

# The Technological Wedge in Law Enforcement

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## **Abstract**

*The objective of this research paper was to look into law enforcement's use of technology and how it affects human interaction. The current literature educates us that police technology is beneficial to law enforcement, but citizens question its utilization. Although law enforcement continues to have challenges with keeping up with technology, their more significant issue is whether it's creating separation from the community they serve. The data collected supports the need for law enforcement to educate their community, so the citizens better understand why police technology is essential. The paper affords relevant information to assist law enforcement agencies' in sustaining a positive relationship with their community when implementing or utilizing technology.*

## **Introduction**

The law enforcement profession can be demanding, and there is no room for error. Criminal investigations require law enforcement officers to pay attention to detail and utilize their training to assist them in solving crimes. In doing so, law enforcement officers have developed several skills to aid their efforts. For example, fingerprint processing, physical surveillance; photographs; and video and audiotape recordings are technologies designed to enhance the capabilities of officers and investigators. These skills require resources that allow law enforcement officers to gather evidence or assist with their investigations.

We have seen law enforcement officers utilize resources such as radios, photo cameras, tape recording devices, and computers throughout history. These examples benefitted law enforcement officers for years and continue to do so with extreme upgrades. The improvements and developments with police equipment have evolved quickly with technology. Law enforcement agencies today utilize several pieces of equipment which allow for instant access to information, whether from live or recorded video feeds, mobile computers, or online reporting. These resources enable law enforcement officers to work efficiently at a much more rapid pace. Furthermore, they have allowed law enforcement officers the ability to provide more factual information or data for prosecution. However, there are challenges that law enforcement agencies encounter when implementing or utilizing technology within law enforcement.

The challenges that law enforcement agencies deal with can vary from financial obligations, lack of use by the officers, and ineffective technology. However, the most challenging issue is maintaining the public's trust, critical of law enforcement actions in recent years.

The perceptions of law enforcement have changed over the years, and so has the way law enforcement performs their duties. Law enforcement's use of technology has

made the public concerned about their privacy and their rights as a citizen. This concern may cause some citizens to question their trust in law enforcement. So one might ask, is technology affecting human interaction within law enforcement? Is the increased use of technology driving a wedge between law enforcement and the public?

The more law enforcement agencies implement technology, the less likely they are to obtain information from individuals. For example, utilizing online reporting or a surveillance camera in an area capturing activity allows law enforcement to use their staffing effectively. It would require many officers and resources to accomplish a task like this; however, there is no human interaction.

How law enforcement uses technology within the profession is essential, but it can raise issues within the communities they serve. Law enforcement is benefitting from technology which is allowing them to accomplish many things. It is also enabling agencies to be more effective in solving crime. However, technology might be dividing the relationship between law enforcement and the public. Law enforcement agencies that invest time in technology should have the ability to avoid community disconnect. The efforts in this area might educate law enforcement and citizens on how technology and human interaction can coexist. This paper examines the use of technology and how it affects the relationship between the public and law enforcement.

## **Literature Review**

### ***Benefits of Technology:***

Technology such as drones, tiny robots, cameras, and high-speed internet service has provided law enforcement with the tools needed to accomplish their efforts. For example, one piece of technology can complete a task that would take ten officers. The use of technology aids law enforcement's efforts as it allows for support without exhausting their personnel. Furthermore, it will enable agencies to utilize their human resources effectively and keep them out of harm's way. (Government Technology, 2021)

The use of closed-circuit television (CCTV) cameras has provided law enforcement with the ability to prevent and solve criminal activity. A CCTV camera placed in the right areas and from multiple angles could provide law enforcement with the information they need to resolve illegal activity. CCTV cameras can increase the probability of apprehending a criminal, which causes them to refrain from committing crimes. However, the use of CCTV cameras is beneficial when gathering evidence for a crime. The video footage captured by these cameras allow law enforcement officers to obtain leads within their investigation. Furthermore, it provides law enforcement officers the ability to identify a potential suspect who witnesses may not have seen. (Dowling, Morgan, Gannoni, & Jorna, 2019)

The ability for law enforcement to access information has increased tremendously in the field. Law enforcement can access relevant information at a rapid pace. This ability is a huge benefit that only has improved since the implementation of FirstNet. FirstNet is a wireless network dedicated to first responders, which was established by a national initiative. This network allows for high-tech photos and video to be received by

smartphones and other mobile devices. Law enforcement can use this information to further their investigations and be more effective. (Government Technology, 2021)

The method by which law enforcement officers locate and investigate criminal activity has seen a drastic change with the use of license plate readers (LPR). The LPR is a fixed network that utilizes cameras to capture license plate images. These images alert law enforcement that a particular vehicle connected to criminal activity came into the camera's view. The illegal activity can range from auto theft, stolen license plates, robbery, etc. This alert occurs because law enforcement can compare the images to other databases connected to the license plates. For example, an individual with an active warrant may be the owner or known to drive the vehicle. (Koper, 2019)

Law enforcement's method in which the public can report crime has also been enhanced. The use of technology has allowed law enforcement to utilize other methods of reporting a crime to police. The process is through a web-based form, commonly referred to as online reporting, which allows citizens to report criminal activity when it happens. The citizens who make the report can input their information if they choose and are not required. Furthermore, they can provide law enforcement with video or photos to aid police in their investigation. For example, a male in Washington DC was arrested after an online report notified police of an indecent exposure incident. (States News Service, 2012)

A standard piece of technology used in law enforcement today is the body-worn camera. This device allows law enforcement agencies and the public to observe the circumstances of a police-related incident. The body-worn camera mounts on law enforcement officers, recording video and audio when activated. As a result of this device, law enforcement agencies have held their officers and the public accountable for their actions. The ability to account for the actual events that took place allows for an increase in civil interactions. Law enforcement agencies can be more effective with police misconduct complaints and internal affairs investigations. This technology has allowed law enforcement to be transparent with the communities they serve. (Newcombe, 2015)

The push for online education and remote training throughout society has changed the method in which law enforcement continues to learn. Research reports have shown that the growth of this type of learning is increasing rapidly. Law enforcement has embraced this style of knowledge and is utilizing it today. Law enforcement officers are praising the use of technology and are requesting more training. The notable benefits are that law enforcement officers do not have to travel to receive their education and continue their work schedule. Furthermore, it benefits law enforcement agencies from paying their officers overtime to attend training or instructors continuing to maintain their certifications to teach. (Leal, 2009)

### ***Challenges of Technology:***

The technology used by law enforcement agencies, for example, body-worn cameras and closed-circuit televisions (CCTV), all incorporate some cost. As a result, law enforcement agencies should consider estimating the total price when implementing new technology. The initial costs only consume one portion of the total financial commitment. Therefore, law enforcement agencies should also consider operating, maintenance, and disposal costs before making a final decision. These factors are essential because law

enforcement agencies work within a budget. Law enforcement agencies cannot afford to make unnecessary financial investments. The commitment to technology can be challenging, and law enforcement's path into the future will not be easy. (PSP Clearinghouse, n.d.)

Law enforcement continues to evolve with trying to address gun violence. Acoustic gunshot detection technology allows law enforcement officers to respond to incidents of gunfire. However, law enforcement agencies discovered that the technology did not assist with police response times, nor did it aid in solving crime. The acoustic gunshot detection technology made law enforcement officers aware of gunfire within an area. Still, it failed to provide the information needed to solve the case as there was less human interaction. Furthermore, it increased the number of calls for service within the agencies while reducing calls from citizens reporting crime. (Blackburn & Mares, n.d.)

As law enforcement's technological challenges continue, so does their ability to utilize specific technology. This issue came to light when IBM took a hard stand on law enforcement's use of facial recognition. The company is refusing to develop or sell this technology until Congress creates laws to govern the rights of citizens. The Electronic Frontier Foundation has also requested that there be a ban on law enforcement's use nationwide. Unfortunately, our laws have not been able to keep up with the pace of technology, and law enforcement is feeling the effects. This delayed technology will continue to occur until lawmakers can develop regulations that govern its use by law enforcement. (Skelton, 2020)

Technological advances can be an asset to law enforcement if utilized responsibly. Unfortunately, the public's opinion of law enforcement's use of technology has created resistance. For example, law enforcement's use of a helicopter has been an accepted use for many years. The ability allows law enforcement officers to obtain a view from above which can aid in criminal investigations. The use of a drone can provide the same information at a fraction of the cost. However, the military's use of drones has given a negative association that hinders law enforcement's ability to use them in the field. Law enforcement is one step behind as individuals utilize drones to commit criminal activity. Furthermore, remotely conducting their actions makes it difficult for law enforcement to hold that individual accountable. (Fox, 2018)

The method by which law enforcement agencies educate their officers continues to evolve. Law enforcement agencies use technology to train their officers, which can be a struggle with different generations. However, studies have shown that e-learning can improve an individual's training up to eight percent compared to traditional learning. This learning method has gained momentum as the military and the private sector has shown success. The challenge in law enforcement is the ability to keep up with the expectations of technology. Furthermore, the rapid pace of technology development might hinder agencies that operate under a fixed budget. (Leal, 2009)

In addition, e-education can hinder the environment in which law enforcement officers learn and develop interpersonal skills. The reason is that law enforcement officers are learning individually online. E-learning allows the flexibility to learn wherever and whenever the law enforcement officer chooses. However, this method does not allow for human interaction due to the environment. Law enforcement officers may, over time, lose their ability to communicate effectively. They may have a difficult time speaking or developing interpersonal skills. This training method has become a primary practice for

some law enforcement agencies due to the lower financial expense. Law enforcement agencies might be gaining an advantage but at potential risk of losing another critical aspect of the profession. (Leal, 2009)

