

PSCR Usability Survey Results Visualizations

The Usability Team of the National Institute of Standards and Technology's (NIST) Public Safety Communications Research (PSCR) program works to identify issues faced by first responders surrounding the use of their existing and emerging public safety communication technology. The Usability Team conducted a nationwide, large-scale survey completed by 7,182 first responders. The visualizations below represent the survey results split into various subsets where appropriate. The survey results, which are accessible via the PSCR Usability Results Tool: Voices of First Responders, can be freely used to influence the research, design and development of communication technology in the public safety domain. Any survey results used in published materials should properly attribute the Survey Results Tool as well as the appropriate NISTIR reports as indicated at publicsafety.nist.gov. Information about the research methodology and survey instrument design as well as instructions on how to interpret the results, can also be found on the tool's website.

For more information about the NIST PSCR Usability Team research, or for questions regarding the PSCR Search Tool, please send an email to usability@nist.gov. More information about the PSCR program can be found at pscr.gov.

Disclaimer: To protect the identity of the first responders interviewed and surveyed, all open-ended survey responses have been reviewed for personally identifiable information (PII) and all identifiers redacted. Any mention of commercial products or reference to commercial organizations is for information only; it does not imply recommendation or endorsement by the National Institute of Standards and Technology, nor does it imply that the products mentioned are necessarily the best available for the purpose.

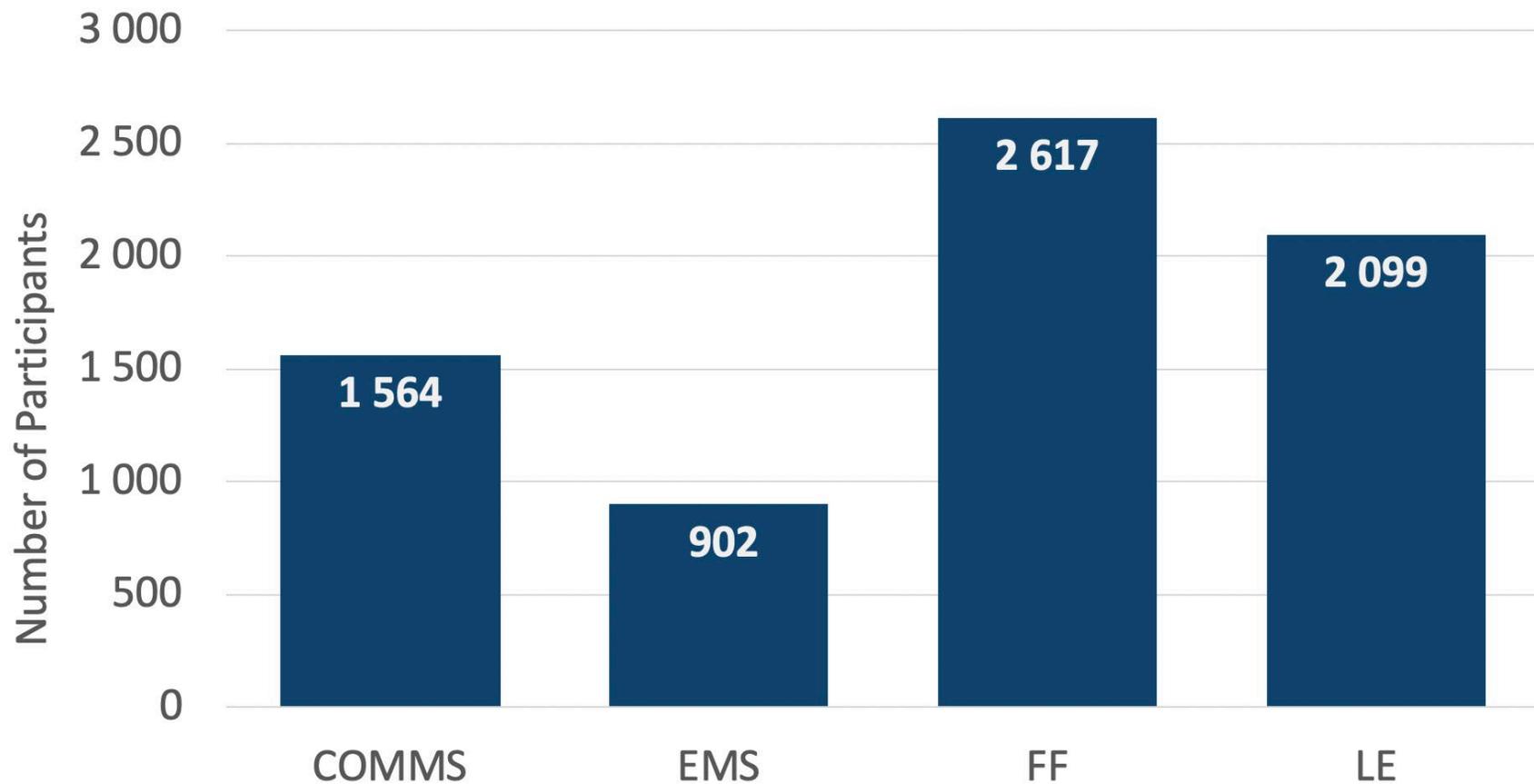
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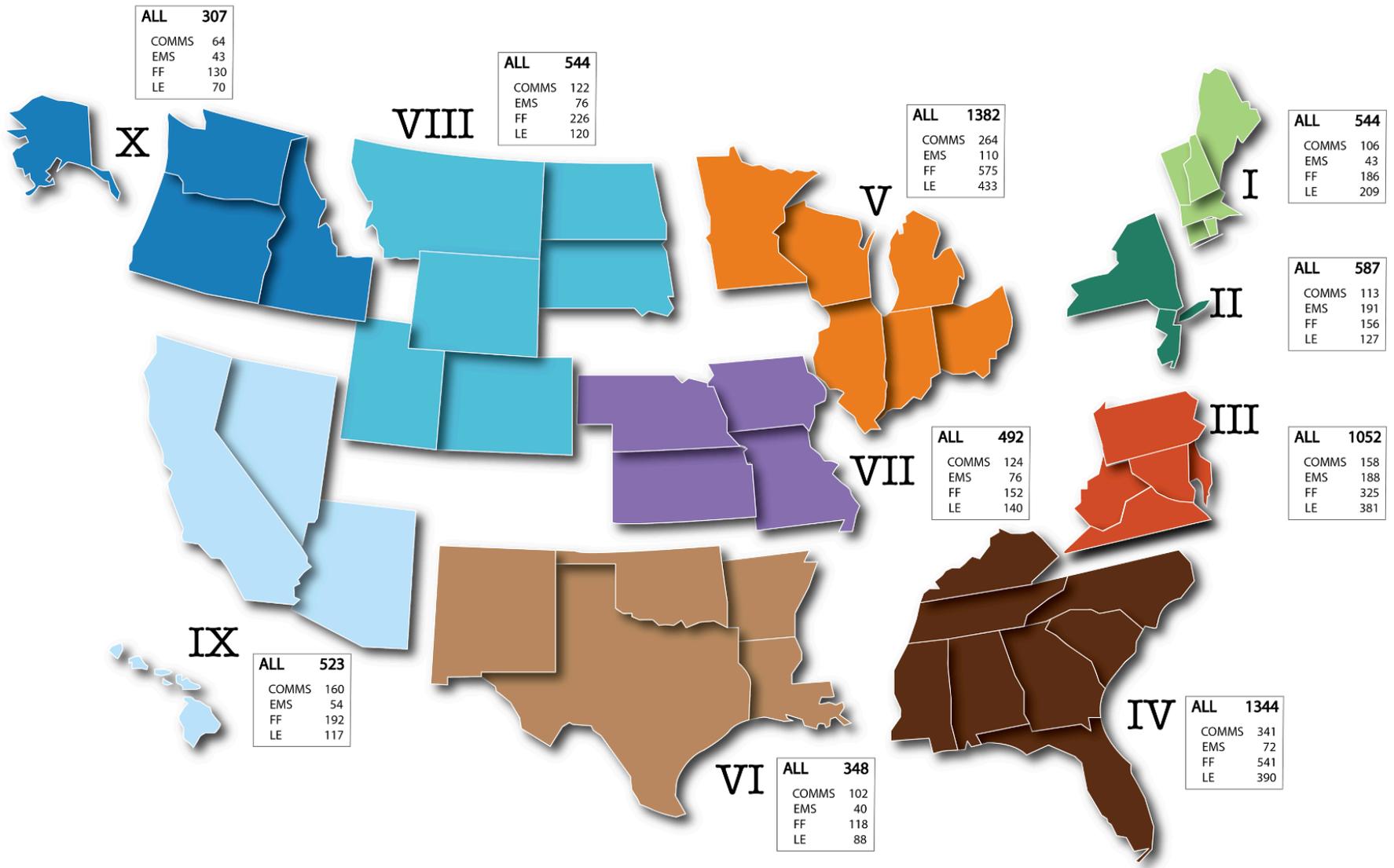
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Survey Respondents by Discipline



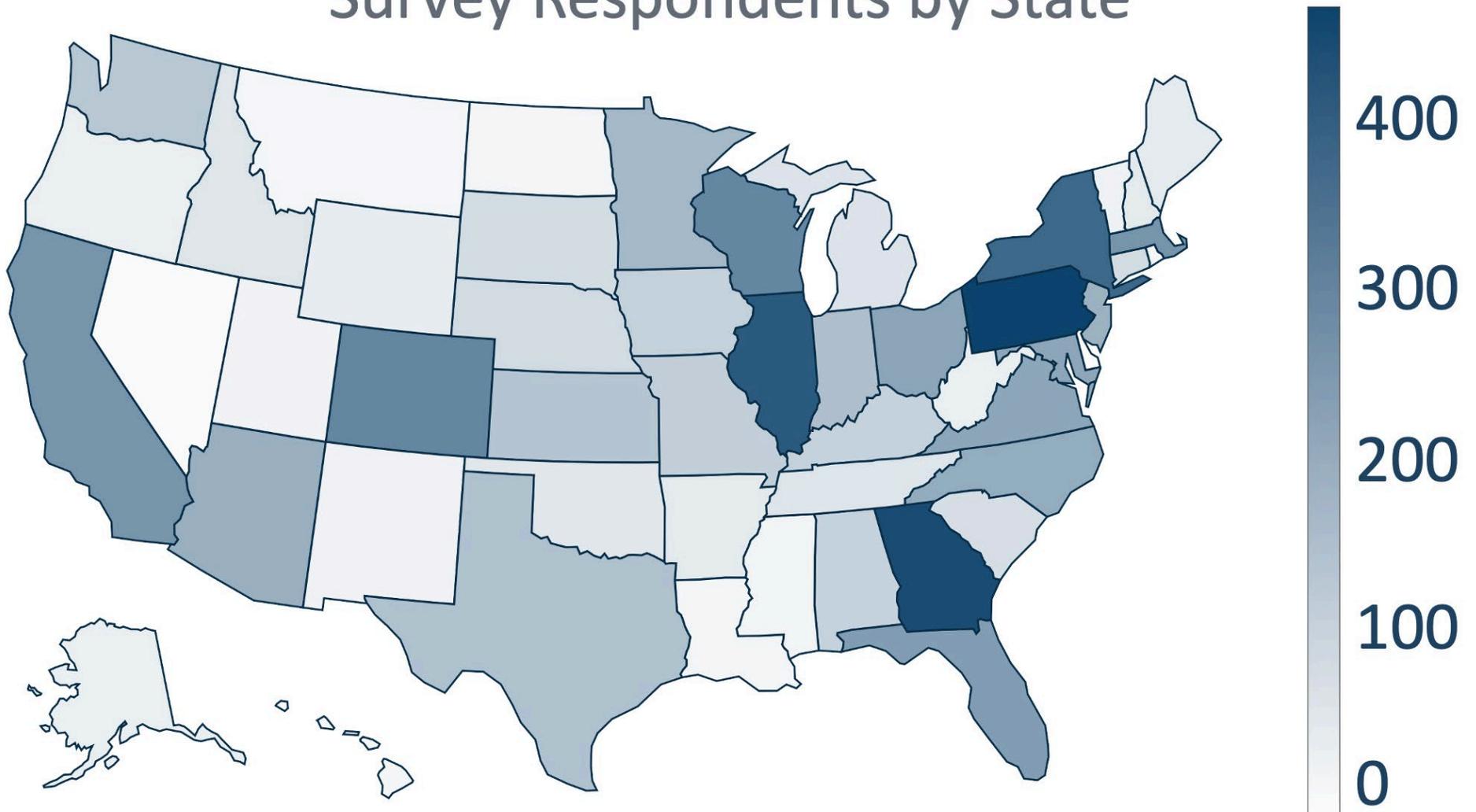
**9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)*

