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Baltimore Aerial Investigation Research Project

Findings from the Early Launch Community Survey

June 2020

UNIVERSITY OF BALTIMORE
Schaefer Center for Public Policy

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Submitted by:
P. Ann Cotten, DPA, CPA | Director
Gabriela Wasileski, Ph.D.
Elias Nader, Ph.D.
Sarah Ficenec, Ph.D.

Schaefer Center for Public Policy
University of Baltimore – College of Public Affairs
1420 N. Charles Street
Baltimore, MD 21201
410.837.6188
acotten@ubalt.edu

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For information about working with the Schaefer Center, please contact the director, Ann Cotten, at 410-837-6188 or acotten@ubalt.edu.

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EXECUTIVE SUMMARY

On May 1, 2020, the Baltimore City Police Department launched the Aerial Investigation Research (AIR) pilot program. The 180-day pilot program, operated by Persistent Surveillance Systems (PSS) and funded by Arnold Ventures, LLC seeks to investigate: the impact of surveillance plane technology on crime rates and clearance rates; its potential deterrence effect on crime and offenders; and public support for the program in Baltimore. The program is focused on the following crimes – murders, non-fatal shootings, armed robberies, and carjackings – in Baltimore City.

This report documents the findings from the early launch community survey of 844 Baltimoreans conducted from June 2-July 17, 2020. The research team used an address-based sampling frame that included 32,000 addresses, 75% of which were from the areas most impacted by violent crime and therefore most likely to benefit from or be impacted by the AIR program. Due to the study's design and the nature of the questions, extreme care should be taken in drawing causal conclusions about specific population groups' views on the AIR program. These results should be views only as the respondents' assessments of the AIR program, neighborhood conditions, and policing in Baltimore; the respondents' demographics were not fully representative of Baltimore's demographics, and these results are not weighted as such either.

FINDINGS

The survey asked Baltimore residents about their level of knowledge about and support for the AIR program. The survey also asked about their perceptions of their neighborhood, personal safety, and the police. The key findings from the survey are summarized below. It is important to note here that the findings of this report are largely descriptive in nature, and thus do not speak to any causal relationships between the factors measured in this survey.

Knowledge of the AIR Program

Even though the use of surveillance planes has been widely covered by the local media since 2016, only 61% of respondents had heard about the AIR pilot program. In addition, the majority of those who were aware of the program reported hearing about it from local TV and radio (77%), followed by newspapers (25%). Only 7% had heard about the program from a Baltimore Police Department (BPD) public announcement.

Approximately 22% of respondents indicated that they had heard noise from the AIR surveillance plane. Of these respondents, approximately 7% reported being annoyed by the noise *all the time* and

approximately 10% were annoyed by the noise *often*. Approximately 31% of respondents who had heard noise from the surveillance plane were annoyed *sometimes*, 17% *rarely*, and 30% *never*.

Support for the AIR Program

Despite the generally negative media coverage of the AIR program and resistance to use of surveillance planes (e.g., Opilo, 2020b), more than half of the respondents who had heard of the program supported it (55%). Respondents also consistently supported the use of the AIR program in investigating homicides (65%), non-fatal shootings (61%), armed robberies (63%), and carjackings (60%).

Approximately 27% of respondents said they did not support the AIR program, and 9% said they were not sure if they supported it. For this 36% of respondents who did not support the AIR program or were not sure if they did, the most frequently cited reasons were concerns with the program violating privacy (54%), not knowing enough about the program to support it (40%), and not enough information being provided to the community about the AIR program (36%). It is important to note that even though some respondents did not support the AIR program overall, they expressed support for use of the program for specific crime such as homicides and robberies. Participants were less likely to support the AIR program if they were White, between 18-34 years old, had a college degree (at the associate's level or higher), and were not retired or disabled.

AIR Program and Civil Rights

Overall, respondents did not believe that the program either violated or protected their privacy. However, White respondents more consistently reported a greater belief that the program violates their privacy than their Black neighbors did. This held true in both low and high crime areas.

Police Legitimacy and Bias

Generally, participants were neutral in their ratings of the legitimacy of the police, with no statistically significant differences across race or neighborhood crime level. Respondents were similarly neutral in their ratings of police bias. While these ratings are not negative, on average participants also did not have positive views that police were unbiased or that police protected the community well and were supported in the community.

Perceptions of Procedural Justice

Generally, participants were also neutral in their ratings of procedural justice (defined as treating community members fairly) among the police. However, those living in higher crime neighborhoods consistently rated procedural justice lower than residents living in lower crime neighborhoods within each racial category. Thus, while the average participant did not approve or disapprove of the police's decision-making process, the differing negative view in higher crime neighborhoods was statistically significant.

Willingness to Engage with Police

On average, participants said they were willing to partner with police in crime-reduction efforts and to contact police to report crime or suspicious activity. However, while there was no significant difference in their willingness to partner with police by race or neighborhood crime level, residents of races other than White or Black living in high crime neighborhoods were the least likely to contact police to report crime. Overall, these results indicate that respondents are open to engaging with the police and addressing issues related to crime.

Perceptions of Neighborhood Social Cohesion

Overall, participants agreed that their neighborhoods were socially cohesive, or that neighbors get along and are willing to help each other. Within each racial category, participants in lower crime neighborhoods rated the levels of social cohesion in their neighborhoods higher than their counterparts in higher crime neighborhoods. Specifically, White respondents in low crime neighborhoods consistently reported the highest levels of social cohesion in their neighborhoods. Additionally, Black respondents in high crime neighborhoods had the largest variation in ratings of social cohesion, including a range of scores lower than any other group across race and neighborhood crime level.

Perceptions of Neighborhood Safety

Overall, participants rated their perceptions of neighborhood safety as neutral, indicating that their neighborhood is neither safe nor unsafe. Participants in lower crime neighborhoods reported slightly higher perceptions of safety than those living in higher crime neighborhoods among both White and Black respondents. Specifically, White respondents in lower crime neighborhoods reported the consistently highest levels of neighborhood safety. White and Black respondents in higher crime neighborhoods had the largest variation in rating of neighborhood safety, including a range of scores lower than the other groups across race and neighborhood crime level. Black respondents in high crime areas reported the lowest median rating of neighborhood safety.

Fear of Being a Victim of Crime

Overall, participants reported that they were not really afraid of being a victim of a crime in their neighborhood. While ratings across most categories varied widely, White respondents in lower crime neighborhoods reported the lowest levels of fear of being a victim to a crime in their neighborhood.

RECOMMENDATIONS

As this is a descriptive report, the findings of this study need to be interpreted with caution, and a causal relationship should not be assumed between respondents' perceptions and demographic characteristics. Nevertheless, the results from this study have important implications for improving Baltimore City residents' relationships with police and perceptions of the use of technological tools such as the surveillance plane for crime prevention. Recommendations resulting from this survey are discussed below.

1. Expand communication about the program by the Baltimore City Police Department

Communication about the AIR program needs to be expanded more broadly, especially beyond social media and websites. With a small minority of respondents (7%) reporting that they heard about the program directly from BPD, it is clear that respondents do not see BPD as the source of information on the program; however, they may have learned about the program from BPD information carried by other sources, such as television or radio news programs or newspapers.

BPD should consider developing a strategic communications plan to more directly disseminate information about the program. The plan should take into consideration the ways that people access information and their expectations for information. For example, while BPD had originally scheduled three community forums in March 2020 to talk to city residents about the AIR pilot program, two of the three meetings had to be moved online once Covid-19 restrictions on public gatherings came into effect. While the BPD may have reached additional viewers by providing these meetings via live streaming, this is likely a different audience than would have attended community meetings in a city with a known "digital divide" (Horrigan, 2020).

In addition, a substantial portion of the respondents who knew about the AIR program did not fully understand the program. For example, approximately 45% believed that a person can be identified from the surveillance plane footage, while a majority of respondents (56%) believed that a person or vehicle can be tracked in real time by the surveillance planes. This level of false beliefs about the program likely contributes to the narrative that the AIR program will violate citizens' privacy, and might reduce confidence in the work the BPD has done with the technology provider and evaluation partners to ensure that citizen privacy is protected.

To ensure that the public knows about the program and has accurate information about how the program operates, BPD should consider engaging in on-going and repetitive efforts to disseminate accurate information about the program. This will facilitate community engagement in policy implementation and potentially improve citizen views of police legitimacy and feelings of procedural justice.

2. Community outreach to discuss challenges of and seek feedback for police initiatives

Recent empirical work and community surveys conclude that a troubled relationship exists between police and the Baltimore community (Greenberger, 2016; Crime and Justice Institute, 2019; Anderson, 2020b). In this survey on the AIR program, however, participants generally felt neutral about the existence of police legitimacy, procedural justice and police bias in their communities. While the average response was not negative, these findings indicate that there is much room for improvement in the context of police-community relationships.

Coupled with the findings that participants did not fully understand the program and the recommendation for expanded BPD communication regarding the AIR program, the involvement of community members in the development of police initiatives may serve as an important community outreach tool. Outreach such as this could promote a healthier relationship between the police and city residents, the latter of whom would be able to engage in the process of developing new police initiatives and to provide input on implementation, facilitating police legitimacy and perceptions of procedural justice. In line with their work through the Consent Decree, the BPD can apply recommendations for collaboration with community members in order gather feedback on and garner support for the utility of the AIR program while simultaneously considering the wider concerns of citizens during the policy development process.

3. Targeted outreach with youth and young people

Across the topics examined in this report, young people aged 18-34 years old showed the least amount of the support for the AIR program. Of this age group, approximately 35% supported the AIR program, compared to approximately 62% of 35-64-year-old respondents and approximately 74% of respondents age 65 years and older. This is not particularly surprising given the context of policing in Baltimore and the recent protests against police violence against Black people in the United States, including in Baltimore. These protests include or are led by young people who are actively speaking out against the police and feature calls for reform, defunding, or abolition of law enforcement. The survey findings echo the mixed perceptions of procedural justice and police legitimacy across the nation. In establishing initiatives such as the AIR program where major questions exist regarding citizen rights, the BPD should address the concerns and needs of young people in order to facilitate a greater understanding of the AIR program and potentially shift public perception among this age group.

Baltimore Aerial Investigation Research Project
Findings from the Early Launch Community Survey

INTRODUCTION

The use of surveillance planes to address Baltimore's serious violent crime problem has been closely watched by civil liberties advocates due to fear that this technology will lead to the active surveillance of civilians. In 2016, while the city was dealing with high crime rates after the unrest following the death of Freddie Gray, the Baltimore City Police Department tested surveillance plane technology without the knowledge of many elected officials and the public. The controversy around the secrecy of the program led to its cancellation (e.g., Rector & Broadwater, 2016; Soderberg, 2016).

Discussion about the use of surveillance plane technology reemerged in 2019 as the murder rate in Baltimore stayed above 300 annually, well above the murder rate in the prior decade.[1] Some community leaders expressed support for the program while other lamented the program's potential negative impact on civil rights (e.g., Rector, 2016a; Rector, 2016b; Opilo, 2020a). Philanthropists Laura and John Arnold offered to fund a surveillance plane pilot program along with a rigorous evaluation to determine the effectiveness of the technology and its impact on civil rights and the community. The Baltimore City Board of Estimates approved the memorandum of understanding authorizing the Aerial Investigation Research (AIR) pilot program on April 1, 2020.

DESCRIPTION OF THE AIR PILOT PROGRAM

On May 1, 2020, the Baltimore City Police Department launched the AIR pilot program. The 180-day pilot program, operated by Persistent Surveillance Systems (PSS) and funded by Arnold Ventures, LLC, seeks to investigate the potential of surveillance plane technology to impact crime rate, clearance rate, and potential deterrence of crime. The program is focused on murders, non-fatal shootings, armed robberies, and carjackings in Baltimore City.

Under the AIR pilot program, PSS's planes were expected to provide continuous aerial surveillance of up to 90% of Baltimore City for a minimum of 40 hours per week for total of 180 days. The implementation of the pilot program began with one plane operating; two other planes were planned to maximize coverage. As of the date of this report, only one additional plane was added. The third plane was not ready in time to deploy during the pilot. While the initial plane primarily flew over parts of the city experiencing high violent crime rates, the additional planes were to provide the opportunity for covering other parts of the city. During the pilot period, Baltimore has experienced both reduced business, pedestrian, and traffic activity as part of the response to the Covid-19 pandemic as well as periodic protests after the death of

[1] See FBI Uniform Crime Reporting (UCR) Program data at https://www.fbi.gov/services/cjis/ucr/.

George Floyd. The city's Police Department also continues to operate under a Consent Decree with the U.S. Department of Justice (DOJ) in response to DOJ investigative findings after Freddie Gray's death.

Video footage is stored on PSS's secure servers and is analyzed by PSS analysts based upon requests from officers investigating specific crimes (homicides, non-fatal shootings, armed robberies and carjackings). The program is designed to be used retrospectively to investigate crimes, and it is not used for real-time monitoring or surveillance. The video footage is intended to be used to develop investigative leads in response to either a homicide, non-fatal shooting, armed robbery, or carjacking. It is also dependent on other policing methods in the city, including networks of CCTV cameras, license plate readers, and ShotSpotter gunshot detection, as images captured by one of the planes cannot be used as the only evidence for an arrest.

