

ARISE Seminar Series

University of Kansas

November 13, 2023, 3:30-4:30 p.m. CST

Strengthening Social Infrastructure: Ethics and Approaches for Interdisciplinary Collaborations

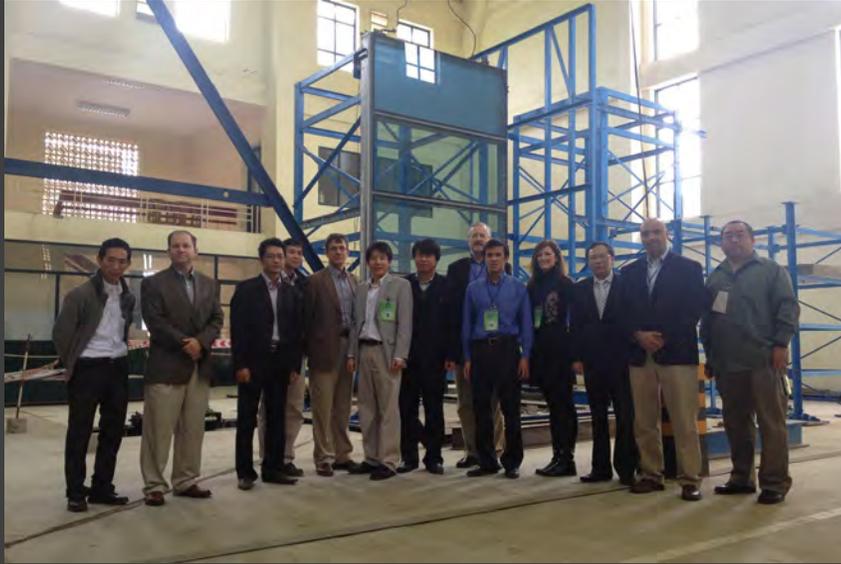
Lori Peek, Ph.D.

Professor, Department of Sociology

Director, Natural Hazards Center and Principal Investigator, CONVERGE

University of Colorado Boulder





Building Strong *Social Infrastructure*



“The physical [and virtual] **places** and **organizations** that **shape the way people interact [and learn]**.... The **networks** and **taken-for-granted systems** that support—or in some cases, undermine—all variety of **collective life.**” -Klinenberg, 2018, *Palaces for the People*



Question:

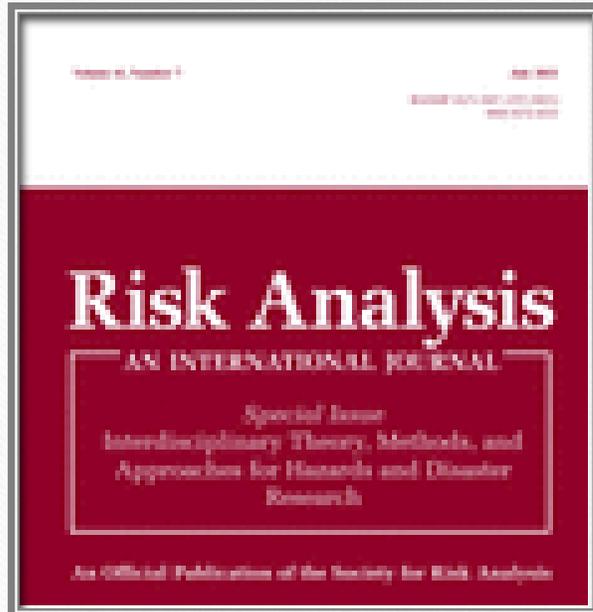
Any tips on big-team,
cross-disciplinary
collaboration?

(Especially when Zoom fatigue
is ever so real, and thus adding
more meetings doesn't feel like
the ideal solution.)

Risk Analysis

Volume 41, Issue 7

<https://onlinelibrary.wiley.com/toc/15396924/2021/41/7>



Special Issue: Interdisciplinary Theory, Methods, and Approaches for Hazards and Disaster Research

