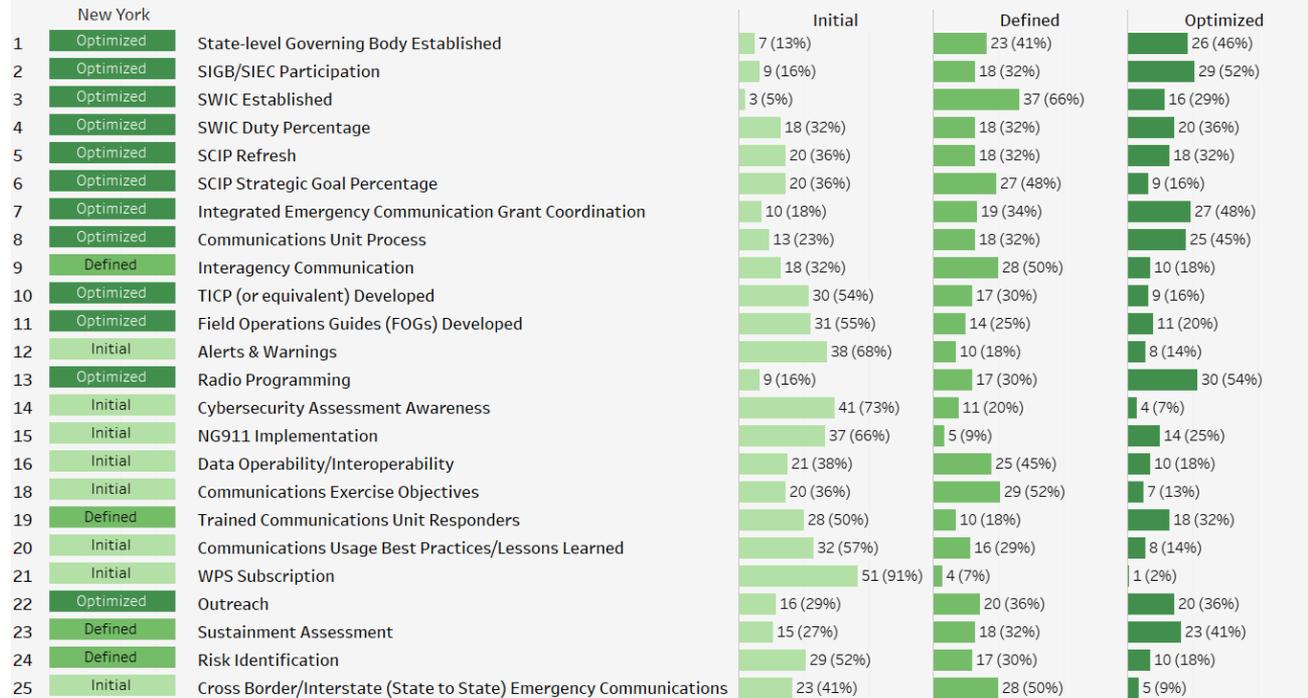
New York Average Marker Score



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New York vs. National View

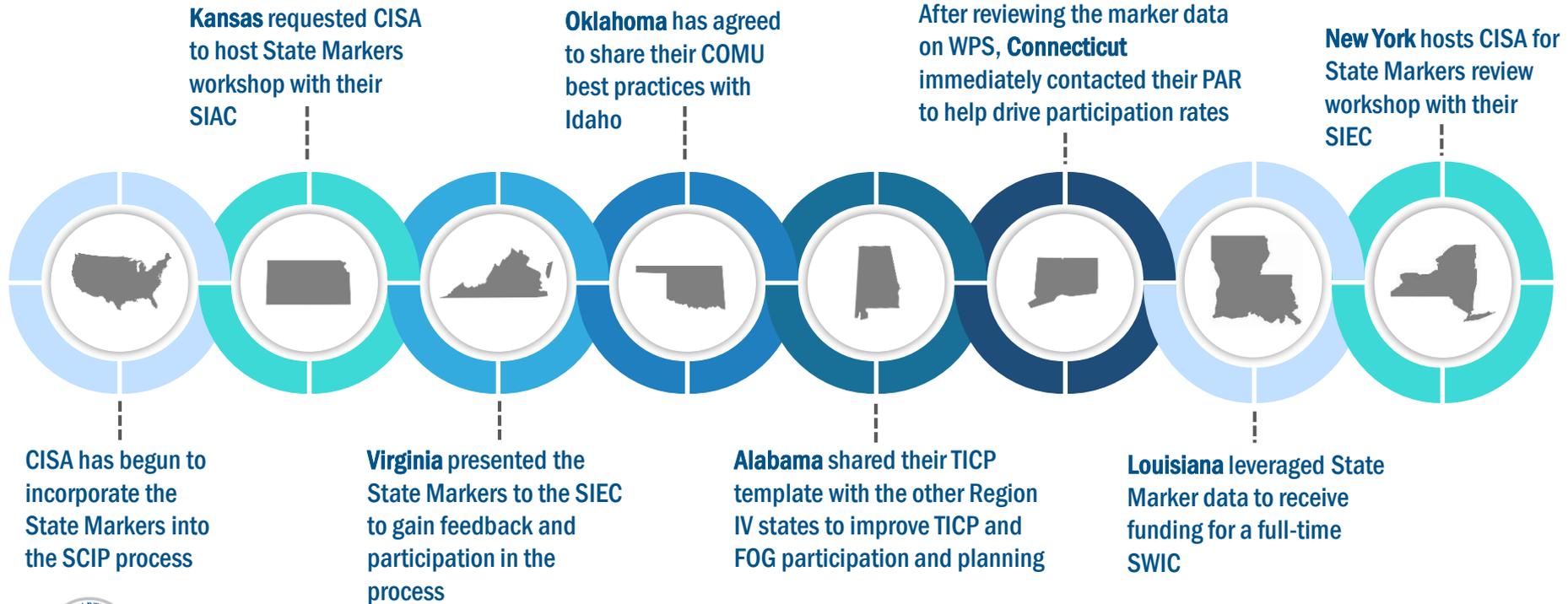
New York vs. National View - November 19, 2019



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State Marker Success Stories





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For More Information: [CISA.GOV](https://www.cisa.gov)

Questions?

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Phone: 302-419-6775

PSAP, SICG and Targeted Grant Updates

Presented by
Larissa Guedko, Radio
Engineer, Office of
Interoperable and
Emergency
Communications

SICG Program Overview

Program Name	Appropriation Year	Appropriation Amount \$\$	Reimbursed \$\$	Project Period
Round 1 SICG	2010-2011	20 million	20 million	12/21/2011 – 09/30/2014
Round 2 (SICG)	2011-2013	102 million	101.7 million	02/04/2013 – 02/03/2018
Round 2 (2012 PSAP)	2011-2012	9 million	9 million	05/01/2013 – 04/30/2017
