
Perceived Risks of Flooding in the North End

EEC 432 Capstone in Environmental Economics and Policy

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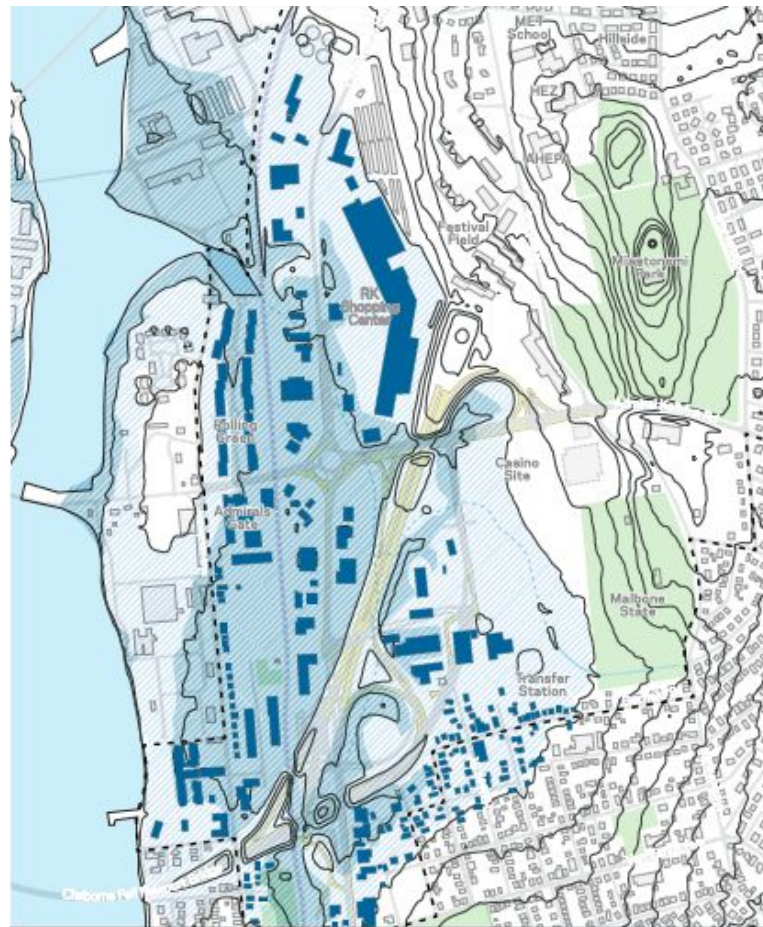
University of Rhode Island
May 2021



For any questions and comments, please contact Prof. Emi Uchida (Dept of Environmental and Natural Resource Economics, University of Rhode Island | euchida@uri.edu)

Goal of the Project

- The North End of Newport is currently at a high risk of flooding due to storm surges and sea level rise.
- **How do residents of the North End perceived the risks of flooding?**
- Doing a survey.



Methodology

- Newport Health Equity Zone has recently finished distributing a similar survey
- With the help of RI State Rep. Lauren Carson and Eastern Rhode Island Conservation District
- 102 surveys. 86 in English and 16 in Spanish. Distribution: 8 done through SurveyMonkey and 94 done on paper.
- Data entry, Data cleaning, Data analysis



Google Sheets

North End Flooding Survey

Is there flooding on the North End of Newport where you live? We want to know because...
We want your opinion on making the North End Green and healthy for all residents

1. Tell us about yourself:

So that we know how to reach you, please provide the following information... (this is only for internal purposes - we will not share your information). Optional.

Name _____ Neighborhood _____

Email Address _____ Phone Number _____

Do you own your home or rent? _____

Your age group:

