

Examining Oklahoma Emergency Managers' Use of Fire Weather Forecast Information

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Project Overview

The goal of this effort was to create a baseline understanding of how emergency managers currently interact with fire weather forecasts, as well as to provide greater insights to core partners in this space (specifically the National Weather Service and Oklahoma Forestry Service).

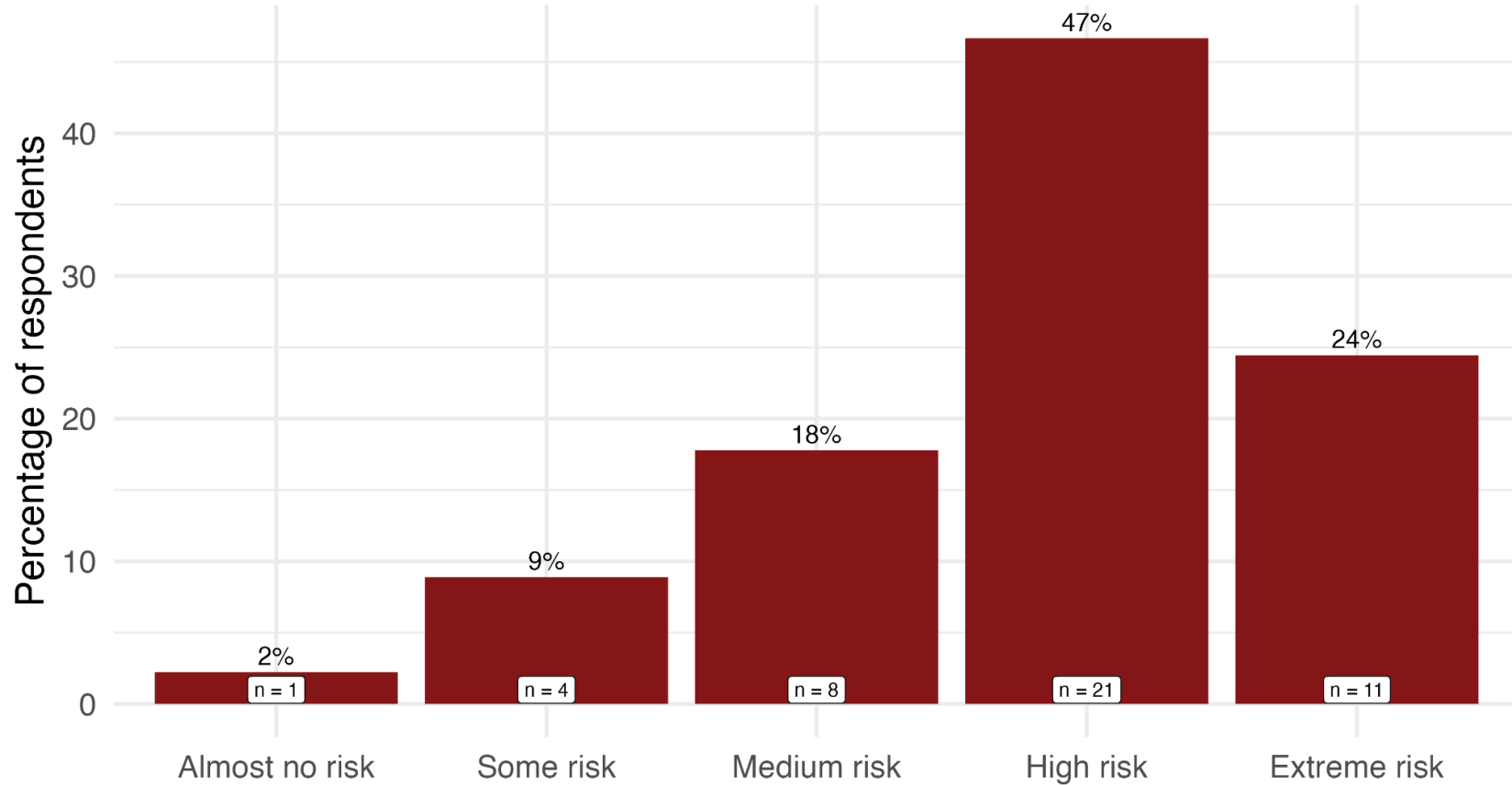


Emergency Managers

Total Responses	46
Jurisdiction Type	State: 3 County: 20 City: 17 Tribal: 5 Other: 1
EM Office Organization	Standalone Agency: 34 Part of Fire Dept: 4 Part of Law Enforcement: 1 Other: 7
Local WFO (EMs may monitor more than one WFO)	Norman: 36 Tulsa: 11 Amarillo: 3 Shreveport: 1

Participants were also asked which sectors of their jurisdictions were at greatest risk from wildfires. Agriculture and Livestock Production (85%) and Homes/Businesses (83%) were the two most popular responses, with Power Infrastructure (52%) and Oil/Natural Gas Production (46%) also relatively high.

