The Unfulfilled Potential of U.S. Geoscience:
Strategic Gaps in Climate Adaptation and Hazard Mitigation Efforts

Christopher Keane and Leila Gonzales

American Geosciences Institute

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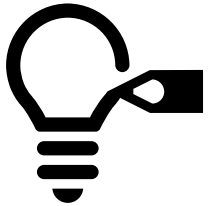
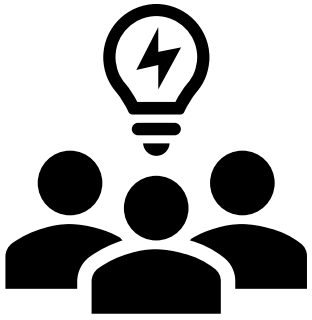
GRANDE – Assessing Adaption to Disasters



Geoscience is the discipline that understands the causes, impacts, and risks of natural hazards.



The geoscience community is well-positioned to lead the way in adaptation and mitigation efforts related to climate and hazard impacts in their professional activities.

Research and Education Engagement

Between 2000 and 2020

5% Percentage of research publications related to hazards in the Journal of Geoscience Education

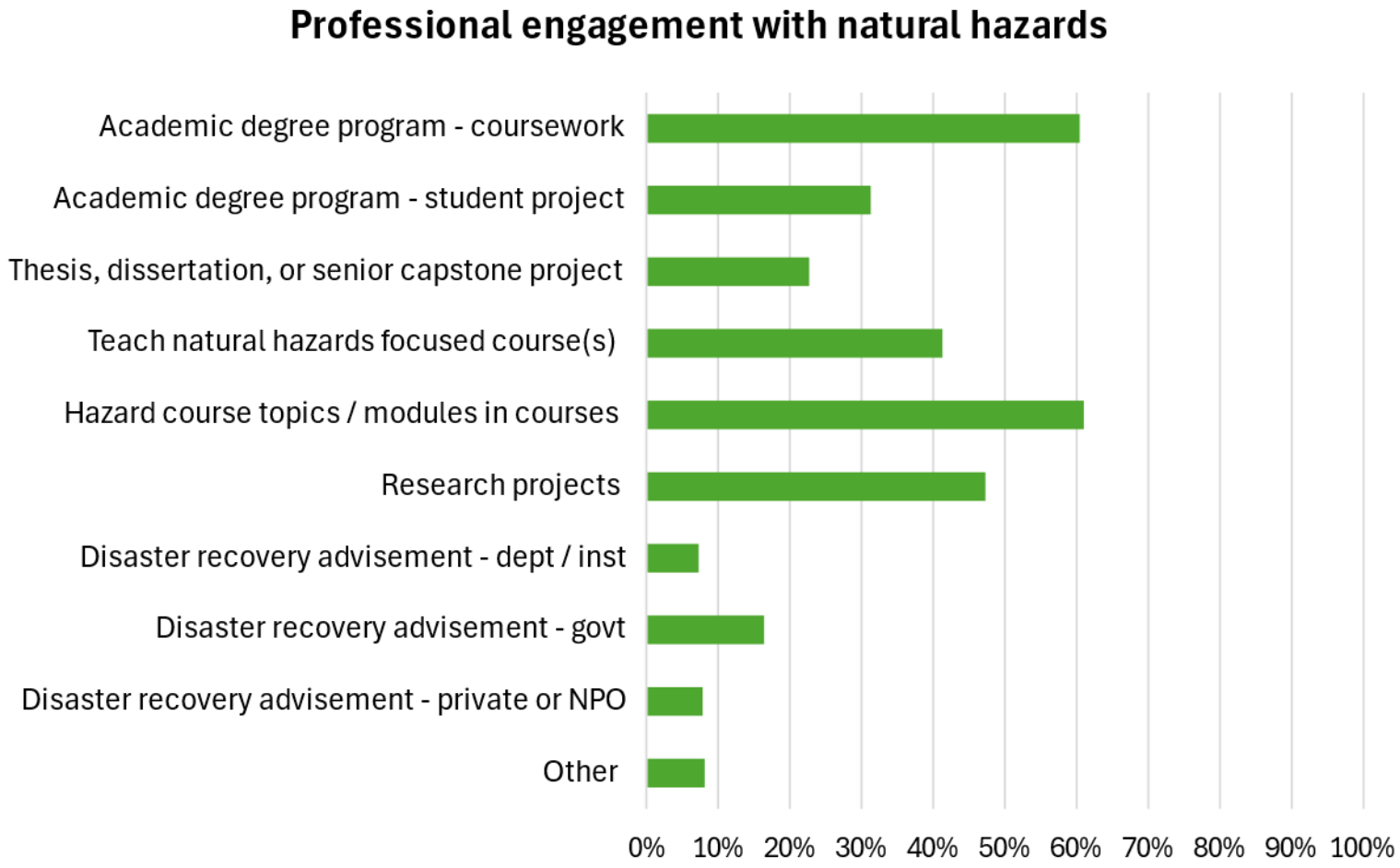
20% Percentage of educational materials related to hazards in the SERC database

