



# Training to CONVERGE: *A Tabletop Exercise to Advance Reconnaissance and Research*



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Natural Hazards Center



CONVERGE





# Welcome and Overview



# Session Objectives

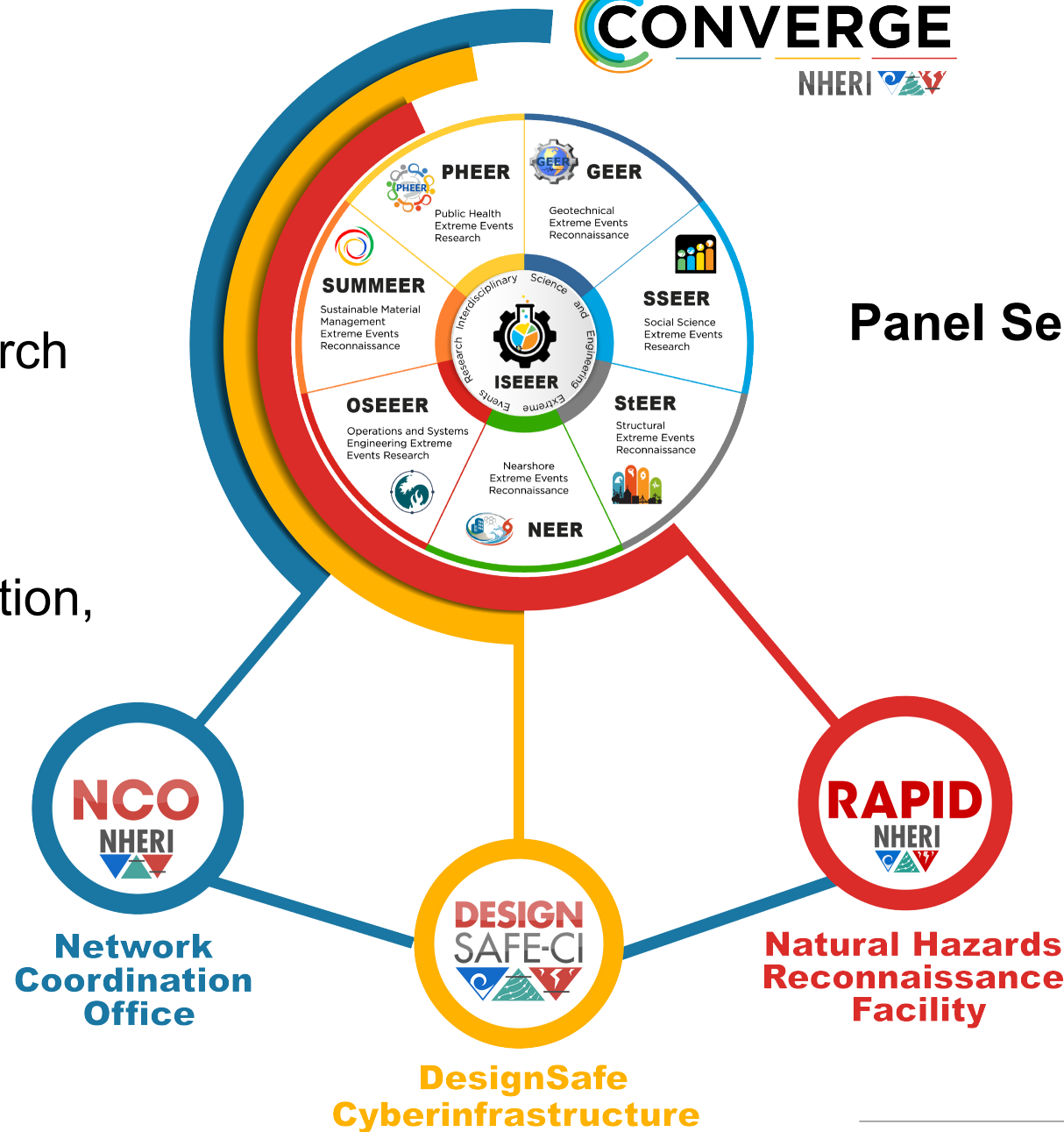
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- Introduce the CONVERGE Leadership Corps
- Highlight progress in reconnaissance coordination and share information regarding our recent tabletop exercise and drill.
- Inspire ideas among attendees regarding the possibility of using a tabletop or drill in their own work.



# CONVERGE Leadership Corps

- Established in 2018
- 4 NHERI Components
- 8 Extreme Events Reconnaissance / Research (EER) Networks
- **Purpose:** Advance interdisciplinary communication, coordination, and collaboration



## Panel Self-Introductions





# April 2024 Tabletop Exercise at the Centers for Disease Control and Prevention (CDC)





# Exercise Purpose

The purpose of this exercise is to **improve transdisciplinary coordination, data collection, and information sharing of rapid disaster reconnaissance and research efforts and to advance the integration of the Public Health Extreme Events Research (PHEER) network across CONVERGE.**



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# Types of Exercises



An exercise is a **simulated activity** focused on specific threats or hazards to shape planning and assess capabilities. Exercises can be:

## Discussion-based Exercises



Exercising a scenario to **familiarize** participants with new and/or current plans, policies, and procedures. Guided by a facilitator, participants analyze the scenario and discuss how they would respond.

