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 in public safety today;
- 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.

This collection of information contains Paperwork Reduction Act (PRA) requirements approved by the Office of Management and Budget (OMB). Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number. Public reporting burden for this collection is estimated to be 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the National Institute of Standards and Technology, Attn: Mary Theofanos, maryt@nist.gov, (301) 975-5889. OMB Control No. 0693-0043, Expiration Date: 12-31-2018.

	rs have you been wanted			otal years of service
2. Do you consid	er the area you cu	rrently work in	as MAINLY:	
Rural				
Suburban				
Tribal				
Urban				
different zip cod	e areas; please list	ork. (We know to the zip code w	_	
different zip cod	e areas; please list		_	
different zip cod actually located	e areas; please list		_	
different zip cod actually located	e areas; please list		_	
different zip cod actually located 4. State where y	e areas; please list		_	
different zip cod actually located 4. State where years	e areas; please list		_	
different zip cod actually located 4. State where ye 5. Sex	e areas; please list		_	
4. State where y 5. Sex Male	e areas; please list		_	
different zip cod actually located 4. State where y 5. Sex Male	e areas; please list		_	

7.	Do you MAINLY work in:	
	911/Dispatch	
) EMS	
	Fire Fighting	
	Law Enforcement	
8.	Are you:	
	Career	
	Volunteer	
9.	What is your title?	
10). What is your jurisdictional level?	
) Local	
	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.

11. Think about your **DAY-TO-DAY** work and your use of the following **devices**. (We know SCBAs are vital to firefighter work, however this list focuses specifically on communication technology and not on things like masks, respirators, etc.)

	Use a lot	Use occasionally	Have but do not use	Do not have
Computer: desktop				
Computer: laptop				
Flip phone: work issued	0	0	0	
MDT/MDC (mobile data terminal/computer)				
Mic: wireless				
Mic: with cord				
Radio: in-vehicle				
Radio: portable				
Smartphone: personal		0	0	
Smartphone: work issued		\bigcirc	\bigcirc	
Tablet				
TIC (thermal imaging camera)				\bigcirc
Other (please specify)				

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

**	Computer: desktop
**	♦ Computer: laptop
**	♦ Flip phone: work-issued
**	DATIMOC (mobile data terminal/computer)
**	♦ Smartphone
**	♦ Tablet
**	♦ TIC (thermal imaging camera)

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

	Always use	Use a lot	Use occasionally	Have but do not use	Do not have
CAD (compter- aided dispatch)	0		0		0
Email	\bigcirc	\bigcirc	\bigcirc		
EPCR (electronic patient care reporting)					
ERG (emergency response guide)					
ERG (emergency response guide)					
Hazmat (guides or operating procedures)	\bigcirc				\bigcirc
Hydrant location					
Language translation		\bigcirc			
Mapping/driving directions					
Pre-plan software			\bigcirc		
RMS (records management system)					
Report writing software					
Traffic	0	0	0		
Weather					
Other (please specify)					

14.	Of the following	g applications/software,	rank the 5 t	that <mark>are mos</mark> t	t useful in
you	ır DAY-TO-DAY	work, with 1 being the m	ost useful.		

0-9 0-0 0-0	CAD (computer-aided dispatch)
0 0 0 0 0 0	♦ Email
0 0 0 0 0 0	♦ EPCR (electronic patient care reporting)
0 0 0 0 0 0	♦ ERG (emergency response guide)
0 0 0 0 0 0 0 0	♦ First responder vehicle tracking
0 0 0 0 0 0 0 0	♦ Hazmat (response guides or operating procedures)
0-0 0-0 0-0	♦ Hydrant location
0-0 0-0 0-0	♦ Language translation
0-0 0-0 0-0	♦ Mapping/driving directions
0-0 0-0 0-0	♦ Pre-plan software
0 0 0 0 0 0	RMS (records management system)
0-0 0-0 0-0	Report writing software
0 0 0 0 0 0	♦ Traffic
0-0 0-0 0-0	♦ Weather

1	neck all that apply
	AR (augmented reality)
	AVL (automatic vehicle location)
	Drones
	Health/vitals monitoring of first responders
	Health/vitals monitoring of patients
	HUDs (heads-up displays)
	Indoor mapping
	One login (instead of many different usernames and passwords)
	Real-time on-scene video
	Remote sensing (by aircraft or satellite)
	Robots
	Self driving vehicles
	Smart buildings
	Smart glasses
	Smart watch
	Voice controls for hands-free input
	Voice recognition for identification
	VR (virtual reality)
	None of the above
Otl	her (please specify)

