# Appendix

### Interview Protocol

Note 1: Questions were organized thematically, and not necessarily in the order in which they were asked at each interview. Many prompts were only reminders for types of things interviewers should think about and were not all read verbatim. Ultimately, each respondent set the tone of what was most important or pressing to talk about.

Note 2: This semi-structured interview was audio recorded and transcribed. In addition to the audio recording, the interviewer used a computer tablet to record closed-ended information. Questions (or sections) that were simultaneously recorded closed-ended on the tablet by the interviewer are marked with an asterisk.

# **Beginning of protocol**

Thank you for agreeing to answer some questions for us. We hope you find the opportunity to share your experience valuable, and that research like this will help us better prepare for and recover from events like these in the future. If you don't mind, while we go through these questions, please do not disclose the names of other individuals who have not consented to participate in this study. Feel free to use terms like "friend," "spouse," "employee," etc.

## \*Psychology (This section was answered closed-ended and privately by respondents using a tablet)

First, if you don't mind, we have a few questions to better provide context for our discussion. If you're comfortable doing so, please read each question and choose the most applicable answer. I do not have to see your answers. Please feel free to ask me questions if anything is unclear or confusing.

For each of these questions, please choose the following options: never, almost never, sometimes, fairly often, very often:

- In the last month, how often have you been upset because of something that happened unexpectedly?
- In the last month, how often have you felt that you were unable to control the important things in your life?
- In the last month, how often have you felt nervous and "stressed"?
- In the last month, how often have you felt confident about your ability to handle your personal problems?
- In the last month, how often have you felt that things were going your way?
- In the last month, how often have you found that you could not cope with all the things that you had to do?
- In the last month, how often have you been able to control irritations in your life?
- In the last month, how often have you felt that you were on top of things?
- In the last month, how often have you been angered because of things that happened that were outside of your control ?
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Please select the option that best describes how you think about yourself right now for each of these questions. The options are: Definitely False, Mostly False, Somewhat False, Slightly False.

- If I should find myself in a jam, I could think of many ways to get out of it. (Definitely False, Mostly False, Somewhat False, Slightly False, Slightly True, Somewhat True, Mostly True, and Definitely True)
- At the present time, I am energetically pursuing my goals. (Definitely False, Mostly False, Somewhat False, Slightly False, Slightly True, Somewhat True, Mostly True, and Definitely True)
- There are lots of ways around any problem that I am facing now. (Definitely False, Mostly False, Somewhat False, Slightly False, Slightly True, Somewhat True, Mostly True, and Definitely True)
- Right now, I see myself as being pretty successful. (Definitely False, Mostly False, Somewhat False, Slightly False, Slightly True, Somewhat True, Mostly True, and Definitely True)
- I can think of many ways to reach my current goal. (Definitely False, Mostly False, Somewhat False, Slightly False, Slightly True, Somewhat True, Mostly True, and Definitely True)
- At this time, I am meeting the goals that I have set for myself. (Definitely False, Mostly False, Somewhat False, Slightly False, Slightly True, Somewhat True, Mostly True, and Definitely True)

# Perception

Great, thank you. Now I want to hear some of your personal opinions about what happened here. Can you tell me a bit about your experience of the storm?

How well do you think your household has recovered from Irma at this point? \*Can you score that for me from 1 to 5 (1 being not at all recovered, and 5 being completely recovered)?

In what ways do you think you have succeeded to recover? Why? In what ways do you think you have struggled to recover? Why? What does recover mean to you?

How well do you think your community/neighborhood has recovered from Irma? \*Can you score that for me from 1 to 5 (1 being not at all recovered, and 5 being completely recovered)? How did you make this assessment?

How likely do you think another event like Irma is to occur to you while living in this home?

Are you concerned that the impacts of tropical storms on communities like yours could become worse in the future? Why? (either for yes, no, or unsure)

Are you concerned about the role that global warming might have on future tropical storm activity? (if not previously addressed)

Are you concerned that the impacts of blackouts on communities like yours could become worse in the future? Why? (either for yes, no or unsure)

Are you concerned about the role that global warming might have on future blackout occurrence? (if not previously addressed)

If concerned about future risks (regardless of the driver):

You said that you were concerned about (either or both hazards) becoming worse in the future, especially because of (response). What do you think your community should do about that? How about your state government? How about the national government?

