



Public Support for Climate Change Adaptation Among South Carolina's Coastal Residents

Matthew C. Nowlin

Dept. of Political Science, College of Charleston

Lorna Parkinson, Justin Reedy, Elizabeth Fly, and Kendra Stewart

Funding provided by the South Carolina Sea Grant Consortium

Climate Change and Public Opinion

- *Understanding Perceptions of Climate Change in South Carolina's Coastal Communities: An Approach using Cultural Cognition and Deliberative Polling*
 - Funded by the South Carolina Sea Grant Consortium
- Question
 - Can a focus on policy solutions through a deliberative process enhance agreement on climate change policy options?
- Deliberative Polling
 - Public opinion survey of South Carolina's eight coastal counties
 - Small deliberation groups with participants drawn from the survey respondents

- Underlying *values* and *cultural characteristics* determine views on policy issues
 - Hierarchy-Egalitarian scale
 - Individualism-Communitarian scale
- Cognitive processes: Identity-protection, bias-information processing

- Sample of residents from Charleston's eight coastal counties
 - Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Horry, and Jasper
- Collected in two time-periods
 - March 24th to March 31, 2015
 - August 18th to August 29th, 2015

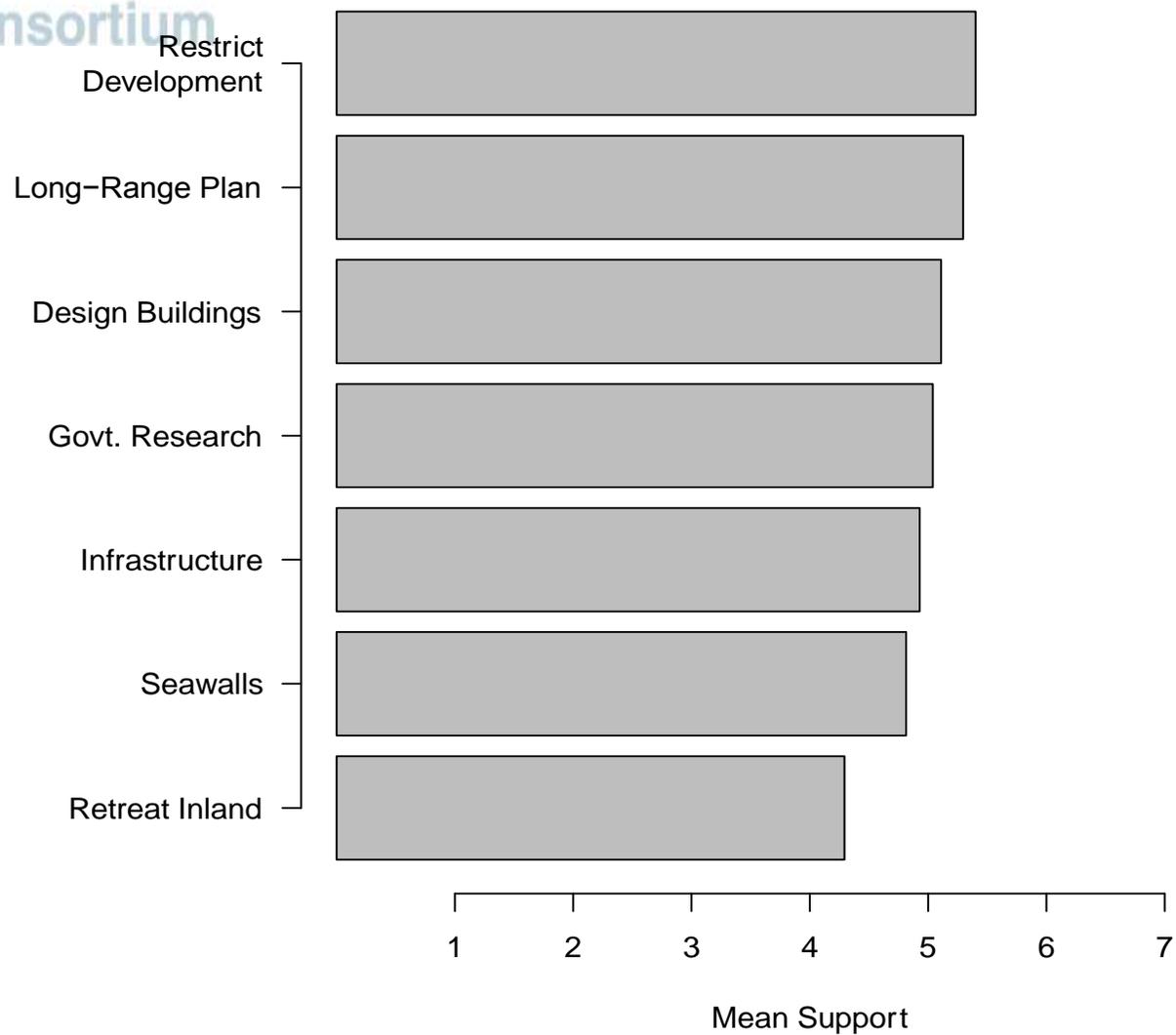
Adaptation Options



Box 1: Adaptation Strategies

1. Developing long-range plans that account for climate change impacts.
2. State and local government funding for renovation and improvement of public infrastructure to cope with sea-level rise and flooding.
3. Changing regulations and zoning laws in coastal/wetland areas to restrict development and protect important habitats.
4. Government funding research aimed at understanding future impacts of climate change in S.C. coastal communities.
5. Requiring vulnerable, highly populated residential and commercial areas to retreat inland and away from the coast over time.
6. Building seawalls and other barriers to protect areas from sea level rise and flooding.
7. Requiring buildings be designed or retrofitted to be resilient to climate change impacts like flooding and increased storm intensity.
8. Promote living shorelines and other green infrastructure for natural buffers to storm surge and sea level rise.

