

Atlantic City Police Officers' Perceptions of Automated License Plate Readers (ALPRs)

*Preliminary Report



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Background

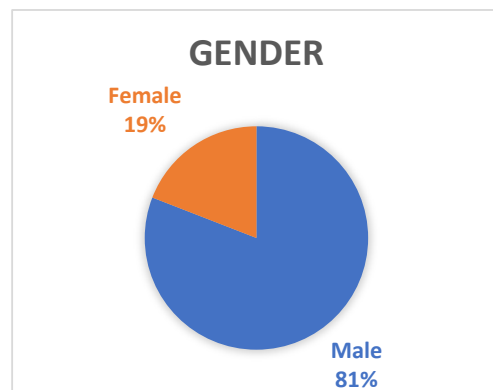
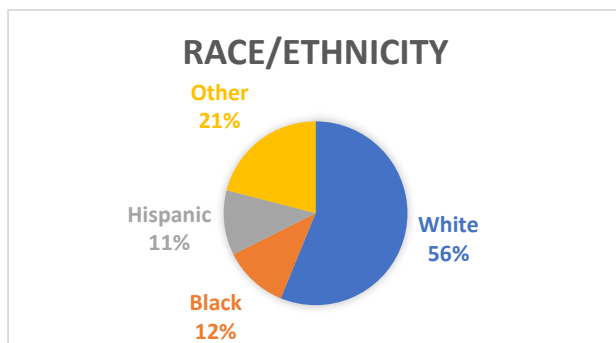
The Atlantic City Police Department (ACPD) received a grant from the Bureau of Justice Assistance’s Smart Policing Initiative to purchase and install fixed/stationary automated license plate readers (ALPR) on roadways in and out of the city. ALPRs scan the alphanumeric license plates on moving or parked vehicles and compare them to existing databases, such as lists of stolen cars or registered owners who have open warrants. The overall goal of the project is to use the ALPRs and its information sharing technology to reduce crime, particularly motor vehicle thefts and gang-related shootings, which the ACPD has identified as a priority. Prior to the ALPRs being installed and the technology becoming operational, both ACPD leadership and the research partners found merit in assessing police officers’ views toward the expanded use of the ALPR technology.

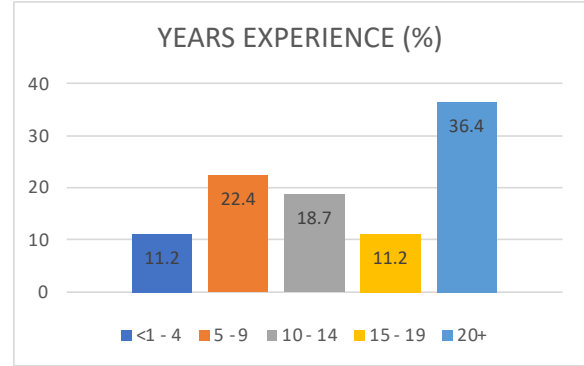
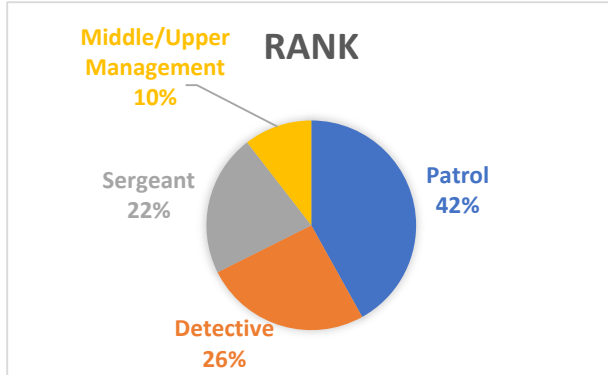
Purpose of Study

The purpose of this study was to collect time-sensitive information on officers’ perceptions regarding not only the potential for the technology’s effectiveness, its impact on day-to-day operations, officer safety, and community relations, but also their degree of cynicism/skepticism.