The AIR program has several additional safeguards to protect civil liberties and minimize the potential for a violation of an individual's constitutional rights. First, the video is recorded at a low resolution (1 pixel per person), which prevents the video from being used to identify individuals, individual characteristics (e.g., ethnicity, gender, clothing) or vehicle characteristics (e.g., color, make, model, license plate). Second, the video images are analyzed by PSS analysts who use the imagery to "… locate crimes, track individuals and vehicles from a crime scene, and extract information to assist BPD in the investigation of target crimes."[2] Third, PSS analysts prepare evidence packets from their video analysis for specific crimes being investigated. Fourth, imagery data is stored on a server maintained by PSS for 45 days during the pilot program. Imagery data related to an active case is retained for a longer period of time. Finally, the AIR program is subject to extensive evaluation by four entities: RAND Corporation (RAND), The Policing Project at New York University School of Law (NYU), the University of Baltimore Schaefer Center for Public Policy (Schaefer Center), and Morgan State University (Morgan State).[3]

DESCRIPTION OF THE AIR PROGRAM EVALUATION

RAND is investigating how often the AIR program data are used by police, the usefulness of the data, and the impact of the program on crime clearance rates and crime reduction. NYU is conducting a civil rights and civil liberties audit of the AIR program. Morgan State is doing a quantitative evaluation of the program and its impact. The Schaefer Center is conducting two public opinion surveys: one in June 2020 during the early launch phase of the AIR program, and one in early 2021 after the completion of the AIR pilot.

The Schaefer Center surveys seek to understand Baltimoreans' perceptions of the AIR program and its impact on crime clearance, crime deterrence, civil rights, perceptions of safety, and opinions about

[2] Baltimore City Police Department, Community Education Presentation: Aerial Investigation Research (AIR) Pilot Program, March 2020. https://www.baltimorepolice.org/sites/default/files/General%20Website%20PDFs/Public_Education_Presentation_Plane_final.pdf.

[3] The evaluations by RAND, NYU, and the Schaefer Center are funded by Arnold Ventures, while Morgan State University's evaluation is funded by the Abell Foundation.

policing. The primary emphasis of the study is to collect perceptual data from the people most likely to be impacted most likely to be impacted positively or negatively by the use of surveillance planes. To that end, the survey employed an address-based sampling frame, with approximately 75% of the sample focused on the census block groups identified as having high levels of crime and a high rate of poverty. The remaining 25% of the sample was randomly distributed in the remaining census block groups in Baltimore. Census block groups were identified as high crime/high poverty through an objective analysis of crime and census data. The exact methodology for making these determinations is discussed under sample design in the Methodology section of this report. The final sample included 92.5% of the addresses located in census block groups most impacted by crime or poverty.

REPORT OVERVIEW

This report documents the findings of the early launch survey, which was administered by via phone and web survey between June 2, 2020, and July 17, 2020. At the time of the survey launch, the surveillance planes had been flying for just a few weeks. The summer's protests over the in-custody death of George Floyd had begun after his death one week prior (May 25, 2020), while the city continued to experience the economic and social effects of the Covid-19 pandemic and the response to it. With the controversary over the prior aerial surveillance effort and the mixed reception among city policy makers and residents to the 2020 pilot program, it is essential to capture residents' views on the program through a robust, systematic survey process designed to reach a wide range of neighborhoods and residents.

This report is descriptive in nature and is organized into five sections: methodology and sampling procedures; perceptions of neighborhood conditions and crime; perceptions of the AIR program; perceptions of the police including the willingness to engage with police; and a summary of findings and recommendations. The three sections on respondents' perceptions of neighborhood conditions and crime, the AIR program, and policing each have separate discussions of the overall survey findings and then findings by race and neighborhood crime level.

Due to the study's design and the nature of the questions, extreme care should be taken in drawing causal conclusions about specific population groups' views on the AIR program. These results should be views only as the respondents' assessments of the AIR program, neighborhood conditions, and policing in Baltimore; the respondents' demographics were not fully representative of Baltimore's demographics, and these results are not weighted as such either. The second survey, to be conducted by the Schaefer Center in 2021, will result in a report with both descriptive and inferential findings, which will allow more conclusions to be drawn about support for the AIR program and perceptions of neighborhood conditions, crime, and policing.

METHODOLOGY

The survey questionnaire was developed by the Schaefer Center project team based on the existing literature on criminal justice and policing. The complete survey questionnaire is available in Appendix C of this report. The project team also evaluated the quality of the survey instrument by computing a measure of internal consistency reliability – Cronbach's Alpha (α) – as discussed further below. For each section where computed, the "alpha" is presented and interpreted as a proportion of variance.[4]

Survey questions were developed to address four research topics (discussed below). Descriptive differences among participants are reported for discussion but should not be used for causal conclusions. A report produced by the Schaefer Center next year, after the second community survey, will include more advanced statistical modeling techniques to test and determine whether the relationship between variables is statistically significant and therefore unlikely to occur by chance.

This section of the report presents information on the research topics, sampling procedure, and calculations used in the analysis of survey data.

RESEARCH TOPICS

The survey of Baltimore City residents documents their perceptions of the AIR program, their perceptions of their neighborhood conditions and crime, and their perceptions of policing in their neighborhood. The survey research plan was designed to answer the following four research topics:

1. Residents' perceptions of their neighborhood conditions, including perceptions of crime and personal safety.
2. Residents' perceptions of policing, including procedural justice, police legitimacy, police bias, willingness to partner with police, etc.
3. Residents' understanding of the overall surveillance plane program.
4. Residents' perceptions about the effectiveness of the surveillance plane program in addressing their concerns about personal safety and safety in their neighborhood.

SAMPLE AND SAMPLING PROCEDURE

Below is a brief description of the sampling procedure used by the research team to recruit Baltimore City households for participation in this survey. Additional information is available in Appendix A.

[4] Ideally, the alpha values should range between 0.70 and 0.90. An alpha of 0.60 and below would be considered poor reliability in most research situations, while a score above 0.90 suggests redundancy in the questions.

The Schaefer Center team created a crime/poverty index for all Baltimore City census block groups with data from the Baltimore Police Department and the U.S. Census Bureau. The purpose of the index was to identify the areas of the city with the highest concentrations of crime and poverty to ensure that the residents most impacted by violent crime would have a higher probability of being included in the survey, since they are expected to be most impacted by the AIR program. Seventy-five percent (75%) of the addresses included in the sampling frame were from census block groups with the highest concentration of crime and poverty. The remaining 25% of the addresses were from the rest of the city.

To identify high crime neighborhoods, crime incident data from the Baltimore Police Department was downloaded from the Open Baltimore portal[5] and filtered to include specific violent offenses: homicides, shootings, robberies (which include carjackings and crimes that occurred on the street, in commercial buildings, and in residential homes), aggravated assaults, and common assaults. The data spanned from January 1, 2019, to March 31, 2020, and contained the location of the crime incident. Geographic Information Systems (GIS) format was used to map out location of these violent offenses, and they were aggregated to the census block group level.

Next, all census block groups in the city were ranked on two dimensions of crime: presence and strength. The first dimension was based on the presence of violent offenses that occurred within each census block group. Block groups were ranked from 0 to 5 on based on the presence of each of the violent offense types, with a ranking of 5 indicating the presence of all of five violent offenses. The second dimension was based on the magnitude of the violent offenses that occurred within each census block group. The block groups were ranked again from 0 to 5, but these scores were based on the number of crimes in relation to the average block group. For each crime, block groups were identified as a "high crime" neighborhood if the crime rate was more than one standard deviation above the average block group. Block groups were then ranked based on the number of crime types for which they were identified. When a block group was identified as having at least three of the crime types, or at least two crime types if they were homicides and shootings, they were ranked at the highest score of 5 on this dimension. For additional information on this index ranking scheme, please see Appendix A.

The final step in identifying block groups for oversampling used demographic data. For block groups that ranked highest for either presence or magnitude of crime, they were also assessed for their poverty rate. Those block groups who had a poverty rate greater than 25% were included in a high crime/high poverty grouping (N = 79). Block groups that did not have the highest rankings for either presence or magnitude of crime but had a poverty rate of 20% or greater were examined for their potential inclusion in the high crime/high poverty grouping. A manual inspection of these block groups was conducted, and three block groups were moved to the high crime/high poverty grouping, mainly due to the unusually high rates of one particular offense type within the block group. The final breakdown of groupings of census block groups are shown in Table 1. In total, 82 block groups in Baltimore were marked as high crime/high poverty block groups for the purposes of this survey sampling and reporting.

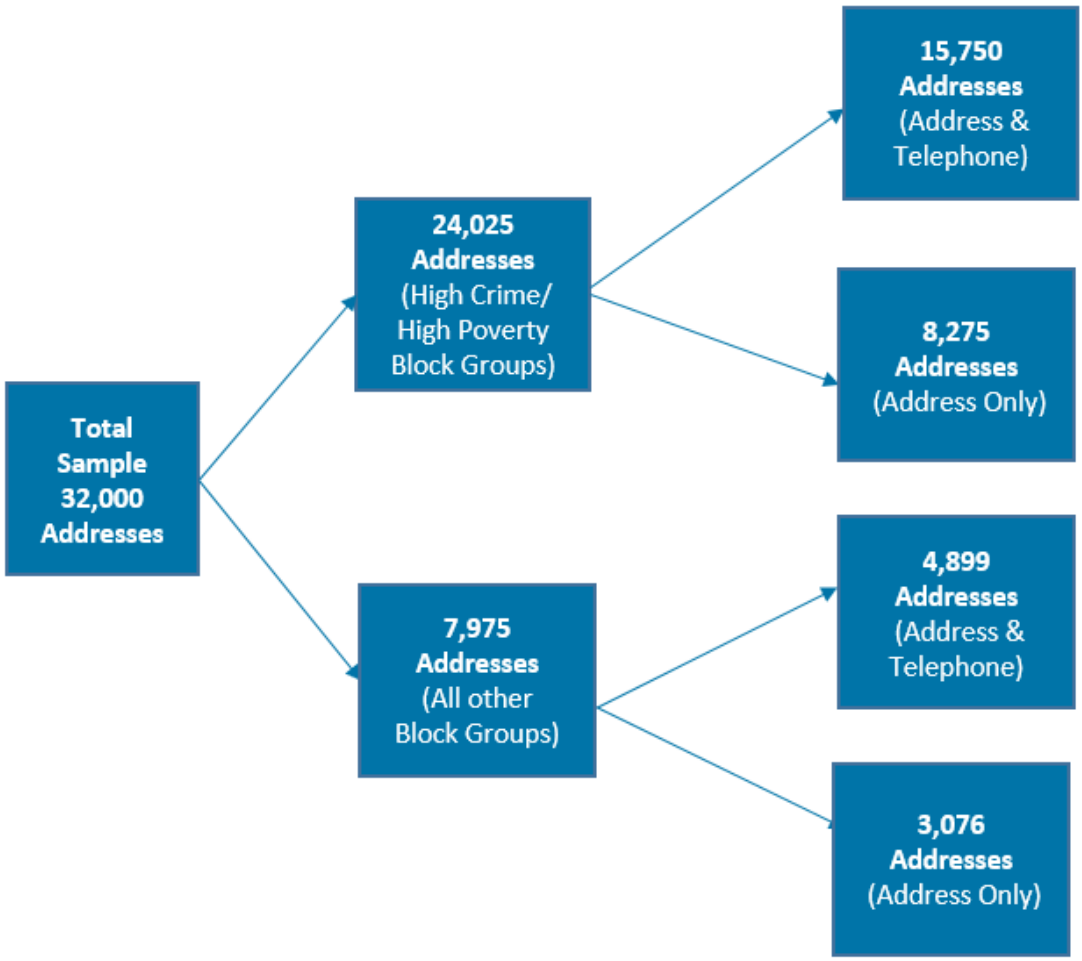
[5] The City of Baltimore's Open Baltimore data portal can be accessed at https://data.baltimore.gov.

Table 1: Distribution of Baltimore City Census Block Groups by Crime and Poverty Rates

Category	Number of Block Groups	Percent of Block Groups
High crime/high poverty census block groups	82	12.56%
All other census block groups in city	571	87.44%
Total	**653**	**100%**

Through its sample vendor, the research team used address-based sampling (ABS) to select a random sample of 32,000 residential addresses from the identified census block groups, with 75% of the sample being from the high crime block groups and the remaining 25% from the other block groups. The addresses were then phone matched by the vendor. See Figure 1 for more information about this process.

Figure 1: AIR Survey Sample Composition



The final sample included 92.5% of all addresses in the high crime/high poverty census block groups. A total of 20,649 addresses (64.5%) were matched to a phone number (Table 2). Of the matched phone numbers, 59.3% were matched to a cell phone number, and the remaining 40.7% were matched to a landline phone number. Sample records with a telephone phone number were called by a vendor, and those that did not have a telephone number match (N=11,351) were mailed a letter inviting them to either call into the call center to complete the survey or go to the project website (http://airsurvey.ubalt.edu) to access the web version of the survey using a unique code provided in the letter. After about two weeks of calling, sample records with a phone number but an invalid number (e.g., disconnected, business, and fax numbers) were mailed an invitation letter.