If not concerned:

You said that you were not concerned about (either or both hazards) becoming worse in the future. Can you tell me a little bit more about how you have come to that opinion?

### Background

Great thanks, now I just want to know a little background about you and your home,

\*Can you tell me how long you've lived in this house? In Florida?

\*Do you own or rent?

How many people live here? What is their relationship to each other?

\*What type of home do you live in? Single family home Multifamily home (duplex or triplex) Apartment or condo Approximately how many units are in the complex?

What utilities does your home have?

Municipal water Municipal electric power Municipal sewer Municipal garbage collection Municipal natural gas Internet Local TV Access to an internet connected smart device such as a phone or tablet Which of these utilities experienced disruptions?

Do you have access to a working car?

#### Neighborhood

What do you like best about this house/neighborhood?

Why did you pick this house/neighborhood?

What bothers you about this house/neighborhood?

*Try and get perception of community cohesiveness, social disorder, implications for community resilience, etc.* 

### Communications

Let's think back to the few days before the hurricane was here. Can you tell me about how you heard that the storm was coming? What were your primary sources of information as the storm drew closer? Which of these sources do you trust the most? Which do you trust the least?

Who do you consider to be a source of advice on whether to evacuate or not that you would trust?
Weather forecasters—TV, radio, newspaper, in print /online? (separate source and mode)
Other news announcers—TV, radio, newspaper, in print /online? (separate source and mode)
State, county, or city government website?
Other online sources?
Florida Division of Emergency Management?
Your local mayor?
Your local police?
Local community groups or community or religious leaders?
Scientists?
Neighbors?
Friends, family, colleagues?
Not trust any sources? Why/Why not?

Did you hear what caused the power outage? From where did you hear this? When did you hear this? If you didn't hear about the cause, what do you think may have caused the power failure?

#### Insurance

What hazards do you think affect this area?

When you moved here did you consider potential natural hazards in this area? If you bought the home, were you officially notified of hazards?

What kinds of insurance do you have?

Flood insurance? Homeowners insurance? Renter's insurance? Car insurance? Other?

Do you have any insurance that would protect you from costs associated with a power failure? (e.g., spoiled food)

Were you required to buy this type of insurance by law, or by your mortgage company?

Are you considering new insurance or changing your insurance coverage after Irma?

### **Hurricane Experience**

Can you tell me a bit about your experience with the hurricane? Before the storm was here, what were your biggest concerns overall? Did your concerns change at all once the storm was here? What did you do when the storm was approaching? at its worst?

\*For any listed concerns: can you tell me how much stress that caused you (scale of 1 to 5, with 1 being no stress and 5 being a lot of stress)?

\*Overall, how stressed did you feel because of Hurricane Irma? (scale of 1 to 5, where 1 is not at all stressed and 5 is very stressed)

Do you still feel any stress because of Irma?

\*Overall, how uncomfortable did you feel because of Hurricane Irma? (scale of 1 to 5, where 1 is not at all uncomfortable and 5 is very uncomfortable)

Are you still uncomfortable in any way because of Irma? Overall, how capable do you feel of dealing with difficult or sudden events in your life (scale of 1 to 5, where 1 is not at all capable and 5 is very capable)?

And how capable did you feel of dealing with this hurricane? (scale of 1 to 5, where 1 is not at all stressed and 5 is very stressed)

What would help you feel more capable?

### Evacuation

Now I want to ask you about evacuation decisions,

\*Did anyone in your household evacuate? Why did they decide (not) to evacuate? Were you given any official evacuation notice?

If evacuated: Did everyone in the house evacuate? Where did they go? Shelter run by city, county, state authorities? Shelter not run by government authorities? Neighbor? Friend? Family? Hotel/motel/room share? How long?

Who paid for your temporary housing?