Methods & Sample

This report is based on the responses of 110 sworn, full-time police officers in the Atlantic City Police Department (ACPD) – resulting in a 44% response rate. With the assistance of Deputy Chief/Interim Officer in Charge James Sarkos, officers received an email describing the purpose of the research project with a link to the online survey through Qualtrics; additional reminders were sent out in the following weeks. Data collection took place between October and December 2021. The data were cross-sectional in nature with a convenience sample of officers willing to participate. The following charts/graphs display the sample’s characteristics:



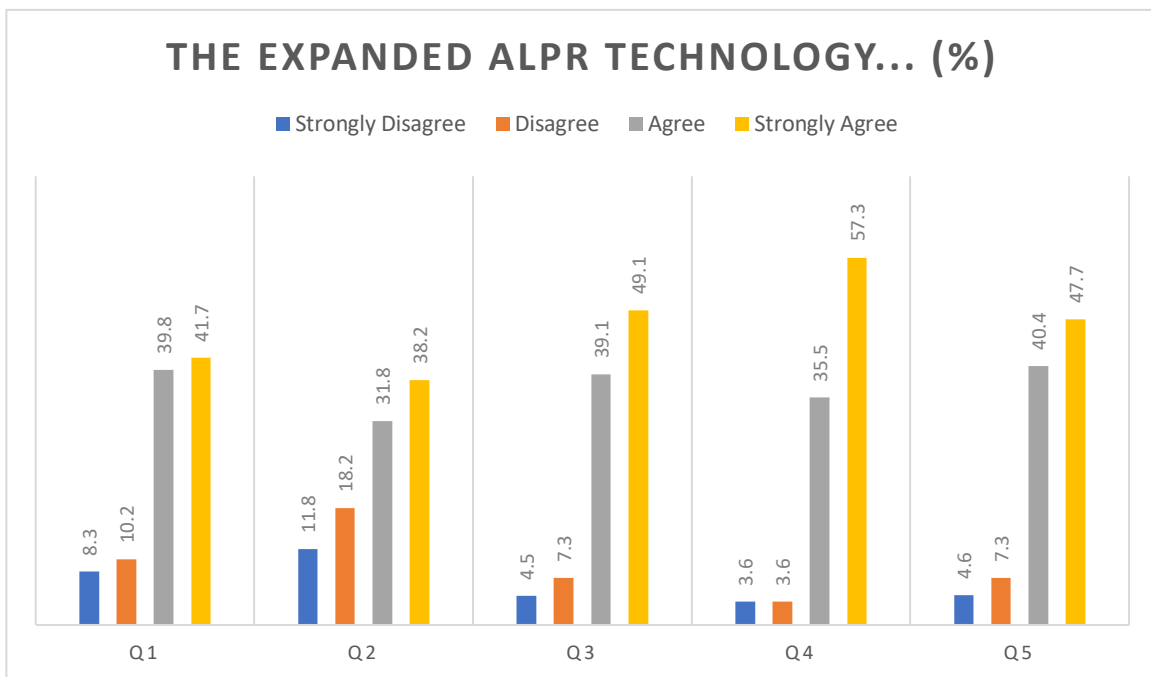


The sample is fairly representative of the ACPD with sufficient representation across officer race/ethnicity, gender, and years' experience. The vast majority of officers are front-line staff (e.g., patrol and detectives) and first-line supervisors opposed to mid-level/upper management.

Findings

The results for this preliminary report are largely descriptive. *Numbers listed in the bar charts are percentages; totals may not add up to 100% due to rounding.

Officers' Perceptions of ALPR Expansion



Q1: ...will be effective in reducing overall crime in Atlantic City.

Q2: ...will be effective in reducing motor vehicle thefts and shootings specifically.

