



JANUARY 2024

Use and Perceptions of Technology and Real Time Crime Centers Among Law Enforcement Personnel in Tallahassee and Leon County

Julie Brancale, Brian Stults, Jonathan Caswell, Alex Billmeier, and Thomas Blomberg

The Capital Region Real Time Crime Center (CRRTCC) is a multi-agency real time crime center staffed by analysts from the Leon County Sheriff's Office (LCSO), Tallahassee Police Department (TPD), and the Florida State University Police Department (FSUPD). The CRRTCC analysts provide information and investigative assistance, in real time, to officers and deputies in Leon County, Tallahassee, and surrounding counties. The Florida State University College of Criminology and Criminal Justice (CCCJ) serves as the research partner for the CRRTCC.

About this Report

As part of the ongoing evaluation of the CRRTCC, the CCCJ conducts an annual survey of personnel from each participating law enforcement agency to assess use and perceptions of the CRRTCC and its technologies. This first annual survey was conducted at the time of the soft opening of the CRRTCC, so the results will serve as a baseline for establishing trends and patterns over time.

Staff from each agency were asked about their use of various law enforcement technologies, perceptions of the technologies, whether they had used the Leon County Sheriff's Office RTCC in their work (which was operational from 2017 until soft opening of the CRRTCC), and the perceived value of the CRRTCC.

A list of all officer and deputy email addresses was provided to the CCCJ research team by each CRRTCC participating agency. The survey was administered from late March-early May 2023 via Qualtrics survey software. Completed surveys were received from 248 staff members across the three agencies, which represents a 44% response rate.

Executive Summary

- Nearly all (95%) law enforcement personnel, regardless of rank or experience had used some form of technology for investigative purposes in the last year.
- Body-worn cameras and social media searches were the most widely used technologies and facial recognition was the least used.
- Personnel with 20+ years of experience reported the lowest technology usage rate; those with fewer than 5 years of experience used technology the most.
- Most personnel had used the LCSO RTCC while it was operational and most viewed it as an asset to their agency.
- Compared with command staff and middle management, a lower percentage of line officers reported receiving adequate guidance on how to use the RTCC.
- Most personnel said the RTCC provided information that altered their approach during calls for service due to concerns for officer safety or public safety.

Use of Law Enforcement Technology

Personnel were asked how often in the prior year they had used various law enforcement technologies for investigative purposes, including automated license plate readers (ALPRs), closed-circuit television (CCTV) camera footage, body-worn camera (BWC) footage, facial recognition software (FRS), and social media searches (SMS).

The results in Figure 1 show that the use of technology in investigative work was nearly universal; only about 5% of respondents had not used any of these resources in the past year. BWC footage and social media searches were the most widely used technologies, with about 74% of personnel reporting using each of them. CCTV footage was not as commonly used, yet nearly 60% used it in the past year. The least commonly used technology—FRS—was used by about 40% of respondents.

Figure 1

Technology Usage Rate in the Past Year

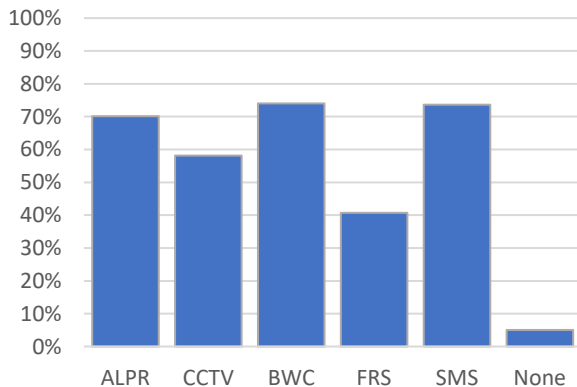
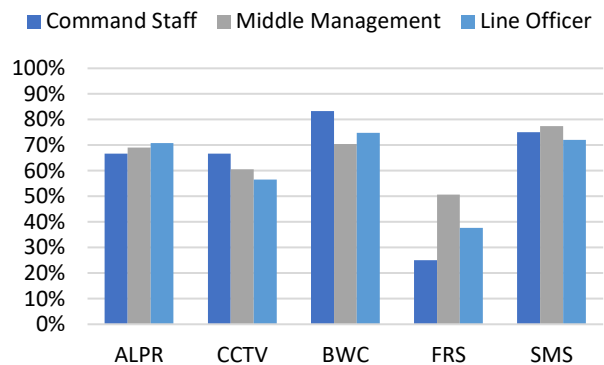