18-30 _____ 31-45 _____ 46-60 _____ Over 60 _____

2. Are there floods in your neighborhood after it rains?

Yes _____ No _____

3. How often does this happen?

every time it rains _____ only once a year _____

several times a year _____ once every 2-5 years _____

I don't know/other _____

4. If yes, where?:

Severe yard flooding _____ Severe street flooding _____

I don't know/other _____

5. Do you know where the flooding comes from? (tick all that apply)

off your roof _____ neighbor's property _____

general flooding in the area _____

drain running through your property _____

off the road _____

blocked or no drains _____ new construction _____

I don't know/other _____

6. Where does it flood? (tick all that apply)

comes inside the house _____ under the house _____

inside the garage or other building _____

under garage or other building _____ driveway under water _____

backyard _____ front yard _____

street _____ I don't know/other _____

7. Did your neighbors or others in your area experience flooding?

Yes _____ No _____ Where do they live? _____

8. If you have children, do they walk in floods on the way to school after it rains?

Yes _____ No _____

9. If there was a flood tomorrow would you feel prepared to handle it?

Yes, I know what to do _____

No, I don't know what to do _____

I have a plan but I would not feel prepared _____

10. How concerned are you about pollution in the bay?

Very concerned _____

Somewhat concerned It doesn't bother me _____

Unsure _____

11. What does environmental justice mean to you?

12. What environmental issues are of concern in your North End Neighborhood?

Air pollution _____ Lack of open space _____

Garbage and waste in the streets _____ Too many cars _____

Other _____

13. Would you be interested in getting involved with a project to make our community more environmentally green and healthy?

Yes _____ no _____

If yes, name and Phone number _____

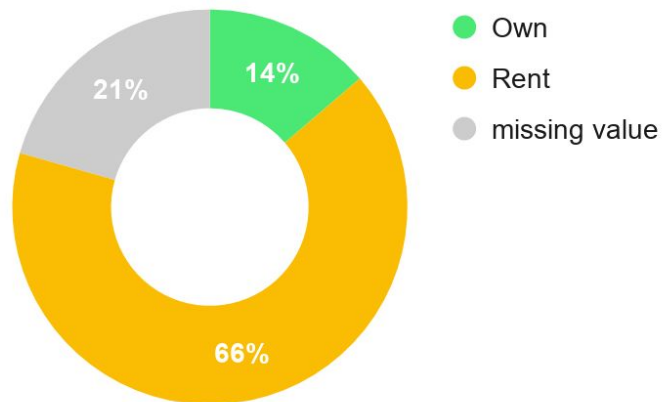
Thank you for your time and feedback.

(OVER)

Demographics

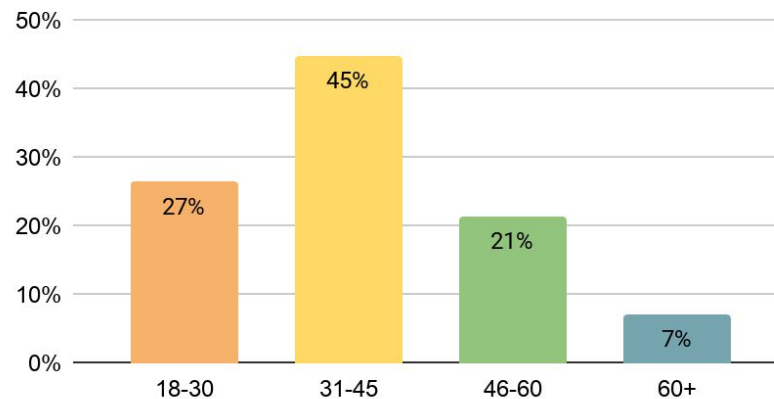
• N=102

Own or Rent



- Do you own your home or rent?

Age Group



- Your age group:

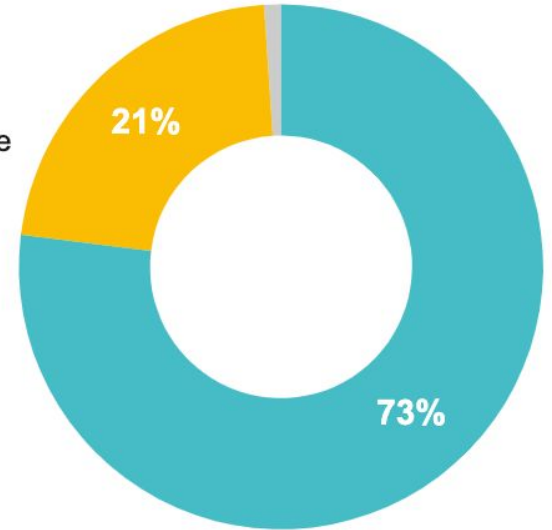
Floods after Rain

- Are there floods in the neighborhood after it rains?
- 74 Yes, 24 No, 1 missing

• N=102

Flooding In Your Neighborhood After Rain?