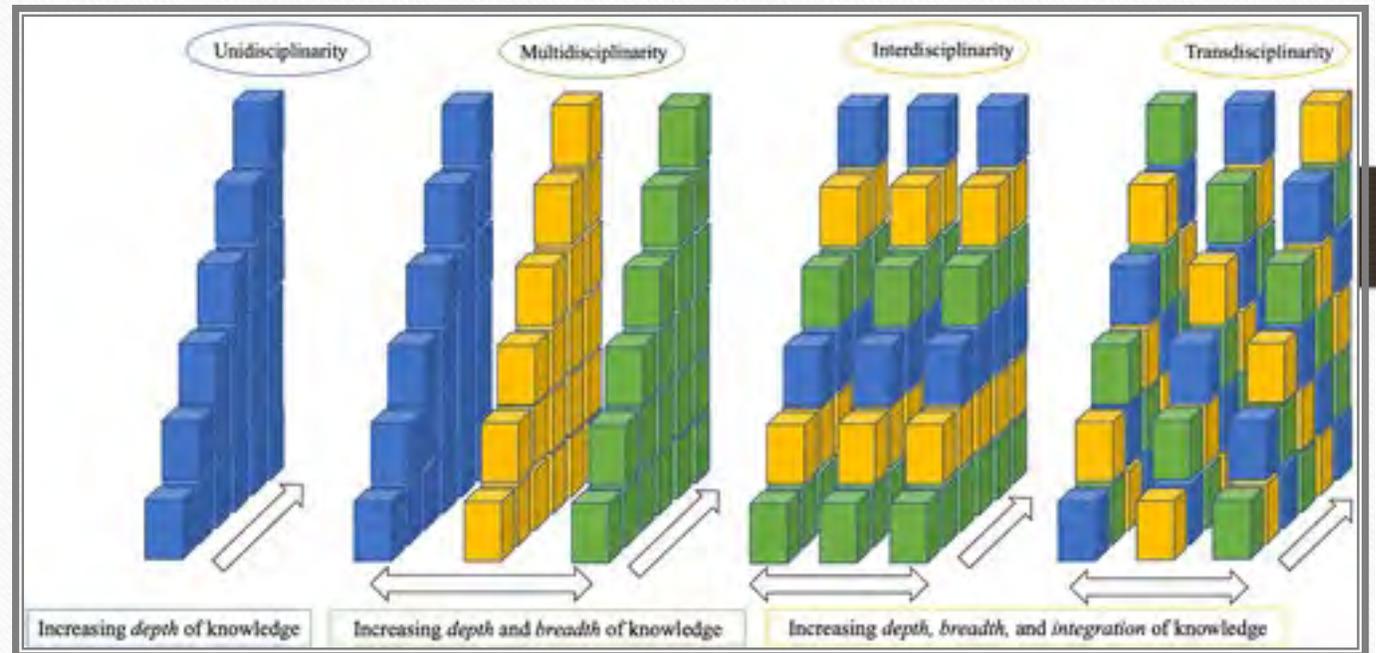
- I. Theory
- II. Methods
- III. Approaches
- IV. Projects



NSF CMMI Award #Award #1649879 and #1650202

Lessons

- It is **difficult** to work in large teams.
- Team-building takes leadership, care, time, trust, and resources.
- Emphasize *quality* over *quantity*. (Why have a monthly all-team meeting, if no one is engaging? Instead, consider investing in smaller task-focused meetings and then semi-annual in-person meetings.)
- *Process* and *product* should be given equal weight.
- Common language is key.
- Make the taken-for-granted or implicit aspects of research *explicit*. Stories can help.





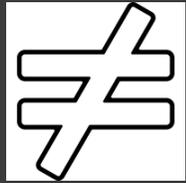
What if we used the stories that researchers tell each other as tools to advance ethical practices and interdisciplinary disaster research?

Experience Stories

- “We define **experience stories** as stories that individuals tell about something that happened during the research process, generally combining descriptive observation, some level of interpretation, and embellishment... These types of stories often do not make their way into formal published research accounts; however, because they can—and do—inform the trajectory of interdisciplinary research projects, we take their **power** and **potential** seriously” (Moezzi and Peek, 2019, 1).



Experience Stories



Gossip or
Critique

- Experience stories are grounded in the research process itself and involve descriptive observation of what was **seen, heard, or otherwise experienced** as part of the project. These stories can serve as a compact and engaging shared platform for **interdisciplinary debate** and for the **discovery of patterns and issues** that can be missed in **discipline-specific reasoning and data collection methods**.
- *Risks:* stories can be personal and painful and lead to disappointment and distrust.
- *Requirements:* time, trust, and a willingness to honor people's stories and listen to different disciplinary perspectives.
- *Possibilities:* More effective **cross-disciplinary collaboration** and a chance to advance **ethical practice** and **scientific rigor** in disaster research.