Figure 2 shows technology usage rates separately for each rank—command staff, middle management, and line officer. ALPR usage rates were similar for all ranks, as were rates for social media searches. About 67% of command staff used CCTV footage in the past year, compared with about 57% of line officers. The highest rate of usage across all technologies and ranks was for BWC, with

83% of command staff using it in the past year. All ranks used social media searches at high rates, while facial recognition software was the least used across all ranks.

Figure 2

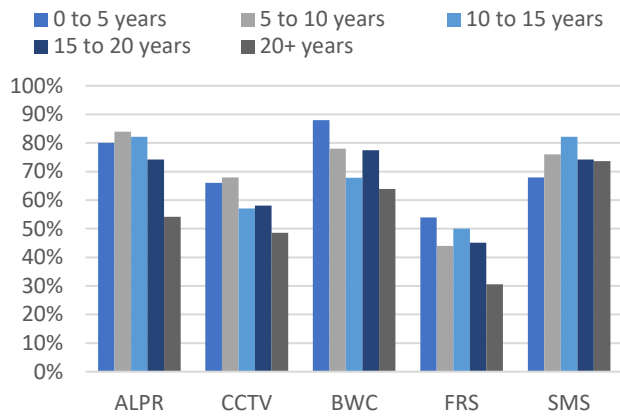
Technology Usage by Rank



A limited number of prior studies have examined perceptions of technology among law enforcement officers, finding that the least experienced officers tend to have more favorable opinions of technologies such as BWC (Fouche 2014; Jennings, Fridell, & Lynch 2014). Figure 3 examines this possibility by showing technology usage rates separately for different levels of experience in law enforcement.

The results provide partial support for the expectation that newer officers will be more supportive of technology in law enforcement. Those with 20 or more years of experience reported the lowest usage rate for every technology except social media searching, where they had usage rates comparable to those with other levels of experience. In contrast, personnel with 0-5 years of experience tended to be among the heaviest users of technology.

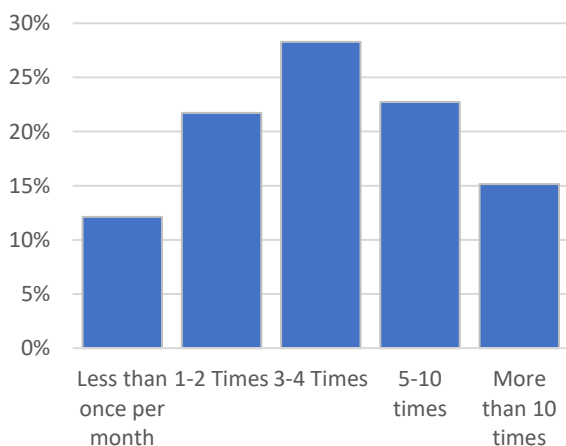
Figure 3
Technology Usage by Years in Law Enforcement



Use and Perceptions of LCSO RTCC

In addition to questions about the use of individual technologies, personnel were also asked whether they used the LCSO RTCC in the past year and, if so, about their experiences and perceptions. Eighty percent of respondents indicated that they had used the LCSO RTCC at least once in the prior year. Figure 4 shows that most personnel used the LCSO RTCC multiple times per month. The most common response was 3-4 times per month, but 23% used it 5-10 times, and 15% used it more than 10 times per month.