4% Percentage of NSF awards related to hazards research

1% Percentage of NSF funding opportunities related to hazards research

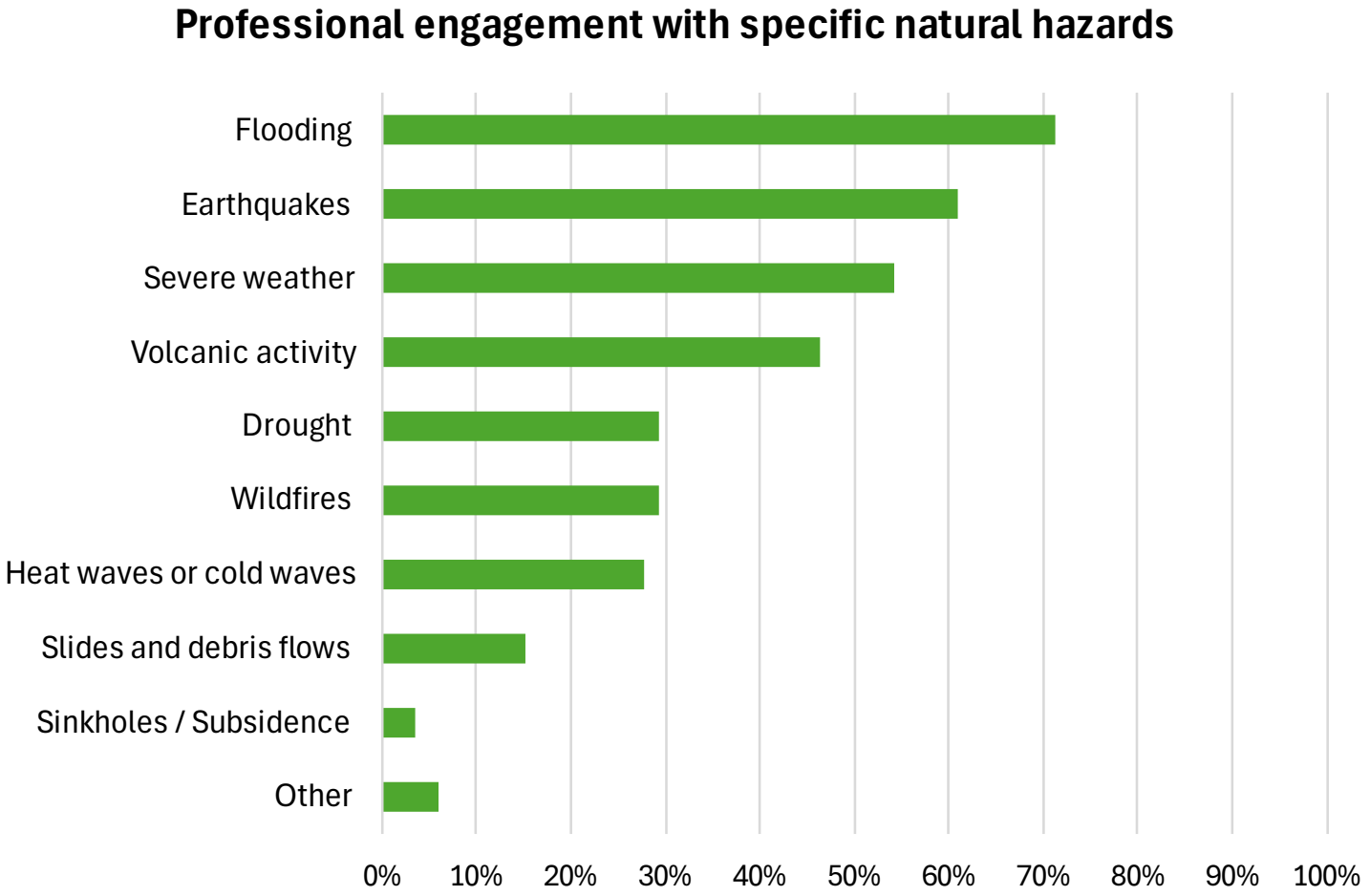
Professional Engagement with Hazards

- Hazards spark inspiration for research, degree choice, and career trajectory.
