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#### November 2018, NCJ 251775

# **Body-Worn Cameras in Law Enforcement Agencies, 2016**

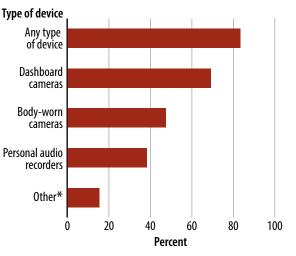
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n 2016, nearly half (47%) of the 15,328 general-purpose law enforcement agencies in the United States had acquired body-worn cameras (BWCs) (figure 1). By comparison, 69% had dashboard cameras and 38% had personal audio recorders.

Findings are based on the 2016 Law Enforcement Management and Administrative Statistics -Body-Worn Camera Supplement (LEMAS-BWCS) from the Bureau of Justice Statistics (BJS). The LEMAS-BWCS was administered for the first time in 2016. Data were collected from a nationally representative sample of general-purpose law enforcement agencies (i.e., municipal, county, and regional police departments; sheriffs' offices with law enforcement duties; and primary state and highway patrol agencies). The LEMAS-BWCS excluded federal agencies, sheriffs' offices with only jail or court duties, and special-purpose agencies such as transit police and campus police.

#### **FIGURE 1**

General-purpose law enforcement agencies with recording devices, by type of device, 2016



Note: See appendix table 3 for estimates and standard errors. \*Includes devices for interview rooms, building surveillance, and other agency-specified responses.

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

### HIGHLIGHTS

- In 2016, 47% of general-purpose law enforcement agencies in the United States had acquired body-worn cameras (BWCs).
- The main reasons (about 80% each) that local police and sheriffs' offices had acquired BWCs were to improve officer safety, increase evidence quality, reduce civilian complaints, and reduce agency liability.
- Among agencies that had acquired BWCs, 60% of local police departments and 49% of sheriffs' offices had fully deployed their BWCs.
- About 86% of general-purpose law enforcement agencies that had acquired BWCs had a formal BWC policy.
- About 60% of law enforcement agencies allowed the officer who made the recording to have direct access to the footage.
- Among agencies that had not acquired BWCs, the primary reason given was costs, including video storage/disposal costs (77%), hardware costs (74%), and ongoing maintenance/support costs (73%).

About 95% of agencies that had acquired BWCs had placed at least one camera in service. Among local police departments, 48% had acquired BWCs and 45% had at least started deploying them (table 1). About 46% of sheriffs' offices had acquired BWCs and 44% had placed BWCs in service. About 27% of primary state police agencies had acquired and at least started deploying BWCs.

About 80% of the largest local police departments (employing 500 or more full-time sworn officers) had acquired BWCs, and 70% had at least started placing the BWCs service. In comparison, about 31% of local police departments employing only part-time sworn officers had acquired BWCs and had placed BWCs in service.

Among the largest sheriffs' offices (those with 500 or more full-time sworn officers), about 58% had acquired BWCs and 53% had at least started deploying them. About 44% of the smallest sheriffs' offices (those with 1 to 24 full-time sworn officers) had acquired BWCs and had placed BWCs in service.

#### TABLE 1

## Agencies that had acquired and started using body-worn cameras, by agency type and size, 2016

cameras, by agency	type and siz	2010	
Type and size of agency	Number of agencies	Acquired BWCs <sup>a</sup>	At least some BWCs in service <sup>b</sup>
Total	15,328	47.4%	44.7%
Local police	12,267	47.7%	45.1%
1,000 or more	45	80.5	78.0
500-999	53	79.6	63.3
250-499	97	62.9	60.7
100-249	470	55.7	52.7
50–99	845	42.4	39.3
25–49	1,614	41.6	39.7
10–24	2,920	47.6	44.6
5–9	2,435	51.3	48.6
1–4	3,530	48.1	45.8
0 <sup>c</sup>	259	30.7	30.7
Sheriff's office	3,012	46.4%	43.7%
1,000 or more	18	66.7	60.0
500-999	28	52.2	47.8
250-499	95	55.9	50.8
100-249	223	46.4	40.9
50-99	356	47.8	43.0
25–49	624	48.6	45.9
10–24	911	44.5	43.6
5–9	554	44.6	40.7
1–4	203	44.1	44.1
Primary state police	49	26.5%	26.5%

Note: Details may not sum to totals due to rounding. See appendix table 4 for standard errors.

<sup>a</sup>Agency responded "agency has acquired in any form (including testing)" body-worn cameras.

<sup>b</sup>Agency reported at least one body-worn camera that was currently in service or being used in the field.

<sup>C</sup>Includes agencies with no full-time sworn officers and only part-time sworn officers.

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### Characteristics of body-worn cameras

Body-worn cameras (BWCs) are small, transportable devices worn by officers to record interactions with the public. The cameras can be attached to an officer's clothing, sunglasses, or helmet. BWCs can produce video and audio recordings. The footage is saved on a local storage device or uploaded to a web-based storage platform. Some BWCs can upload video while in the field. Unlike dashboard cameras, BWCs are not fixed to law enforcement vehicles and allow for video recording wherever the officer is. According to the Bureau of Justice Assistance, BWCs vary by a number of characteristics, "including battery-life length, event marking, weight, camera placement, camera size, quality of video, vision type (day or day/ night), field of view, playback capacity, charge time, pre-event recording, law enforcement radio interface, video and audio format, video safeguards, download capability, and cost."<sup>1</sup>

<sup>1</sup>Bureau of Justice Assistance. (2015). *Body-worn Camera Toolkit: FAQs*. Washington, DC: U.S. Department of Justice.

## Among general-purpose agencies with BWCs, about 119,000 BWCs were in service

In 2016, there were nearly 415,000 full-time sworn officers in those general-purpose agencies that had acquired BWCs (table 2). Within these agencies, there were about 119,000 BWCs currently in service (29 BWCs per 100 full-time sworn officers). Agencies with BWCs reported that an additional 86,000 BWCs would be deployed within the next 12 months (21 BWCs per 100 full-time sworn officers).

In local police departments, there were about 90,000 BWCs in service (30 BWCs per 100 full-time sworn officers) and another 68,000 slated to be deployed in the next 12 months (22 BWCs per 100 full-time sworn officers). In 2016, sheriffs' offices had more than 28,000 BWCs in service (29 BWCs per 100 full-time sworn officers) and planned to deploy another 17,000 BWCs within the next 12 months (18 BWCs per 100 fulltime sworn officers). Among the 13 primary state police agencies with BWCs, about 2,700 BWCs were either in service or were slated to be in the next 12 months.

#### More than 8 in 10 (82%) general-purpose law enforcement agencies with BWCs acquired BWCs in part to improve officer safety

General-purpose law enforcement agencies gave a variety of reasons for having acquired BWCs. The most common reasons given (about 80% each) were to improve officer safety, improve evidence quality, reduce civilian complaints, and reduce agency liability (table 3). Other

#### TABLE 2

#### Full-time sworn officers with body-worn cameras, by agency type, 2016

	Number of full-time	BW	Cs in service	BWCs to be deployed within the next 12 months			
Type of agency	sworn officers in agencies with BWCs	Number	BWCs per 100 full-time sworn officers*	Number	BWCs per 100 full-time sworn officers*		
Overall	414,504	119,399	29	86,377	21		
Local police	304,800	90,149	30	67,535	22		
Sheriff's office	96,262	28,368	29	17,035	18		
Primary state	13,442	882	7	1,807	13		

Note: See appendix table 5 for standard errors.