Round 2 (2013 PSAP)	2012-2013	9 Million	8.9 million	06/25/2014 – 06/24/2017
Round 3 SICG	2013-2014	75 million	75 million	12/03/2013 – 06/30/2019
Round 4 SICG	2014-2015	50 million	33.4 million	01/01/2016 – 12/31/2019
2016 SICG Formula	2015-2016	45 million	30.2 million	01/01/2017 – 12/31/2019
2017 SICG Formula	2016-2017	45 million	14.6 million	01/01/2018 – 12/31/2019
2018 SICG Formula	2017-2018	45 million	2.3 million	01/01/2019 – 12/31/2020



SICG Program Overview (Continued)

Program Name	Appropriation Year	Appropriation Amount \$\$	Reimbursed \$\$	Project Period
2014-15 PSAP Operations	2014-2015	10 million	10 million	01/01/2015 – 12/31/2015
2015-16 PSAP Operations	2015-2016	10 million	10 million	01/01/2016 – 12/31/2016
2016-17 PSAP Operations	2016-2017	10 million	10 million	01/01/2017 – 12/31/2017
2017-18 PSAP Operations	2017-2018	10 million	10 million	01/01/2018 – 12/31/2018
2018-19 PSAP Operations	2018-2019	10 million	5.2 million	01/01/2019 – 12/31/2019