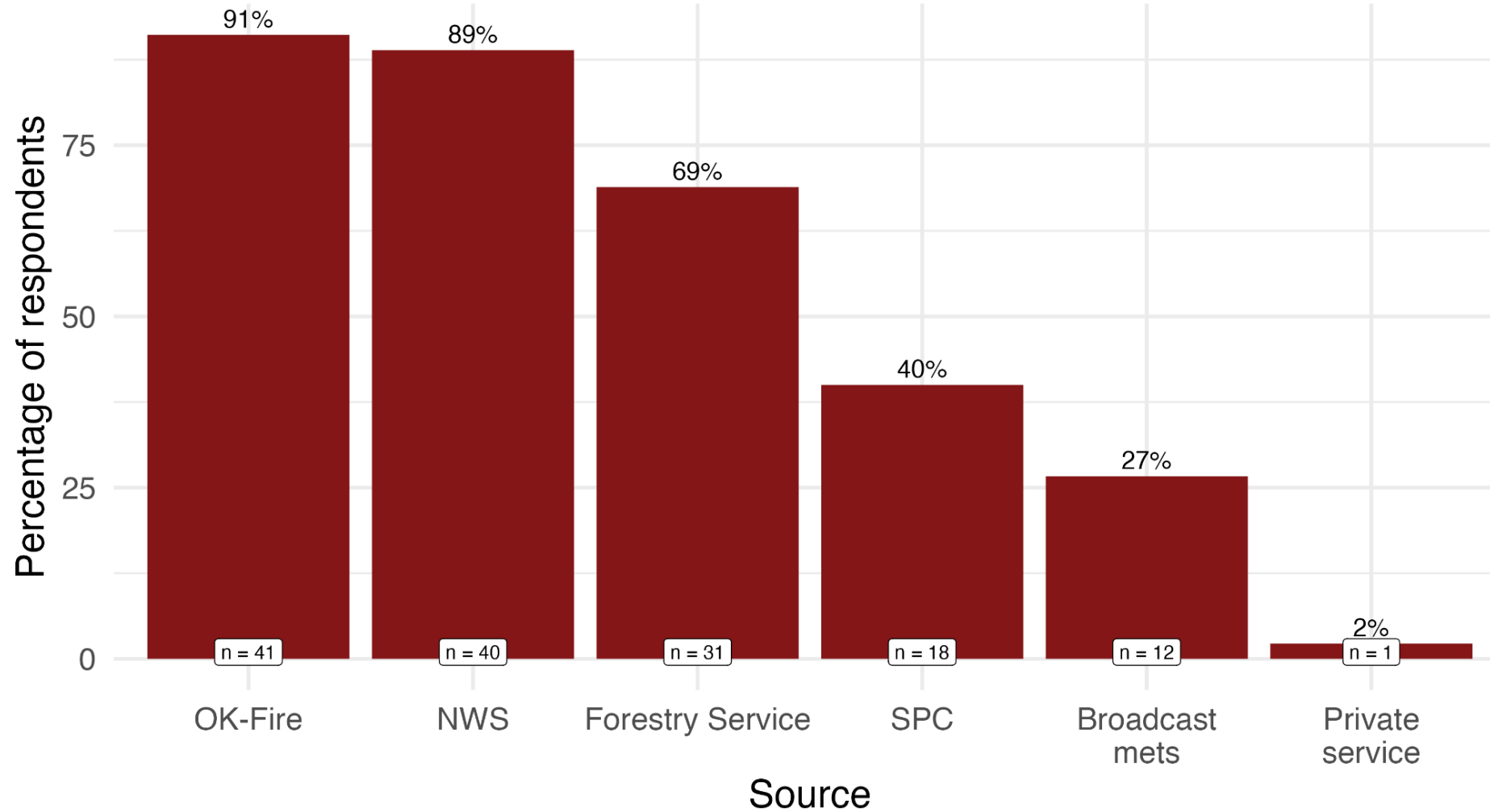
How would you characterize the risk that wildfires pose to your jurisdiction?



n = 45



Which of the following sources do you regularly consult for fire weather information in the days or hours leading up to a wildfire?