If anyone did not evacuate: who stayed home and why? Didn't expect it to be bad Had nowhere to go Didn't want to stay in a shelter Was afraid that would be difficult to come back home Have household members who are difficult to move / need special care Didn't have transportation Evacuation order came too late Wanted to protect the home Wanted to be around to help family and/or neighbors Didn't leave because couldn't take pets House not in evacuation zone Didn't know about the evacuation order Was away when the storm came

## Help

Thanks so much for helping us understand how people experienced this event. I want to ask you about who was providing help during and after the storm.

\*Did you seek help before during or after the storm?

If yes, from who: Family? Friends/colleagues? Neighbors? Social worker/Case manager? **Business**? Government agency? Electric utility? Gas utility? Water utility? Emergency personnel/first responders? Employer group/union? Firefighters? Hospital? Libraries? Local community or church group? National Guard? Non-profit/Volunteer group? Police? Schools? Did you receive the help you sought? was it helpful? If it wasn't helpful why? If you didn't seek help, why not? Didn't know where to look for help Gave up because application process was too time-consuming or complicated Gave up because waiting times for help were very long Heard about bad experiences

Did not need help

Did not want help

\*Was anyone in your household involved in helping others during or after Irma in any way, for example, by providing others with a place to stay, helping to feed people or provide water or first aid, or providing emotional support?

Rescued people during or right after the storm? Took in people who were displaced from their home by the storm? Helped neighbors? Donated money, goods, or services? Volunteered with a relief or recovery group? Raised donations from others? Provided consolation, friendship, or other emotional/psychological relief?

## Needs

\*Did anyone in your household face medical problems during or after the storm? Illness (heat, food poisoning, rashes, etc.)

\*Did anyone in your household face problems with access to medical care during or after the storm? Obtaining medications, managing chronic illness, etc. (e.g., insulin, sleep apnea machine)

\*Did access to food or water become more difficult for you during or after the storm? In what ways? What did you do to deal with those deficiencies? Cooking without power? Preserving food without power? Obtaining potable water? Do you think you were well prepared to deal with those complications with respect to food and water? Would you have done anything differently, knowing what you know now?

# Costs

I realize that you may be still recovering from this event, but the best you can right now, what kind of costs do you think you've incurred due to Irma?

How significantly did Irma affect the physical structure of your home?

What were the biggest effects from? Water intrusion from rain Wind Water intrusion from the ground Mold Loss of power

\*Have you had to spend your own money recovering from Irma?

\*Do you know yet by what percentage has Irma reduced your household's savings? \*Have you had to go into debt because of Irma?

Has anyone who lives here lost their job because of Irma? Or been unsure of their job security?

# Blackout

Now let's talk a bit more now about the power outage itself.

In your current home, how often had you experienced a power blackout or electricity failure before Hurricane Irma?

\*What was the longest time you have been without power in your current home before Hurricane Irma?

\*How stressed were you specifically because of lack of electrical power during Hurricane Irma? (scale of 1 to 5, where 1 is not at all stressed and 5 is very stressed)

\*How uncomfortable were you because of lack of electrical power during Hurricane Irma? (scale of 1 to 5, where 1 is not at all uncomfortable and 5 is very uncomfortable)

\*And how capable did you feel of dealing with lack of electrical power during Hurricane Irma? (scale of 1 to 5, where 1 is not at all stressed and 5 is very stressed)

\*How long were you without electrical power because of Irma?

Do you know the cause of the power outage? (e.g., tree fell on line, substation flooded, etc.)

Was it just your home? Your whole block? The whole city?

\*Did you use a generator?

Had you used a generator before? Did you need to purchase it? How did you manage fuel supply and storage? Was noise a problem? Air pollution? Malfunctions?

What were your biggest concerns about not having power?
Of those, which were the most difficult to overcome?
Can you score your concern on a scale of 1 to 5 (1 being not concerned, and 5 being very concerned)?
What about the difficulty of addressing those concerns on a scale of 1 to 5 (1 being not difficult at all, and 5 being very difficult)?

Thinking about a future power outage, what would you do differently?

In retrospect, how well prepared do you think you were for the power outage?

