

# ROSS Quarterly Call

24 June 2024



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# Agenda

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- Welcome from FEMA Office of Emerging Threats (OET) Branch Chief and ROSS Program Manager – Jonathan Gill, PhD
- Welcome from CRCPD ROSS Program Manager – Bill Irwin, ScD, CHP, FEMA Type 1 ROSS
  - ROSS 10<sup>th</sup> Anniversary Presentation – Bill Irwin; Angela Leek, PhD, CHP, FEMA Type 1 ROSS; and Jon Gill
  - May 18 CRCPD HS/ER Committee Meeting Report - Bill
  - ROSS at Cobalt Magnet 25 and in support of CDC Public Health Decision Makers training - Bill
- Special Presentation: Weapons of Mass Destruction Directorate Strategic Group – Jon Gill
- Closing Remarks – Jon Gill



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## FEMA Office of Emerging Threats

### Opening Remarks

Jon Gill, PhD

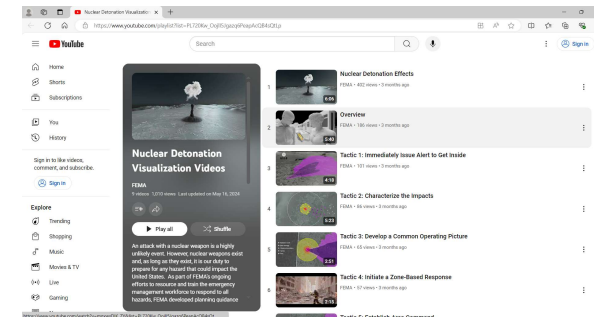
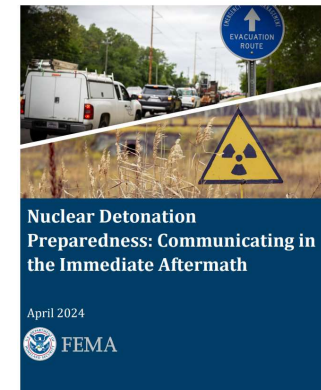


Source: GAO. | [www.gao.gov](http://www.gao.gov)

<https://www.gao.gov/products/gao-19-164> accessed 2/23/23.

# FEMA OET Updates

- 10th Anniversary of ROSS NREP and CRCPD meetings, upcoming HPS/IRPA meeting
- PER-388 courses this quarter
- Annual ROSS WG meeting
- [Communicating in the Aftermath of a Nuclear Detonation, 2nd Ed.](#)
- [Nuclear Detonation Response Guidance Planning for the First 72 Hours Visualization](#)



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# Welcome from CRCPD Homeland Security/Emergency Response Committee 4 (HS/ER-4)

Bill Irwin, ScD, CHP, FEMA Type 1 ROSS, CRCPD ROSS Program Manager



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Questions? [william.Irwin@vermont.gov](mailto:william.Irwin@vermont.gov)

# Welcome to New Initial ROSS Training Course Graduates!

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- Forty-two new people taking the initial step to become a ROSS.
  - PER-388 is the initial step that more than 360 people have taken.
  - Documenting training and experience in the in the ROSS Position Task Book (PTB) is where the fuller ROSS development occurs.
- We are grateful to the folks in Michigan and Utah who planned and prepared for these two classes!
- We are excited that CTOS is teaching at least five more classes this year:
  - Ohio this week                      Kentucky July 22
  - Nebraska August 12              Massachusetts September 23
  - Kansas November 8              Plans for CDC in Atlanta in October, too



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## The Next Steps

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- A reminder to send your certificates for ROSS Type 4 Training to [FEMA-ROSS@fema.dhs.gov](mailto:FEMA-ROSS@fema.dhs.gov): IS-100, IS-200, IS-700, IS-800, IS-836 or equivalents and PER-388.
- You will then be invited as a Type 4 ROSS to join MissionEdge and get assigned your Type 3 PTB to work on so to can work independently as a ROSS.
- We are doing our best to provide opportunities where you can advance in type:
  - The ND and RDD Virtual Evaluation Scenario Tool (VEST), tabletop and full-scale exercises, the Department of Energy Nuclear Emergency Support Team Reserve Corp, and quarterly ROSS problem sets.
  - Historical recognition to document competencies demonstrated in the past.



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# ROSS 10 Year Anniversary!

Bill Irwin, Angela Leek, Jon Gill and Eliot Calhoun



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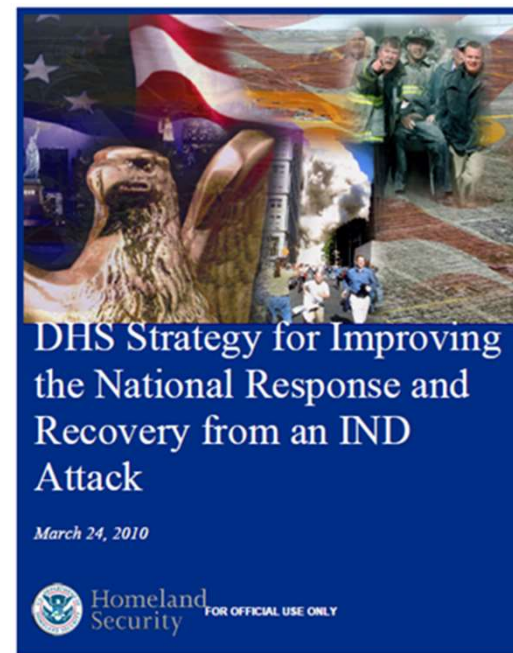


Questions? [william.Irwin@vermont.gov](mailto:william.Irwin@vermont.gov)



# The Beginning

The ROSS grew out of 9/11 and the Improvised Nuclear Device (IND) forum, an assessment of gaps in the Nation's preparedness for an IND by federal, state, tribal, territorial, and local responders.



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# The Beginning for Me

It was in the National Academy of Sciences', Keck Building, in Washington, DC. Between presentations, Dan Blumenthal asked me if I would go to Indiana for a week-long nuclear detonation exercise and play this new FEMA role, called the ROSS.



It was nice and cool here in March



It is frickin' hot in Indiana in July



It looked, sounded and smelled like a nuclear war zone.



Headed for the hot zone  
just outside the Moderate  
Damage Zone







Arriving early at the front lines, the locals had a nice air-conditioned command post and multiple communications vehicles



By the end of Day 1, there was a tent city with generators, air conditioning and a battle rhythm carrying along the Planning P.



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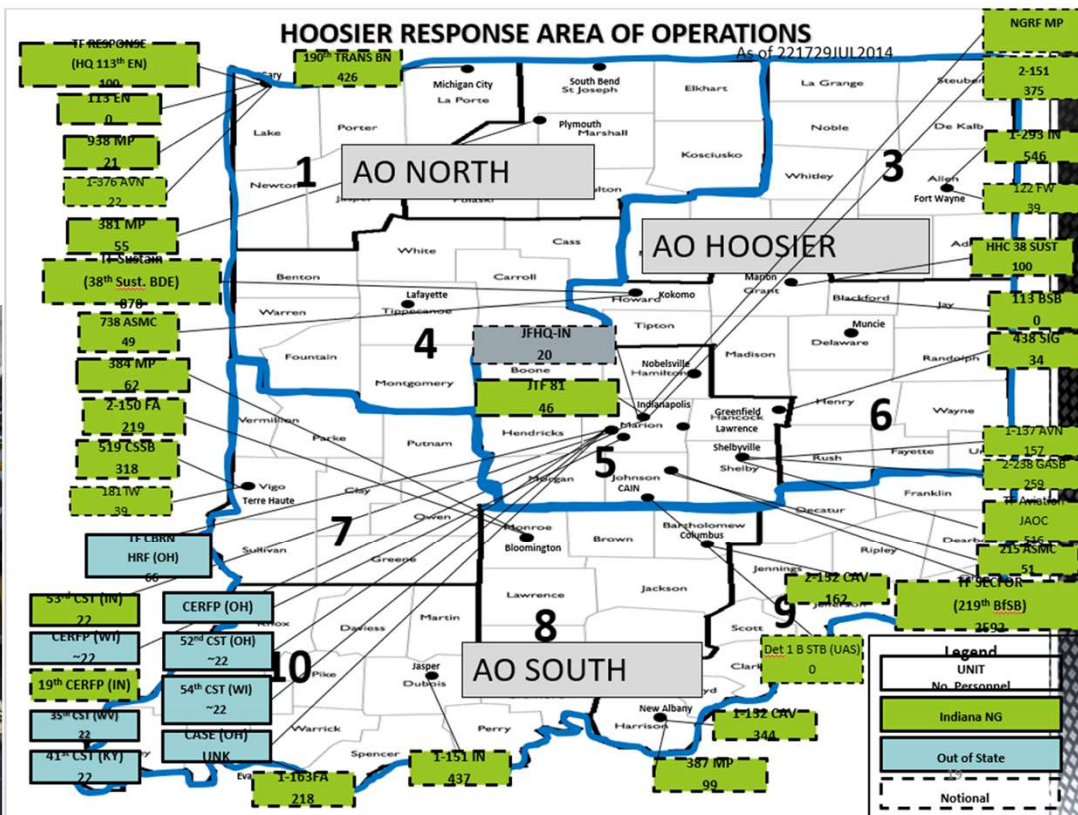




The Indiana Incident Management Team: Experts with tornadoes and floods; never been near anything nuclear

## My new partners

A representation of the thousands of members of CBRN Response Enterprise ( CRE) working on the front lines of war brought to America





## The Indiana State Emergency Operations Center

I introduced my self to the Incident Manager, the Ops Chief, the Planning Chief, the Radiation Control Program Director, the various Emergency Support Function Leaders, and the cabinet level commissioners of the Policy Group.

I learned that contrary to recommendations, the area where the detonation occurred had been evacuated, and, contrary to logic, sites were being set up for decontaminating hundreds of thousands of people.

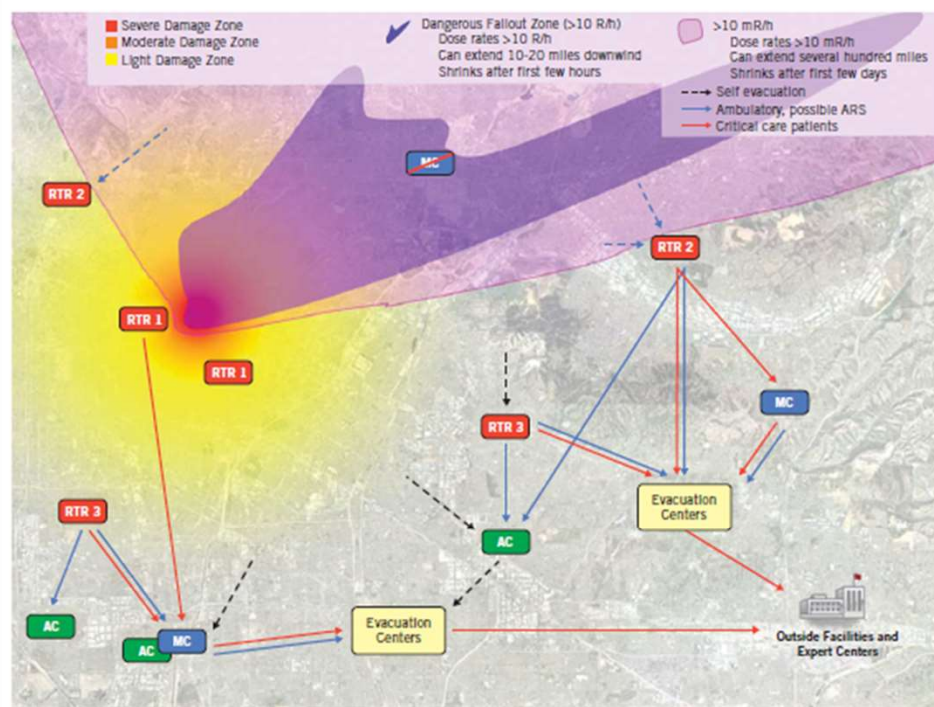




## Creative compensatory planning was required every minute, every day

I worked with FEMA to convert from mass decon to self decon, with the ESF 8 for Health to start implementing the RTR system for radiation triage, transport and treatment, with the US DHHS on Health Alert Network messages to health care providers, and their DMORT Team on a plan for fatality management, and with the Advisory Team for Environment, Food and Health for various unique and complex questions.

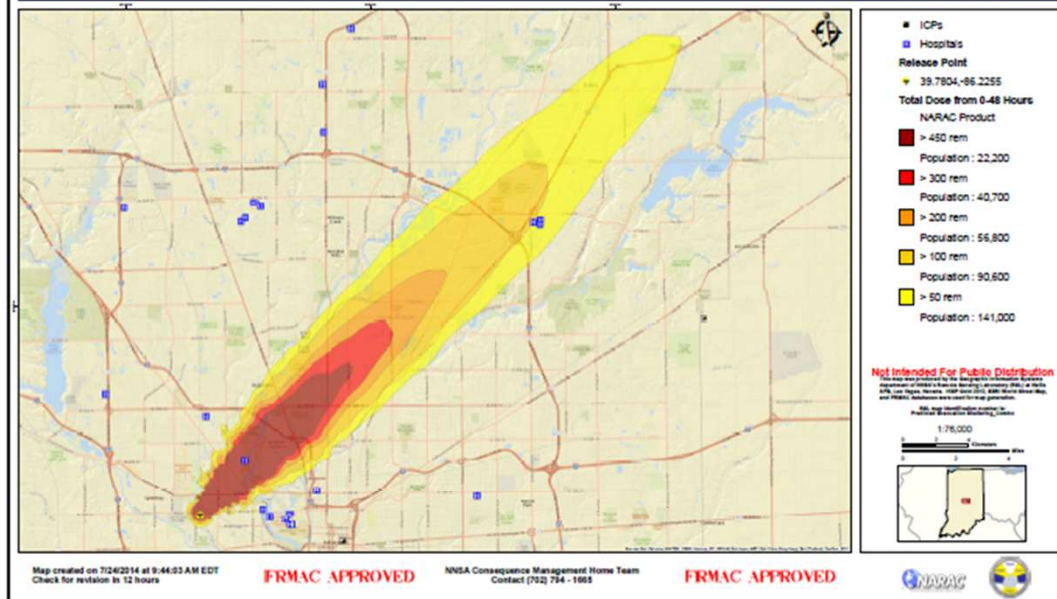
Overlay of the RTR system with the zoned approach



### EXERCISE

### Total Integrated Dose from 0 - 48 Hours Including Plume Passage

SET 1  
VIBRANT RESPONSE 14  
INDIANAPOLIS, IN



This custom NARAC data product was used to tell evacuees who needed it to seek immediate medical attention and for others not to create a medical surge since they would be fine.

