Hurricane Maria Project

Information Providers Interview Guide for:

Media-based Professionals (e.g., broadcast meteorologists, journalists)

OMB Control #0693-0078
Expiration Date: 07-31-2022

Script for Introduction:

"Thank you for taking the time to meet with us today. We are interested in your perspective on information and communications related to Hurricane Maria in Puerto Rico on September 20, 2017. We would like to better understand this hurricane because it impacted a non-continental and Spanish-speaking U.S. island. Ideally, these interviews will lead to beneficial recommendations to policy, procedures, and codes. We realize that the hurricane was a few years ago, and some details may not readily come to mind. We will try to walk you through different topics and events to aid your memory, but let us know if you need any clarifications. Please know that there are no right or wrong answers to any of these questions, we just want to understand your perspectives and experience. Your responses will never be linked to your individual identity, instead, findings will be attributed to a "Hurricane Information Provider" at the national, commonwealth, regional, or local level, and will only be shared in aggregate detail. Are you ready to begin?"

Required Script for Paperwork Reduction Act:

"A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0693-0078. Without this approval, we could not conduct this information collection. Public reporting for this information collection is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. All responses to this information collection are voluntary. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the National Institute of Standards and Technology at: Katherine Johnson, Social

Scientist and National Construction Safety Team Member, NIST Engineering Laboratory; or contact at katherine.johnson@nist.gov."

Section A. Background Questions

1. Please describe to us the position you held in the days prior to Hurricane Maria.
   a. How long had you held that position?
2. What were your primary roles and duties in your position with regard to informing or communicating about hurricanes?
3. Who are the groups or individuals you are responsible for communicating too? We will refer to these people in further questions as your "stakeholders".
4. Before Hurricanes Irma and Maria, can you briefly describe any previous experiences you've had with hurricanes?

Section B. Pre-hurricane Preparation and Plans

[*For station staff /managers*]

5. Prior to Hurricanes Irma and Maria, can you please describe any plans your station or office had to communicate with stakeholders regarding the approach of a hurricane?
   a. Follow-up (if any are discussed): Would it be possible for you to share any of these communication plans with NIST? Or describe them?
   b. Was a plan in place for how to communicate if you lost broadcast, etc.?
      i. Back-ups?
      ii. Go to radio?

Section C. Hurricane Data and Products

6. In the days leading up to Hurricane Maria making landfall on Puerto Rico, could you summarize the information, data, and products you / your office <u>received</u> as time went on related to Hurricane Maria related to Puerto Rico?
   a. Follow-up: What specific output or information did you obtain from each source?
   b. Follow-up: How did you obtain this information? (i.e., channel; phone, NHC and WFO websites; webinars; Twitter; Facebook live) Do you use software packages to ingest data and information? Is so, can you please describe?
   c. Follow-up: Do you remember if, over time, any particular items or threats were emphasized to you /your office? And by whom?

7. Did your office or station <u>produce</u> any of your own products related to Hurricane Maria, or use other tools to increase your knowledge of the hurricane or communicate it to others?
    a. How did you feel those were helpful/needed?
8. As the hurricane progressed, what types of information/models/products did you <u>use for your forecasts</u> (how much do you rely on NWS products and information directly)?
9. How often <u>do your forecasts differ</u> from NWS (Weather Forecast Office) and/or NHC, if ever?
    a. Do you utilize private radar at your station?
    b. Where is it located and how did it supplement your information?
10. Do you remember a point at which you thought this hurricane would be different or significant in any way? What led you to that conclusion?
    a. And, do you remember at what point (if at any) you felt confident enough in forecasts that action should be taken (e.g., evacuation notices)?

Section D. Communication

First, please walk us through you/ your office's <u>communication process</u> leading up to Hurricane Maria making landfall.