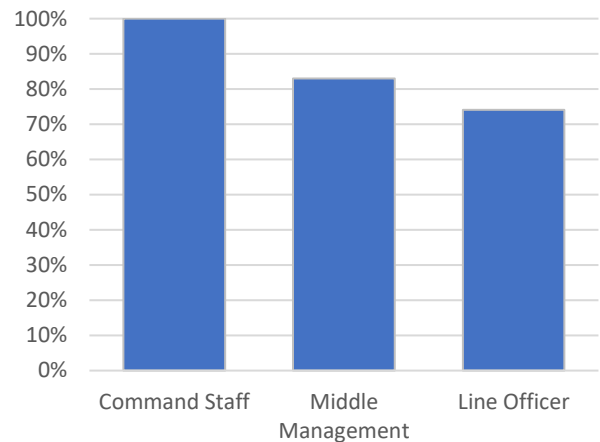
Figure 4
RTCC Average Monthly Usage Rate



Adequate Guidance on Use of the LCSO RTCC

Regardless of whether personnel had used the LCSO RTCC or not, they were asked whether they have received adequate guidance on how to effectively use of the RTCC. When combined, nearly 80% of respondents indicated that they received adequate guidance. However, as shown in Figure 5, there is more variation when broken down by rank. All command staff and over 80% of middle management reported having obtained adequate guidance, whereas 74% of line officers reported having adequate training.

Figure 5
Received Adequate Guidance on How to Make Use of the RTCC

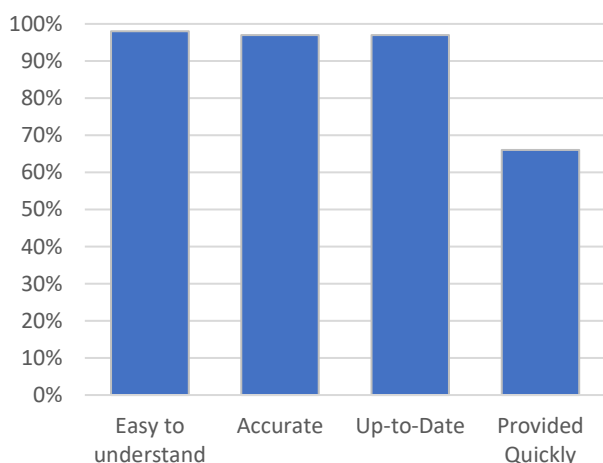


Information Provided by the LCSO RTCC

Of the respondents who had used the LCSO RTCC, questions were asked about the information provided. As shown in Figure 6, over 95% of respondents indicated that it was easy to obtain information from the RTCC, that the information provided was accurate, and that the information was up to date. Timeliness of RTCC information was ranked lower, but still, about two-thirds responded that the LCSO RTCC provided information quickly.

Respondents were asked to submit open-ended responses detailing any positive and negative effects, outcomes, or experiences working with the RTCC. There were few negative comments, but there were some concerns about the speed and accuracy of the information provided. For example, one respondent indicated, "...It would sometimes be faster for [me] to try to find the data I was looking for. RTCC always got the data to me, but there were a few occasions...where it was easier to just do it myself." Another respondent wrote "...we had a tag that was one character off and the RTCC was unable to identify it."

Figure 6
Information Provided by the LCSO RTCC



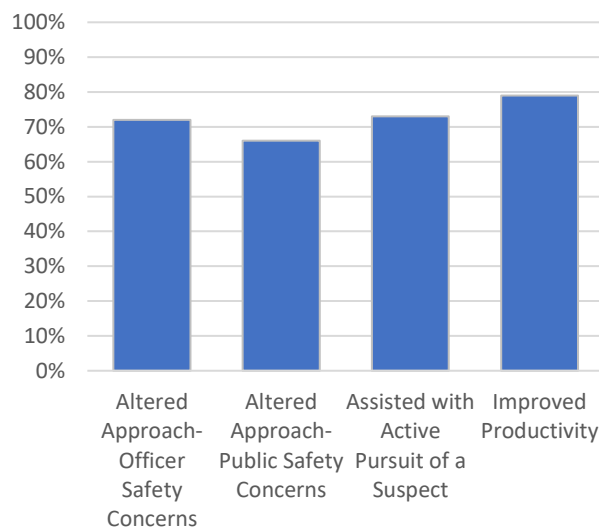
Impacts of the LCSO RTCC on Officer and Deputy Behavior and Productivity