\*Number of body-worn cameras (BWCs) divided by the total number of full-time sworn officers in agencies that have acquired BWCs, times 100. Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics Body Worn Camera Supplement, 2016.

#### TABLE 3

#### Reasons why body-worn cameras were acquired, by agency type and size, 2016

						-					
				Local police	5			S	heriff's offi	ce	
Reason	Agencies with BWCs <sup>a</sup>	Total	500 or more	100-499	25-99	0–24 <sup>b</sup>	Total	500 or more	100–499	25-99	1–24
Improve officer safety	81.6%	82.1%	72.2%	75.0%	77.5%	83.8%	80.3%	72.7%	73.0%	79.6%	82.6%
Reduce/resolve civilian complaints	80.7	81.4	80.6	77.1	87.6	80.3	78.5	72.7	79.1	80.4	77.4
Improve evidence quality	78.6	77.9	66.7	68.9	74.7	79.5	81.5	72.7	73.0	77.6	86.2
Reduce agency liability	77.6	78.6	72.2	68.7	77.7	79.6	74.1	63.6	69.9	71.5	77.0
Improve officer/agency accountability	73.5	73.5	80.6	80.4	76.0	72.3	73.6	77.3	74.5	74.6	72.7
Make cases more prosecutable	69.6	68.6	61.1	56.8	62.8	71.0	73.8	40.9!	58.9	69.5	80.9
Improve officer professionalism	60.1	60.3	66.7	64.3	62.8	59.4	59.6	68.2	52.8	59.5	60.9
Improve community perceptions	56.7	58.2	75.0	71.3	67.2	54.9	50.3	68.2	53.0	61.3	42.1
Simplify incident review	50.3	49.9	38.9	38.1	50.0	50.9	52.1	22.7 !	37.0	46.0	60.3
Improve training	48.8	48.9	61.1	59.5	55.5	46.3	48.6	50.0	58.9	48.9	46.2
Reduce use of force	33.8	34.2	62.5	45.0	36.7	32.3	32.8	50.0	41.6	35.4	28.7
Strengthen police leadership	24.5	25.1	23.6	19.9	25.8	25.3	22.5	18.2!	18.6	25.3	21.7
Pilot testing only	17.3	17.3	45.8	35.2	22.4	14.3	16.9	40.9!	30.1	20.5	10.9
Other <sup>c</sup>	15.5	15.7	26.4	19.3	18.2	14.6	14.3	13.6!	17.9	14.0	13.8
Number of agencies with BWCs	7,259	5,847	78	322	1,030	4,416	1,399	26	157	473	742

Note: Details do not sum to 100% due to non-mutually exclusive categories. The categories of reasons given were response options provided on the questionnaire, and agencies were asked to select all that apply. See appendix table 6 for standard errors.

! Interpret with caution. Too few cases to provide a reliable rate, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes the 13 primary state police agencies that acquired body-worn cameras (BWCs). These had too few cases to show individual results.

<sup>b</sup>Includes agencies with no full-time sworn officers and only part-time sworn officers.

<sup>C</sup>Includes to receive BWC funding, to relieve external pressure, to supplement or replace dashboard cameras, to increase citizen accountability, because BWCs were donated or free, and other agency-specified responses.

reasons commonly given were to improve accountability (73%), make cases more prosecutable (70%), improve officer professionalism (60%), and improve community perceptions (57%). About 34% acquired BWCs in part to reduce use of force.

Among local police departments, improving officer safety (82%), reducing or resolving civilian complaints (81%), reducing agency liability (79%), and improving evidence quality (78%) were the most common reasons reported for acquiring BWCs. About 63% of the largest local police departments (500 or more full-time sworn officers) acquired BWCs partly to reduce use of force, compared to 32% of the smallest (0 to 24 full-time sworn officers) local police departments.

About four in five sheriffs' offices that had acquired BWCs reported improving evidence quality (82%), improving officer safety (80%), and reducing civilian complaints (79%) as reasons for acquiring the cameras. About 81% of the smallest sheriffs' offices (1 to 24 fulltime sworn officers) had acquired BWCs in part to make cases more prosecutable. Eight of the 13 primary state police agencies with BWCs had acquired the cameras for pilot testing only (not shown).

# About 57% of general-purpose law enforcement agencies with BWCs had fully deployed them to all intended personnel

In 2016, more than half (57%) of general-purpose law enforcement agencies that had acquired BWCs had fully deployed them to all intended personnel (table 4). About 60% of local police departments that had acquired BWCs had fully deployed them to all intended personnel, with about two-fifths of local agencies having either partially deployed their BWCs (19%) or having deployed them on a pilot basis (18%). Sixty-four percent of local police departments with BWCs and 0 to 24 full-time sworn officers (some local agencies only had part-time sworn officers) had their BWCs fully deployed, while 85% of the largest local police departments (500 or more full-time sworn officers) had either partially deployed their BWCs (43%) or had deployed them on a pilot basis (42%).

Nearly half (49%) of sheriffs' offices had fully deployed their BWCs. About 62% of the smallest sheriffs' offices (1 to 24 full-time sworn officers) had fully deployed their BWCs, while about 46% of the largest sheriffs' offices (500 or more full-time sworn officers) had deployed them on a pilot basis.

# **TABLE 4**Deployment of body-worn cameras among agencies that had acquired BWCs,by agency type and size, 2016

Type and size of agency	Full <sup>a</sup>	Partial <sup>b</sup>	Exploratory/ pilot	Unsure/ don't know <sup>c</sup>	Missing <sup>c</sup>
Total <sup>d</sup>	57.3%	20.4%	18.7%	3.0%	0.6%
Local police	59.5%	18.8%	18.2%	3.0%	0.6%
500 or more	12.5 !	43.1	41.7	2.8!	0.0
100-499	28.1	32.7	37.8	1.3 !	0.0
25–99	53.1	19.5	24.9	1.7 !	0.8
0-24 <sup>e</sup>	64.1	17.2	14.8	3.4	0.6
Sheriff's office	48.8%	27.1%	20.2%	3.3%	0.7%
500 or more	18.2 !	36.4 !	45.5	0.0	0.0
100-499	21.7	38.0	36.2	3.3 !	0.8
25–99	38.5	35.8	20.7	4.2 !	0.8
1-24	62.2	18.8	15.5	2.9!	0.6

Note: Includes all agencies that had acquired body-worn cameras (BWCs; 7,259). See appendix table 7 for standard errors.

! Interpret with caution. These had too few cases to provide a reliable rate, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes agencies that reported "full deployment to all intended personnel."

<sup>b</sup>Includes agencies that reported "partial deployment" or "complete deployment for some assignments/partial deployment in others."

<sup>C</sup>Among the 7,259 agencies that had acquired BWCs, 0.6% (43 agencies) did not answer the question about whether the BWCs had been deployed, whereas 3.0% (220 agencies) answered that they were unsure or didn't know if the BWCs had been deployed.

<sup>d</sup>Includes the 13 primary state police agencies that acquired BWCs. These had too few cases to show individual results.

<sup>e</sup>Includes agencies with no full-time sworn officers and only part-time sworn officers.

#### Among general-purpose law enforcement agencies that had not fully deployed their BWCs, 63% reported it was due to insufficient funding

Insufficient funding was the most common reason all three types of law enforcement agencies gave for not fully deploying their acquired BWCs to all intended personnel. Among general-purpose law enforcement agencies that had not fully deployed BWCs, about 61% of local police departments and 71% of sheriffs' offices stated they had insufficient funding for fully deploying cameras to all intended personnel (see appendix table 1). Technology challenges, such as lack of data storage and the inability to acquire sufficient hardware, were reported as reasons for not having fully deployed BWCs by about half of local police departments (50%) and sheriffs' offices (51%).