SICG Program Overview (Continued)

Program Name	Appropriation Year	Appropriation Amount \$\$	Reimbursed \$\$	Project Period
2018 SICG-Targeted	2015-2019	65 million	0.3 million	11/28/2018 – 11/28/2022

2018 SICG Targeted Grant: announced \$32,640,405 in Phase 1 of the award process.

Anticipated RFAs Schedule:

PSAP Operations Grant - *every year in May-June*

SICG Formula Grant – *every year in June-July*

SICG Targeted Grant – *ongoing, rolling schedule*



SICG Program Overview

- ✓ 2019 SICG Formula – Award Results are being evaluated by Governor's office
- ✓ 2019 PSAP Operations Grant – Awards announced
- ✓ 2019 SICG Targeted – RFA First Quarter 2020

TOTAL \$492.6 million in grants

Please visit www.dhSES.ny.gov/oiec/grants for additional information



Use of Interoperability Channels

- ✓ Any use of Interoperability Channels should be notified via “Interopnotify” listserv (contact OIEC office for details how to sign up)
- ✓ National Interoperability channels were activated in NY over 100 times since January 2019.
- ✓ Uses include: testing, training, exercises, emergency situations (fire, manhunts, search and rescue, providing communications between different system using patching, etc)
- ✓ ***Interoperability Repeaters MUST be OFF when not in use!***



Standing Committee Reports

Presented by
Michael A. Sprague,
Director, Office of
Interoperable &
Emergency
Communications,
Chair, SIEC Board



911 Advisory Committee

Presented by
A. Wesley Jones,
Committee Chair



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NG 9-1-1 Working Group

Presented by
Brett Chellis, Deputy
Director, Office of
Interoperable and
Emergency
Communications



NG911 Activities to date:



- Established NG911 Working Group
- Developed Federal partnership with DHS CISA ECD
- Attended National NG911 conferences
- Multiple In-person working group sessions
- Bi-weekly working group calls
- NG911 Draft Plan
 - Framework developed
 - Stakeholder input and review
 - Amendments, updates
 - Present for Exec Review



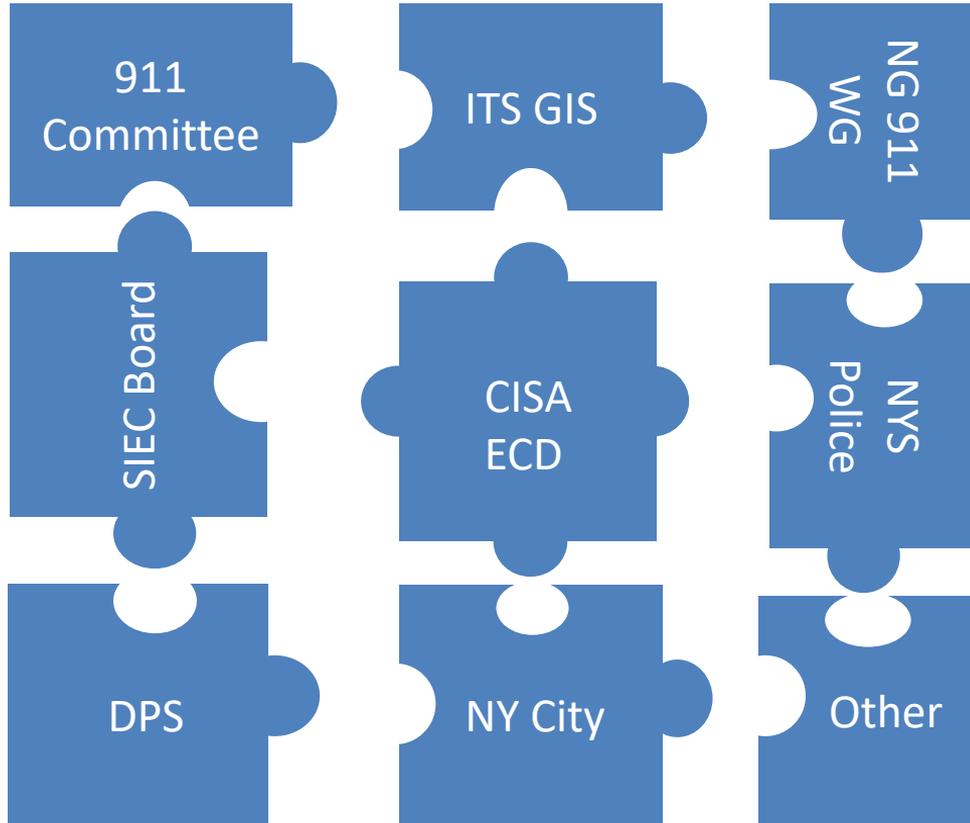
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THE 9-1-1 ASSOCIATION