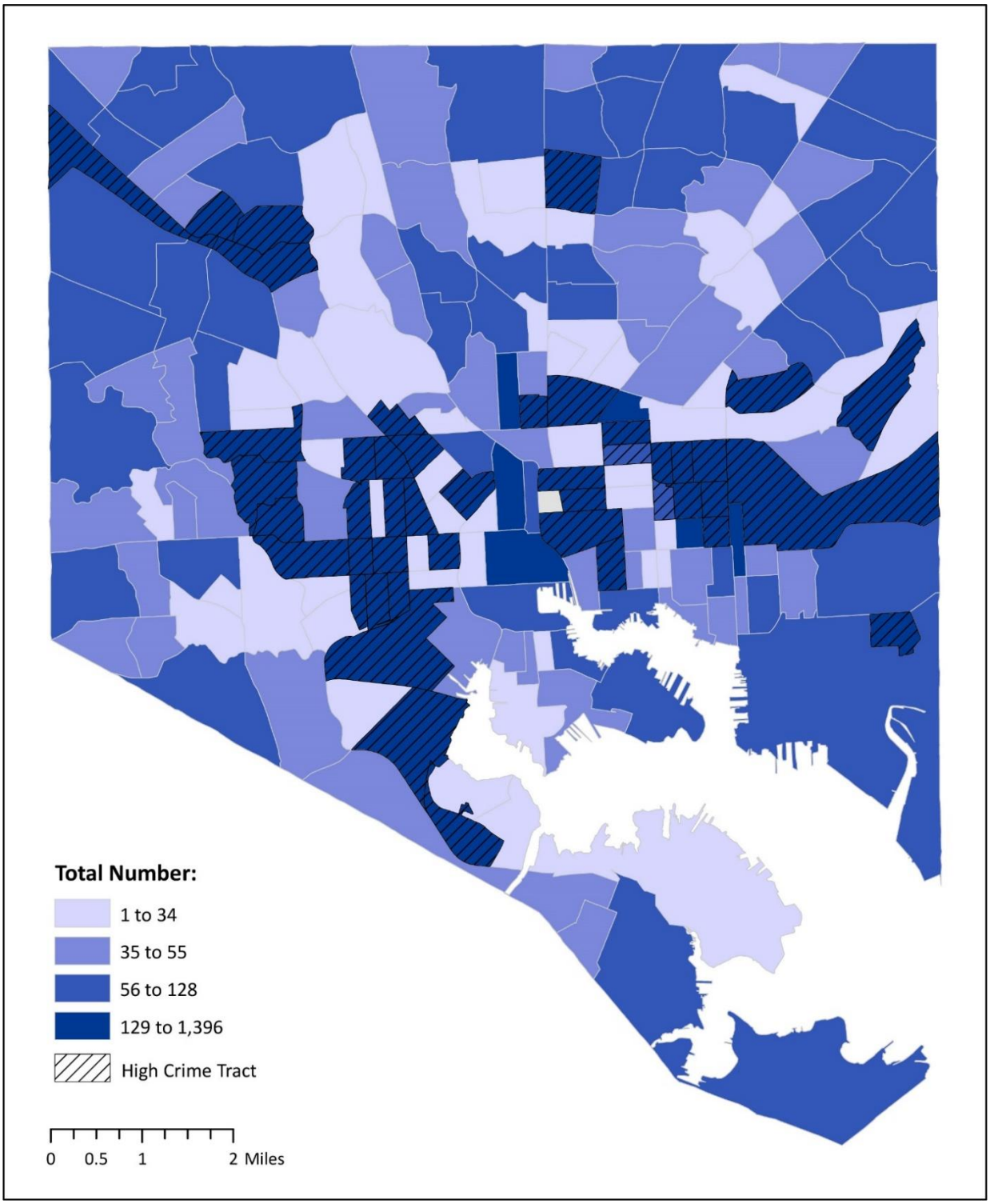
Just under 93% of all valid addresses in high crime/high poverty census block groups were included in the final sample and contacted by phone or mail.

Table 2: Sample Distribution by Contact Type

Census Block Group Classification	Universe of Possible Addresses	Address & Phone Number (Contacted by Phone)	Address Only (Contacted by Mail)	Total
High crime/high poverty census block groups	25,954	15,750	8,275	24,025
All other census block groups	233,876	4,899	3,076	7,975
Total	**259,840**	**20,649**	**11,351**	**32,000**

Figure 2 below shows the number of households sampled by census tract (aggregated from the block group data). The map also shows which tracts were high crime areas targeted by the survey. The high crime areas are designated with diagonal lines.

Figure 2: Number of Households Sampled by Census Tract



Note: Census tracts presented in this map are an aggregation of census block groups.

Data collection for the study commenced on June 2, 2020, with the start of outbound calling. The invitation letters were mailed out over 5 waves between June 11 and June 24, and the project web site was available for completing the survey until July 17, 2020. Outbound calls were made Monday-Friday 10 a.m.-9:00 p.m. EST and Saturday and Sunday from noon-6:00 p.m. EST. For outbound calls, up to five attempts were made to each phone number, and a message was left on the first encounter of a voicemail. This message informed the respondent about the purpose of the call and gave them the information needed to complete the survey online or to call back into the call center.

A total of 844 individuals participated in the survey (see Table 3). The AAPOR Response Rate 4 for the study is 5.2%.[6]

Table 3: Sample Disposition Summary[7]

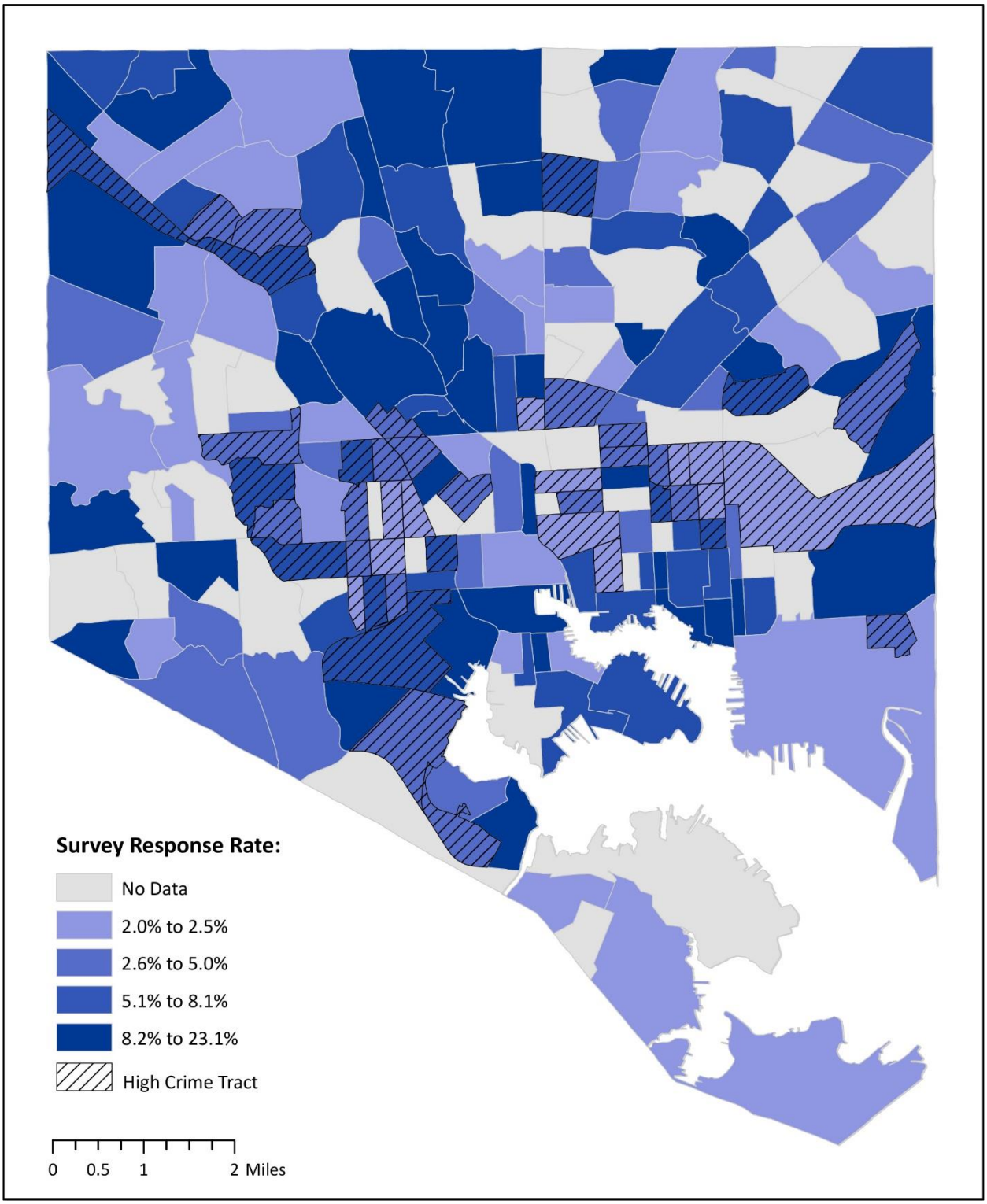
Disposition	Phone Sample	Mail Only Sample	Total
Completed Interview [1]	676	168	844
Eligible, Contacted Respondent - Interview Not Completed [2]	5,296	10	5,306
Unknown eligibility [3]	8,791	11,173	19,964
Not Eligible [4]	5,886	-	5,886
Total	**20,649**	**11,351**	**32,000**

Notes:
[1] Includes complete and partially complete interviews.
[2] Includes refusals, callbacks, answering machines, terminated interviews, deceased respondents, and language barriers.
[3] Includes always busy, no answer, call blocking, letters mailed without response or return, and returned mail.
[4] Includes not a Baltimore City resident, fax/data line, non-working/disconnected number. business or government number, no eligible respondent, quota filled, and duplicate listing.

Figure 3 shows the survey response rates by census tract, while Figure 4 shows the number of surveys completed by tract. Both maps also identify high crime tracts. (The tracts in both maps are aggregated from the block group data.)

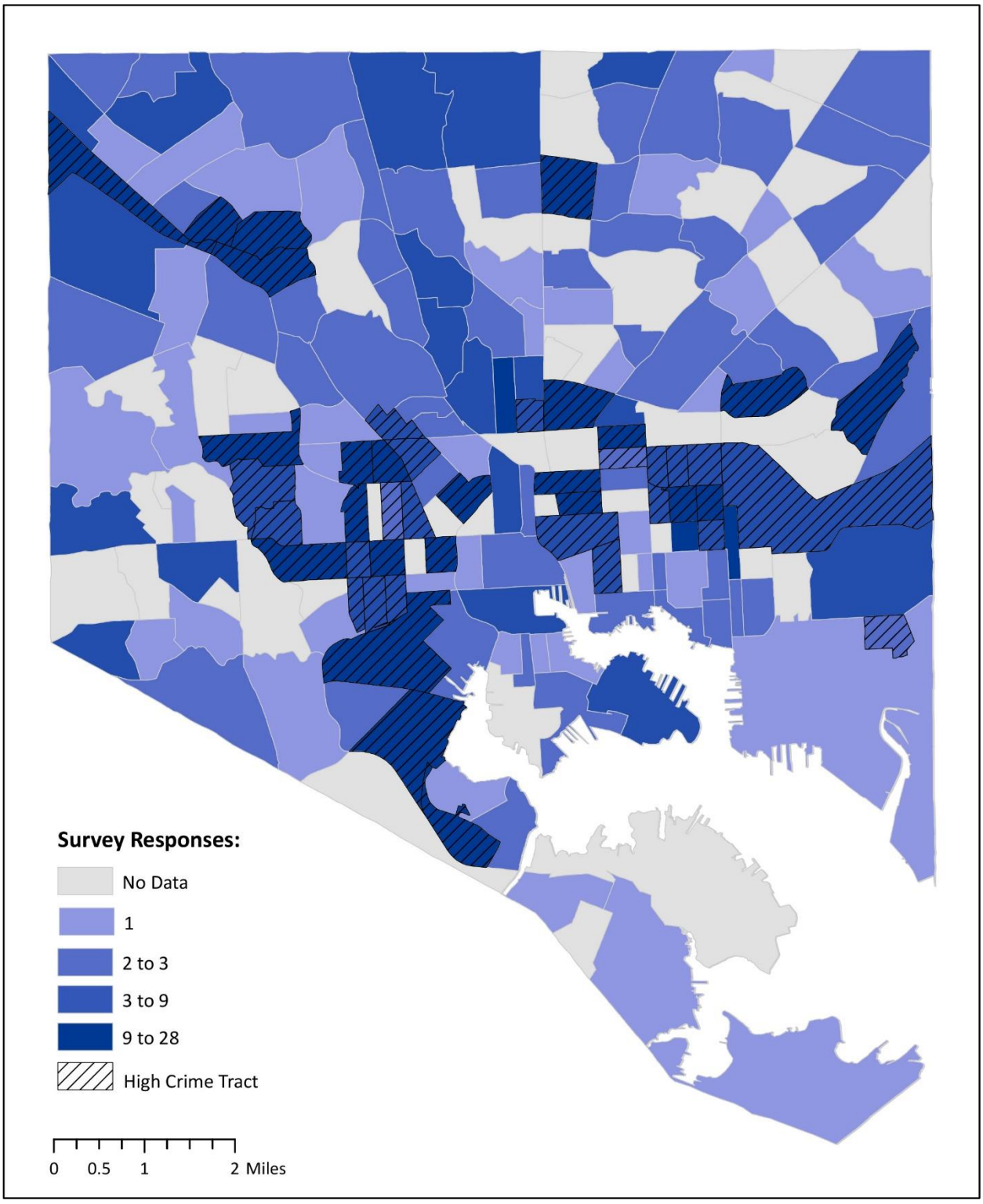
[6] APPOR refers to the American Association for Public Opinion Research, and the response rate was estimated using their calculator, version 4.0, available at https://www.aapor.org/AAPOR_Main/media/MainSiteFiles/Response-Rate-Calculator-4-0-Clean-18-May-2016.xlsx.
[7] A fuller breakdown of the sample disposition is available in Appendix A.

Figure 3: Survey Response Rate by Census Tract



Note: Census tracts presented in this map are an aggregation of census block groups.

