Welcome to the Public Safety Survey on Communication Technology

Help us get requirements for public safety technology right! This is your chance to tell us what works, what doesn't, and what technology you think would be useful for incident response communications.

NIST, the National Institute of Standards and Technology, is conducting this survey. Our goals are to identify:

- 1. technology currently used for communication;
- 2. problems experienced with this technology;

3. other kinds of technology that may be helpful for communication in public safety in the future. The survey will take about 20 minutes to complete.

Please share the survey link with others you know in public safety, the more folks we hear from the better. www.XXXX.nist.gov

We appreciate your time and input!

Your Participation is Confidential and Voluntary

All data are de-identified. No personally identifiable information (PII) is collected or associated in any way with your survey responses. Your participation is voluntary and you may choose to quit the survey at any time.

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Demographics

1. How many years have you been working in public safety? (Total years of service, regardless of changing positions or departments.)

2. Do you consider the area you currently work in as **MAINLY**:

🔵 Rural

🔵 Suburban

- 🔵 Tribal
- 🔵 Urban

3. Zip Code where you currently work. (We know that some agencies cover different zip code areas; please list the zip code where your agency/station is actually located.)

4. State where you currently work

\$

5. Sex

🔵 Male

Female

6. Age

7. Do you **MAINLY** work in:

911/Dispatch

- **EMS**
- Fire Fighting
- Law Enforcement

8. What is your title?

9. What is your jurisdictional level?

- 🔵 Local
- O County
- State
- **Federal**
- 🔵 Tribal

Use of technology in your **DAY-TO-DAY** work

We know there is no such thing as a "typical" day in public safety. However, for this set of questions, focus on the kinds of things you use in your day-to-day work.

	Use a lot	Use occasionally	Have but do not use	Do not have
Body camera	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Computer: desktop	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Computer: laptop	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Dash camera	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Earpiece: wireless (self purchased)	\bigcirc	0	•	\bigcirc
Earpiece: wireless (work issued)	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Earpiece: with cord	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Fingerprint scanner	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Flip phone: work issued	\bigcirc	•	•	\bigcirc
License plate reader	\bigcirc	\bigcirc	\bigcirc	\bigcirc
MDT/MDC (mobile data terminal/computer)	0	0	•	0
Mic: wireless	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Mic: with cord	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Radio: in-car	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Radio: portable	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Smartphone: personal	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Smartphone: work issued	\bigcirc	0	•	\bigcirc
Tablet	\bigcirc	\bigcirc	\bigcirc	\bigcirc
ther (please specify)				

11. Of the following devices, RANK the 5 that **are most useful** in your **DAY-TO- DAY** work, with 1 being the most useful.

Body camera	
Computer: desktop	
Computer: laptop	
Dash camera	
Image: Fingerprint scanner	
License plate reader	
MDT/MDC (mobile data terminal/computer)	
Radio (with or without mic and earpiece)	
Smartphone Smartphone	
Tablet	

12. Think about your DAY-TO-DAY work and your use of the following **applications/software**.

Use a lot Use occasionally Have but do not use Do not have CAD (computer-()aided dispatch) Criminal ()databases Electronic policies/laws Email First responder vehicle tracking Language \bigcirc translation Mapping/driving directions **RMS (records** management system) **Report writing** software Traffic Weather

Other (please specify)

13. Of the following applications/software, rank the 5 that are most useful in your **DAY-TO-DAY** work, with 1 being the most useful. **CAD (Computer-aided dispatch)** H Criminal databases H **Electronic policies/laws** . ii. 😫 Email **\$** First responder vehicle tracking ii. Language translation ii ii Mapping/driving directions Records management system H H **\$** Report writing software **♦** Traffic Weather

14. Which of the items below **would also be useful** for your **DAY-TO-DAY** work. Check all that apply

AR (augmented reality)
Drones
Facial recognition software
First responder tracking
Health/vitals monitoring of first responders
HUDs (heads-up displays)
Indoor mapping
One login (instead of many different usernames and passwords)
Real-time on-scene video
Robots
Self driving cars
Smart buildings
Smart glasses
Smart watch
Thermal imaging
Vehicle tracking
Voice controls for hands-free input
Voice recognition for identification
VR (virtual reality)
None of the above
Other (please specify)

Problems with your Day-TO-DAY devices

For the next set of questions, think about problems you have experienced with 3 of the devices you previously selected.

15. With your **RADIO**, have you experienced problems with:

		Most of the				Does not
	Always	time	Sometimes	Rarely	Never	apply
Audio quality	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Battery life	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Channel switching	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Cord	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Coverage/dead zones	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Radio discipline/etiquette	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Size/bulkiness	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

16. Have you experienced other problems with your RADIO?

🔵 No

🔵 Yes

18. With your **MIC**, have you experienced problems with:

		Most of the				Does not
	Always	time	Sometimes	Rarely	Never	apply
Audio quality	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Cord	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Falling off	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Placement on body	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Talk button location	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Talk button size	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

19. Have you experienced other problems with your MIC?

\frown	
$\langle \rangle$	No
()	INO

O Yes

21. With your **EARPIECE**, have you experienced problems with:

		Most of the				Does not
	Always	time	Sometimes	Rarely	Never	apply
Audio quality	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Battery life	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Fit/falling out	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Volume	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Wireless (bluetooth pairing, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