### ***Citizen Perceptions:***

The way law enforcement is perceived can depend on the public's confidence or trust between both parties. When citizens believe that law enforcement is genuinely trying to protect their community, they are more likely to support law enforcement's use of technology. However, many citizens believe that law enforcement is overstepping their boundaries and invading their privacy. The use of drones is one example of the public's concern. The public's perception of law enforcement's ability to observe and monitor people within an area violates their privacy and is excessive. This concern is incredibly genuine within residential areas when police can watch their property from above. Unfortunately, the military's use of drones to conduct surveillance and other activities may have impacted the public's concerns. Law enforcement's use of military-style weapons and vehicles is already a concern for many who believe law enforcement has exceeded its boundaries. (Sakiyama, 2017)

Many citizens are skeptical of being monitored by drones, body cameras, and CCTV. The constant watchful eye of the public by law enforcement is alarming. These circumstances are especially true when individuals are just going about their day. Unfortunately, law enforcement's use of drones for proactive enforcement or observation will consequently capture the activity of innocent people. The use of this device causes distrust between the public and law enforcement. Furthermore, citizens feel it is a direct violation of their privacy. The public tends to believe this type of observation is excessive and should be regulated. (Sakiyama, Miethe, Lieberman, Heen, & Tuttle, 2017)

The use of license plate readers (LPR) falls into the same category. An LPR has the ability to capture license plates as vehicles travel on the roadway. Furthermore, they can track a vehicle's movement if there are several LPRs within an area. This data allows law enforcement to know when and where a particular car is traveling. Many law enforcement agencies are even using this technology without the community's knowledge that they exist. Law enforcement's use of an LPR can negatively affect the public and cause them to lose trust in police. The lack of confidence is especially true when citizens know that their data is being held for an extended period. Studies have shown that citizens feel strongly about law enforcement's ability to observe people constantly. The public's sense of privacy appears to be invaded as they move throughout their day. This issue could impact a law enforcement's relationship with the community without the public's support. (Merola, Lum, & Murphy, 2019)

Video recording of citizens and law enforcement has become an everyday occurrence within specific communities. Body-worn cameras have been issued to law enforcement officers to aid in protecting their conduct and preventing civil or criminal liability. For example, citizens have utilized cell phones to record law enforcement's actions during citizen encounters. The use of this technology has resulted in a back and forth of holding police and citizens accountable. Furthermore, it builds the potential of mistrust and community division. The public's perception of law enforcement can change based on their opinions of what occurred during particular incidents. These views then

begin to change the way the public views law enforcement as a whole. As a result, law enforcement becomes separated from the community they serve. Anti-police organizations start to form, promoting potential false narratives. (Wasserman, 2018)

The placement of electronic devices can also be a concern for the community. This concern is incredibly genuine when cameras are placed in minority populated areas. These areas can present the impression that law enforcement is racially biased and citizens within a particular area are law enforcement targets. Furthermore, it implies the belief that law enforcement is constantly watching an individual's movements. This impression can derive from the fact that cameras are not in wealthy neighborhoods but undeveloped neighborhoods. Implying that individuals with high income or status are not subject to the same observation principles by law enforcement. (Arnett, 2020)

Law enforcement's use of facial recognition technology is a growing topic of concern. The lack of laws governing law enforcement's use has caused significant problems, causing corporations to refuse to sell and develop this technology for law enforcement. The reason for one major company was the concern of law enforcement's ability to conduct large-scale surveillance, violate individuals' rights, and engage in racial profiling. The perception is that there is no control over law enforcement's use of the technology, and officers will discriminate against innocent individuals. The public's lack of trust in law enforcement and the refusal to allow law enforcement to utilize this technology has set the tone for a divided relationship. (Skelton, 2020)

## **Methods**

This research assignment utilized two surveys obtained and organized for dissemination through an online survey company. The company could disseminate the survey to participants using their email addresses. The email included a web link so participants could complete the survey. The goal was to have law enforcement participate in one eleven-question survey, and the public participates in one ten-question survey. The surveys were distributed to several law enforcement agencies within Florida, who conducted the law enforcement survey and placed the public survey on their social media for three weeks. Contact was made through email confirming the receipt of the survey and the ability to transfer the web link to their social media. The surveys' themselves were designed to protect the identity of the individuals who responded in order to preserve their privacy.

The survey was created to understand the perceptions of law enforcement's utilization of technology and its effects on the community they serve. The survey's primary focus was to capture law enforcement's and the community's perceptions of human interaction and determine any adverse effects. The intent of the survey was to possibly identify issues or concerns that may have triggered a lack of trust in law enforcement. The survey did not contain the perceptions of each officer but the agency as a whole. However, the survey did include the age demographics to display any variances in response to the perceptions of human interaction.

A possible limitation in the survey was a large number of agencies involved and their eagerness to respond. The survey may not have captured the perceptions of all areas within Florida. Furthermore, the survey disseminated to law enforcement may

contain the perception of each agency but not the perception of each officer. The officers' views may differ and may not coincide with their agency's perception.

Another possible limitation is the survey format, which included only ten or eleven questions. Participants are not eager to participate in surveys, especially when the survey consumes a lot of time. The questions within the survey were designed to obtain relevant data rapidly, allowing for an increased response from participants. An increase in the number of questions would cover the topic entirely; however, the reactions would be minimal.

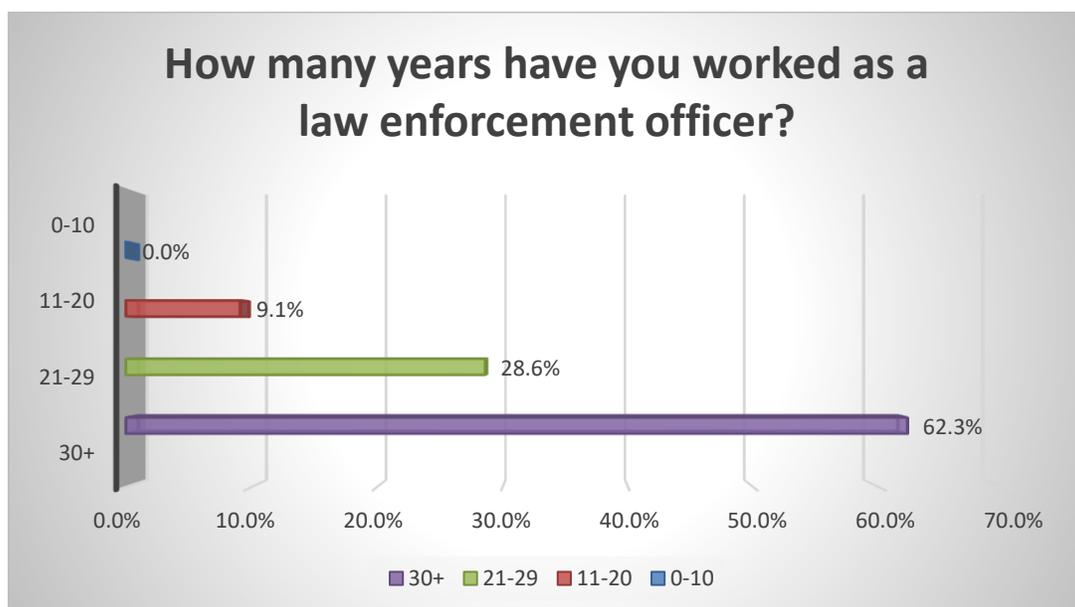
## Results

The law enforcement survey was sent to 246 law enforcement agencies within Florida. The agencies were asked to place the community survey on their social media for a period of three weeks. As a result, I received 77 responses to the survey from law enforcement, for a response rate of 31.3%. The survey from the community resulted in 589 responses during the three weeks.

Regarding the law enforcement survey, Questions #1 and #2 asked respondents to establish their level of law enforcement experience and the frequency of technology used. Questions #3 - #11 utilized a dichotomous and Likert scale response system to measure responses regarding law enforcement's use of technology and its effects on human interaction.

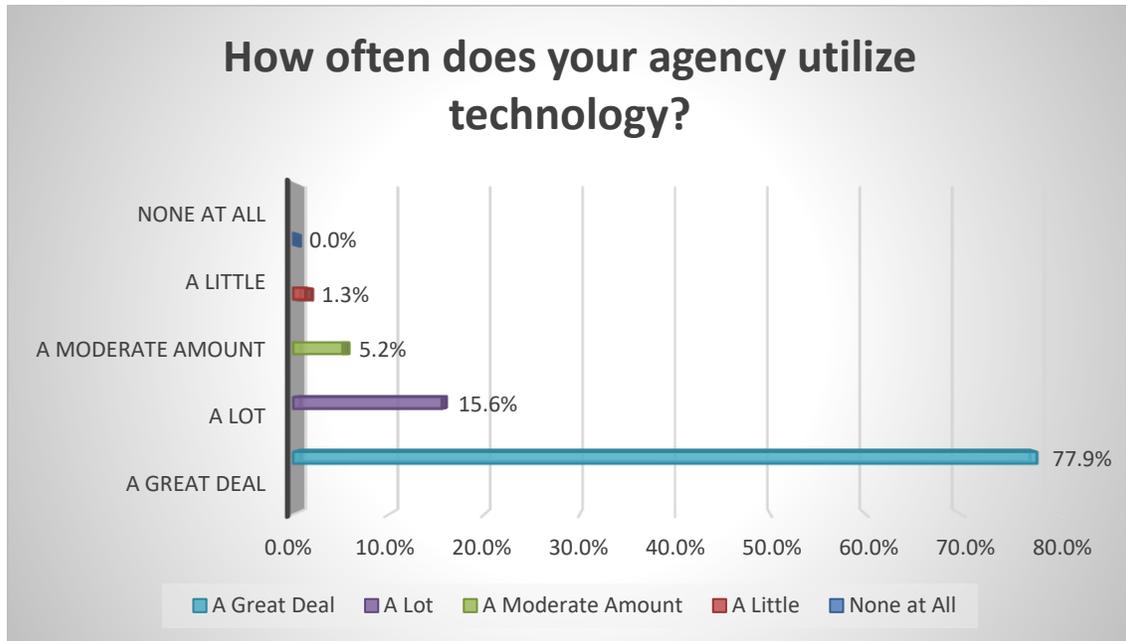
The first survey question asked the respondents to indicate the number of years they have worked in law enforcement.