#### About 86% of general-purpose law enforcement agencies that had acquired BWCs had a formal BWC policy

In 2016, about 86% of all general-purpose law enforcement agencies that had acquired BWCs had a formal policy or were in the process of developing a policy on the use of BWCs (table 5). About 86% of local departments and 84% of sheriffs' offices that had acquired BWCs had a formal policy or a draft form. Of the 13 primary state police agencies that had acquired BWCs, 12 had a formal policy or one in draft form (not shown).

Among general-purpose law enforcement agencies with BWCs and a BWC policy, more than four in five included guidelines on what specific events to record (84%) and on video transfer, storage, and disposal (87%). About 81% of local departments and 76% of sheriffs' offices included the frequency for video upload and offload in their BWC policy.

TABLE 5

#### Policy topics related to body-worn cameras, by agency type and size, 2016

				Among agencies with a BWC policy, percent that covered—							
Type and size of agency	Number with BWCs	Percent with BWC policy <sup>a</sup>	Number with BWC policy	Video transfer, storage, or disposal	Specific events to record	Video upload/ offload frequency	Routine supervisor review of footage	Officer review of footage	Public release of raw (unredacted) footage	Informing citizens they are being recorded	Content that must be redacted
Total <sup>b</sup>	7,259	85.9%	6,235	87.2%	84.3%	79.8%	76.7%	64.2%	54.0%	45.2%	40.5%
Local police	5,847	86.2%	5,042	87.7%	84.9%	80.7%	78.0%	65.4%	54.8%	47.1%	41.6%
500 or more	78	97.2	76	92.9	97.1	87.1	87.1	91.4	65.7	68.6	38.6
100-499	322	95.3	307	95.8	95.0	89.0	87.3	84.4	67.4	66.7	49.3
25-99	1,030	91.4	942	94.3	92.5	91.5	85.8	81.7	62.6	59.5	49.1
0-24 <sup>c</sup>	4,416	84.2	3,717	85.3	81.8	77.2	75.1	59.2	51.6	41.9	39.1
Sheriff's office	1,399	84.4%	1,181	85.2%	82.1%	76.4%	71.0%	58.7%	50.4%	37.1%	35.8%
500 or more	26	95.5	25	90.5	95.2	90.5	90.5	76.2	52.4	71.4	33.3!
100–499	157	89.0	140	92.8	84.8	86.8	84.2	71.9	61.3	46.7	44.4
25-99	473	87.8	415	86.9	82.3	77.2	66.5	61.4	48.7	35.4	31.4
1–24	742	81.0	601	82.0	80.7	72.8	70.1	53.1	48.9	34.5	37.0

Note: Based on number and percent of agencies. Details do not sum to totals due to non-mutually exclusive categories. Policy categories were response options provided on the questionnaire, and agencies were asked to select all that apply. See appendix table 8 for standard errors.

! Interpret with caution. Too few cases to provide a reliable rate, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes agencies that have a formal policy (62.4%) or one under development (23.5%).

<sup>b</sup>Includes the 13 primary state police agencies that acquired body-worn cameras (BWCs). These had too few cases to show individual results.

<sup>C</sup>Includes agencies with no full-time sworn officers and only part-time sworn officers.

More than 45% of these agencies' BWC policies included informing citizens when they are being recorded. BWC policies in about 47% of local police departments and 37% of sheriffs' offices included informing citizens when they are being recorded.

#### 9 in 10 general-purpose law enforcement agencies with BWC policies on what events to record required officers to turn on their BWCs during traffic stops

Among general-purpose law enforcement agencies with BWCs, a formal BWC policy even in draft form, and a policy including what events to record, 93% required BWCs to record traffic stops (table 6). More than 90% of local police departments and sheriffs' offices required officers with BWCs to record traffic stops.

About 85% of general-purpose law enforcement agencies with BWCs that covered what to record in their BWC policies required officers to record officer-initiated citizen contacts, and the same percentage required officers to record the execution of arrests or search warrants. Officers were required to record the transporting of offenders in about 53% of local police departments and 39% of sheriffs' offices.

#### TABLE 6

## Events that body-worn cameras are required to record, by agency type, 2016

- , , .			
Type of event	Total <sup>a</sup>	Local police	Sheriff's office
Traffic stops	92.9%	93.2%	91.9%
Officer-initiated citizen contacts	84.5	84.8	83.6
Executing arrest/search warrants	84.5	84.6	84.8
Firearms deployments	84.0	85.0	79.7
Responding to routine service calls	78.9	79.4	77.0
Criminal investigations	71.9	72.8	67.9
Public-order policing	53.7	53.9	53.4
Special operations	53.5	54.0	51.9
Transporting offenders	50.1	52.6	39.1
Policing public events	26.5	27.0	24.5
Other <sup>b</sup>	9.6	9.5	9.9
Number of agencies with BWCs and a policy covering events to record <sup>c</sup>	5,259	4,280	969

Note: Details do not sum to 100% due to non-mutually exclusive categories. Event categories were response options provided on the questionnaire, and agencies were asked to select all that apply. See appendix table 9 for standard errors.

<sup>a</sup>Includes the 13 primary state police agencies that acquired body-worn cameras (BWCs). These had too few cases to show individual results.

<sup>b</sup>Includes any situation, officer's discretion, emergency responses, and other agency-specified responses.

<sup>C</sup>Includes all agencies that have acquired BWCs, have a formal policy even in draft form which may or may not be in effect, and the BWC policy includes what events to record.

#### About 60% of general-purpose law enforcement agencies with BWCs allowed the officer who made the recording direct access to the video

More than four in five (88%) of general-purpose law enforcement agencies allowed the chief executive (such as the police chief, sheriff, or commissioner) to have direct access to the BWC video files without having to file a formal request (table 7). Almost 90% of local police departments allowed the chief executive to access the video files. Among sheriffs' offices, 84% of agencies with 1 to 24 full-time sworn officers and 75% with 500 or more officers allowed the sheriff to have direct access. About 60% of general-purpose law enforcement agencies allowed the officer who made the recording direct access to the video files without having to file a formal request. Among agencies with 500 or more full-time sworn officers, 86% of local police departments and 80% of sheriffs' offices allowed officers who made the recording to have direct access.

One in five (20%) general-purpose law enforcement agencies allowed the district attorney direct access to BWC footage. About 26% of sheriffs' offices and 18% of local police departments that had acquired BWCs allowed the district attorney to access BWC video footage without filing a formal request.