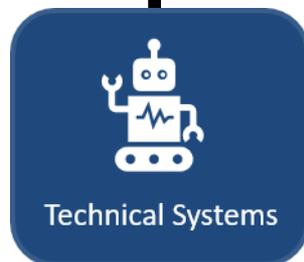
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Stakeholders



Plan Under Executive Review

Contents of NG911 Plan



The Process in NY

Will be impacted by many factors, including but not limited to:

- Agency feedback and direction
- Funding
- Established and forthcoming national NG911 standards
- Evolution of technology and available options
- Stakeholder outreach and feedback

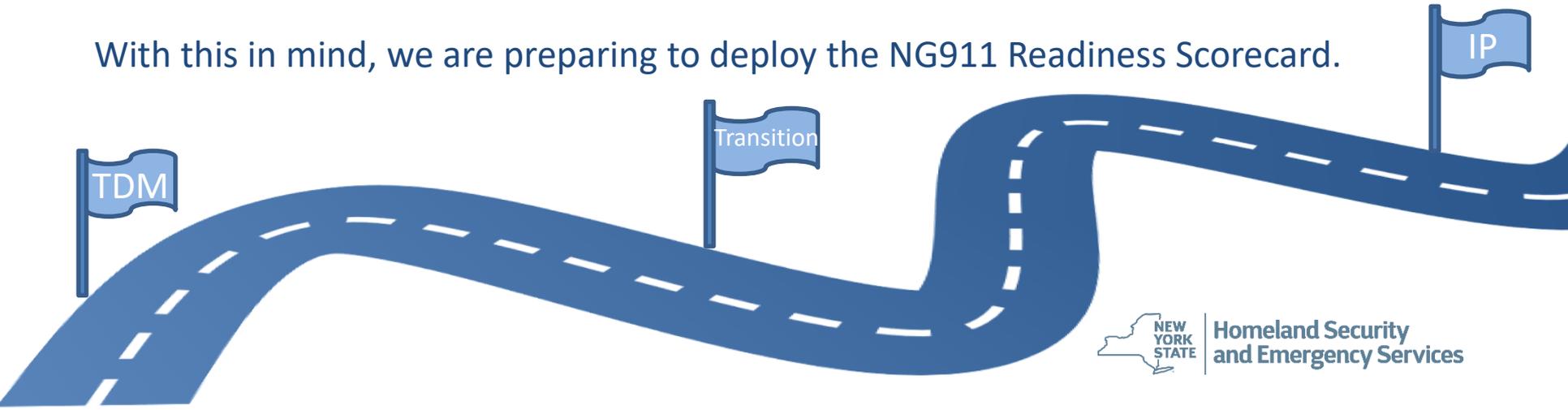


The Path to NG911

Need PSAP managers, 911 Authority managers, and elected officials at every level to come to an understanding to create NG911 end states at the County, regional, State and the national level.

Managing the development and implementation in a planned evolution as opposed to a crisis managed reactionary implementation as TDM is replaced by IP technology.

With this in mind, we are preparing to deploy the NG911 Readiness Scorecard.



NG911 Readiness Scorecard

Source:

FCC Task Force on Optimal PSAP Architecture
Supplemental Report: NG911 Readiness Scorecard – Dec 2,
2016

Purpose:

The NG911 Readiness Scorecard provides the State 911 Program an understanding of the NG911 implementation maturity states and the essential elements necessary to be present within each County.