- 0 indicated 0-10 years (0%),
- 7 indicated 11-20 years (9.10%),
- 22 indicated 21-29 years (28.60%),
- 48 indicated 30 plus years (62.30%)



The second question asked the respondents to indicate the frequency in which their agency utilizes technology by responding a great deal, a lot, a moderate amount, a little, or none at all.

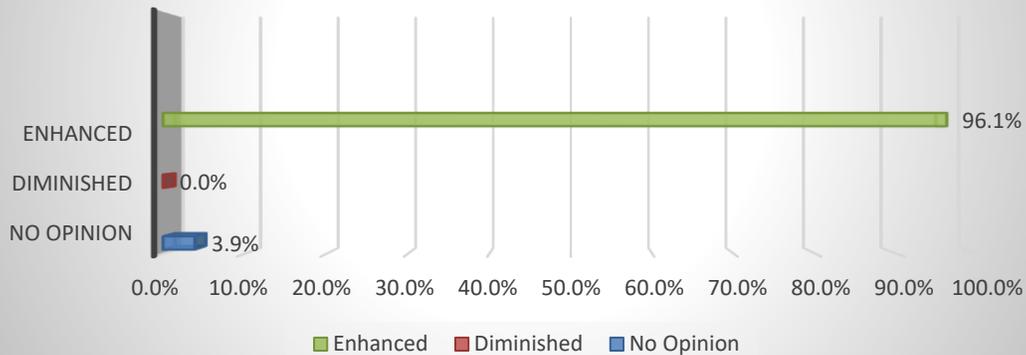
- 60 indicated a great deal (77.90%)
- 12 indicated a lot (15.6%)
- 4 indicated a moderate amount (5.2%)
- 1 indicated a little (1.3%)
- 0 indicated none at all (0%)



The third question asked the respondents to indicate if technology has enhanced or diminished police performance in their respective communities by responding that it has enhanced, diminished, or had no opinion.

- 74 indicated enhanced (96.1%)
- 0 indicated diminished (0%)
- 3 indicated no opinion (3.9%)

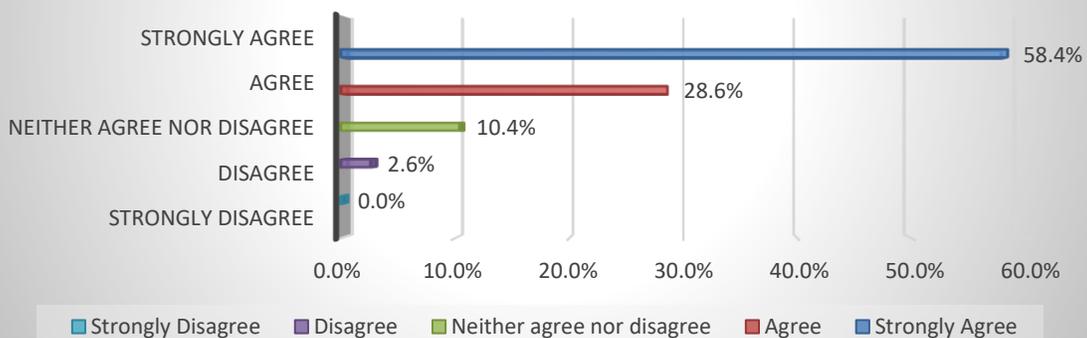
## Do you believe increased technology has enhanced or diminished police performance in your community?



The fourth question asked the respondents to indicate their level of agreement with the statement that additional resources are needed when implementing technology by responding strongly agree, agree, neither agree nor disagree, disagree, strongly disagree.

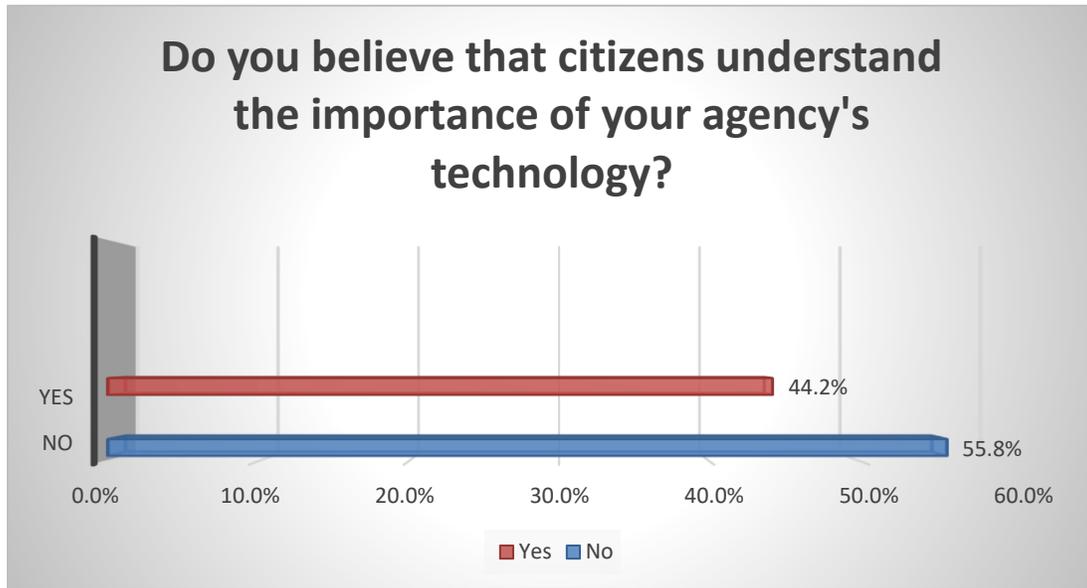
- 45 indicated strongly agree (58.4%)
- 22 indicated agree (28.6%)
- 8 indicated neither agree nor disagree (10.4%)
- 2 indicated disagree (2.6%)
- 0 indicated strongly disagree (0%)

## Please indicate your level of agreement with the following statement: Additional resources are needed when implementing technology.



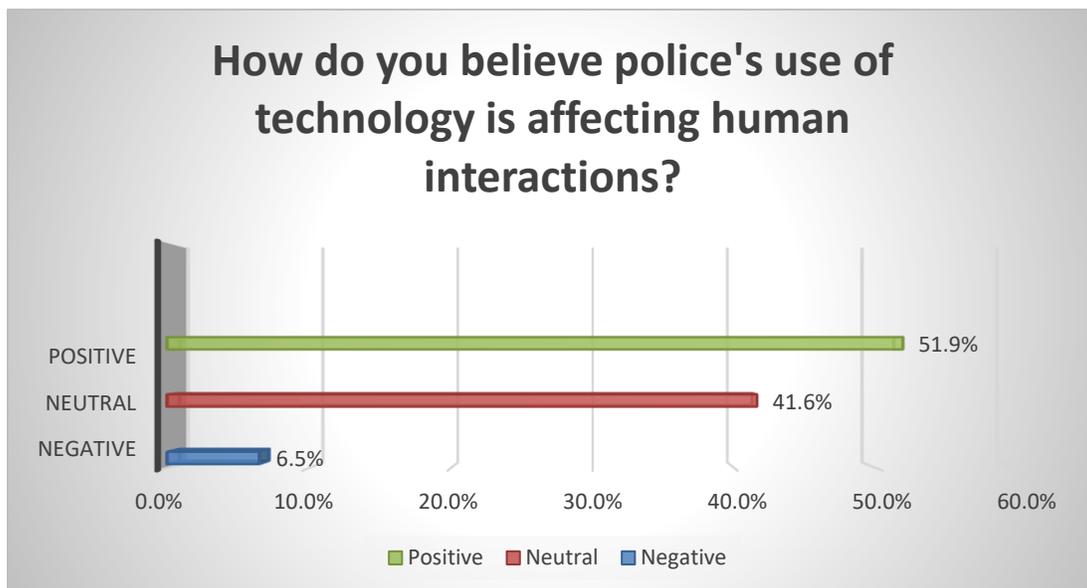
The fifth question asked the respondents to indicate if they believed that citizens understand the importance of their agency's technology by responding yes or no.