Survey Respondents by FEMA Region and Discipline



*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

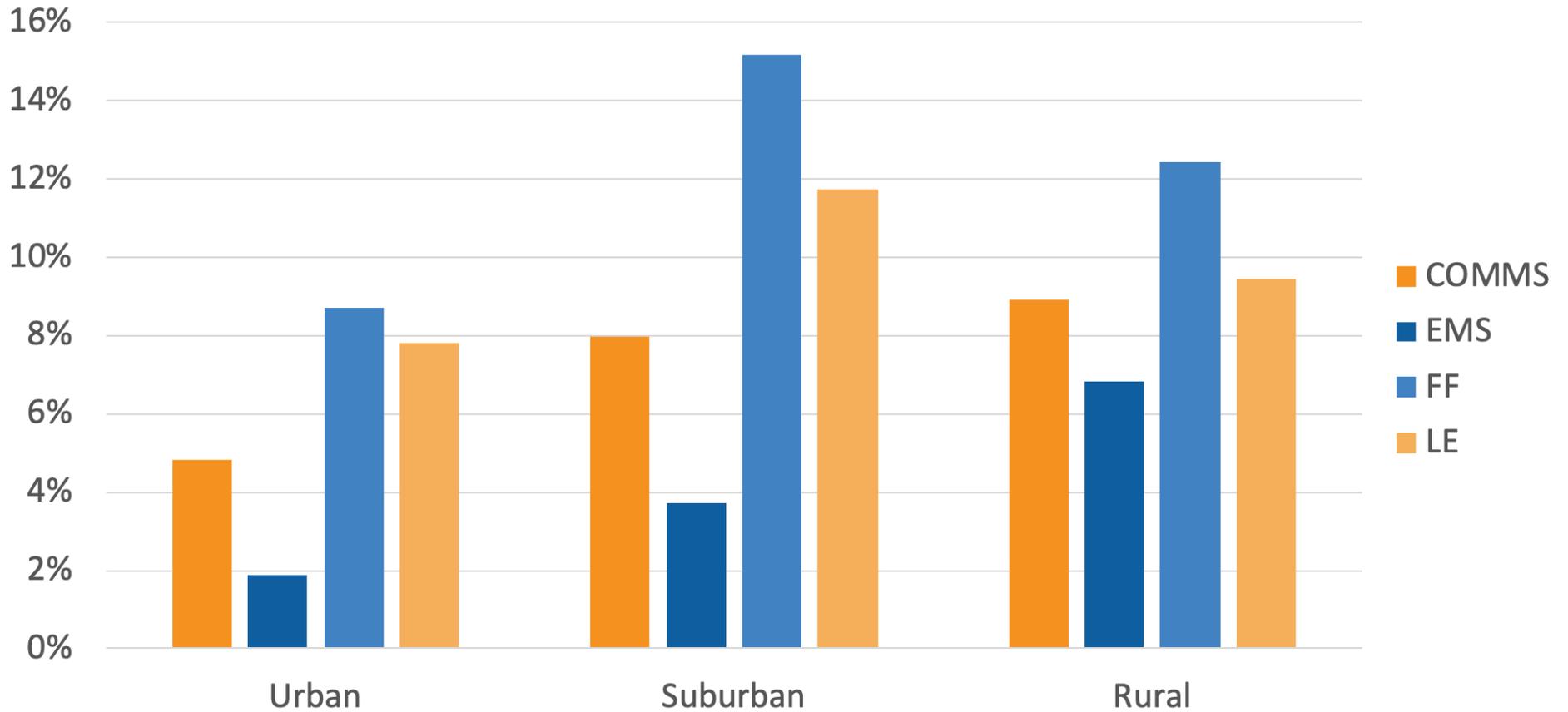
Survey Respondents by State



Min: 7
Max: 482

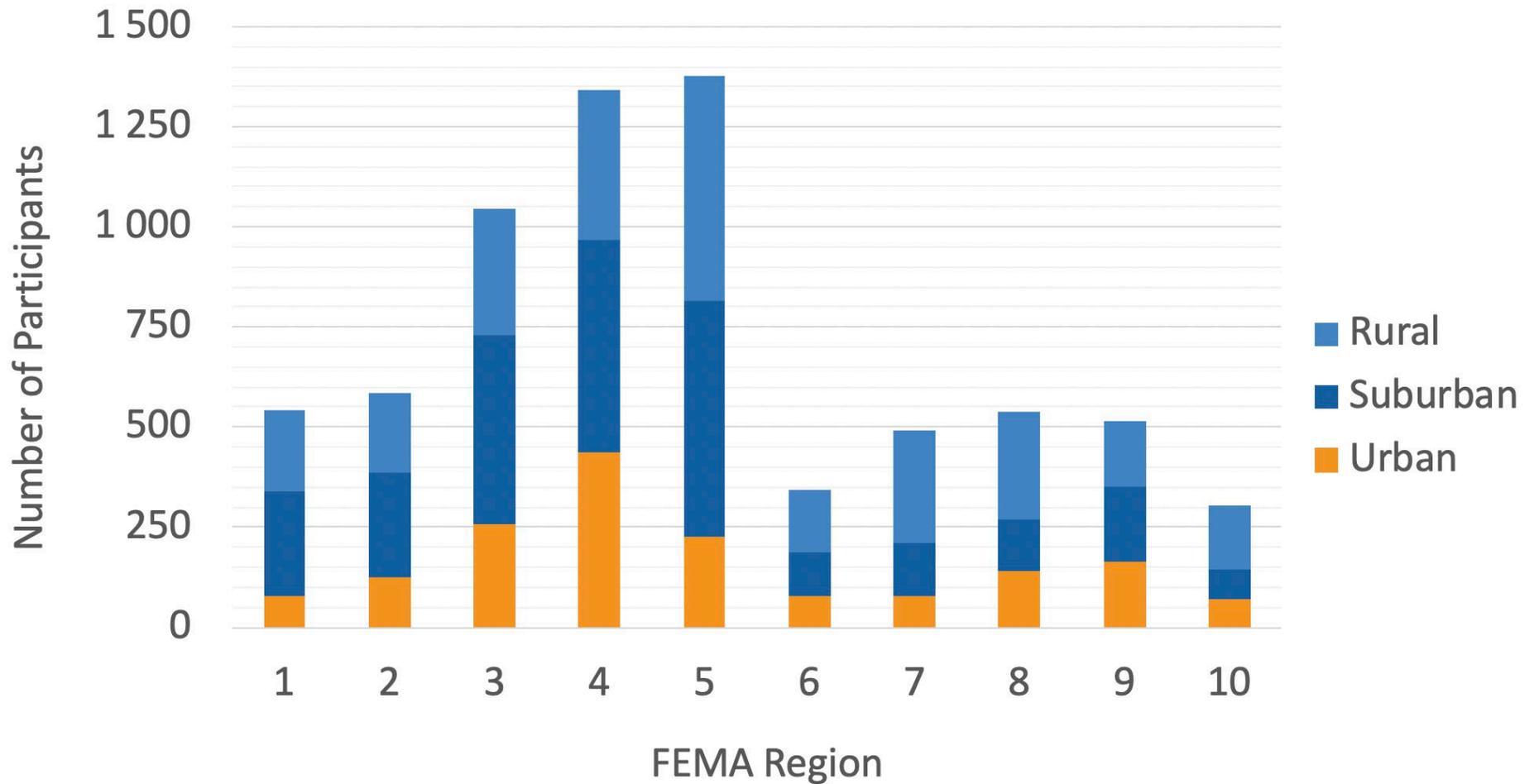
Median: 92
Mean: 139.67

Survey Respondents by Area

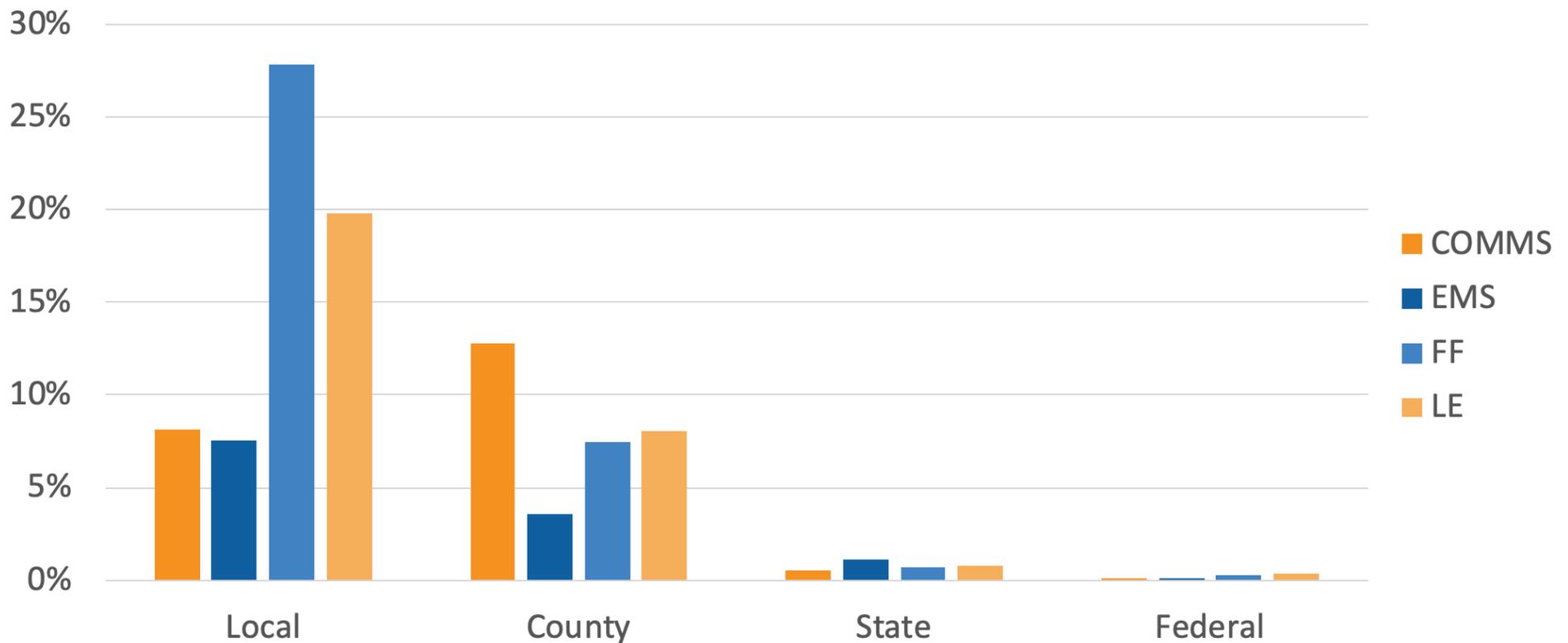


*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