11. Specifically, how did you communicate updates, alerts, or warnings about Hurricane Maria to the public <u>before and during</u> the storm?
    a. Follow-up (if not discussed): Please describe the timeline of these updates and warnings/alerts.
    b. Follow-up: What alerting or warning channels did you use to disseminate information about the hurricane? And why did you use the ones you did? (e.g., press briefings, in-person, social media, 3rd party alert/warning systems, etc.)
    c. As Hurricane Maria progressed, what levels of coverage did your station provide during the storm (e.g. "wall to wall", live field reports, etc.), and when; why?
12. Regarding the content of public warning messages specifically, what did they say?
    a. Follow-up: Were alert or warning messages prepared ahead of time (e.g., as templates) or written from scratch during the hurricane?
    b. Follow-up: How do your messages/text/scripts differ from what NWS provides?
    c. Were warning messages all provided in Spanish, English or a combination of the two languages?)

13. Over time, what were the items, threats, or themes you <u>chose to emphasize most to the public</u>, and how did you do so (i.e. using what products and channels)? What made you decide to emphasize those items or threats at those times?
    a. Did the threats you chose to emphasize, or your means of communicating them change over time?
    b. Follow-up: What products, language, or channels did you choose to use to communicate these threats or themes? Do you think they did their job?
    c. Follow-up: What were some particular attributes of Hurricane Maria that caused difficulty for forecasting, if any? How did you decide to message around those hazards or communicate uncertainties?
        i. In comparison, were there particular parts of the forecast that were quite certain? How did you message around those or communicate that certainty?

The next set of questions is about how you communicated information about the Hurricane Maria to the public <u>after</u> the storm hit:

14. After the Hurricane Maria had passed, how did you <u>communicate with the public</u> (both within and outside of your jurisdiction) after the storm? (Prompt: please discuss technology and processes)
    a. Did you encounter any issues in providing emergency communications (after Hurricane Maria hit PR)? If so, how did you overcome these barriers (directly after the storm, and over time)?
    b. Follow-up: When did communication technologies (radar, satellite, other communications) come back online?

<u>Section E. Inter-agency Coordination</u>

15. Reflecting back on the hurricane, how well do you think communication and <u>inter-agency coordination</u> (if any) worked between the NHC and different information-providers involved (e.g. WFOs, SERFC, WPC, and OPC, EM's, the media, and the public)?
16. Can you please describe one or two specific examples of <u>communication success</u> between particular organizations, describing what worked well and why?
17. Can you think of one to two examples when <u>communications did not work well</u>, or difficulties that you or coworkers/staff/ or colleagues encountered? Please identify what did not work well (e.g. procedures, systems, personnel, etc.).
    a. What do you think could be done to improve on these problems?
18. In your perspective, how <u>consistent</u> was information related to Hurricane Maria as it was disseminated throughout the weather community (i.e. NHC, WFOs, meteorologists)?

a. Do any key issues seem important to improve effective communication?

Section F. Public Perceptions

The next set of questions have to do with methods of communicating with the public.

19. In your opinion, what was the best way to reach the public in PR (e.g., information channels) both prior to and during Hurricane Maria?
    a. Follow-up: Were there particular radio or TV stations in PR that were more popular than others?

Section G. Ending Questions

We're almost finished with the interview. We just have a few last questions.

20. Since Hurricane Maria, were there any new procedures, guidelines, or policy changes that have been developed and/or implemented relating to hurricane products, communication, and/or interagency coordination? Can you describe these changes or share with us any updated products?
21. If you were to go through an experience like Hurricane Maria again, is there anything you would suggest for yourself or others do differently? Can you explain why and how?
    a. Are there any new products, rules, or services that would aid in the changes you would suggest? If so, which ones (and how would they be used)?
22. Before we go, is there anyone else whom you think we should reach out to for an interview on these topics? (e.g., someone influential in communicating hurricane risks, forecasts, etc. to the public)
23. Thank you for your time. Is there anything else that you would like to share with us that we didn't already discuss?