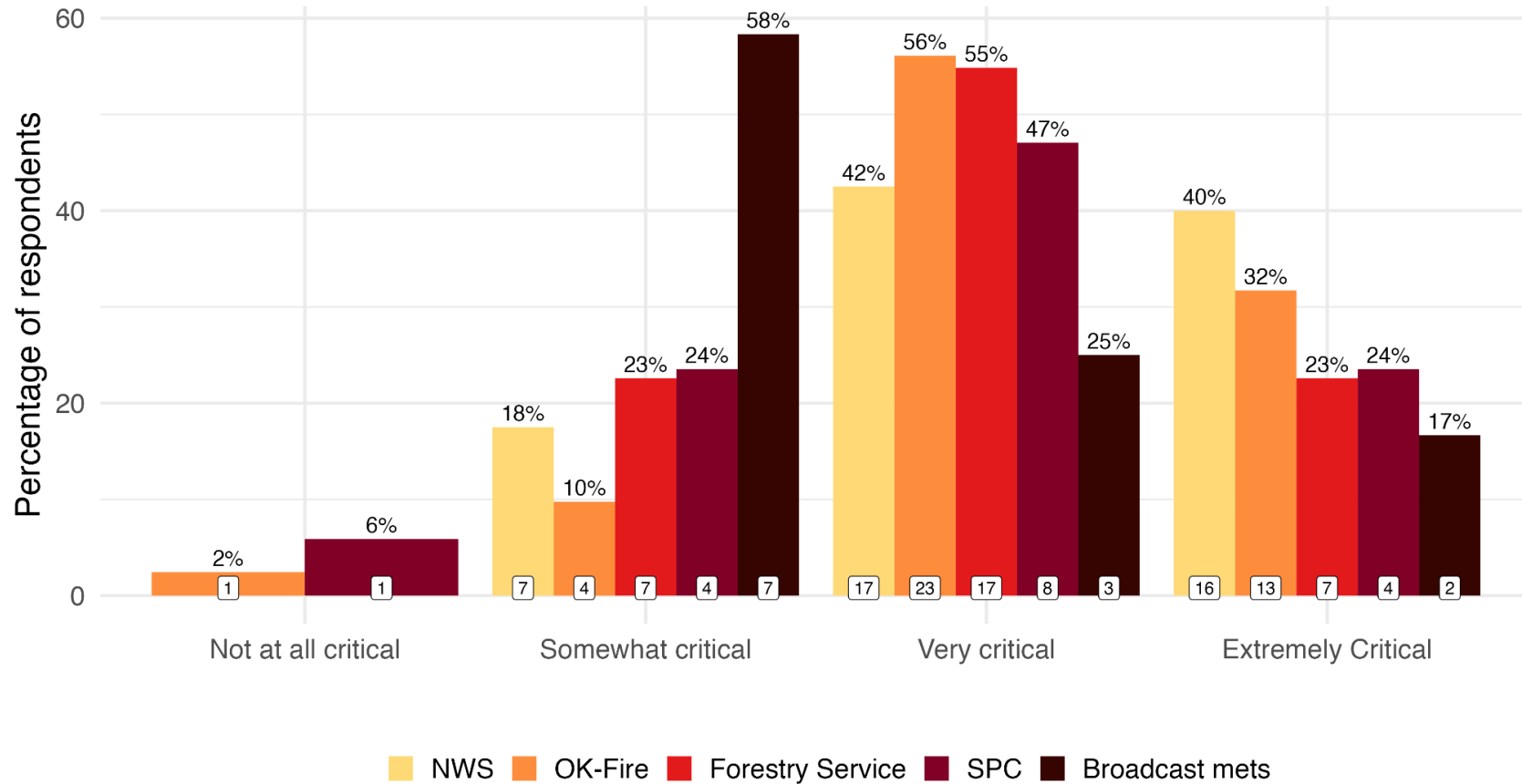


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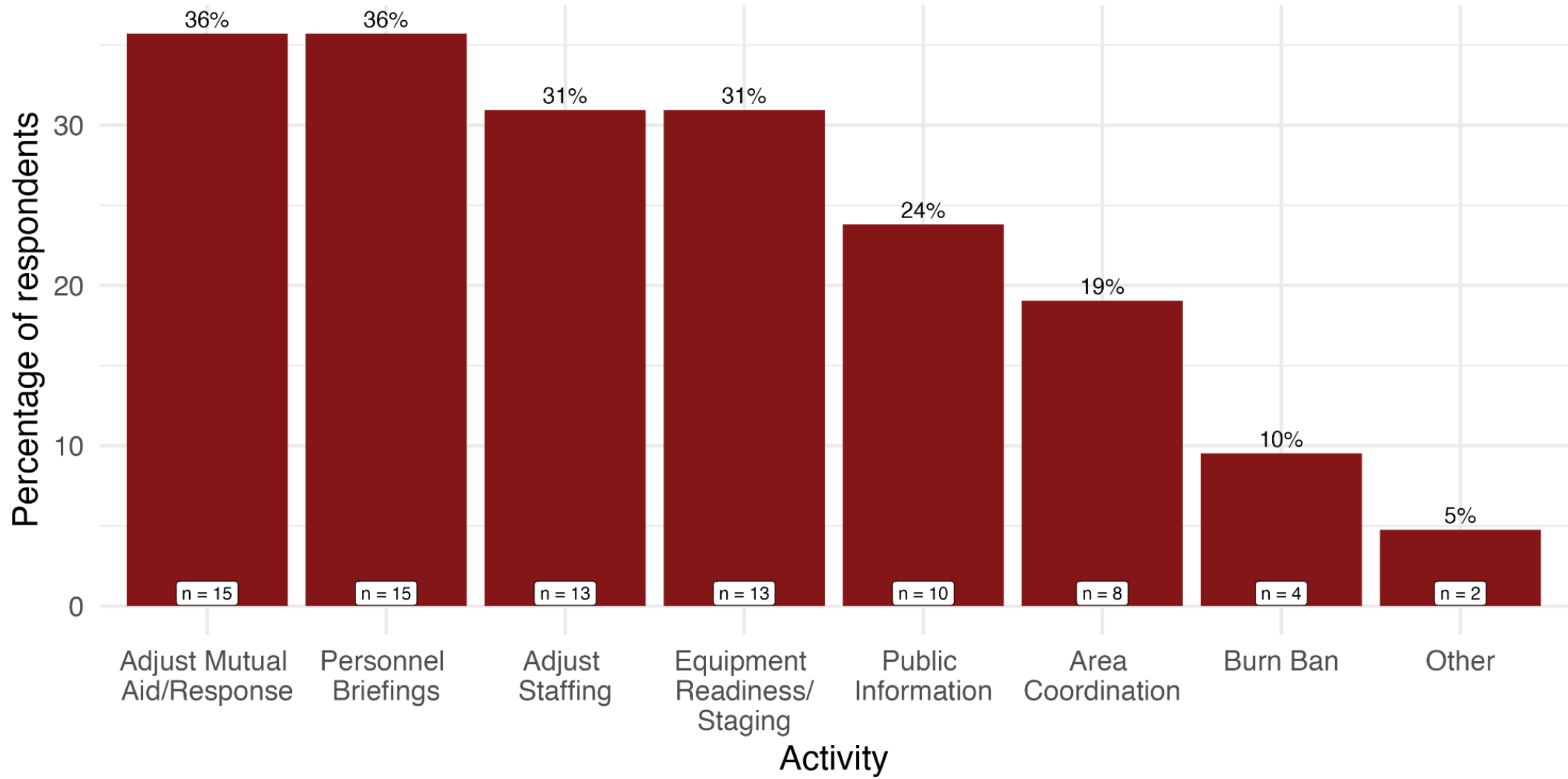


“We typically staff our EOC on red flag days with volunteers and staff to better triage resource requests for fires. Our office also responds to fires on these high fire danger days as soon as they are