- 34 indicated yes (44.2%)
- 43 indicated no (55.8%)



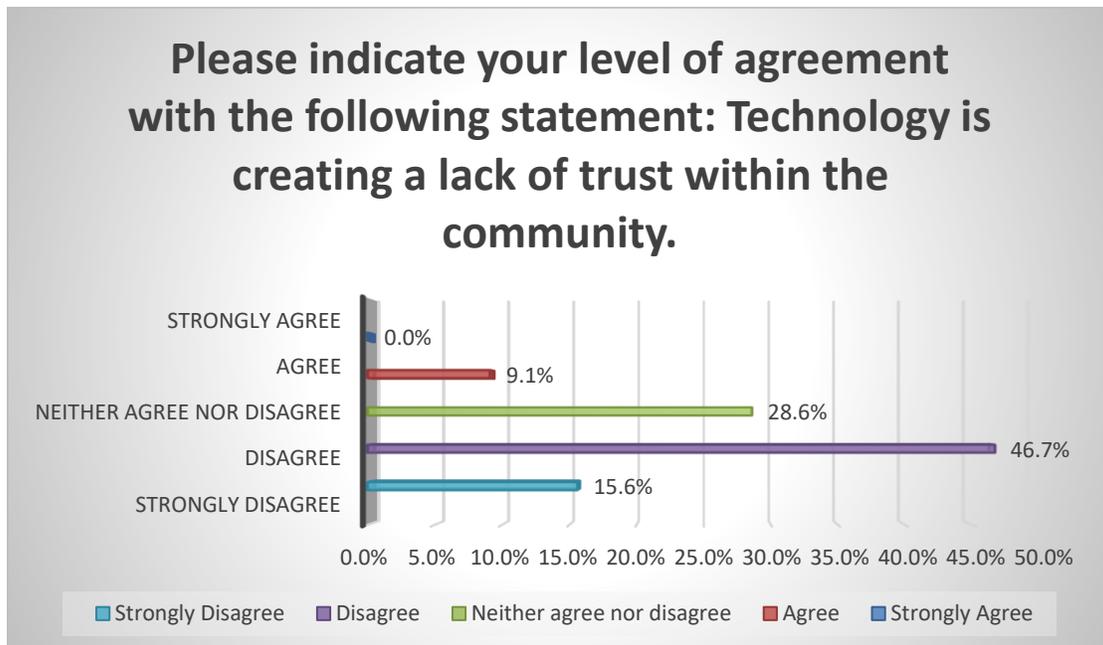
The sixth question asked the respondents to indicate how they believe their use of technology affects human interactions by responding whether it is positive, neutral, or negative.

- 40 indicated positive (51.9%)
- 32 indicated neutral (41.6%)
- 5 indicated Negative (6.5%)



The seventh question asked the respondents to indicate their level of agreement with the statement that technology is creating a lack of trust within the community by responding strongly agree, agree, neither agree nor disagree, disagree, strongly disagree.

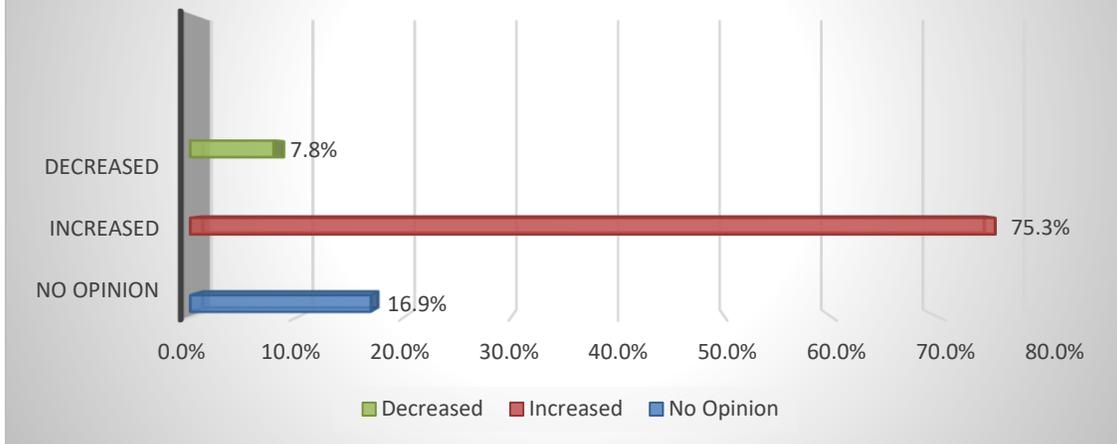
- 0 indicated strongly agree (0%)
- 7 indicated agree (9.1%)
- 22 indicated neither agree nor disagree (28.6%)
- 36 indicated disagree (46.7%)
- 12 indicated strongly disagree (15.6%)



The eighth question asked the respondents to indicate whether they believed that police technology has decreased or increased community service by responding decreased, increased, or no opinion.

- 6 indicated decreased (7.8%)
- 58 indicated increased (75.3%)
- 13 indicated no opinion (16.9%)

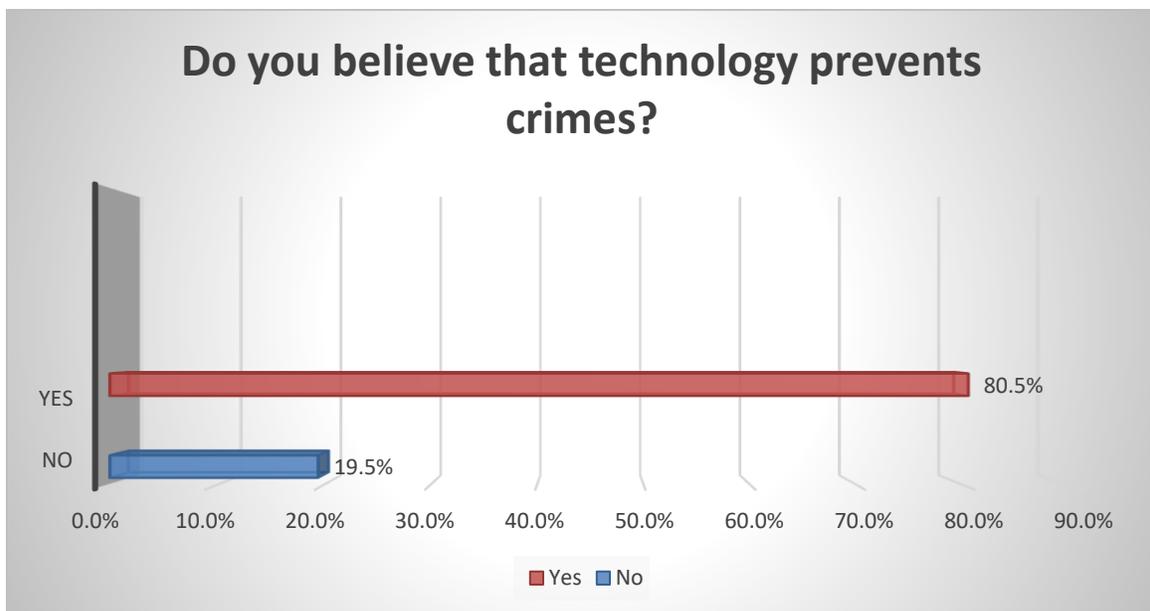
## Do you believe police technology has decreased or increased community service?



The ninth question asked the respondents to indicate whether they believed that technology prevents crimes by responding yes or no.

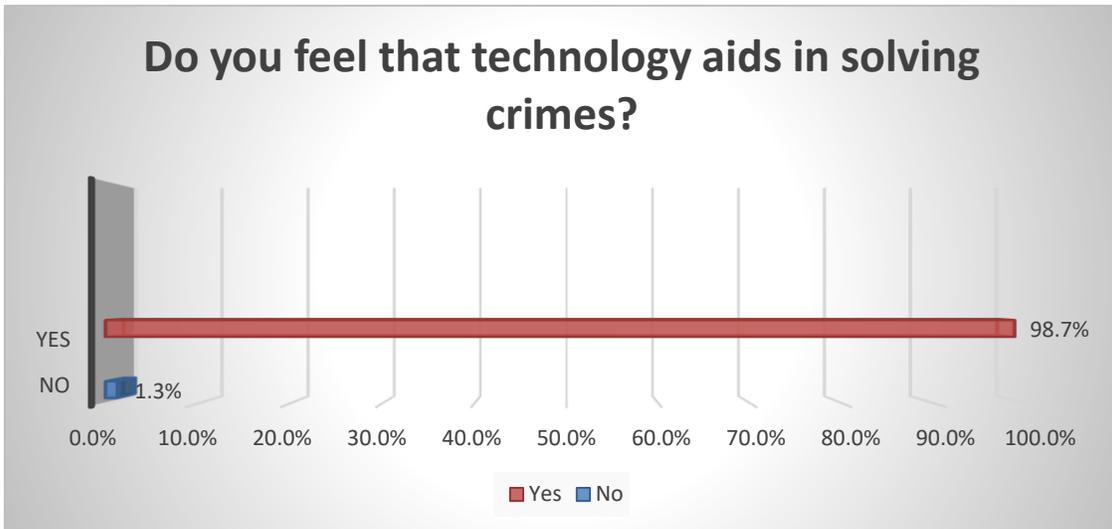
- 62 indicated yes (80.5%)
- 15 indicated no (19.5%)

## Do you believe that technology prevents crimes?



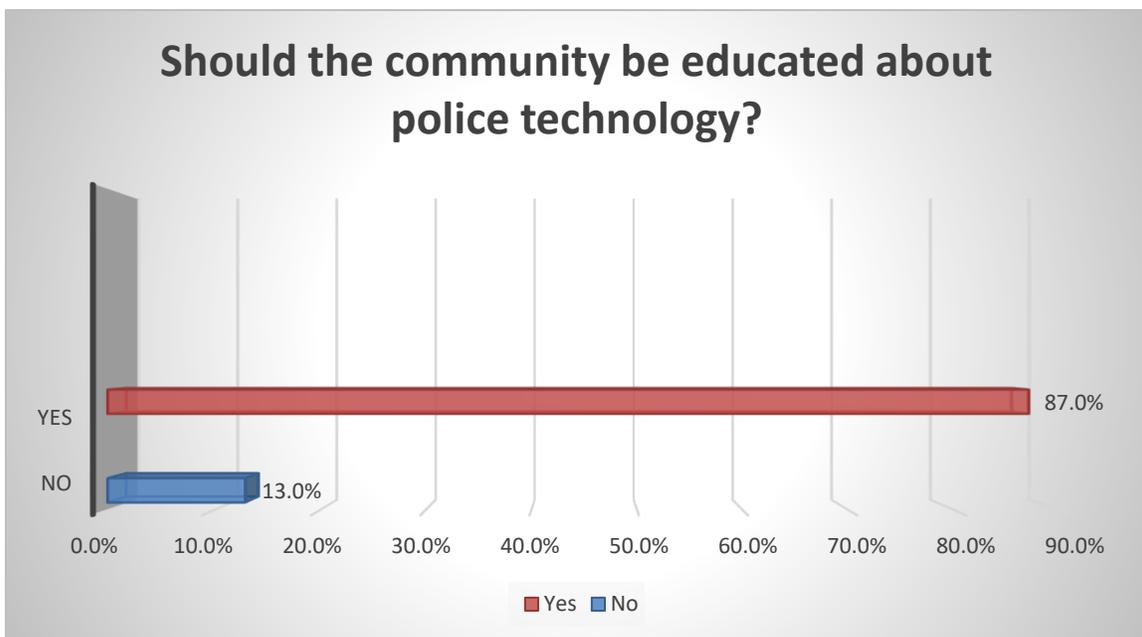
The tenth question asked the respondents to indicate whether they believed that technology aids in solving crimes by responding yes or no.