- Primary engagement through academic courses and research projects



Types of Hazards

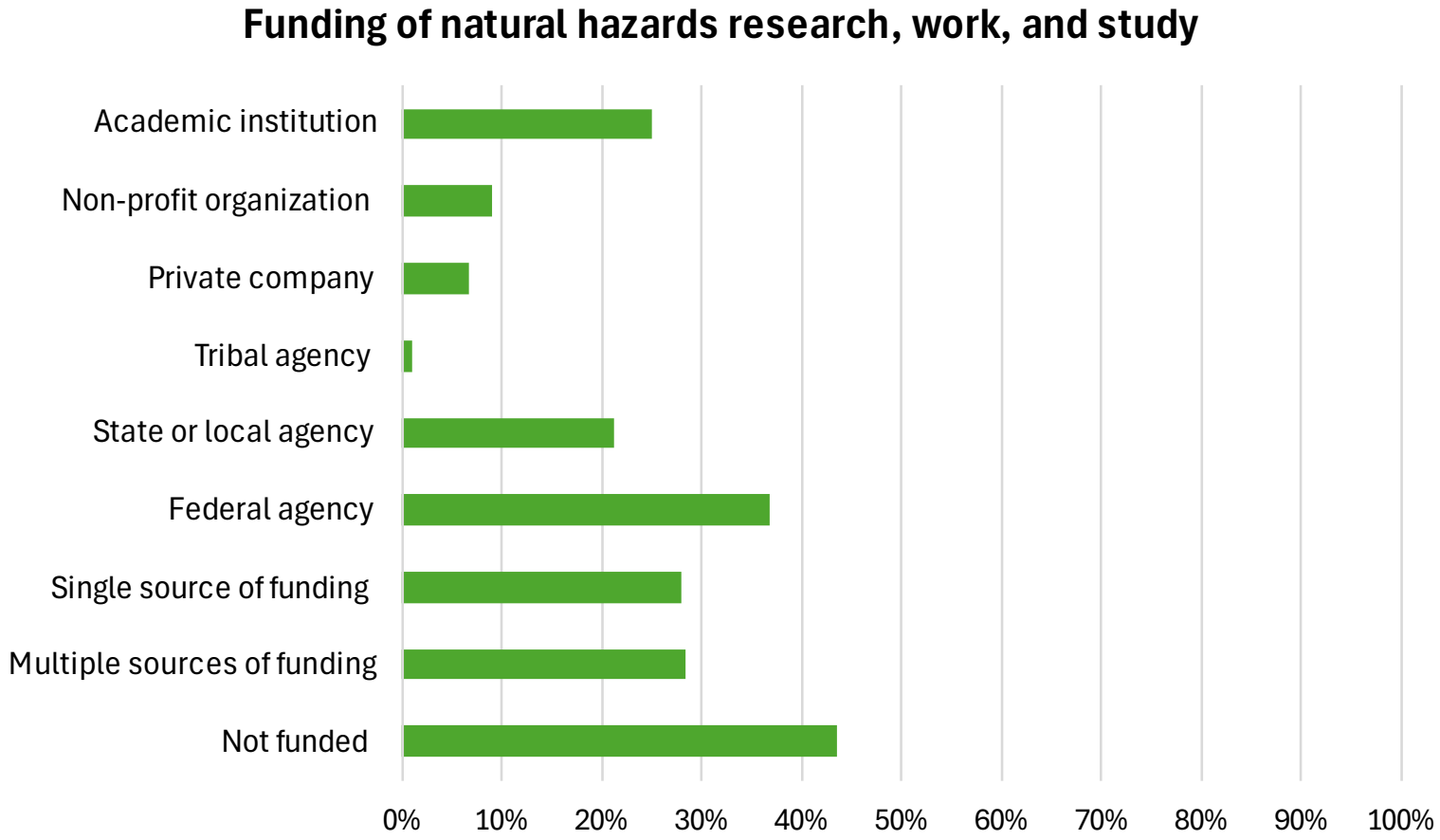
- Engagement primarily with flooding, earthquakes, severe weather, and volcanic activity.
- Aligns with federal funding of hazard related research in terms of types of hazards studied.