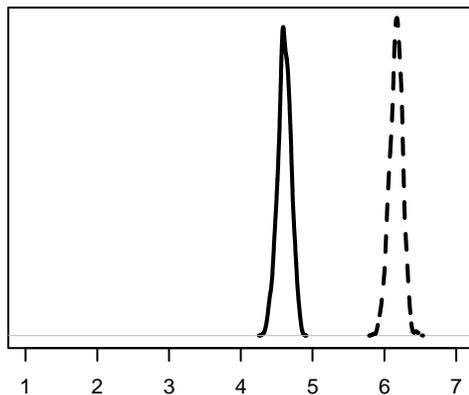
Support for Adaptation Options



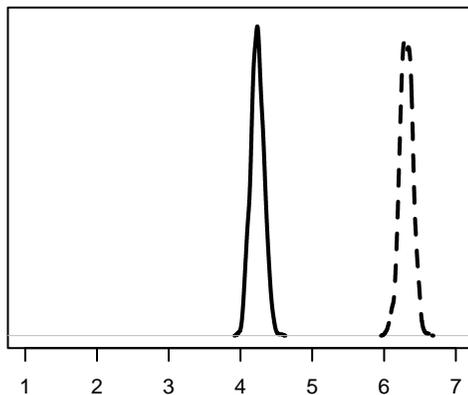
Support for Adaptation Options



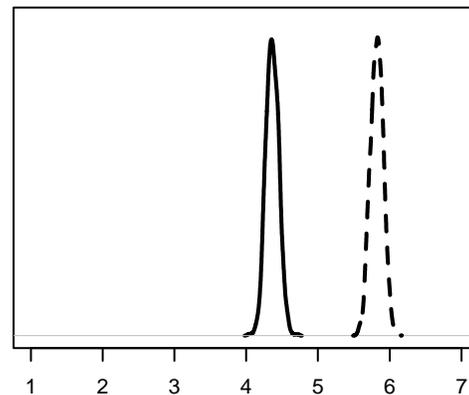
Restrict Development



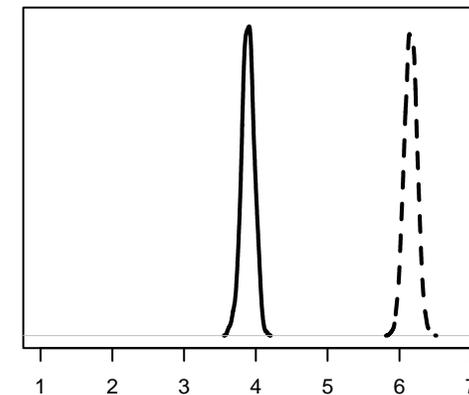
Long-Range Plan



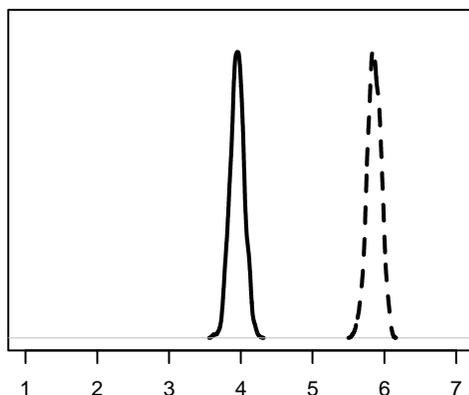
Design Buildings



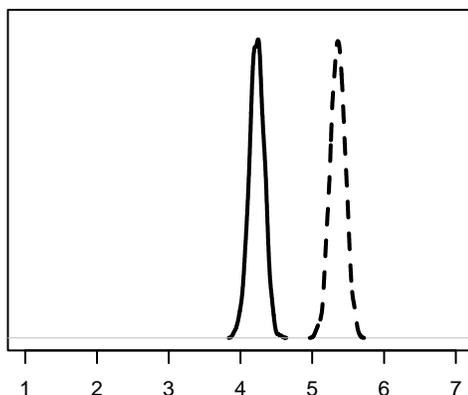
Govt. Research



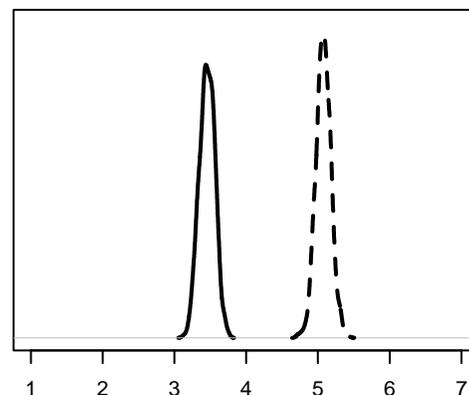
Infrastructure



Seawalls



Retreat Inland



— Hierarchical-Individualist

- - Egalitarian-Communitarian

- Four groups
 - November 9th, 2015
 - November 23rd, 2015
 - December 14th, 2015
 - January 28th, 2016
- Recruited from survey respondents
 - 28 participants total
- Presentation by Elizabeth Fly, followed by group discussions facilitated by Kendra Stewart

- Development

- *“I was going to say, before the developers are allowed to develop, they need to identify the areas that are at risk.”*
- *“We have to address development, and we have to address where people can build.”*
- *“I am anti-development. We've got - it really pisses me off, to go down to Folly Beach and see those houses, building right on the water line, knowing that they're going to get washed off, and I'm going to have to pay –”*
- *“I mean, as far as I'm concerned, our zoning laws need to be changed anyway. Not even for this purpose, but for other purposes too.”*

- Development
 - “... *thinking changing regulations and zoning laws, **to do it locally.***”
 - “*Because it’s better done with the sensitivity that local officials bring, rather than federal or state. Sometimes the funding has to come, just because of the amounts involved, but if you can do it locally, where people know what that community, what it needs and what will work, what people’s appetite for it is, that would be my feeling about it.*”
- More acceptance of *local* regulations

- The problem with a *just education* strategy

“Just that presentation alone, demonstrated to me how poor demonstrations are in getting information across. I mean, I saw a lot of bar graphs. I saw graphs going up and down in different colors. But I really didn't feel anything from it. It really didn't affect me on a, you know, deep level. I didn't really see anything. Graphs, big deal. I mean, it just doesn't - I don't think you're going to get your point across to the general public with presentations like that.”

- Deliberative process focused on solutions

“... when you are asked to go to a focus group, you don’t know really what the motive is, or the reason for the focus group. And I read this, and I was wondering if, I mean, to me the assumption based on your presentation is that the climate is changing. How are we going to affect it? So we skipped the whole piece of is the climate changing, and whose fault is it, right? There was that - and so it was - I think it was more interesting because it was about reality and solutions in getting public buy-in to solutions, which is going to be critical.”