dispatched. We also support the fire departments by helping them organize multiple agency responses to each fire. Our departments rely on us to provide detailed fire weather info and condition updates throughout the day/event.”

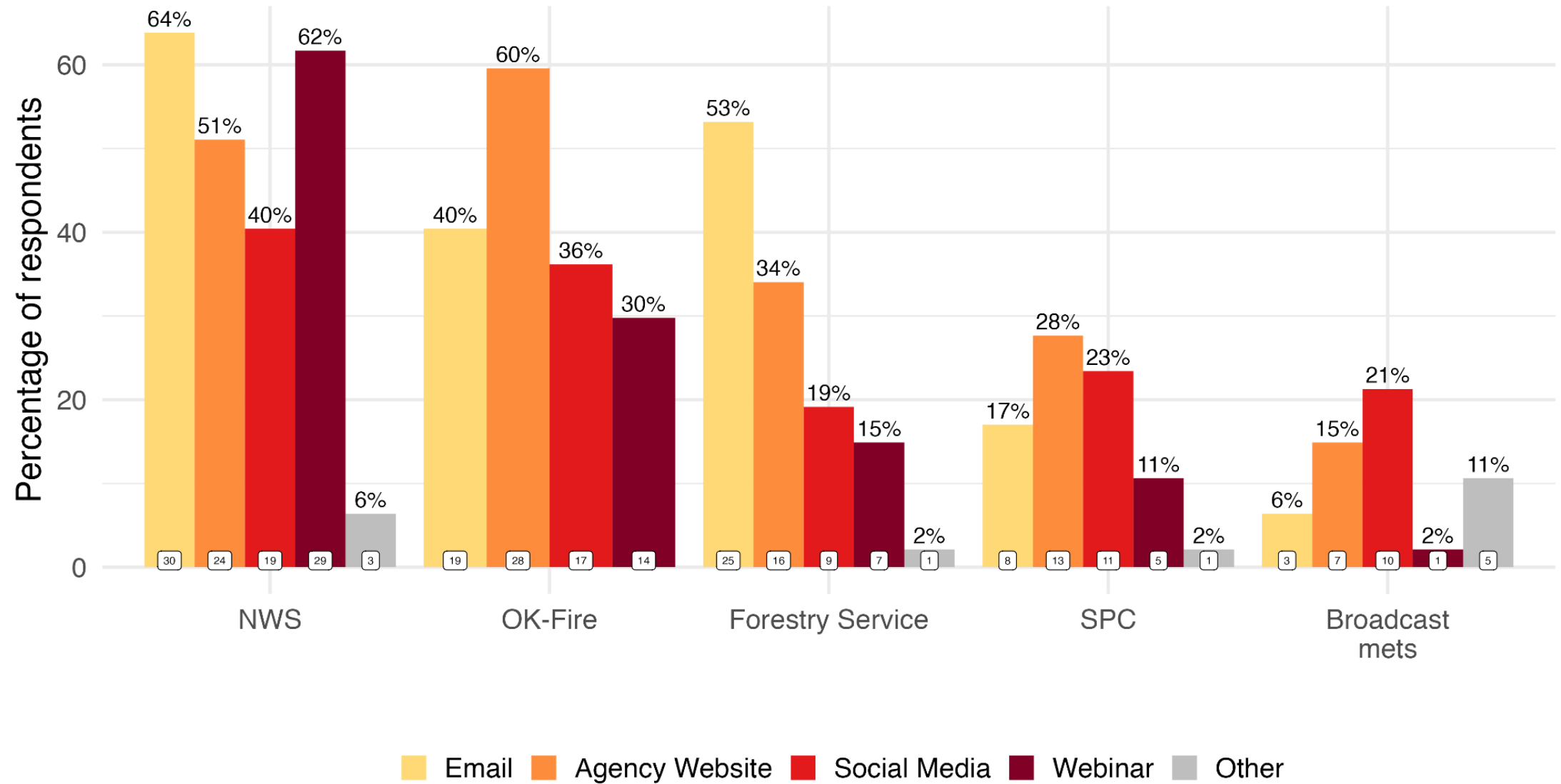
How critical is the information provided by ... to your operations?



