



2021 FEMA Region 1 Higher Education Community Engagement Conference

After Action Report

September 22–23, 2021

This report was prepared through a collaborative effort between FEMA's National Training and Education Division Higher Education Program, FEMA Region 1, and Massachusetts Maritime Academy.

Table of Contents

Engagement Overview	1
Executive Summary	2
Engagement Themes	4
Observations	5
Continuous Improvement Survey	5
Appendix A: Agenda	10
Appendix B: Participants	12
Appendix C: Proposed Research Questions.....	14

Engagement Overview

<i>Item</i>	<i>Description</i>
Meeting Name	FEMA Region 1 Higher Education Community Engagement Conference
Meeting Dates	September 22–23, 2021
Scope	This engagement event was held for two days at Massachusetts Maritime Academy. Planning was part of a collaborative effort between FEMA Region 1, FEMA National Training and Education Division, and Massachusetts Maritime Academy’s External Affairs and Projects and Events Departments. The event consisted of presentations from practitioners, academics, and subject matter experts, as well as themed breakout discussion sessions and large-group brief backs to develop shared research themes and questions across the region.
Meeting Themes	Networking; Best Practice Sharing; Equity and Inclusion; Risk Build Up and Disaster Exposure; Data, Technology, and Societal Impacts; High-Risk Habitation Zones.
Purpose	The purpose of this event was to bring together emergency management practitioners, faculty, and students to network, learn from one another, and map out future collaborations between FEMA Region 1 and academic institutions in New England. Additionally, FEMA Region 8’s successful partnerships with schools in its area were presented with the aim of inspiring similar efforts in FEMA Region 1. Finally, participants were brought together to brainstorm New England-specific emergency management issues and research questions based off the 2018 FEMA National Research Agenda for the Emergency Management Higher Education Community.
Meeting Objectives	<p>Primary Objectives:</p> <ol style="list-style-type: none"> 1. Facilitation of symbiotic relationships between FEMA Region 1 staff and Higher Education Community faculty, practitioners, and students. 2. Initial development of Region 1-specific research questions built off the 2018 National Research Agenda for projects and topics to be investigated in one year or less, or up to two years for graduate research. 3. Participants will become familiar with success stories of FEMA/Higher Education Community partnerships. 4. Participants will become familiar with the work done in both FEMA Region 1 and Region 8, hopefully eliciting future organic cooperative opportunities. 5. Participants will grow their network and understanding of unique emergency management challenges to consider opportunities for partnerships moving forward.
Sponsor	FEMA Region 1

<i>Item</i>	<i>Description</i>
Participating Organizations	A wide variety of organizations participated in this event, including representatives from FEMA, the International Association of Emergency Managers (IAEM), law enforcement, the private sector, and academia. A comprehensive list of attendees and participating organizations can be found in Appendix A.
Point of Contact	Greg D'Ercole FEMA Region 1 Emergency Management Program Specialist Gregory.DErcole@fema.dhs.gov 202-809-3733

Executive Summary

On Wednesday, September 22nd and Thursday, September 23rd, 2021, FEMA Region 1 convened an engagement conference to share best practices and successes and generate future partnerships between FEMA and the Emergency Management Higher Education Community. The two-day event was held at Massachusetts Maritime Academy's Admiral's Hall, beginning at 8:00 AM each day, concluding at 4:00 PM.

The content of the conference was developed by the event organizer with the aim of providing valuable and appealing briefings to all "three legs of the stool" of the New England Emergency Management Higher Education Community – practitioners, faculty, and students.

On day one, attendees were provided a table-setting presentation from Kelly Fitzgerald, FEMA Higher Education Program Manager, and Daniel Green of FEMA Region 8's National Preparedness Division. Their briefing described the value and impact of FEMA/Higher Education Community partnerships and showcased the success stories of FEMA Region 8's collaborative efforts with schools in the Colorado area. The introductory presentations were followed by a briefing by Melissa Surette, FEMA Region 1 Regional Integration Branch Chief, and Ben Trump of the United States Army Corps of Engineers on recent successful efforts between Region 1 staff and local academia to produce predictive data modeling tools in aid of COVID-19 response. Several conference attendees then delivered presentations to introduce their home institution, agency, school, or organization during a session called "Show and Tell."