Approaches to Damage Assessments w/ a Social Science Sampling Lens

- Population
- Probability Sampling (simple random, systematic, stratified, cluster, etc.)
- Non-Probability Sampling (convenience, snowball, quota, purposive, expert, etc.)



Question:

When we select communities to work with, study, or engage, whose permission must we first seek to say ‘we’re working in/studying this community’?



Authors:

Chris Baker

Seth Cohen

Gigi Coulson

Susan Durden

Ed Rossman

Why engage communities and community partners?

It is the required thing to do.

It is the right thing to do – scientifically *and* ethically.

“A primary reason to engage the public in [research] and the ... planning process is to **develop a better understanding of problems and opportunities** so that better plans can be developed.

With increased knowledge gained through the public involvement process, [researchers] and planners **can tell a better “story” of the overall need** and thus **help decision makers to better understand the significant issues.”**

Flooding Disproportionately Harms Black Neighborhoods

The impacts of floods can exacerbate existing racial and social inequality

By Thomas Frank, E&E News on June 2, 2020



THE CONVERSATION

Academic rigor, journalistic flair

COVID-19 Arts + Culture Economy + Business Education Environment + Energy Ethics + Religion Health Politics + Society Science + Technology



New flood maps show US damage rising 26% in next 30 years due to climate change alone, and the inequity is stark

Published: January 31, 2022 11:00am EST

Coastal cities like Port Arthur, Texas, are at increasing risk from flooding during storms. Joe Raedle/Getty Images

- Email
- Twitter 49
- Facebook 320
- LinkedIn
- Print

Climate change is raising flood risks in neighborhoods across the U.S. much faster than many people realize. Over the next three decades, the cost of flood damage is on pace to rise 26% due to climate change alone, [an analysis of our new flood risk maps](#) shows.

That's only part of the risk. Despite recent devastating floods, people are still

Authors

 **Oliver Wing**
Research Fellow, University of Bristol

 **Carolyn Kousky**
Executive Director, Wharton Risk Center, University of Pennsylvania

SCIENCE

Queer Communities Often Left Out of Disaster Planning, Research Shows



LISTEN

By Ezra David Romero Feb 14

Save Article



02-12-22

Natural disasters can wipe out affordable housing for years

And when communities lose affordable housing, it's harder for businesses—and the entire economy—to recover from those disasters.



her Paul/Getty Images]

E READ

The New York Times

Why Does Disaster Aid Often Favor White People?

The federal government often gives less help to Black disaster survivors than their white neighbors. That's a challenge for President Biden, who has vowed to fight both inequality and climate change.



By Christopher Flavelle

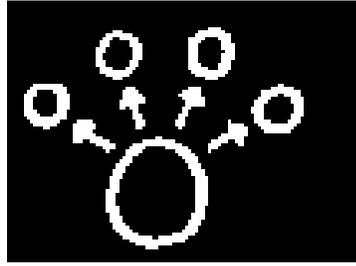
Published June 7, 2021 Updated Oct. 27, 2021



Developing Sincere and Sustainable Community Connections



Spectrum of Public Participation



INFORM

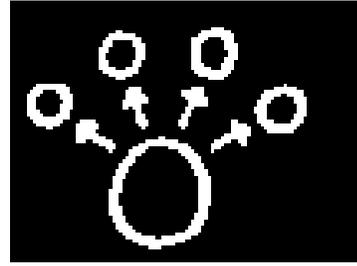
PUBLIC PARTICIPATION GOAL

To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

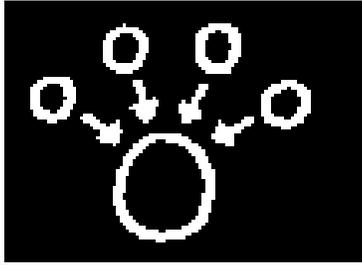
PROMISE TO THE PUBLIC

We will keep you informed.

Spectrum of Public Participation



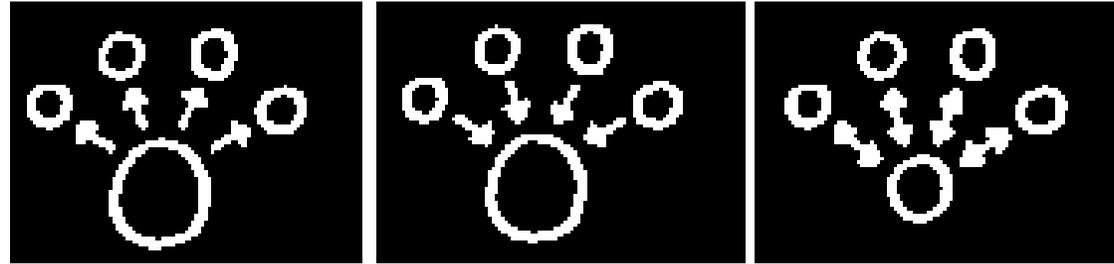
INFORM



CONSULT

PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.