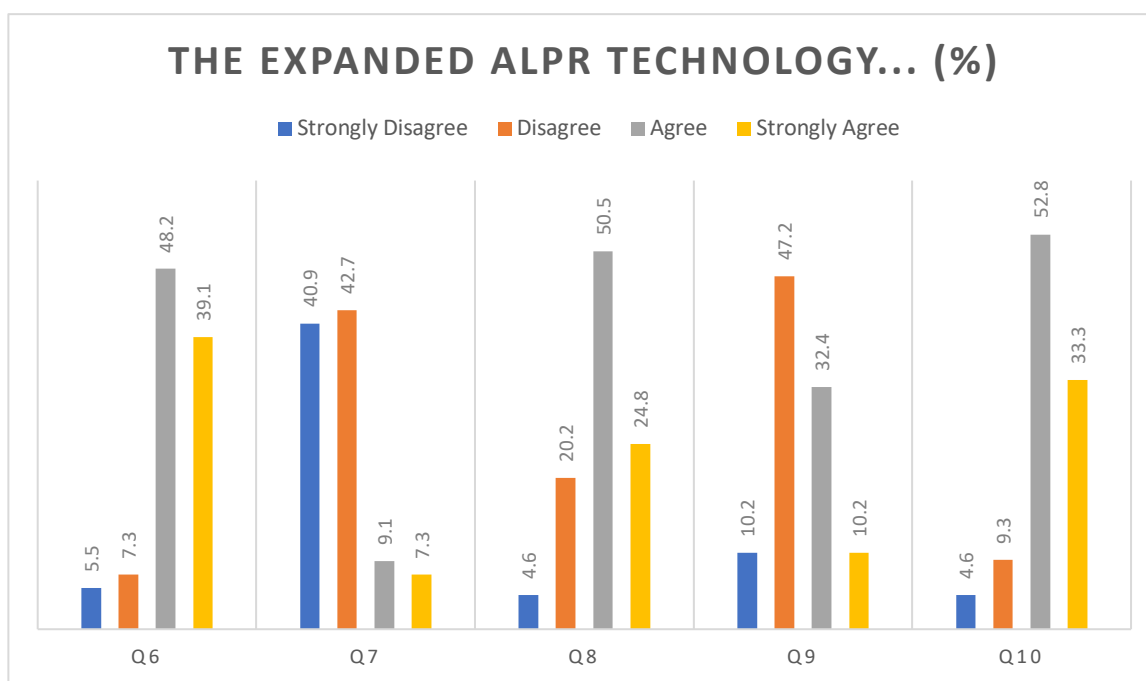
Q3: ...will improve police work in Atlantic City.

Q4: ...will assist in criminal investigations and help us solve cases/make arrests.

Q5: ...will improve the quality of evidence to prosecute cases.

Officers were generally optimistic about the expanded ALPR technology and felt that it would improve agency performance. It is also apparent that officers see the value of the ALPR technology for investigatory and evidentiary purposes.

- 81.5% agreed the technology would be effective in reducing crime (41.7% of whom “strongly agreed”). (Q1)
- 70% agreed the technology would be effective in reducing the target problems of motor vehicle thefts and shootings in particular (38.2% of whom “strongly agreed”). (Q2)
- 88.2% agreed the technology would improve police work (49.1% of whom “strongly agreed”). (Q3)
- 92.8% agreed the technology would assist in criminal investigations and help solve cases/make arrests (57.3% of whom “strongly agreed”). (Q4)
- 88.1% agreed the technology would improve the quality of evidence to prosecute cases (47.7% of whom “strongly disagreed”). (Q5)



Q6: ...will make the job easier.

Q7: ...will harm police-community relations.

Q8: ...will increase the number of vehicle stops and thus contacts with drivers.

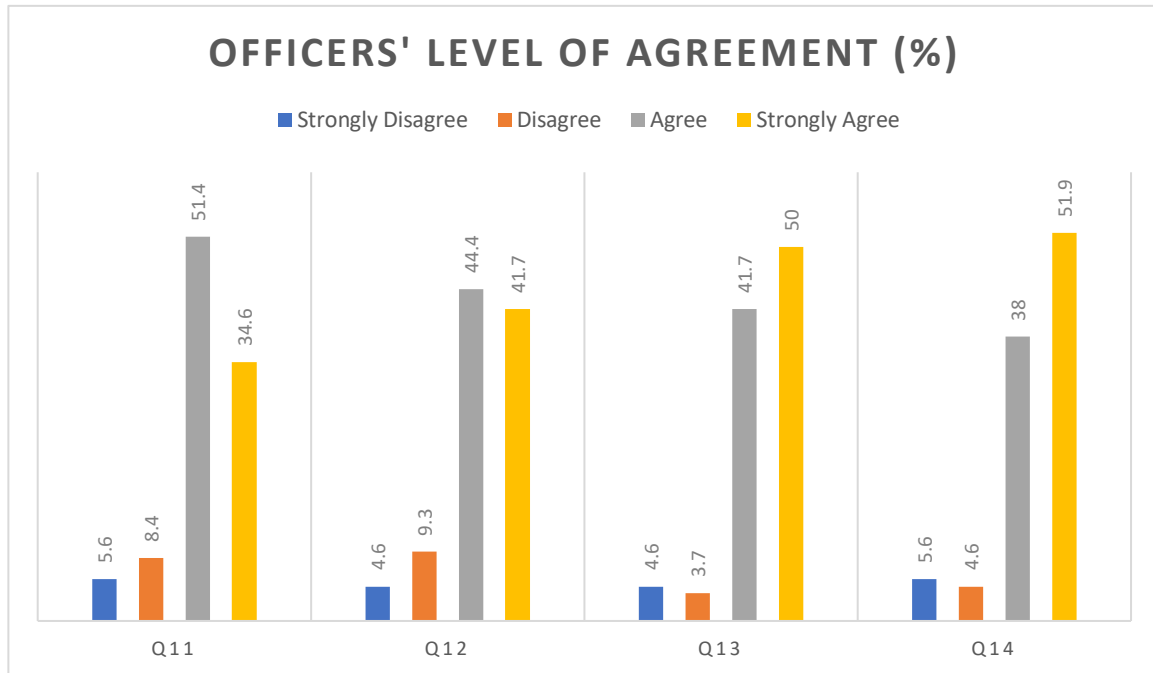
Q9: ...will reduce officer choice/discretion in who to pull over.

