



# 2021 FEMA Region 7 Higher Education Regional Engagement Meeting

After Action Report

August 11-12, 2021



FEMA

This report was prepared through a collaborative effort between FEMA's National Training and Education Division Higher Education Program, FEMA Region 7, Kansas State University Research and Extension, and the National Agricultural Biosecurity Center.

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## Engagement Overview

<i>Item</i>	<i>Description</i>
Meeting Name	FEMA Region 7 Higher Education Regional Engagement Meeting
Meeting Dates	August 11–12, 2021
Scope	This engagement event was held for two days at the Kansas State University Olathe campus. Planning involved a collaborative effort between FEMA Region 7, Kansas State University Research and Extension, and Kansas State University National Agricultural Biosecurity Center. The event consisted of presentations from practitioners and academics, themed breakout discussion sessions, and large-group brief backs to develop shared research themes across the region.
Meeting Themes	Community Preparedness, Cybersecurity, Economic Recovery.
Purpose	The purpose of this meeting was to develop a “living document” with goals, strategies, and outcomes shifting to meet real-world constraints, limitations, goals, and desires from stakeholders and leadership for Region 7.
Meeting Objectives	<p>Primary Objectives:</p> <ol style="list-style-type: none"> <li>1. Development of a framework for an institutionalized, multi-year partnership between Region 7 and academic institutions and emergency management practitioners across Region 7 (five-year outlook).</li> <li>2. Development of an initial Region 7 Research Agenda with 8-12 topics for investigation by Region 7 academic and practitioner partners (projects and topics to be investigated in one year or less, up to two years for graduate research).</li> <li>3. Evaluation of the national-level Research Agenda for continued applicability and interest among Region 7 academic partners.</li> </ol> <p>Secondary Objectives:</p> <ol style="list-style-type: none"> <li>1. Participants will become familiar with success stories of FEMA/Higher Education Community partnerships.</li> <li>2. Participants will become aware of opportunities for mutually beneficial relationships between FEMA Region 7 staff and the Higher Education Community (including practitioners, faculty, and students).</li> <li>3. Participants will become familiar with the work done by their peers in Region 7, promoting future organic collaborative opportunities.</li> </ol>

<b>Item</b>	<b>Description</b>
	4. Participants will grow their network and understanding of unique emergency management challenges in order to consider opportunities for collaboration moving forward.
Sponsor	FEMA Region 7
Participating Organizations	A wide variety of organizations participated in this engagement event, including representatives from local, state, and federal government agencies and academia. A comprehensive list of attendees and participating organizations can be found in Appendix A.
Point of Contact	<p>FEMA</p> <p>Jay Van Der Werff, PhD National Preparedness Division Director <a href="mailto:jay.vanderwerff@fema.dhs.gov">jay.vanderwerff@fema.dhs.gov</a> 202-924-1374</p> <p>Kansas State University</p> <p>Elizabeth Kiss, PhD Associate Professor and Extension Specialist <a href="mailto:dekiss4@k-state.edu">dekiss4@k-state.edu</a> 785-532-1480</p>

## Executive Summary

On Wednesday, August 11, 2021, leadership from FEMA Region 7 convened an engagement event designed to bring together emergency management practitioners and researchers across the region, covering all levels of government and institution size. The event took place over the course of two days, beginning at 10 am on August 11, and wrapping up on August 12 at 3 pm. The event was held at the Olathe campus of Kansas State University.

Planning for this engagement event, in terms of both event logistics and the event goals and objectives, was coordinated through a collaborative effort between FEMA Region 7 leadership and representatives of Kansas State University. Planning team members included:

- Jay Van Der Werff, PhD, National Preparedness Division Director, FEMA Region 7
- Jennifer Regn, Regional Training Manager, FEMA Region 7
- Dr. Sid Saleh, Colorado School of Mines – McNeil Center for Entrepreneurship & Innovation

- Elizabeth Kiss, PhD, Associate Professor and Extension Specialist, K-State Research and Extension, Kansas State University (K-State)
- Adrian Self, Operations Research Analyst, National Agricultural Biosecurity Center, K-State
- David Hogg, Project Manager, National Agricultural Biosecurity Center, K-State

Attendees to the meeting were first provided an overview from FEMA Headquarters' Higher Education Program Office and FEMA Region 8 staff on the value and impact of FEMA/Higher Education Community partnerships, including showcasing the success stories of FEMA Region 8's collaboration with schools in the Colorado area. A discussion was held regarding FEMA's Proposed Research Agenda for the Higher Education Community—offering opportunities for students to partner with FEMA Region 7 staff for research proposals, the formation of Special Interest Groups (SIGs), and other symbiotic relationships.