Figure 4: Number of Surveys Completed by Census Tract



Note: Census tracts presented in this map are an aggregation of census block groups.

Sample Demographics

Table 4 on the next page shows the demographics of the survey respondents. Of those who reported their demographic information, 61.47% identified as female and 65.59% identified as Black or African American. The median participant in this study is between 45-54 years old with an income between $50,000-$59,999. Approximately half (48.84%) of respondents have an educational level of an associate's degree or higher, and the majority of respondents (70.14%) live in high crime neighborhoods.[8] The larger representation of female respondents is not surprising as women usually report larger involvement within their community and report a higher level of fear of crime than men. Additionally, women are also more likely to take precautionary measures in response to their fear of crime (Warr, 2000; Weitzer & Kubrin, 2004).

The sample generally matches the demographics of the city's adult residents, although there are some substantial differences. For example, while there are more adult female residents in Baltimore than male residents, the share of the Baltimore general population is more evenly distributed – with women comprising 53.99% and men 46.01% – than of the sample population. The distribution of the sample by race and ethnicity roughly mirrored that of the city population-at-large, with 27.09% of respondents identifying as White and 65.59% identifying as Black compared to 30.45% and 62.46% of the city's population at large. Similarly, 5.12% of the city's adult population is Hispanic or Latino compared to 3.48% of sample population.

The share of respondents who are employed was also similar to that of the city's population at large (52.83% and 55.92%, respectively). In contrast, while respondents are evenly divided by education, the city's adult population is less evenly distributed by education, with a larger share of adults achieving at most a high school degree, and smaller shares with some college, an associate's degree, or vocational training, and with a bachelor's degree or above.

Appendix B contains a detailed discussion of the sample demographics, the demographics by response mode (telephone or web survey), and a detailed comparison of the sample demographics to the demographics of the population of Baltimore City.

[8] High crime neighborhoods are those identified through the sampling procedure described above.

Table 4: Demographics of Survey Participants

Variables	N	Percent	Valid Percent
Age Group			
18-24 years old	15	1.78%	2.16%
25-34 years old	90	10.66%	12.97%
35-44 years old	123	14.57%	17.72%
45-54 years old	129	15.28%	18.59%
55-64 years old	145	17.18%	20.89%
65-74 years old	120	14.22%	17.29%
75 years or older	72	8.53%	10.37%
Missing/refused	150	17.77%	
Gender			
Male	262	31.04%	37.81%
Female	426	50.47%	61.47%
Nonbinary	5	0.59%	0.72%
Missing/refused	151	17.89%	
Race			
White	185	21.92%	27.09%
Black	448	53.08%	65.59%
Other	50	5.92%	7.32%
Missing/refused	161	19.08%	
Ethnicity			
Latinx	24	2.84%	3.48%
Not Latinx	665	78.79%	96.52%
Missing/refused	155	18.36%	
Education			
Up to a High School Degree	199	23.58%	28.76%
Some college, Associates, or Vocational Training	194	22.99%	28.03%
Bachelor's or higher	299	35.43%	43.21%
Missing/refused	152	18.01%	
Employment Status			
Yes (at least part time)	364	43.13%	52.83%
Not employed	88	10.43%	12.77%
Retired/disabled, not able to work	237	28.08%	34.40%
Missing/refused	155	18.36%	
Crime Level			
Low crime neighborhood	252	29.86%	29.86%
High crime neighborhood	592	70.14%	70.14%

SURVEY TOPICS

The primary goal of this study was to explore the perception of the AIR program by Baltimore residents. The survey instrument was divided into four major sections measuring: (I) Perceptions of Neighborhood Conditions, Crime, and Personal Safety, (II) Perceptions of the AIR Program, (III) Perceptions of the Police, and (IV) Willingness to Cooperate with Police. Inclusion of these sections was based on the idea that the community relationship with and perception of police often impact the use of technology in crime prevention strategies. In Sections I, III, and IV, survey measures were adopted based on tested and valid measurement items from existing literature, although they may have been modified to fit the needs of this survey (e.g., removing or adding items, changing response scales). Items in Section II: Perceptions of the AIR Program were structured based on existing surveys on other technologies (e.g., surveillance cameras; police drones), with the inclusion of new items written to fit the needs of this study. Additional information on the sources for specific survey questions is available upon request. The full survey instrument is available in Appendix C.

To evaluate the survey results for each section, a series of survey scales were developed. These scales included the responses to between three and six survey questions (with each question being included in no more than one scale). Table 5 shows these scales along with a description of the number of questions included in each scale and the range of responses for each item. In each of these scales, items were totaled and then averaged in order to obtain an average score per item for each scale. This average item score represents the average rating of a respondent for questions on that scale. For each scale, if a participant had one value that was missing (either because it was skipped or they refused to answer that item), their score could not be summed and averaged, and thus resulted in a missing case for the scale. The questions included in each scale, descriptive statistics for the responses and the results, and contextual information for each scale are presented in the subsequent sections of this report.

Table 5: Summary of Survey Scales

Scale	Description
Perceptions of Neighborhood Conditions, Crime, and Personal Safety	
Social Cohesion & Interaction	5-question scale, with responses ranging from 1=Strongly Disagree to 5=Strongly Agree.
Perceptions of Neighborhood Safety	5-question scale, with responses ranging from 1=Strongly Disagree to 5=Strongly Agree.
Fear of Being a Victim	6-question scale, with responses ranging from 1=Not Afraid at all to 4=Very Afraid
Perceptions of AIR Program	
Knowledge of AIR Program	Response of: Yes, No, or I am not sure
Support of AIR Program	Response of: Yes, No, or I am not sure
Support of AIR Program for investigating crime	4-question scale for four crime types: Carjacking, Armed Robberies, Non-fatal Shootings, and Murders/Homicides. Responses range from 1=Strongly Against to 5=Strongly Support
Attitudes about effectiveness of AIR Program	5-question scale, with responses ranging from 1=Strongly Disagree to 5=Strongly Agree.
Beliefs about privacy and AIR program	4-question scale, with responses ranging from 1=Strongly Disagree to 5=Strongly Agree.
Perceptions of the Police	
Police Legitimacy	6-question scale, with responses ranging from 1=Strongly Disagree to 5=Strongly Agree.
Procedural Justice	5-question scale, with responses ranging from 1=Strongly Disagree to 5=Strongly Agree.
Perceptions of Police Bias	3-question scale, with responses ranging from 1=Strongly Disagree to 5=Strongly Agree.
Section IV: Willingness to Cooperate with Police	
Willingness to partner with Police	3-question scale, with responses ranging from 1=Very Unlikely to 4=Very Likely.
Likelihood of contacting Police	4-question scale, with responses ranging from 1=Very Unlikely to 4=Very Likely.

Note: The questions included in each scale, descriptive statistics for the responses and the results, and contextual information for each scale are presented in the subsequent sections of this report.

In addition to analyzing the responses for the subcomponents of each scale, two additional analyses were conducted to understand the relationships between each scale and respondents' race and neighborhood crime level. The responses to the survey scales were examined across categorical levels within race and neighborhood crime, as these factors likely have important implications in the context of this policing program.

First, in the criminological literature race has been consistently found to be associated with perceptions of crime and criminality as well as attitudes towards police and policing. Specifically, research has often found that Black residents are more likely than their White neighbors to report negative experiences with

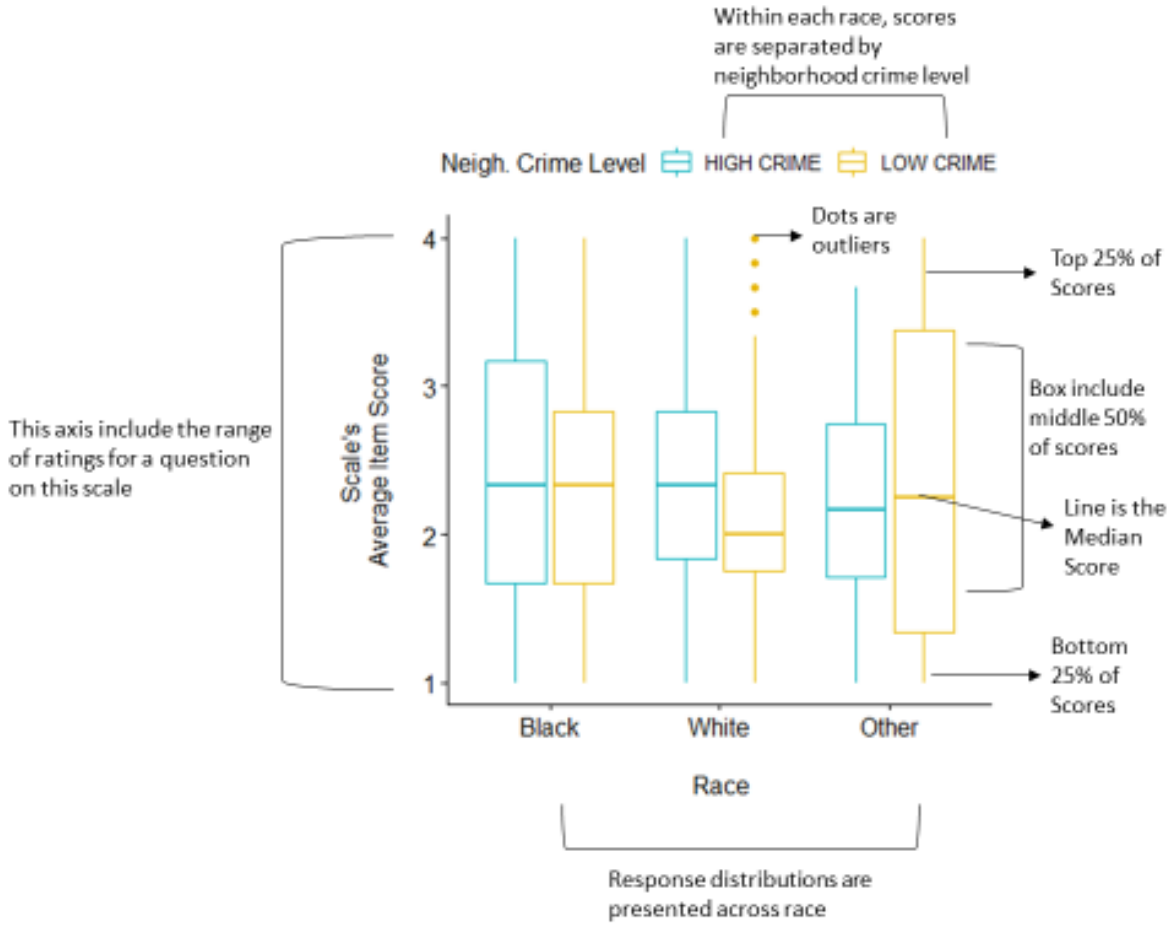
and/or dissatisfaction with police (e.g., Jefferson & Walker, 1993; Johnson et al., 2017; Taylor et al., 2001; Weitzer & Tuch, 1999).

The neighborhood context in Baltimore plays an additional role, and potentially interacts with race. Baltimore is a highly segregated city, with a legacy of disinvestment in neighborhoods and communities with a majority of Black residents. In many cities, Black residents are often overrepresented in impoverished, disorganized, and higher-crime neighborhoods, which is associated with an increased likelihood of policing (Anderson, 1999; Fagan & Davies, 2000; Brunson & Miller, 2006). This holds true in Baltimore, where Black residents in higher crime neighborhoods have been subject to differential policing patterns and practices, as outlined by the DOJ's Consent Decree for the BPD. Thus, residents in these higher crime neighborhoods may have different perceptions on topics of neighborhood conditions, crime and police than those in lower crime neighborhoods.

For the purpose of the analyses, race was coded in three categories: Black, White, and Other. Neighborhood crime level was coded in two categories: High and Low crime neighborhoods. High crime/high poverty census block groups were coded in these analyses as high crime neighborhoods, while the other block groups in the city were coded as low crime neighborhoods.

The distributions of scores within race and neighborhood crime level categories are shown in a boxplot. The boxplot offers several advantages to data visualization, including presenting the key points of the data distribution and showing overall patterns of response for a group of respondents based on independent variables, in this case race and neighborhood crime level. Figure 5 presents an example of a boxplot with labels to assist with interpretation. Within each group, the box on the graph contains the scores for 50% of the respondents the category, with the line inside of the box identifying the median score. Thus, 25% of scores are located above the box and 25% are located below the box, with respondents identified as dots being "outliers" compared to the other category counterparts. When boxes are shorter, this means that scores are generally more consistent across participants in that category. When boxes are longer, this means greater variability in how participants responded to questions on the scale.

Figure 5: Sample Box Plot



Second, a two-way ANOVA (Analysis of Variance) was computed for each scale to compare statistical differences within each factor (i.e., race and neighborhood crime level) on the outcome of interest (i.e., the scale). The two-way ANOVA also examines whether an interaction effect exists for the two factors on the outcome of interest.

SECTION I: PERCEPTIONS OF NEIGHBORHOOD CONDITIONS AND CRIME – OVERALL FINDINGS

Survey respondents' perceptions of neighborhood conditions, crime, and personal safety offer an opportunity to study features of the neighborhood that may affect resident attitudes about the use of new technology, such as surveillance planes in crime prevention and crime control strategies. Three common concepts were drawn from the policing literature and measured: (1) social cohesion and interaction, (2) perceptions of neighborhood safety, and (3) fear of being a victim to a crime. For each of these survey scales, the study drew heavily from the existing literature to develop questions that captured these topics.