Survey Respondents by Area and FEMA Region

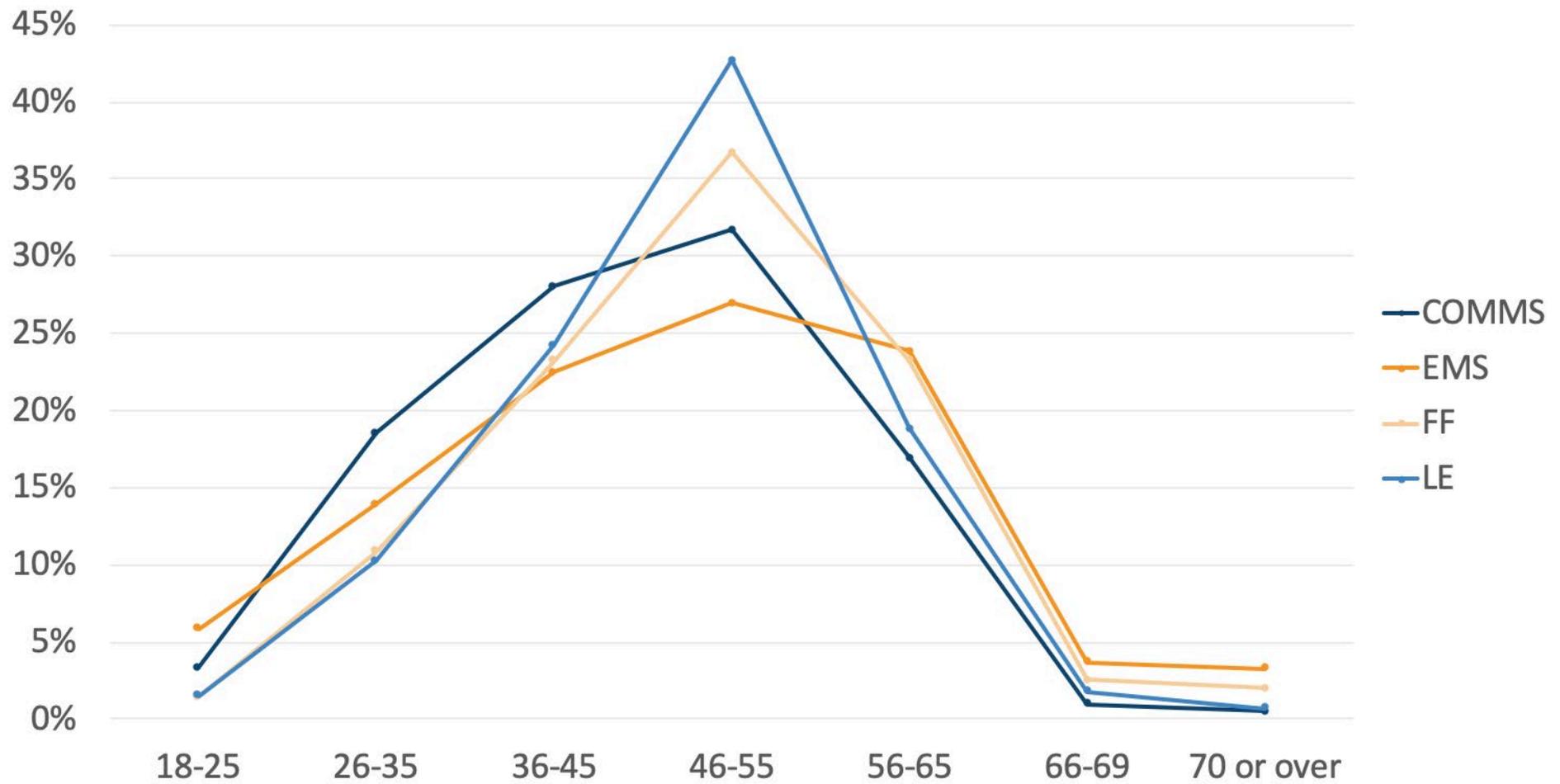


Survey Respondents by Jurisdiction



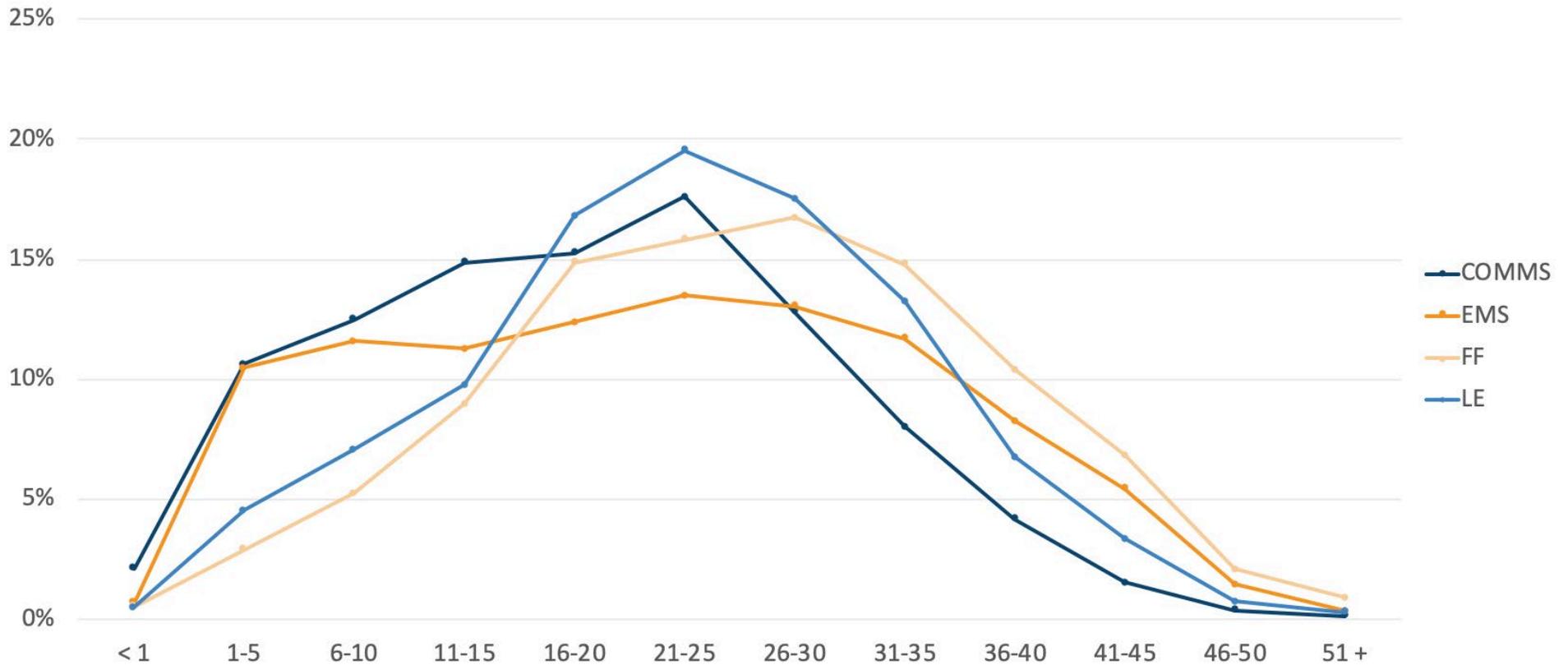
*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

Survey Respondents by Age



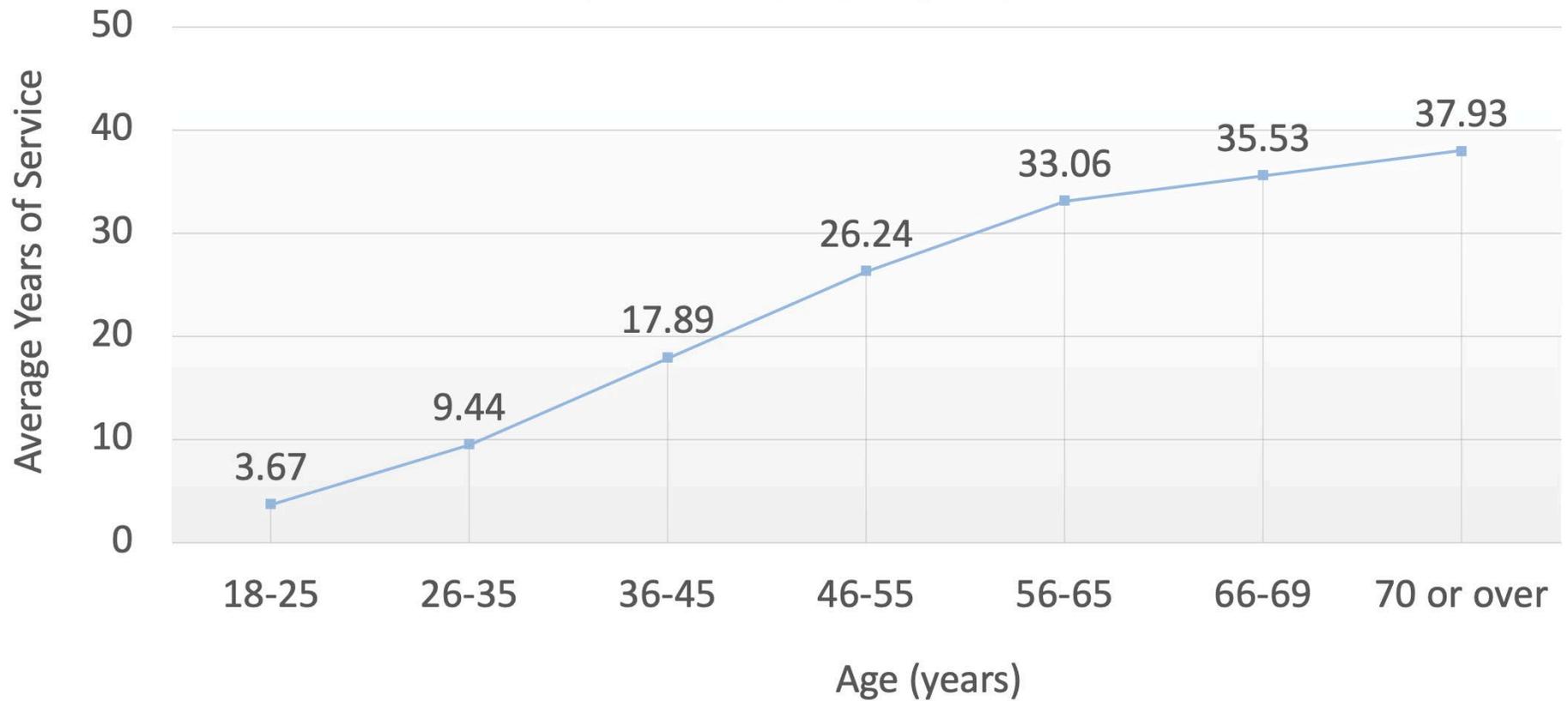
*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