An effort was made to stress the importance of the socialization of real-world emergency management “problem statements” in need of a fresh set of eyes from academia. To facilitate this goal, after the initial presentations, the group broke up into smaller discussion groups focused around pre-identified theme areas, highlighted in greater detail below. Attendees were allowed to attend multiple discussion groups during the remainder of the day on August 11. These discussion groups were facilitated by a pair of facilitators, representing both a federal and academic perspective on each theme area. The goal of these discussion groups was to identify common areas of observed or experienced needs between practitioners, researchers, and federal personnel.

Once attendees returned on August 12, the direction of the four breakout rooms changed from discussing common problem areas to the development of potential research questions designed to engage and address these problems. Each theme area, under the direction of the facilitators, developed a number of proposed research questions with attendee feedback and support.

The final piece of the event involved returning to a large-group setting by which each of the theme areas briefed out the high-level discussion areas and proposed research questions. A discussion was then held about next steps for these research questions, collaboration and coordination with the larger FEMA Higher Education effort, and ideas for future regional collaboration efforts and events.

This event was originally planned as an in-person event but, due to the continued challenges posed by the COVID-19 pandemic, adjustments had to be made to accommodate as many participants as possible. This meant that while an in-person event was still supported, a virtual option had to be added for attendees who either could not travel or were not comfortable attending in person. Support from IT professionals at K-State Olathe allowed for Zoom facilitation to each of the breakout rooms and for attendees to participate remotely from all four Region 7 states.

## Engagement Themes

During the planning phase of the event, it was decided that developing themes for directing discussions and potential research questions would likely result in a better final product than providing no overarching direction to attendees. The decision was made to focus on the following areas – Cybersecurity, Community Preparedness, and Economic Recovery and Resilience. A fourth area was added as something of a catch-all in case there were specific areas that either researchers or practitioners specifically wanted to discuss but that did not fit in the more focused areas.

During the course of the event, the unique geographic, demographic, and economic characteristics of the region played an important role in driving both the identification of problem areas and the formulation of potential research questions. Region 7's high reliance on agriculture as an economic driver, as well as a factor in demographic makeup and changes, played an important role in many of the discussions that took place. Similarly, the divide between large urban centers with relatively large resource pools (Kansas City, St. Louis, Omaha, Des Moines, etc.) and the predominance of more rural jurisdictions was a frequent source of discussion.

The following is a collection of notes that were captured from each of the four engagement theme breakout rooms. These notes are unedited and exist to provide a snapshot of some of the conversations that took place but are not meant to be a comprehensive list of all discussions that took place over the course of the event.

### 1. Cybersecurity

#### **What Tech Can Do for EM**

- Optimum way to gain situational awareness in common emergency management environments
- What are the things all Emergency Operations Centers (EOCs) need to know and how can technology be used to support?
- Many EM support technologies require or are built on “full comms” environment and aren't designed to readily function in comms out environment

#### **Tech Maintenance and Integration**

- Retention of qualified IT personnel to support EM
- Integration of IT into Unified Command, Law Enforcement operations, etc.
- Resource intensity to manage IT systems to support EM Response
- Cyber security curriculum/ training standards incorporated into EM degrees, certifications, etc.

