

Focus Group Guide on Winter Weather Communication

Slide 1 - Welcome Slide

Introductions

Welcome and thank you for joining us! This focus group is entirely voluntary, and you may decide to leave at any time. We're excited to hear about your experiences. Before we get started, we will briefly introduce ourselves, explain the logistics of the focus group, and allow you all to introduce yourselves.

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Eastern Research Group will not release your name or information that could identify you as part of this focus group process or in our subsequent reports to NOAA NWS.

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- Introductions
 - Go around the room and have everyone say their name and organization.
 - ERG gives background on project

- Logistics
 - Describe focus group format
 - Announcements (location of restroom, tornado shelter, etc.).

I. General Decision-Making Process (Slide 2)

1. What decisions do you make that depend on winter weather forecasts?
 - a. Probe for Staffing policies, telecommuting options, closing schools, limiting access to highways, parking restrictions on roads/parking lots, etc.

2. How do you decide which action to choose? Please describe your process.
 - a. Are these decisions made with input from others? Who are they?

3. Are there thresholds of snow amounts that generally lead to automatic action?
 - a. What types of judgement calls must you make?

4. What information do you need to make those decisions?
 - a. Where do you go to gather information about winter weather?
5. When do you begin planning for a winter storm response?
 - a. Does your timeline/needs change between ice and snow events?
 - b. Are reaction times different between ice and snow events?
6. When a winter storm is forecast, please explain your information needs starting 3 days before a storm.
 - a. Now two days before ...,
 - b. Day before...,
 - c. Day of
 - d. <<If partners discuss general information>>, probe for utility of general information days before the storm
 - e. <<If partners don't bring up probabilities>>, With all the information sources you have brought up, how do probabilities play a role, if at all, in the messages you receive?
Facilitator Note: See if their needs are more specific as the event nears, and follow-up if clarity is needed.
7. What is your goal in making this decision (what outcomes make a better or worse decision)?
8. What kinds of information about winter storms do you need at this point?
 - a. Probe for the following:
 1. Timing
 2. Intensity
 3. Confidence
 4. Precipitation type
 5. Road temp
 6. Accumulation on roads
 7. Character of Snow (wet vs powdery)
 8. Wind
9. Do you usually feel you have enough information to make a decision? Why or why not?

9. Experimental Probabilistic Graphics (Slide 3)

Now we'd like to show you a series of snowfall forecasts and gather your feedback.
 (Show Slide 4 - winter storm warning)

10. Have you seen this before?
11. How useful is this product to you in guiding your decision-making process? Please explain.
 - a. Probe for adequacy of information about timing, intensity, confidence, and uncertainty

12. **Least/Expect/Most/Potential Questions** - Show Slide 5

- a. What does this set of graphics tell you? (Probe for the below questions if not mentioned already)
 - i. How do you feel about the **title** of the graphics?
 - ii. Do you feel you have enough information to understand what the graphics are communicating?
 - iii. (IF they don't mention color) What do the colors represent in this picture?
 - iv. How do you feel about the **color** representation?
 - 1. Would you change it?
- b. **Timing - Slide 6**
 - i. What does the graphic tell you about the timing of the snow?
 - ii. What do you think is the relationship between the time on these graphics with the winter storm watch/warning/advisory products?
 - iii. Then tell them how the graphic is supposed to work with the timing. Ask if that meets their needs.
- c. What do you see as the relationship among the 3 graphics?
 - i. How would you use these graphics to differentiate snow amounts by location?
- d. **(Slide 7)** How useful are these maps in guiding your decision-making process? Please explain.
 - i. (If useful) Are all three of the graphics equally useful?
 - ii. Or, is one of the three more useful to you? Please explain.
- e. Would you change anything to make it more useful to you?

13. Percent Chance That Snow Accumulation Will Be Greater Than...

- a. **(Slide 8)** Show just one image. Explain that it comes in a larger suite of probability greater than 0.1", 1", 2", 4", 6", 8", 12", 18". Then show **Slide 9 and Slide 10**). Then show them together on **Slide 11**.
- b. *(Stay on Slide 11)* What does this graphic tell you? (Probe for the below questions if not mentioned already)
 - i. What does it mean to you if an area has a 40% chance of ≥ 4 inches of snow, for example?
 - 1. Do you all agree?
 - ii. How do you feel about the title of the graphic?
 - iii. Do you feel you have enough information to understand what the graphic is communicating?
 - iv. (IF they don't mention color) What do the colors represent in this graphic?
 - v. How do you feel about the color representation?
 - 1. Would you change it?
 - 2. Do you need more or less levels within the color bar?
 - 3. (at this time, make sure they know it's probability and not inches)
- c. (Show a few different graphics individually then show 3 or 4 on the screen at one time. Explain that on the web, they would be able to toggle over the images).
 - i. What does this set of graphics communicate to you?

- ii. Do you feel you have enough information to understand what the graphics are communicating?
 - 1. (If no) What additional information do you need?
- iii. What do you see as the relationship among the graphics?
- iv. Specifically, what does the changing probability convey to you?
- d. How useful are these maps in guiding your decision-making? Please explain.

14. Comparison of “expect/most/potential” to probability greater than – Show Slide 12

- a. Please look at both graphics side by side.
 - i. What do the colors represent to you in each graphic?
 - ii. Should the color scheme remain the same or different?
- b. How do these graphics complement one another? In other words, please explain to us what you see as the relationship between the graphics.

15. Chance of Snow Table Questions

- a. <<show exceedance – **Slide 13**>> What does this table communicate to you?
 - i. Probe for parts of the table, labeling, percentages, etc.
 - ii. What does exceedance mean to you?
- b. <<show range – **Slide 14**>> What does this table communicate to you?
 - i. Do you notice anything different from the previous table?
 - 1. Probe for ranges
 - 2. How do you feel about the ranges? Do you need smaller or larger ranges of snow?
- c. <<show both – **Slide 15**>> Do you have a preference for exceedance vs range? Please explain.
- d. How useful is this table in guiding your decision-making? Please explain.

16. Show all three sets of graphics – Show Slide 16

- a. What do you see as the relationship among the 3 sets of graphics?
- b. Relative to your decision-making needs, do you have a preference for one graphic over another? Why or why not?
- c. Are there any graphical changes you would make now that you can see all three together? If so, please explain.

III. Final Graphical Details and Changes – Show Slide 17

- 1. Format Needs
- 2. Accessibility
- 3. What additional snow information would help improve your decision process?
- 4. Is there anything we haven’t discuss that you would like to share with us today?