Survey Respondents by Experience

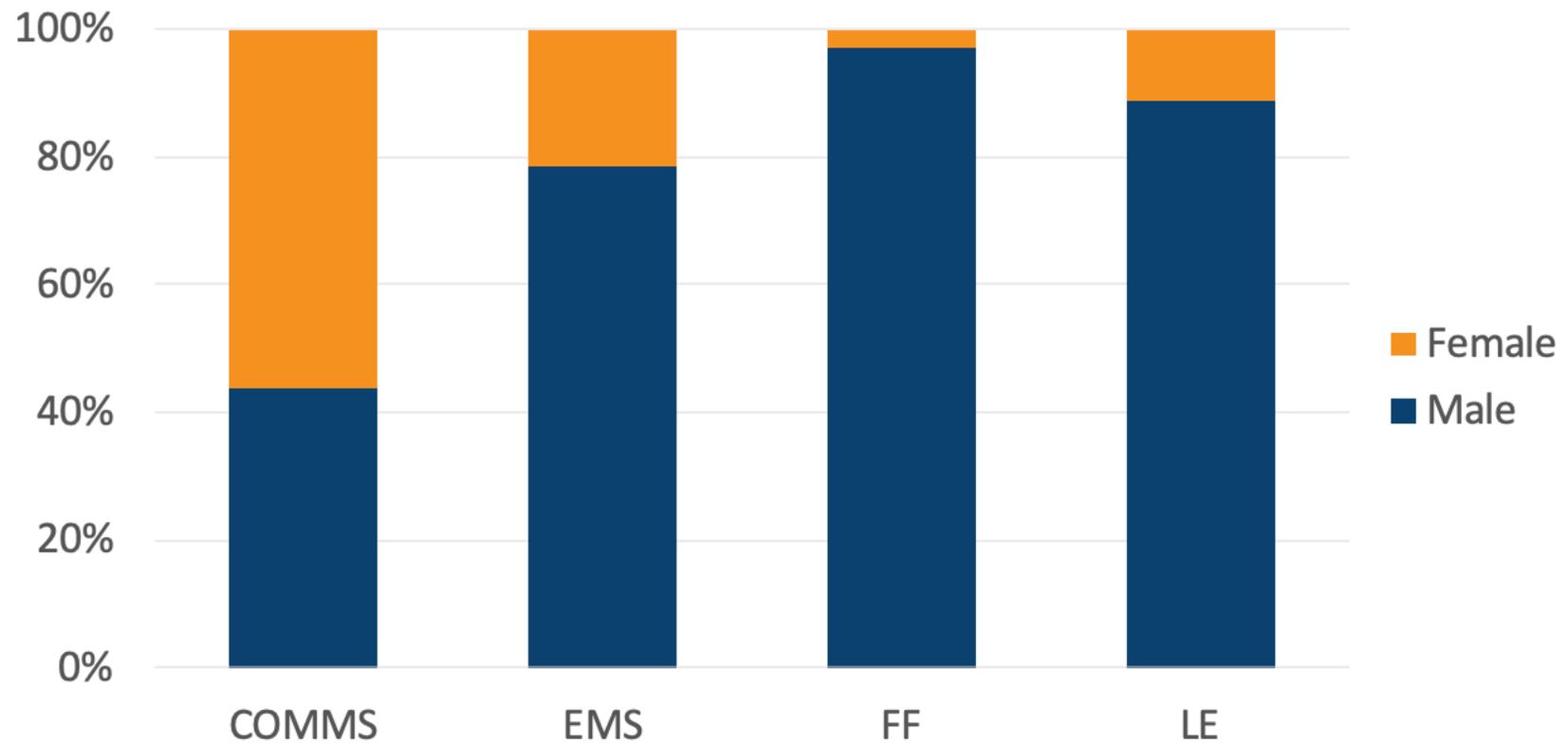


*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

Survey Respondents, Age by Experience

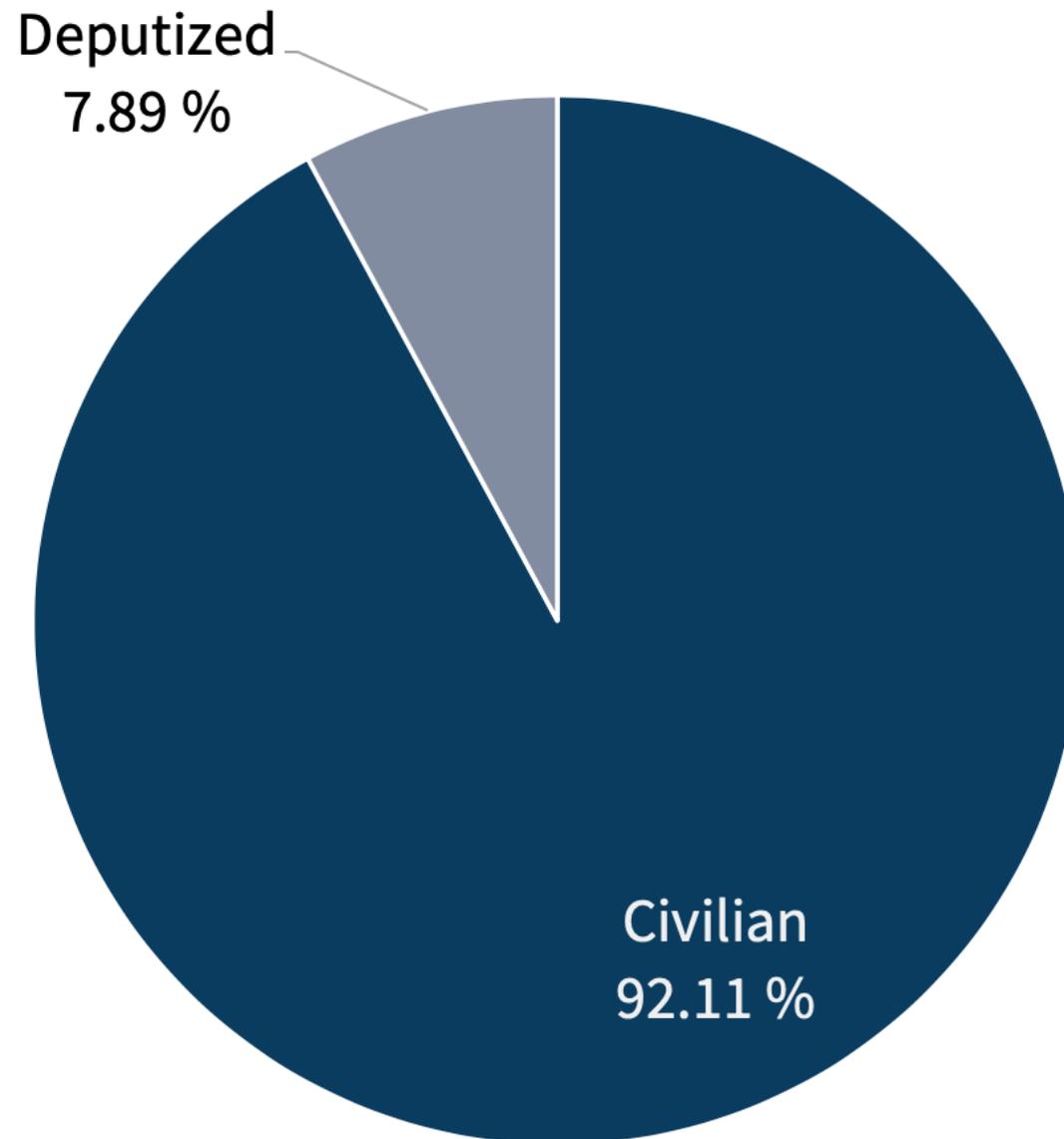


Survey Respondents by Gender

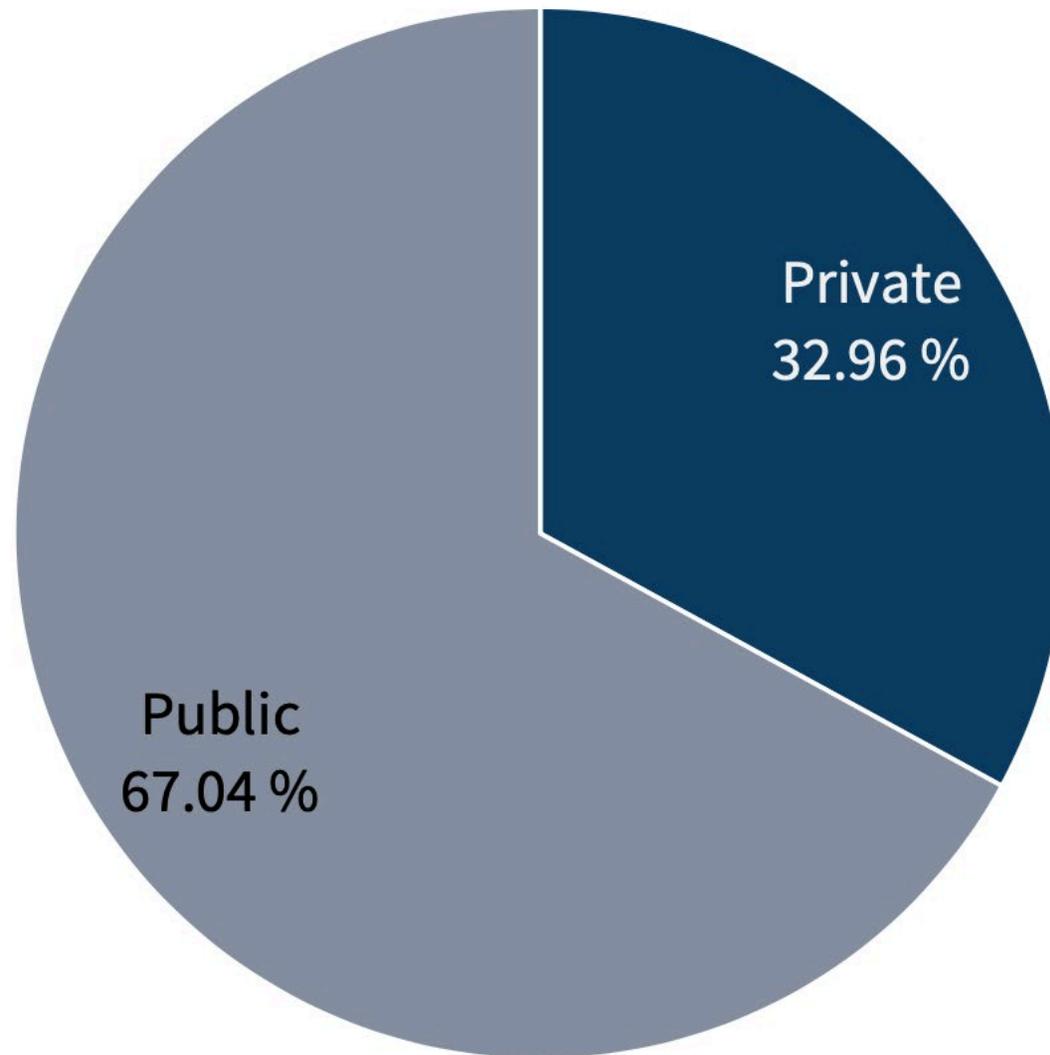


**9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)*

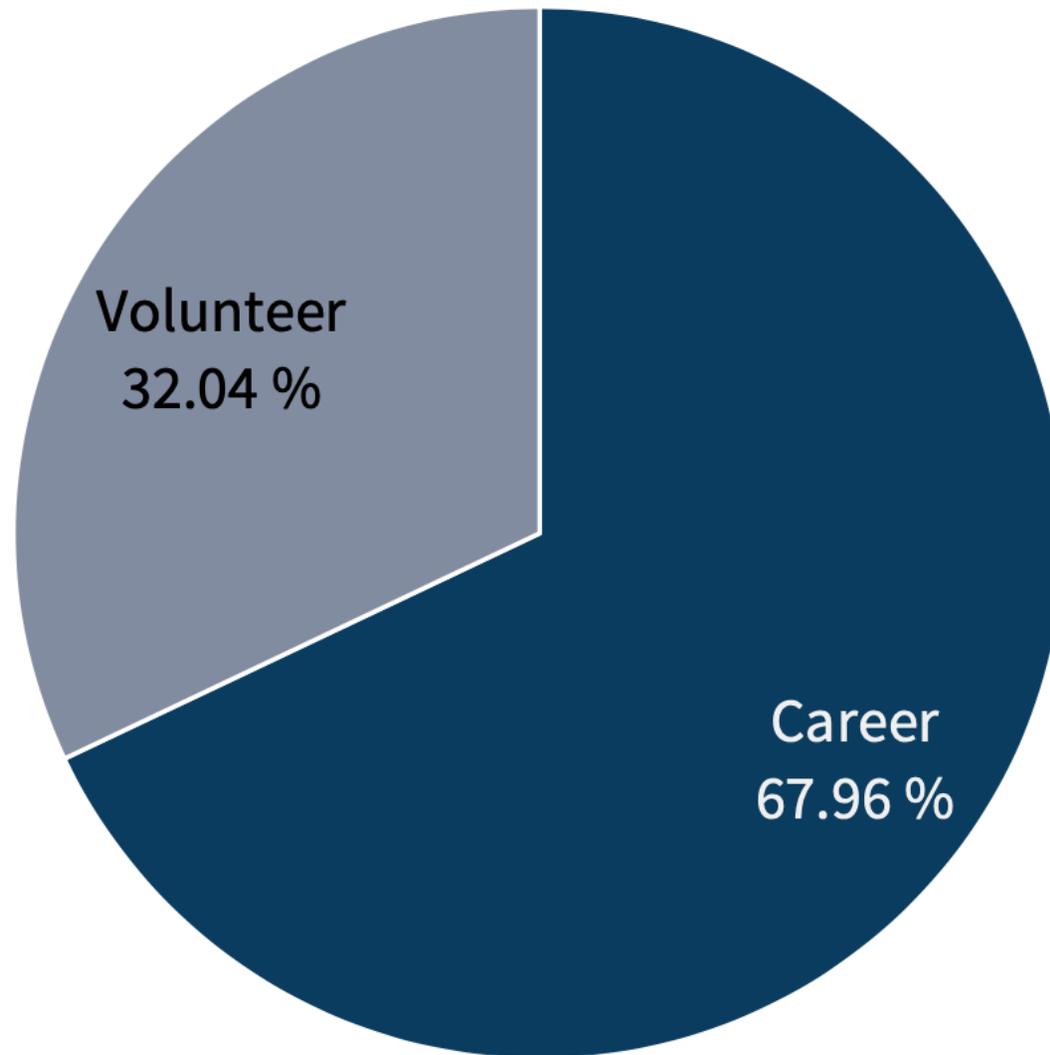
9-1-1 / Dispatch Survey Respondents



EMS Survey Respondents



FF Survey Respondents



Most Used Devices

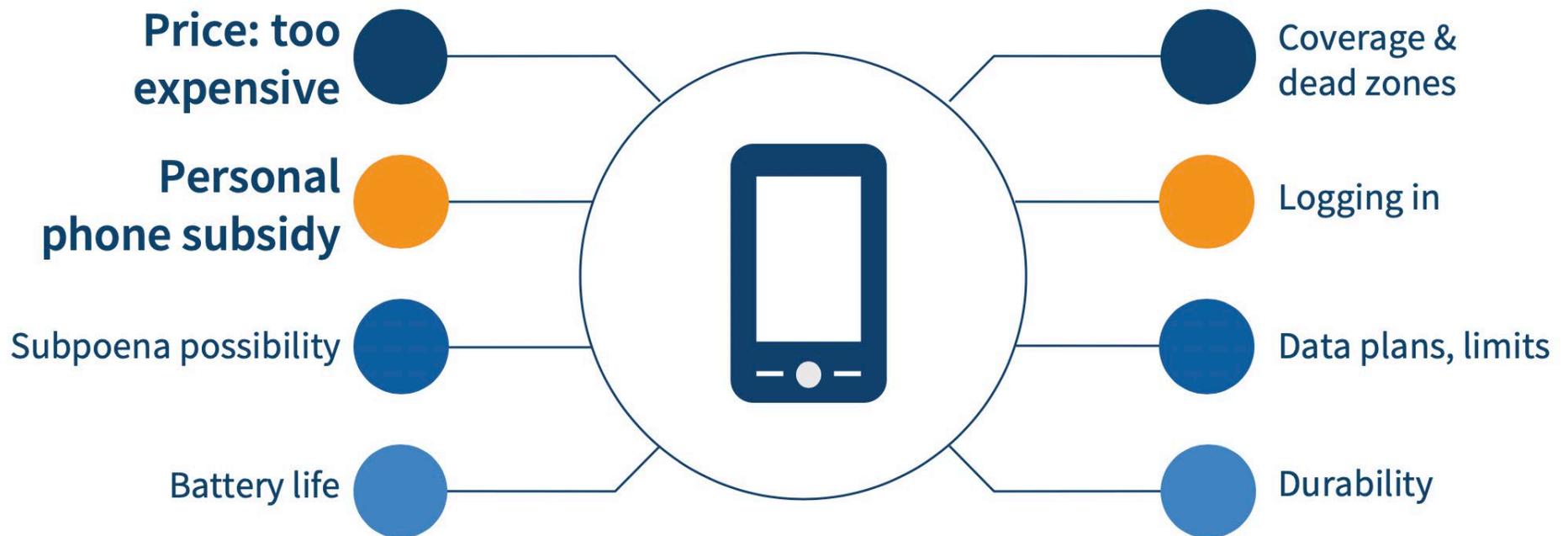