Spectrum of Public Participation



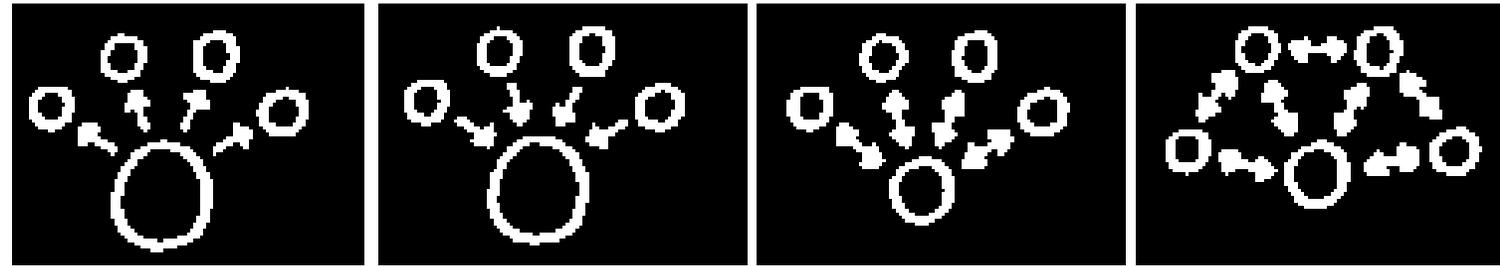
INFORM

CONSULT

INVOLVE

PUBLIC PARTICIPATION GOAL	<p>To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.</p>	<p>To obtain public feedback on analysis, alternatives and/or decisions.</p>	<p>To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.</p>
PROMISE TO THE PUBLIC	<p>We will keep you informed.</p>	<p>We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.</p>	<p>We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.</p>

Spectrum of Public Participation



INFORM

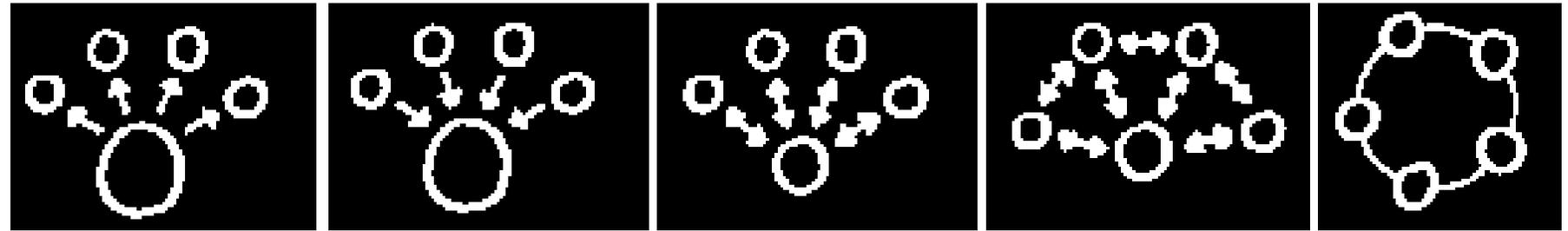
CONSULT

INVOLVE

COLLABORATE

PUBLIC PARTICIPATION GOAL	<p>To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.</p>	<p>To obtain public feedback on analysis, alternatives and/or decisions.</p>	<p>To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.</p>	<p>To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.</p>
PROMISE TO THE PUBLIC	<p>We will keep you informed.</p>	<p>We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.</p>	<p>We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.</p>	<p>We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.</p>

