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New Jersey Public Support for Risk-Reducing Policies in Flood-Prone Lands

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Four Research Questions

- 1. What proportion of the NJ's population supports risk-reducing land use and building policies in flood prone areas? And why?
- 2. What impact has Superstorm Sandy had on public perception of global climate change? And why?
- 3. How were transit, energy delivery, and other infrastructure impacted by the storm? What are public perceptions of those impacts? And why?
- 4. Can we predict assistance and how is it associated with preparedness, situation, needs and constraints?

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Survey

- 1750 samples
- 65% landline, 35% cell phone
- February 13-March 27, 2013
- Sample divided into two groups with 875 receiving land use/building management questions and global climate change questions and the other 875 receiving the infrastructure and preparedness-outcome questions.
- All received key predictor questions about global climate change, trust, cost, and demographics

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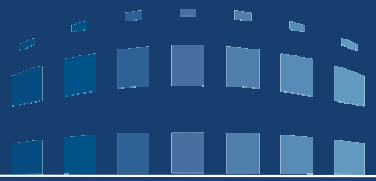

Question 1

- What proportion of the NJ population support risk-reducing land use and building policies in flood prone areas? And why?

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TABLE 1—Proportion of Respondents Who Supported Land Use, Design and Financial Policy Changes. Question 1.

Summary data	Strongly agree, %	Somewhat agree, %
Allow local governments to require housing in some areas to be built in ways highly resistant to natural disasters	62.5	**22.4**
Have the federal and state government identify the areas to not be developed as they provide natural buffers in the event of storms	61.3	**22.3**
Relocate water, sewer, natural gas, roads, and other infrastructure away from the most vulnerable areas of the state	53.0	**25.8**
Have the government give financial incentives to rebuild in ways that reduce future risks	49.1	**30.8**
Allow local governments to prohibit housing in some areas	42.5	**26.6**
Limit the number of times homeowners in high risk areas may receive federal disaster relief	38.2	**21.5**
Have the federal and state government purchase property in vulnerable areas and turn it into open space	35.0	**25.8**

Association Among 7 indicators

- 6 correlated and used them to form a support government-managed flood risk reduction component (used Cronbach's alpha and factor analysis)
- Limit number of times homeowners in high risk areas may receive federal disaster relied was not correlated with above 6.

Hypothesis 1. GLOBAL CLIMATE CHANGE [% agree]

- 1. Priority to redevelop areas of NJ devastated by Sandy [95%]
- 2. Concern about impact of global climate change on NJ [70%]
- 3. Global climate change is risk to me, my family & friends [64%]
- 4. Recent hurricanes strengthened my belief about global climate change or made them reconsider their neutrality about the issue [65%]

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Hypothesis 2. TRUST [% agree]

- Trust scientific community understands the science behind global climate change [64%]
- Trust federal government or state government to
- manage shore redevelopment [49%]
- Our state and local officials understand the implications of global climate change for my region [41%]
- Media I rely on communicate with us honestly about global climate change [33%]

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Hypothesis 3. WILLINGNESS TO PAY FOR A DEDICATED REVENUE STREAM [% agree]

- Willingness to raise state income taxes by 1% for 5 years [19%]
- Raise state sales tax by 1% for 5 years [24%]
- Add a special additional tax of 1% of hotels, motels, airports and recreation facilities for 5 years [53%]
- Approve a multi-billion dollar bond issue to be paid out over 30 years [42%]
- Add a 5-cents-per-gallon tax on gasoline sales in NJ for 5 years [14%]

OTHER FACTORS

- Those in support were disproportionately:
  - Female
  - Not residents of South Jersey
  - Younger
  - Identify with Democratic party
  - Perceive environment will be worse in 25 years
  - Egalitarian

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Scale of the Support and Opposition

- Supporters of the proposed policy is 50% support 4 or more of the 7 policies.
- Key shaping agents are willingness to pay and secondarily trust.
- The clock is ticking on public connection to the issue.