**Tabletop Exercise:** A tabletop exercise is a facilitated analysis of an emergency situation in an informal, stress-free environment. There is minimal attempt at simulation in a tabletop exercise. Equipment is not used, resources are not deployed, and time pressures are not introduced.

## Operations-based Exercises



Exercising a scenario to **validate** plans, policies, and procedures, and implement response activities.

**Drill:** A drill is a coordinated, supervised exercise activity, normally used to test a single specific operation or function. It is used to practice and perfect one small part of your program and help prepare for more extensive exercises, in which several functions will be coordinated and tested.

[For more information, click on this link to view informational videos created by FEMA.](#)



# Exercise Planning Team

***Trusted Agents are individuals who provide input on exercise planning decisions ahead of the exercise***

- Trusted Agents must not reveal details or share insight to protect the **integrity and confidentiality** of the exercise and evaluation process. This is especially important to those team members who may also serve as controllers or evaluators during exercise conduct.
- All members of the exercise planning team are trusted agents.

## TRUSTED AGENTS

### CONVERGE

- Lori Peek (CONVERGE, SSEER)
- Shideh Dashti (GEER)
- [Maria Esteva \(DesignSafe\)](#)
- Cat Hartwell (PHEER)
- Jen Horney (PHEER)
- [Derek Manheim \(SUMMEER\)](#)
- [David Roueche \(StEER\)](#)
- Nazli Yesiller (SUMMEER)
- Dan Zehner (NCO)
- [Candace Evans \(CONVERGE\)](#)

### CDC

- Tracy Thomas
- Robin Soler
- Tambra Dunams
- Mark Channer
- Eric Woods
- Contractor Support

[\\*Evaluation Committee in Blue](#)



# Guiding Exercise Documentation

## Planning Paper

**Purpose:** Document the overarching exercise plan outlining the exercise purpose, scenario, objectives, overall design, and evaluation elements

**Audience:** Exercise planning team and trusted agents

**Owner:** Developed by CDC, finalized in collaboration with Trusted Agents

## Facilitator Guide

**Purpose:** Guide the facilitator through talking points and discussion questions

**Audience:** Exercise Facilitator

**Owner:** Developed by CDC, finalized in collaboration with Trusted Agents / Facilitator

## Presentation Slides

**Purpose:** Visually guide participants through the discussion

**Audience:** Exercise participants

**Owner:** Developed by CDC, finalized in collaboration with Trusted Agents

## Participant Feedback Forms

**Purpose:** Provide an opportunity for feedback during and after the exercise

**Audience:** Exercise participants

**Owner:** Developed by CONVERGE Representative (Eval Lead: Cat Hartwell)



# Documentation to Exercise Against

Exercising “against documentation” consists of using developed plans, policies, or procedures to **guide discussion questions for the tabletop exercise** and to review processes and protocols outlined in those documents





# Documentation to Exercise Against

<b>CONVERGE Leadership Corps Internal Operations Manual</b>	<b>Purpose:</b> Clarifies the structure, membership, scope, and purpose of the CONVERGE Leadership Corps <b>Audience:</b> Current and future members of the CONVERGE Leadership Corps; NSF Program Directors <b>Owner:</b> Lori Peek
<b>GEER Reconnaissance Manual</b>	<b>Purpose:</b> Standardize reconnaissance practices among researchers to maintain safety in the field, improve overall quality of the data collection effort, and best organize the findings for digital report and map delivery <b>Audience:</b> GEER members; <b>Owner:</b> David Frost, Shideh Dashti
<b>NEER Member Manual</b>	<b>Purpose:</b> Summarize NEER's mission, members, leadership, activities, and response protocol <b>Audience:</b> NEER members; <b>Owner:</b> Britt Raubenheimer
<b>PHEER Concept of Operations (CONOPs)</b>	<b>Purpose:</b> Document PHEER processes, including activities for pre-event coordination, mobilization, deployment, and post-deployment in response to an extreme event <b>Audience:</b> PHEER members, leadership, and external partners; <b>Owner:</b> Nicole Errett and PHEER Leads
<b>StEER Quick Reference Sheet</b>	<b>Purpose:</b> Summarize the StEER activation protocol for a tiered response model, including criteria for activating or elevating a response, what each level entails, uses, and produces. <b>Audience:</b> StEER members and deployed individuals <b>Owner:</b> Tracy Kijewski-Correa, David Roueche, Keegan Wolohan
<b>SUMMEER Disaster Data Collection Approach</b>	<b>Purpose:</b> Identification of data types to be collected across response and short- and long-term recovery phases <b>Audience:</b> SUMMEER members; <b>Owner:</b> Juyeong Choi



# The Scenario





# Exercise Scenario

## Scenario

There was a magnitude 9.0 Cascadia Subduction Zone earthquake along the length of the fault with no distinct epicenter on April 17, 2024, at 8:03 am ET.