Overall, all three scales had Cronbach's alpha scores in the desirable range, indicating that items within each scale have good reliability amongst one another (Table 6). In each of these scales, items were totaled and then averaged in order to obtain the average item score for each scale. This average item score represents the average rating of a respondent for questions on that scale. This section of the report discusses the findings for survey respondents overall, while the next section explores differences in responses across race and neighborhood crime level.

Table 6: Neighborhood Conditions Scales

Variables	Minimum-Maximum	Avg. Item Score (St. Dev)	α *	Missing
Social Cohesion & Interaction	1.00 – 5.00	3.51 (0.79)	0.80	N=110 (13.03%)
Perceptions of Neighborhood Safety	1.00 – 5.00	3.20 (0.86)	0.73	N=97 (11.49%)
Fear of Being a Victim	1.00 – 4.00	2.33 (0.87)	0.90	N=131 (15.52%)

Note: N=844.
Values for Scale Ranges:
Social Cohesion & Interaction: 1 lowest social cohesion; 5 highest social cohesion.
Neighborhood Safety: 1 not safe; 5 very safe.
Fear of Being a Crime Victim: 1 not afraid; 4 very afraid.
* *Cronbach's alpha score between 0.70-0.90 indicates that the items in the scale have good reliability with one another.*

SOCIAL COHESION & INTERACTION

The concept of social cohesion refers to the connections, values, and trust among a group of people (e.g., Sampson et al., 1997, 2002; Portes, 1998; Forrest & Kearns, 2001). For this study, the focus of social cohesion and interaction is respondents' neighborhoods. Therefore, survey questions centered on concepts such as a willingness to help neighbors, trust among neighbors, and interaction among neighbors. Generally, neighborhoods that have higher ratings of social cohesion also tend to have lower instances of crime.

Social cohesion refers to the connections, values, and trust among a group of people. It includes a willingness to help neighbors, trust among neighbors, and interaction among neighbors. Generally, neighborhoods that have higher ratings of social cohesion tend to have lower instances of crime.

Participants, on average, responded to items on this scale with a score of 3.51 (S.D.=0.79), or at approximately a rating of agree (Table 7). Thus, on average, participants perceived that their neighborhood had a positive social cohesion and interaction among neighbors.

Table 7: Social Cohesion & Neighborhood Interaction Frequency Table

Question	N	Respondent Level of Agreement							Mean Question Response [1]
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Total	
		1	2	3	4	5			
People around here are willing to help their neighbors.	844	4.7%	8.3%	19.9%	44.4%	20.7%	1.9%	100%	3.74
People in this neighborhood can be trusted.	844	7.7%	13.3%	27.3%	36.4%	11.7%	3.6%	100%	3.41
People in this neighborhood generally get along with each other.	844	2.7%	5.8%	15.2%	56.0%	17.7%	2.5%	100%	3.86
People in this neighborhood share the same values.	844	6.8%	20.7%	25.0%	31.5%	8.3%	7.8%	100%	3.34
People in this neighborhood visit each other's homes or talk in the streets.	844	5.1%	14.3%	14.6%	45.0%	15.6%	5.4%	100%	3.64
Average Scale Item Score [2]									3.51

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average social cohesion item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.

PERCEPTIONS OF NEIGHBORHOOD SAFETY

The scale for perceptions of neighborhood safety (Fontaine et al., 2019) measured respondents' perceptions of safety within their own neighborhoods. Perceptions of safety may directly influence how respondents view the police as well as initiatives that target crime, such as the AIR program. Respondents were directly asked if they would rate their neighborhood as safe, as well as questions about if they avoid certain streets or buildings, if they feel comfortable walking alone, if they carry a weapon to feel safe, and if people sell or use drugs on the street.

Neighborhood safety includes questions asking if respondents generally feel their neighborhood is safe, if they avoid certain streets or buildings, if they feel comfortable walking alone, if they carry a weapon to feel safe, and if people sell or use drugs on the street. Perceptions of safety may directly influence how respondents view the police as well as initiatives that target crime, such as the AIR program.

Participants rated their perceptions of neighborhood safety at an average item score of 3.20 (S.D.=0.86) or approximately neutral (Table 8). Thus, on average, participants perceived that their neighborhood was neither safe nor unsafe.

Table 8: Perceptions of Neighborhood Safety Frequency Table

Question	N	Respondent Level of Agreement							Mean Question Response [1]
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Total	
		1	2	3	4	5			
My neighborhood is safe.	844	11.1%	20.3%	24.6%	32.2%	9.0%	2.8%	100%	3.09
I avoid certain streets or buildings in my neighborhood. [3]	844	11.8%	28.7%	11.7%	27.8%	14.8%	5.1%	100%	3.12
I feel comfortable walking alone in my neighborhood.	844	9.0%	15.3%	16.1%	39.6%	14.8%	5.3%	100%	3.43
I carry a weapon to feel safe in my neighborhood. [3]	844	32.5%	41.1%	7.7%	9.1%	3.9%	5.7%	100%	2.13
People sell or use drugs on the street in my neighborhood. [3]	844	9.7%	20.5%	13.2%	24.4%	24.3%	7.9%	100%	3.46
Average Scale Item Score [2]									3.20

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average perceptions of neighborhood safety item score was calculated by adding together scores for each participant on all items on the scale (considering any reverse coded items as such) and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.
[3] Item is reverse coded.

FEAR OF BEING A VICTIM OF A CRIME

Fear of crime relates to how community members view police, and thus how they support policing initiatives. Respondents were asked about their level of fear of being a victim to several crimes, including property damage, a stolen car, a home break-in, being robbed or mugged, being shot or shot at, and being murdered.

The final measure of neighborhood conditions aims to understand how participants view safety within their communities through their fear of being a victim of a crime (e.g., Ferraro, 1995; Jackson et al., 2009; Warr, 2000). The fear of crime itself may be more pervasive than actual crime in its effects on Americans (Warr, 2000). Fear of crime is directly tied to how community members view social cohesion or disorder within in their communities, as well as potential confidence in and support for police (Jackson et al., 2009). In this study, respondents were asked to rate their level of fear of being a victim of several crimes, including having their property/car damaged, having their car stolen, having someone break into their house, being robbed or mugged, being shot or shot at, and being murdered. Fear of being a victim of a crime has great implications towards how respondents feel about initiatives that target crime, and greater levels of fear may be connected to increased support for policing initiatives that target those crimes.

Participants rated their fear of being a victim of a crime at an average score of 2.33 (S.D.=0.87). Thus, on average, participants were not really afraid of being a victim of a crime in their neighborhood (Table 9). There were no reported differences in respondent's fear among the different types of crimes.

Table 9: Fear of Being a Victim of a Crime Frequency Table

Question	N	Respondent Perception of Fear						Mean Question Response [1]
		Not afraid at all	Not really afraid	Somewhat afraid	Very afraid	Missing	Total	
		1	2	3	4			
Having your property/car damaged by vandals.	844	22.0%	26.3%	30.1%	12.7%	8.8%	100%	2.46
Having your car stolen or being carjacked.	844	28.6%	25.2%	22.5%	11.4%	12.3%	100%	2.38
Having someone break into your home.	844	25.2%	25.2%	26.3%	15.9%	7.3%	100%	2.38
Being robbed or mugged by a stranger.	844	19.9%	24.5%	32.3%	15.5%	7.7%	100%	2.50
Being shot or shot at.	844	24.9%	25.7%	22.2%	18.7%	8.5%	100%	2.42
Being murdered.	844	30.7%	25.1%	17.3%	18.6%	8.3%	100%	2.30
Average Scale Item Score [2]								2.33

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average fear of being a victim item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.

SUMMARY

Overall, respondents generally had a neutral or slightly favorable response to these scales related to neighborhood conditions and crime. The average item response for social cohesion and interaction was 3.51, which suggested that there was evidence neighbors interacted with one another, were willing to help one another, and trusted one another (Figure 6). Scales representing questions of neighborhood safety (Figure 7) and fear of being a victim of a crime (Figure 8) resulted in neutral opinions, in contrast, despite the overrepresentation of high crime neighborhoods in the sampling methodology. The next

section will discuss how those responses differed by the race of the respondent and whether the respondents lived in low or high crime neighborhoods.

Figure 6: Social Cohesion & Interaction Gauge

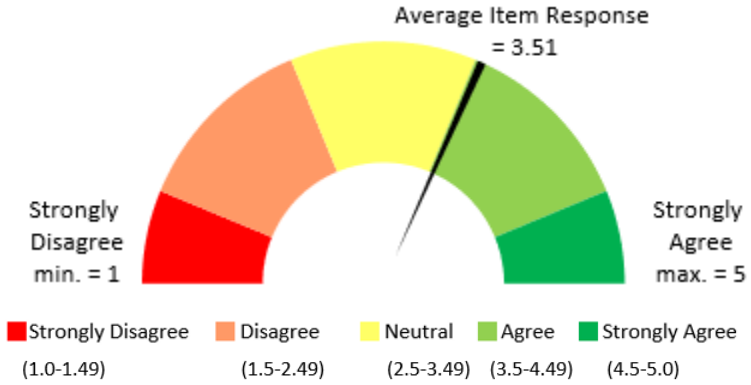


Figure 7: Perceptions of Neighborhood Safety Gauge

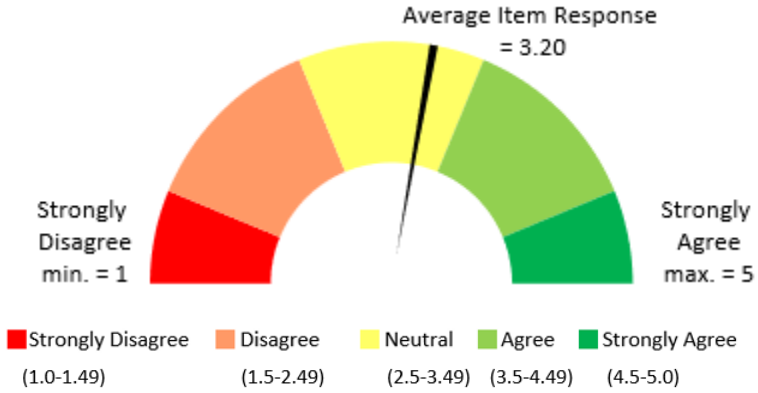
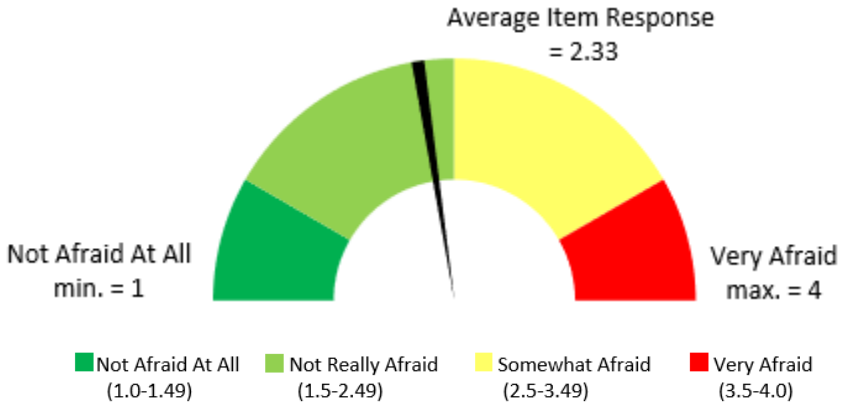


Figure 8: Fear of Being a Victim Gauge



SECTION II: PERCEPTIONS OF NEIGHBORHOOD CONDITIONS AND CRIME – FINDINGS BY RACE AND NEIGHBORHOOD CRIME LEVEL

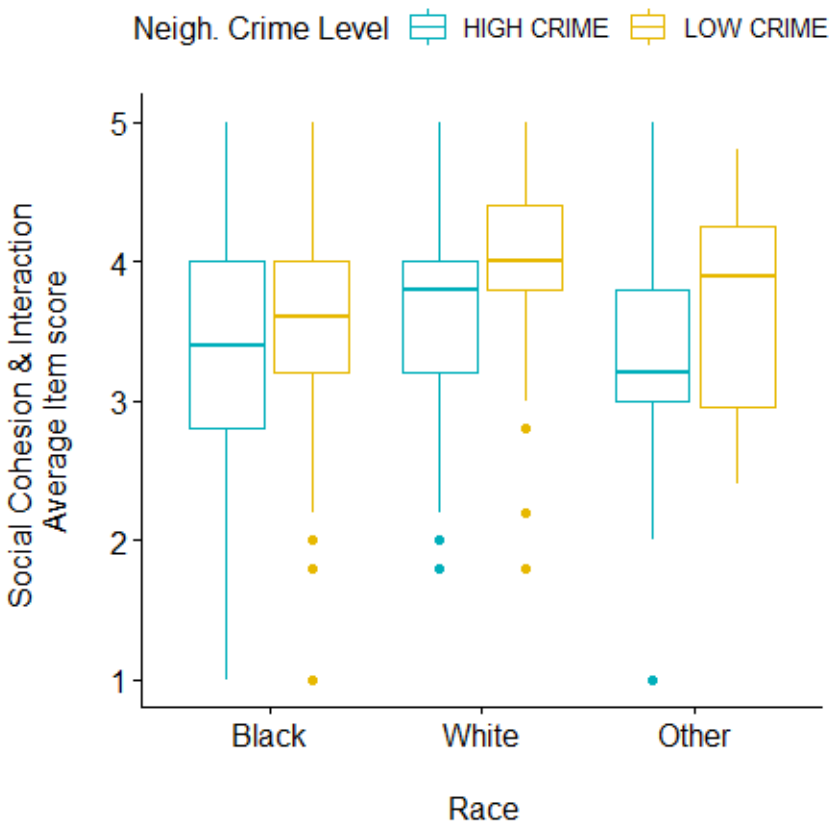
In this section, we examine the perceptions of neighborhood conditions and crime within race and neighborhood crime as these factors likely have important implications for community support of the AIR program.