- So many questions, so few people to answer them



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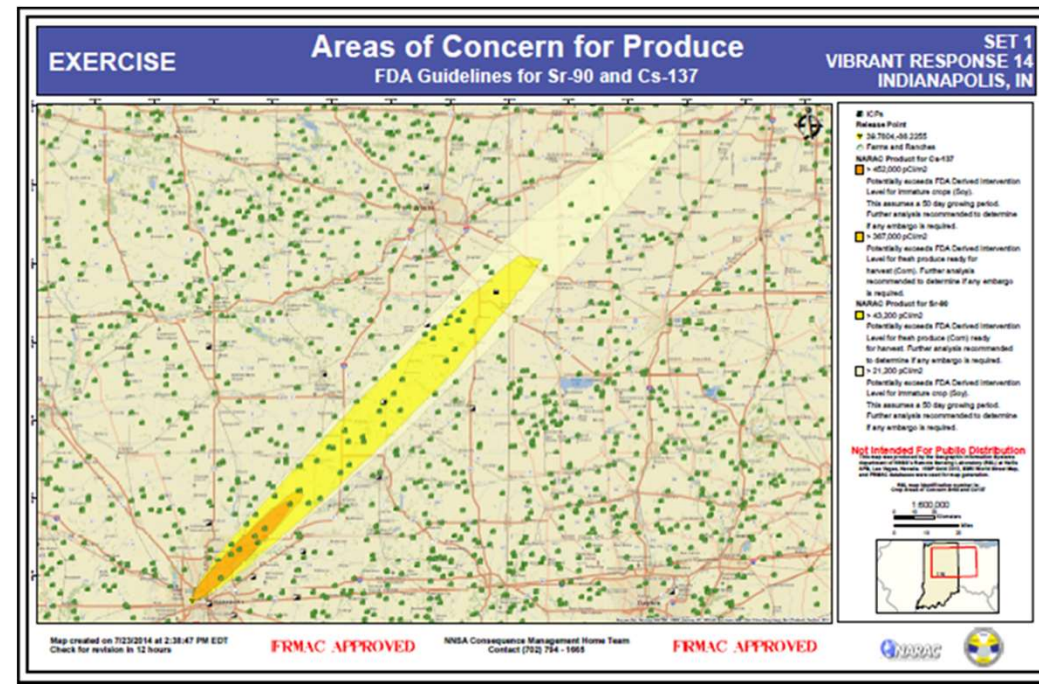
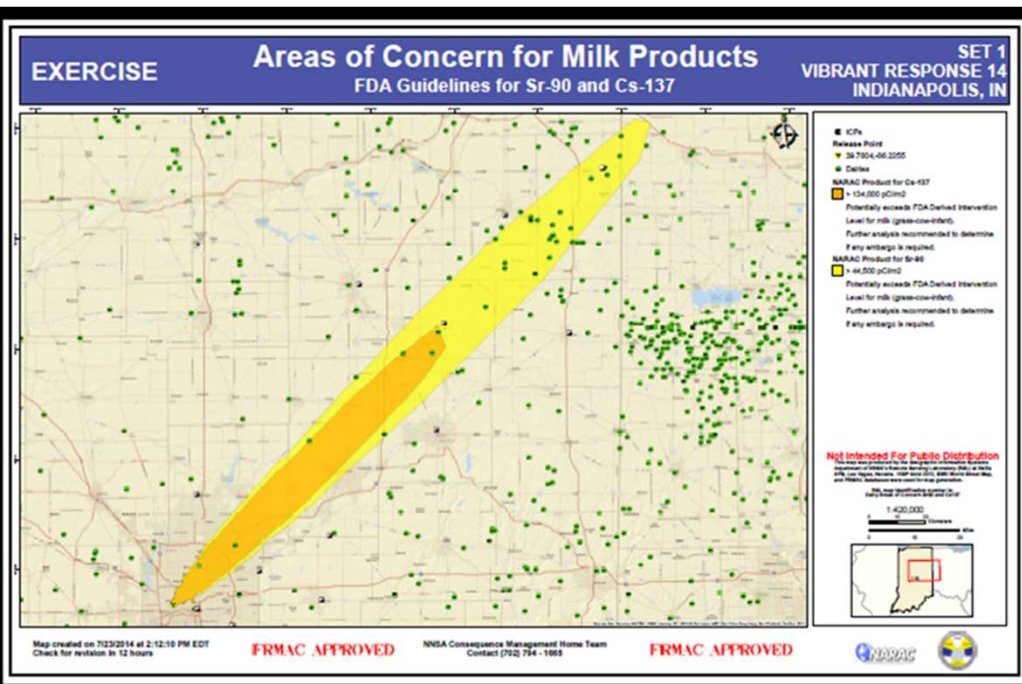




By the end of Day 4, we were helping outlying areas deal with the long-term needs

There were questions from everywhere about everything. We did not have enough people to answer all the question, and this was an exercise.

Thankfully, the federal, state and local public information officers making up the Joint Information Center were a joy to work with getting critical messages out to everyone fast.

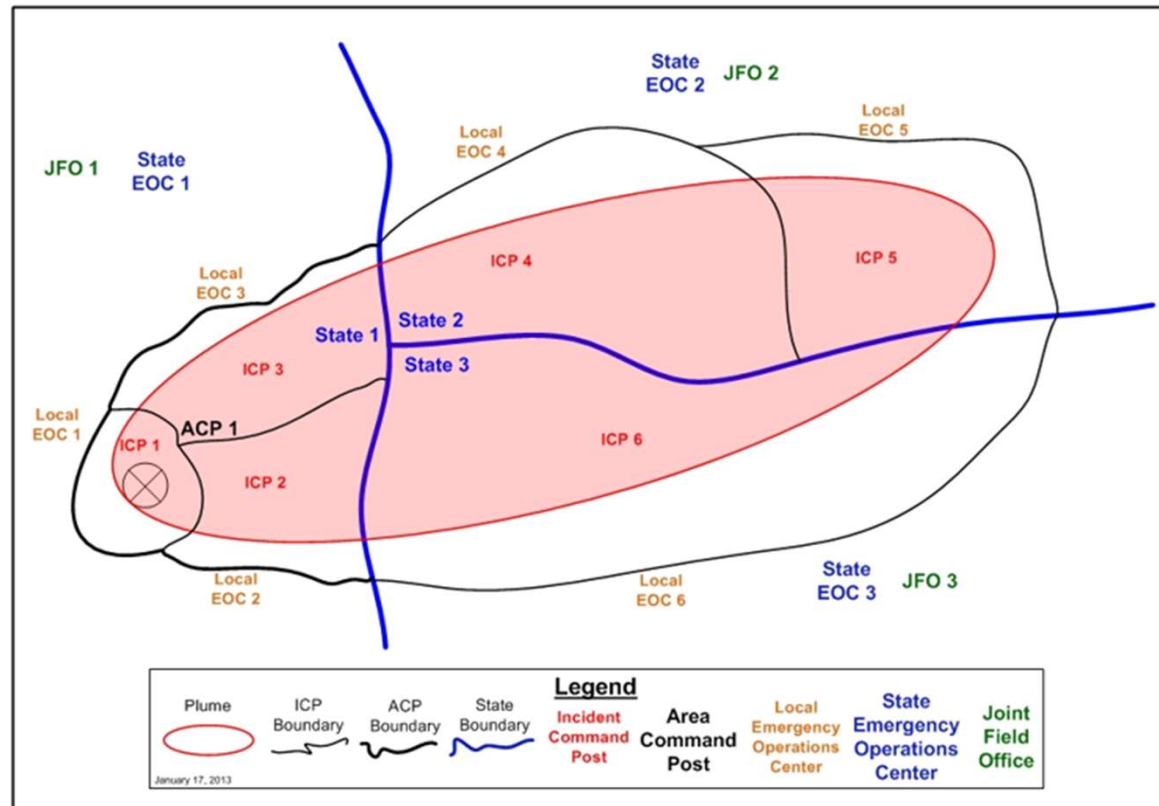


## “One Plume, One Response”

That was ten years ago, this July.

We are still working on what Dan Blumenthal wanted – one plume, one response.

We are still working on what I want - to respond better so we recover faster.



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How did we get where we are, and where are we going?



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## The ROSS Leadership

- The Federal Emergency Management Agency (FEMA) leads the program to develop radiological and nuclear emergency response and recovery subject matter expert – the Radiological Operations Support Specialist
- They have done so with the support of:
  - The Department of Homeland Security (DHS) National Urban Security Technology Laboratory (NUSTL), and
  - The Department of Energy (DOE) National Nuclear Security Administration (NNSA).
- The Conference of Radiation Control Program Directors (CRCPD) co-leads the program within and among the states.
- FEMA, DOE, DHS and the CRCPD form what is called the ROSS Steering Committee.



## The ROSS are important to 2 of 15 National Planning Scenarios

Figure B-1: National Planning Scenarios

National Planning Scenarios	
Improvised Nuclear Device	Major Earthquake
Aerosol Anthrax	Major Hurricane
Pandemic Influenza	Radiological Dispersal Device
Plague	Improvised Explosive Device
Blister Agent	Food Contamination
Toxic Industrial Chemicals	Foreign Animal Disease
Nerve Agent	Cyber Attack
Chlorine Tank Explosion	

[https://www.fema.gov/pdf/emergency/nrf/National\\_Preparedness\\_Guidelines.pdf](https://www.fema.gov/pdf/emergency/nrf/National_Preparedness_Guidelines.pdf).

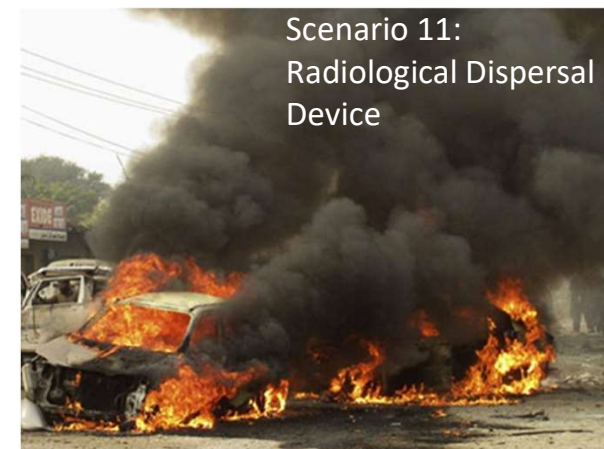
Starting in 2014, the role has been demonstrated and critically evaluated in radiological dispersal device, nuclear power plant accident, spacecraft launch anomaly, and nuclear detonation exercises. Dozens were full-scale exercises and dozens more were tabletop exercises.



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Scenario 1:  
Improvised Nuclear Device



Scenario 11:  
Radiological Dispersal  
Device

## History of the ROSS – the Job Task Analysis

- Evaluators followed the ROSS and wrote after action reports on the skills, knowledge and abilities (SKAs) ROSS used in the exercises.
- Under contract with NUSTL, Lawrence Livermore National Laboratory (LLNL) conducted focused outreach to the health physics and response communities to document the SKAs useful to people who might become ROSS and people who might need ROSS.
- LLNL used the SKAs as objectives for a set of training lesson plans and a pilot course was hosted by the CRCPD and delivered to sixteen health physicists in 2016.
- After a second pilot hosted by the Centers for Disease Control and Prevention, the lesson plans were turned over to Counterterrorism Operations Support (CTOS)
- CTOS conducted three pilot courses to have the course, PER-388, accepted into FEMA's National Domestic Preparedness Consortium catalog.



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# The Inaugural ROSS Classes



## Certificate of Completion

Jeffrey Semancik

RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

40-HOUR INITIAL TRAINING CURRICULUM, FEMA MGT 455

ROSS Cadre Management: Integration into Incident Command; Radiological and Nuclear Emergency Standards, Guides, and References; Radiological and Nuclear Incident Characteristics; ROSS Communications; Radiological and Nuclear Emergency Response and Recovery Resources; Briefing Products and Field Data Management; Atmospheric Dispersion Modeling, Dose Assessment, and Data Collection and Sharing Tools.

**Completed September 23, 2016**

Instructors:

\_\_\_\_\_  
Brooke Buddemeier, CHP

\_\_\_\_\_  
William Irwin, ScD, CHP

\_\_\_\_\_  
James Rogers



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From the first sixteen, Four Type 1 ROSS, three ROSS instructors.

From these leaders is passed on the ROSS of the future.

Top left are Orly Amir and Ben Stevenson form DHS NUSTL.

Top right is the first FEMA ROSS Program Manager, Jim Rogers.

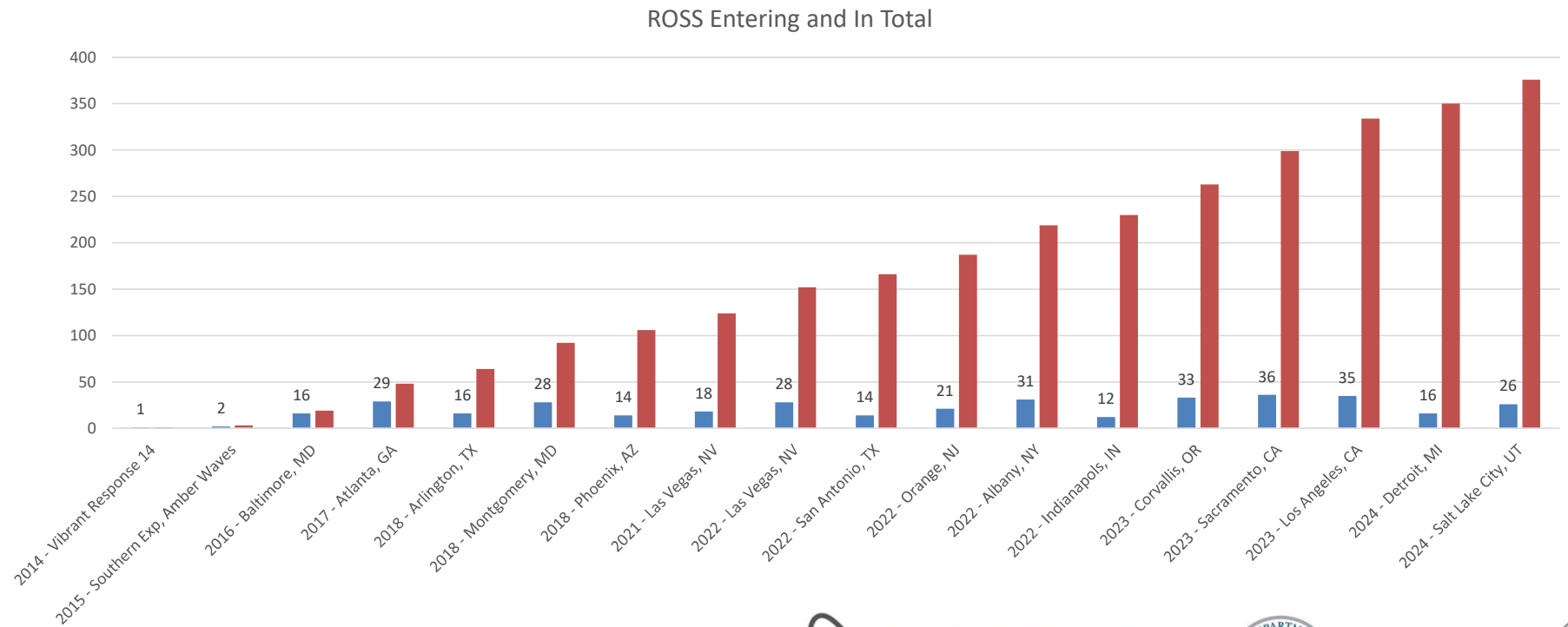
Jim, Brooke Buddemeier (bottom left) and I were joined by John Nasstrom of NARAC, Brendan Palmer of Chainbridge, and Billy Haley of EMSI as the first ROSS instructors.