- Yes
- No
- missing value

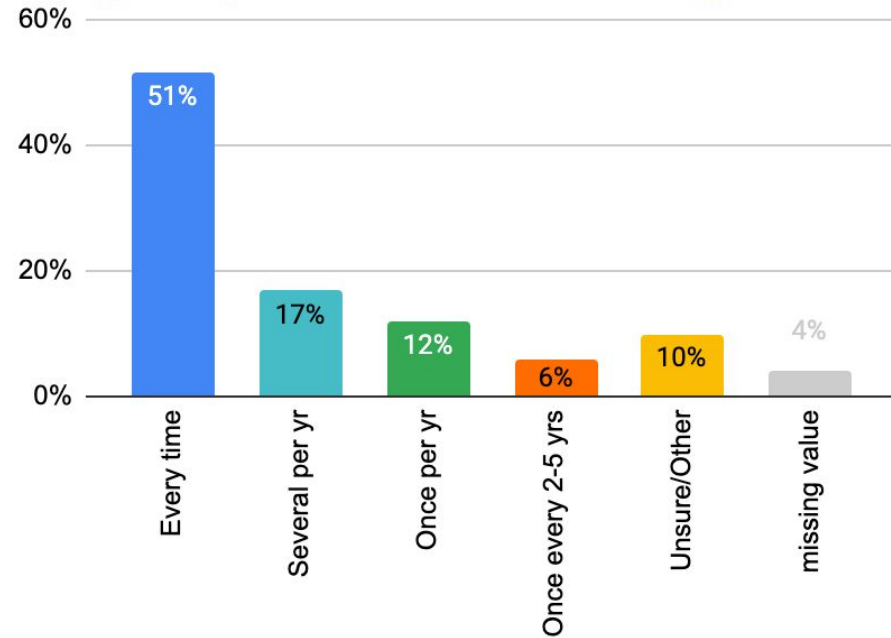


Frequency

- How often does this happen?
- Follow up question to the previous one.
 - Percentages same as actual counts.

• N=102

Frequency of Post-Rain Flooding



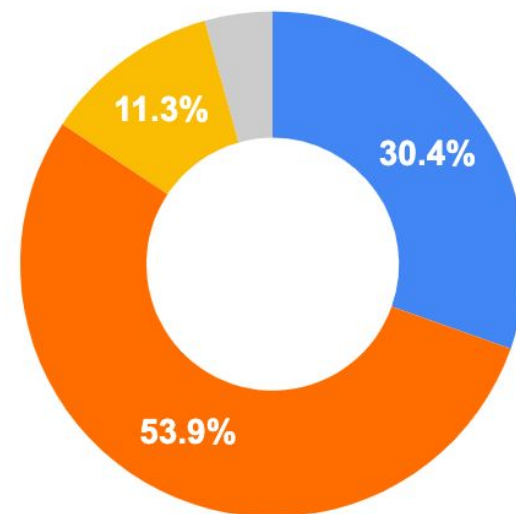
General Area

- If yes, where?
- Follow up question to the previous one.
- 5 people (4%) did not respond

• N=102

Flooding in General Area

- Severe Yard
- Severe Street
- Unsure/Other
- missing value

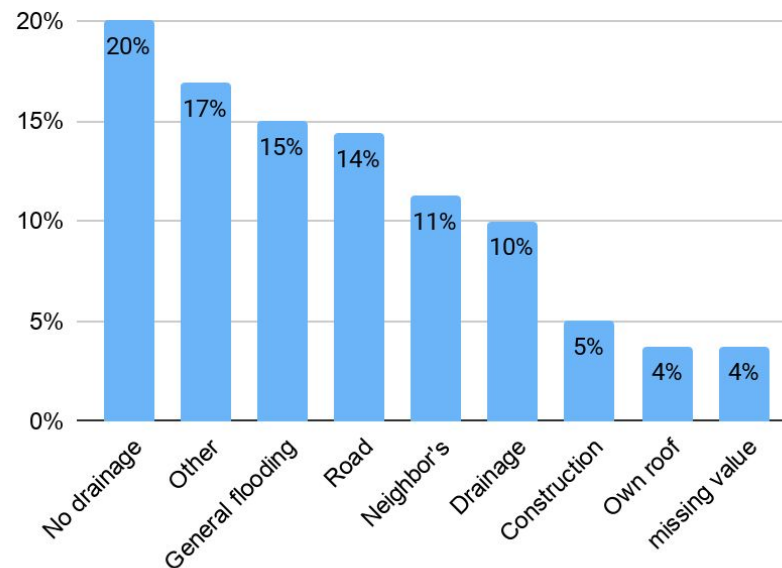


Origin of Flood

- Do you know where the flooding comes from? (Check all that apply)
- Starting with the most common answer
- 6 missing value