Within Baltimore, the neighborhood context plays an important role and potentially one that interacts with race. Baltimore is a highly segregated city, with a legacy of disinvestment in neighborhoods and communities with a majority of Black residents. Black residents are often overrepresented in impoverished, disorganized, and higher-crime neighborhoods, which is associated with an increased likelihood of policing (Anderson, 1999; Fagan & Davies, 2000; Brunson & Miller, 2006). Neighborhood context also plays an important role in influencing residents' perceptions and fear of crime (e.g., Sampson & Raudenbush, 2004; Scarborough et al., 2010) and thus may, in turn, influence how residents perceive the importance of policing and programs such as the AIR pilot program.

SOCIAL COHESION & INTERACTION

The responses to social cohesion and interaction across both race and neighborhood crime level were examined, with the boxplot distributions shown in Figure 9. A boxplot offers several advantages to data visualization, including presenting the key points of the data distribution and showing overall patterns of response for a group of respondents based on their race and neighborhood crime level where they live. Each box contains 50% of the respondents for each category, with the line inside identifying the median. Thus, 25% of values are located above the box and 25% of values are below the box, with respondents identified as dots being "outliers" compared to their other category counterparts.

Figure 9: Social Cohesion & Interaction by Race and Neighborhood Crime Level



Note: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree

The boxplots suggest that White residents in low crime neighborhoods had consistently higher ratings of social cohesion since they have both the smallest box (indicating consistency) and highest box placement across the range of values (indicating highest ratings of social cohesion). Additionally, Black residents in high crime neighborhoods had the largest variation in ratings of social cohesion, with the largest range of data in their category. The rest of the categories were generally consistent in their distributions of scores on social cohesion.

A two-way ANOVA, which compares statistical differences within each factor (i.e., race and neighborhood crime level) as well as interaction effects between the factors, was computed. The ANOVA findings confirmed that there are statistically significant differences across race ($F=18.27$, $p<0.001$) and neighborhood crime level ($F=12.42$, $p<0.001$) in the social cohesion scale, but no interaction between these two factors (Table 10). The interaction test tells us whether the effects of one factor (race) depend on the other factor (neighborhood crime level). In other words, the findings suggest that both race and neighborhood crime level affect the perception of neighborhood cohesion and interaction, but that the influence of race and neighborhood crime level are not dependent upon one another (i.e., the effect of race on perceptions of neighborhood crime level does not change across races).

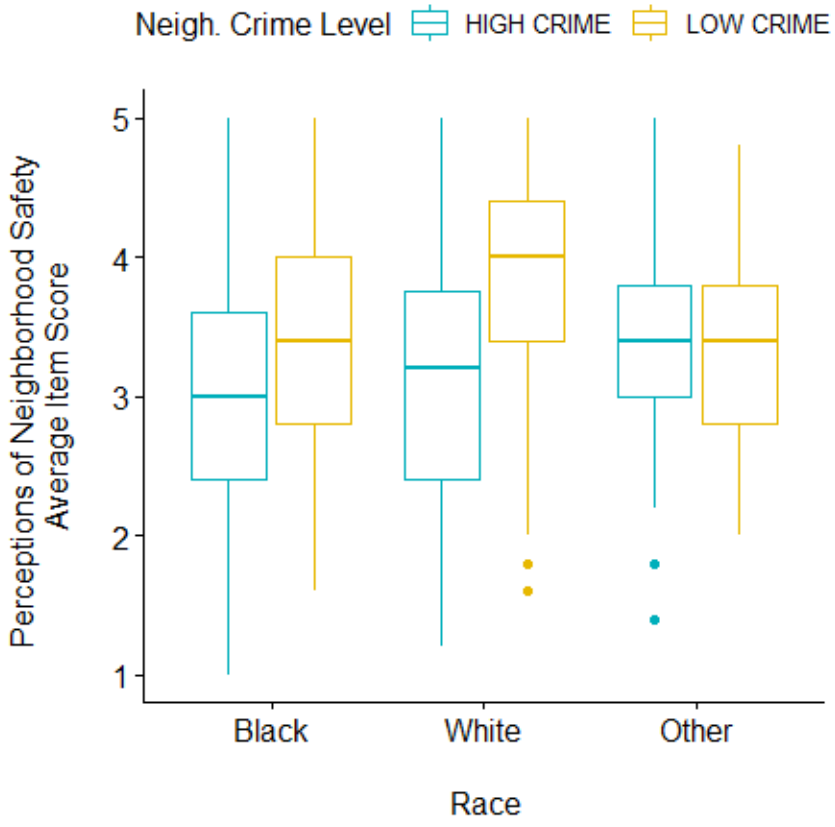
Table 10: Social Cohesion & Interaction by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	18.27	<0.001	0.031
Neighborhood crime level	12.42	<0.001	0.020
Race*neighborhood crime level	1.36	0.259	0.004

PERCEPTIONS OF NEIGHBORHOOD SAFETY

The perception of neighborhood safety was examined across both race and neighborhood crime level, and the distributions are plotted in Figure 10. White residents in low crime neighborhoods consistently had the highest ratings of neighborhood safety. The rest of the categories were consistent in their distributions of perceptions of neighborhood safety scale scores. In addition, the boxplots also suggest that the perception of neighborhood safety is higher for residents living in the low crime areas than for those living in high crime neighborhoods for both Black and White respondents.

Figure 10: Perceptions of Neighborhood Safety by Race and Neighborhood Crime Level



Note: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree

The two-way ANOVA confirmed that there are statistically significant differences across race (F=22.03, p<.001) and neighborhood crime level (F=51.95, p<0.001) in perceptions of neighborhood safety (Table 11). There is also a statistically significant interaction effect between the two factors (F=5.00, p=0.007), indicating that the relationship between race and perceptions of neighborhood safety depends on the level of neighborhood crime.

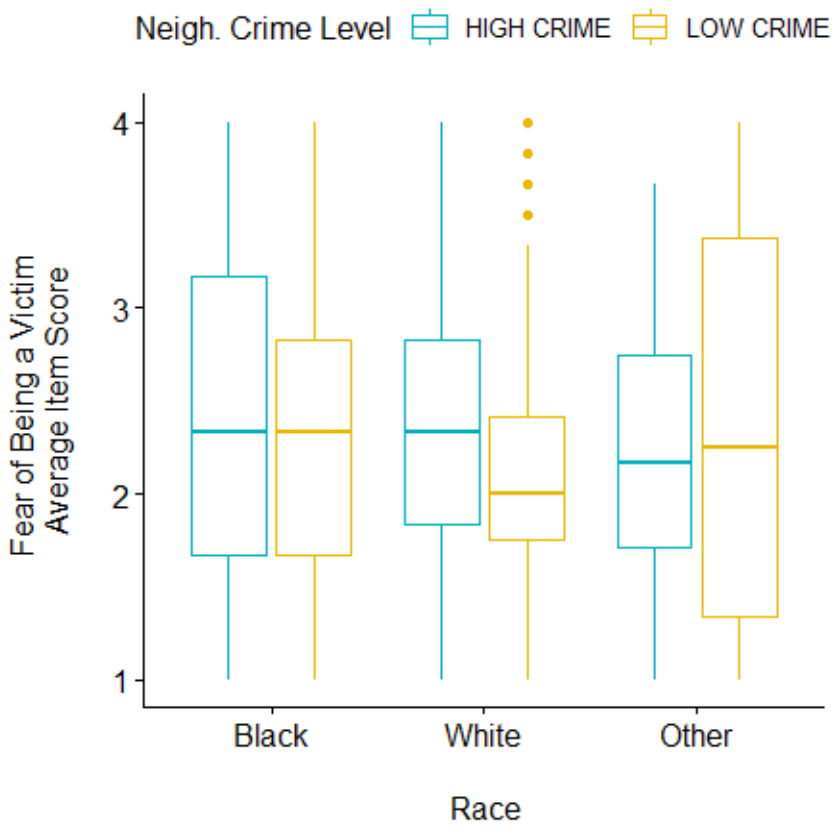
Table 11: Perceptions of Neighborhood Safety by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	22.03	<0.001	0.020
Neighborhood crime level	51.95	<0.001	0.075
Race*neighborhood crime level	5.00	0.007	0.015

FEAR OF BEING A VICTIM OF A CRIME

Fear of being a victim of a crime was also examined across both race and neighborhood crime level. The boxplot distributions are shown in Figure 11. White residents in low crime neighborhoods consistently reported lowest ratings of fear of being a victim of a crime. Ratings across all other categories for fear of crime were relatively similar, with some slight variations in the overall distributions of their scores.

Figure 11: Fear of Being a Victim by Race and Neighborhood Crime Level



Note: 1= Not afraid at all, 2= Not really afraid, 3= Somewhat afraid, 4= Very afraid

The two-way ANOVA confirmed that there are statistically significant differences across race (F=3.36, p=0.035) and neighborhood crime level (F=5.98, p=0.015) in fear of being a victim of a crime, but no interaction between these two factors (Table 12). In other words, both race and neighborhood crime level affect the fear of being a crime victim.

Table 12: Fear of Being a Victim of a Crime by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	3.36	0.035	0.004
Neighborhood crime level	5.98	0.015	0.009
Race*neighborhood crime level	1.18	0.309	0.004

SUMMARY

The survey results presented here suggest that the three measures of perceptions of neighborhood conditions and crime have statistically significant relationships with both race and neighborhood crime level. This suggests that both race and neighborhood crime level affect perceptions of social cohesion and interaction, neighborhood safety, and fear of being a victim of a crime. The findings also suggest that race and neighborhood crime level interact with one another to influence the perceptions of neighborhood safety, while there was no statistically significant evidence of an interaction effect between these factors for perceptions of social cohesion and interaction or fear of being a victim of a crime.

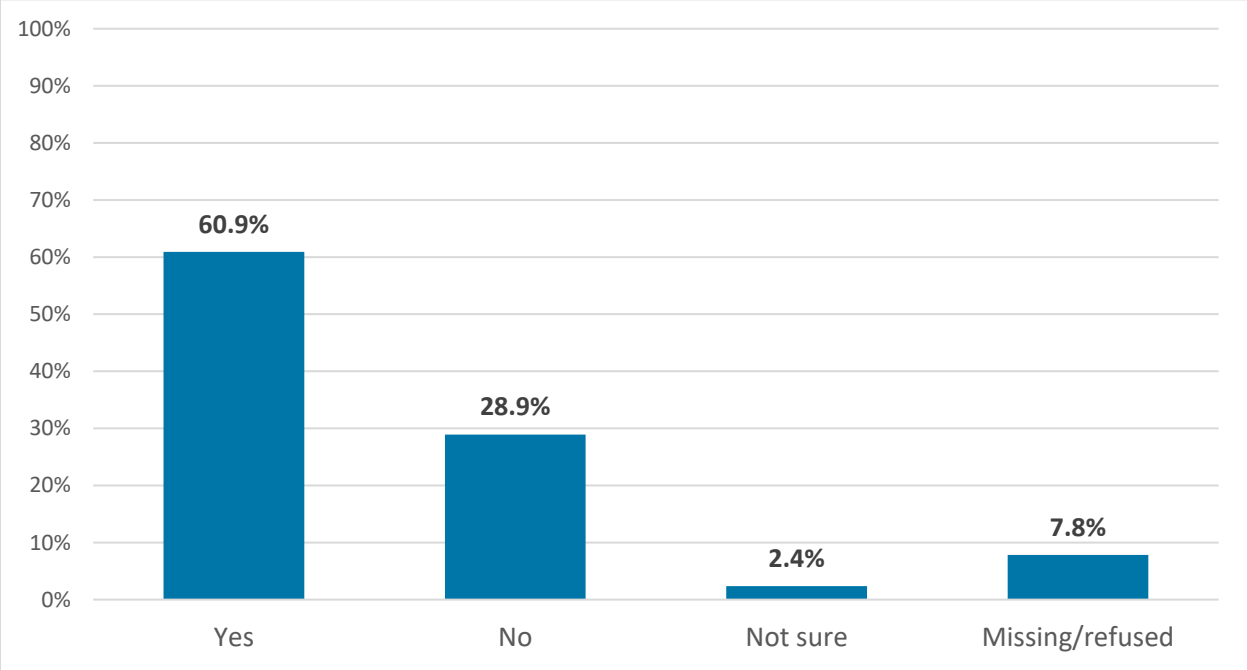
SECTION III: PERCEPTIONS OF AIR PROGRAM – OVERALL FINDINGS

As discussed in the Introduction, there are a range of public opinions about the AIR program. Both supporters and opponents of the pilot program and the more expansive aerial surveillance technology have voiced their views at public events, in local newspapers, on television news programs, and on social media. This section of the report discusses the results of survey questions about awareness of the program, support for the program, attitudes about the effectiveness of the program, and beliefs about the AIR program and its impact on privacy. The following section (Section IV) of the report considers the findings by race and neighborhood crime level.

AWARENESS OF THE AIR PROGRAM

Of the 844 respondents, 514 (60.9%) reported that they had heard of the AIR program (Figure 12). As shown in Table 13, of those who had heard of the program, the majority (398 respondents, 77.43%) reported that they had heard about the program from local TV and radio.[9] The second most common source of their awareness was the newspaper (N=129; 25.10%). Only 36 respondents (7.00%) reported that they had heard about the program directly from a Baltimore Police Department announcement.