- The class was sponsored by the CDC and held at Georgia Tech.
- Almost doubled the size of the Baltimore class at 29 students.
- This time, two students from the 2016 course came on as instructors.
- CTOS tool over instruction in 2018.



## The ROSS trajectory so far



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360+  
people  
trained as  
ROSS to  
date\*



\*Map does not include  
28 people trained last  
week in Utah.

### 33 States with ROS

CT-5, MA-4, VT-2, NJ-9, NY-38, DC-4,  
10, PA-7, VA-8, FL-6, GA-14, KY-1, SC-3  
5, IL-2, OH-3, MI-16, WI-3, LA-5, TX-34, IA-  
4, MO-2, SD-2, AZ-9, CA-78, NV-3, ID-1,  
OR-16, NE-3, IN-13, MN-1, WV-2. KS-1



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## ROSS Deployments

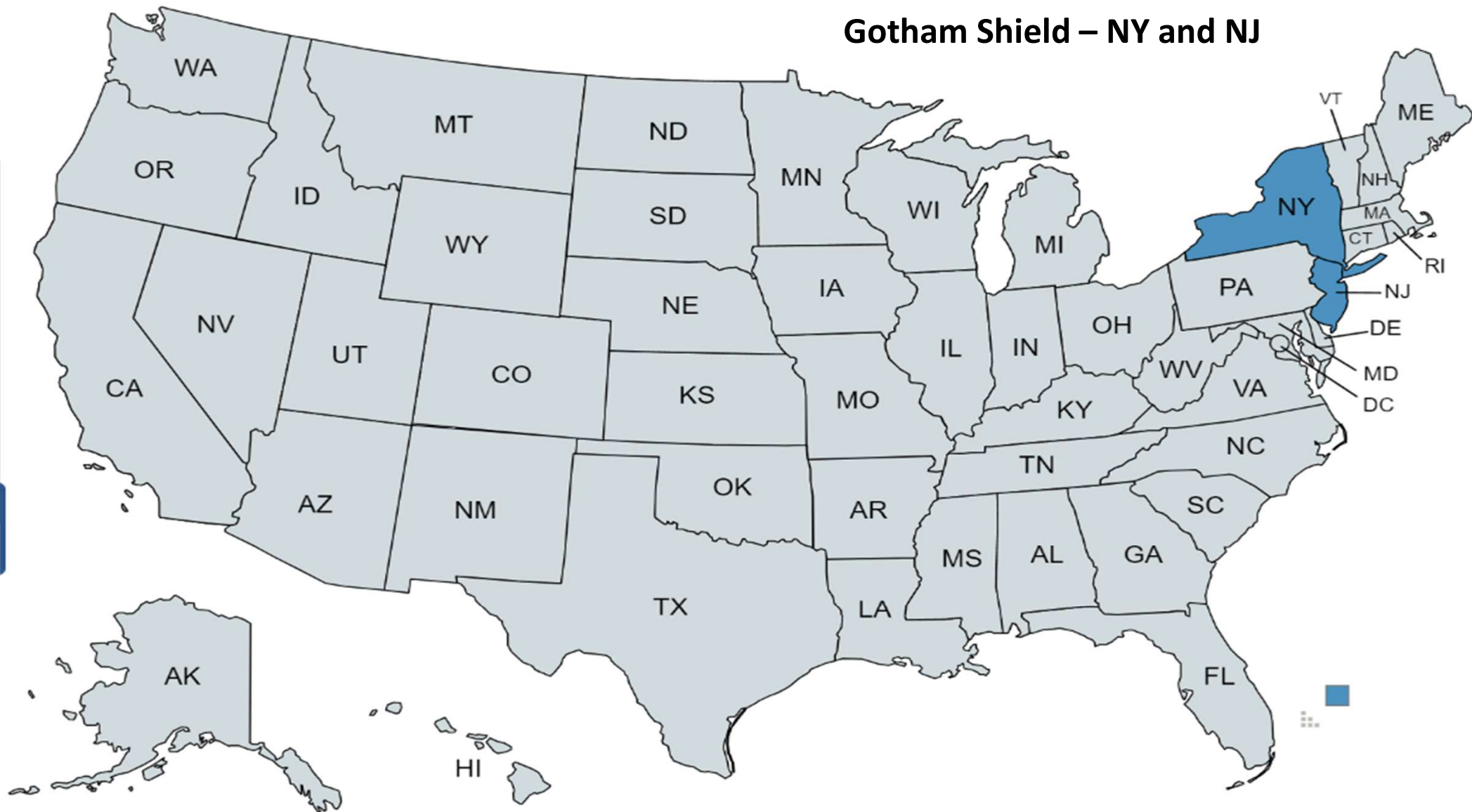
- Because radiological and nuclear emergency incidents are fortunately rare, we rely on exercises to help ROSS improve their competencies after they take the CTOS PER-388 Initial ROSS Training class.
- It allows ROSS to work within an incident command or incident management system while also completing important tasks in their Position Task Book.
- Task completion, whether done as witnessed by an evaluator or through historical recognition, is necessary for advancement from Type 4 to 3 to 2 to Type 1.



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## Gotham Shield – NY and NJ