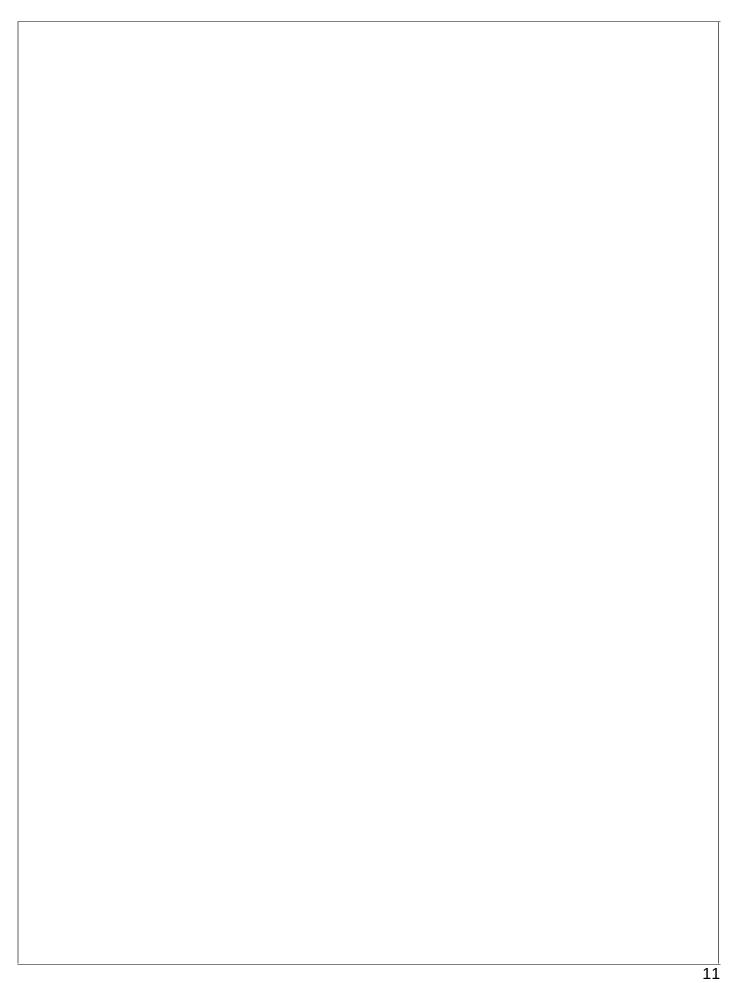
Problems with your Day-TO-DAY devices

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

16. With your RADIO, have you experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Audio quality						
Battery life						
Channel switching						
Cord						
Coverage/dead zones						0
Durability						
Interoperability						
Outdated/old						
Price: too expensive						
Radio discipline/etiquette				\bigcirc		
Size/bulkiness			0			

17. Have you experienced other problems with your RADIO?
○ No
Yes
18. Please list.



19. With your MIC, have you experienced problems with:

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

20. Have you experienced other problems with your MIC?

	No				
	Yes				
21.	Please lis	st.			

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

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Audio quality						
Battery life						
Durability						
Fit/falling out						
Outdated/old						
Price: too expensive						
Volume						
Wireless (bluetooth pairing, etc.)			\bigcirc			\bigcirc
3. Have you expe	rienced o	ther proble	ems with you	ur EARPIE (CE?	
No						
Yes						
4. Please list.						

25. 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)						
Durability						
Glare						
Interoperability						
Lack of portability						
Mapping/navigation						
Logins/passwords						
Outdated/old						
Price: too expensive						
Size/bulkiness						
Using while driving						

	ave you experienced other problems with your MDT/MDC?
O No	
Ye	s
27. Pl	ease list.

28. 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						
Coverage/dead zones						
Data plans/data limits						
Dropped calls						
Durability						
Glare						
Logging in (PINS, passwords, usernames, etc.)						
Outdated/old						
Permission/access to apps						
Policies about usage						
Price: too expensive			0			
Subpoena possibility for personal smartphone	\bigcirc					
Subsidy for personal smartphone (insufficient or no subsidy)						

29. Have you expe	erienced other prol	olems with your S	MARTPHONE	(work-issued
or personal)?				
○ No				
Yes				
30. Please list.				

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

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

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

\bigcirc	INO
	Yes

33. Please list.		

34. With your TABLET, have you experienced problems with:

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

35. Have you	ı experienced	other	problems	with your	TABLET?
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	No		
	Yes		
36.	. Please list.		

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

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

38. Have you ex	xperienced othe	er problems with	n your DESKTO l	P COMPUTER?
○ No				

Yes

39. Please list.

40. With your **TIC** (thermal imaging camera), have you experienced problems with:

	Always	Most of the time	Sometimes	Rarely	Never	Does not apply
Accuracy of information						
Battery						
Durability						
Outdated/old						
Price: too expensive						
Size/bulkiness						
Small screen						

41	. Have you experienced other problems with your TIC?
	No
	Yes
42	. Please list.

Use of technology in a MAJOR DISASTER	Use	of	techno	logy	in	a	MAJ	OR	DISA	ST	ER
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osc of teelmotogy in a MAOON DISASTEN.
The next set of questions focus on your use of technology during major disasters, natural or man-made.
43. Have you ever worked in public safety during a MAJOR DISASTER, something that disrupts your day-to-day operations? For example, an earthquake, hurricane, wildfire or a FEMA type 1 incident. No Yes
 44. Have you ever worked in public safety during a LARGE, PLANNED EVENT? For example, a concert, football game, or parade. No Yes

45. 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. 46. Please list the **specialized** technology you use during a **MAJOR DISASTER**. 47. Please list the most important technology you use during a MAJOR DISASTER. 48. 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) **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.

49. 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.
50. Please list the specialized technology you use during a LARGE , PLANNED
EVENT.
51. Please list the most important technology you use during a LARGE, PLANNED
EVENT.

	52. In addition to the technology you use day-to-day, which of the following do you
t	hink would be helpful during a LARGE, PLANNED EVENT?
	Deployable communication technology (such as cell towers on wheels)
	Drones
	Helicopters
	Mobile command centers
	Remote sensing (by aircraft or satellite)
	Robots
	Other (please specify)

VR (Virtual Reality)
These questions ask you to think about the use of VR (virtual reality) in your work.
53. Do you think VR (virtual reality) would be useful for training in your work?
○ No
○ Yes
O Not sure
54. Do you see VR as useful in other ways for your work? No
○ Yes
O Not sure
55. Please explain.

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56. Is there anythir	ng else you would lik	e to tell us about you	ır experience with
technology in your	work?		

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Thank you for taking the survey!				
Thank you for taking the survey:				