Funding Sources

- Just over half of respondents reported that their activities were funded (56%), while 44% reported that they did not receive funding.

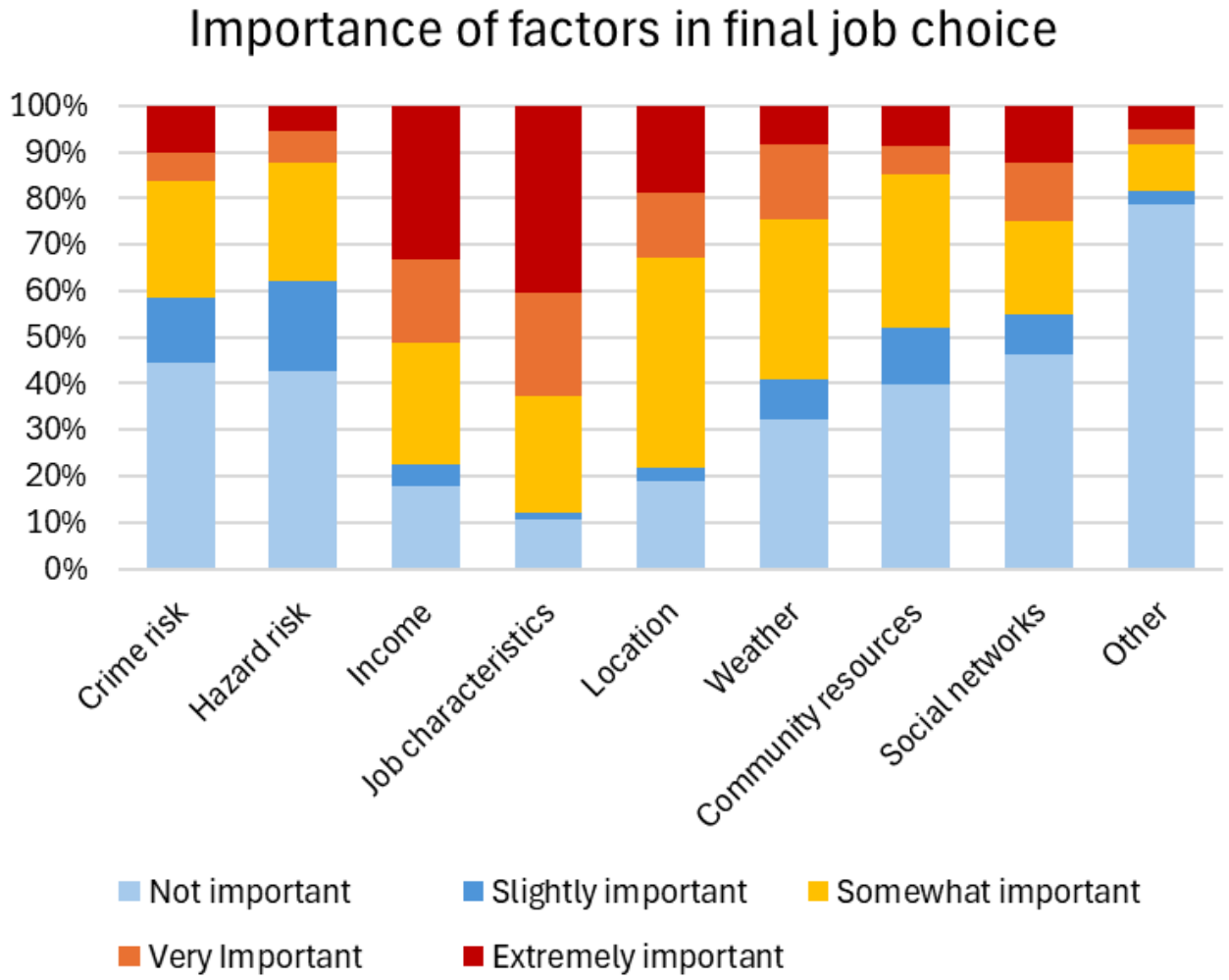
- Primary sources of funding were federal agencies, academic institutions, and state / local government agencies.