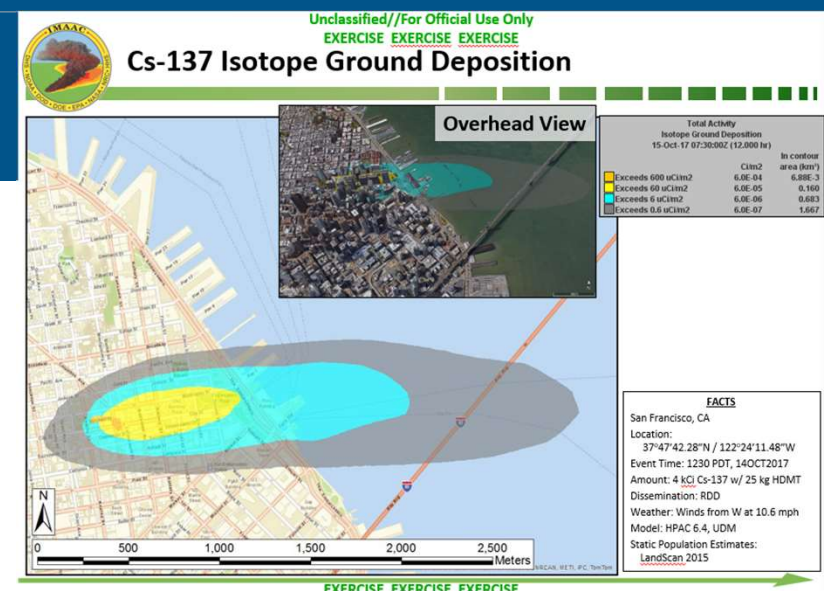






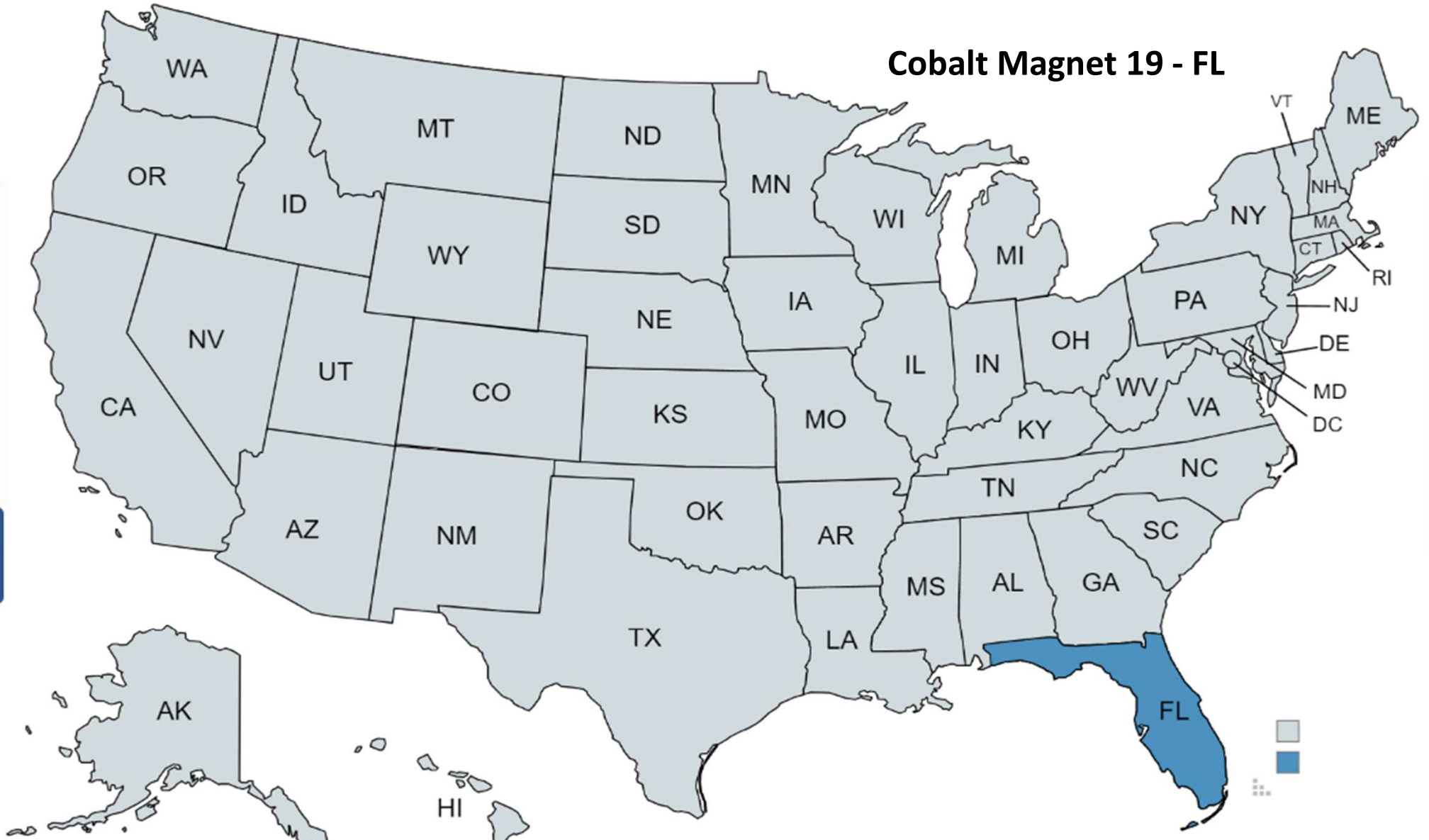
## Vigilant Guardian - CA





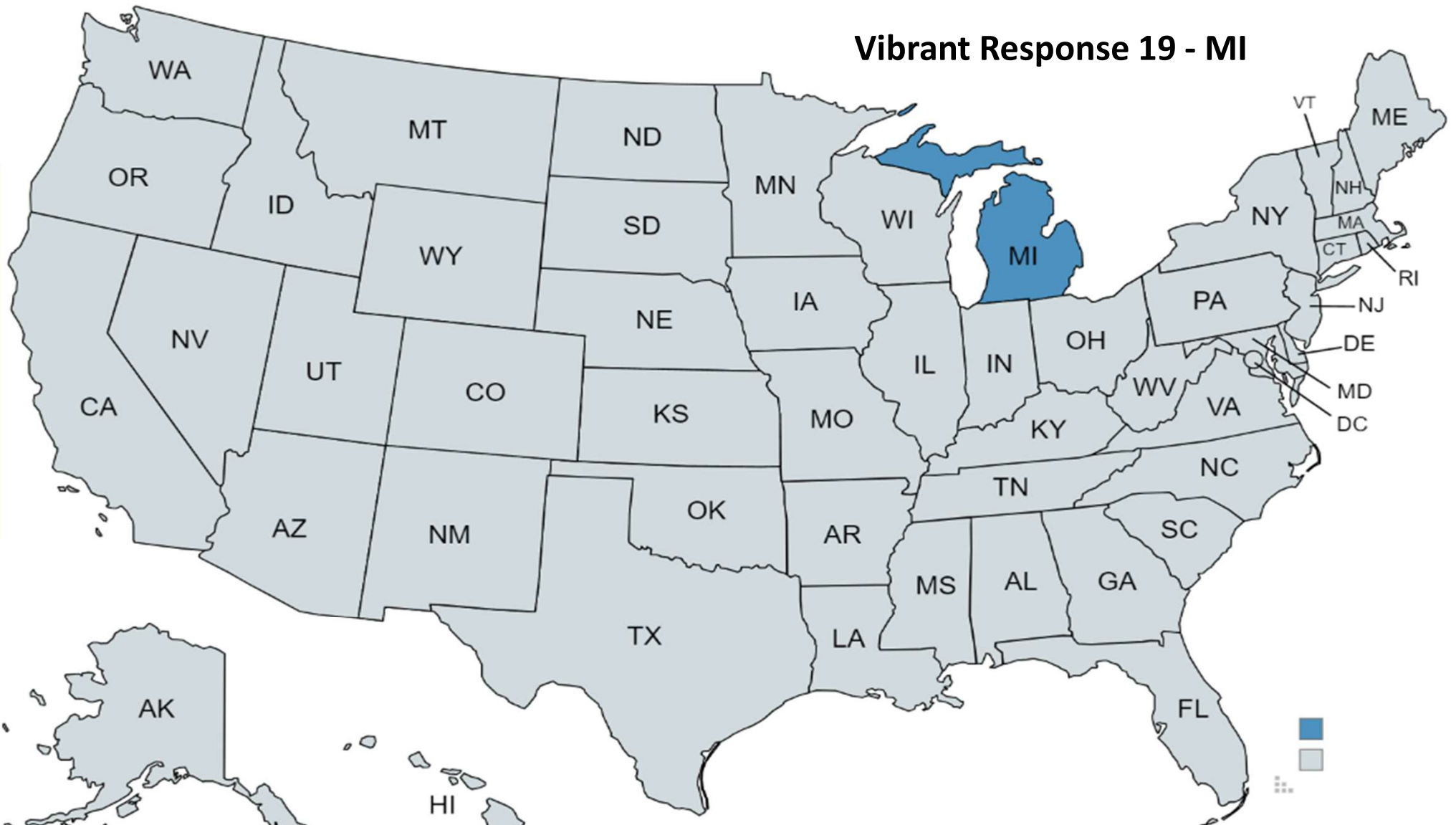


## Cobalt Magnet 19 - FL

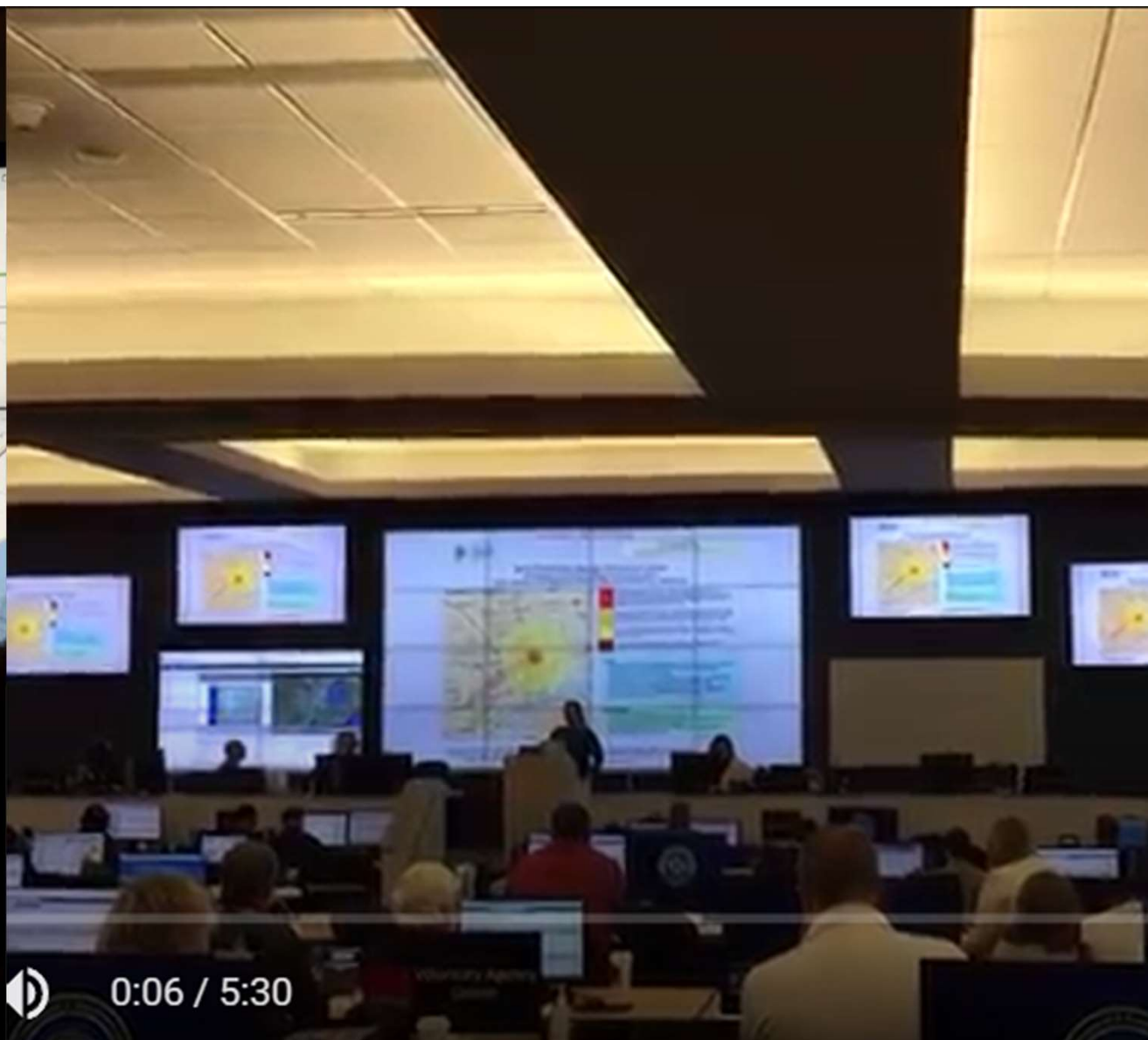
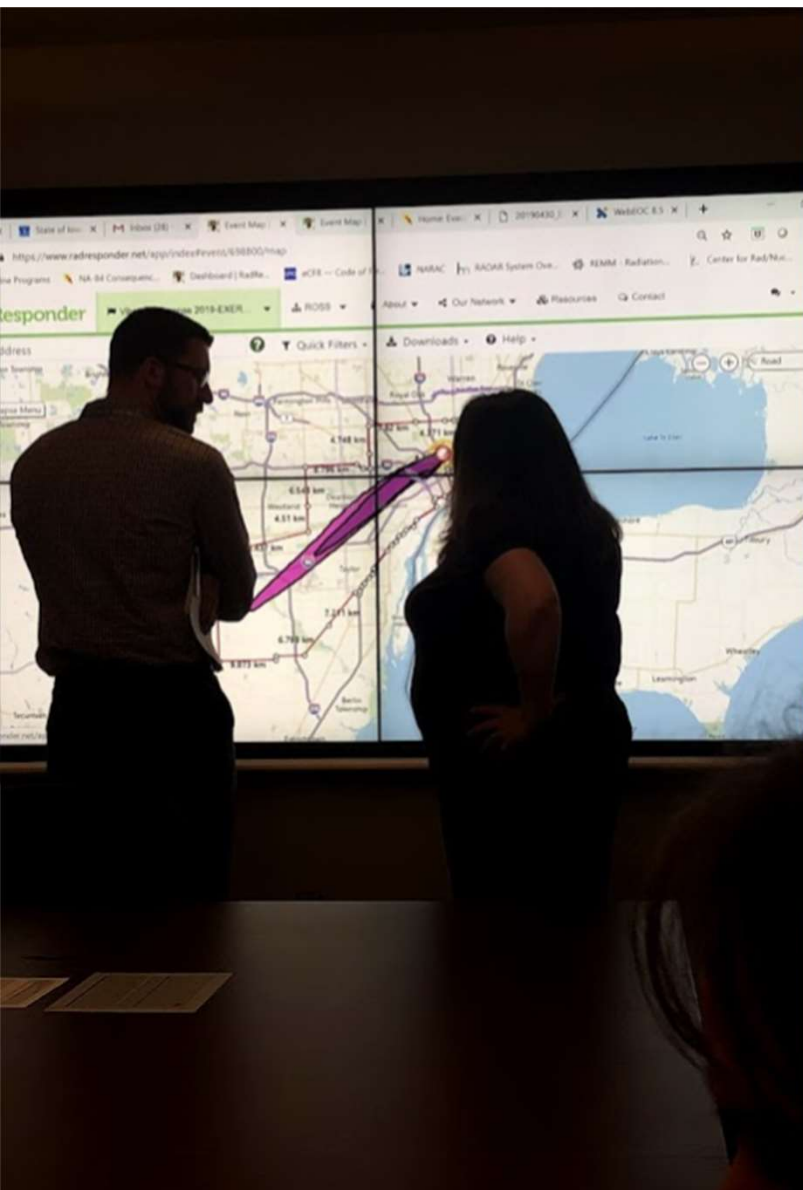