Later in the day, the audience received a moving first-hand account of managing a serious event that has affected countless college campuses in recent years – an active shooter incident. Former Dallas Chief of Police Max Geron joined the conference via Zoom to describe his efforts in leading the response to the mass-shooting incident that occurred in front of a Dallas college in 2016 in which five police officers perished. Chief Geron's presentation was followed by a briefing by FEMA Region 1 National Preparedness' Arlene Magoon on training available to colleges on how to triage wounds during and after a mass-casualty incident.

Later in the conference, FEMA Region 1's Preparedness Branch Chief, Lauren DeMarco, provided a presentation on navigating the federal hiring process and USA Jobs website was provided with the aim of fostering a greater understanding of federal career opportunities to the Massachusetts Maritime Academy cadets (and other students) in attendance.

In addition to sharing the past successes of FEMA's partnerships with academia, an additional goal of the event was to review the 2018 FEMA Higher Education Research Agenda to build off the "Research Thrusts". Discussions between FEMA Region 1 and the FEMA National Training and Education Division Higher Education Program informed the approach of generating New England-specific issues and research questions during day two's Regional Research Questions Workshop led by Steve Recca of the Center for Homeland Defense and Security's (CHDS's) University and Agency Partnership Program (UAPP). A more detailed summary of the workshop will be provided in the following sections.

Following the workshop, the audience was briefed by Dr. David McEntire, a professor of emergency management, homeland security, and national security at Utah Valley University, who has conducted research and authored books on wide-ranging emergency management topics around the world. His post-workshop briefing was aimed at jumpstarting attendees' imaginations for future research efforts that could occur in FEMA Region 1.

The event organizer collaborated closely with Massachusetts Maritime Academy's External Affairs office over the course of several months leading up to the event. Planning team members from FEMA included (in alphabetical order):

- Lauren DeMarco – Region 1 Preparedness Branch Chief
- Greg D'Ercole – Region 1 National Preparedness Division Emergency Management Program Specialist
- Kelly Fitzgerald – FEMA Headquarters Higher Education Program Manager
- Arlene Magoon – Region 1 National Preparedness Division Emergency Management Program Specialist
- Dan McElhinney – Region 1 Federal Preparedness Coordinator/Deputy Regional Administrator
- John McGough – Region 1 Deputy Federal Preparedness Coordinator
- Dorothy Nicholas – Region 1 National Preparedness Division

Representing Massachusetts Maritime Academy on the planning team were:

- Samantha Coonan – Assistant Professor, Emergency Management and Homeland Security Department
- Dana Ferris – Assistant Director, Projects, and Events Department

- Elizabeth Simmons – Vice President, External Affairs

Tremendous support for the event was provided by CHDS and Massachusetts Maritime Academy IT staff, who pulled off the “hybrid” event– allowing the virtual and in-person audience and presenters to seamlessly interact. FEMA Region 1 is grateful for their hard work and attention to detail.

FEMA Region 1 also benefitted by being able to attend and observe the successful events held in 2021 in both FEMA Region 8 and FEMA Region 7, which set a high bar for success.

FEMA Region 1 would like to thank Massachusetts Maritime Academy, CHDS, FEMA Region 7, FEMA Region 8, NTED, and all the event presenters and participants for their work in making this event a success.

Engagement Themes

The decision was made to utilize the 2018 FEMA National Research Agenda for the Higher Education Community to elicit New England-specific emergency management issues and research questions that fall under the umbrella of the five “National Research Thrusts” found in the document.

The proposed research questions will be consolidated with existing “Problem Statements” previously drafted by FEMA Region 1 staff to provide an ever-changing repository of real-world emergency management challenges for collaborative development of solutions.

The “Research Thrusts” found in the 2018 Research Agenda include:

1. Justice, Equity, and Capacity Development

Calls for researchers to address how justice and equity considerations influence the entire disaster life cycle, as well as the ways in which capacity might be developed among those remaining at elevated risk post disaster. This principal research thrust cuts across the remaining four thrust areas.

2. Risk Build-up and Disaster Exposure

Aims to encourage the research community to examine how cumulative personal and collective disaster loss influences developmental trajectories for individuals, family dynamics, and neighborhood and community resilience.

3. High Risk Habitation Zones

Draws attention to the need for more research centered on environmental and social vulnerability to both high-impact and chronic disasters.