- How many counties have an EOC/Cybersecurity response annex?
- Using common terminology among and between IT and EM

### **Threats**

- Pervasiveness of networked systems (increases potential gateways for attack)
- Follow on cyberattacks/incidents in response to high profiles emergency incidents
- Intersection of incident management respective to system restoration and resulting cascading impacts from cyberattacks

### **Issues with Current Practice**

- Lack of clearly defined roles or terminology in cyber incident response
- Lack of awareness of cyber issues among general EM community
- Lack of incident documentation and after-action reporting following cyber incidents
- Coordination of ESFs across all mission areas
- Cybersecurity and Infrastructure Security Agency (CISA) role in cyber incident prevention, response, recovery?
- Elevating Cybersecurity into cross-cutting core capability or separate mission area
- Status of state planning standards for cyber response plans

### **New Tech, the Future, and Misc.**

- Unknown vulnerabilities with existing, new, and emerging technologies (and lack of countermeasures)
- Cost/benefit analysis of incorporating new technologies into EM operations
- Lack of adoption/use of complex technology to support incident response
- Increase in technology use among the public increases the complexity of incident response
- Impact of tech on mitigation and equity during planning



## 2. Community Preparedness

### **Preparedness for Communities**

- This subject is highly discussed but it's difficult to define. The question became what is needed for preparedness? What makes a community prepared?
- Relationship building
  - How does this happen? Who is responsible?
- Exercise
  - Financial – who pays?
  - Manpower or getting the right people to training
  - Agencies prefer to train on their own
  - Policy vs what really occurs. Reality vs training
- Mitigation
  - Is it being done? Is it done correctly?
- Resources
- Motivation to exercise
  - Whose responsibility is it? Who coordinates?

### **Emergency Management Program**

- Where does this start?
- Are there standards?
- Compensation – how is it determined? What determines the amount?
- How can local emergency managers actively engage with diverse populations in their jurisdiction to build community preparedness, capacity, and cohesion? What resources exist or could be developed to assist with this goal?
- How do local emergency management programs prepare for no-notice incidents where local and regional resources may not be available? For example, the Iowa Derecho.

### **Mis-Information vs Good Information**

- How does good information get distributed?
- What is success? How is it measured?
- How is information best received? Older populations vs younger populations

### **Barriers to Preparedness**

- Region specific
- Is there a correlation to resilience?
- How does preparedness get measured? Is this difficult?

### **Expectations vs Needs**

- What does the community expect from FEMA?
- How does the public gauge expectations vs needs?
- What's the reality?
- Individual needs vs political needs

### **Resilience**

- Is resilience about bounding back or about being flexible in moving forward?
- Is there a multi-disciplinary difference?
- Obstacles to diversity
  - Comfort of researchers
  - Comfort of citizens
- Building Trust/Relationships
  - Who are the community champions?

### **Relationships**

- How does this effect preparedness, recovery and mitigation?
- How are these built? Who is responsible?

- How do these (good or bad) effect resilience and the comeback of community?
- Quantitative vs qualitative.

### **Insurance**

- With COVID-19 many have been affected with economic issues. Insurance, particularly flood insurance, has been an item sacrificed.
- Misinformation around the need or lack of need.

### **FEMA**

- Does the general public know what FEMA does or does not do?
- How does FEMA communicate?
- What policies and procedures drive the deployment of FEMA?
- What is the perception of the role of FEMA in the immediate response to a disaster?
  - From emergency managers?
  - From local elected officials and/or leaders?
  - From state elected officials and/or leaders?
  - The public?

### **Case Studies**

- Incidents looking at long-term emergency managers versus new or relatively new hires to determine the impact of longevity and relationship building on response and recovery
- Gap analysis of needs for emergency management program development to meet current and future threats and hazards
- How do we or can we address rural vulnerability through equipping local jurisdictions to access grants for capacity building? Wo can provide this service or develop tool kits for local usage?
- How can local emergency managers actively engage with diverse populations in their jurisdiction to build community preparedness, capacity and cohesion? What resources exist or could be developed to assist with this goal?

### 3. Economic Recovery and Resilience

- Issue: Local elected officials rely on tax revenue from animal feeding operations to assist with funding community programs. This is especially true in smaller rural communities that may have limited capacity and capabilities. Following an animal pandemic event there could be disruption in tax revenue streams that could persist for several years. Local officials and emergency management do not have the tools or knowledge necessary.
- Issue: for small communities a disaster can be decimating to the community. This can be loss of business, housing, infrastructure, and the economic sector forming the tax base. In some cases this loss can be significant enough that the community may be at risk of not being able to recover.
- Issue: there are many smaller communities who have had successful resilience projects. Yet other communities struggle with projects.