- 76 indicated yes (98.7%)
- 1 indicated no (1.3%)



The eleventh question asked the respondents to indicate whether the community should be educated about police technology by responding yes or no.

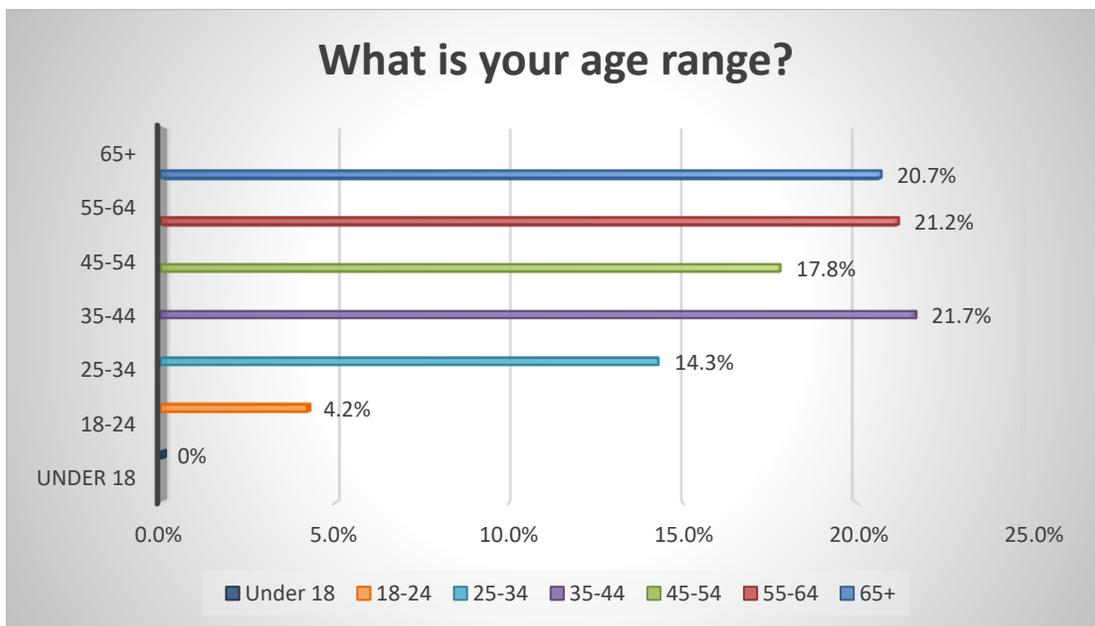
- 67 indicated yes (87%)
- 10 indicated no (13%)



Question #1 for the community survey asked respondents to establish their age range. Questions #2 - #10 utilized a dichotomous and Likert scale response system to measure responses regarding law enforcement's use of technology and its effects on human interaction.

The first survey question asked the respondents to indicate their age range.

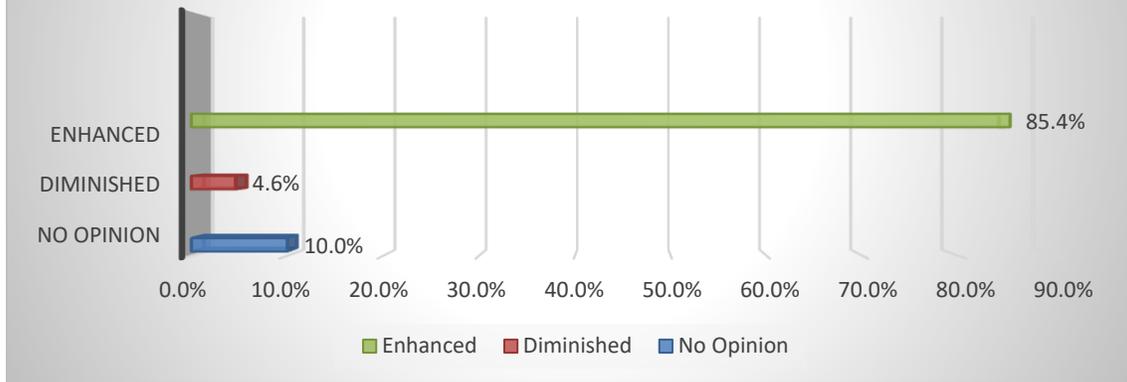
- 0 indicated under 18 (0%)
- 25 indicated 18-24 (4.3%)
- 84 indicated 25-34 (14.3%)
- 128 indicated 35-44 (21.7%)
- 105 indicated 45-54 (17.8%)
- 125 indicated 55-64 (21.2%)
- 122 indicated 65+ (20.7%)



The second question asked the respondents to indicate if technology has enhanced or diminished police performance in their community by responding that it has enhanced, diminished, or had no opinion.

- 503 indicated enhanced (85.4%)
- 27 indicated diminished (4.6%)
- 59 indicated no opinion (10%)

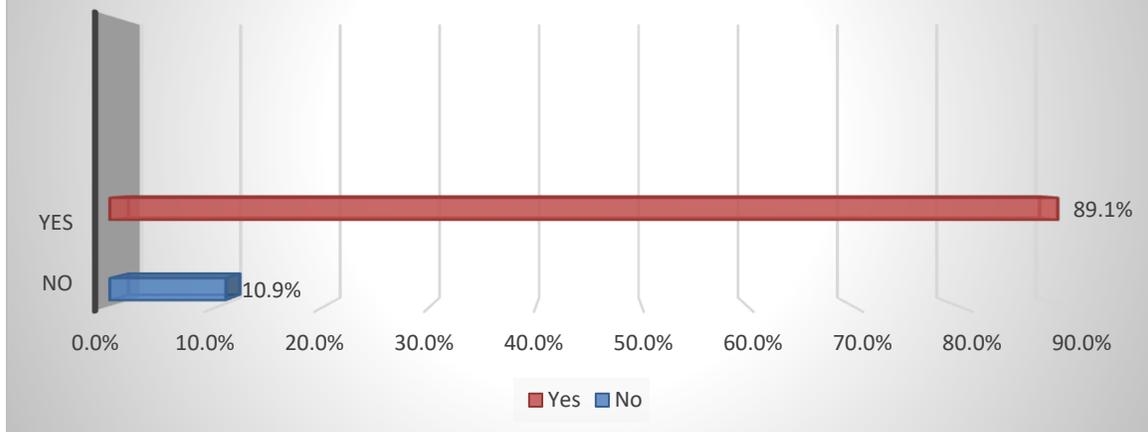
## Do you believe technology has enhanced or diminished police performance in your community?



The third question asked the respondents to indicate whether they understood why police use various technologies by responding yes or no.

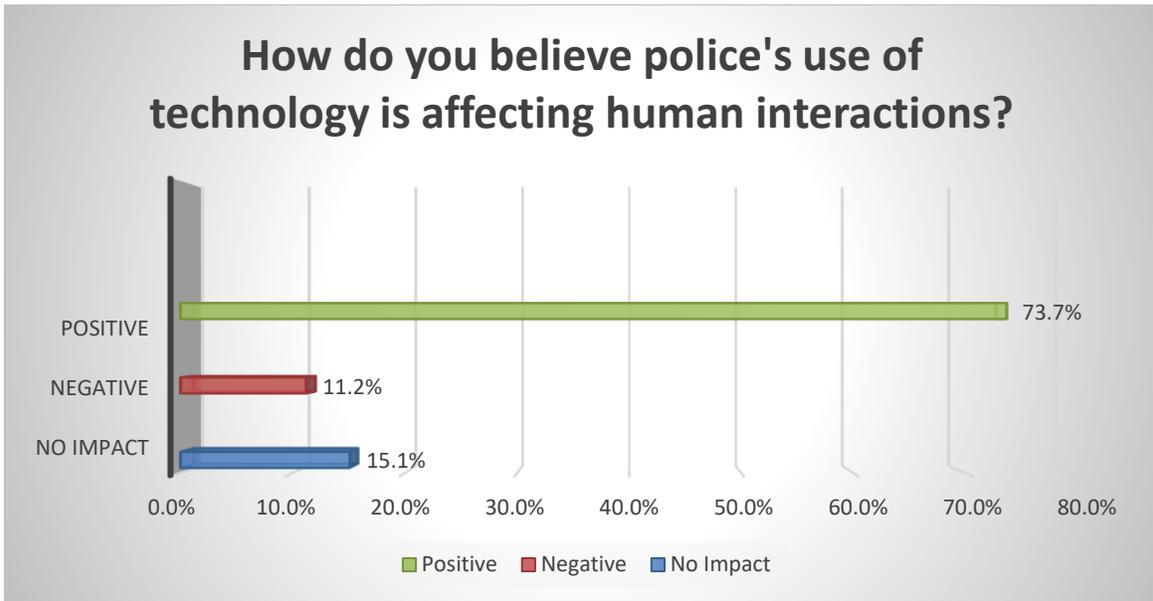
- 525 indicated yes (89.1%)
- 64 indicated no (10.9%)