#### TABLE 7

#### Personnel with direct access to video produced by body-worn cameras, by agency type and size, 2016

					P	ersonnel v	vith direct acc	ess to video	)			
Type and size of agency	Number with BWCs in service	Chief executive <sup>a</sup>	Executive staff	Officer made recording	Supervisor of officer that made recording	Internal affairs	Head of information technology	District attorney's office	Other employed sworn officers	Other information technology staff	non-sworn	Other <sup>b</sup>
Total <sup>c</sup>	6,857	88.0%	60.9%	59.8%	57.2%	34.9%	24.1%	19.6%	19.1%	11.2%	8.1%	3.9%
Local police	5,529	89.7%	59.2%	59.1%	55.9%	34.9%	22.5%	18.0%	19.0%	10.6%	8.3%	4.1%
500 or more	68	85.7	84.1	85.7	84.1	90.5	66.7	38.1	36.5	54.0	22.2	19.0
100-499	306	85.4	84.4	76.5	74.7	79.3	46.9	18.8	24.2	28.4	14.3	9.6
25-99	972	90.8	89.9	65.2	76.5	70.0	44.3	17.4	17.3	21.4	13.2	4.7
0–24 <sup>d</sup>	4,182	89.8	49.9	55.9	49.2	22.6	14.9	17.8	18.7	6.1	6.5	3.4
Sheriff's office	1,315	81.3%	68.1%	62.8%	62.4%	34.6%	30.9%	26.5%	19.4%	13.2%	7.3%	3.1%
500 or more	24	75.0	75.0	80.0	80.0	75.0	60.0	30.0!	25.0!	45.0!	10.0!	5.0!
100-499	140	69.3	69.9	58.2	65.0	67.9	49.6	18.9	12.9	25.8	10.3	7.7 !
25-99	439	80.4	77.1	64.1	64.0	46.5	43.9	24.1	20.0	16.6	7.3!	4.5 !
1–24	712	84.4	62.0	62.3	60.2	19.4	18.3	29.2	20.2	7.6	6.6	1.2 !

Note: Data are based on number and percentage of agencies. Direct access is defined as having access to the files without filing a formal request. Details do not sum to totals due to non-mutually exclusive categories. Personnel categories were response options provided on the questionnaire, and agencies were asked to select all that apply. See appendix table 10 for standard errors.

! Interpret with caution. Too few cases to provide a reliable rate, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes police chiefs, sheriffs, or commissioners.

<sup>b</sup>Includes undetermined/pending, vendor staff, and other agency-specified responses.

<sup>C</sup>Includes the 13 primary state police agencies that acquired body-worn cameras (BWCs). These had too few cases to show individual results.

<sup>d</sup>Includes agencies with no full-time sworn officers and only part-time sworn officers.

#### Nearly one in five (18%) general-purpose law enforcement agencies with BWCs reported that the public had never requested video footage

In 2016, about 63% of general-purpose law enforcement agencies that had acquired BWCs had, on average, no public requests for video footage per month or had never received a request from the public to obtain video generated from BWCs (table 8).

About a fifth of agencies (21%) received an average of one to five requests from the public per month for BWC video footage. About 21% of local police departments and 19% of sheriffs' offices with BWCs received one to five such requests per month.

Of those agencies that had BWCs and at least one request on average per month, 75% reported it took less than 2 hours to produce video footage for the public. About 39% of local police departments said it took less than one hour on average to produce the video, while 41% of sheriffs' offices said it took an average of one to 2 hours to produce the video (not shown).

In 2016, among the general-purpose law enforcement agencies that had BWCs and averaged at least one public request per month, 41% had denied public access to BWC video footage (not shown). The most common reason cited was that the video was part of an ongoing investigation. More than 9 in 10 local police agencies (92%) and sheriffs' offices (99%) denied a public request citing this reason (not shown).

#### Concerns about privacy were the most common obstacle associated with using cameras or video in agencies with BWCs

In 2016, about a third (35%) of general-purpose law enforcement agencies that had acquired BWCs said privacy concerns were an obstacle to using cameras or the associated video (table 9). About 36% of local police departments and 28% of sheriffs' offices had concerns about privacy.

Greater costs than anticipated and concerns about procedures surrounding video storage were each obstacles for about a third of the local police departments and sheriffs' offices that had acquired BWCs.

#### TABLE 8

## Public-use footage requests for agencies with body-worn cameras, by agency type, 2016

Average times per month that public requests video footage	Total <sup>a</sup>	Local police	Sheriff's office
Never <sup>b</sup>	17.7%	18.0%	16.2%
0 <sup>c</sup>	44.8	44.9	44.6
1–5	20.8	21.1	19.4
6–10	1.7	1.8	1.5
11 or more	1.2	1.3	0.7
Unsure/unknown	10.9	10.2	13.5
Number of agencies with body-worn cameras	7,259	5,847	1,399

Note: Details may not sum to 100% due to missing data. See appendix table 11 for standard errors.

<sup>a</sup>Includes the 13 primary state police agencies that acquired body-worn cameras. These had too few cases to show individual results.

<sup>b</sup>These agencies reported that the public has never requested video generated by BWCs.

<sup>C</sup>These agencies reported an average of zero requests per month. (For example, they may have received only one request per year.) Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### TABLE 9

## Obstacles encountered with using body-worn cameras or with footage, by agency type, 2016

Type of obstacle	Total <sup>a</sup>	Local police	Sheriff's office
Privacy	34.7%	36.2%	28.1%
Video storage procedures	33.8	33.7	34.1
Costs were greater than expected	32.5	32.7	31.4
Technical difficulties	21.0	20.6	22.5
Liability	20.7	21.6	16.8
Burden of requests for footage from public/agency	20.2	20.6	18.3
Security of information contained in video	20.0	20.1	19.4
Lack of support <sup>b</sup>	8.8	8.9	8.2
Other <sup>c</sup>	11.5	11.4	11.8
Unsure/unknown	19.4	19.1	20.7
Number of agencies with body-worn cameras	7,259	5,847	1,399

Note: See appendix table 12 for standard errors.

<sup>a</sup>Includes the 13 primary state police agencies that acquired body-worn cameras. These had too few cases to show individual results.

<sup>b</sup>Includes lack of support by officer, public, or officer labor union/ other organization.

<sup>C</sup>Includes cameras not in use yet, too early to tell, none, and other agency-specified responses.

#### Law enforcement agencies without body-worn cameras

In 2016, more than 8,000 general-purpose law enforcement agencies had not acquired body-worn cameras (BWCs) (table 10). In terms of other recording devices, 62% of these agencies had acquired dashboard cameras and 32% had acquired personal audio recorders. Almost all primary state police agencies without BWCs had dashboard cameras (94%), whereas 66% of sheriffs' offices and 61% of local police departments without BWCs had dashboard cameras. About 45% of primary state police agencies, 40% of sheriffs' offices, and 30% local and county police departments without BWCs had personal audio recorders.

About three-quarters of law enforcement agencies without BWCs reported video storage and hardware costs as primary reasons for not obtaining them

Most general-purpose law enforcement agencies without BWCs cited costs as a reason for not obtaining BWCs (table 11). Agencies were primarily concerned with costs associated with video storage or disposal (77%), hardware (74%), ongoing maintenance or support (73%), and public records requests or video redaction (68%).

About two in five (39%) law enforcement agencies without BWCs stated they had not acquired BWCs due to privacy concerns. About 41% of local police departments, 32% of sheriffs' offices, and 45% of primary state police agencies were concerned about privacy.

Overall, 13% of law enforcement agencies without BWCs stated there was no need for the technology. About 14% of local police departments, 11% of sheriffs' offices, and 36% of primary state police agencies felt there was no need for BWCs.

#### TABLE 11

Reasons for not having acquired body-worn cameras, by agency type, 2016

Reason	Total	Local police	Sheriff's office	Primary state police
Video storage/disposal costs	76.6%	76.7%	76.2%	71.0%
Hardware costs	74.4	73.3	78.7	64.5
Ongoing maintenance/ support costs	72.8	73.0	72.5	64.5
Public records request/video redaction costs	68.3	69.1	65.1	54.8
Privacy concerns	39.4	41.1	32.3	45.2
Training costs	38.8	38.6	39.6	29.0!
Video transfer/storage issues	31.6	31.0	33.4	48.4
Liability concerns	25.0	26.1	21.0	19.4!
Camera operation technical difficulties	18.3	18.1	19.2	19.4 !
No perceived need	13.3	13.9	10.8	35.5
Lack of support <sup>a</sup>	7.2	7.6	5.8	6.5 !
Other <sup>b</sup>	13.0	13.7	10.4	19.4!
Number of agencies without body-worn cameras	8,069	6,420	1,613	36

Note: Details do not sum to 100% due to non-mutually exclusive categories. The categories of reasons given were provided as response options on the questionnaire, and agencies were asked to select all that apply. See appendix table 14 for standard errors.