## Vibrant Response 19 - MI

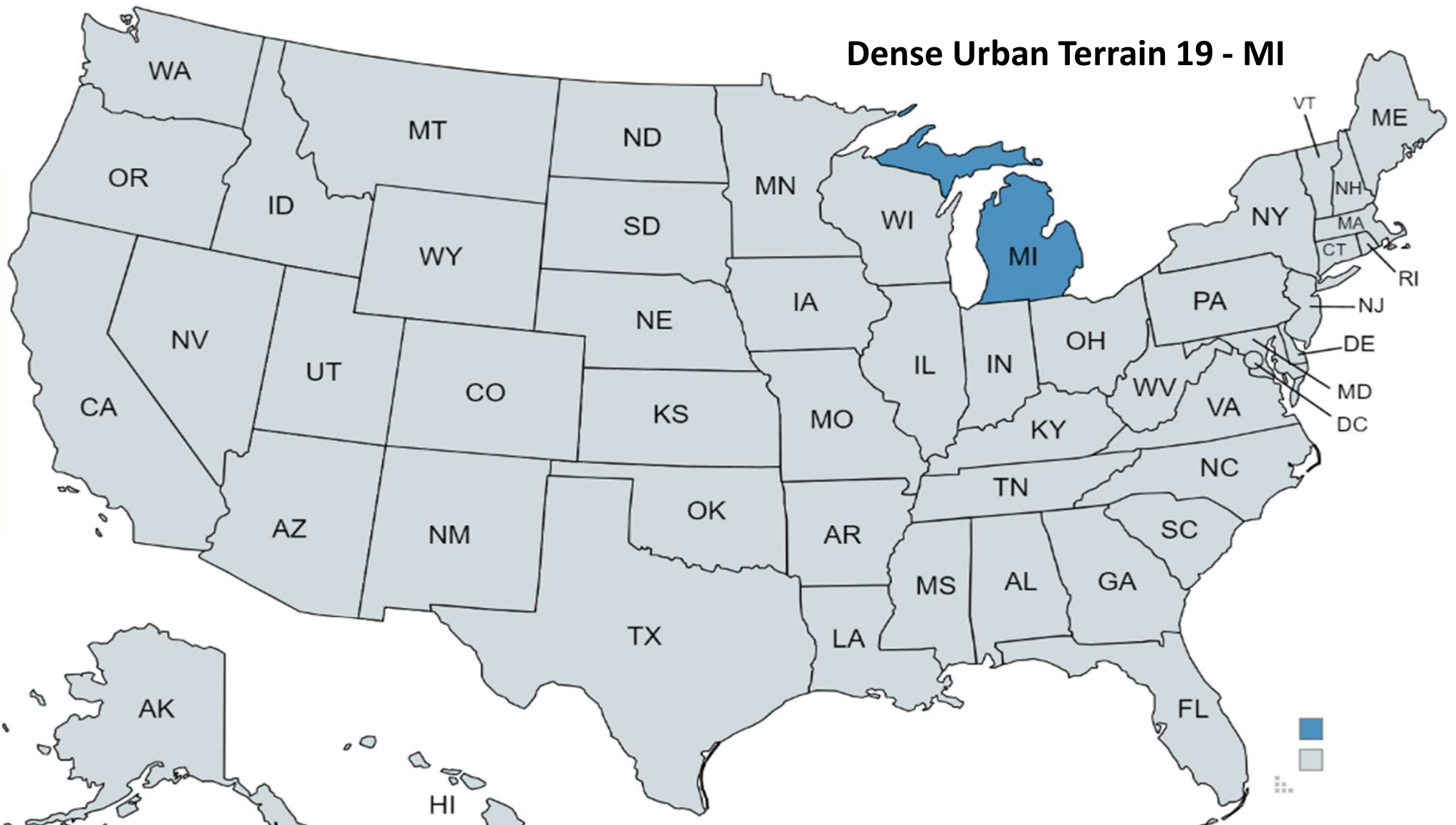








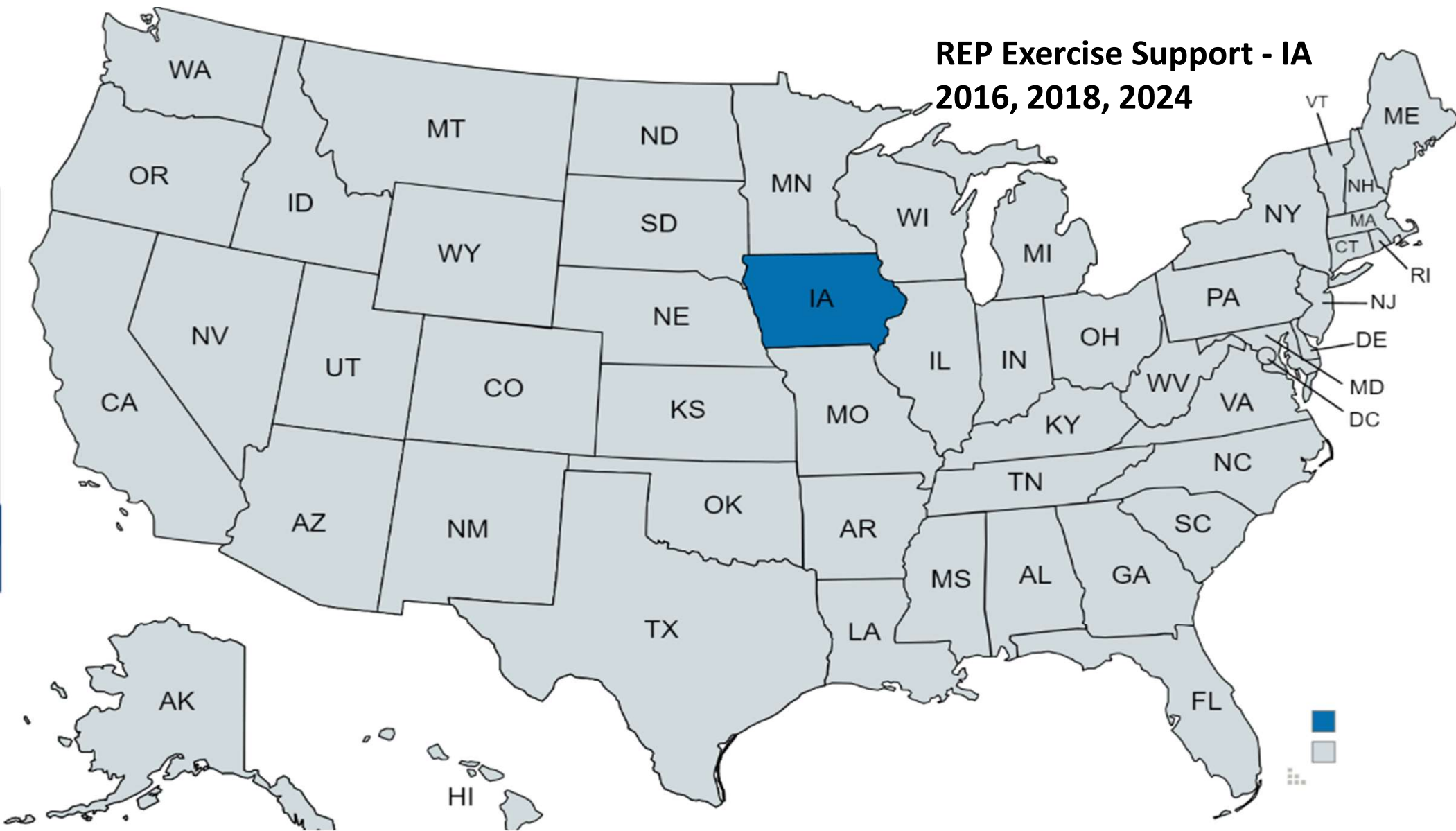
## Dense Urban Terrain 19 - MI



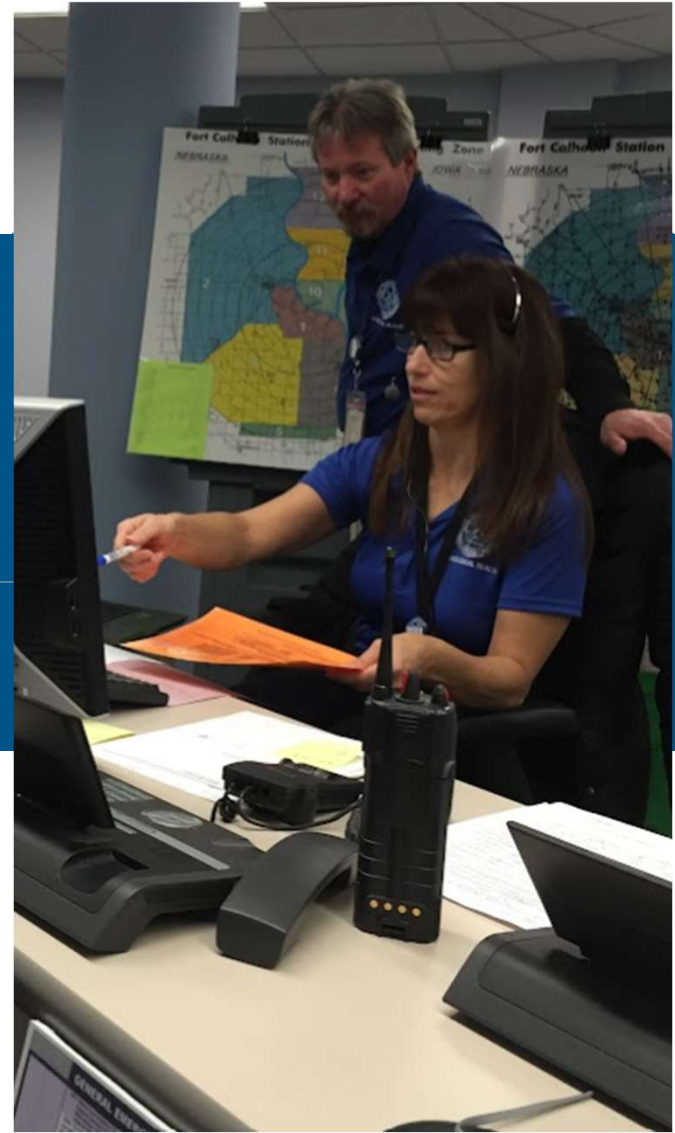




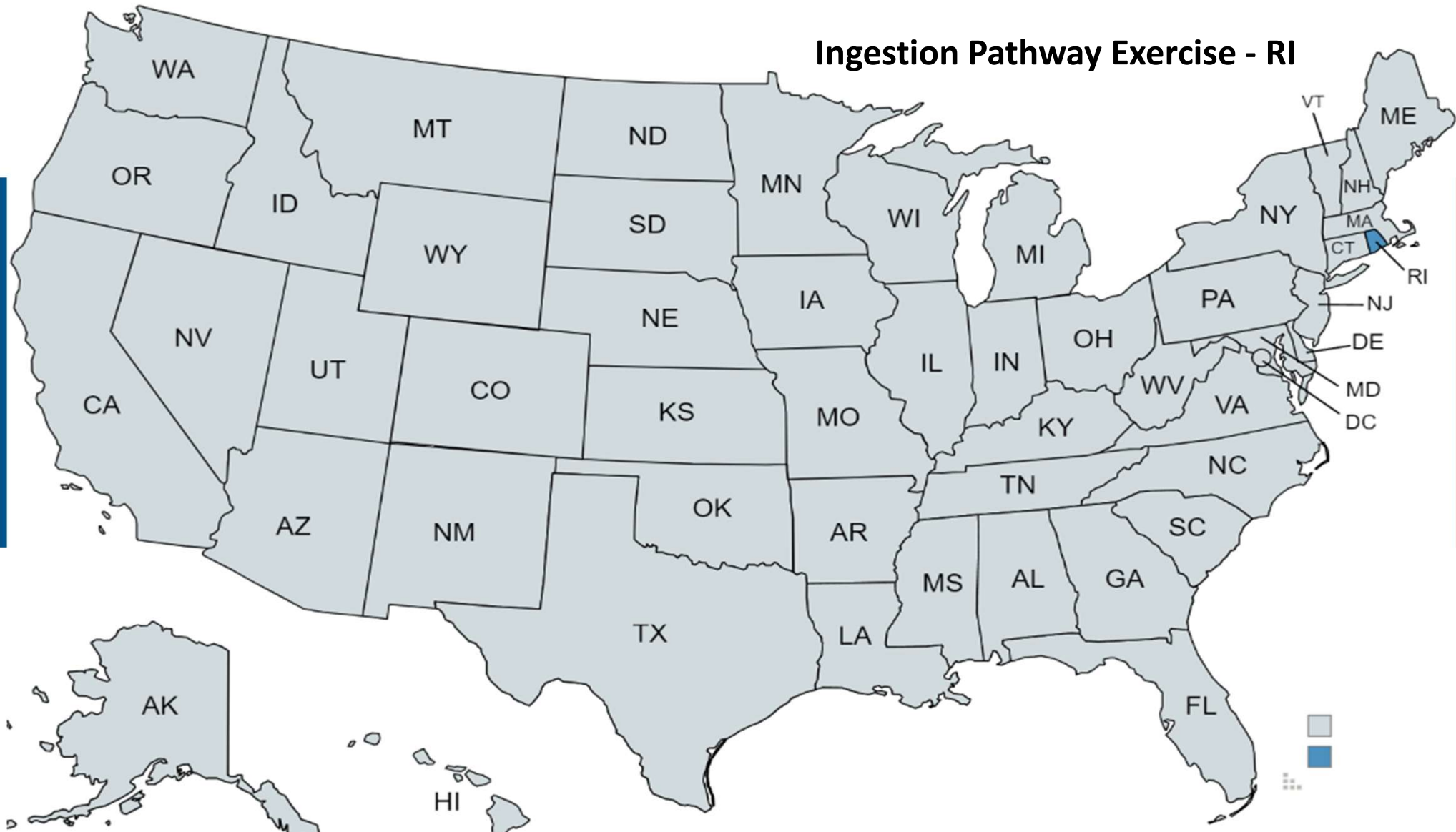
**REP Exercise Support - IA  
2016, 2018, 2024**