Across Disciplines, Day-to-Day Use



**Mobile Data Terminal (MDT), Mobile Data Computer (MDC)*

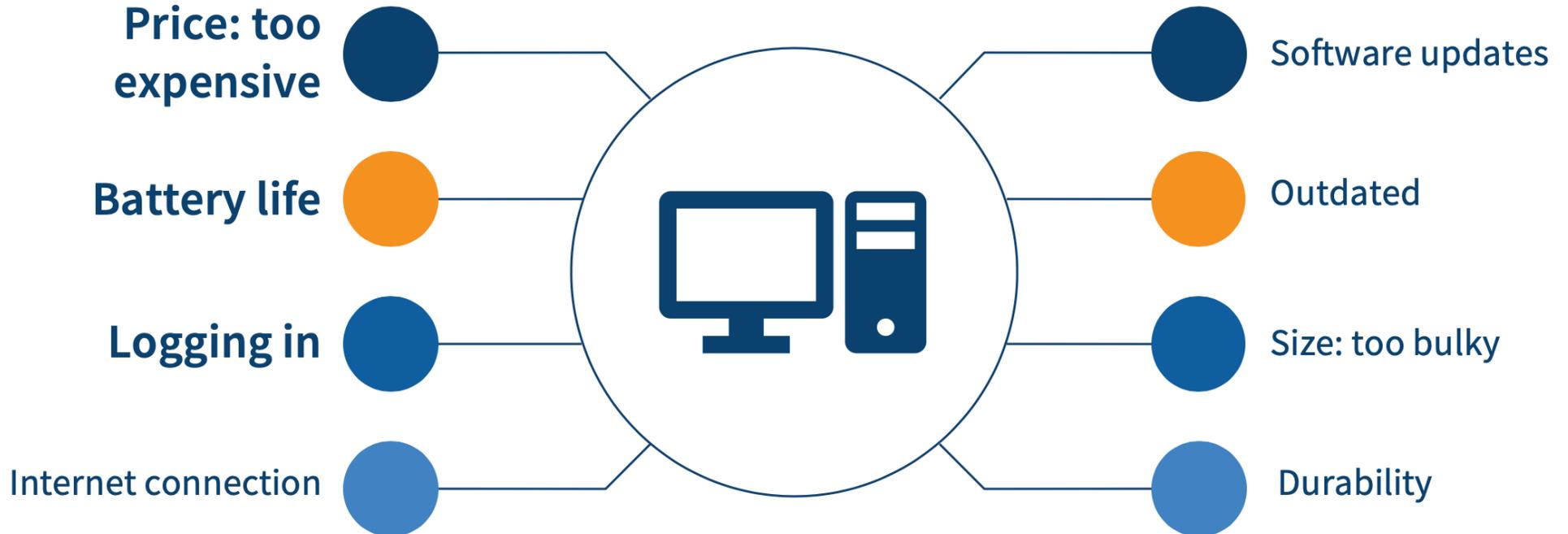
Smartphone Problems

Across Disciplines, "Always" experienced



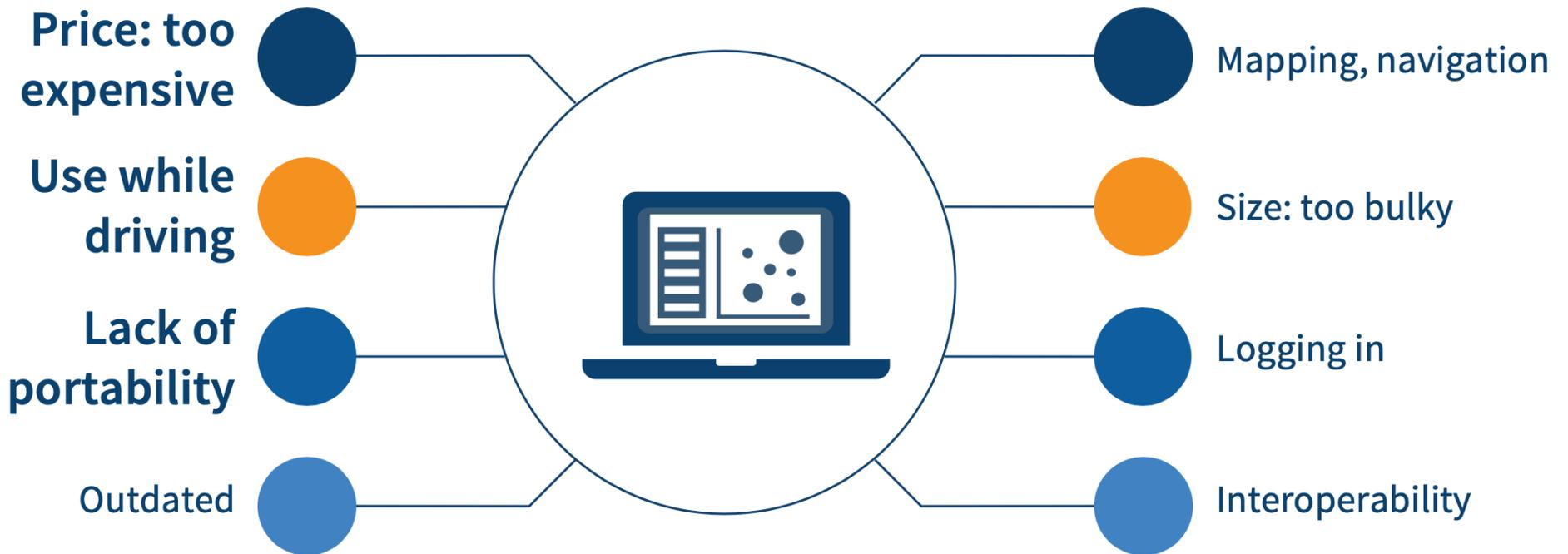
Laptop/Computer Problems

Across Disciplines, "Always" experienced



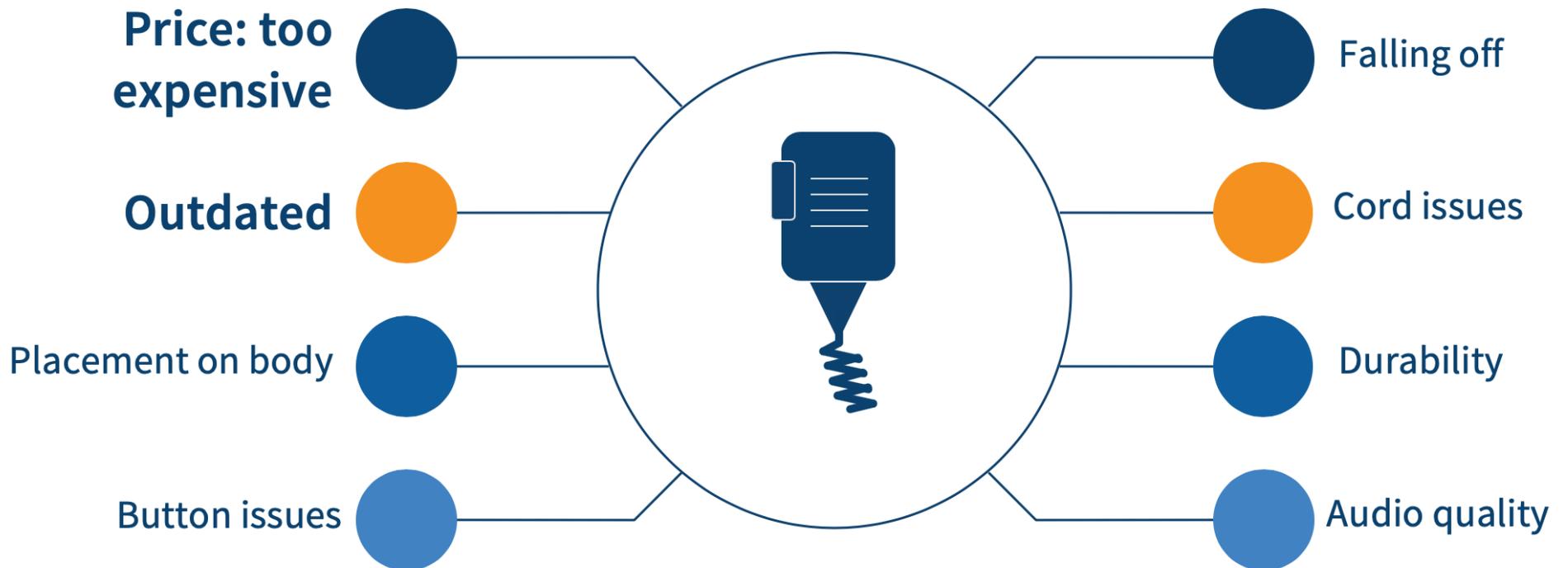
MDT/MDC Problems

Across Disciplines, "Always" experienced



Microphone Problems

Across Disciplines, "Always" experienced



