New England Climate Adaptation Project

Research Questions

• What are the climate change risks facing coastal communities?
• What can these communities do to manage or adapt to these risks?
• Can widespread playing of tailored role-play simulations enhance the readiness of communities to collectively manage climate change risks?
• What will it take to build informed agreements in each community about the appropriate steps to take?

Research Methods

Public Polls
Two professional public opinion polls were conducted in each community, in May 2013 and May 2014, to assess and track public attitudes about climate change and managing local risks.

Stakeholder Assessments
Key stakeholders in each community were interviewed to gain a deeper understanding of local views on climate adaptation from different perspectives (government, business, civic groups, etc), and to assess potential opportunities and barriers to local action on climate change risks.

Summary Risk Assessments
For each community, local climate change risks and opportunities for enhancing local resilience were broadly assessed, using downscaled climate projections produced by climate scientists at University of New Hampshire.

Role Play Simulations & Workshops
A role play game was custom-made for each community using data and insights from the Stakeholder Assessments and Summary Risk Assessments. A series of workshops then engaged local officials, town staff, and community members (500+ participants total) in a mock collaborative decision-making process to help participants collectively think about how to manage the climate change risks facing their community.

Workshop Surveys & Follow-Up Interviews
Both before and after each workshop, participants filled out surveys to indicate their views on climate change and managing local risks. In-depth interviews were also conducted with 20% of participants a few weeks after each workshop to better understand how the workshop experience impacted their perspective.
SAMPLE OF RESULTS

Public Polls

How concerned are you about the possible impacts a changing climate might have on your town?

- WELLS, ME
- CRANSTON, RI

Risk Assessments

Days of Extreme Heat (>90°F)

Days of Extreme Cold (<32°F)

4° Precipitation

Extreme Events

Sea Level Rise

Role Play Workshops

“I just wouldn’t have guessed that local folks could have as much impact as really they can. I think it was something that the workshop brought out for me”

“This approach gets people to think, ‘this is my town,’ we better get together to solve what we can, while we can”

- workshop participants

How important is it that residents, local groups, and businesses be involved in deciding how to respond to climate change risks?

- CRANSTON, RI

SAMPLE OF RESULTS

Better Safe Than Sorry

Helping Coastal Communities Anticipate and Manage Climate Change Risks

Contact Us at necap@mit.edu

- Concern about local climate change risks increased in three of the four towns (it was already very high in the fourth town)
- Sense of local responsibility for preparing for and managing climate change risks increased in three of the four towns (it was already very high in the fourth town)
- Confidence in town’s ability to reduce its vulnerability to climate-related risks increased in all towns
- Participants’ understanding of other perspectives and appreciation for the need for collective action and stakeholder engagement increased in all towns