4. Data, Technology, and Societal Impacts

Recommends that cross-disciplinary research in the areas of data, technology, and societal impacts focus on both innovation and risks associated with old, new, and emerging technologies.

5. Infrastructure for Humanity

Invites researchers to engage in humane and equitable design that moves from a “systems failures” approach to studying infrastructure to a focus on systems stability, flexibility, and agility. This includes striving toward universal design and accessibility for all.

Observations

Event organizers provided the following observations to inform planning for future events:

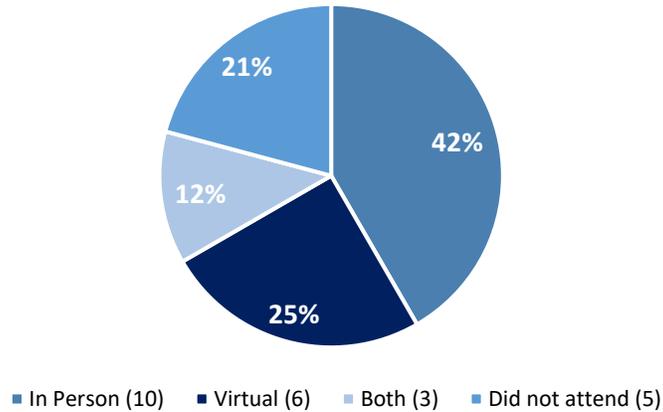
- Focused engagements targeting one segment of the “three legs of the stool” of the Higher Education Emergency Management (EM) community (faculty, practitioners, students) could be beneficial, or at least breaking the multi-day event into sections/days aimed at each group.
- Better polling of Higher Education EM faculty to identify student(s) and program(s) that would be interested in collaborating with FEMA staff for research.
- Future events and content should be created with interdisciplinary programs in mind. In advance of future event(s), FEMA Region 1 would benefit from the identification of non-emergency management focused New England schools interested in working with them on the research questions and/or problem statements previously identified.
- An after-hours networking event such as a happy hour would greatly help with relationship-building between participants. Future events should identify a local establishment for a social engagement at the conclusion of the first day.

Continuous Improvement Survey

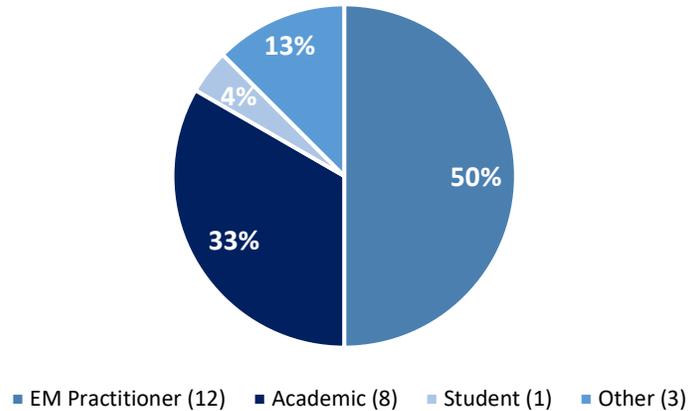
The below survey was sent out to all who registered for the event whether they attended or not. Responses were received from 24 individuals.

Question 1: Did you attend the Higher Education Workshop in person, virtually, or a combination of both?

For those who did not attend, the survey asked why they could not attend. Of the five individuals indicating they did not attend, four identified scheduling conflicts as the reason and one did not respond to the question.



Question 2: Which category best describes your primary emergency management work?

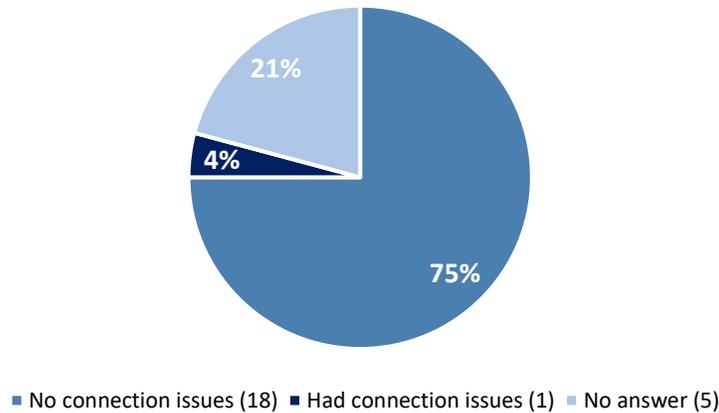


Question 3: If you participated virtually, did you encounter any problems connecting to the workshop?

