Public Safety Communications Research

Examining the Rural Perspective

NIST PSCR Usability Team

Geography & Topography

- Response time & coverage affected by:
 - Distance
 - Size
 - Isolation
 - Type of terrain
 - Remote / wilderness areas
- Lack of addresses

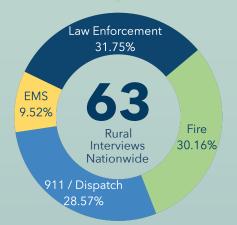


Incident Types

- Seasonal nature of climate
 - Brush fires, avalanches, flooding, etc.
 - Incidents like skiing, hiking, rafting, etc.
- Tourism and special events
 - Increase in population and call volume
 - Tourists unable to give location info
 - Tourism affects staffing needs







Resources

Rural areas often suffer from limited budgets

Often missing basic gear and technology; responders buy own tools or used equipment

Financial

• Reliance on fundraisers & community support

Personnel

Rural areas have difficulty recruiting, hiring & keeping staff

- Lack of specialized personnel such as IT staff; one person often fills several roles
- Declining volunteerism



Infrastructure

Rural areas have problems with communication & coverage

- Problems with radios, cellphones, and GPS
- Lack of department and community resources and facilities

Based on nationwide (US) interviews with first responders, NIST analyzed data identifying the contexts and challenges specifically faced by rural first responders. While there are many similarities between rural first responders and their urban and suburban counterparts, this report (https://doi.org/10.6028/NIST.IR.8277) focuses on the unique nature of rural emergency response and its implications for technology needs and development. While some places are wealthier than others, the characteristics and challenges shown are often experienced in rural areas. This work is part of a larger dataset of approximately 200 first responder interviews (https://doi.org/10.6028/NIST.IR.8216, https://doi.org/10.6028/NIST.IR.8216, https://doi.org/10.6028/NIST.IR.8216, https://doi.org/10.6028/NIST.IR.8245)