### 4. Other Topic Areas

- Issue: professionalization of field

The duties of emergency managers are varied and often misunderstood. In today's world the appropriate emphasis often falls within the management domain rather than focusing on a specific type of emergency. State, Local, Tribal, and Territorial (SLTT) officials often don't understand the knowledge and skills that emergency managers possess. It is time for emergency management to define the fundamental interpersonal, managerial, and technical skills required to be a successful emergency manager and the related academic training that supports their development. There is a disconnect between what is needed in the "real world" and what the Certified Emergency Manager® (CEM®) measures.

- Major metros – organization, assets, etc. – drastically different in rural communities
- CEND – community emergency natural disaster
- Professional Organizations
- Academic Training
- Industry partners/Employers
- SLTT (State, Local, Territorial, Tribal) Local partners/Employers
- State Partners/Employers
- Federal Partners/Employers

- Four Levels of Response
  - L1: Communication alert measures
  - L2: Take pro-active measures
  - L3: Event occurs
  - L4: Get assistance from outside sources
  - Scenario-based planning
  - Local emergency operations plan – Needs to state who is empowered to do what

## Successes and Areas for Improvement

### Meeting Logistics

The planning of the event could have been somewhat smoother with earlier identification of facilitators for the breakout groups. Recommend identifying these individuals at least one month prior to the event and consider including facilitators in the late-stage planning.

The “Save the Dates” email was sent out approximately 45 days prior to the event, and the meeting invitation with the link for the virtual session was sent out one week prior. FEMA Region 7 requested assistance from the International Association of Emergency Managers (IAEM) Region 7 leadership to assist in promulgating the “Save the Dates” email to practitioners in the Region. FEMA Region 7 contacted the Higher Education Program office for regional attendees who participated in FEMA’s National Higher Education Symposium and the “Save the Dates” email were sent to those individuals. Recommend FEMA Region 7 maintain and update a list of academic partners in the Region for future Higher Education engagements to include inter-disciplinary departments that may have areas of interest not typically associated with emergency management. Topic areas may include agriculture, anthropology, economics, geography, hydrology, psychology, and sociology as examples.

Providing a virtual option for attendees affected by COVID-19 positively impacted the event and allowed for participation from academia and practitioners across the Region.

## Appendix A: Attendees

**Table 1: Attendees**

<i>First Name</i>	<i>Last Name</i>	<i>Affiliation</i>
Dianna	Bryant	University of Central Missouri
Rebecca	Burns	FEMA HiEd
Joe	Chandler	FEMA
Linda	Davis	FEMA
Shyrlee	Fox	FEMA
Jodi	Freet	Cedar County, Iowa, Emergency Management
David	Hogg	National Ag Biosecurity Center, K-State
Chet	Hunter	Washington University in St. Louis
David	Johnson	Missouri State University
Paul	Johnson	Douglas County, Nebraska, Emergency Management
Elizabeth	Kiss	Kansas State University
Nicolas	LaLone	University of Nebraska-Omaha
Lisa	Lofton	FEMA
Ryan	Lowry-Lee	FEMA
Anthony	Lupo	University of Missouri
Erin	Lynch	Mid-America Regional Council
Diana	Mendoza Cauley	FEMA
Ryan	Nicholls	Washington University in St. Louis
Londa	Nwadike	Kansas State University
Samantha	Peterson	East-West Gateway Council of Governments
Terri	Ploger-McCool	Kansas Division of Emergency Management
Jennifer	Regn	FEMA
Dan	Robeson	Johnson County, Kansas, Emergency Management

<b><i>First Name</i></b>	<b><i>Last Name</i></b>	<b><i>Affiliation</i></b>
Michelle	Schmeling	FEMA
Adrian	Self	National Ag Biosecurity Center, K-State
Justin	Sorg	FEMA
Shawn	Steadman	St. Louis University
John	Stipetich	University of Kansas
Deborah	Tootle	Iowa State University
Jay	Van Der Werff	FEMA
Marty	Vanier	National Ag Biosecurity Center, K-State
Mark	Willis	Kansas Division of Emergency Management
Timothy	Young	FEMA

## Appendix B: List of Proposed Research Questions

Listed below is an overview of the proposed research questions divided by theme areas:

