



**NOAA**  
WEATHER  
PROGRAM OFFICE

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# Social Science Program

## FY25 Funded Projects

2025-2027



The Weather Program Office (WPO) Social Science Program is delighted to share the seven research projects funded as part of its 2025 competition to support and advance how communities perceive, respond to, and are impacted by extreme weather. This cohort of projects draws on the excellence of our research partners to address societal needs across multiple scales and geographies. Project teams will design and test methodologies that evaluate individual and community responses to weather, including how information flows and integrates into protective decision-making; assess the role of uncertainty information and differing hazardous weather events on protective decisions; and, draw on data science (and other approaches) to explore the connections between forecast timing and accuracy to social, behavioral, and economic outcomes.

Legend:	Severe Weather	Extreme Temps	Flooding & Precip	Fire Weather	Tropical Cyclones	Winter Weather	Relevant to All Hazards	At-Risk Populations
<p><b>RL 2</b></p> <p><b>Human Health Impacts of Hurricanes and Hurricane Forecasts</b> PI: Renato Molina // University of Miami</p> <p>Quantify the human health impacts of hurricanes and evaluate how accurate and timely forecasts mitigate these effects by combining high-resolution health and hurricane data with state-of-the-art econometrics.</p>	<p><b>RL 2</b></p> <p><b>Integrating Mobility Data, Survey Responses, and Forecasting Information to Enhance Understanding of Decision-Making During Hazardous Weather Events in Communities</b> PI: Liqing Li // Texas A&amp;M University</p> <p>Examine population mobility in response to hazardous weather information by developing a database of warnings and evacuation orders, collecting survey responses, employing econometric methods, and pairing all of these with cellphone mobility data during extreme events.</p>							
<p><b>RL 3</b></p> <p><b>Advancing Natural-Human System Models to Integrate Hurricane Forecasts, Data, and Impacts</b> PI: Austin Harris // NCAR Co-PI: Paul Roebber // Univ. Wisconsin-Milwaukee</p> <p>Use model simulations to test the impact of forecast changes on evacuation success and expand its capacity to ingest different types of forecast information to better understand the link between forecasts and societal outcomes.</p>	<p><b>RL 2</b></p> <p><b>Towards a ColdRisk Messaging Framework: Research to inform the development and scalability of an extreme cold decision support tool for Washington State</b> PI: Nicole Errett // University of Washington</p> <p>Address decision support needs during extreme cold events by identifying intervention points and response strategies, including developing a proof-of-concept ColdRisk tool. This tool integrates local health impacts with population needs and risk reduction strategies.</p>							
<p><b>RL 2</b></p> <p><b>Emergency Alert Systems: Exploring the Perspectives and Behavior of Populations with Limited-English Proficiency (LEP)</b> PI: Mary Angelica Painter // Natural Hazards Center, University of Colorado Boulder</p> <p>Understand how populations with limited-English proficiency receive, perceive, and respond to emergency information related to extreme weather events.</p>	<p><b>RL 3</b></p> <p><b>Virtual Risks and Hero Projects: Activating Transformative Community Actions for Preparedness Against Extreme Weather Events through Extended Reality and Artificial Intelligence</b> PI: Sun Joo (Grace) Ahn // University of Georgia Co-PI: Danny Pimentel // University of Oregon</p> <p>Leverage immersive technologies and AI to help individuals localize risk experience, which can better prompt action. Also, co-develop transformative action preparedness plans to increase individual and community resilience.</p>							
<p><b>RL 2</b></p> <p><b>Understanding How Businesses Process and Prioritize Hazardous Weather Information to Make Protective Action Decisions for Employees and Patrons</b> PI: Michelle Saunders // Mississippi State Univ.</p> <p>Understand how businesses perceive, integrate, and prioritize hazardous weather information and set thresholds when making protective actions decisions for employees and patrons.</p>								