Of the personnel who had used the LCSO RTCC in the past year, questions were asked about how the information from the RTCC changed their work. Specifically, they were asked whether the information altered their approach during a call for service due to concerns about officer and public safety, assisted with the pursuit of a suspect, and improved productivity. The results show that information from the RTCC has a widespread

impact on how law enforcement personnel conduct their work.

Figure 7 shows that over 70% of personnel indicated the RTCC provided information that altered their approach due to concerns about officer safety. Additionally, approximately 65% reported a similar impact on their approach regarding public safety. More than 70% responded that the RTCC assisted them while they were in active pursuit of a suspect, and approximately 80% of respondents reported that the LCSO RTCC improved their productivity. One respondent wrote "I did not expect how quickly and effectively [the] RTCC would be able to relay information regarding active calls for service. By monitoring dispatched calls and actively searching for data related to them, [the] RTCC has been able to relay accurate and useful information regarding involved parties and provide notice of up-to-date officer safety and public safety concerns."

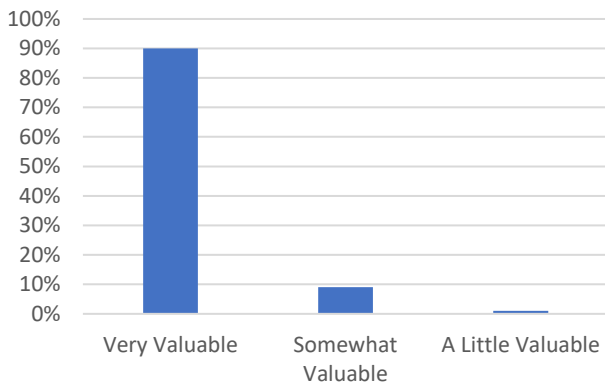
Figure 7
Impacts of LCSO RTCC on Officer Behavior and Productivity



Value of LCSO RTCC to Agency Efforts

Regardless of whether respondents had used the LCSO RTCC, they were asked how valuable it was to their agency’s law enforcement efforts. As shown in Figure 8, 90% of respondents indicated that the LCSO RTCC was very valuable to their agency, 9% indicated that it was somewhat valuable, and only 1% of respondents indicated that it was a little valuable. One respondent wrote, “Receiving live information while enroute to a call has become very beneficial.”

Figure 8
Value of LCSO RTCC to Agency Efforts



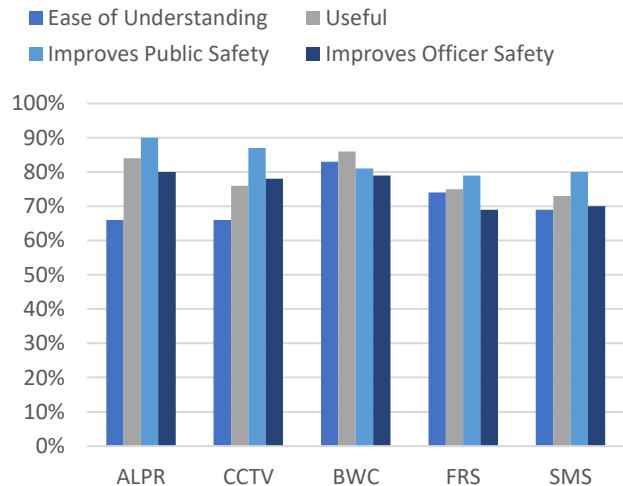
Perceptions of Law Enforcement Technology

Beyond asking about usage of technology and the RTCC, personnel were also asked a series of questions about their opinions of the technologies used in the RTCC, including ALPR, CCTV, BWC, FRS, and SMS. For each technology, respondents were asked how much they agree that the information was easy to understand and was useful, and whether the technology improves public safety and officer safety.