• N=102

Origin of Flooding

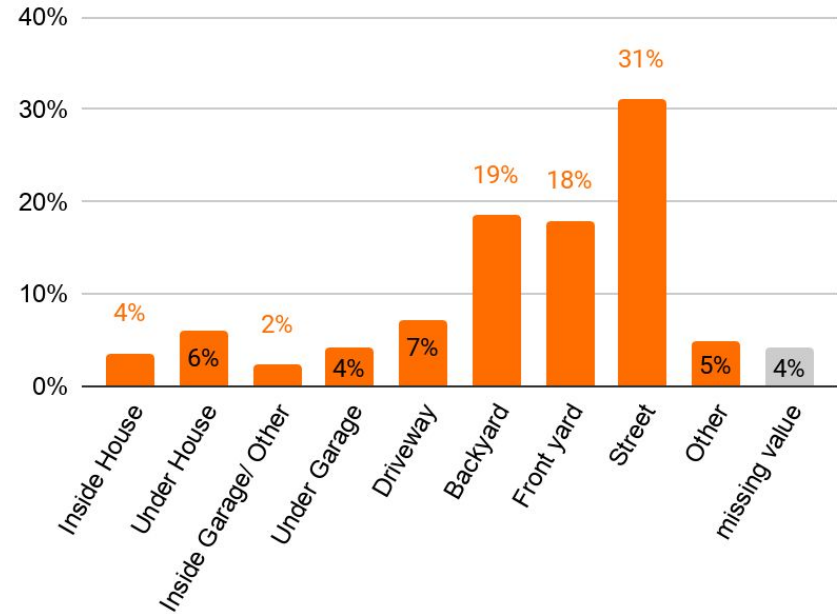


Specific Locations

- Where does it flood? (check all that apply)

• N=102

Flood Prone Areas on Property

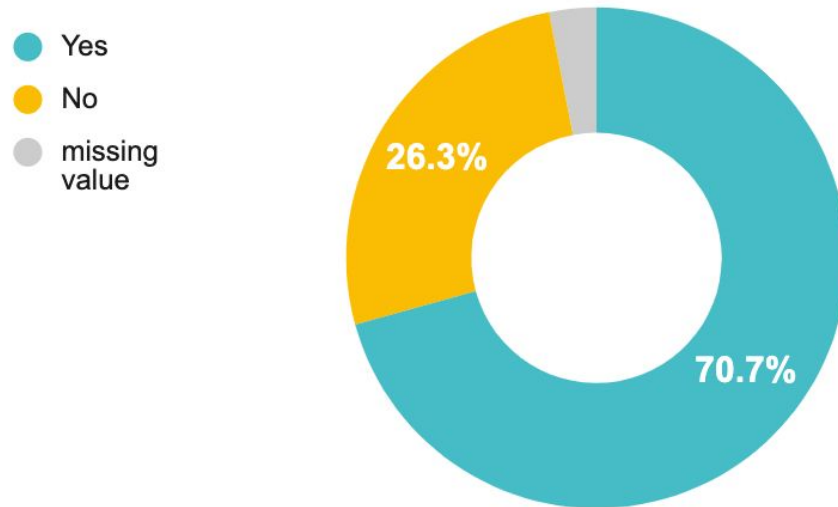


The Neighbors

- Did your neighbors or others in your area experience flooding?
- 3 missing values