! Interpret with caution. Too few cases to provide a reliable rate, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes lack of community, agency leadership, or patrol officer support.

<sup>b</sup>Includes legislation/legal issues, need for improved technology, best practices unknown, currently acquiring, and other agency-specified responses.

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### TABLE 10

Alternative methods of recording police-citizen interactions for agencies without body-worn cameras, by agency type, 2016

		Al	Agencies without body-worn cameras					
Type of agency	Total	Dashboard cameras	Personal audio recorders	Other event- recording equipment*	Total	Dashboard cameras	Personal audio recorders	Other event- recording equipment*
Total	15,328	69.0%	38.1%	15.4%	8,069	62.1%	32.3%	15.8%
Local police	12,267	68.0	35.9	15.4	6,420	60.8	30.1	16.6
Sheriff's office	3,012	72.6	46.8	15.3	1,613	66.4	40.4	13.0
Primary state police	49	93.2	49.5	8.8 !	36	93.5	45.2	6.5 !

Note: See appendix table 13 for standard errors.

! Interpret with caution. Too few cases to provide a reliable rate, or coefficient of variation is greater than 50%.

\*Includes devices for interview rooms, building surveillance, and other agency-specified responses.

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

*Continued on next page* 

#### Law enforcement agencies without body-worn cameras (continued)

About 60% of agencies without BWCs expressed concern about initial acquisition costs

In 2016, about 33% of sheriffs' offices and 31% of local police departments without BWCs said they were likely to consider acquiring BWCs in the next year (not shown). Of these agencies, 48% anticipated acquiring BWCs within 12 months, and about 36% were unsure when they would acquire BWCs. About 19% of primary state police agencies without BWCs said they were likely to consider acquiring BWCs in the next year.

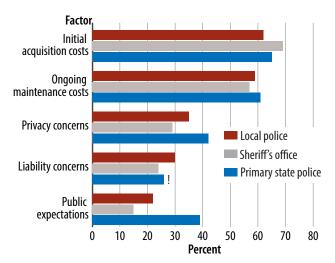
Among agencies without BWCs, the top factors determining whether they would explore using BWCs in the next year were costs, concerns about privacy and liability, and public expectations (figure 2). Initial acquisition and ongoing maintenance costs were each selected by about 60% of agencies as factors that would determine whether they explored BWCs in the next year. About 40% of primary state police agencies reported privacy concerns as a factor. (See appendix table 15 for the full list of factors and their estimates.)

About three-quarters (73%) of general-purpose law enforcement agencies without BWCs said officers would be supportive of adopting BWCs

In 2016, 73% of general-purpose law enforcement agencies without BWCs stated officers would be very or somewhat supportive of adopting BWCs (appendix table 2). Similarly, 71% of law enforcement agencies thought the community would be very or somewhat supportive of adopting BWCs. More than 80% of the largest (500 or more full-time sworn officers) local police departments and sheriffs' offices without BWCs said officers would be very or somewhat supportive of BWC adoption. About 65% of primary state police

#### **FIGURE 2**

Factors determining if an agency would explore body-worn cameras in the next year, by agency type, 2016



Note: See appendix table 15 for estimates and standard errors. ! Interpret with caution. Too few cases to provide a reliable rate, or coefficient of variation is greater than 50%. Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016. agencies thought officers would be supportive of BWC adoption. About 94% of the largest (500 or more full-time sworn officers) local police departments and 88% of the largest sheriffs' offices felt the community would be supportive. Sixty-eight percent of the smallest local police (0 to 24 full-time sworn officers) and sheriffs' offices (1 to 24 full-time sworn officers) said the community would be supportive of adoption.

### Methodology

#### Survey overview

Beginning in 2016, the Law Enforcement Management and Administrative Statistics (LEMAS) adopted a core and supplemental survey structure. The LEMAS core has been conducted every 3 to 4 years since 1987 with approximately 3,200 state, local, and county law enforcement agencies across the United States. Due to the breadth of the survey, detailed analysis of any specific law enforcement topic cannot be done with the LEMAS core. The LEMAS supplements are designed to fill this void by allowing for a more comprehensive examination on a key topic in law enforcement and are administered between core years. The 2016 Body-Worn Camera Supplement (LEMAS-BWCS) is the first supplement administered under the new structure.

Using a similar sampling procedure as the LEMAS core, the 2016 LEMAS-BWCS was administered to a nationally representative sample of approximately 5,000 state, county, and local general-purpose law enforcement agencies. The survey was administered to agencies regardless of whether they had body-worn cameras (BWCs) and contained items for agencies with and without BWCs. The survey examined reasons for acquiring and not acquiring BWCs, types of deployment, policies and procedures surrounding camera use and handling of the resulting video files, any obstacles to camera acquisition and use, levels of support for BWCs, and use of alternative recording equipment. The LEMAS-BWCS data collection period was May-October 2016. RTI International served as BJS's data collection agent.

#### Sampling procedure

The sample for the 2016 LEMAS-BWCS was derived from the 2016 Law Enforcement Agency Roster (LEAR) database. The LEAR was originally built from a variety of sources including, but not limited to, the 2008 and 2014 Census of State and Local Law Enforcement Agencies (CSLLEA) and the 2013 LEMAS Survey. The 2016 LEAR contains a census of 15,810 general-purpose law enforcement agencies, including 12,695 local and county police departments, 3,066 sheriffs' offices, and 49 primary state police departments.

Local police departments and sheriffs' offices were chosen for the 2016 LEMAS-BWCS using a stratified sample design based on the number of full- and part-time sworn officers (part-time sworn officers were counted as 0.5 full-time equivalents) and agency type. The sample was designed to be representative of all general-purpose state and local law enforcement agencies in the United States, with separate samples drawn for local police departments and sheriffs' offices. All 49 primary state law enforcement agencies (state police and highway patrol) were included, and all have 100 or more full-time sworn officers. (Hawaii does not have a primary state agency.) Agencies serving special jurisdictions (such as schools, airports, or parks) or with special enforcement responsibilities (such as conservation or alcohol laws) were considered out-of-scope for the LEMAS-BWCS.

The original 2016 LEMAS-BWCS sample included 5,063 state, local, and county law enforcement agencies. During the data collection phase, it was determined that 56 agencies did not engage in primary law enforcement activities, 13 had closed, 7 had one part-time sworn officer (a minimum of the equivalent of one full-time sworn officer was required for potential inclusion), 3 were temporarily without sworn staff, 7 were part of another agency or contracted services, and 1 was a duplicate agency. The final sample size was 4,976 and included 1,048 self-representing (SR) agencies with 100 or more sworn personnel and 3,928 nonself-representing (NSR) agencies employing fewer than 100 sworn.

The SR agencies included 640 local and county police departments, 359 sheriffs' offices, and 49 state law enforcement agencies. The NSR local police agencies and NSR sheriffs' offices were selected using a stratified random sample based on the number of sworn personnel and agency type. The total NSR local police sample included 3,067 agencies, and the NSR sheriffs' offices sample included 861 agencies.