Q10 ...will make officers more cautious in making vehicle stops, especially when alerted by a “hit” from a hotlist.

Similarly, officers generally agreed that the expanded ALPR technology would be beneficial to themselves and would not harm police-community relations.

- 87.3% agreed the technology would make the job easier (39.1% of whom “strongly agreed”). (Q6)

- Only 16.4% agreed the technology would harm police-community relations; 83.6% disagreed (40.9% of whom “strongly disagreed”). (Q7)
- 75.3% agreed the technology would increase the number of vehicle stops and thus contacts with drivers (24.8% of whom “strongly agreed”). (Q8)
- Officers were split on whether they felt the technology would reduce officer choice/discretion in who to pull over: 42.6% agreed and 57.4% disagreed. (Q9)
- 86.1% agreed the technology would make officers more cautious in making vehicle stops, especially when alerted by a “hit” from a hotlist (33.3% of whom “strongly agreed”). (Q10)



Q11: The expanded ALPR technology will be well-received by my co-workers.

Q12: The expanded ALPR technology will increase/enhance officer safety.

Q13: Use of ALPR technology should be expanded to other departments around the state/country.

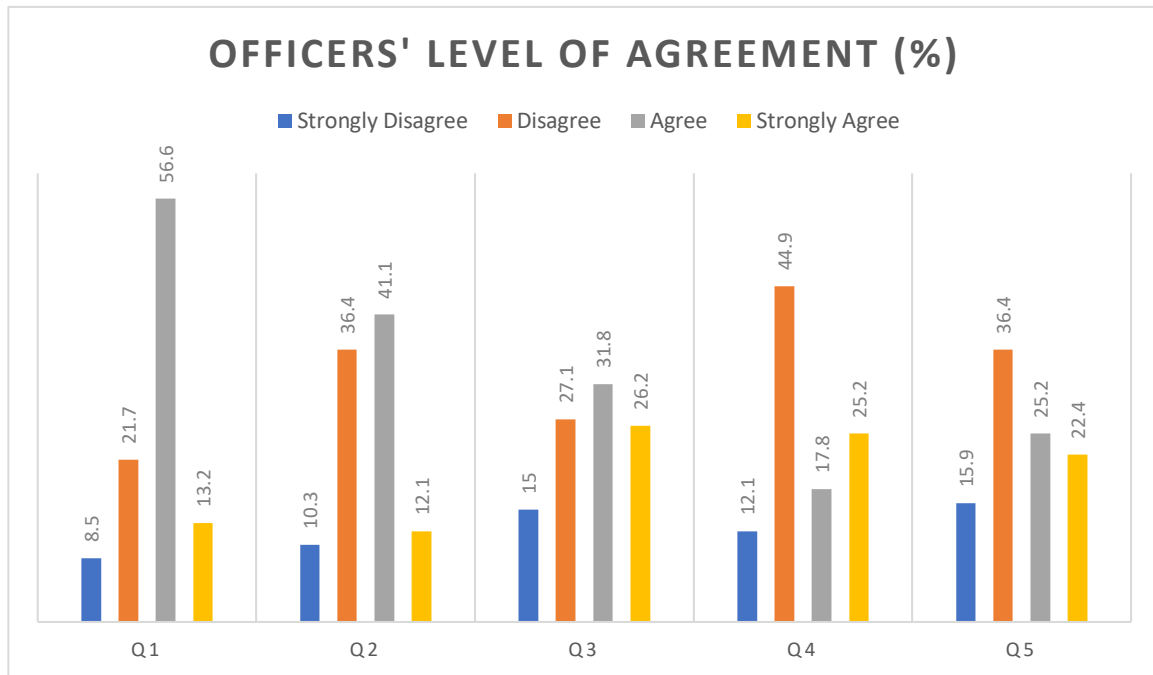
Q14: The advantages of police departments adopting ALPR technology will outweigh the disadvantages.