Figure 12: Share of Respondents Aware of the AIR Program



[9] Participants were able to report more than one source of where they had heard about the AIR program.

Table 13: Source(s) of Awareness of the AIR Program Frequency Table

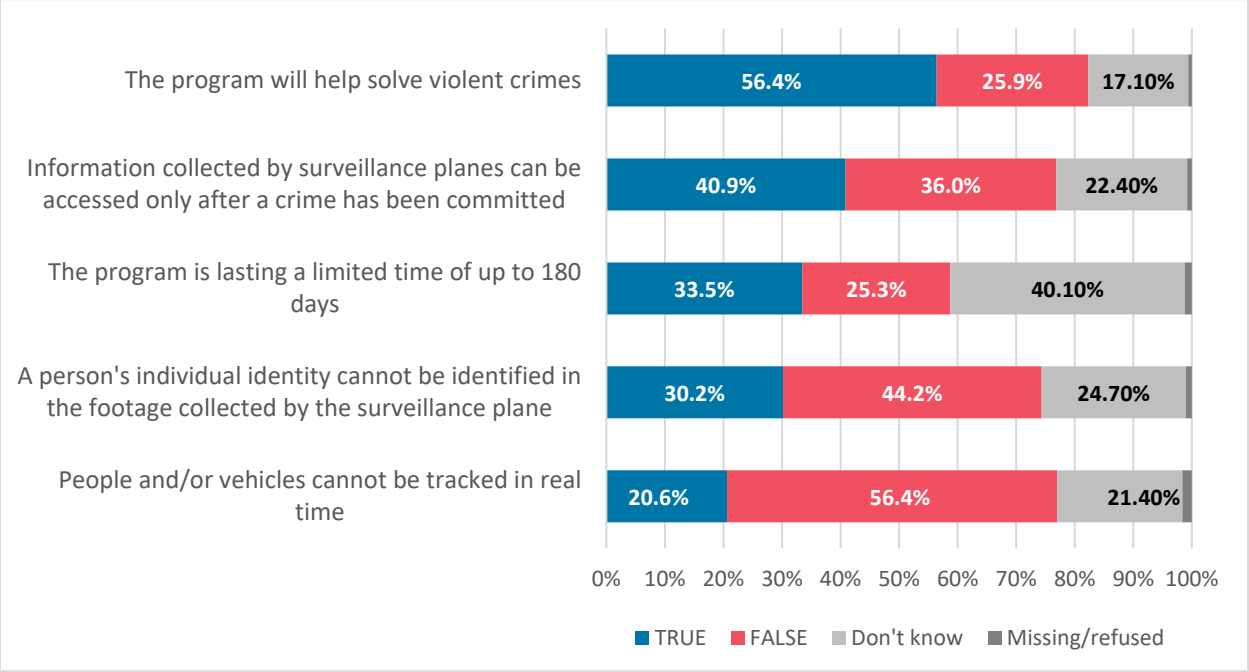
	Percent
Local TV or radio	77.4%
Newspaper	25.1%
People in respondent's community	15.2%
Friends or family	13.8%
Community organizations	9.9%
Baltimore Police Department announcement	7.0%
Religious organization, such as a church	2.3%
Other	13.8%

Notes: N=514. Respondents were asked to check all source(s) that applied.

Knowledge of AIR Program Components

The 514 participants who indicated they had heard of the AIR program were asked supplemental questions to understand their knowledge of the AIR program (Figure 13). In general, the responses indicate a lack of understanding about the program – less than half of respondents who had heard of the program correctly identified that the planes were used only after a crime was committed, that the pilot would last 180 days, that a person cannot be identified from the footage, and that people and vehicles cannot be tracked in real time. The only program characteristic that respondents correctly said was "true" was that the planes are only used to help solve violent crimes. This suggests that, among those who have heard of the program, there is still a lack of understanding of its extent and key features, especially surrounding the privacy of citizen data.

Figure 13: Percent of Responses to Items on Specific Knowledge of AIR Program



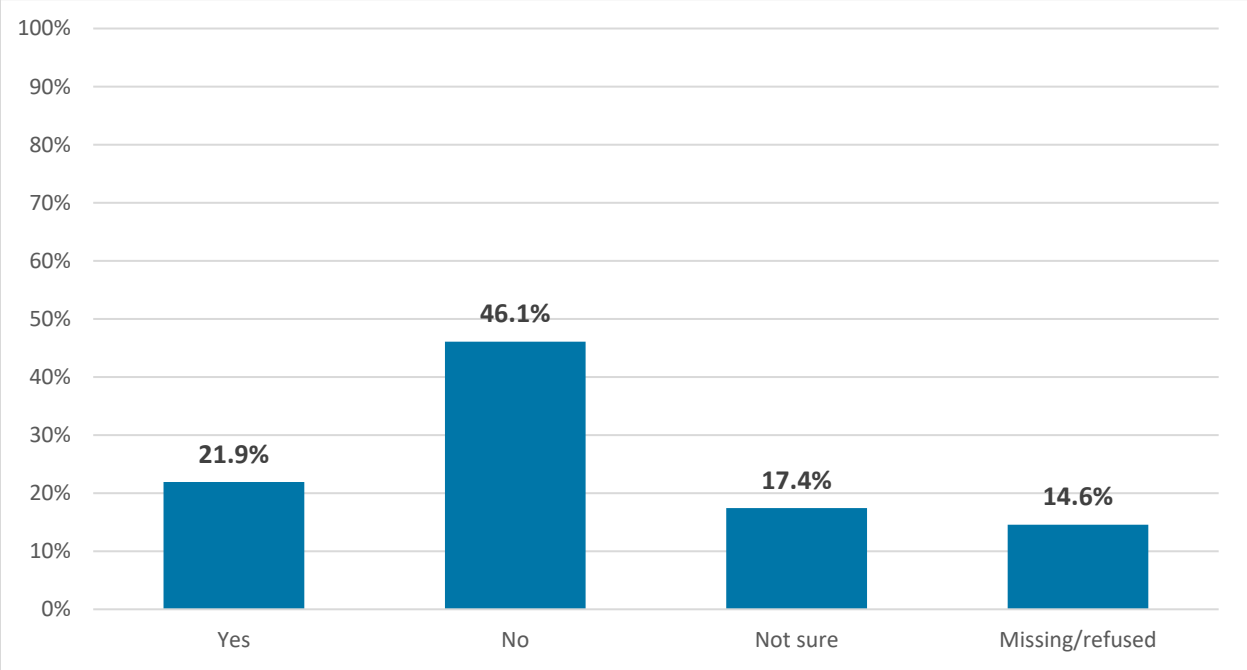
Notes: N=514. All items measured on this scale are real (i.e., True) components of the AIR program.

Noise From the AIR Plane

In addition to privacy issues, there have been concerns raised about city residents hearing the AIR surveillance planes flying above Baltimore (e.g., Anderson, 2020a; Krauss, 2020).[10] To better understand the prevalence of this situation, the survey asked respondents if they had heard the noise from the plane, and almost half (46.1%) said they had not (Figure 14). Almost 22% (N = 185) of respondents said they had heard the noise.

[10] There have also been several Reader Response opinion pieces published in the *Baltimore Sun* during the AIR pilot program.

Figure 14: Share of Respondents Who Heard Noise from the AIR Plane



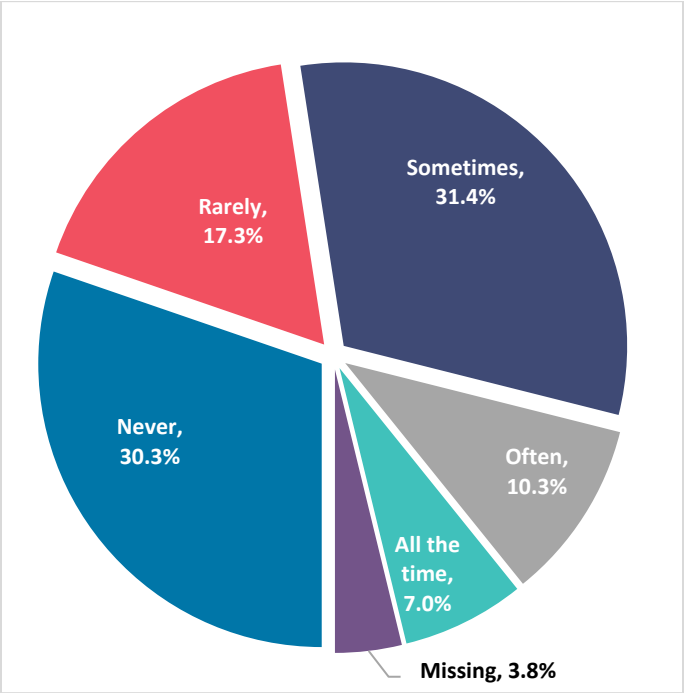
Follow-up questions were asked of the 185 respondents who indicated that they had heard the noise from the plane. When asked where they heard the noise of the surveillance planes, 88.6% reported they had heard the noise outside on their property, 73.5% reported that they had heard the noise inside with the windows open, and 53.0% reported that they heard the noise inside with the windows closed (Table 14). Of participants who heard the noise, 7.0% indicated they were annoyed *all the time*, 10.3% indicated they were annoyed *often*, and 31.4% were *sometimes* annoyed by it (Figure 15). Approximately one in three respondents (30.3%) who heard the noise were *never* bothered by it.

Table 14: Where Surveillance Plane Noise Was Heard

Location	Yes	No	Don't Know	Missing
On your property, but outside your home	88.6%	5.9%	4.9%	0.5%
In your home with the windows OPEN	73.5%	15.1%	6.5%	4.9%
In your home with the windows CLOSED	53.0%	34.1%	5.9%	7.0%

Notes: N=185. Asked only of those who reported hearing noise from the AIR surveillance plane. Most frequent responses for each factor highlighted in light blue.

Figure 15: How Often Respondents Have Felt Annoyed by Noise from the Surveillance Plane

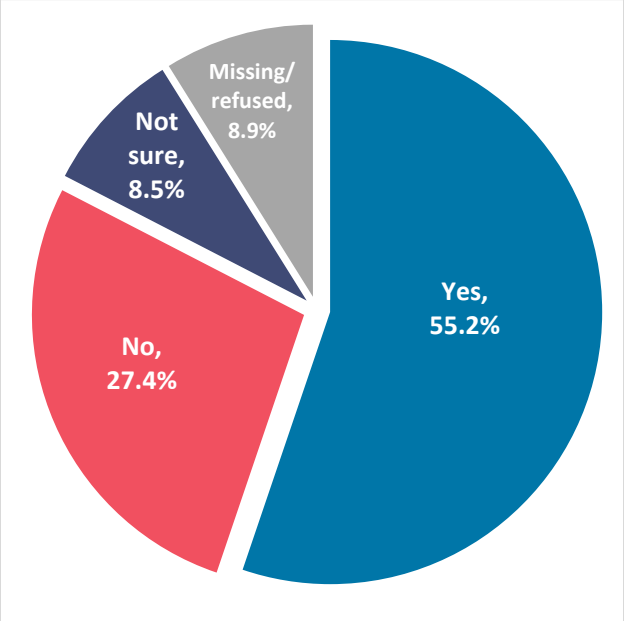


Notes: N=185. Asked only of those who reported hearing noise from the AIR surveillance plane.

SUPPORT FOR THE AIR PROGRAM

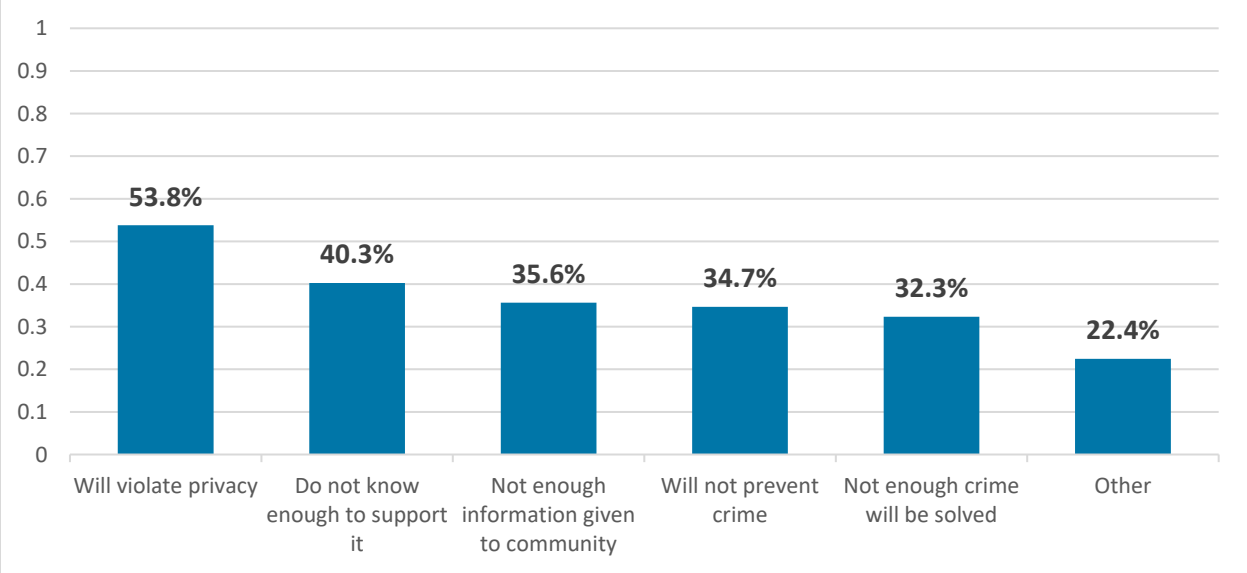
Survey participants were asked if they supported the AIR program (Figure 16). In total, 466 participants (55.2%) responded that they do support the program, 231 participants (27.4%) responded that they do not support the program, and 72 participants (8.5%) responded that they did not know if they supported the program.