#### Agency response rate

Of the 4,976 eligible agencies that received the 2016 LEMAS-BWCS, 3,928 agencies completed the survey, for a response rate of 79% (table 12). By size, the response rate for local police departments ranged from 92% for SR agencies to 61% for agencies with one officer. For sheriffs' offices, the response rate ranged from 83% for SR agencies to 50% for agencies with one officer. The response rate for primary state police agencies was approximately 90%.

Because the overall response rate was less than 80%, a non-response bias analysis was conducted. Effect sizes were calculated across agency type only, size only, size and type combined, and census region. Frame data were used for both respondents and non-respondents. The effect size compares sample members to respondents to detect if there is large deviation. Generally, effect sizes of less than 0.2 are considered small and do not indicate concern for non-response bias. All four effect sizes were smaller than 0.2, with the combination of size and type having the largest calculated effect size of 0.1.

An adjustment factor unique to each stratum was used to account for non-response and ineligible agencies. These non-response adjustments and the final resulting analytical weights are included in table 13. Five primary state police agencies did not complete the LEMAS-BWCS. Two of these agencies submitted an incomplete LEMAS-BWCS questionnaire but confirmed they had not acquired BWCs. The other three agencies that did not submit a LEMAS-BWCS completed the 2016 LEMAS core survey and indicated that they had no BWCs. Therefore, the 13 state agencies that reported having BWCs comprise all state police agencies with BWCs and did not require a non-response adjustment. The non-response adjustment was calculated for state police agencies without BWCs, and a final weight of 1.161 was applied to items that were asked only of agencies without BWCs.

#### TABLE 12

#### Response rate, by agency type and size, 2016

Type and size of agency	Response rate
Total	78.9%
Local police	79.6%
100 or more	91.7
50–99	84.4
25–49	85.9
10–24	81.4
5–9	73.0
2–4	72.6
1	60.8
Sheriff's office	76.6%
100 or more	83.0
50–99	77.1
25–49	79.3
10–24	71.8
5–9	72.8
2–4	69.6
1	50.0
Primary state police	89.8%

Note: Includes both full- and part-time officers, with a weight of 0.5 assigned to part-time officers.

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### Item non-response and imputation

Data were primarily collected through two different modes. Agencies had the choice to respond via web or mail in a paper survey. Additional data were captured through phone interviews for an abbreviated set of questions. Among the responding agencies, 86% completed via web, 12% via mail, and 2% by combination of web and phone.

For the 3,928 agencies completing the survey, overall item non-response rates due to omission or invalid data were less than 2% for the data elements used in this report, except for acquisition of dashboard cameras (3.9% missing), personal audio recorders (8.2%), and other recording equipment (16.8%). Missing data for a particular item were not removed from the denominator for analyses.

Imputation was used on only the number of full-time sworn officers. Cold-deck imputation was implemented using the value from the LEAR frame. Minor editing was completed for BWC acquisition based on subsequent questions (i.e., an agency marked that it had not acquired BWCs but answered the questions on acquisition, confirming it had).

#### **TABLE 13**

## Base weights, non-response adjustment factors, and final analytical weights, by agency type and size, 2016

Type of agency and size	Base sample weight	Non-response adjustment*	Final analytical weight
Local police			
100 or more	1.000	1.087	1.087
50–99	3.756	1.194	4.486
25–49	3.745	1.167	4.371
10–24	3.746	1.233	4.618
5–9	3.748	1.370	5.135
2–4	3.748	1.411	5.286
1	3.756	1.774	6.661
Sheriff's office			
100 or more	1.000	1.201	1.201
50–99	3.076	1.297	3.989
25–49	3.068	1.278	3.919
10–24	3.052	1.397	4.265
5–9	3.040	1.381	4.198
2–4	3.085	1.479	4.562
1	2.889	2.163	6.250
Primary state police			
Body-worn cameras	1.000	1.000	1.000
No body-worn cameras	1.000	1.161	1.161
Note: Includes both full- ar	d part-time offi	core with a word	t of 0.5

Note: Includes both full- and part-time officers, with a weight of 0.5 assigned to part-time officers.

\*Includes adjustment based on agency eligibility from the 2016 Law Enforcement Management and Administrative Statistics survey. Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### Accuracy of the estimates

The accuracy of the estimates presented in this report depends on two types of error: sampling and non-sampling. Sampling error is the variation that may occur by chance because a sample was used rather than a complete enumeration of the population. Non-sampling error can be attributed to many sources, such as the inability to obtain information about all cases in the sample, the inability to obtain complete and correct information from the administrative records, and processing errors. In any survey, the full extent of the non-sampling error is difficult to measure.

As measured by an estimated standard error, the sampling error varies by the size of the estimate and base population. Because BWC data were collected from a sample, the results are subject to sampling error. Variance and standard error estimates for the 2016 LEMAS-BWCS were generated using the IBM SPSS statistical software package. The Taylor linearization method for a "stratified without replacement" design was used for these calculations. See appendix tables 1 through 15 for the standard error estimates.

These standard error estimates may be used to construct confidence intervals around percentages in this report. For example, the 95% confidence interval around the percentage of departments that have acquired BWCs is  $47\% \pm (1.96 \times 0.8\%)$ , or approximately 45% to 49%.

Standard error estimates may also be used to construct confidence intervals around numeric variables such as number of full-time sworn personnel in agencies with BWCs. For example, the 95% confidence interval around the number of full-time sworn personnel in agencies with BWCs is approximately  $414,504 \pm (1.96 \times 30,587)$  or 354,553 to 474,455.

#### **APPENDIX TABLE 1** Reasons why body-worn cameras have not been fully deployed, by agency type, 2016

		Estimate			Standard erro	or
Reason	Total <sup>a</sup>	Local police	Sheriff's office	Total	Local police	Sheriff's office
Insufficient funding	63.3%	60.9%	71.3%	1.7%	2.1%	3.0%
Technology challenges	50.0	49.6	51.3	1.8	2.1	3.4
Lack of staff to handle footage	29.6	30.2	27.4	1.6	2.0	2.9
Legal/policy issues	25.3	27.8	17.4	1.6	1.9	2.5
Currently vetting vendor offerings	16.1	16.3	15.2	1.2	1.4	2.3
Benefits unclear	12.2	12.2	11.9	1.2	1.4	2.2
Insufficient time to complete deployment	11.9	12.4	10.5	1.2	1.4	2.0
Lack of support <sup>b</sup>	7.0	7.5	5.2	1.0	1.2	1.6
Other <sup>c</sup>	7.4	7.3	7.5	0.9	1.1	1.8
Number of agencies	2,876	2,196	670	82	75	33

<sup>a</sup>Includes the 13 primary state police agencies that acquired body-worn cameras. These had too few cases to show individual results.

<sup>b</sup>Includes lack of community, agency leadership, or patrol officer support.

<sup>C</sup>Includes waiting on legislation, currently acquiring, and other agency-specified responses.

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 2**

#### Officer and community support of body-worn cameras, by agency type and size, 2016

			stimate	Stan	dard error
Type and size of agency	Number of agencies without body-worn cameras	Officers would be very or somewhat supportive	Community would be very or somewhat supportive	Officers would be very or somewhat supportive	Community would be very or somewhat supportive
Total	8,069	73.3%	70.5%	1.0%	1.0%
Local police	6,420	73.3%	70.4%	1.1%	1.2%
500 or more	20	83.3	94.4	7.0	4.3
100–499	244	72.4	82.6	2.5	2.1
25–99	1,428	73.0	77.0	2.3	2.2
0–24*	4,728	73.4	67.7	1.4	1.5
Sheriff's office	1,613	73.3%	71.1%	2.0%	2.1%
500 or more	19	81.3	87.5	7.5	6.3
100–499	162	79.0	79.0	3.3	3.3
25–99	506	75.2	72.9	3.6	3.7
1–24	926	71.2	68.3	2.9	2.9
Primary state police	36	64.5%	71.0%	5.3%	5.0%

\*Includes agencies with only part-time sworn personnel.