## Do you feel you have a good understanding of why police use various technologies?



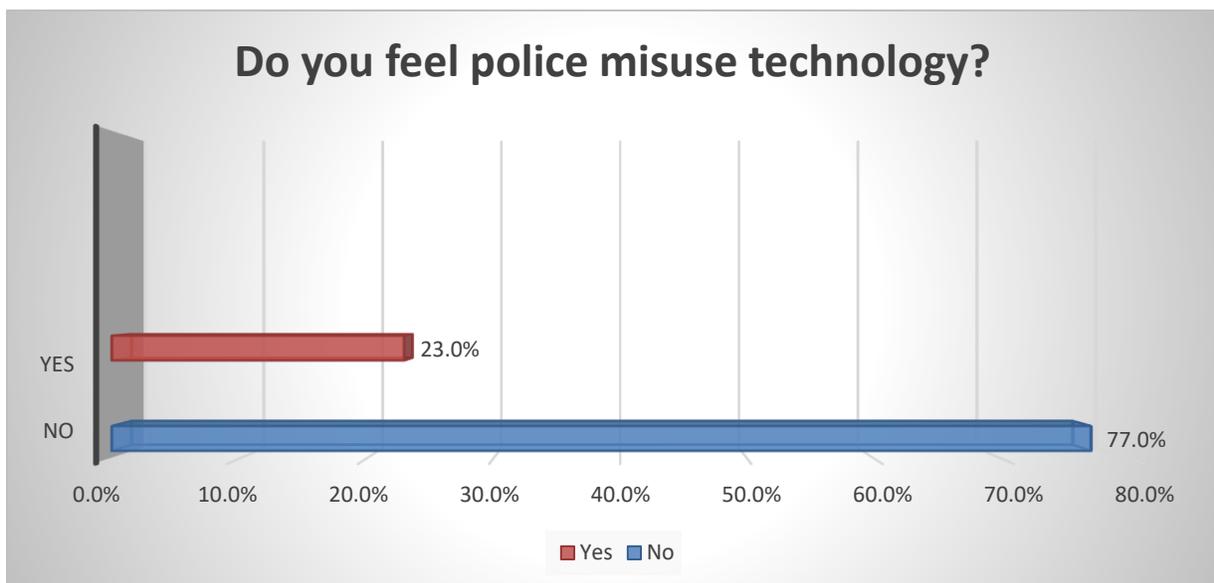
The fourth question asked the respondents to indicate how they believe police's use of technology affects human interactions by responding positive, negative, or no impact.

- 434 indicated positive (73.7%)
- 66 indicated Negative (11.2%)
- 89 indicated no impact (15.1%)



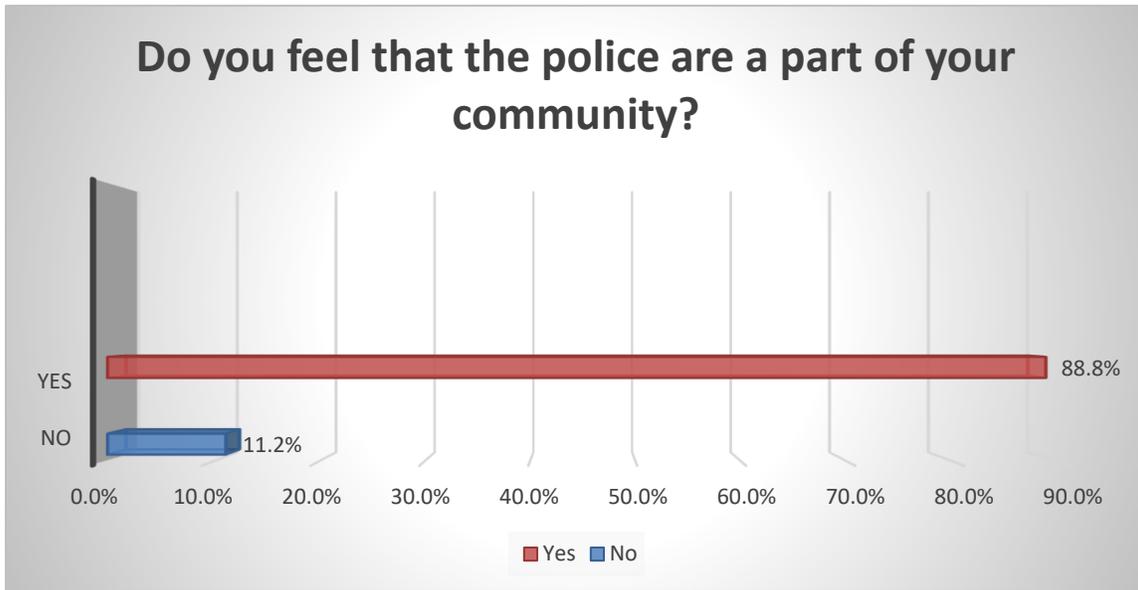
The fifth question asked the respondents to indicate if they feel police misuse technology by responding yes or no.

- 134 indicated yes (23%)
- 455 indicated no (77%)



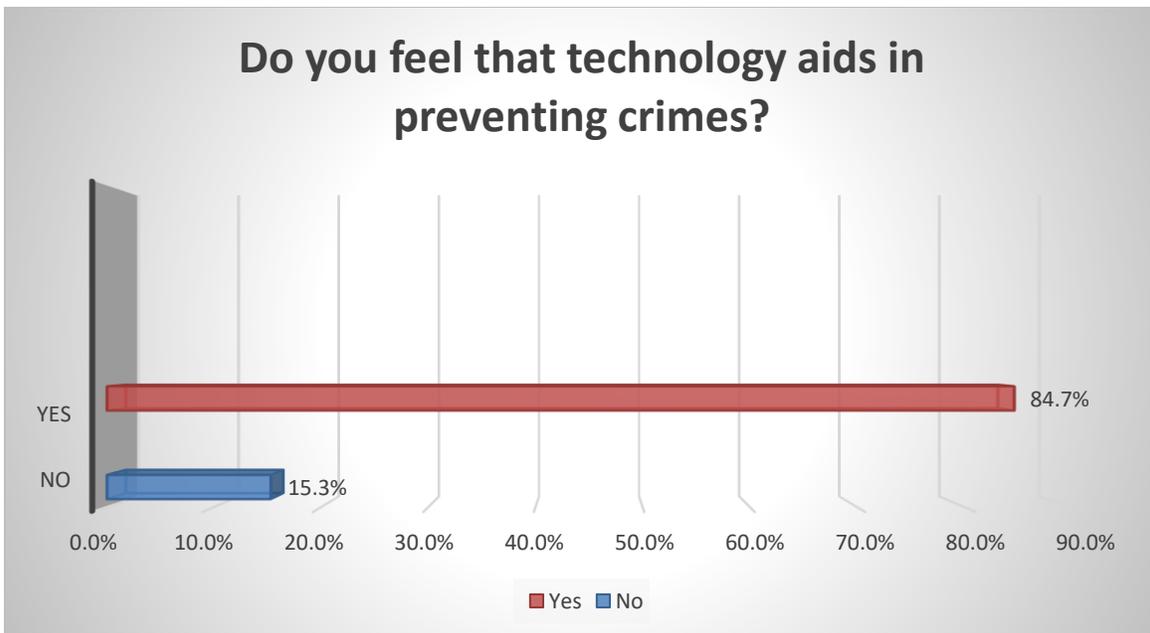
The sixth question asked the respondents to indicate if they feel that police are a part of their community by responding yes or no.

- 523 indicated yes (88.8%)
- 66 indicated no (11.2%)



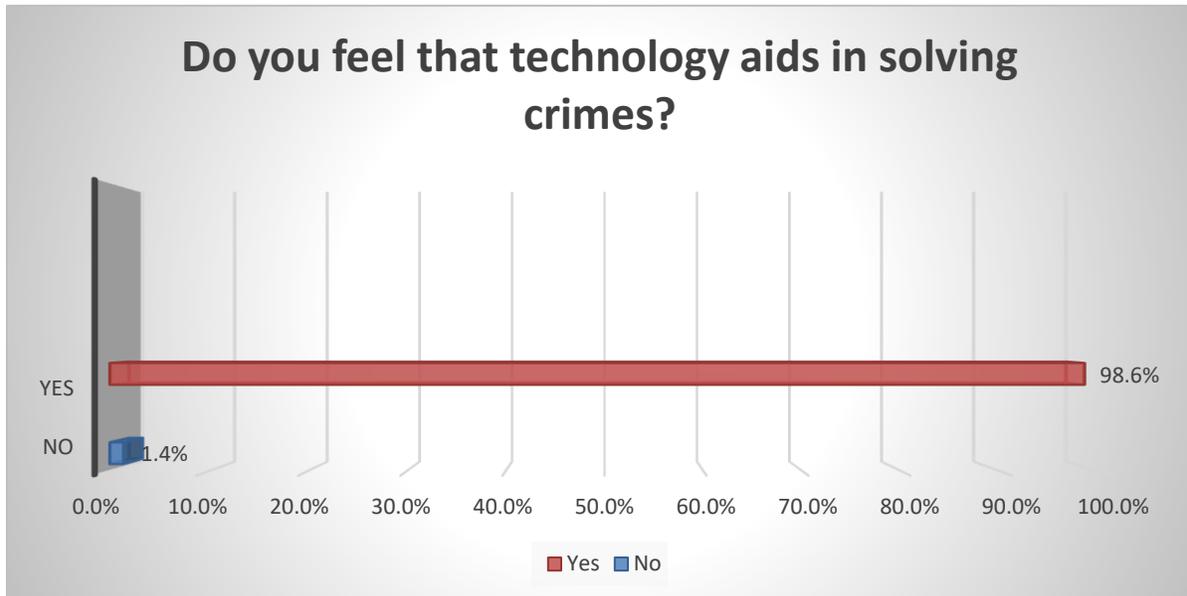
The seventh question asked the respondents to indicate whether they believed that technology prevents crimes by responding yes or no.

