

Public priorities on locally-driven sea level rise planning on the East Coast of the United States

BACKGROUND

Although sea level rise is only one of many effects of climate change, it has the potential to seriously impact low-lying coastal communities. There are several general approaches to decision making around adaptation that can apply to locally-driven planning decisions, such as real options, robust decision-making, and scenario analysis.

Not fully addressed in these programs and discussions, however, is an **understanding of the public's priorities and preferences** in developing locally-driven sea level rise plans. This work sought to bridge this gap by examining public perceptions.



Flooded street on Long Beach Island
Image by: Adam Carpenter

THE SURVEY

First, a **pilot study** was done to help inform questions and options.



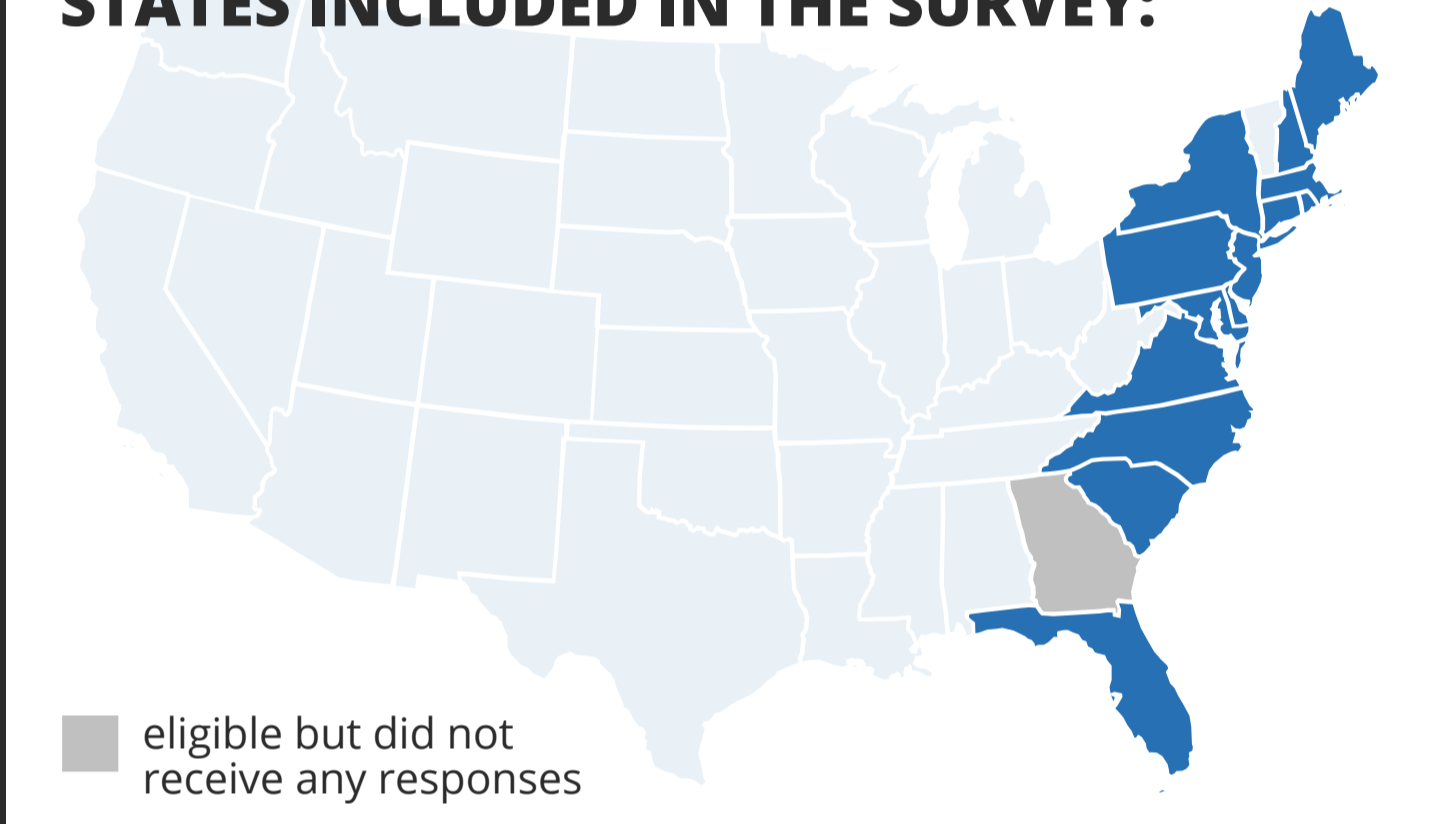
Then, an **in-depth survey** was performed to gain more detailed insights on public perceptions of sea level rise planning priorities. The survey included:

503 respondents who live in, work in, and/or regularly visit a coastal community on the East Coast of the United States.

14 questions on the subject matter (+ 10 on demographics).

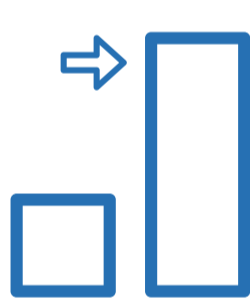
Finally, a **statistical analysis** was done – and 6 key findings derived from the results.

STATES INCLUDED IN THE SURVEY:



6 KEY FINDINGS

1. RELATIVE PRIORITY



Officials are likely to gain better engagement with the public if they make a **strong connection between planning for sea level rise and other high priority issues** like the environment, infrastructure/ utilities, and the economy.

2. PLANNING COMPONENTS



Officials should consider building sea level rise plans that **integrate response planning and preparedness with mandatory policies** to reduce future damage.

3. PROTECTION PRIORITIES



Officials should consider the **protection of essential utility and transportation services** as some of the highest priorities for protection in sea level rise plans. Residents also rated the protection of individual homes and of government facilities very highly.

4. FUNDING PRIORITIES



Officials should consider **public meetings to discuss how to pay for priorities**, should use state and federal funds when available, and should work with the insurance industry on risk reduction measures. Officials should avoid cutting other programs and should proceed cautiously with taxes.

5. CONFLICT RESOLUTION



To help prevent and resolve conflict, officials should consider bringing in both preparedness experts and scientists familiar with flooding and sea level rise to talk with the community and use the media to **help educate the community about the issue**. Avoid making adaptation measures optional to avoid conflict.

6. ADAPTATION RESPONSES



Public officials should consider a **variety of adaptation responses**. Early warning systems, natural and artificial barriers, and hardening infrastructure are among the items respondents generally found to be appropriate. Officials should avoid cutting off assistance from high risk areas.