• N=102

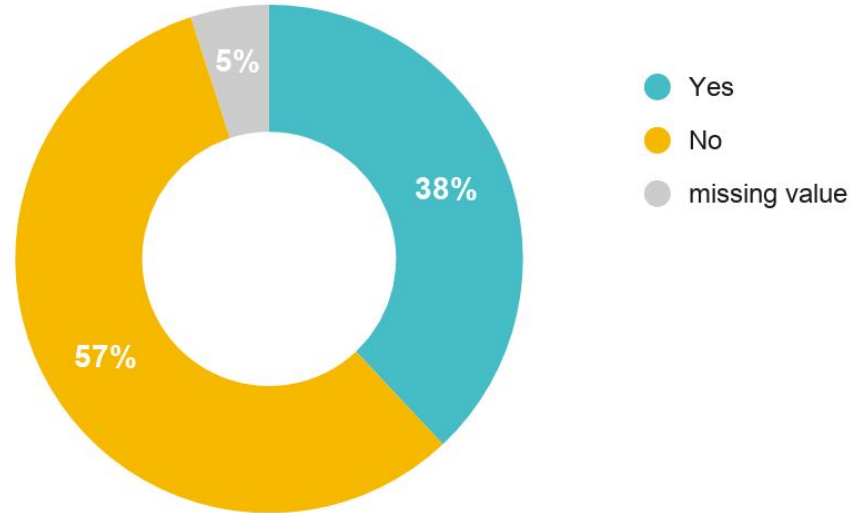
Neighbor experiencing flooding?



Children

- N=102

Children walking through flood

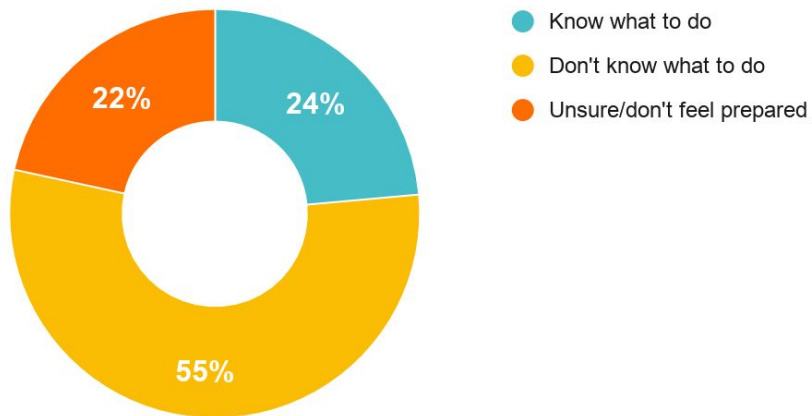


- If you have children, do they walk in floods on the way to school after it rains?

Perception of the North End

• N=102

Sense of Preparedness



- If there was a flood tomorrow, would you feel prepared to handle it?

What does Environmental Justice mean to you?

“Is the equal treatment and meaningful involvement of ALL people (regardless of color, national origin, income, etc) with development, implementation, enforcement of environmental policies, laws, regulations, and needs of the community”

“Doing right by our environment”

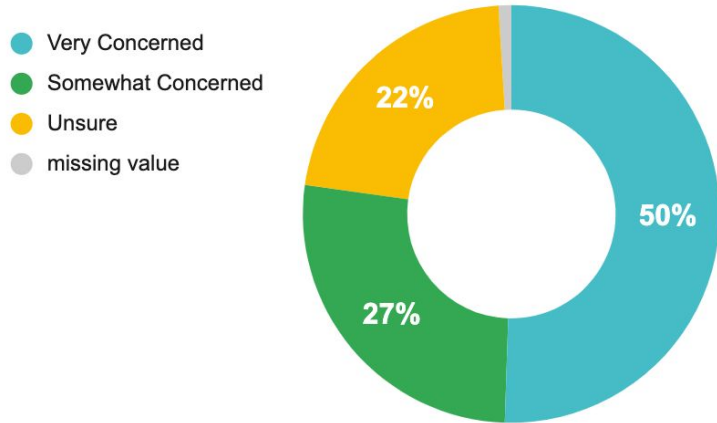
“Everyone should have equal access to flooding prevention.”

“Neighborhood's having a voice. City and state leaders listening and prioritizing it.”