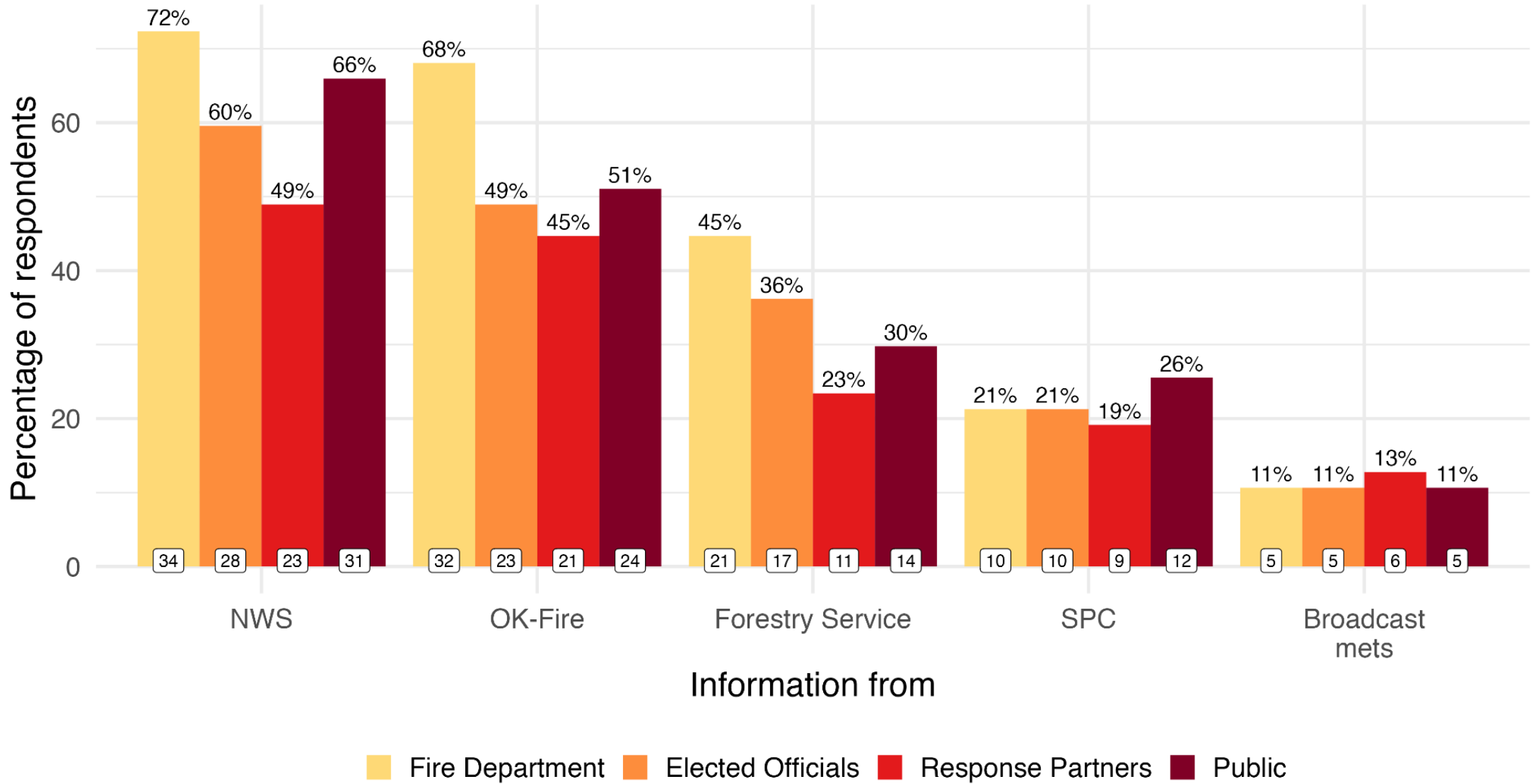
What are some actions that you or your jurisdiction typically take in preparation for potential wildfires based on forecast information?