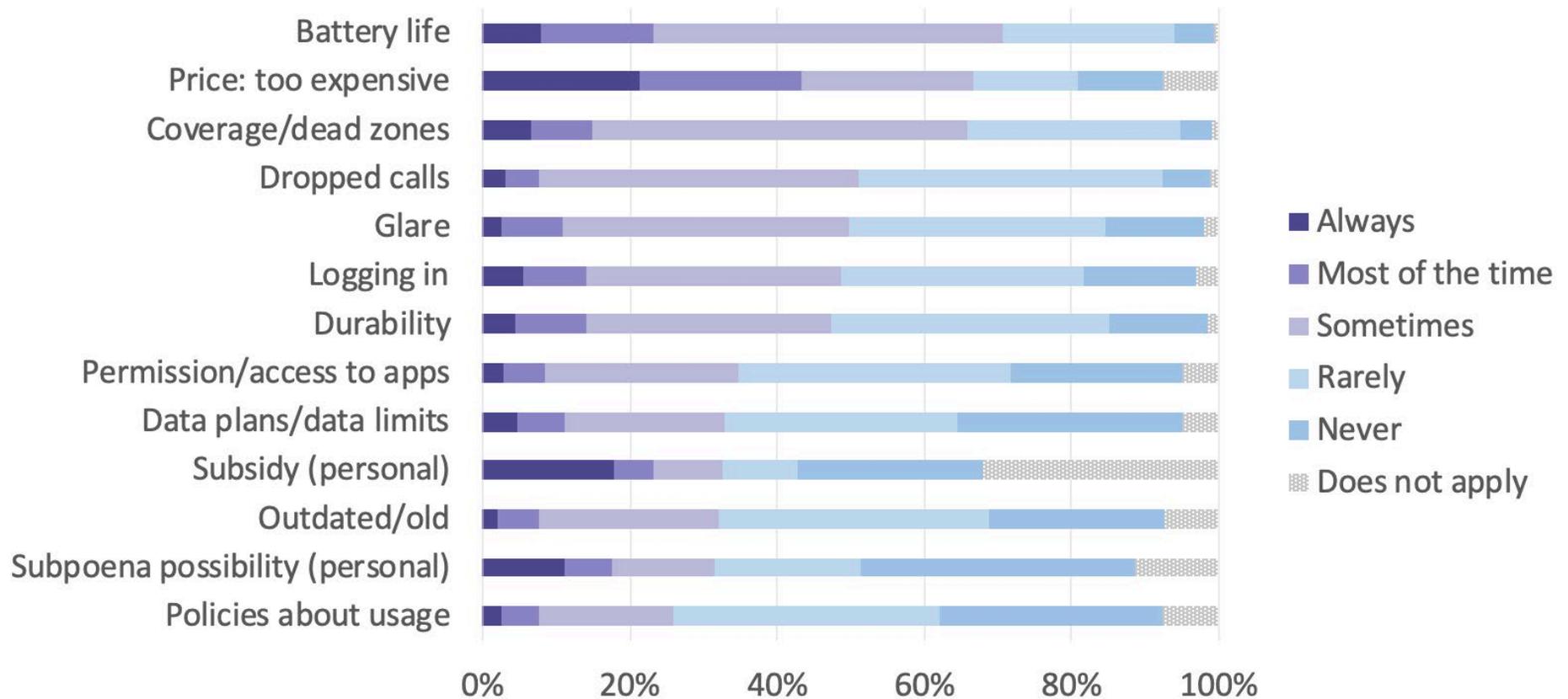
Radio Problems

Across Disciplines, "Always" experienced



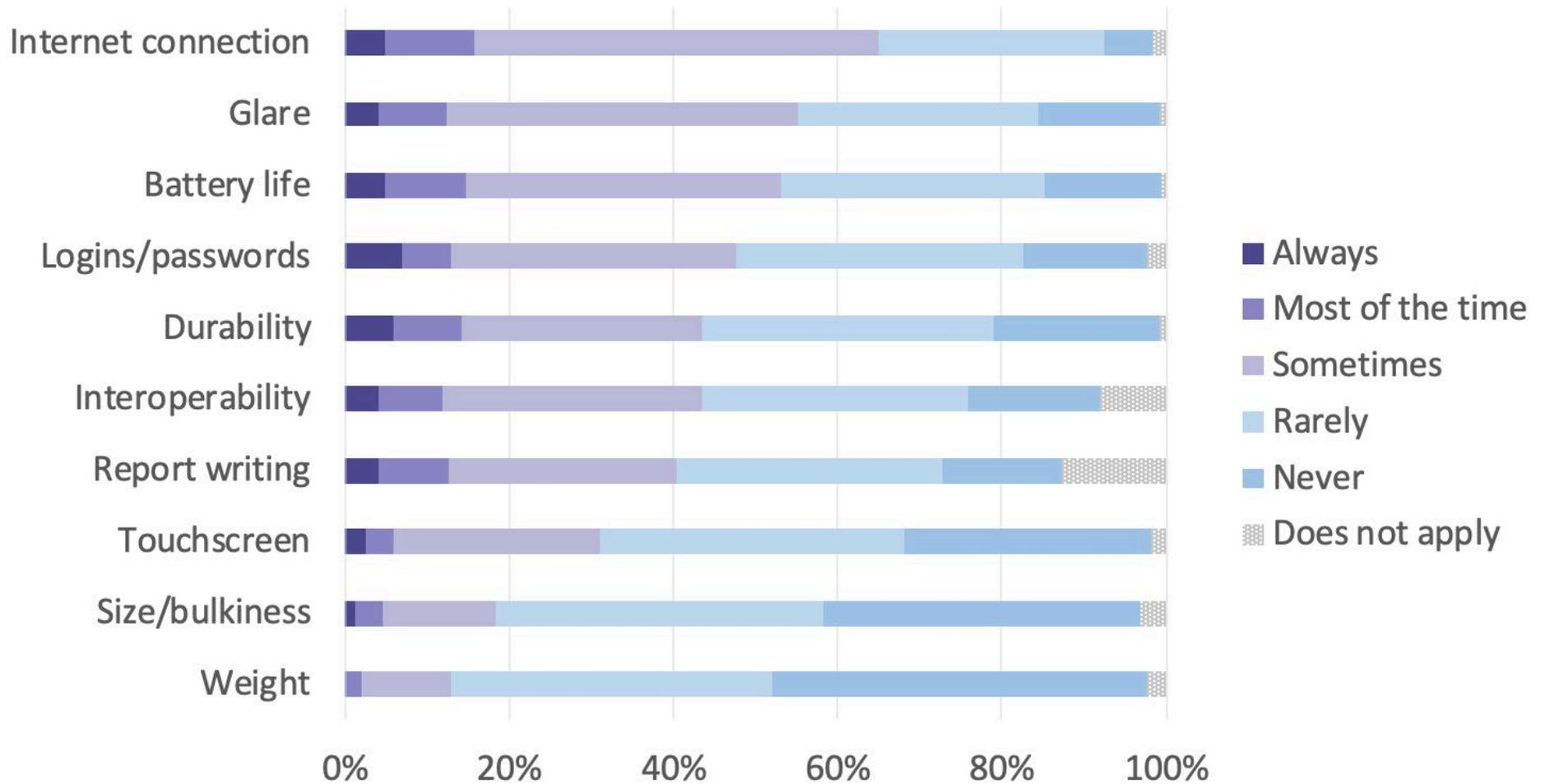
Smartphone Problems

Across Disciplines



Tablet Problems

Across Disciplines



Most Used Apps

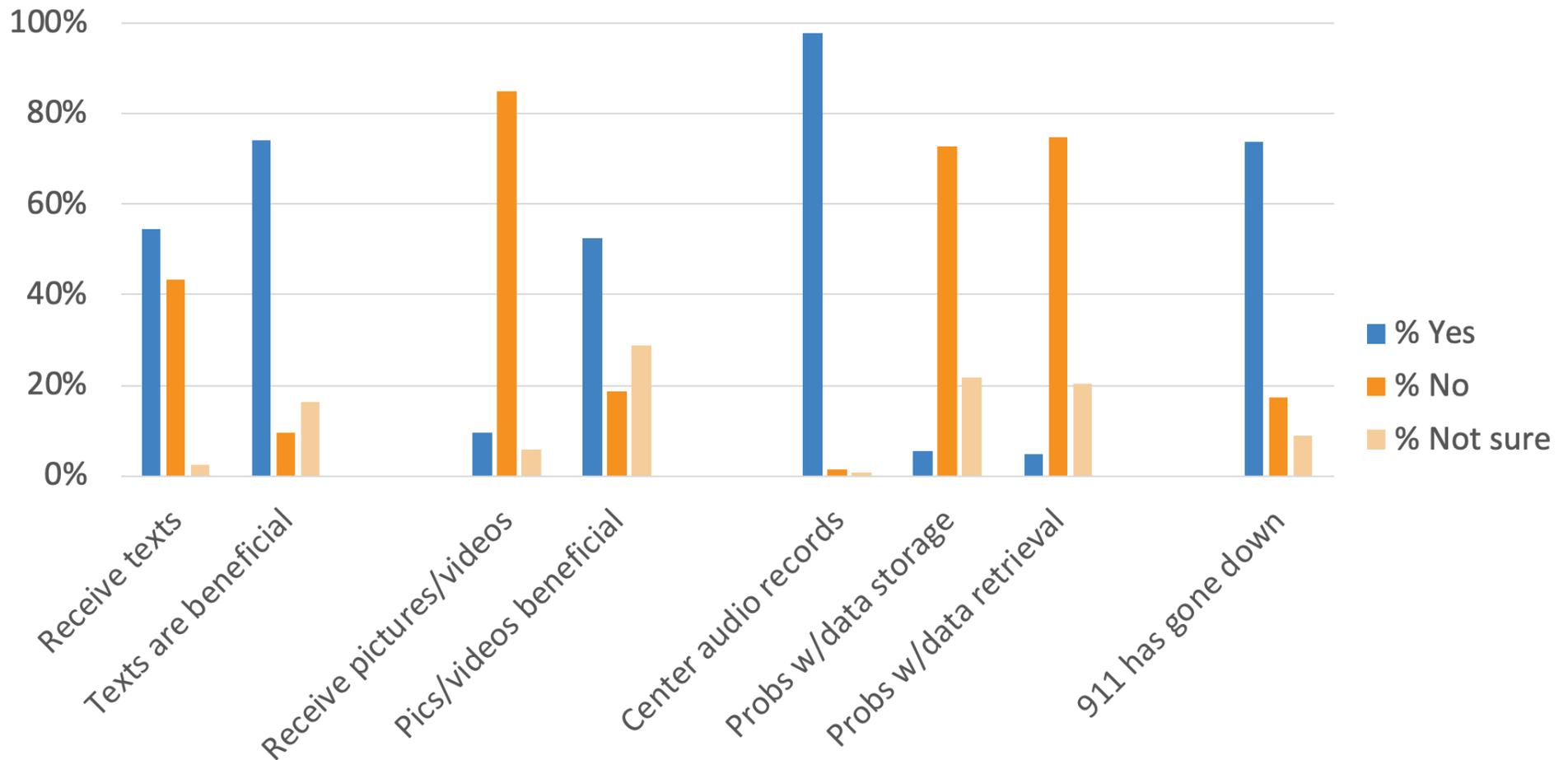
Across Disciplines, Day-to-Day Use



**Computer-Aided Dispatch (CAD), Records Management System (RMS)*

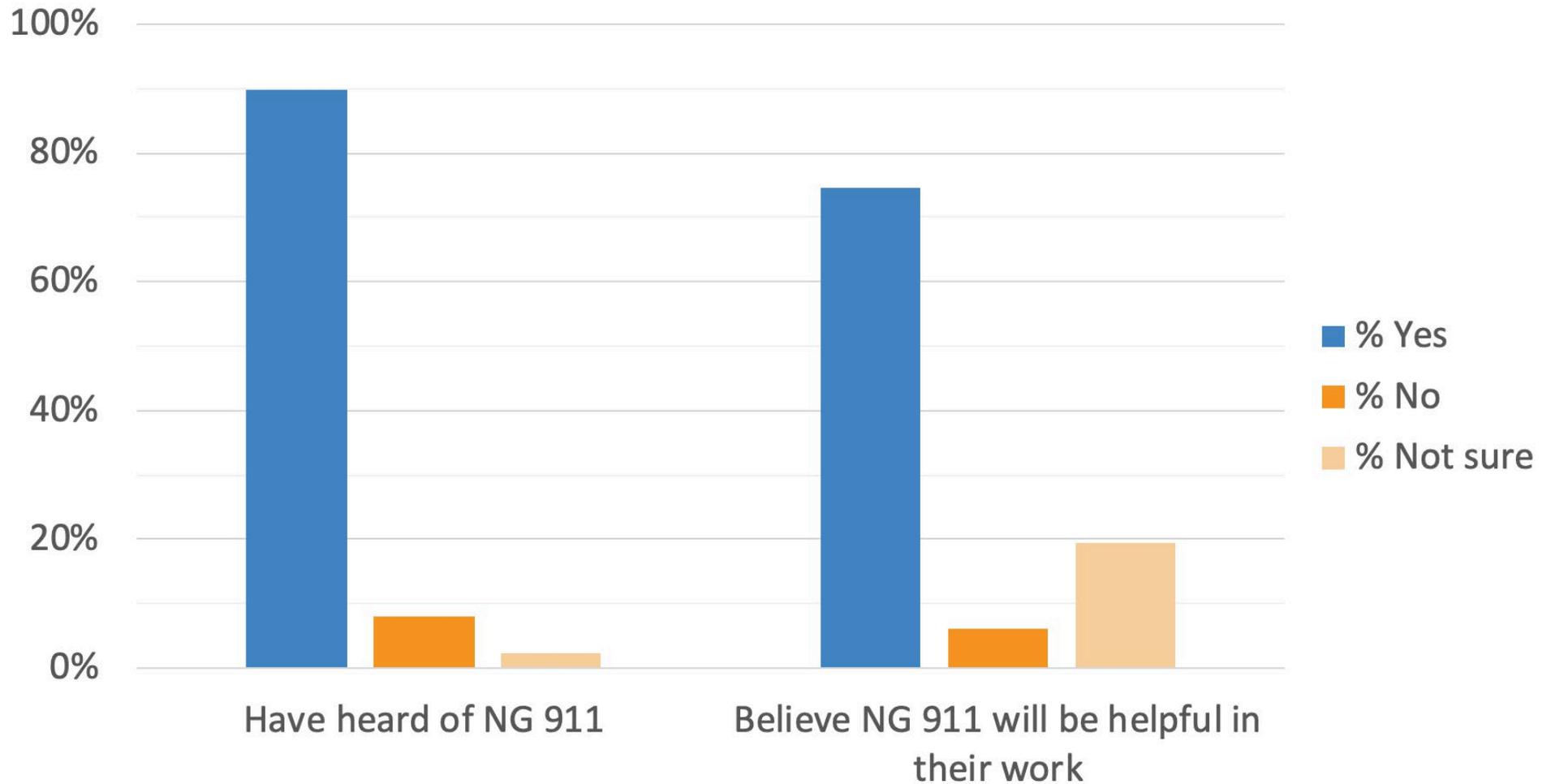
Futuristic Technology: Call Centers

COMMS



Futuristic Technology: NG 9-1-1

COMMS



*Next Generation (NG)