- 499 indicated yes (84.7%)
- 90 indicated no (15.3%)



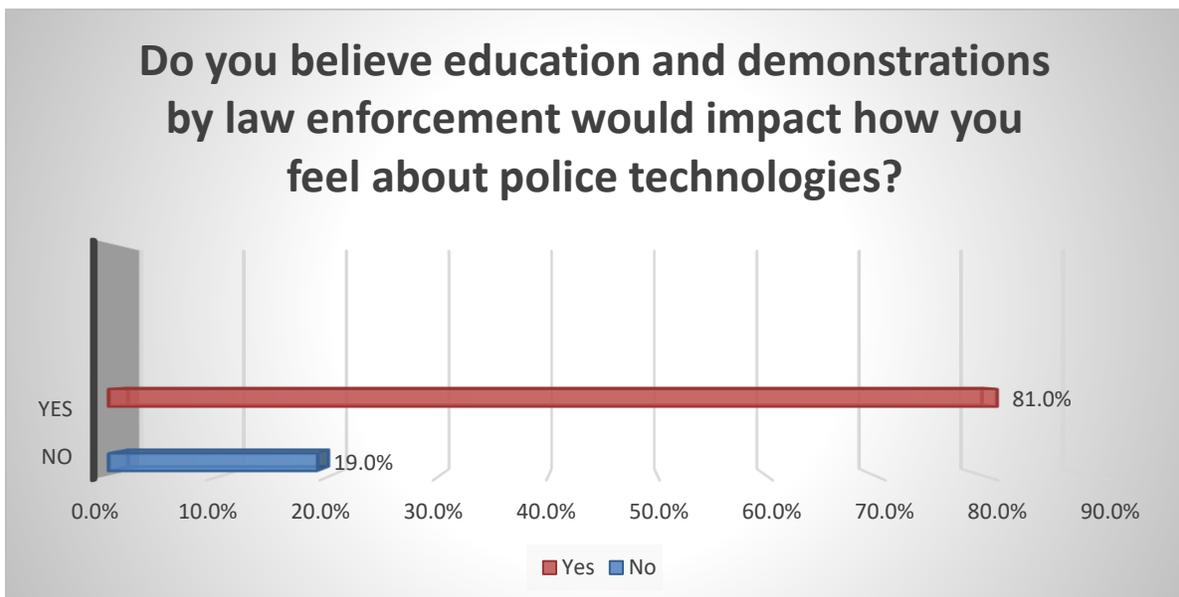
The eighth question asked the respondents to indicate whether they believed that technology aids in solving crimes by responding yes or no.

- 581 indicated yes (98.6%)
- 8 indicated no (1.4%)



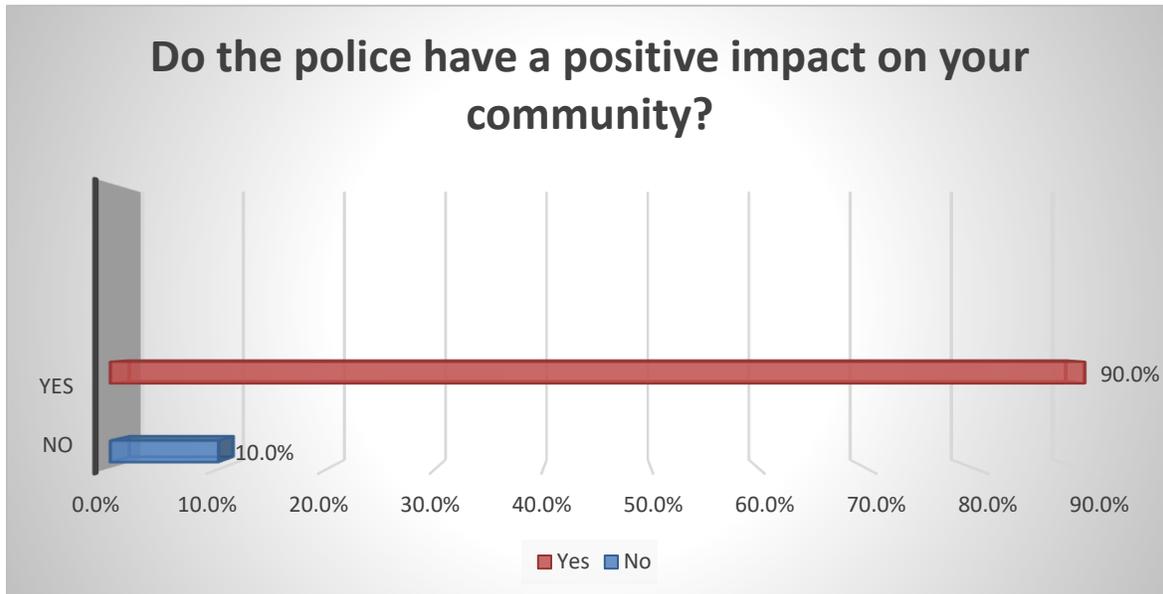
The ninth question asked the respondents to indicate whether they believe education and demonstrations by law enforcement would impact how they feel about police technologies by responding yes or no.

- 478 indicated yes (81%)
- 111 indicated no (19%)



The tenth question asked the respondents to indicate if police positively impact their community by responding yes or no.

- 531 indicated yes (90%)
- 58 indicated no (10%)



## Discussion

The participants from the law enforcement survey and the community survey involved agencies and citizens throughout Florida. The law enforcement survey brings a perspective of the services they provide daily. However, the participants from the community survey bring a perspective on how they view services offered by law enforcement. The survey tried to identify how police technology is perceived and if it is affecting human interaction with law enforcement. The survey provided a clear understanding of the police and citizens' feelings about utilizing technology for law enforcement.

The law enforcement survey concluded that the respondents believed there is a value in police technology. Respondents indicated they believed the use of the technology is beneficial, frequent, and could increase community service. The survey distinctly demonstrated that police technology aids in law enforcement's efforts in preventing and solving crime. However, there is concern that citizens do not understand the importance of technology. The survey points out that law enforcement's technology positively affects human interaction, but many respondents also wished to remain neutral. Furthermore, the survey indicates that the community should be educated about police technology, answering why citizens do not understand its importance.

The community survey established that the respondents believe police technology benefits their community. The technology has enhanced law enforcement's performance

and ability to prevent and solve crimes. Furthermore, police technology has not harmed the community or created mistrust with law enforcement. The survey demonstrates that law enforcement's use of technology is accepted and understood. However, the survey does point out that the community sees a benefit in law enforcement educating and demonstrating their technology.

Questions one and two of the law enforcement survey provided a foundation for the respondents' responses to the survey's remaining questions. The questions provided a baseline for each law enforcement agency regarding police technology.

The third question relates to the law enforcement agency's perspective on whether police technology has positively impacted their performance within the community. The respondents indicated an overwhelming response (96.1%) that it has enhanced their performance. However, a slight reply (3.9%) had no opinion on the question. The question provided a clear response that increased police technology is not hindering the respondents' agency performance.

The fourth question provides the respondents' opinion on whether they believe additional resources are needed when implementing technology. The responses to this question indicate an agreement of 87% who believe other resources are required. The respondents indicated Strongly Agree (58.4%) and Agree (26.6%). The remaining combined score between having neither agree nor disagree and disagree was approximately 13%.

The interpretation of this question can have some impact depending on the type of police technology utilized by the agency. The level of technology might dictate whether additional resources are required. As a result, the level of technology might influence the respondents' decisions.

The fifth question asked the respondents their belief in whether citizens understood the importance of their technology. The answers to this question consisted of an answer of Yes (44.2%) and No (55.8%). The total responses to this question display a middle ground of uncertainty with a slight edge that citizens do not understand. The respondents have provided a solid reaction to police technology's importance but may not convey that importance to their community.

The sixth question may provide a connection with question five as it relates to the knowledge base of the citizens. The question asked respondents if they believed police technology utilization affects human interactions. The responses provided were Positive (51.9%), Neutral (41.6%), and Negative (6.5%). This question may have provided some limitations as the respondents could remain neutral instead of giving a definitive response. The real answers to this question also display a middle ground of uncertainty with a slight edge that technology positively affects human interaction.

The seventh question required respondents to provide their opinion on whether technology creates a lack of trust within the community. Of the 77 respondents, 62.3% disagreed that police technology creates a lack of faith. The respondents responded Strongly Disagree (15.6%) and Disagree (46.7%). The remaining combined score between having neither agree nor disagree and agree was approximately 37.7%. The question demonstrates law enforcement's perceptions of their community's trust, which is an opinion. As a result, this question may have provided some limitations as the respondents could remain neutral instead of giving a definitive response.

The eighth question inquires whether the respondents believe police technology has increased or decreased community service. The responses indicate that it has increased (75.3%) rather than decreased (7.8%) community service. The remaining reactions of no opinion resulted in 16.9%.

The acknowledgment from the respondents demonstrates that law enforcement continues to have an impact within their community. Even technology can improve how law enforcement functions in today's society. As stated in the literature review, technology has rewarding benefits, but citizens must continue to be in the process of police work.

The ninth question relates to whether police technology prevents crime. The answers to this question consisted of an answer of Yes (80.5%) and No (19.5%). The firm "yes" response to this question indicates that police technology is beneficial. Law enforcement demonstrates that police technology can serve as a helpful tool in assuring crime does not occur.