Nineteen individuals responded to this question, five skipped the question. Only one individual identified having connection issues.

No connection issues – 94.74%

Had connection issues – 5.26%



Question 4: Did the ability to participate virtually factor into your decision to attend the workshop?

Twenty-two individuals responded to this question, and two skipped the question. Responses were evenly split with half saying it was a factor in their decision and half saying it was not a factor.

Question 5: During the hotwash at the end of the event, participants identified several items they felt are important to this workshop. To what degree do you feel these are important to consider for future FEMA Region 1 Higher Education Workshops?

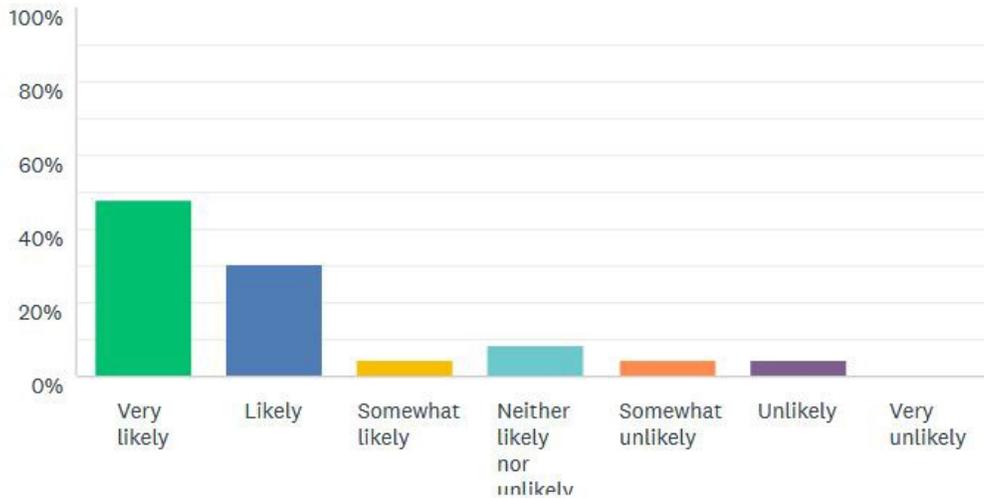
The following topics are organized by rank of importance based on survey feedback. The percentage given shows total percentage that identified the topic as very important or important.

- Opportunities for partnership between academia and FEMA – 91%
- Preparing emergency management students for the career field – 91%
- Presenting case studies and real-world events – 82%
- Networking events – 78%
- Student engagement and participation – 77%
- Developing research topics for academic community in Region 1 – 73%

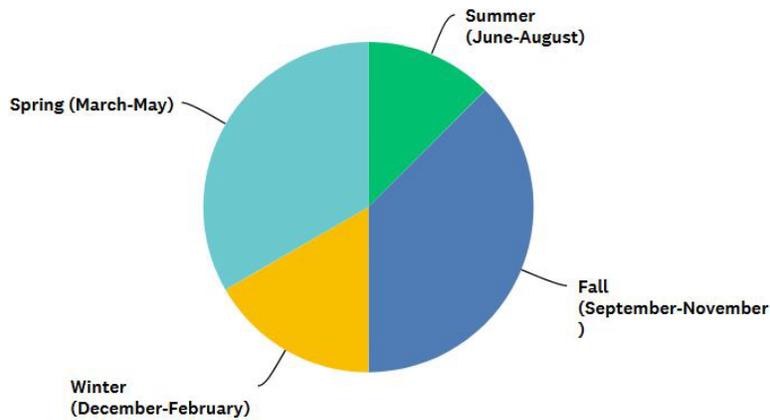
- Inclusion of public health presentations – 68%
- Keeping the hybrid structure – 55%

Question 6: Based on your experience at this workshop, how likely are you to attend a future FEMA Region 1 Higher Education event?

Nineteen of the twenty-three responses to this question indicated they would likely attend again.



Question 7: What time of year do you feel is best to hold this conference?