Futuristic Technology

Across Disciplines



● **One login:**
single sign-on

● **Tracking:**
responders &
vehicles

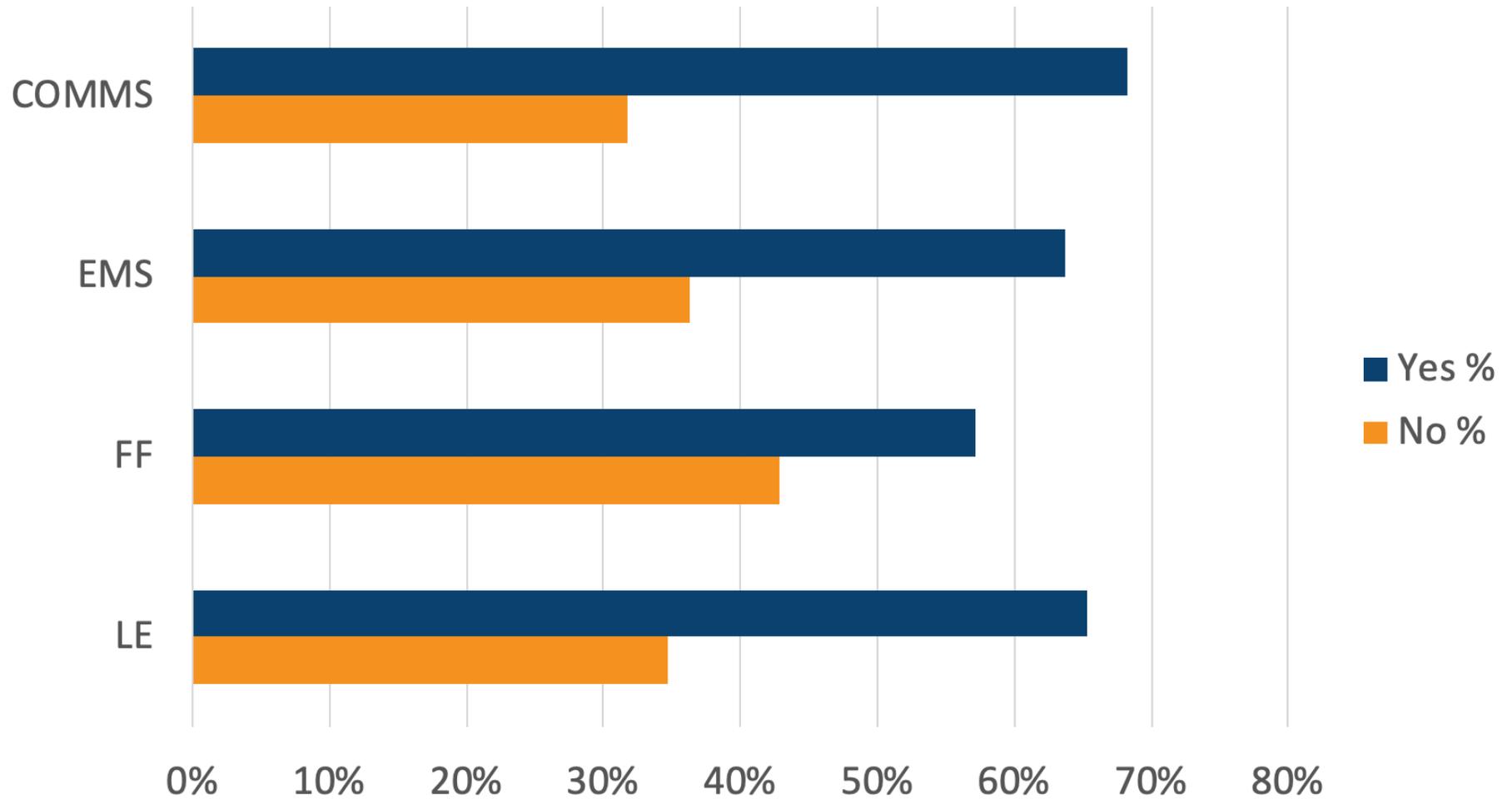
● **Video:**
real-time on-
scene

● **Indoor
mapping:**
navigation

● **Voice
controls:**
hands-free
interaction

Large Events: Major Disasters

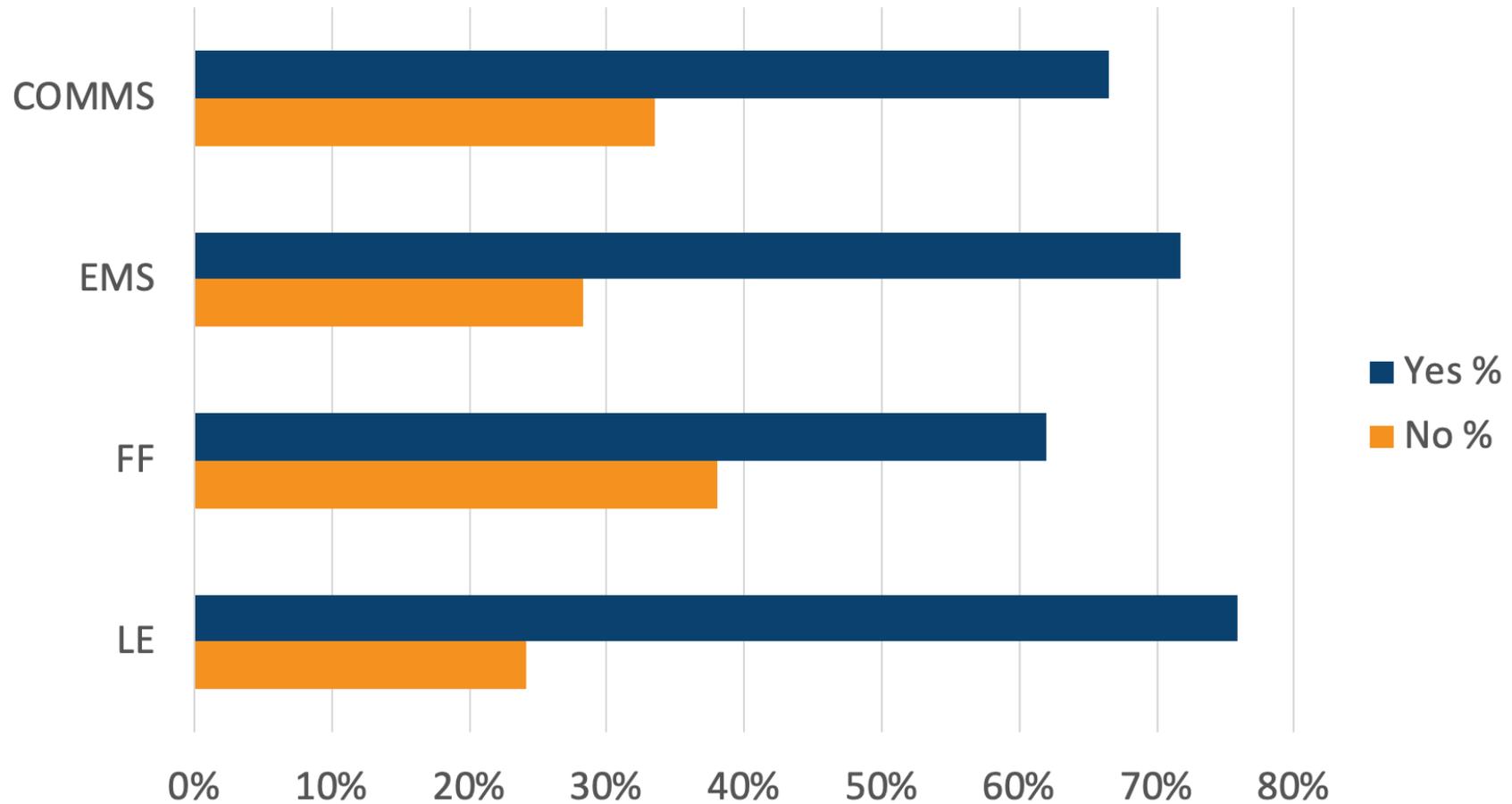
Across Disciplines



*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

Large Events: Planned

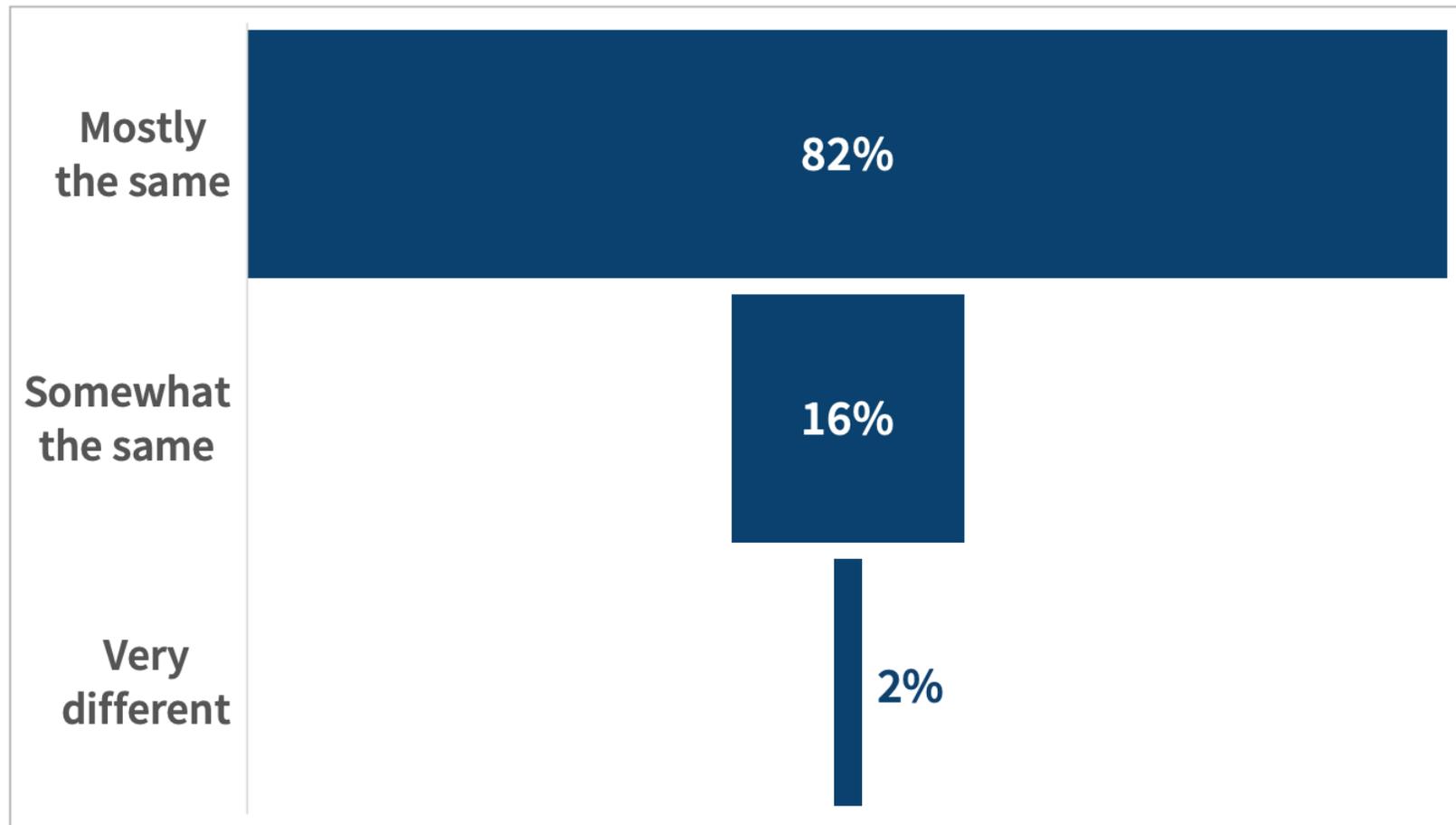
Across Disciplines