## Ingestion Pathway Exercise - RI

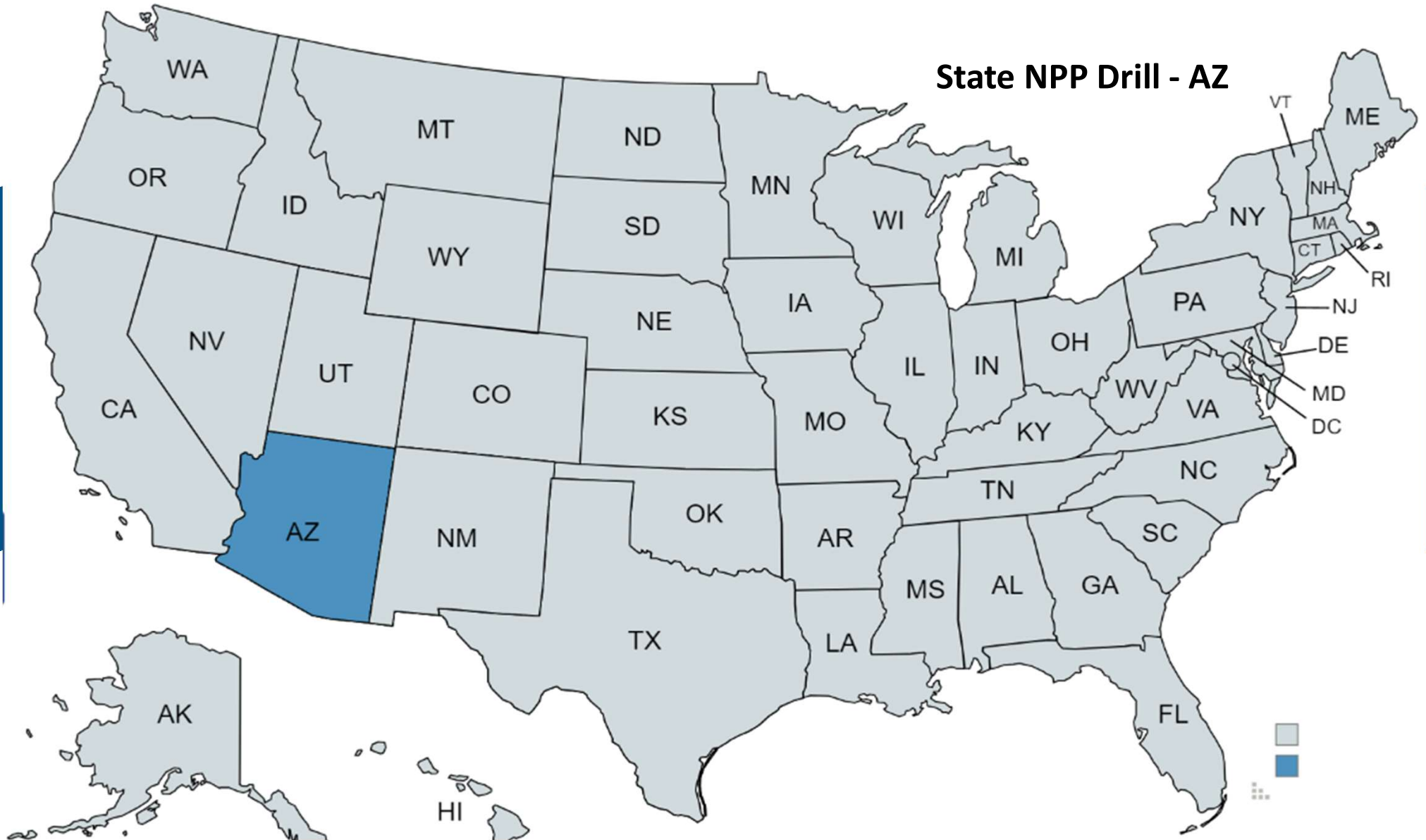


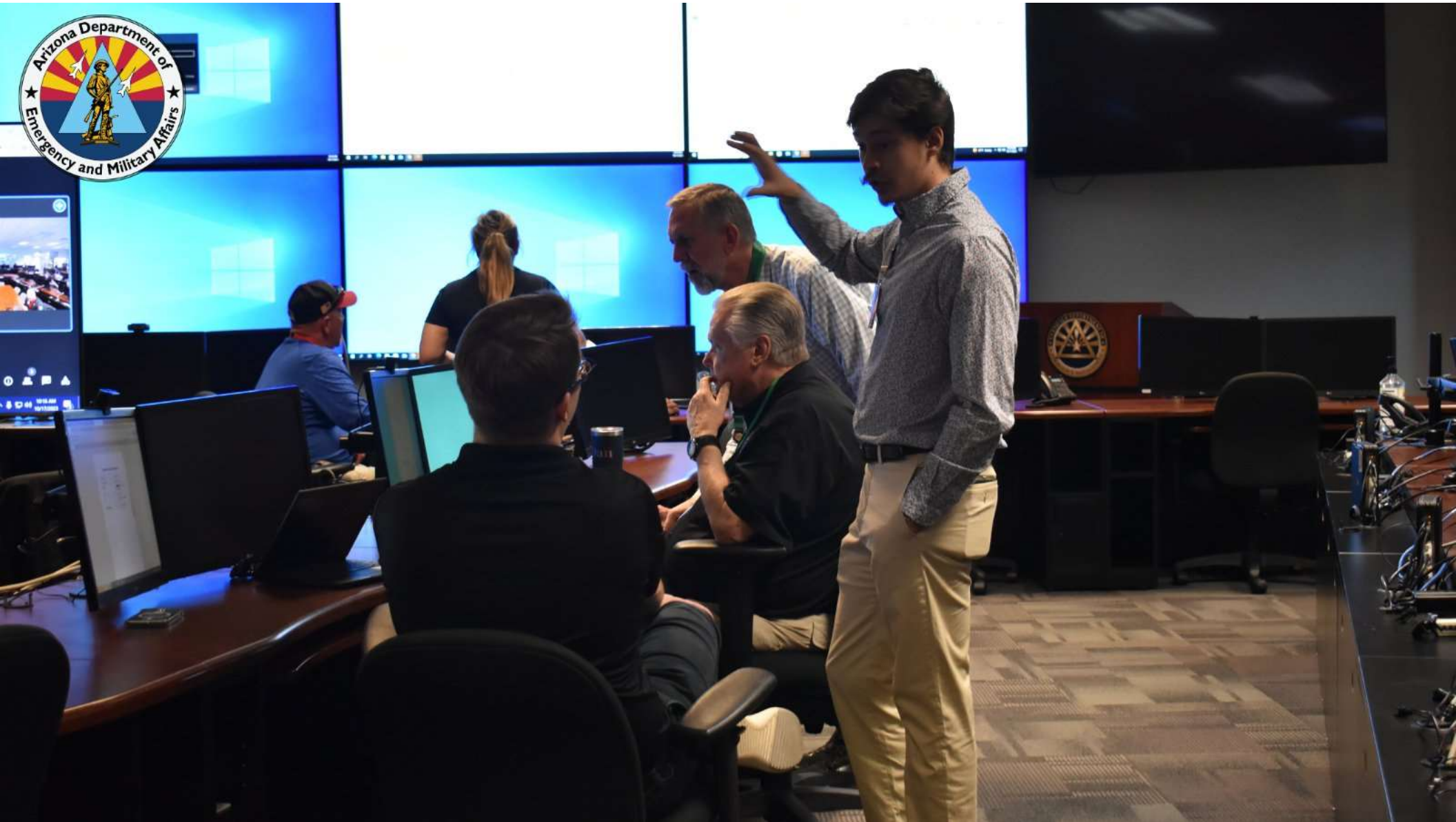






## State NPP Drill - AZ







# TTX Opportunities

## Silent Thunder

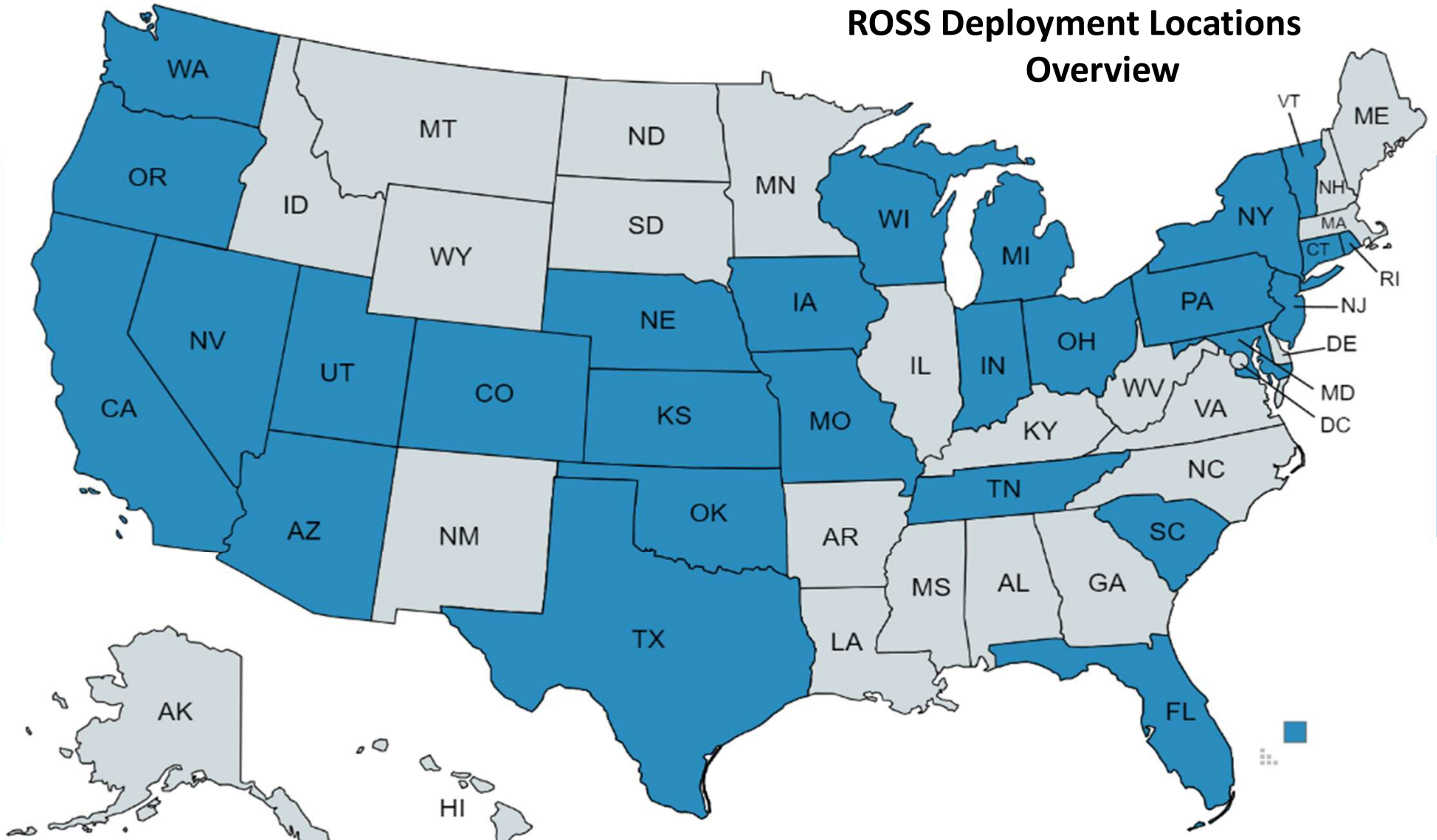
## Isotope Crossroads,

## CURRIE

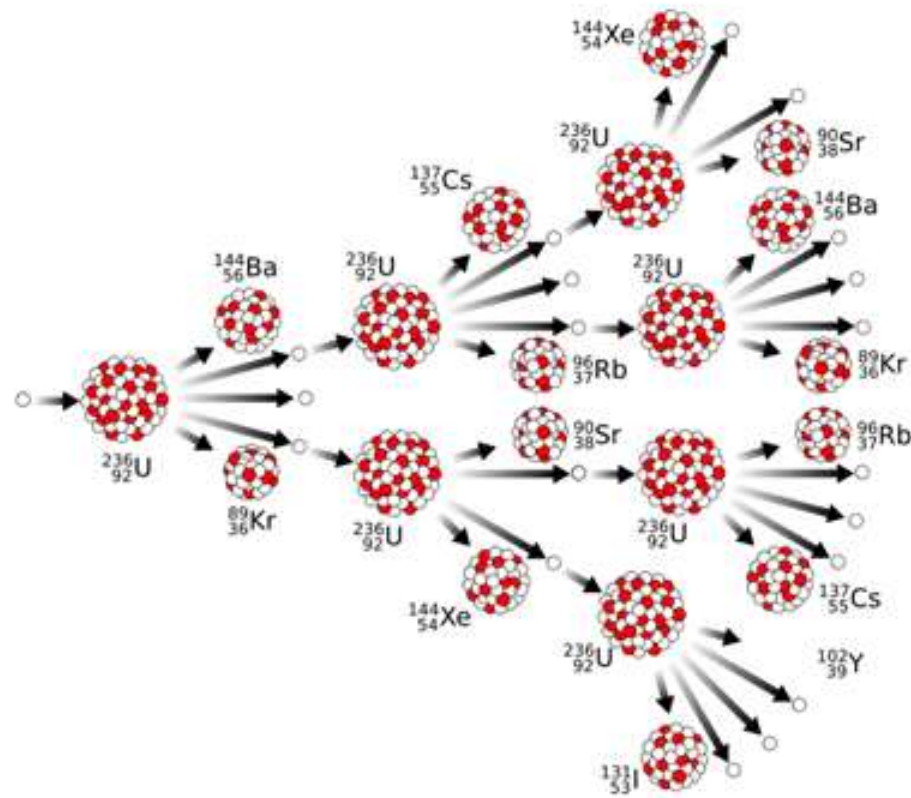
- Impacts
- What is the capacity of the local healthcare system to provide medical care during this incident?
  - What is the process to identify individuals who were exposed or contaminated? (And what is the difference?)
    - Mass decontamination capabilities
    - Individual patient decontamination procedures
  - What is your plan for the "worried well" presenting at healthcare facilities?
  - How will the transportation of possibly contaminated patients be accomplished?



## ROSS Deployment Locations Overview



## Other critical developments



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## The ROSS Becomes a NIMS National Qualification



*"There is a shared recognition that FEMA cannot only plan for events we are capable of responding to; rather, we must plan for catastrophic events that will overwhelm capabilities at all levels of the government and private sector and challenge even the most scalable structures and systems."*

**– Administrator Craig Fugate**

- In 2019, the FEMA National Integration Center assisted in the development of a FEMA National Qualification System (NQS) Position Qualification (NIMS 509) and Position Task Book (PTB) for the ROSS. It follows the SKAs in the job task analysis and builds on the initial training in CTOS PER-388.
- The NIMS 509 is here:  
[https://www.fema.gov/sites/default/files/documents/fema\\_radiological\\_operations\\_support\\_specialist\\_03023.pdf](https://www.fema.gov/sites/default/files/documents/fema_radiological_operations_support_specialist_03023.pdf).
- The PTB is here:  
[https://www.fema.gov/sites/default/files/documents/fema-nqs-ptb\\_radiological-operations-support-specialist.pdf](https://www.fema.gov/sites/default/files/documents/fema-nqs-ptb_radiological-operations-support-specialist.pdf).



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# The National Qualification



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Resource Typing Definition for Response  
Situational Assessment

## RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

RESOURCE CATEGORY	Radiological and Nuclear Response
RESOURCE KIND	Personnel
OVERALL FUNCTION	<p>The Radiological Operations Support Specialist (ROSS):</p> <ol style="list-style-type: none"> <li>1. Provides subject-matter expertise and guidance on questions about radiation, the environment, hazard modeling, data and risk management, public protective actions and other scientific and technical issues to incident response leaders at any level</li> <li>2. Gathers, organizes, synthesizes, documents and distributes incident and resource information to improve situational awareness at all levels of incident management</li> <li>3. Is able to clearly explain the implications of modeling, measurement and analysis methods, as well as the health risks and hazards that exist during a radiological or nuclear incident</li> <li>4. May function as a ROSS Strike Team Leader when serving as a Type 1 or Type 2 ROSS as part of a ROSS Strike Team</li> </ol>
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> <li>1. This position can be ordered as a single resource</li> <li>2. Requestor specifies any additional qualifications necessary based on incident complexity and needs</li> <li>3. Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment</li> </ol>

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

COMPONENT	TYPE 1	TYPE 2	TYPE 3	TYPE 4	NOTES
DESCRIPTION	<p>Same as Type 2, PLUS:</p> <ol style="list-style-type: none"> <li>1. Has the capacity to work at the Incident Command Post (ICP) and Emergency Operations Center (EOC) levels and to advise Authority Having Jurisdiction (AHJ) and elected officials</li> <li>2. Helps the AHJ integrate Federal radiological response assets and capabilities from across the government into the response, as necessary</li> <li>3. Coordinates radiological activities and technical data management with</li> </ol>	<p>Same as Type 3, PLUS:</p> <ol style="list-style-type: none"> <li>1. Creates exposure estimates for a variety of internal and external exposure scenarios</li> <li>2. Understands key state and Federal radiological response assets, capabilities, and reporting structures, and integrates them into an effective response</li> <li>3. Communicates complex radiological issues to large groups and senior managers, and supports public message development</li> </ol>	<p>Same as Type 4, PLUS:</p> <ol style="list-style-type: none"> <li>1. Works as a technical specialist and advises response personnel and AHJ on issues pertaining to radiological and nuclear (rad/nuc) response</li> <li>2. Provides radiological incident assessment and resource information through: <ol style="list-style-type: none"> <li>a. Interpreting and communicating model and measurement results and data products</li> <li>b. Proficient use of the CBRNResponder mobile app and website to collect and share data</li> </ol> </li> <li>3. Has knowledge of state radiation control programs and other radiological emergency preparedness assets, as</li> </ol>	<p>The National Incident Management System (NIMS) Type 3 ROSS:</p> <p>Has completed initial ROSS training and can work as a technical specialist under the supervision of a Type 3 or higher ROSS</p>	<p>When serving as part of a ROSS Strike Team, a NIMS Type 1 or Type 2 ROSS may also function as a team leader.</p>

March 2023

FEMA-509-v20170717

RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST



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The Position Description provides details delineating Type 1, 2, 3 and 4.

The goal is to have a Type 1 and 3 or more ROSS in each state with several more in larger states.

## Available for Mutual Aid



- ROSS may be looked up in the FEMA Resource Typing Library and requested as mutual aid.
- We are developing model Mission Ready Packages (MRPs) for donor states and Resource Support Agreements (RSAs) for host states.
- MRPs and RSAs will be entered into the EMAC Mutual Aid Support System (MASS).



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## Continuing Support

- The FEMA CBRN ROSS Program and the ROSS Steering Committee help ensure ROSS are built on a consistent national framework through the:
  - Testing ROSS Task Forces in Exercises
  - NQS FEMA 509 and PTB
  - CTOS initial training
  - ROSS Toolkit on CBRNResponder
  - ROSS Job Aids on CBRNResponder
  - ROSS-Prepared curriculum for college and university health physics programs
  - CTOS Virtual Evaluation Scenario Tool (VEST) for ROSS continuing education
  - Identification of State ROSS Certifying Officials and State ROSS Coordinators in 34 States
  - ROSS Task Force Leaders assisting the 2024 RadResponder Nationwide Drill
  - The CRCPD ROSS Portal



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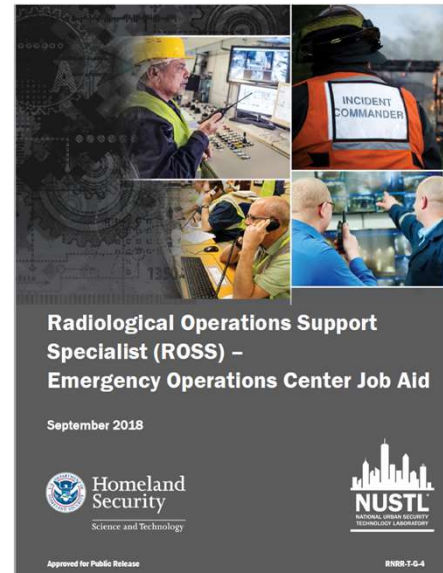
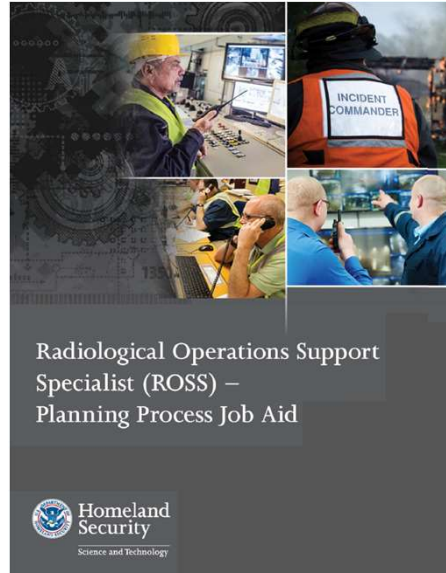
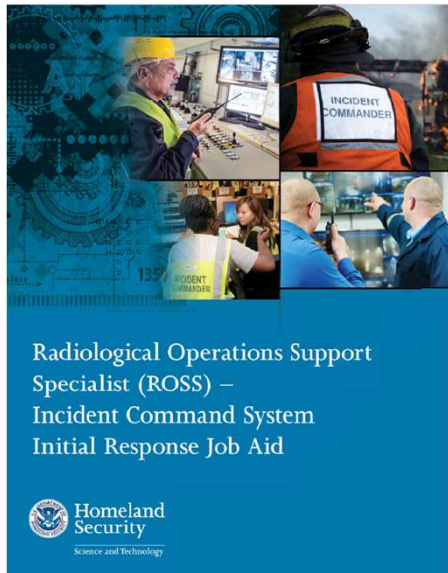