How do you typically receive fire weather forecast information from...



Who do you regularly share fire weather forecasting information from ... with?



What role do EMs play in wildfire operations?

96% coordinate or order resources

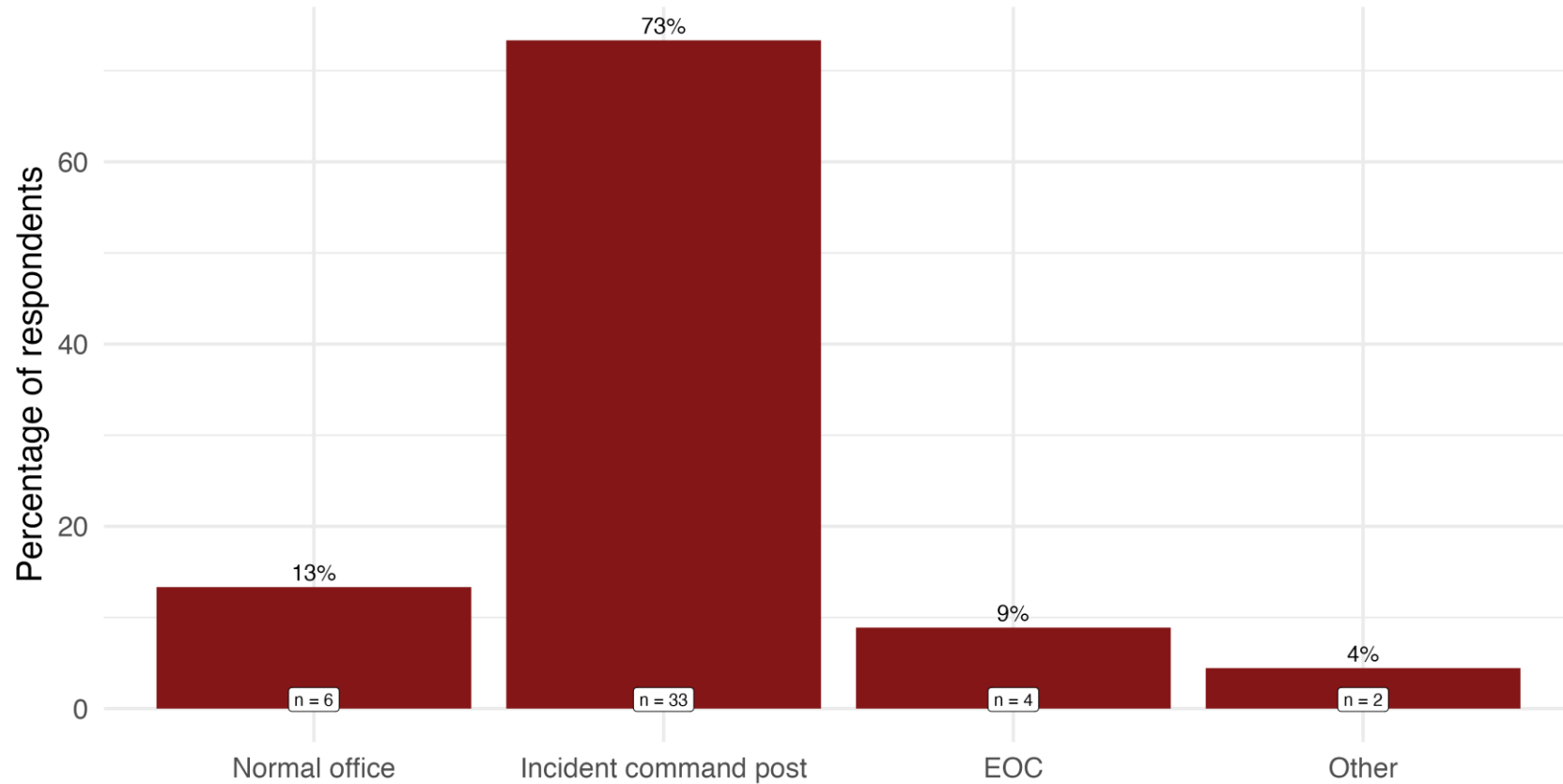
91% monitor changing weather conditions

82% monitor firefighting activities

66% communicate with members of the public

25% actively engage in firefighting activities

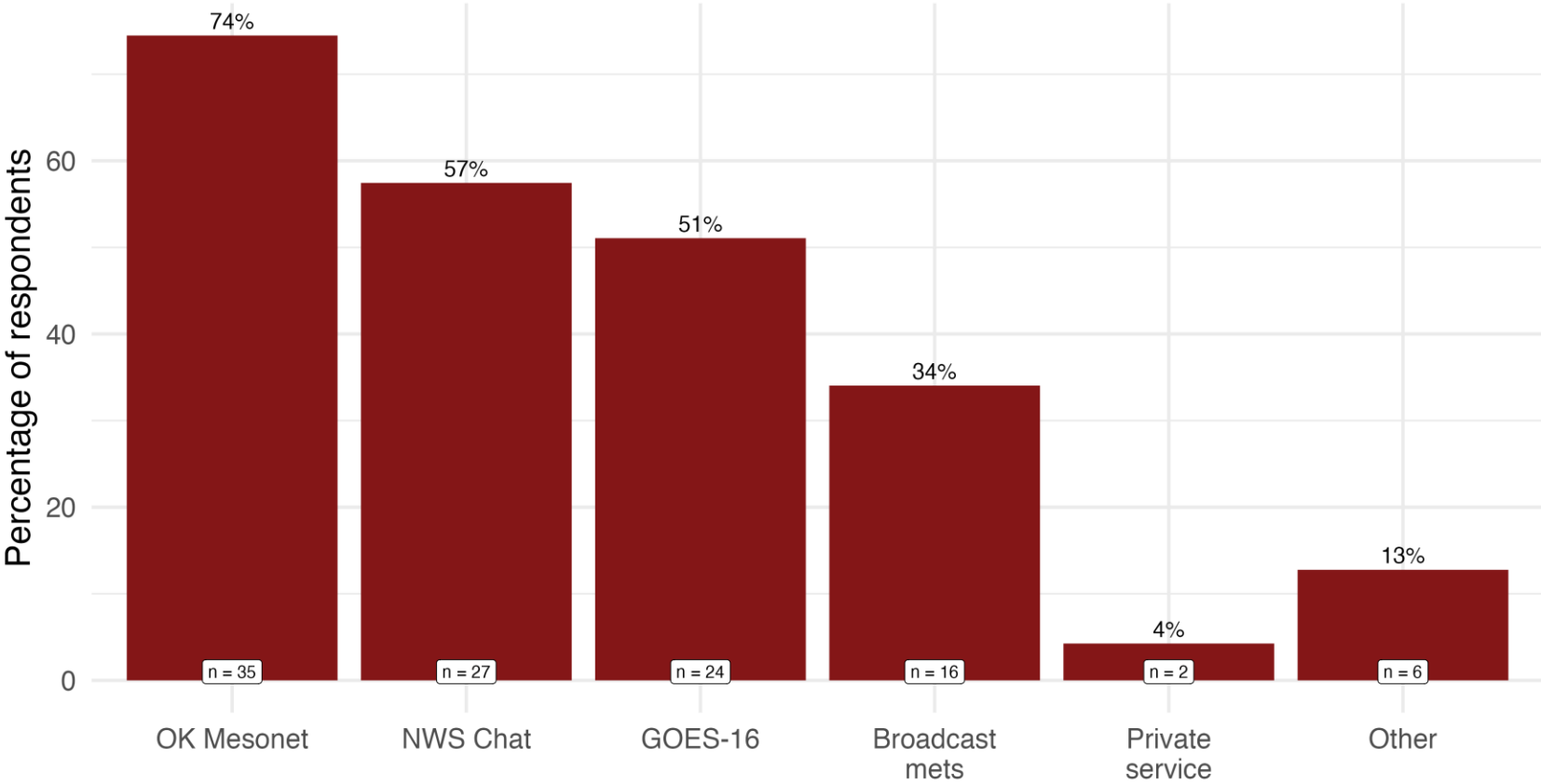
During wildfire operations, where are you most likely to be physically located?



91% of participants stated that monitoring weather conditions is part of their job during wildfire operations.

Even so, less than 50% of respondents were “very” or “extremely” confident that changing weather conditions (specifically wind speed or directions) would be noticed by someone in the incident command structure or communicated to personnel actively fighting fires.