### 1. Cybersecurity

- What are minimum cybersecurity training courses that should be included in emergency management degrees/certifications? Who sets those standards?
  - Within an incident chain of command structure, what are the appropriate standards of cybersecurity awareness needed for each position or level?
- What are the common types of cyberattacks directed at different levels of government? How should messaging/awareness/response/planning standards be customized to address these attacks? What are the roles and responsibilities of emergency management for each level of government and what are best practices? How prepared are typical EOCs to prepare for, respond and recover from cyberattacks?
- How can cyber-incident after-action reports be safeguarded to reduce disclosure of vulnerabilities, but still provide value to correct deficiencies and improve future responses?
- What are policy implications for sharing emergency management sensitive data among response partners? How do these policies change as sensitive data moves to digital formats and cloud computing?
- What technologies do emergency managers wish they could have now to support disaster response/recovery/mitigation? (Regardless of feasibility)
- How can technology support knowledge transfer and transition from response to recovery? What are cybersecurity concerns/issues that may arise during transition?
- What life-safety response capabilities are most at-risk from cyberattacks? What mitigation measures exist? What more are needed?

### 2. Community Preparedness

- How is Emergency Management Performance Grant (EMPG) funding dispersed? Who is not receiving these funds? Why?
- What is the standardization as an emergency manager in your jurisdiction? How is/was this established?
- How do local emergency management programs prepare for no-notice incidents where local and regional resources are not available?



- How can local emergency managers or the community leaders actively engage with diverse populations in their jurisdictions to build community preparedness, capacity, and cohesion? What resources exist or could be developed to assist with this goal?
- How many households have cut back on homeowners or flood insurance? Was this the first item they cut back on? If so, why? What other essential items have they cut back on?
- What programs exist or are needed to address rural vulnerability through equipping local jurisdictions to access grants for capacity building? Who can provide this service or develop tool kits for local usage?
- What is the perception of the role of FEMA in the immediate response to a disaster?
  - From emergency managers?
  - From local elected officials and/or leaders?
  - From state elected officials and/or leaders?
  - The public?

### 3. Economic Recovery and Resilience

- What tools are available to local officials for making decisions pre or during an infectious disease event? Some data exists that could assist with local officials to make decisions on how such an event could affect the tax base discussion, however, it is not in a format that could drive the discussion. A system is needed to develop the data and take the info and put in a format that could inform economic decisions.
- What is the tipping point that would influence whether the community rebuilds or relocates, or decides to disincorporates? What data is available that helps drive the discussion?
- How can the knowledge of the communities that have been successful be leveraged to assist similar communities who want to implement a program?

### 4. Other Topic Areas

- What are the pathways that successful academic programs are using to educate and develop capability in the next generation of emergency managers? What are the gaps?
- Are there examples of other fields who have successfully navigated the process of becoming a recognized “profession” through certification and accreditation? What were their steps in their process?
- Is there a difference in the quality of decision-making when training is based on scenario-based planning and exercises compared to capabilities and functional based training?

- Based on an analysis of after-action reports, IAPs, 214s, and interviews what is the timing and flow of activity over the course of an incident from notification to dis-establishment of Incident Management Assistance Team (IMAT) (turned back over to local authorities)?

## Appendix C: Agenda

### August 11, 2021 (K-State Olathe)

9:00 AM | Arrival and Registration (Beverages and breakfast Items available)

10:00 AM | Welcome and Introductions

HiEd 101, the HiEd research agenda, NHC review

Vision for this meeting

FEMA RVIII example

12:00 PM | LUNCH (ON YOUR OWN)

1:45 PM | Round 1 Facilitated Discussions: Community Preparedness, Cyber-security, Economic Recovery and Resilience, Wild Card (No formal break, beverages available)

1:45 – 2:40: Discussion Breakout 1

2:45 – 3:40: Discussion Breakout 2

3:45 – 4:30: Discussion Breakout 3

4:30 PM | Re-cap and Planning for Day 2

### August 12, 2021 (K-State Olathe)

8:30 AM | Gathering and Morning Announcements

9:00 AM | Round 2 Facilitated Discussions; Same Topics as Round 1

9:00 – 10:15: Discussion Breakout 1

10:15 – 11:30: Discussion Breakout 2

11:30 AM | WORKING LUNCH

Daniel Nyquist – FEMA Region 8

1:00 PM | Report out by Group

2:30 PM | Wrap-up and Next Steps