Spectrum of Public Participation



INFORM

CONSULT

INVOLVE

COLLABORATE

EMPOWER

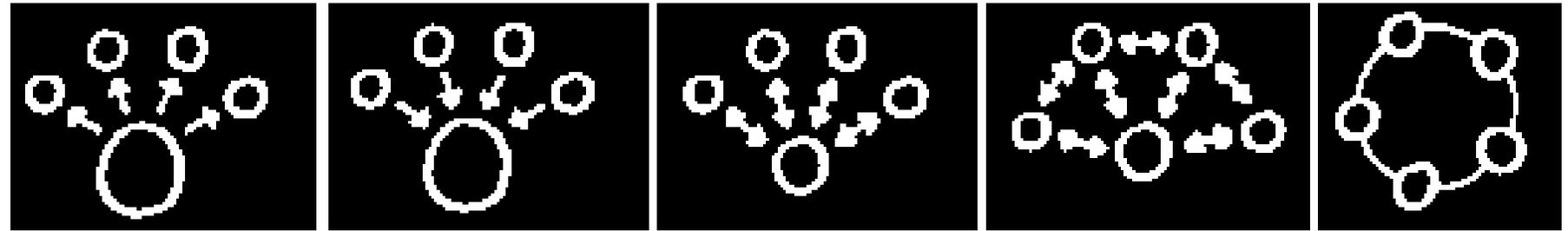
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
INCREASING IMPACT ON THE DECISION					
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Equity is practiced when **those most impacted by structural inequities are meaningfully involved** in creation and the implementation of practices and policies that affects their lives.

-Andrews et al., 2019

[How to Embed a Racial Equity Perspective in Research: Practical Guidance for Research process](#)

Spectrum of Public Participation



INFORM

CONSULT

INVOLVE

COLLABORATE

EMPOWER

PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
INCREASING IMPACT ON THE DECISION 					
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.



Question:

When we select communities to work with, study, or engage, whose permission must we first seek to say ‘we’re working in/studying this community’?

Cultural Humility



- A constructive process of self-critique and awareness
- Includes a constant questioning of biases, assumptions, and your role as ‘objective’ or ‘neutral’
- Goes along with active efforts to address power imbalances between officials and individuals



Positionality

- *Positionality* refers to one's multiple intersecting identities and how social roles, power, and privilege influence one's perceptions and experiences in research.

Definition: Evans, Adams, and Peek (2024)

Images: Pollock, Meagan (2021 March 24). What is positionality?. Engineer Inclusion.
<https://engineerinclusion.com/what-is-positionality/>

Why are cultural humility and positionality important?

“Understanding the broader structural context of a community (historical, political, social, economic factors) before entering the field can help prevent researchers and practitioners from inadvertently causing further harm.... An understanding of positionality – and a commitment to cultural humility, reflexivity, and reciprocity – can also help us to develop stronger relationships in the field.”



CONVERGE Training Modules

Welcome to the CONVERGE Training Modules!

Each module takes 30-60 minutes to complete and features specific learning objectives and detailed lesson plans along with resources for further reading, analysis, and exploration. At the close of the module, you will have the opportunity to take a 10-question quiz. If you get 8 out of 10 questions correct, you will receive a Certificate of Completion for each module. Each completed CONVERGE Training Module is worth one contact hour of general management training through the International Association of Emergency Managers (IAEM) certification program.

<https://converge-training.colorado.edu/modules/>

Broader Ethical Considerations
for Hazards and Disaster
Researchers

Collecting and Sharing
Perishable Data

Conducting Emotionally
Challenging Research

Cultural Competence in
Hazards and Disaster Research

Disaster Mental Health

Institutional Review Board (IRB)
Procedures and Extreme
Events Research

Public Health Implications of
Hazards and Disaster Research

Reciprocity in Hazards and
Disaster Research

Social Vulnerability and
Disasters

Understanding and Ending
Gender-Based Violence in
Fieldwork



Questions:

- How can we make sure we are integrating equity in both *process and product*, including within our team, with the communities we are engaging, and with the research products we're producing?
- What are good examples of **evaluating or measuring equity** – a very complex topic - particularly as it applies in community and/or infrastructure resilience

Process

Process

Process

Process

Process

Process

Outcome

copywritingcourse.com

Equity is both a process and an outcome

Equity is **practiced** when those most impacted by structural inequities are meaningfully involved in creation and the implementation of practices and policies that affects their lives.