Figure 9 shows the percentage of respondents who strongly agreed with each of these statements. There is strong, consistent support for all the technologies. Ease of understanding was highest for BWCs, likely because they are

used on every shift. Information from ALPRs and CCTVs was the least easy to understand, though two-thirds still strongly agreed that these technologies were easy to understand. Personnel consistently agreed that the information from these technologies was useful in their work, with more than 72% reporting strong support for every technology. Support for these technologies was strongest regarding their perceived benefit to public safety. For every technology, nearly 80% or more strongly agreed that it improves public safety. Support was highest for ALPRs followed by CCTVs, with 90% and 87% reporting strong agreement, respectively.

Figure 9
Perceptions of Law Enforcement Technology



Perceptions of Technology by Rank and Experience

Figure 10 shows the percent of respondents who agreed that the technologies were easy to understand, separated by rank. Over 60% of all ranks reported that information from the technologies was easy to understand. However, among all ranks, information from

CCTV and SMS had the lowest levels of reported ease of understanding.

Figure 10

Perception of Ease of Understanding by Rank

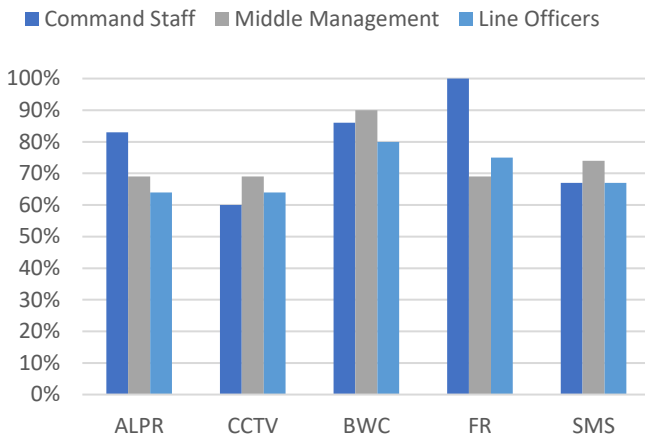


Figure 11 shows the percent of respondents who agreed that the technologies were easy to understand, separated by years in law enforcement. For each technology, with the exception of SMS, those with 10-15 years experience reported the greatest ease of understanding.

Figure 11

Perception of Ease of Understanding by Years in Law Enforcement

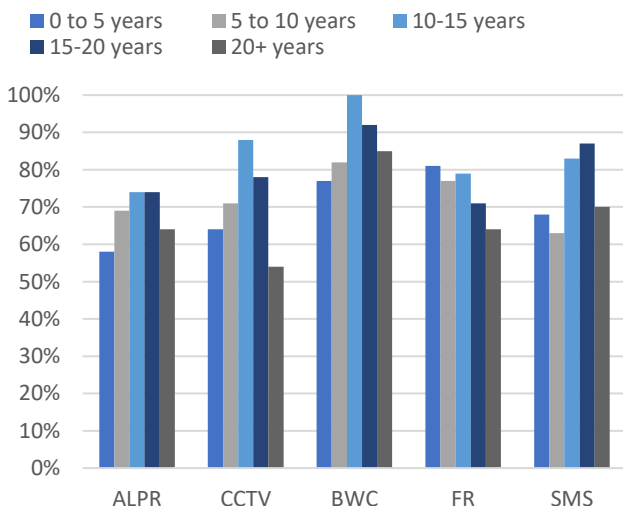


Figure 12 shows the percent of respondents, by rank, who agreed that the information obtained from each technology was useful. A higher percent of respondents, regardless of rank, reported that information from BWC was useful. All command staff and over 80% of line officers reported that information from FR was useful, whereas 64% of middle managers reported that the information was useful.