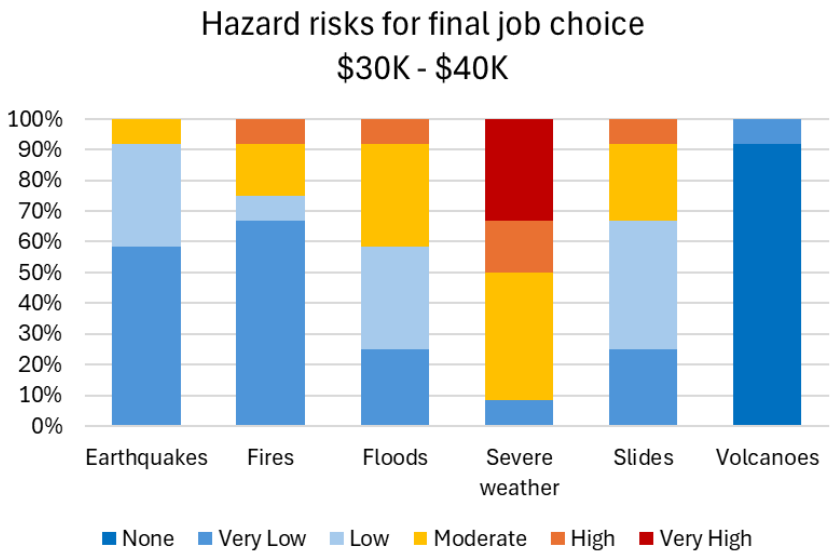
Risk Consideration in Job Choice

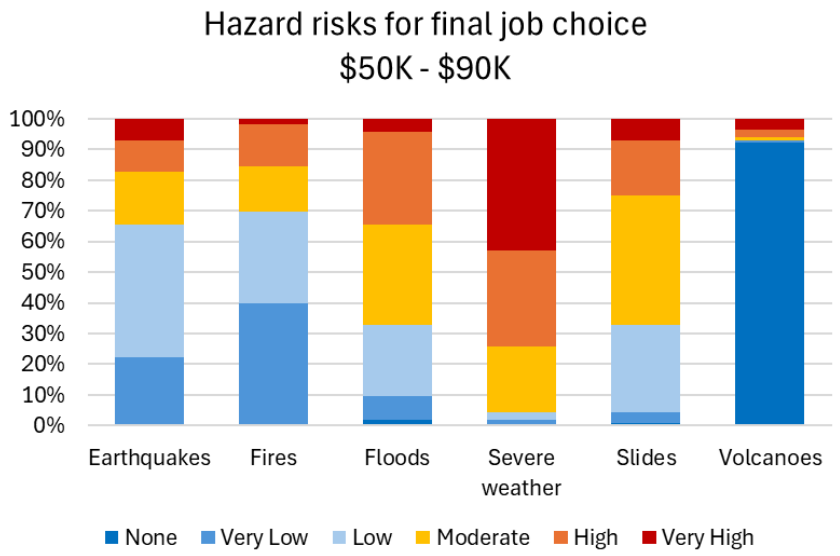
Geoscientists want jobs that are **interesting**, **pay well**, and are **in locations they prefer**.