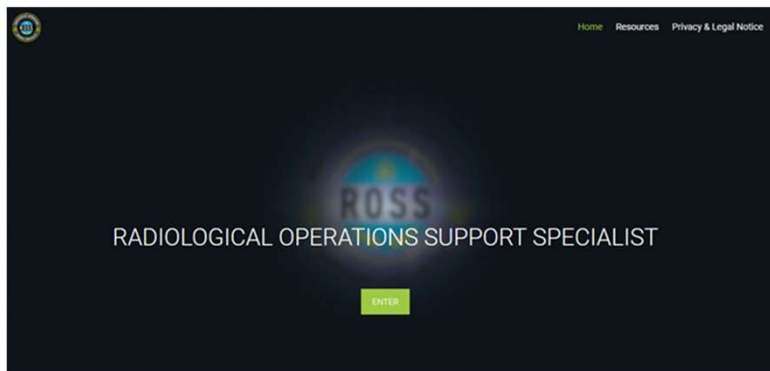
# State Certifying Officials and State ROSS Coordinators

No.	State	Certifying Official	Email	State ROSS Coord.	Email
1	Alabama	Cason Coan	<a href="mailto:cason.coan@adph.state.al.us">cason.coan@adph.state.al.us</a>	Jerome Coleman	<a href="mailto:jerome.coleman@adph.state.al.us">jerome.coleman@adph.state.al.us</a>
2	Arizona	Brian Goretzki	<a href="mailto:brian.goretzki@azdhs.gov">brian.goretzki@azdhs.gov</a>	Sonia Carpena	<a href="mailto:Sonia.Carpena@azdema.gov">Sonia.Carpena@azdema.gov</a>
3	Arkansas	Bernard Bevill	<a href="mailto:bernard.bevill@arkansas.gov">bernard.bevill@arkansas.gov</a>	Bernard Bevill	<a href="mailto:bernard.bevill@arkansas.gov">bernard.bevill@arkansas.gov</a>
4	California	Anthony Chu, Acting	<a href="mailto:Anthony.Chu@cdph.ca.gov">Anthony.Chu@cdph.ca.gov</a>	Juan Garcia	<a href="mailto:juan.garcia@cdph.ca.gov">juan.garcia@cdph.ca.gov</a>
5	Connecticut	Jeff Semancik	<a href="mailto:Jeffrey.Semancik@ct.gov">Jeffrey.Semancik@ct.gov</a>	Jeff Semancik	<a href="mailto:Jeffrey.Semancik@ct.gov">Jeffrey.Semancik@ct.gov</a>
6	Florida	Clark Eldridge	<a href="mailto:clark.eldredge@flhealth.gov">clark.eldredge@flhealth.gov</a>	John Williamson	<a href="mailto:john.williamson@flhealth.gov">john.williamson@flhealth.gov</a>
7	Georgia	David Matos	<a href="mailto:david.matos@dnr.ga.gov">david.matos@dnr.ga.gov</a>	Shelly Stancil	<a href="mailto:shelly.stancil2@dnr.ga.gov">shelly.stancil2@dnr.ga.gov</a>
8	Indiana	Courtney Eckstein	<a href="mailto:ceckstein@dhs.IN.gov">ceckstein@dhs.IN.gov</a>	Courtney Eckstein	<a href="mailto:ceckstein@dhs.IN.gov">ceckstein@dhs.IN.gov</a>
9	Iowa	Patty Riesberg	<a href="mailto:patricia.riesberg@idph.iowa.gov">patricia.riesberg@idph.iowa.gov</a>	Scott Wendt	<a href="mailto:khequ@iastate.edu">khequ@iastate.edu</a>
10	Kansas	Jason Meinholdt	<a href="mailto:jason.meinholdt@ks.gov">jason.meinholdt@ks.gov</a>	Jason Meinholdt	<a href="mailto:jason.meinholdt@ks.gov">jason.meinholdt@ks.gov</a>
11	Kentucky	Matt McKinley	<a href="mailto:mattheww.mckinley@ky.gov">mattheww.mckinley@ky.gov</a>	Matt McKinley	<a href="mailto:mattheww.mckinley@ky.gov">mattheww.mckinley@ky.gov</a>
12	Louisiana	Jerry Lang	<a href="mailto:jerry.lang@la.gov">jerry.lang@la.gov</a>	Jessica Walker	<a href="mailto:jessica.walker@la.gov">jessica.walker@la.gov</a>
13	Maryland	Eva Nair	<a href="mailto:eva.nair@maryland.gov">eva.nair@maryland.gov</a>	Marci Catlett	<a href="mailto:marci.catlett@maryland.gov">marci.catlett@maryland.gov</a>
14	Massachusetts	Jack Priest	<a href="mailto:jack.priest@mass.gov">jack.priest@mass.gov</a>	Rusty Sorensen	<a href="mailto:william.lorenzen@childrens.harvard.edu">william.lorenzen@childrens.harvard.edu</a>
15	Michigan	T.R. Wentworth	<a href="mailto:wentwortht@michigan.gov">wentwortht@michigan.gov</a>	David Skutt	<a href="mailto:skuttd@michigan.gov">skuttd@michigan.gov</a>
16	Minnesota	Mary Navara	<a href="mailto:mary.navara@state.mn.us">mary.navara@state.mn.us</a>	Brandon Juran	<a href="mailto:brandon.juran@state.mn.us">brandon.juran@state.mn.us</a>
17	Missouri	John Langston	<a href="mailto:john.langston@health.mo.gov">john.langston@health.mo.gov</a>	Jeremy Wilson	<a href="mailto:jeremy.wilson@health.mo.gov">jeremy.wilson@health.mo.gov</a>
18	Nebraska	Becki Harisis	<a href="mailto:becki.harisis@nebraska.gov">becki.harisis@nebraska.gov</a>	Ahaileas (Larry) Harisis	<a href="mailto:aharisis@unl.edu">aharisis@unl.edu</a>
19	Nevada	John Follette	<a href="mailto:jfollette@health.nv.gov">jfollette@health.nv.gov</a>	John Follette	<a href="mailto:jfollette@health.nv.gov">jfollette@health.nv.gov</a>
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21	New Jersey	Patrick Mulligan	<a href="mailto:patrick.mulligan@dep.nj.gov">patrick.mulligan@dep.nj.gov</a>	Patrick Mulligan	<a href="mailto:patrick.mulligan@dep.nj.gov">patrick.mulligan@dep.nj.gov</a>
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29	Tennessee	Beth Shelton	<a href="mailto:beth.shelton@tn.gov">beth.shelton@tn.gov</a>	Andrew Holcomb	<a href="mailto:andrew.holcomb@tn.gov">andrew.holcomb@tn.gov</a>
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# The ROSS Job Aids and Toolkit from CBRNResponder



ROSS are meant to be RadResponder SMEs and RadResponder houses critical reference materials in the ROSS Toolkit.



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## ROSS Working to Sustain the ROSS

- CRCPD HS/ER-4 helps foster connections among ROSS and between ROSS and government agencies.
- CRCPD supports ROSS training and exercise opportunities, quarterly calls and competency maintenance problem sets.
- CRCPD Supports relationships between ROSS and the ROSS Steering Committee, State Radiation Control Program Directors and the State ROSS Coordinators



The ROSS Program is managed by FEMA as guided by a Steering Committee of FEMA CBRN, the DHS National Urban Security Technology Laboratory, the DOE National Nuclear Security Administration and the CRCPD.

If you have questions about becoming a ROSS or using ROSS contact the ROSS Steering Committee at [FEMA-ROSS@FEMA.DHS.GOV](mailto:FEMA-ROSS@FEMA.DHS.GOV)

### Testimonials

*Southern Exposure 15 - "This was an incredible opportunity for me personally and for the ROSS program in its early days."*



Ken Yale  
U.S. EPA

[ROSS Portal - CRCPD](#)



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## ROSS Qualification

- Take PER-388 at Counterterrorism Operations Support CTOS.
- Those who complete PER-388 then contact [FEMA-ROSS@fema.dhs.gov](mailto:FEMA-ROSS@fema.dhs.gov) and provide evidence of completing additional ICS and NIMS training on the Position Qualification (FEMA-509) to become Type 4 ROSS.
- ROSS then complete tasks in the Position Task Book (PTB) to advance to Type 3, to Type 2, and to Type 1.
- Tasks may be signed off by higher ranked ROSS as well as the authority having jurisdiction (AHJ).
- The AHJ also acts as the Certifying Official for ROSS advancing by Type.



## ROSS Qualification

- There are 63 tasks.
  - It takes 41 to become a Type 3,
  - It takes 15 more to become a Type 2, and
  - It takes 7 more to become a Type 1.
- Like most FEMA ICS/NIMS Type 1 positions, it takes work and time to reach the highest level.



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TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
38. Demonstrate ability to help the IC adjust responder dose guidelines for rescue operations involving large doses and vulnerable populations: <ul style="list-style-type: none"> <li>• Demonstrate ability to clearly and concisely communicate implications of setting worker dose for lifesaving missions too low</li> <li>• Identify appropriate alarm set points and dose alerts for lifesaving missions</li> <li>• (TYPES 1 AND 2 ONLY) Explain when and why bodies such as the National Council on Radiation Protection and Measurements (NCRP), the International Atomic Energy Agency (IAEA) and the EPA sometimes recommend higher dose thresholds</li> </ul>	C, E, F, I, J, T		
39. Demonstrate an understanding of the decision-making process for incident response: <ul style="list-style-type: none"> <li>• Describe positions and agencies typically involved in decision-making for radiological incidents</li> <li>• (TYPES 1 AND 2 ONLY) Explain to an audience how nontechnical factors (geographical, social and so on) can inform protective action decisions</li> <li>• (TYPE 1 ONLY) Provide highly detailed science-based guidance—appropriate for complex and potentially dangerous situations—to agencies typically involved in decision-making for radiological incidents</li> </ul>	C, E, F, I, J, T		
40. (TYPES 1 AND 2 ONLY) Explain the capabilities of primary radiological assets such as Department of Defense (DOD) National Guard Civil Support Teams (CST), CBRN Enhanced Response Force Packages (CERFP), Air Force Radiation Assessment Teams (AFRAT), and so on: <ul style="list-style-type: none"> <li>• For decision makers, describe when to request and activate National Guard assets and how best to use them</li> <li>• Describe the National Guard assets important to radiological incident response, including their mission, capabilities, footprint and expected response times</li> </ul>	C, E, F, I, J, T		
41. (TYPES 1 AND 2 ONLY) Explain the capabilities of primary radiological DOE assets: <ul style="list-style-type: none"> <li>• For decision makers, describe when to request and activate DOE assets and how best to use them</li> <li>• Describe to an audience the DOE assets important to radiological incident response—Radiological Assistance Program (RAP), AMS, FRMAC, NARAC, and so on—including their mission, capabilities, footprint and expected response times</li> </ul>	C, E, F, I, J, T		

## Taking the Initial ROSS Course is Only the Beginning

- The initial ROSS course runs through many important tools, valuable resources, and essential references, and puts trainees into complex scenarios where they must quickly help leaders make potentially life-saving decisions.
- Competency maintenance after the initial training is where the real growth occurs.
- The Position Task Books are where ROSS demonstrate that they have the skills, knowledge and abilities to do what is assigned efficiently and precisely.



<https://www.canada.ca/en/treasury-board-secretariat/services/professional-development/key-leadership-competency-profile.html>.



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# For me, it all started with a simple step....

- I signed up to be a member of CRCPD Committee HS/ER-4 in 2006.
- We could use more help.
- We cannot simply train hundreds of people and hope that a good fraction of them advance from Type 4 to Type 3, 2, and 1.
- The ROSS need deep dive training in the incredible challenges of RDDs, NPP accidents, catastrophic transportation incidents and a nuclear detonation.
- They need to learn and practice using new skills in environments that simulate the intense threats widespread contamination and dangerous levels of radiation present.
- All this takes time, people, creativity and care.
- If you want to join me in this adventure, reach out.



# ROSS Experiences, ROSS's Fit, and ROSS Going Forward

*May 2024*



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# Agenda

- Anecdotes of ROSS Importance
- How does ROSS Fit in FEMA Strategic Plan?
- Where are we going?



# How ROSS has made a difference and Where we are needed

- Expanding REPP exercises for power plant exercises
- Short staffed or missing expertise for nuclear detonation exercises
  - In the best cases 2 for an EOC or 1 for a UCG
  - Missing ROSS to help advise and support ICS sections

# ROSS's Fit in FEMA's Strategic Plan

- Goal 1: Instill Equity as a Foundation of Emergency Management
- Goal 2: Lead Whole of Community in Climate Resilience
- **Goal 3: Promote and Sustain a Ready FEMA and Prepared Nation**
  - **Objective 3.1 Strengthen the emergency management workforce**

- Measure: Number of personnel who maintain a current FEMA Qualification Status



Implement and  
with National

# Where are we going

- Continue to grow the size of ROSS and the pool of active ROSS
  - Target 400-500 ROSS, currently about 300-350
  - ROSS in all 54 States and Territories
  - As we grow, a new challenge will emerge, managing attrition
- State leadership of their ROSS programs
- Provide and enable continued education and growth for existing ROSS
- ROSS importance and engagement by State, Territory, and DHS leadership
- Program Policies and Strategy
  - Renewed interest in legal grounding



Jonathan Gill  
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ROSS Program Manager  
Chief, Risk Management Branch  
Office of Emerging Threats



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# Updates from CRCPD HS/ER-4: CRCPD Annual Meeting May 2024

Bill Irwin



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Questions? [william.Irwin@vermont.gov](mailto:william.Irwin@vermont.gov)

# Conference of Radiation Control Program Directors Annual Meeting

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- Homeland Security/Emergency Response Committee-4 met all day in Jacksonville, Florida on Saturday 18 May.
- Angela Leek, Wendy Renno, Christine Allston, me and several other ROSS presented an all-day training course on Sunday 19 May.
  - An extension of an effort to teach the new emergency response and recovery paradigm which started with the radiological dispersal device in 2022 and the nuclear detonation in 2023 and ended with the nuclear power plant (NPP) in 2024.
  - The NPP course was important because their preparedness approaches differ the most from the new paradigm built over the last twenty years for counter-terrorism.
  - As with the other years, the training was taught at the National Radiological Emergency Preparedness Conference (NREP) and the CRCPD Annual Meeting and will be taught at the HPS/IRPA 16 Annual Meeting.
- Angela Leek, Jon Gill, Eliot Calhoun and I Held a special session celebrating the 10<sup>th</sup> Anniversary of the ROSS Program on Wednesday 22 May.