Comments:

- Hybrid format should allow many EM practitioners to “attend” as it facilitates “logistics” (no travel/hotel), and “attendees” can still address daily professional requirements.
- Case studies/EM issues could be addressed in “joint” working groups/break out groups comprised of students/professionals focused on planning considerations for “Preparedness/Response etc.”
- Massachusetts Maritime Academy’s graduate program contains formal academic research project (Capstone)–where students must formally research an EM problem and find solutions via empirical research. Could be room for a FEMA/IAEM/Massachusetts Maritime Academy collaboration.
- Academia always needs info on latest EM doctrine (update to National Response Framework? new law/policy? new strategy (updated strategic plan?) These conferences provide that critical “update forum.”
- Could only attend part of conference, but from what I observed – useful, relevant, and lots of potential for future.
- The research question exercise could have been improved by including input from both EM practitioners and academia. Our group was primarily from academic institutions. It would have been helpful to hear from regional practitioners on key issues they’re facing. A survey ahead of the workshop could have provided areas of focus.
- Didn’t like the show and tell session midday on the first day. Felt like it was colleges and universities trying to “sell” their programs and not share best practices as much.
- Audio and video setup for virtual presentations was good! Well done!
- I wasn’t aware how much of the time would be beneficial to undergraduate students as opposed to practitioners who’ve been in the field for years. Perhaps structuring the conference in the future so one day is aimed at one group and the other day is aimed at the other, would allow each group to better utilize their time.
- As a virtual attendee, it would have been helpful to have a camera on the in-person audience AND the in-person podium to see who was speaking.
- Have HiEd practitioners bring problems or research items to the event that are specific to their organization. This will allow students and other practitioners to collaborate and create future research opportunities for the students in a real-world need.
- Thank you for your efforts to include Tribal presenters and participation during the planning phase.

Appendix A: Agenda

September 22, 2021

8:00 AM | Opening Remarks and Welcome

Paul Ford – FEMA Region 1 Regional Administrator (Acting)

Dan McElhinney – FEMA Region 1 Deputy Regional Administrator (Acting)

Thomas Lennon – Captain, USCG (Ret.), Emergency Management Department Chair

Icebreaker/Introductions

Greg D’Ercole – FEMA Region 1 National Preparedness

8:45 AM | FEMA Higher Education 2.0, the Path Forward

[Kelly Fitzgerald](#) – FEMA Higher Education Program Manager

[Daniel Green](#) – FEMA Region 8 Q&A

9:30 AM | BREAK

9:45 AM | Federal Partnerships with Academia in Support of COVID Response

Melissa A. Surette, LP. D, MSEM, CEM – FEMA Region 1

Ben Trump – United States Army Corps of Engineers

Q&A – Discussion

10:45 AM | BREAK

Optional Tour: Mass Maritime Academy USTS Training Ship Kennedy

11:30 AM | LUNCH (Cafeteria or off site)

12:30 PM | Attendee Show and Tell

Introductions and Presentations by Programs and Partners

1:45 PM | BREAK

2:00 PM | IAEM Student Interests and Collaboration Success Stories

Taylor Frizzell – IAEM President

David Muse – IAEM Vice President Elect

2:30 PM | Mass Shooting Case Study – Response to Real World Incidents

Max Geron – Rockwall, TX Police Chief and On-Scene Commander for Response to 2016 Dallas Police Shootings at El Centro College

3:30 PM | You Are the Help; Until Help Arrives

Arlene Magoon – FEMA Region 1 National Preparedness

4:00 PM | Massachusetts Maritime Academy EOTC Tour (Optional)

September 23, 2021

8:00 AM | Opening Remarks/Icebreaker
Greg D’Ercole – FEMA Region 1 National Preparedness

8:15 AM | Regional Research Questions Workshop
Steve Recca – Naval Postgraduate School

12:00 PM | LUNCH (Cafeteria or off site)

12:45 PM | Mass Maritime Ship Simulator Tour (Optional)

1:30 PM | Internships, Local Hires, Reservist Cadre positions, and Other Opportunities for
Emergency Management Students and Recent Graduates
Lauren DeMarco – FEMA Region 1 Individual and Community Preparedness Branch Chief

2:00 PM | Student Research Projects
David McIntire – Utah Valley University
Kelly Fitzgerald – FEMA Higher Education Program Manager

3:00 PM | Hot Wash (After Action/Lessons Learned Discussion)
Michael Corey –FEMA Region 1 Continuous Improvement Advisor