*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

Large Events vs. Day-to-Day Technology

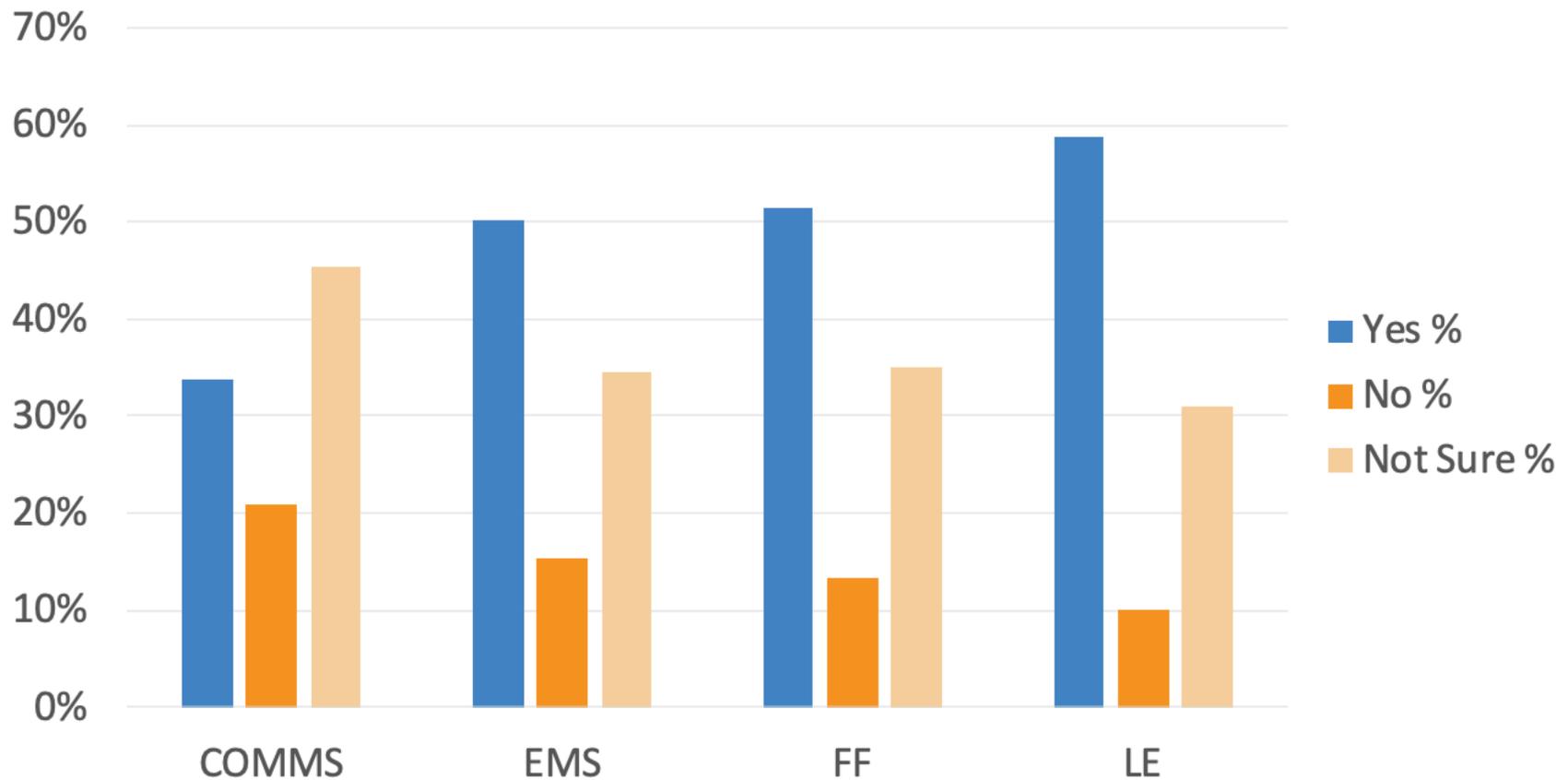
Across Disciplines



**Major Disasters and Large Planned Events, combined*

VR for Training

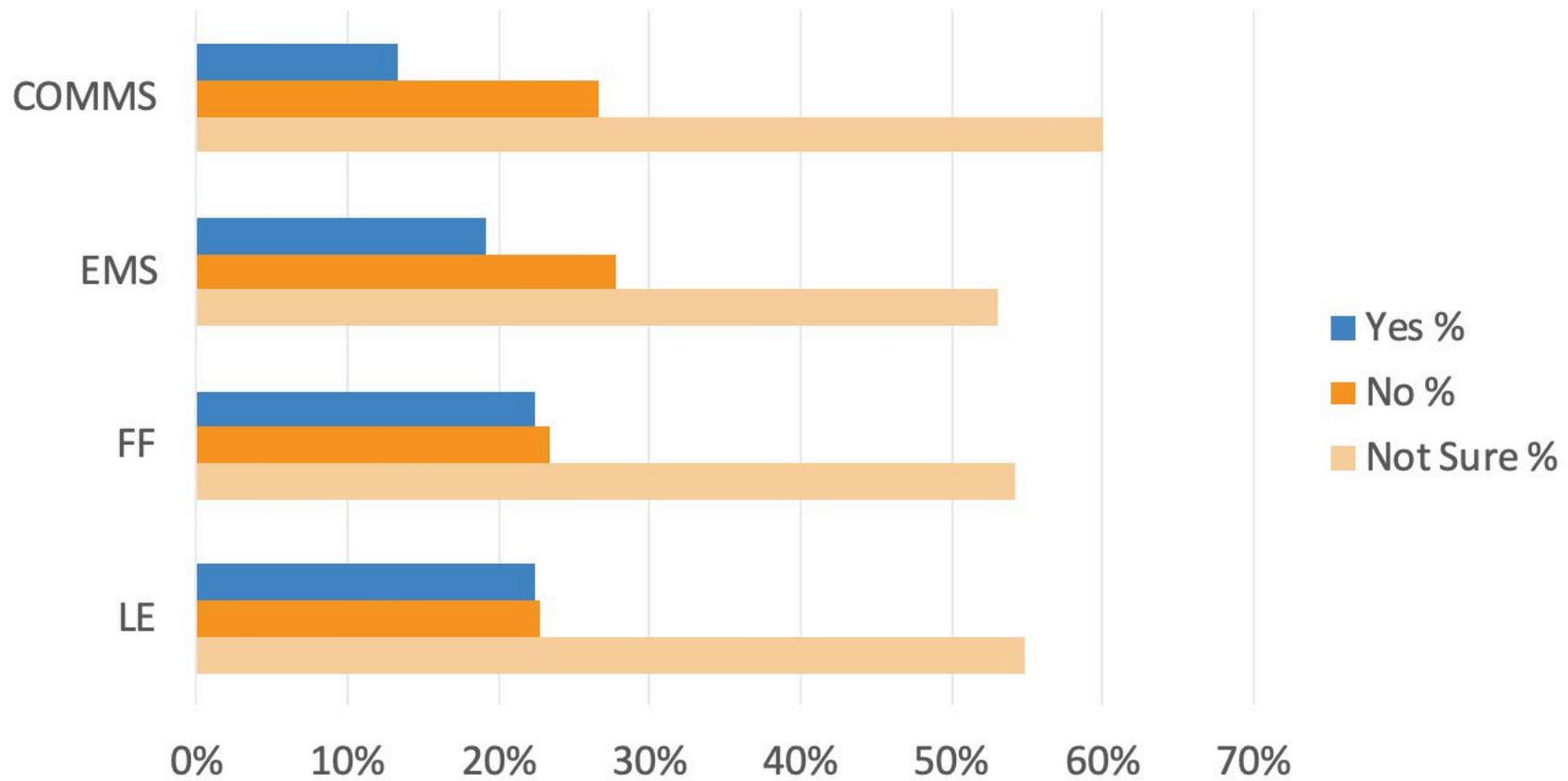
Across Disciplines



*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)

VR for Other Purposes

Across Disciplines



*9-1-1 / Dispatch (COMMS), Firefighting (FF), Emergency Medical Service (EMS), and Law Enforcement (LE)