How do you accomplish continued weather monitoring?

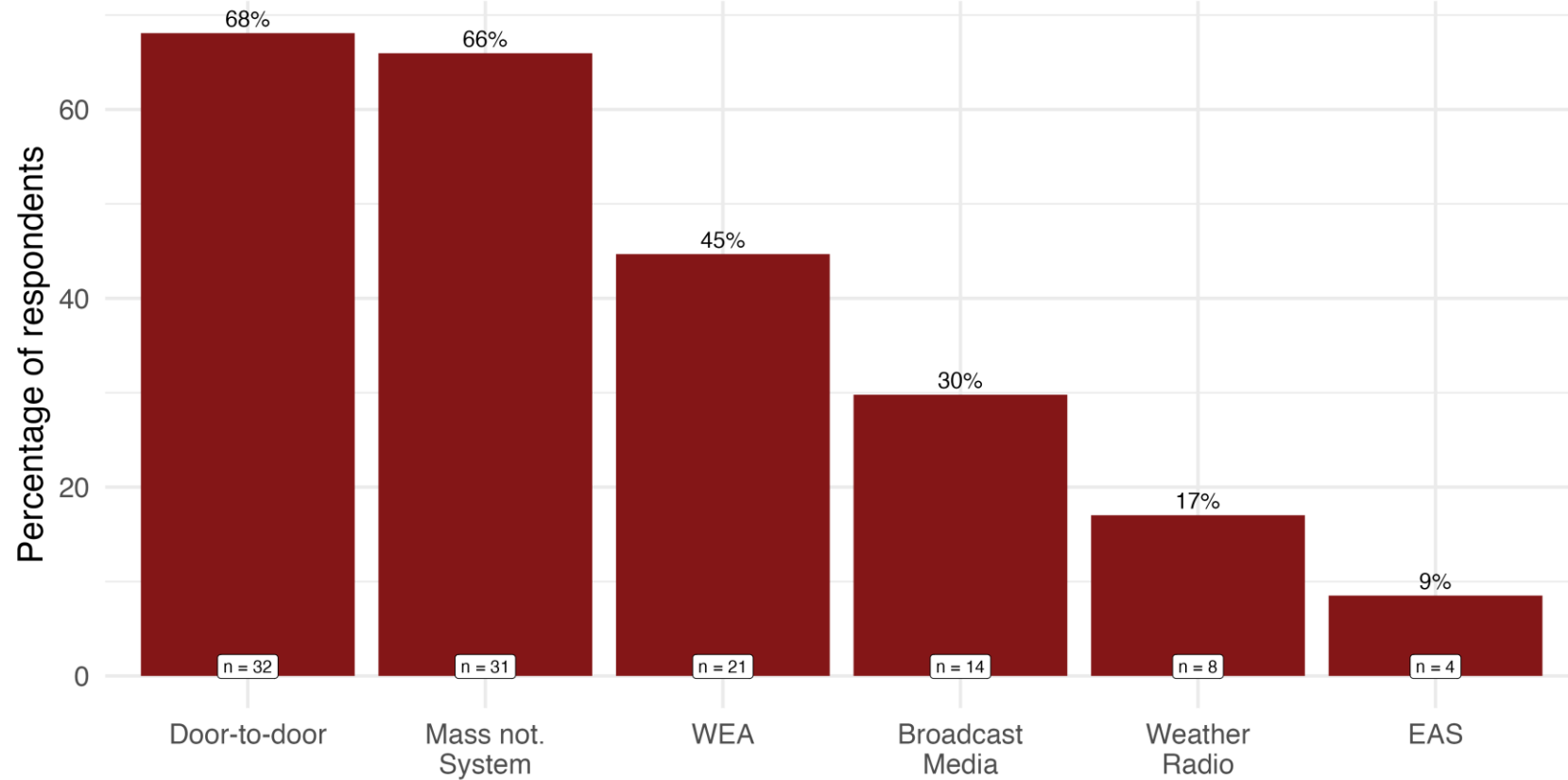


60% of participants reported that an evacuation order had been issued for portions of their jurisdiction due to wildfires at some point in the past.

Of those participant, 75% were part of the decision to issue the evacuation order.

Only 3 of the 46 participants had requested a Fire Warning from NWS to assist with dissemination of information to the public.

If an evacuation order is needed...how is that most likely to be disseminated?



Next Steps



- Expand survey to collect information from broadcast meteorologists
- Conduct full analysis of data
- Conduct potential follow up interviews with emergency managers or broadcasters
- Potentially embed in NWS, OFS, or local emergency managers during a high-risk fire weather day
- Expand the survey geographically to encompass the entire nation by working with OU-IPPRA to include fire weather questions on a future wave of the Extreme Weather and Emergency Management Survey

Thank you!

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