The vast majority of officers – consistently around 85% or more – felt that the technology would be well-received by colleagues, would increase officer safety, should be expanded to other departments, and that the advantages of ALPR outweigh the disadvantages.

- 86% agreed the technology would be well-received by colleagues (34.6% of whom “strongly agreed”). (Q11)
- 86.1% agreed the technology would increase/enhance officer safety (41.7% of whom “strongly agreed”). (Q12)
- 91.7% agreed the technology should be expanded to other departments around the state/country (50% of whom “strongly agreed”). (Q13)
- 89.9% agreed the advantages of police departments adopting ALPR technology would outweigh the disadvantages (51.9% of whom “strongly agreed”). (Q14)

Officers' Level of Cynicism and Skepticism Toward Expanded ALPR Use

Based on prior officer surveys from other agencies, it is apparent that there is some degree of cynicism/skepticism regarding the use of ALPR and other technologies. Officers have expressed concern over a lack of prosecution, restrictive pursuit policies, and an overall sentiment that the money spent on innovative technologies (e.g., ALPR, ShotSpotter, etc.) could be better invested in old and declining data infrastructure. As such, ACPD officers were asked about similar concerns.



Q1: The expanded use of ALPR technology cannot act as a deterrent if the public does not know that we're using it.

Q2: The expanded use of ALPR technology won't deter crime; it will only help us address/solve incidents after they already occur.

Q3: There is little use for ALPR technology to assist in investigations if our prosecutors will not consistently bring charges against offenders.

Q4: There is limited use for ALPR technology for detecting stolen vehicles when our Attorney General's new pursuit policy is too restrictive and does not allow officers to make chase.

Q5: There is little point in investing in ALPR technology when we need basic investments in our normal, everyday technology like the computers in our cars (e.g., working Internet; software that doesn't crash).

There was more variation in officers' responses to these questions compared to the previous 14. In fact, officers' perceptions here point to a significant degree of cynicism/skepticism regarding the expanded ALPR technology – with some factors outside of the control of the ACPD.

- A little more than 2/3rds (69.8%) agreed that the expanded use of ALPR technology cannot act as a deterrent if the public does not know about it. (Q1)

- 53.2% agreed that expanded use of ALPR technology won't deter crime, but it will only help solve incidents after they already occur. (Q2)
- 58% agreed that there is little use for ALPR technology to assist in investigations if our prosecutors will not consistently bring charges against offenders (26.2% of whom "strongly agreed"). (Q3)
- 43% agreed that there is limited use for ALPR technology for detecting stolen vehicles when the New Jersey Attorney General's new pursuit policy is too restrictive and does not allow officers to make chase. (25.2% of whom "strongly agreed"). (Q4)
- 47.6% agreed that there is little point in spending money on ALPR technology when basic investments in normal, everyday technology (e.g., working Internet in patrol cars; software that doesn't crash) is needed (22.4% of whom "strongly agreed"). (Q5)

Open-Ended Responses

Finally, the officer survey provided an opportunity to weigh in using an open-ended format. Officers were asked about 1) other locations where they would like to see fixed/stationary ALPRs and 2) any/all final thoughts regarding the ALPR technology and the project as whole. 50 officers provided responses to at least one of the two open-ended portions (45% of the total survey responses).

Locations for Additional ALPRs

Upon synthesizing the responses, there were a few locations that showed up multiple times:

- Connector entries/exits (7 times)
- Casinos and their parking garages (6 times)
- Martin Luther King Boulevard (broadly, 6 times) with an additional 8 more times listed with intersections: MLK/Baltic (3), MLK/Rt. 30 (2), MLK/Arctic (1), MLK/Atlantic (1), and MLK/Adriatic (1) – total of 14
- Back Maryland section/Brigantine Homes (broadly, 5 times) with an additional 5 more times listing the 800 block of Maryland Avenue and other intersections – total of 10
- Venice Park (5 times) and the Westside area (2 times)
- 1700 block of Atlantic Avenue (3 times)
- Stanley Homes Village (2 times)

Several other intersections were listed once, including: Albany/Winchester, North Carolina/Caspian, New Hampshire/Atlantic, South Carolina/Caspian, Florida/Atlantic, South Carolina/Adriatic, and Tennessee/Adriatic.