Figure 12

Perception of Usefulness by Rank

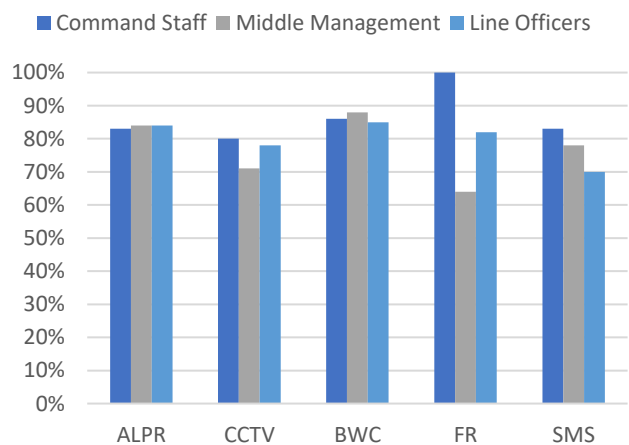


Figure 13 shows the percent of respondents who agreed that the information was useful, by years experience. Similar to ease of understanding, those with 10-15 years experience reported that information from each technology, with the exception of SMS, was useful. Those with 15-20 and 20+ years experience reported lower levels of agreement that information from FR was useful.

Figure 13

Perception of Usefulness by Years in Law Enforcement

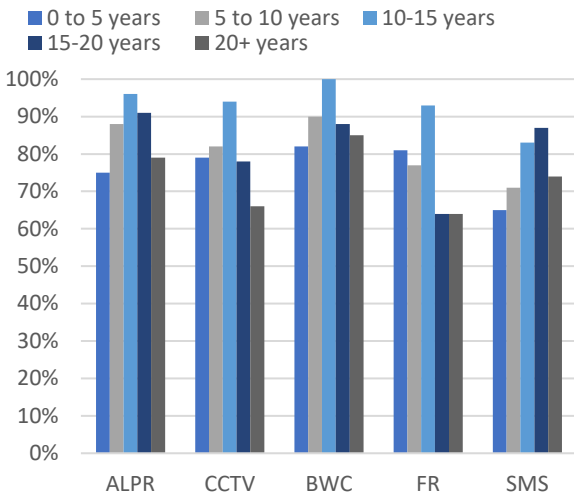


Figure 14 shows the percent of respondents who strongly agreed that the technologies improved public safety, separately by rank. For each technology, command staff reported the highest levels of agreement that the technologies improve public safety, and line officers reported the lowest levels of agreement.

Figure 14

Perception of Improves Public Safety by Rank

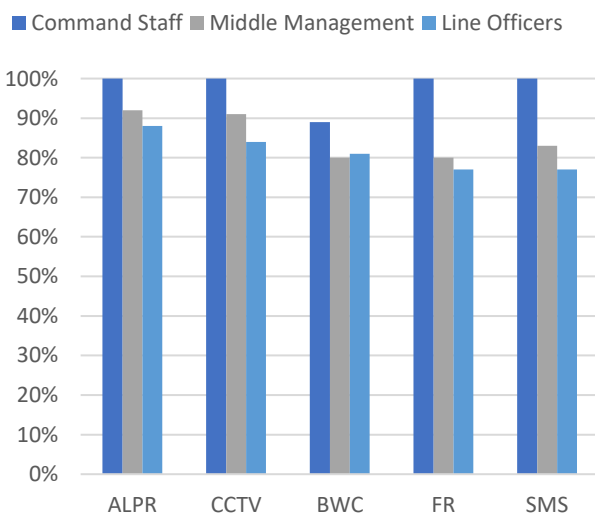


Figure 15 shows the percent of respondents who strongly agreed that the technologies improved public safety, by years in law enforcement. Those with 10-15 and 15-20 years experience reported the highest levels of agreement that each technology improves public safety. SMS had the lowest reported agreement that information would improve public safety—those with 0-5 years experience reported the lowest levels of agreement that SMS improves public safety.