#### **APPENDIX TABLE 3**

#### Estimates and standard errors for figure 1: General-purpose law enforcement agencies with recording devices, by type of device, 2016

Type of device	Estimate	Standard error
Any type of recording device	83.3%	0.6%
Dashboard cameras	69.0	0.7
Body-worn cameras	47.4	0.8
Personal audio recorders	38.1	0.7
Other*	15.4	0.5

\*Includes devices for interview rooms, building surveillance, and other agency-specified responses.

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 4**

Standard errors for table 1: Agencies that had acquired and started using body-worn cameras, by agency type and size, 2016

,		At least some BWCs
Type and size of agency	Acquired BWCs	
Total	0.8%	0.8%
Local police	0.9%	0.9%
1,000 or more	1.8	1.8
500–999	1.6	1.9
250–499	1.4	1.5
100–249	1.4	1.4
50–99	3.2	3.1
25–49	2.3	2.2
10–24	1.8	1.8
5–9	2.0	2.0
1–4	1.8	1.8
0	6.2	6.2
Sheriff's office	1.5%	1.5%
1,000 or more	5.0	5.2
500–999	4.3	4.3
250-499	2.8	2.9
100–249	2.7	2.6
50–99	4.4	4.4
25–49	3.4	3.4
10–24	3.0	3.0
5–9	3.8	3.8
1–4	6.2	6.2
Primary state police	2.1%	2.1%

#### **APPENDIX TABLE 5** Standard errors for table 2: Full-time sworn officers with body-worn cameras, by agency type, 2016

		В	WCs in service	BWCs to be deploy	red within the next 12 months			
Type of agency	Number of full-time sworn officers in agencies with BWCs	Number	BWCs per 100 full-time sworn officers	Number	BWCs per 100 full-time sworn officers			
Overall	30,587	3,325	2.1	5,887	1.6			
Local police	29,674	2,881	2.9	5,492	2.1			
Sheriff's office	6,831	1,598	2.3	1,852	1.6			
Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics Body Worn Camera Supplement, 2016.								

#### **APPENDIX TABLE 6**

#### Standard errors for table 3: Reasons why body-worn cameras were acquired, by agency type and size, 2016

			L	ocal police	5			Sł	neriff's offic	e	
			500 or					500 or			
Reason	Agencies with BWCs	Total	more	100-499	25–99	0-24	Total	more	100-499	25-99	1-24
Improve officer safety	0.9%	1.0%	3.5%	2.2%	2.6%	1.2%	1.9%	7.3%	3.6%	3.5%	2.7%
Reduce/resolve civilian complaints	0.9	1.0	3.1	2.0	2.1	1.3	2.0	7.3	3.3	3.4	3.0
Improve evidence quality	1.0	1.1	3.7	2.4	2.7	1.3	1.8	7.3	3.6	3.5	2.5
Reduce agency liability	1.0	1.1	3.5	2.0	2.6	1.3	2.1	7.9	3.7	3.9	3.0
Improve officer/agency accountability	1.0	1.2	3.1	1.6	2.7	1.5	2.1	6.9	3.5	3.7	3.2
Make cases more prosecutable	1.1	1.2	3.9	2.5	3.0	1.5	2.1	8.1	4.1	3.9	2.8
Improve officer professionalism	1.2	1.3	3.7	2.2	3.0	1.6	2.4	7.6	4.1	4.2	3.5
Improve community perceptions	1.2	1.3	3.4	2.0	2.9	1.6	2.4	7.6	4.0	4.1	3.4
Simplify incident review	1.2	1.3	3.9	2.3	3.1	1.6	2.4	6.9	3.8	4.2	3.5
Improve training	1.2	1.3	3.9	2.3	3.1	1.6	2.4	8.2	4.1	4.2	3.5
Reduce use of force	1.1	1.3	3.8	2.5	3.0	1.5	2.3	8.2	4.2	4.1	3.3
Strengthen police leadership	1.0	1.2	3.4	1.7	2.7	1.4	2.0	6.3	3.2	3.7	3.0
Pilot testing only	0.9	1.0	3.9	2.4	2.6	1.1	1.7	8.1	3.7	3.5	2.2
Other	0.8	1.0	3.5	1.9	2.4	1.1	1.7	5.6	3.2	3.0	2.5

#### Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 7**

#### Standard errors for table 4: Deployment of body-worn cameras among agencies that had acquired BWCs, by agency type and size, 2016

Type and size of agency	Full	Partial	Exploratory/ pilot	Unsure/ don't know
Total	1.1%	0.9%	0.9%	0.4%
Local police	1.3%	1.0%	1.0%	0.5%
500 or more	2.6	3.9	3.9	1.3
100-499	2.5	2.2	2.3	0.5
25-99	3.1	2.5	2.7	0.8
0-24	1.6	1.2	1.1	0.6
Sheriff's office	2.4%	2.1%	1.9%	0.9%
500 or more	6.3	7.9	8.2	0.0
100-499	3.4	4.0	3.8	2.4
25-99	4.2	4.1	3.4	1.7
1–24	3.5	2.8	2.6	1.2

### **APPENDIX TABLE 8** Standard errors for table 5: Policy topics related to body-worn cameras, by agency type and size, 2016 Among of agencies with a BWC policy, percent that covered—

		Among of agencies with a BWC policy, percent that covered—							
Type and size of agency	Percent with BWC policy	Video transfer storage, or disposal	r, Specific events to record	Video upload/offload frequency	Routine supervisor review of footage	Officer review of footage	Public release of raw (unredacted) footage	Informing citizens they are being recorded	Content that must be redacted
Total	0.8%	0.9%	0.9%	1.0%	1.1%	1.2%	1.3%	1.3%	1.3%
Local police	0.9%	1.0%	1.1%	1.1%	1.2%	1.4%	1.4%	1.4%	1.4%
500 or more	1.3	2.1	1.4	2.8	2.8	2.3	3.9	3.8	4.0
100-499	0.8	0.8	0.9	1.3	1.4	1.6	2.6	2.3	2.6
25-99	1.7	1.5	1.7	1.8	2.3	2.5	3.2	3.2	3.3
0–24	1.2	1.3	1.4	1.5	1.5	1.7	1.8	1.8	1.7
Sheriff's office	1.8%	1.9%	2.1%	2.3%	2.5%	2.6%	2.7%	2.5%	2.6%
500 or more	3.4	5.1	3.7	5.1	5.1	7.4	8.7	7.8	8.2
100-499	2.9	2.9	3.9	3.3	3.4	4.2	4.5	4.3	4.4
25-99	2.8	3.1	3.5	3.9	4.3	4.5	4.6	4.4	4.2
1–24	2.8	3.1	3.2	3.5	3.7	4.0	4.1	3.8	3.9
Source: Bureau o	f Justice Statisti	cs, Law Enforcer	nent Managemer	it and Administrat	tive Statistics	- Body-Worn	Camera Supplen	nent, 2016.	