Other Themes

A final open-ended section provides an interesting supplement to the close-ended survey questions discussed earlier. In many ways, officers' long-form answers largely support and reinforce the earlier findings: general optimism about the technology with less agreement when it comes to levels of cynicism/skepticism. In fact, the officers' responses here suggest more nuanced perspectives, particularly regarding concerns about factors that could potentially limit the expanded ALPRs effectiveness/impact. **Four** themes emerged:

1. Optimism for the technology, particularly in the area of improvements to investigations (13 officers)

Many of the responses touched on strong support for the expanded ALPR technology and the belief that it will improve the ACPD's effectiveness.

- "Bring in the ALPRs they will help tremendously."
- "I believe the future of law enforcement will involve a much greater use of technology like the plate readers. This is a step in the right direction."
- "This technology would have been useful during many criminal instances during past years and this is long overdue."
- "Atlantic City is one of the most difficult areas to conduct investigations. ANY help in investigations would be appreciated."

2. Concerns that some factors, if not addressed, will impede the ALPRs' effectiveness (7 officers)

Here again, officers were generally supportive of the technology, but hinted at factors that should be considered. They include: officers not having access to the cameras or the ability to search for license plates, general IT problems that take too long to be resolved, understaffing of dispatchers as well as civilian staff working in A.C.H.I.L.E.S., and limitations of only having ALPRs on the outskirts of the city

- "I just hope that the system works and that we have the capability to use the information in real time. We have a constant problem with the in car computers (MDT) that do not work and have problems. They take weeks to fix, sometimes months. They then get fixed and the same problems reoccur. We need a real team of IT people just for the police department."
- "Dispatch cannot confirm LPR hits because they are understaffed."
- "Most of the shootings are usually performed within city limit."
- "We have a very high crime area and our criminals are definitely capable of navigating around these systems if they're not put in the proper places or else will have blind spots that could severely impact our cases."
- "I believe ALPRs should be placed so that patrol has time to respond to Hot Hits before the vehicle leaves the city."

3. A preference for ALPRs mounted on police vehicles as opposed to mounted on fixed/stationary objects (5 officers)

A few officers felt that the current plan of fixed/stationary ALPRs would be less effective. They would like to see more ALPRs mounted on police vehicles to bolster the fixed/stationary ALPRs, which is also relevant to some of the aforementioned limitations.

- "Every single marked patrol vehicle should have a LPR system. Patrol vehicles move around the city 24/7 7 days a week and would be much more effective then fixed locations. Fixed is good, but patrol vehicles should be strongly considered."
- "More vehicles equipped with ALPRs are needed."
- "I also feel if we had more units on the police vehicles, that too would be of great assistance."

4. Other general critiques (5 officers)

A few officers felt that the patrol division was severely understaffed (3 officers) and that financial resources should be used/directed toward hiring more officers. Additionally, one officer was skeptical about the expanded use of ALPR based on the perceived departmental restrictiveness of existing ALPRs in patrol cars. Lastly, one officer voiced concerns about negative citizen perceptions (city residents and visitors) stemming from the upcoming project.

- “More Officers are needed in Patrol and less separate units on duty.”
- “We don’t need money for big brother projects. We need more officers.”
- “The only down fall is that there needs to be more officers in patrol to make the difference.”
- “The supervisory staff of the department are too controlling to allow their officers to utilize them and act as if they’re a privilege to only be used by the few hand selected officers of their choice.”
- “There will be more uptight residents knowing that their vehicles are being scanned every time they enter and exit Atlantic City. Also if the public knows that there are ALPR set up throughout every exit and entrance they will be deterred to visit the city just knowing the facts that the city is being closely monitored.”

Next Steps

The descriptive statistics highlight both stability and variation in officers’ responses – the latter of which can be examined further. The next phase of the analysis will investigate if/how the aforementioned perceptions, particularly cynicism/skepticism toward the upcoming ALPR project, vary across officer demographics (race/ethnicity, rank, gender, years’ experience). Bivariate relationships and correlations among these variables will be explored.

There will also be a follow-up, second effort to examine officers’ perceptions 6 months to 1 year after all of the fixed/stationary ALPR units are mounted and operational. This will help to uncover whether officers’ perceptions have changed post-implementation (if at all).

Finally, there is an ongoing effort to evaluate the overall effectiveness of the expanded ALPR technology on crime. Reported crime, particularly motor vehicle thefts and shootings, and other outcomes will be compared before and after the implementation.

About the Author

John Shjarback, Ph.D. is an assistant professor in the Department of Law and Justice Studies at Rowan University. He is a policing researcher, and his recent work has examined officer-involved shootings and transactional violence between police and citizens.