Have you already, or do you plan to do anything to get more prepared for a potential future outage?

*Ok, I know a lot was going on at once, but if you can, will you walk me through what you did when you found out that you lost power? What were the first actions you took to address the lack of power? How long did you think it would last? Did you seek more information? From what sources?* 

What about how you felt? Did you change any plans? Did any of this change on the second, third day?

How did you get information?

Did you have access to the internet during the power outage?

Did you have access to the radio? What other communication technologies did you use? Were you able to charge cell phones or other mobile technology?

What were your biggest needs?

Which ones were you able to fill? Which weren't you? How did you feel about those needs and your ability to fill them?

Did you mostly stay in your home during the blackout? Did you leave? Where did you go? Did you go to work?

Did you need to check on or care for any deponents inside or outside your home? Were you able to?

Were you concerned about it being dark at night? Were you concerned about you or your household's security or safety in general?

Did you encounter any problems with preparing or storing food? How did you handle feeding yourself or your family during the blackout?

Was boredom a problem? (especially if they have kids) What did you do for entertainment?

What about the heat? What did you do to stay cool?
Did you change were you sleep?
Did you fan yourself?
Wet yourself?
Swim?
Open windows?
Use fans or a window a/c if you had portable power?

*Previously you mentioned that your overall level of stress and discomfort from the hurricane was (#, #). How much of that was due to the heat in particular?* (e.g., 50/50, half of the stress and all of the discomfort, etc.)

You also said that your level of stress and discomfort from just the blackout was (#, #). How much of that was due to the heat in particular? (e.g., 50/50, half of the stress and all of the discomfort, etc.)

# **Social Networks**

I want to ask you some questions about your social network to get an idea of how this event was experienced by networks of people.

How many people who live in your neighborhood would you say you know?

How many of those people do you think you communicate with often?

What about only once in a while?

Do you communicate with these people primarily in person, on the phone, via email, or via social media?

How many people who live in your county would you say you know?

How many of those people do you think you communicate with often?

What about only once in a while?

Do you communicate with these people primarily in person, on the phone, via email, or via social media?

What about in all of Florida?

Do you communicate with these people primarily in person, on the phone, via email, or via social media?

Do you think that the community you live in is the type of place where people generally look out for each other and provide help when fellow community members are in need?

Are you aware of any community groups near you?

Neighborhood associations/neighborhood watch? Churches? Groups affiliated with the church? Parent-teacher organizations at school? Do you or anyone in your household participate in any of these? (participate means helps organize, manage, or volunteer, as opposed to receive services). Were any of them helping during or after Irma?

## \*Demographics

It would be helpful to include with your responses some basic demographic information.

What do you consider your gender?

What year were you born?

Is anyone else who lives here over age 64? Is anyone else who lives here under age 6?

What is your relationship to the head of this household? The head of household is defined as whomever in the household is considered the head by the residents of the home. The head of the household is typically chiefly responsible for the monetary and material maintenance and upkeep of the home. This responsibility can be shared between more than one person.

Are any of the people who live here limited in their ability to move about freely without assistance? (examples: wheelchair, bedridden, on oxygen, confused) What is your current employment or labor force status?

What do you consider your ethnicity or race?

Is there any adult in your household who does not speak English?

These last questions are about your access to resources. I realize we don't usually like talking about this information, but it is really helpful for understanding who in our society is being impacted by these disasters, and how personal resources affect those impacts.

How often do you struggle to afford essentials, such as food, housing, utilities, and medicine?

Please, as best as you can, indicate to me the category that represents the total combined income before taxes for all the people in your household last year:

- \$20,000 and under
- \$20,001-40,000
- \$40,001–60,000
- \$60,001-80,000
- \$80,001–100,000
- \$100,001–120,000
- \$120,001–140,000
- \$140,001–160,000
- \$160,001-180,000
- \$180,001-200,000
- More than \$200,000.

# Wrap Up

Thank you so much for answering these questions for us!

Is there anything we can do as researchers that would help you with regards to hurricanes or power failure?

Is there anything else you want us to know?

Thanks!