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## Homeland Security/Emergency Response Committee-4 Meeting on 18 May

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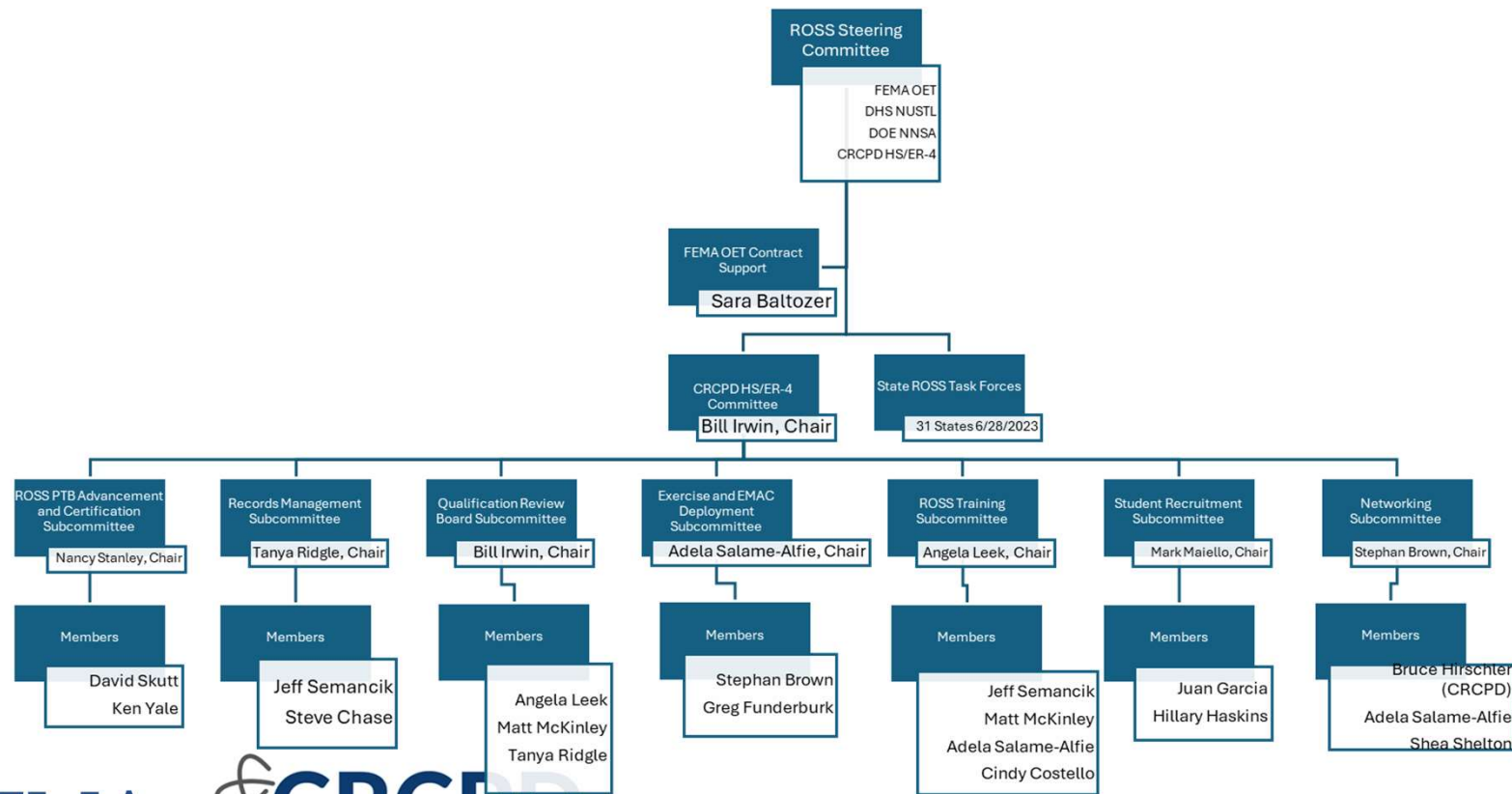
- Attended by Angela Leek, Adela Salame-Alfie, Cindy Costello, Tany Ridgle, Stephan Brown and Juan Garcia.
- Discussed current subcommittee work and challenges.
- Created a new organizational chart that is more vertical and less horizontal.
- Identified work to be done by each Section and Group.



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# Previous Subcommittee Organization Chart

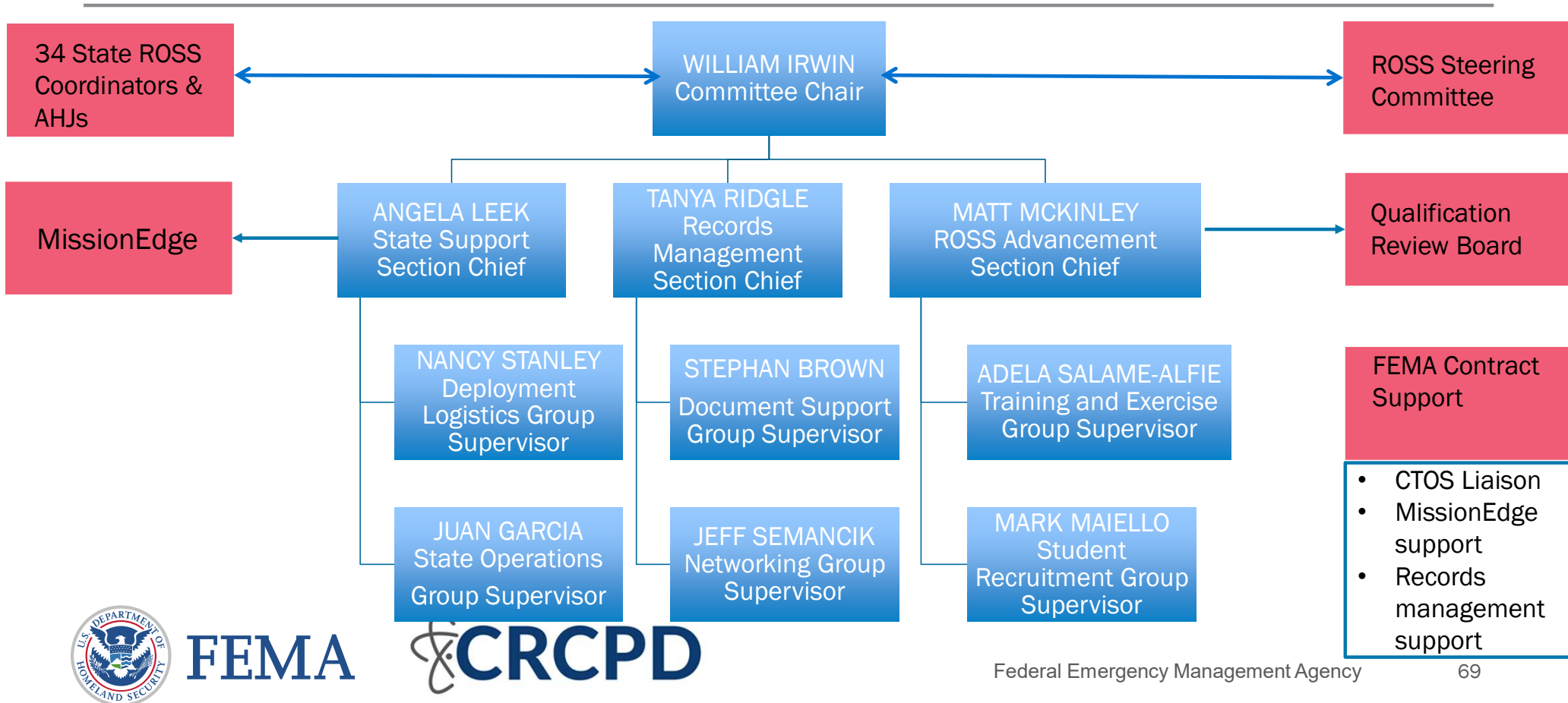


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Federal Emergency Management Agency

# New HS/ER-4 Organization Chart





## State Support Section

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- Completely new section and groups focused on supporting states that are helping the ROSS effort.
- Angela Leek (IA) is the State Support Section Chief with Nancy Stanley (NJ) the Deployment Group Supervisor and Juan Garcia (CA) the State Operations Group Supervisor.
- Key objectives are to help states build and manage their own cadre of ROSS, and to help ROSS get into planning, training and exercises where they can improve their competencies.



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## State Support Section Help (Videos, Checklists, Job Aids)

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- MissionEdge users (documentation for task completion and advancement by type).
- State ROSS Coordinator roles.
- The support needed from Authorities Having Jurisdiction (AHJ).
- Models for large and small state ROSS programs.
- Consistency and compatibilities of national and state programs.
- Exercise request and state contract for ROSS travel templates.
- EMAC Mission Ready Package and Resource Support Agreement templates.
- ROSS requirements for and responses to in-state and national exercise opportunities.
- Assigning ROSS to states or to the National ROSS Program.



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## Records Management Section

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- Consolidation of two past subcommittees into one Section.
- Tany Ridgle (CA) is the Records Management Section Chief with Jeff Semancik (CT) the Document Support Group Supervisor and Stephan Brown (PA) the Networking Group Supervisor.
- Key functions are support of Mission Edge, the Homeland Security Information Network (HSIN) ROSS Community of Interest, the ROSS Portal at [www.CRCPD.org](http://www.CRCPD.org) and networking on social media.



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## Records Management Section Help (Videos, Checklists, Job Aids)

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- HSIN usage, including a reminder to log in monthly to keep that practice fresh.
- Publishing on the ROSS Portal and social media.
- Which records need retention and where they are to be retained.
- Confidential records in password protected HSIN:
  - Name                      Type                      State of residence
  - Employer              Email address              Mobile telephone number
- Obtaining information about new PER-388 graduates and helping them with their next steps to become Type 4 ROSS.
- Working to keep records current and protected.



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## ROSS Advancement Section

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- Consolidation of two past subcommittees under one Section.
- Matt McKinley (KY) is the ROSS Advancement Section Chief with Adela Salame-Alfie (GA) as the ROSS Training Group Supervisor and Mark Maiello (NY) as the Student Recruitment Group Supervisor.
- The objectives for this section include ROSS skills development, ROSS-focused deep dives into technical content areas, and quarterly competency maintenance problem sets.



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## ROSS Advancement Section Help (Videos, Checklists, Job Aids)

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- Task completion
- Advancement by type (including QRB Review and AHJ Certification)
- Historical recognition, with examples
- Initial ROSS training student recruitment preferences
- How-to guide on hosting a CTOS Mobile ROSS Course
- Support of the Virtual Evaluation Scenario Tool offerings after their pilots
- Position Qualification and Position Task Book training course equivalency determination
- Notifications about training opportunities useful to ROSS
- Competency maintenance training at ROSS Quarterly Calls



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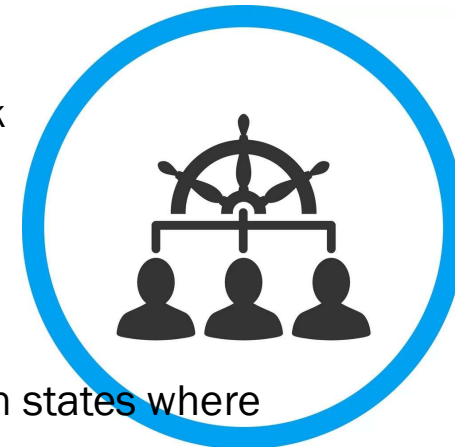




## Work of the ROSS Steering Committee

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- Integration of the ROSS into the:
  - FEMA Radiological Emergency Preparedness programs, planning, training and exercises
  - DOE Office of Radiological Security exercises
  - DHS Urban Areas Security Initiative (UASI) and/or Secure the Cities (STC) work
- ROSS volunteer recognition and appreciation
  - Credentials with photos, expiration date, return to address, FEMA-ROSS
  - ROSS Shirts ([william.Irwin@vermont.gov](mailto:william.Irwin@vermont.gov)) and ROSS coins
- Recruiting ROSS to CRCPD HS/ER-4 and State ROSS Coordinators and AHJs in states where SRCs have not been appointed yet
- ROSS Code of Conduct



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# Updates from CRCPD HS/ER-4: ROSS Participation in Cobalt Magnet 25

Bill Irwin



FEMA



Questions? [william.Irwin@vermont.gov](mailto:william.Irwin@vermont.gov)

## Cobalt Magnet May Be the Most Extensive NPP Exercise In History

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- I started attending CM 25 meetings in May of 2025 for Purposes of Helping Incorporate ROSS into it.
- The Fermi II plant is located such that this will be an international exercise as well.
- What ROSS can do has been shared in dozens of Working Group Meetings held remotely since the Initial Planning Meeting.
- A ROSS class has been held in Michigan to develop a local cadre and to improve the skills and knowledge of staff.
- Indiana ROSS have attended meetings and Working Group conference calls, and they and Ohio ROSS are planning on helping their neighbor.
- I am discussing ROSS working as exercise controllers with lead planner Wendy Renno.



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## CDC Public Health Decision Makers Courses in Support of CM25 and Beyond

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- The Centers for Disease Control and Prevention (CDC) is sponsoring two offerings of it's Public Health Decision Makers Training Course in Michigan in July and September.
- The CDC would like ROSS to become trainers for these courses starting with attendance in Lansing, Michigan in July; Wayne County, Michigan in September; or Sacramento, California in August.
- We are reaching out to specific ROSS today about their interest in attending the courses and becoming a trainer.
- Travel funding for possibly two or three ROSS is available this fiscal year.
- More is expected in the next fiscal year.
- Some of the FY 25 travel funding will be available for a train the trainer course in Atlanta.



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# WMD Directorate Strategic Group

Jon Gill, PhD, FEMA Office of Emerging Threats



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Questions? [william.Irwin@vermont.gov](mailto:william.Irwin@vermont.gov)

# Closing Remarks

Jon Gill, PhD, FEMA Office of Emerging Threats



# FEMA

Any Questions:

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