3:30 PM | End of Engagement Conference

Event Recording

Day 1 and 2 [Recordings and Presentations](https://nps01-my.sharepoint.com/:f:/g/personal/sarah_hanson_ctr_nps_edu/EpFUXRDim9V0jaC5D60f_foBKE3yqAd5ocP2nFCMuLv3mQ?e=bjpr8f) (https://nps01-my.sharepoint.com/:f:/g/personal/sarah_hanson_ctr_nps_edu/EpFUXRDim9V0jaC5D60f_foBKE3yqAd5ocP2nFCMuLv3mQ?e=bjpr8f)

Password: Provided upon request – email Gregory.DErcole@fema.dhs.gov

Appendix B: Participants

The table below is presented in alphabetical order by last name.

Table 1: Registered Attendees

<i>First Name</i>	<i>Last Name</i>	<i>Affiliation</i>	<i>Participation</i>
Nate	Almeida	Harvard University	In-Person
Katy-Jan	Bobseine	Endicott College	Virtual
Alan	Bruce	Quinnipiac College	Virtual
Rebecca	Burns	FEMA HiEd	Virtual
Bob	Cerovac	FEMA Region 1	Virtual
Kristin	Collins	Massachusetts Maritime Academy	Virtual
Samantha	Coonan	Massachusetts Maritime Academy	In-Person
Mike	Corey	FEMA Region 1	In-Person
Lauren	DeMarco	FEMA Region 1	In-Person
Gregory	D'Ercole	FEMA Region 1	In-Person
Jed	Fiato	FEMA Region 1	In-Person
Cecily	Fiene	FEMA Region 1	Virtual
Kelly	Fitzgerald	FEMA Headquarters	Virtual
Paul	Ford	FEMA Region 1	Virtual
Taylor	Frizzell	IAEM	In-Person
David	Jannetty	Post University	Virtual
Barbara	Johnson	FEMA Headquarters	Virtual
Brian	Kennedy	FEMA Region 1	In-Person
Thomas	Kettle	Westfield State University	Unknown
Ken	Lebetkin	University of Massachusetts	Virtual
Arlene	Magoon	FEMA Region 1	In-Person
Emily	Martuscello	FEMA Region 1	Virtual
Eda	Matchak	Massachusetts Maritime Academy	Virtual
Dan	McElhinney	FEMA Region 1	In-Person

<i>First Name</i>	<i>Last Name</i>	<i>Affiliation</i>	<i>Participation</i>
Tara	McEnroe-Kent	Massachusetts Maritime Academy	In-Person
John	McGough	FEMA Region 1	In-Person
Lauren	McLane	FEMA Region 1	In-Person
John	Moore	Dean College	Unknown
David	Muse	IAEM	In-Person
Dorothy	Nicholas	FEMA Region 1	In-Person
Russell	Norris	Rivier University	In-Person
Terry	O'Sullivan	University of New Hampshire	Virtual
Ashlie	Perry	Endicott College	Virtual
Richard	Pertito	Tufts University	Virtual
James	Ramsay	University of New Hampshire	Virtual
Steve	Recca	CHDS	In-Person
Mary	Reilly	Unknown	Virtual
Coleen	Rice	FEMA Headquarters	Virtual
Tracy	Rogers	Unknown	Virtual
Regina	Sanderson	Anna Maria College	Unknown
Andrew	Sankey	Maine Emergency Management	Virtual
Martin	Spellacy	Unknown	Unknown
Michael	Stevens	Anna Maria College	Unknown
John	Stewart	FEMA Region 1	Virtual
Melissa	Surette	FEMA Region 1	In-Person
Knadia	Tash	FEMA Region 1	Virtual
Ben	Trump	USACE	Virtual
Anna	Woringer	Massachusetts Maritime Academy	Unknown

Appendix C: Proposed Research Questions

Day two of the conference featured a 4.5-hour workshop facilitated by Steve Recca, director of the University and Agency Partnership Program (UAPP) with the Naval Postgraduate School Center for Homeland Defense and Security (CHDS). Steve and UAPP support connections between DHS/FEMA and the homeland security higher education community.

During the workshop, conference attendees (both in-person and virtual) were split into four groups, with each group assigned to one of the five “Research Thrusts” found in the 2018 FEMA Research Agenda for the Higher Education Community. As there were not enough conference attendees to create five groups, Research Thrust #3 (High-Risk Habitation Zones) was omitted.