Result:

With this understanding we are able to better plan, budget and execute NG911 transition.



<https://www.fcc.gov/about-fcc/advisory-committees/general/task-force-optimal-public-safety-answering-point>



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NG911 Readiness Scorecard

NG9-1-1 Implementation Continuum

The Scorecard utilizes a multi-step implementation model which consists of the following implementation maturity states;

Legacy

Foundational

Transitional

Intermediate

Jurisdictional End State

National End State



NG911 Readiness Scorecard



NG9-1-1 Essential Elements

- The Scorecard then identifies essential elements which are necessary to be present within each NG911 Implementation Maturity State.
- Essential elements are categorized into the following areas of interest:
 - Governance
 - Routing & Location
 - GIS Data
 - NG Core Service Elements
 - Network
 - PSAP Call Handling Systems & Applications
 - Security
 - Operations
 - Optional Interfaces



NG911 Readiness Scorecard



Completion process in New York

- The National 911 Program office will have a template available soon for PSAP's and State 911 Programs to utilize.
- PSAP Authorities will be asked to complete the template and forward it to the OIEC 911 Program for compilation to complete a statewide assessment for New York to help the Working Group with planning purposes.



GIS Subcommittee Report



Gerald A. Engstrom Jr., AICP

New York State Police County CAD and GIS Program Manager

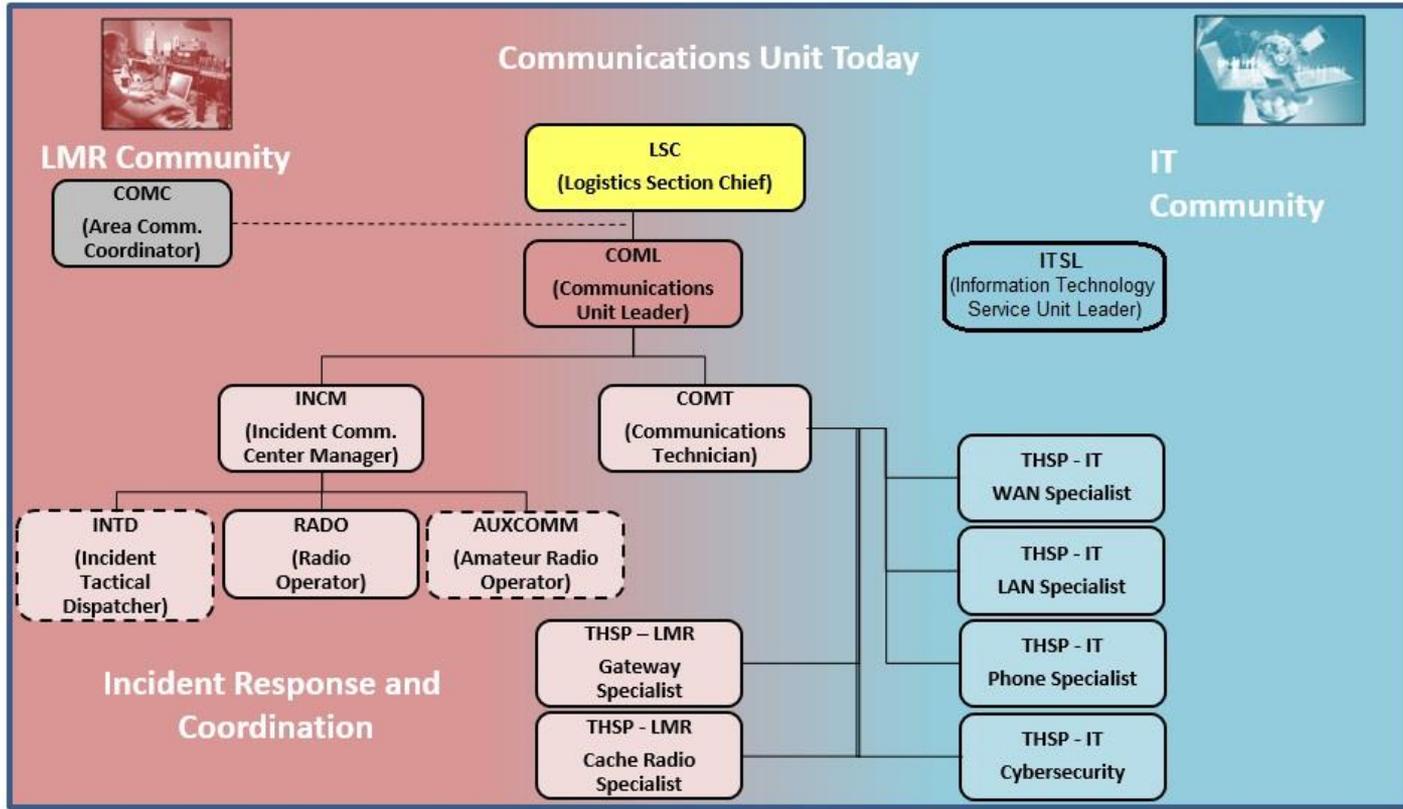
Office of Information Technology Services – GIS Program Office