#### **APPENDIX TABLE 9**

#### Standard errors for table 6: Events that body-worn cameras are required to record, by agency type, 2016

Type of event	Total	Local police	Sheriff's office						
Traffic stops	0.7%	0.8%	1.6%						
Officer-initiated citizen contacts	1.0	1.1	2.2						
Executing arrest/search warrants	1.0	1.1	2.0						
Firearms deployments	1.0	1.1	2.4						
Responding to routine service calls	1.1	1.3	2.5						
Criminal investigations	1.2	1.4	2.7						
Public-order policing	1.4	1.6	3.0						
Special operations	1.4	1.6	3.0						
Transporting offenders	1.4	1.6	2.9						
Policing public events	1.2	1.4	2.6						
Other	0.8	0.9	1.8						
	Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.								

Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 10**

Standard errors for table 7: Personnel with direct access to video produced by body-worn cameras, by agency type and size, 2016

				Supervisor					Other		
Type and size of agency	Chief executive	Executive staff	Officer that made recording	of officer that made recording	Internal affairs	Head of information technology	District attorney's office	Other employed sworn officers	information technology	Other non-sworn employees	Other
Total	0.8%	1.1%	1.2%	1.2%	1.0%	0.9%	1.0%	0.9%	0.7%	0.6%	0.4%
Local police	0.8%	1.2%	1.4%	1.3%	1.1%	1.0%	1.1%	1.1%	0.8%	0.7%	0.5%
500 or more	3.1	3.2	3.1	3.2	2.6	4.1	4.3	4.2	4.4	3.7	3.5
100-499	1.5	1.6	2.1	2.4	2.3	2.6	2.0	2.3	2.2	2.4	1.3
25-99	1.8	1.9	3.1	2.7	2.9	3.1	2.4	2.4	2.6	2.2	1.3
0–24	1.0	1.5	1.6	1.6	1.3	1.1	1.3	1.3	0.8	0.8	0.6
Sheriff's office	1.9%	2.3%	2.5%	2.5%	2.2%	2.2%	2.2%	2.0%	1.6%	1.3%	0.8%
500 or more	7.7	7.7	7.1	7.1	7.7	8.7	8.2	7.7	8.9	5.3	3.9
100–499	4.3	3.6	4.4	4.3	4.0	4.4	3.0	2.5	3.4	2.3	2.0
25-99	3.5	3.7	4.3	4.3	4.5	4.5	3.8	3.6	3.3	2.4	1.9
1–24	2.7	3.5	3.6	3.6	2.8	2.8	3.3	2.9	1.9	1.8	0.8

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 11**

Standard errors for table 8: Public-use footage requests for agencies with body-worn cameras, by agency type, 2016

Average times per month that public requests video footage	Total	Local police	Sheriff's office
Never	0.9%	1.0%	1.8%
0	1.1	1.3	2.3
1–5	0.9	1.0	1.9
6–10	0.3	0.3	0.6
11 or more	0.2	0.2	0.4
Unsure/unknown	0.7	0.7	1.5

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 12**

Standard errors for table 9: Obstacles encountered with using body-worn cameras or with footage, by agency type, 2016

Type of obstacle	Total	Local police	Sheriff's office		
Privacy	1.1%	1.2%	2.1%		
Video storage procedures	1.1	1.2	2.3		
Costs were greater than expected	1.1	1.3	2.2		
Technical difficulties	1.0	1.1	2.1		
Liability	1.0	1.1	1.8		
Burden of requests for footage from public/agency	0.9	1.0	1.8		
Security of information contained in video	0.9	1.1	1.9		
Lack of support	0.7	0.7	1.3		
Other	0.8	0.9	1.6		
Unsure/unknown	0.9	1.1	2.0		
Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.					

#### **APPENDIX TABLE 13**

Standard errors for table 10: Alternative methods of recording police-citizen interactions for agencies without body-worn cameras, by agency type, 2016

		All agencies		Agencies without body-worn cameras			
Type of agency	Dashboard cameras	Personal audio recorders	Other event- recording equipment	Dashboard cameras	Personal audio recorders	Other event- recording equipment	
Total	0.7%	0.7%	0.5%	1.1%	1.0%	0.8%	
Local police	0.8	0.8	0.6	1.2	1.2	0.9	
Sheriff's office	1.4	1.5	1.1	2.2	2.2	1.5	
Primary state police	1.2	2.4	1.4	2.7	5.5	2.7	

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Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 14**

Standard errors for table 11: Reasons for not having acquired body-worn cameras, by agency type, 2016

Reason	Total	Local police	Sheriff's office	Primary state police
Video storage/disposal costs	1.0%	1.1%	1.9%	5.0%
Hardware costs	1.0	1.1	1.8	5.3
Ongoing maintenance/support costs	1.0	1.2	2.0	5.3
Public records request/video redaction costs	1.0	1.2	2.2	5.5
Privacy concerns	1.1	1.2	2.1	5.5
Training costs	1.1	1.3	2.2	5.0
Video transfer/storage issues	1.0	1.2	2.1	5.5
Liability concerns	1.0	1.1	1.8	4.4
Camera operation technical difficulties	0.9	1.0	1.8	4.4
No perceived need	0.8	0.9	1.4	5.3
Lack of support	0.6	0.7	1.1	2.7
Other	0.7	0.9	1.3	4.4
Source: Pureou of Justice Statistics Jaw Enforce	omont Ma	and a mont and	Administrativo	

Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics - Body-Worn Camera Supplement, 2016.

#### **APPENDIX TABLE 15**

## Estimates and standard errors for figure 2: Factors determining if an agency would explore body-worn cameras in the next year, by agency type, 2016

	Estimate				Standard error			
Factor	Total	Local police	Sheriff's office	Primary state police	Total	Local police	Sheriff's office	Primary state police
Initial acquisition costs	63.7%	62.4%	68.6%	64.5%	1.1%	1.2%	2.1%	5.3%
Ongoing maintenance costs	58.9	59.2	57.5	61.3	1.1	1.3	2.2	5.4
Privacy concerns	33.7	34.7	29.4	41.9	1.0	1.2	2.0	5.5
Liability concerns	29.0	30.3	23.9	25.8 !	1.0	1.2	1.9	4.8
Public expectations	20.5	21.8	14.8	38.7	0.9	1.0	1.6	5.4
Leadership directives	14.6	15.1	11.8	45.2	0.8	0.9	1.3	5.5
Other similar/nearby jurisdictions acquiring body-worn cameras	10.5	11.8	5.6	3.2 !	0.7	0.8	1.0	2.0
Support from patrol officers	9.4	9.9	7.7	9.7 !	0.7	0.8	1.2	3.3
Support from agency leadership	7.8	7.9	7.1	19.4 !	0.6	0.7	1.1	4.4
Communication/relationship with vendors	5.6	5.5	5.5	19.4 !	0.5	0.6	1.0	4.4
Other*	14.2	15.1	10.1	25.8 !	0.8	0.9	1.3	4.8

Note: Factor categories were response options on the questionnaire, and agencies were asked to select all that apply.

! Interpret with caution. Estimate based on fewer than 10 cases, or coefficient of variation is greater than 50%.

\*Other includes legislation, support from government officials, and other agency-specified responses.



The Bureau of Justice Statistics of the U.S. Department of Justice is the principal federal agency responsible for measuring crime, criminal victimization, criminal offenders, victims of crime, correlates of crime, and the operation of criminal and civil justice systems at the federal, state, tribal, and local levels. BJS collects, analyzes, and disseminates reliable statistics on crime and justice systems in the United States, supports improvements to state and local criminal justice information systems, and participates with national and international organizations to develop and recommend national standards for justice statistics. Jeffrey H. Anderson is the director.

This report was written by Shelley Hyland. Connor Brooks verified the report.

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November 2018, NCJ 251775



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