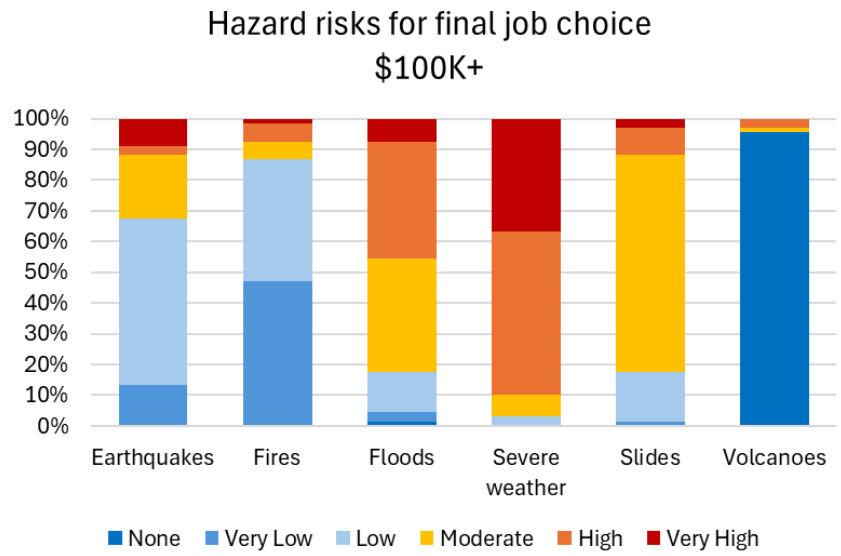
Consideration of hazard risk ranks near the bottom of factors driving choice.



Risk tolerance







Salary

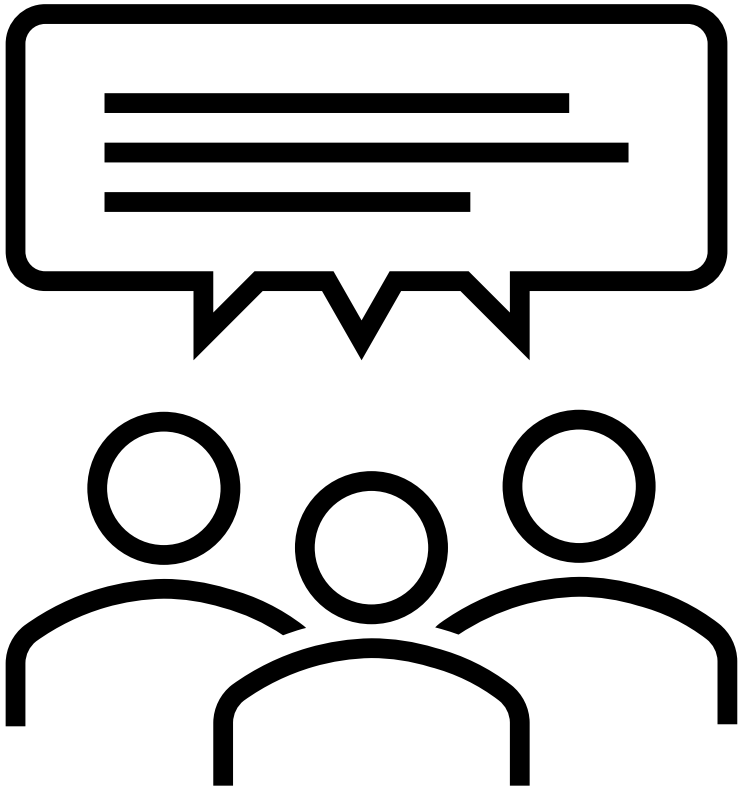
Risk Tolerance

Especially for severe weather, floods, and slides

Investing in Potential

- Investment in hazard research
- Investment in education
- Bridging the gap between academic pursuits and career pathways
  - Internships
  - Private – Public partnerships
- Incentivizing career choice via job salaries, location, and job tasks
  - Competitive salaries
  - Choice of locations
  - Making the connection – applying and developing academic skillsets to career

Questions?



AGI's GRANDE project data
https://grande.americangeosciences.org/data

Natural Hazards & Job Choice Game
https://hazardgame.americangeosciences.org

Contact us directly
lmg@americangeosciences.org
keane@americangeosciences.org