Communications and Interoperability Working Group

Presented by
Jay Kopstein, Co-Chair
**Mark Balistreri, Radio
Engineer, OIEC**





NY State Communications Unit (COMU) Credentialed Personnel (Statewide)

ICS Position	2017	2018	2019	2020 (Projected)	Total
COML	1	36	9	30	75
COML (Instructors)	0	0	12	0	12
INCM	0	0	0	20	20
COMT	0	0	3	30	33
COMT (Instructors)	0	0	12	12	24
INTD	0	0	0	40	40
RADO	0	0	0	20	20
AUXCOMM	0	0	16	30	46
ITSL	0	0	0	20	20

NY State Communications Unit (COMU) 2020 Training (Requested)

1/27/20 – 1/31/20 (COMT Course)
2/11/20 – 2/13/20 (INCM Course)
3/10/20 – 3/12/20 (Exercise Design Course) *
4/14/20 – 4/16/20 (COML Course)
4/27/20 – 5/1/20 (COMT Train-the-Trainer Course)
5/18/20 – 5/22/20 (ITSL Course)
6/9/20 – 6/11/20 (RADO Course)
7/21/20 – 7/23/20 (AUXCOMM Course)
9/15/20 – 9/18/20 (INTD Course)
10/20/20 – 10/21/20 (AUXCOMM Train-the-Trainer Course)
11/16/20 – 11/20/20 (COMT Course)

* DHSES-OIEC is requesting that at least two (2) individuals from each of the nine (9) Consortiums take this course.



Questions ?

If you do have questions or need assistance later on:

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Public Safety Broadband User Group

Presented by
Matthew Delaney, Radio
Engineer, Office of
Interoperable and
Emergency
Communications



Public Safety Broadband

- Continue to monitor developments and hold discussions with the carriers.
 - If you have a need for deployable or other coverage/capacity requirements at events coming up, please work with us (it's NOT too early to plan for next summer)
- You may have seen in the news...T-Mobile has announced if the Sprint – T-Mobile merger occurs, they will offer free services to public safety. We don't have all details yet, but will track for more information.

Public Safety Broadband

- There is more interest in LMR-LTE push to talk integration. We will begin discussions on this in the PSBBUG. End result: Does the State issue a guideline or best practice document?
- If you are using, or have evaluated, LMR over cellular, or PTT on cellular, please let us know.



State Agency Communications Working Group

Presented by
Michael A. Sprague,
Director, Office of
Interoperable &
Emergency
Communications,
Chair, SIEC Board



State Agency Working Group

November 15, 2019

- Rapid Deployment Plan – Finalize document
 - Reviewed NYSP Radio Frequency Authorization document
 - Suggested Edits
 - Review by NYSP
 - Redistribution to State Agency Contacts
 - Agency Training & Familiarization
 - Exercise of RDP
- Consolidation of Radio Requests
- Agency Reports



Channel Naming and Use Working Group

Presented by
Matthew Delaney, Radio
Engineer, Office of
Interoperable and
Emergency
Communications



Uncoordinated Interoperability Repeaters

- National Interoperability Channel (NIO) repeaters left on the air when not in use continue to be a problem.
- E.g. UTAC41 left online but dormant. When an agency needs to activate UTAC41 for an incident, they receive interference from the other repeater.
- NIO repeaters are a great asset...but only when properly coordinated.
- NYS Guidelines address this...repeaters off when not in use; activation notifications sent to listserv.
- If you install an NIO repeater, you must have some way to control the repeater mode...over the air DTMF, console button, site telemetry, etc.