The tenth required respondents to indicate whether technology aids in solving crime. The answers to this question also consisted of an answer of Yes (98.7%) and No (1.3%). The question demonstrates that the respondents unanimously agree that police technology increases their chances of solving crimes within their communities. The respondents recognize that police technology is crucial in law enforcement and necessary to adapt to the growing criminal enterprise.

The eleventh and final question of the law enforcement survey asked the respondents about police technology education. Should the community be educated about police technology? The responses to this question consisted of an answer of Yes (87%) and No (13%). A strong indication that the respondents believe education is necessary—furthermore, it is a clear indication of the results from questions five and six. Law enforcement believes that the community should understand why police use technology, so they are not apprehensive of its implementation.

Question number one of the community survey provided a foundation for the respondents' responses to the survey's remaining questions. The questions provided a baseline for the range of ages participating in the survey. However, it did create some unanswered questions and limitations. The limitations are that the study was unable to determine the viewpoints from each age range. The survey does not show if one age group had the same or different views from another. As a result, the focus will have to look at the citizens' responses regarding the topic and not each group's beliefs.

The second question relates to the community's' belief on whether police technology has enhanced or diminished police performance in their community. The respondents indicated an overwhelming response of 85.4% that it has enhanced police performance. However, a slight reply of 4.58% stated that it has diminished, and no opinion resulted in 10%. These responses coincide with similar responses from the law enforcement survey, indicating that respondents agree. The question clarifies that increased police technology does not negatively impact the community.

The third question establishes whether the community understands why police use various technologies. The respondents felt strongly about this by indicating yes (89.1%) to this question. However, 10.9% said that they do not have a good understanding. The responses may connect to the amount of education law enforcement provides to their communities. If education increases, there may be a question about whether citizens understand the uses or not.

The fourth and fifth questions address whether law enforcement's use of technology affects human interactions and whether police misuse their technology. The fourth question indicates that technology positively affects human interactions (73.7%). The remaining responses indicated Negative (11.2%) and No impact (15.1%). The fifth question suggests a strong response that law enforcement does not misuse police technology with a Yes (23%) and No (77%) response. The reactions suggest no correlation that police technology changes how law enforcement interacts with their community. Furthermore, the belief is that law enforcement is utilizing their equipment correctly and not losing the community's trust. As stated in the literature review, the use of technology (i.e., body-worn cameras) has aided law enforcement in conveying transparency.

The sixth question asks the respondents whether they believe the police are a part of their community. A substantial percentage of respondents responded Yes (88.8%) with only a small number of No (11.2%). The basis of the information indicates that law enforcement continues to have a strong bond with their communities even with the increased use of technology. The human bond remains and will continue as long as there is a human element to law enforcement.

The seventh and eighth questions deal with whether the community believes that police technology aids in preventing and solving crimes. The respondents' results regarding these questions are similar to the law enforcement survey. 84.7% indicated yes, and 15.3% indicated no regarding crime prevention, 98.6% indicated yes, and 1.4% stated no regarding assistance in solving crime. These results demonstrate that the viewpoint of law enforcement and the citizens are in line with each other. Furthermore, it displays that both parties agree that police technology is beneficial for enforcing the law.

The ninth question displays consensus between the community and law enforcement surveys. The responses to this question consisted of an answer of Yes (81%) and No (19%). The respondents answered whether education and demonstrations by law enforcement would impact how they felt about police technology. Educating the community about police technology would help citizens understand why police use it and why it is essential. This critical element could explain why some respondents were not receptive to law enforcement's use of technology.

The tenth and final question of the community survey relates to the perspective on whether police have a positive impact on their community. The respondents indicated an overwhelming response of Yes (90%) and a small response of No (10%). The question clarifies that police technology is not negatively affecting law enforcement's relationships within their community. This question may connect with question number six as there could be a strong relationship foundation already established within the community.

The rapid growth of technology has law enforcement gravitating to implement it within their agencies. Criminals are also utilizing these resources to commit crimes, which were unheard of in the past. For law enforcement to stay ahead of this type of criminal activity, they must also improve and implement this technology. However, law enforcement serves the citizens of their community, and they also need to understand the importance of technology. The exploration into technology and how it affects human interaction touches on areas that law enforcement must consider.

The use of police technology improves the law enforcement service provided to the citizens they serve. As technology increases, human interaction can decrease, driving

a wedge between law enforcement and the community. The research uncovers an exciting discovery on how citizens feel about police using technology. The respondents from the law enforcement survey and the community survey have very similar beliefs about police technology. Respondents from both surveys agree that police technology is beneficial and has increased law enforcement's performance in preventing and solving crime. The relationship between the community and law enforcement appears to be intact with a level of trust. However, the survey identified some areas where law enforcement can continue to avoid any negative interactions with their community regarding technology. These areas come in the form of education.

The respondents from the law enforcement survey believe that the community does not understand the importance of police technology. Furthermore, law enforcement believes they should educate the community about police technology. The respondents from the community survey believe that education and demonstrations by law enforcement would impact how they feel about police technology.

### **Recommendations**

For law enforcement to maintain the balance of technology and how it affects citizens, police agencies need to be more proactive in educating why police technology is beneficial. Education is vital in this area because many individuals do not understand why law enforcement utilizes specific tools to perform their assigned responsibilities. Citizens may choose to assume or listen to others who do not understand the importance of the implemented technology. The results can cause citizens to question law enforcement's actions and whether the use of the technology is a violation of their rights.

Law enforcement agencies can accomplish this by participating in community meetings, informing citizens of officers' current challenges, and providing the citizens with information on how technology will assist law enforcement's efforts and solve some of their challenges. Law enforcement agencies should provide examples that support this information so citizens can visualize and relate to the message they are trying to convey. Furthermore, agencies should work to educate the community on the procedures and laws that are in place that protect their rights and how police use the technology. Law enforcement agencies can accomplish this by providing literature to the citizens that they can read or share with others. In addition, law enforcement agencies can utilize social media to extend beyond the local area. This method will reach many citizens in a rapid timeframe, expand to those who could not attend community meetings, and provide a tremendous amount of exposure to a topic of community concern.

Additionally, law enforcement agencies should make efforts to demonstrate how the technology will benefit the community and aid law enforcement efforts. A visual demonstration allows citizens to visualize exactly how the technology works and its impact on the community. Furthermore, it reinforces the information already disseminated to the citizens within the area. Law enforcement can host these demonstrations at their agency, citizen academies, or particular community events. Positive interactions with citizens combined with allowing limited access to the implemented technology will demonstrate the agency's objective and transparency in the equipment officers utilize.

Furthermore, law enforcement can record these interactions and place them on social media.

Agencies that work hard in this area will have less resistance and more support in obtaining or implementing police technology. Transparency in everything we do allows us to maintain our commitment to serving the people we swore to protect.

Lieutenant Anthony Vizzini has been with the Ocala Police Department since 2000. He currently serves as the Watch Commander for the Patrol Division. He has served as an officer/detective in Patrol, Special Operations, Investigative Services, Narcotics, and as a SWAT Operator. In 2015, he was promoted to the rank of Sergeant and served in Patrol, Intelligence, Investigative Services, and as a SWAT Team Leader. In 2020, he was promoted to the rank of Lieutenant and serves in Patrol and as the SWAT Commander. Lieutenant Vizzini received his Bachelor's Degree in Criminal Justice Administration from Columbia Southern University.

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## Appendix

### Law Enforcement Survey

Please take a few moments to participate in this brief survey. The purpose of the survey is to gauge how law enforcement officers feel about the use of technology by law enforcement agencies and how it may impact relationships with communities. Your responses are anonymous and will provide you with an important opportunity to provide feedback to law enforcement agencies.

\* 1. How many years have you worked as a law enforcement officer?

- 15-19
- 20-24
- 25-29
- 30+

\* 2. How often does your agency utilize technology?

- A great deal
- A lot
- A moderate amount
- A little
- None at all

\* 3. Do you believe technology increased has enhanced or diminished police performance in your community?

- Enhanced
- Diminished
- No Opinion

\* 4. Please indicate your level of agreement with the following statement: Additional resources are needed when implementing technology.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

\* 5. Do you believe that citizens understand the importance of your agency's technology?

- Yes
- No

\* 6. How do you believe police's use of technology is affecting human interactions?

- Positive
- Neutral
- Negative

\* 7. Please indicate your level of agreement with the following statement: Technology is creating a lack of trust within the community?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

\* 8. Do you believe police technology has decreased or increased community service?

- Decreased
- Increased
- No Opinion

\* 9. Do you believe that technology prevents crimes?

- Yes
- No

\* 10. Do you feel that technology aids in solving crimes?

- Yes
- No

\* 11. Should the community be educated about police technology?

- Yes
- No

## Community Survey

Please take a few moments to participate in this brief survey. The purpose of the survey is to gauge how the community feels about the use of technology by law enforcement agencies. Your responses are anonymous and will provide you with an important opportunity to provide feedback to law enforcement agencies.

\* 1. What is your age range?

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

\* 2. Do you believe technology has enhanced or diminished police performance in your community?

- Enhanced
- Diminished
- No Opinion

\* 3. Do you feel you have a good understanding of why police use various technologies?

- Yes
- No

\* 4. How do you believe police's use of technology affects human interactions?

- Positive
- Negative
- No Impact

\* 5. Do you feel police misuse technology?

- Yes
- No

\* 6. Do you feel that the police are a part of your community?

- Yes
- No

\* 7. Do you feel that technology aids in preventing crimes?

- Yes
- No

\* 8. Do you feel that technology aids in solving crimes?

- Yes
- No

\* 9. Do you believe education and demonstrations by law enforcement would impact how you feel about police technologies?

- Yes
- No

\* 10. Do the police have a positive impact on your community? 0

- Yes
- No