22. Have you experienced other problems with your EARPIECE?

🔿 No

O Yes

24. With your **MDT/MDC (mobile data terminal/computer)**, have you experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
CAD (computer- aided dispatch)	\bigcirc	ightarrow	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Glare	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Lack of portability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Mapping/navigation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Logins/passwords	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Size/bulkiness	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Using while driving	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

25. Have you experienced other problems with your MDT/MDC?

- 🔿 No
- O Yes

27. With your BODY CAMERA, have you experienced problems with:

		Most of the				Does not
	Always	time	Sometimes	Rarely	Never	apply
Battery life	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Falls off easily	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Placement/location on body	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Size/bulkiness	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Turning on/off	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Using/tagging recorded video data	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Video quality	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Video transfer/storage	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

28. Have you experienced other problems with your BODY CAMERA?

🔿 No

O Yes

30. With your **SMARTPHONE** (work-issued or personal), have you experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Battery life	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Coverage/dead zones	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Data plans/data limits	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Dropped calls	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Glare	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Logging in (PINS, passwords, usernames, etc.)	\bigcirc	\bigcirc	\bigcirc	ightarrow	\bigcirc	0
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Permission/access to apps	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Policies about usage	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Subpoena possibility for personal smartphone	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Subsidy for personal smartphone (insufficient or no subsidy)	\bigcirc	•	\bigcirc	0	•	•

31. Have you experienced other problems with your SMARTPHONE (work-issued
or personal)?
○ No
Yes

33. With your **FINGERPRINT SCANNER**, have you experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Battery life	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Capture of fingerprints	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Glare	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Logging in (PINS, passwords, usernames, etc.)	lacksquare	ightarrow	\bigcirc	ightarrow	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	ightarrow
Quality of fingerprints	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Receiving fingerprint results quickly	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Sending fingerprints	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Size/bulkiness	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

34. Have you experienced other problems with your **FINGERPRINT SCANNER**?

🔿 No

Yes

36. With your **LAPTOP**, have you ever experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Battery life	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Glare	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Internet connection	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Logins/passwords	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Power source/recharging issues	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	•
Size/bulkiness	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Software crashes	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Software updates/upgrades	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Weight	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

37. Have you experienced other problems with your **LAPTOP?**

🔿 No

O Yes

39. With your LICENSE PLATE READER, have you experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Ability to accurately read plates	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	lacksquare
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Power source	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Range	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Receiving results quickly	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	0

40. Have you experienced other problems with your LICENSE PLATE READER?

\bigcap	NZ	•
	140	

O Yes

42. With your **DESKTOP COMPUTER**, have you ever experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Internet connection	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Logins/passwords	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Software crashes	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Software updates/upgrades	0	\bigcirc	0	\bigcirc	0	\bigcirc

43. Have you experienced other problems with your **DESKTOP COMPUTER**?

🔵 No

O Yes

45. With your **TABLET**, have you experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Battery life	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Durability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Glare	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Internet connection	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interoperability	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Logins/passwords	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Outdated/old	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Price: too expensive	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Report writing	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Size/bulkiness	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Touchscreen	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Weight	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

46. Have you experienced other problems with your **TABLET**?

🔿 No

O Yes

Use of technology in a MAJOR DISASTER.

The next set of questions focus on your use of technology during major disasters, natural or man-made.

48. Have you ever worked in public safety during a **MAJOR DISASTER**, something that disrupts your day-to-day operations? For example, an earthquake, hurricane, active shooter situation, or riot.

🔿 No

O Yes

49. Have you ever worked in public safety during a **LARGE**, **PLANNED EVENT**? For example, a concert, football game, or parade.

🔵 No

🔵 Yes

50. Think about the technology you use during a **MAJOR DISASTER**. How similar or different is it than the technology you use during your day-to-day work?

- I use mostly the same technology.
- 🔿 I use some of the same technology, with some specialized technology.
- I use very different technology.

51. Please list the **specialized** technology you use during a **MAJOR DISASTER**.

52. Please list the most important technology you use during a MAJOR DISASTER.

53. In addition to the technology you use day-to-day, which of the following do you think would be helpful during a **MAJOR DISASTER**? Check all that apply.

Deployable communication technology	(such as cell towers on wheels)
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- Drones
- Helicopters
- Mobile command centers
- Remote sensing (by aircraft or satellite)
- Robots

Other (please specify)

Use of technology in a LARGE, PLANNED EVENT.

The next set of questions focus on your use of technology during a LARGE, PLANNED EVENT.

54. Think about the technology you use during a LARGE, PLANNED EVENT. How similar or different is it to the technology you use during your day-to-day work?

I use mostly the same technology.

I use some of the same technology, with some specialized technology.

I use different technology.

55. Please list the **specialized** technology you use during a **LARGE, PLANNED EVENT**.

56. Please list the **most important** technology you use during a **LARGE, PLANNED EVENT**.

VR (Virtual Reality)

These questions ask you to think about the use of VR (virtual reality) in your work.

58. Do you think VR (virtual reality) would be useful for training in your work?

- 🔿 No
- Yes
- Not sure

59. Do you see VR as useful in other ways for your work?

- 🔵 No
- Yes
- Not sure

60. Please explain.

61. Is there anything else you would like to tell us about your experience with technology in your work?

Thank you for taking the survey!