Uncoordinated Interoperability Repeaters

- Some recent examples of issues
 - Bethel Woods festival: Command repeater on UTAC43 was receiving interference from another repeater left on. With the FCC's help...on a weekend...it was tracked to an out of state location. They did not know they had a repeater online...likely not used in years. Repeater was shut off.
 - Orange County Airshow: Backup channel on UTAC42. Console control stations were able to key a distant repeater. Luckily this backup channel was not needed. Later tracked down during UNGA mission.

Uncoordinated Interoperability Repeaters

- UCALL40 heterodyning from multiple repeaters interfering with training event at the SPTC. Determined to be a central NY county with 3 sites, all turned on and not simulcast. Fortunately there was a Morse Code ID (CWID) on the repeater and the licensee was quickly found and contacted. Their vendor did not understand the issue as the repeater was not locked into transmit. Had to explain about NIO, heterodyning, etc. Repeaters were disabled. *(Counties/agencies, remember, you are the license and are ultimately responsible)*
- VTAC34 in the Adirondacks. Was discovered during routine testing. A dispatch center answered the test and was identified. Follow-up through the county resulted in the repeater being turned off when not in use. Discovered repeater is regularly used for interop, but left online 24/7 without any coordination.



Uncoordinated Interoperability Repeaters

- OIEC, working with DHS and the FCC, has begun tracking down these uncoordinated repeaters. The first joint planned mission was during September's UN General Assembly (UNGA).
- DHSES, FCC, DHS, FDNY, NYPD worked as a team to track multiple repeaters in the NYC area.
- Over the course of a week, multiple repeaters were found online, many interfering with each other (making the channel totally useless when needed).



Uncoordinated Interoperability Repeaters

- Some causes were:
 - Repeater controller programmed to default repeater-on when power comes back;
 - DAS testing that was forgotten about;
 - Grandfathered non-interop licensee (but with a repeater that was transmitting bursts of static for no valid reason);
 - A county where their console indicated the repeater was off, but a site visit proved it to be enabled.
 - An installation where the person in charge retired and nobody was aware of its existence;
 - A fire department that decided to take a 2W grandfathered mobile license and make it a high power fixed repeater (you don't want to explain that to the FCC).

END RESULT: ALL QUIET ON THE NIO IN THE NYC AREA



Uncoordinated Interoperability Repeaters

- Additional work still to be done. There are others in the State. We will be visiting all areas...so please check your repeaters now before we are in your area.
- Don't ASSUME they are off...verify they are off. We have seen a number of instances with well-intentioned statements that "all our repeaters are off" when they really are not...technical issues exist.
- If notification hasn't been made to the listserv, the repeat-mode must be disabled.
- And remember, ALL fixed sites must have an FCC license. FIXED TRANSMITTERS ARE NOT EXEMPT FROM FCC LICENSE. (Only mobile and portable radio use of the NIO frequencies is covered by "license by rule")



Citizen Alerting Committee

Presented by
Michael A. Sprague,
Director, Office of
Interoperable &
Emergency
Communications,
Chair, SIEC Board



Citizens Alerting Committee

- No Meeting – This Quarter
- NYSOEM
 - Conducted monthly test of WEA on Monday November 18, 2019
 - Attempted at test with IPAWS in October but was postponed by FEMA
- Reminder that effective November 2019 all COGs are required to conduct monthly tests

New Business

Presented by
Michael A. Sprague,
Director, Office of Interoperable
& Emergency Communications,
Chair, SIEC Board



New Business

- Schedule Meetings for 2020

Summary, Closing Remarks and Adjournment

Presented by
Michael A. Sprague,
Director, Office of
Interoperable &
Emergency
Communications,
Chair, SIEC Board