Figure 15

Perception of Improves Public Safety by Years in Law Enforcement

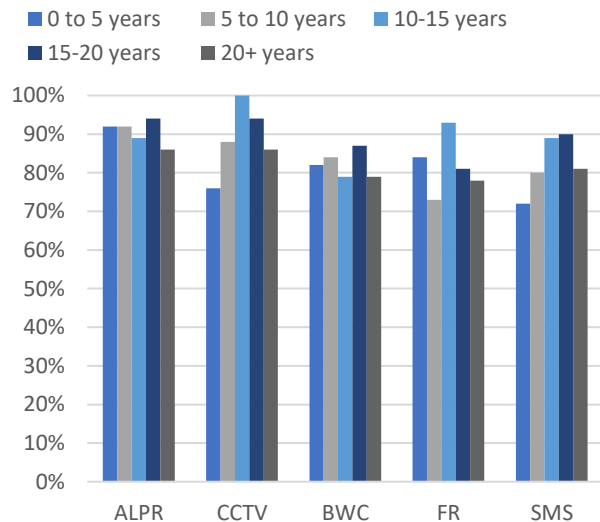


Figure 16 shows the percentage of respondents who strongly agreed that the technologies improved officer safety, broken down by rank. Command staff reported the highest levels of agreement that all technologies (except BWCs) improve officer safety. Among middle management and line officers, the lowest agreement for improving officer safety was for FR and SMS.

Figure 16

Perception of Improves Officer Safety by Rank

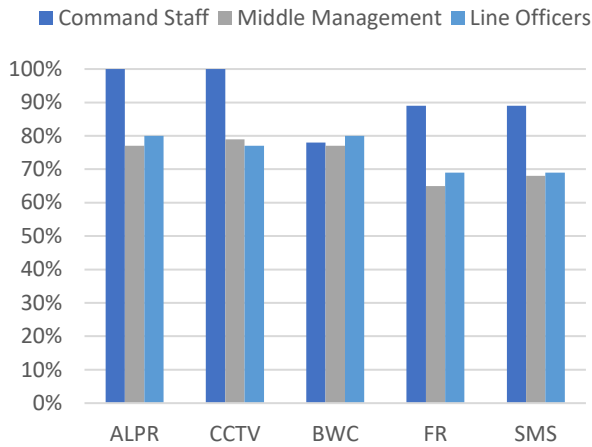
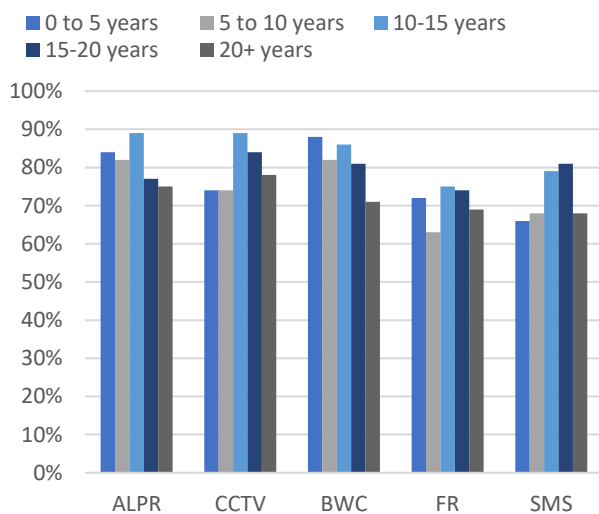


Figure 17 shows the percentage of respondents who strongly agreed that the technologies improved officer safety, separately by years in law enforcement. With the exception of those with 20+ years of law enforcement experience, all ranks had high levels of agreement that BWC improve officer safety. Those with more experience (10 or

Figure 17

Perception of Improves Officer Safety by Years in Law Enforcement



more years) reported higher agreement that CCTV improves officer safety. FR and SMS had lower levels of agreement that information would improve officer safety.