The shaking lasted four minutes. Approximately 30 minutes after the earthquake, the first tsunami wave roared ashore, devastating the Pacific Northwest region's coastline.



Severe damage occurred to buildings, roads, bridges, power lines, communications, and other components of lifeline infrastructure in Seattle and surrounding areas. Multiple aftershocks have already been observed and are likely to continue soon. Early news reports offered widely varying estimates of possible deaths and injuries from the earthquake, with numbers ranging from 5,000 to 25,000 potentially dead in schools, places of work, and on collapsed roadways, and many thousands more injured.



Power access to and functionality of hospitals and other healthcare facilities in the region is not yet apparent.





# Key Takeaways and Insights



<b>Juyeong Choi</b>	<ul style="list-style-type: none"> <li>• 1 Key Takeaway for SUMMEER</li> <li>• 1 Key Takeaway for CONVERGE Leadership Corps (LC)</li> <li>• 1 Lesson Learned for the Community</li> </ul>
<b>Tim Cockerill</b>	<ul style="list-style-type: none"> <li>• 1 Key Takeaway for DesignSafe</li> <li>• 1 Key Takeaway for CONVERGE LC</li> <li>• 1 Lesson Learned for the Community</li> </ul>
<b>David Frost</b>	<ul style="list-style-type: none"> <li>• 1 Key Takeaway for GEER</li> <li>• 1 Key Takeaway for CONVERGE LC</li> <li>• 1 Lesson Learned for the Community</li> </ul>
<b>Jen Horney</b>	<ul style="list-style-type: none"> <li>• 1 Key Takeaway for PHEER</li> <li>• 1 Key Takeaway for CONVERGE LC</li> <li>• 1 Lesson Learned for the Community</li> </ul>
<b>Julio Ramirez</b>	<ul style="list-style-type: none"> <li>• 1 Key Takeaway for NCO</li> <li>• 1 Key Takeaway for CONVERGE LC</li> <li>• 1 Lesson Learned for the Community</li> </ul>
<b>David Roueche</b>	<ul style="list-style-type: none"> <li>• 1 Key Takeaway for StEER</li> <li>• 1 Key Takeaway for CONVERGE LC</li> <li>• 1 Lesson Learned for the Community</li> </ul>
<b>Joe Wartman</b>	<ul style="list-style-type: none"> <li>• 1 Key Takeaway for RAPID</li> <li>• 1 Key Takeaway for CONVERGE LC</li> <li>• 1 Lesson Learned for the Community</li> </ul>
<b>David Roueche</b>	<ul style="list-style-type: none"> <li>• Evaluation Process and Results</li> </ul>



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# GEER Observations



Geotechnical Extreme Events Reconnaissance  
Turning Disaster into Knowledge

## Key Takeaway for GEER

Need to **remain aware of differences** in team objectives, study approaches and response timelines reinforced (can range from days to weeks to months).

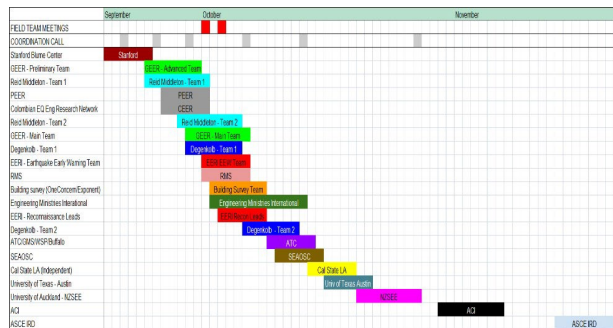
## Key Takeaway for CONVERGE Leadership Corps

Avoid **under-** and **over-**communication - goal should be to be valuable to other entities.

Seek ways to **simplify things** – may need less complexity to be of value to CONVERGE LC situational awareness than we need for our own objectives

## Community Lesson Learned

**Common denominator** for various activities is data collection, ingestion, curation and dissemination – we need to develop a much stronger **“data” culture**, individually and collectively.



(after Ortiz-Milan, 2022)







# Next Steps and Discussion



# Exercise Purpose

The purpose of this exercise is to **improve transdisciplinary coordination, data collection, and information sharing of rapid disaster reconnaissance and research efforts and to advance the integration of the Public Health Extreme Events Research (PHEER) network across CONVERGE.**

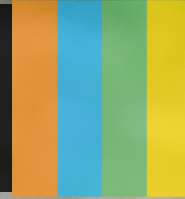






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# THANK YOU



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