-Andrews et al., 2019

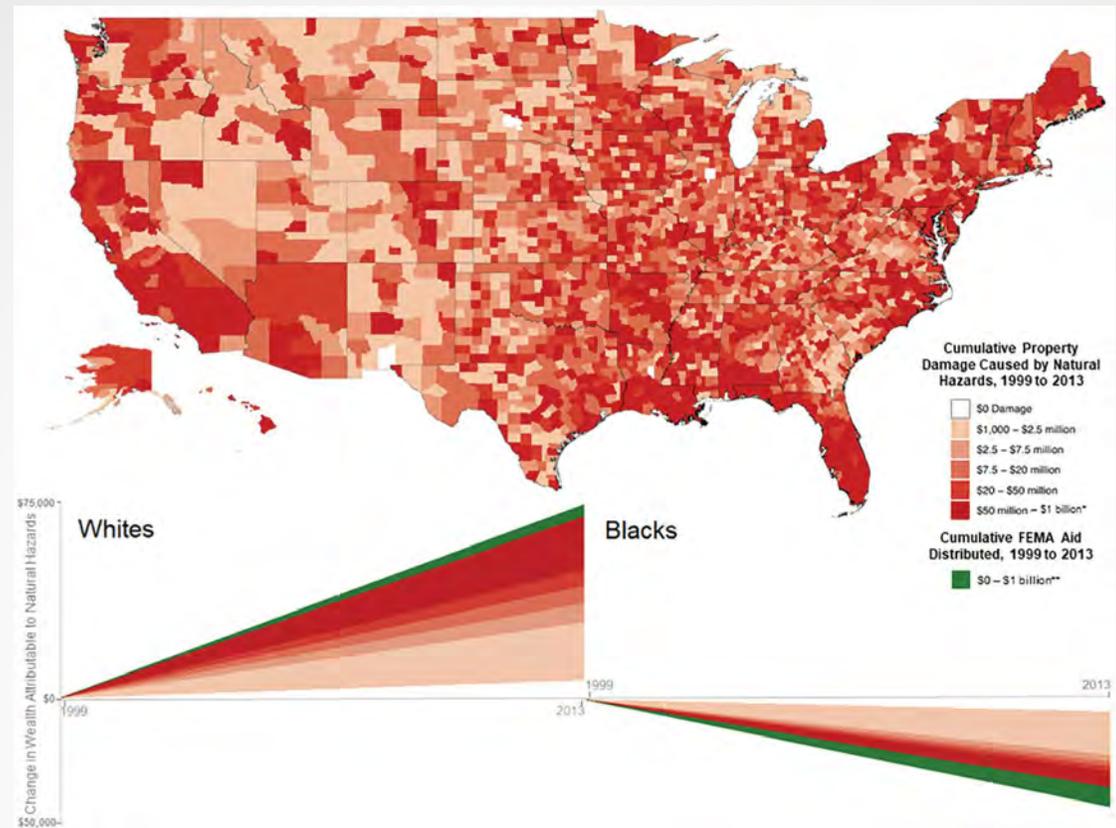
[How to Embed a Racial Equity Perspective in Research: Practical Guidance for Research process](#)

“Equity is **achieved** when outcomes are not predicted based on someone’s identities or characteristics (e.g., race, gender identity, sexual orientation, ability status, etc.).“

-Creative Reaction Lab

[Equity Centered Design Field Guide](#)

We are much more advanced at measuring social vulnerability and unequal impacts in the hazards and disaster field. We have few case examples or indicators that would help us to measure *equitable* processes or outcomes.



Disasters exacerbate wealth inequality whereas Whites in disaster affected counties see a cumulative gain in wealth and blacks experience a loss of wealth (Howell and Elliott, 2018).

Black and Latino disaster victims apply more often for aid, but are disproportionately denied (Raker, 2023).

Sources: Howell and Elliott (2018), “As Disaster Costs Rise, So Does Inequality.” *Socius*, <https://journals.sagepub.com/doi/full/10.1177/2378023118816795>

Raker (2023), “Stratifying Disaster: State Aid, Institutional Processes, and Inequality in American Communities, *Social Forces*, <https://academic.oup.com/sf/advance-article-abstract/doi/10.1093/sf/soad050/7111727?redirectedFrom=fulltext>.

“

Equity – as a process and outcome – is *not* simply the opposite of social vulnerability. But most of the indicators and tools currently being used in the equity space are demographic measures of social vulnerability.”



**Please sign up for updates and information for the
Natural Hazards Center and CONVERGE:**

hazards.colorado.edu/signup

converge.colorado.edu/signup



*The Natural Hazards Center and CONVERGE are funded by the National Science Foundation (Award #1635593 and #1841338).
Any opinions, findings, conclusions, or recommendations expressed in this material are those of the author and do not necessarily reflect
the views of the NSF*