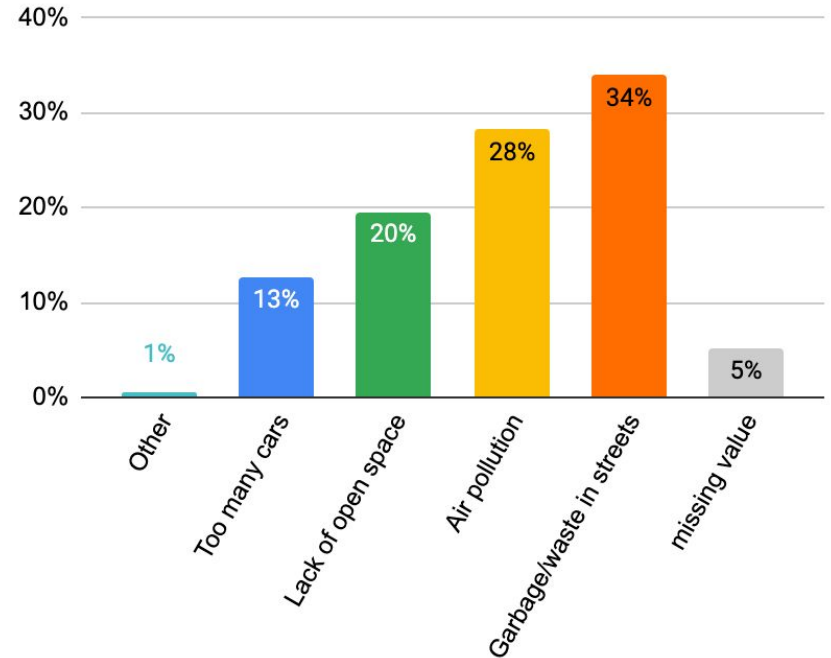
“That we are all stewards of the planet and we all must do our part in keeping it environmentally healthy, not one group's land bears the greater burden of pollution”

Environmental Concerns

Overall Pollution concern



Other Environmental Concerns

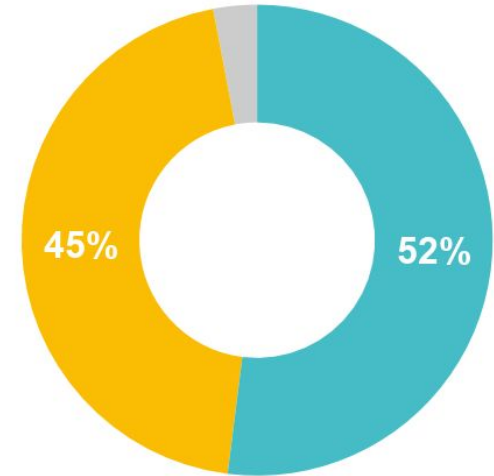


Interest in Future Projects

- Would you be interested in getting involved with a project to make our community more environmentally green and healthy?
- 3 people didn't respond

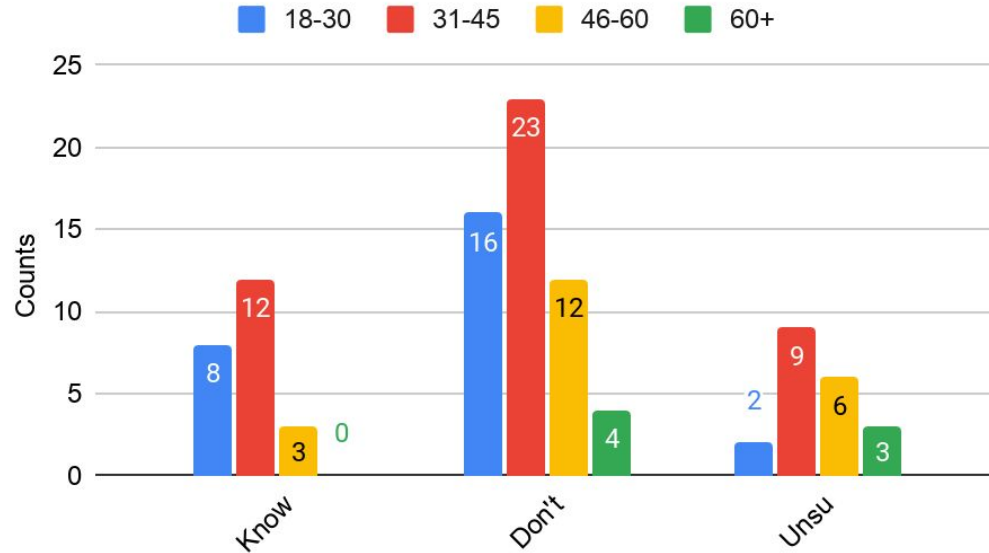
Want to get involved?