Each group was asked to first frame New England-specific issues that fit under the umbrella of their assigned topic, share them, and then reconvene to brainstorm research questions that could be used for graduate level capstone projects.

Below are the group assignments and **Research Thrust in bold** with context below, found in the previously mentioned 2018 National Research Agenda. Below each research thrust are the research questions each group collaborated to produce *in italics*.

Group 1 - Justice, Equity, and Capacity Development (National Research Thrust)

Calls for researchers to address how justice and equity considerations influence the entire disaster life cycle, as well as the ways in which capacity might be developed among those remaining at elevated risk post disaster. This principal research thrust cuts across all thrust areas.

1. *What are the current systems and policies in place that are preventing FEMA from understanding the unique needs of underserved, under-represented, and vulnerable communities that we engage in our work?*
2. *How do we identify the tools for understanding the gaps, barriers, and needs within vulnerable communities, that accounts for and considers an understanding of the cultural and systemic dynamics of the community we are engaging?*
3. *How do we provide additional support to respond to the self-identified unique gaps, barriers, and needs of vulnerable communities that empowers local leaders and residents to be the focus of a collaborative network that enhances community ownership and local long-term capacity?*

Group 2 - Risk Build-up and Disaster Exposure (National Research Thrust)

Aims to encourage the research community to examine how cumulative personal and collective disaster loss influences developmental trajectories for individuals, family dynamics, and neighborhood and community resilience.

1. *What motivates people to volunteer?*
2. *How can we make both short-term and long-term grants more flexible for our communities and those who need them the most?*
3. *How does community attrition impact its vulnerability and future?*
4. *What can we learn by conducting an overlay of the social vulnerability index and national risk index?*

Examples:

- a. *What programs are most effective for the recruitment and retention of volunteer firefighters?*
- b. *Should FEMA's National Preparedness Grant Programs be consolidated into one National Preparedness Grant?*
- c. *How can the Threat and Hazard Identification and Risk Assessment (THIRA)/Stakeholder Preparedness Report (SPR) process be more standardized to facilitate a less subjective process?*

Group 4 - Data, Technology, and Societal Impacts (National Research Thrust)

Recommends that cross-disciplinary research in the areas of data, technology, and societal impacts focus on both innovation and risks associated with old, new, and emerging technologies.

Regional Issue(s)

Example: There is concern over New England State and Tribal Partners' capacity and resilience for a catastrophic disaster, and government integration with the private sector during response.

1. *How do we empower/incentivize communities to adopt data/tech systems?*
 - a. *How can we ensure that said system is simple, usable, and knowable for the whole community, across demographics?*
 - b. *How do we enable vertical and horizontal integration of information and communications systems and streamline common systems?*
2. *What data/tech systems could be used/deployed across varying communities?*
 - a. *Rural vs urban, different disaster scenarios?*
 - b. *How can mountainous areas use/adapt to any system?*
 - c. *What solutions exist when standard communications are destroyed in a wildfire, hurricane, or tornado scenario?*
 - d. *How do we address less resourced urban areas?*

3. *How do we improve power reliability/resilience, to maintain quality of access to information and data to individuals and communities?*
 - a. *Power.*
 - b. *Cell phones, landlines, social media.*
 - c. *For urgent assistance, EMS.*

Group 5 - Infrastructure for Humanity (National Research Thrust)

Invites researchers to engage in humane and equitable design that moves from a “systems failures” approach to studying infrastructure to a focus on systems stability, flexibility, and agility. This includes striving toward universal design and accessibility for all.

1. *How can the U.S. better support the private entities who are primarily responsible for critical infrastructure in the United States?*
2. *How can the government more effectively incentivize the U.S. population to make their homes more disaster prepared? (ties to energy efficiency; relates to climate impacts)*
3. *How can the government and academia better partner with indigenous peoples to implement more holistic, effective, and culturally sensitive mitigation practices?*
4. *What specific communities in New England are least prepared for disasters, due to geography, socioeconomic, cultural, and structural factors?*
5. *How do we better prepare Cape Cod and the islands for disasters?*
6. *How effective are public education efforts (i.e., ready.gov) in preparing the population for disasters?*
7. *What incentives would be most effective and equitable to encourage responsible housing practices in high-risk areas? (i.e., subsidizing generators for homes and/or local businesses).*