Respondent Characteristics

Table 1 provides descriptive information about the respondents who completed the survey. Most respondents were male, white or Caucasian, between the ages of 30-39, and had earned a bachelor’s degree or higher. Thirty-one percent of respondents had 20 or more years of law enforcement experience, and most were line officers.

Table 1

Respondent Demographic Characteristics

Age	
18 to 29 years	19.0%
30 to 39 years	31.1%
40 to 49 years	29.4%
50 to 59 years	19.0%
60+ years	16.1%
Gender	
Male	83.1%
Female	16.9%
Race	
White or Caucasian	80.65%
Black or African American	14.52%
Other	4.83%
Hispanic or Latino	
Non-Hispanic or Latino	87.10%
Hispanic or Latino	12.90%
Educational attainment	
High school diploma or GED	3.23%
Some college credit	16.94%
Associate's degree	15.32%
Bachelor's degree	56.05%
Master's degree	8.47%
Law enforcement experience	
0 to 5 years	21.7%
5 to 10 years	21.7%
10 to 15 years	12.1%
15 to 20 years	13.4%
20+ years	31.2%
Rank	
Command Staff	4.65%
Middle Management	27.52%
Line Officer	67.83%

Summary and Recommendations

The survey results show that officers and deputies from the CRRTCC's participating agencies regularly used technology for investigative purposes and held very positive views about the use of technology for their work. However, there was variation in usage rates based on years of experience in law enforcement. Personnel with 0-5 years of experience were the heaviest users of technology and those with 20 or more years of experience reported lower usage rates. These differences may not necessarily be attributable to opposition, but rather exposure, comfort, and experience with technology. To ensure all personnel are comfortable using new technologies, agencies should offer training courses about how and when to use various technologies and the benefits of doing so. Among all respondents, information from ALPRs and CCTVs was ranked lowest for ease of understanding. Since these technologies are among the most used by the CRRTCC, analysts and supervisors should explore how information can be better communicated to line officers to ensure it is well understood.

In general, survey respondents found the LCSO RTCC to be beneficial for their work. Most indicated that they had received adequate guidance on how to use the RTCC. However, there were notable differences based on rank. Line officers were less likely than middle management and command staff to agree that they received adequate training. Partner agencies should ensure regular participation at in-house trainings, during "check-ons," and when new officers and deputies are hired, to facilitate the sharing of information about the CRRTCC's operations and abilities. The CRRTCC should also consider developing standard training manuals that would be provided to each officer and

deputy with information about how to make best use of the CRRTCC. These recommendations are similar to those made by Hollywood, McKay, Woods, and Agniel (2019) following their evaluation of the Chicago Police Department's RTCC. Specifically, Hollywood et al., recommend the department adopt continuing education opportunities for officers.

Among the questions about the effectiveness of the LCSO RTCC, personnel reported the least support for the statement "information was provided quickly." As the CRRTCC continues to add and train staff, the timeliness of provided information should be monitored, best practices documented, and strategies implemented to reduce the amount of time it takes to provide information to line officers.

Acknowledgements

The authors thank Young-An Kim, Leslie Rabon, Travis Bergeron, and Heather Costa-Barrow for their thoughtful feedback during the development and implementation of the survey and the writing of this report.

References

- Fouche. 2014. Officer attitudes of body-worn cameras in the University of Georgia Police Department Patrol Division. *Campus Law Enforcement Journal*, May/June 2014, 21-28.
- Hollywood, McKay, Woods, & Agniel. 2019. *Real-Time Crime Centers in Chicago: Evaluation of the Chicago Police Department's Strategic Decision Support Centers*. Santa Monica, CA, RAND Corp.
- Jennings, Fridell, & Lynch. 2014. Cops and cameras: Officer perceptions of the use of body-worn cameras in law enforcement. *Journal of Criminal Justice*, 42, 549-556.

SMART POLICING | Data. Analysis. Impact.

This project was supported by Grant No. 15PBJA-21-GG-04372-SMTP, awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.