- Yes
- No
- missing value



Age

Age and Preparation



• N=98

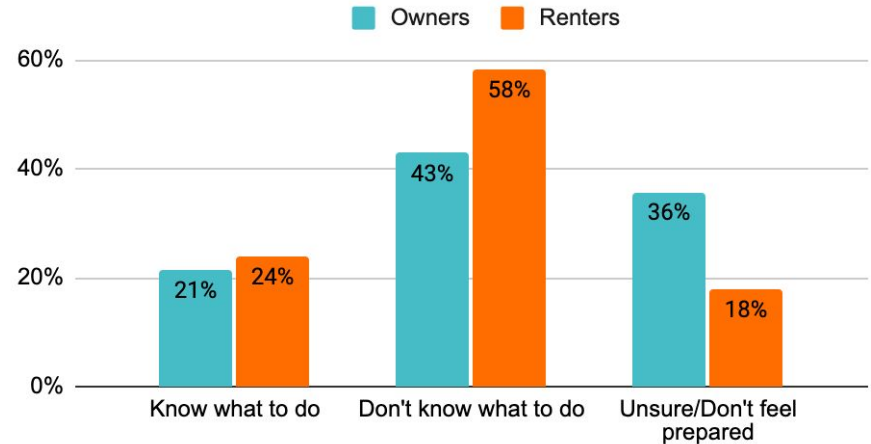
- If there was a flood tomorrow, would you feel prepared to handle it?

Ownership

- If there was a flood tomorrow, would you feel prepared to handle it?
- Seeing how Ownership affects the sense preparation
- Keep in mind that our Owners population is small at 14

• N=81

Ownership and Preparation



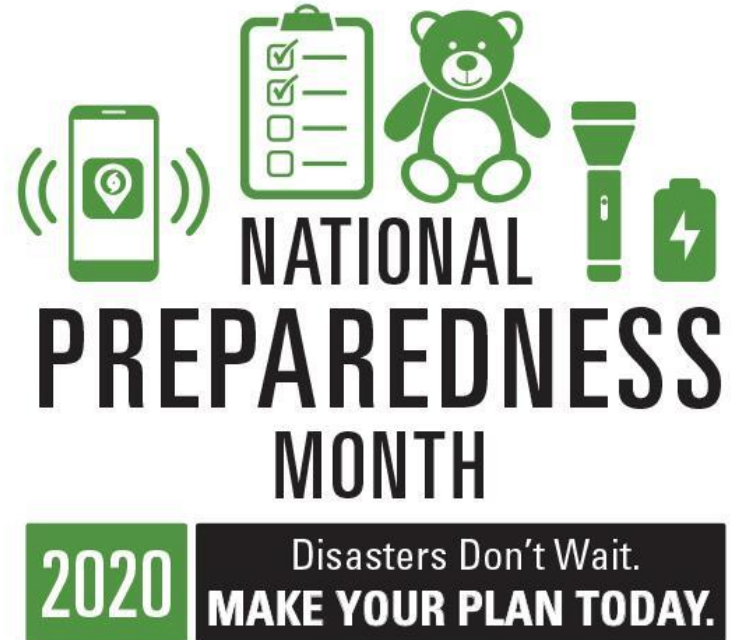
- Total of 67 Renters and 14 Owners

Conclusion

- Residents are concerned
- Areas affected most are street, backyard, and front yard
- Higher need to prepare for storms and floods.
- Prepareathon
- This survey is a good start to help local officials gain more understanding
- Keep raising awareness

Prepare-a-thon

- Initiative designed by FEMA to motivate communities to be prepared for disasters
- Goals of a Prepare-a-thon
 - Understand the types of disasters that could affect the area
 - Know how to stay safe and take action
 - Improve ability to recover from a disaster
- Sara Varela
 - Put together the “Prepare-a-thon” for Common Fence Point in Portsmouth, RI
 - sara.varela@associates.fema.dhs.gov



Acknowledgements and Thanks

- RI State Representative Lauren Carson
- Individuals from the North End who took time to complete the survey
- Newport Health Equity Zone and Resident Consultants
- Sara Churgin from the Eastern RI Conservation District



Thank you!

University of Rhode Island
Environmental & Natural Resource Economics
Capstone Class



Links.

Link to the Google Sheets is in the speaker notes.