Figure 16: Support of AIR Program



Follow up questions were asked of those participants who did not support the AIR program and those who did not know if they supported it (N=303). When asked why, of the listed reasons, they did not support the program, participants could select as many as they felt applied (Figure 17). The most common reason among these participants was that their lack of support was due to violation of privacy (53.8%) followed by not knowing enough about it (40.3%) and not being given enough information (35.6%).

Figure 17: Reasons why Respondents Do Not Support AIR Program or are Unsure (N=303)

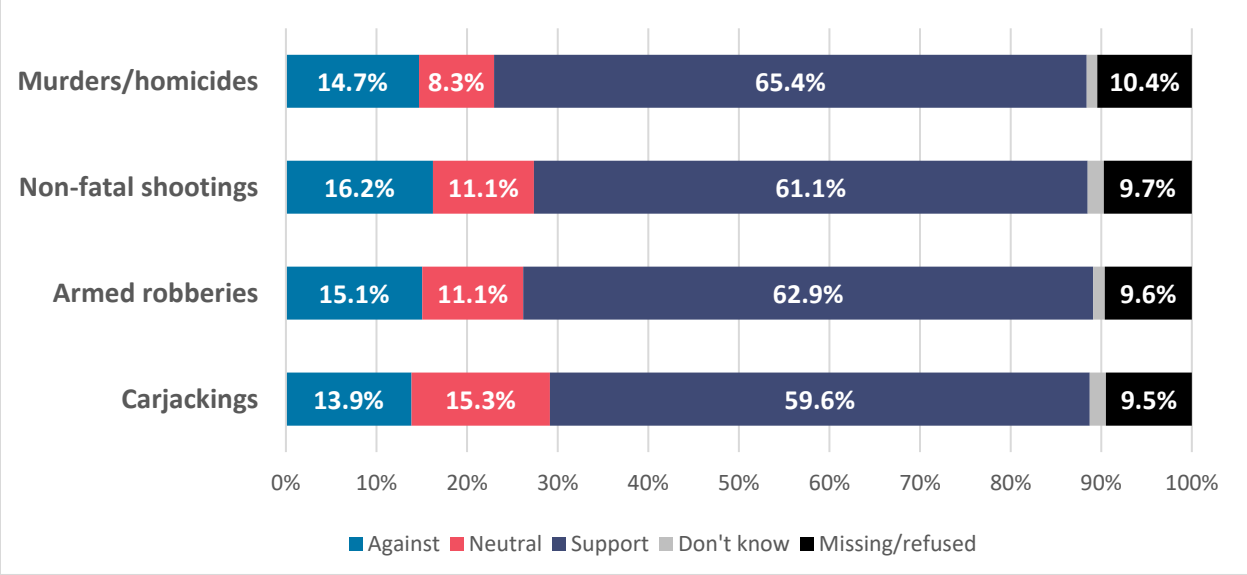


Note: N=303.

Support for Using the AIR Program for Specific Types of Crimes

All participants were asked whether they support the usage of the AIR program for investigating the specific types of crime that the program is targeting (Figure 18). Overall, the majority of respondents were consistently in support of the AIR program's application to investigating the crimes of carjacking, armed robberies, non-fatal shootings, and murders/homicides, with the percentages of participants who support the AIR program's usage to investigate the four crime types between 59.6% and 65.4%, which is a difference of less than six percentage points. In addition, the percentages of participants against the use of AIR to investigate crime remained relatively consistent, with variability from just under 14% to just over 16%, across the four types of violent crime.

Figure 18: Resident Belief in Use of AIR Program for Investigating Crimes



ATTITUDES ABOUT THE EFFECTIVENESS OF THE AIR PROGRAM

Survey respondents were asked several questions about how they would define the AIR program as being effective, including questions relating to the usefulness of the AIR program at gathering evidence, preventing people from engaging in crime, and encouraging people to report criminal activity. The items on this scale had a Cronbach's alpha score in the desirable range, indicating good reliability (Table 15).

Table 15: Attitudes about the Effectiveness of the AIR Program

Variable	Minimum-Maximum	Avg. Item Score (St. Dev)	α*	Missing
Attitudes about effectiveness of AIR program	1.00 – 5.00	3.10 (0.99)	0.84	N=123 (14.57%)

Scale values: 1 strongly disagree the program is effective; 5 strongly agree the program is effective.

* *Cronbach's alpha score between 0.70-0.90 indicates that the items in the scale have good reliability with one another.*

Participants rated their attitudes about the effectiveness of the AIR program at an average item score of 3.10 (S.D.=0.99) or at approximately neutral (see Table 16). Thus, on average, participants did not believe surveillance planes would be either effective or ineffective.

Table 16: Attitudes about the Effectiveness of the AIR Program Frequency Table

Question	N	Respondent Level of Agreement							Mean Question Response [1]
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Total	
		1	2	3	4	5			
Surveillance planes gathering evidence in open public places, like parks and streets, is useful for police.	844	9.7%	6.6%	25.4%	28.1%	18.2%	11.9%	100%	3.46
Surveillance planes gathering evidence in open private places, like porches and backyards, is useful for police.	844	17.8%	17.5%	19.7%	21.6%	11.7%	11.7%	100%	2.93
Surveillance planes gathering evidence for serious crimes, like shootings and homicides, will help the police solve these crime.	844	7.6%	4.9%	14.6%	33.8%	27.1%	12.1%	100%	3.79
Surveillance planes will prevent people from engaging in criminal activity.	844	19.5%	21.1%	16.1%	17.4%	13.2%	12.7%	100%	2.83
Surveillance planes will encourage people to report criminal activity to the police.	844	19.4%	25.5%	20.6%	13.9%	7.9%	12.7%	100%	2.63
Average Scale Item Score [2]									3.10

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average attitudes about AIR program effectiveness item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.
Light blue highlighting shows most frequent response within each individual question.

BELIEFS ABOUT PRIVACY AND THE AIR PROGRAM

Survey respondents were asked several items about their beliefs about privacy and the AIR program, including questions relating to the planes gathering their private information, if the planes violate their privacy, and if the planes are worth a potential loss of privacy. The item on this scale had a Cronbach's alpha score in the desirable range, indicating that items have good reliability with one another (Table 17).

Table 17: Beliefs about Privacy and the AIR Program

Variable	Minimum-Maximum	Avg. Item Score (St. Dev)	α *	Missing
Attitudes about privacy	1.00 – 5.00	3.07 (0.95)	0.78	N=130 (15.40%)

* *Cronbach's alpha score between 0.70-0.90 indicates that the items in the scale have good reliability with one another.*

Participants rated their beliefs about privacy and the AIR Program at an average item score of 3.07 (S.D.=0.95) or approximately neutral (Table 18). Thus, on average, participants did not believe the program was either violating or protecting their privacy.

Table 18: Beliefs about Privacy and the AIR Program Frequency Table

Question	N	Respondent Level of Agreement							Mean Question Response [1]
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Total	
		1	2	3	4	5			
Surveillance planes violate my privacy.	844	8.5%	23.9%	19.4%	20.0%	14.8%	13.3%	100%	3.11
The surveillance planes gather too much private information about me.	844	9.1%	26.3%	23.6%	15.3%	12.2%	13.6%	100%	2.96
The information collected from the surveillance planes is worth my loss of privacy. [3]	844	13.6%	19.7%	23.0%	20.3%	9.7%	13.8%	100%	2.93
Surveillance planes are excessive monitoring.	844	5.9%	23.2%	23.3%	18.4%	14.3%	14.8%	100%	3.16
Average Scale Item Score [2]									3.07

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average attitudes about privacy and the AIR program item score was calculated by adding together scores for each participant on all items on the scale (considering any reverse coded items as such) and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.
[3] Item is reverse coded.
Light blue highlighting shows most frequent response within each individual question.

SUMMARY

The findings in this section suggest that there is still a substantial part of the city's population that are unaware of the AIR program, with almost one in three respondents reporting they were not aware of it. Moreover, of those who were familiar with the program, many were not able to correctly several features of the aerial surveillance program as a whole or the pilot program in particular. This includes only 30% responding correctly that a person cannot be identified from footage and 20% responding correctly that people and vehicles cannot be tracked in real time. While over half of surveyed respondents said they

supported the program, increasing general knowledge of the AIR program and improving understanding of its specific components may increase this support, especially as the leading reasons that respondents gave for not supporting the program were that it will violate privacy, that they did not know enough to support it, and not enough information was given to the community.

Responses on survey questions comprising the scales on the effectiveness of the AIR program resulted in a neutral response, suggesting that respondents did not have an overall view on if the surveillance planes were effective or ineffective in reducing or solving crime (Figure 19). Respondents were also neutral on the privacy issues related to the AIR program, which suggests they did not see the program as a privacy violation or protection (Figure 20). Again, increasing the information given to the community about the program could change both of these results, depending on the results of the pilot program.

Figure 19: Attitudes about Effectiveness of Program Gauge

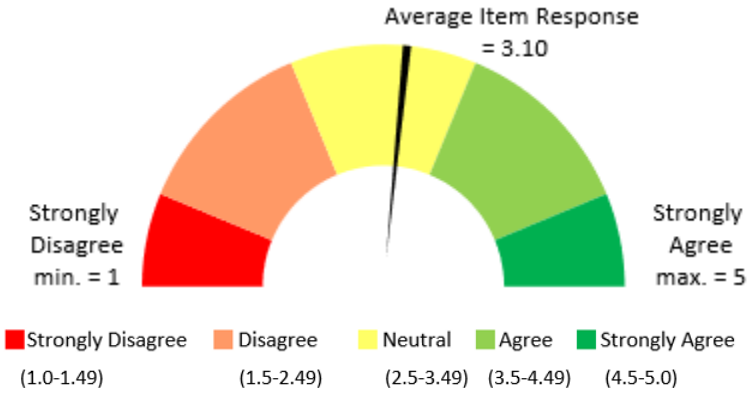
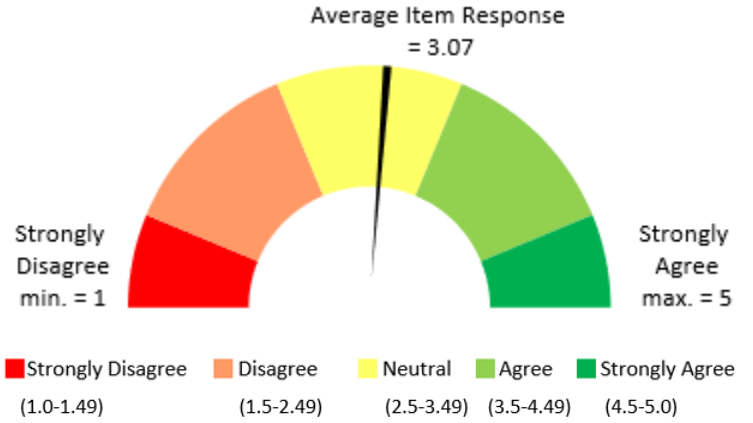


Figure 20: Beliefs about Privacy Gauge



SECTION IV: PERCEPTIONS OF AIR PROGRAM – FINDINGS BY RACE AND NEIGHBORHOOD CRIME LEVEL

Echoing the work above in Section II, we examine the perceptions of the AIR program in this section across race and neighborhood crime level. As the AIR pilot program planes have flown over higher crime neighborhoods more often than lower crime neighborhoods, the residents of higher crime neighborhoods may be more impacted by the AIR program. This is true for both the effectiveness of the program – since the planes, especially during the early stages of the pilot, were focused on areas with large numbers of murders – and the effect on privacy – as these individuals would be more likely to be captured more frequently by the planes' cameras. Therefore, this section looks specifically at how individuals of different races and living in neighborhoods with different crime rates view the AIR program; it also investigates awareness of and support for the AIR program by other demographic indicators as well.[11]

AWARENESS OF THE AIR PROGRAM

The knowledge of the AIR program's existence was analyzed across six demographic factors: race, educational attainment, employment status, gender, age, and neighborhood crime level (Table 19). Chi squared tests were computed to determine if there were statistically significant differences across factor categories for knowledge of the AIR program's existence.

[11] Due to the nature of this study, it is useful to note once again that these analyses only suggest if a relationship is present between a demographic characteristic and awareness or support of the AIR program. Causation should not be assumed.

Table 19: Relationship between Knowledge of AIR Program and Demographic Variables

	Knowledge of AIR Program		
	No/Unsure	Yes	Total
Race			
Black	157 (35.04%)	291 (64.96%)	448 (100%)
White	39 (21.08%)	146 (78.91%)	185 (100%)
Other	24 (48.00%)	26 (52.00%)	50 (100%)
Education (Associate's Degree or higher)			
Yes	85 (24.01%)	269 (75.99%)	354 (100%)
No	137 (40.53%)	201 (59.47%)	338 (100%)
Employment Status			
Employed	98 (26.92%)	266 (73.08%)	364 (100%)
Not employed	33 (37.50%)	55 (62.50%)	88 (100%)
Retired/disabled	92 (38.82%)	145 (61.18%)	237 (100%)
Gender			
Female	158 (37.09%)	268 (62.91%)	426 (100%)
Male	63 (24.05%)	199 (75.95%)	262 (100%)
Age Group			
18-34 years old	34 (32.38%)	71 (67.62%)	105 (100%)
35-64 years old	126 (31.74%)	271 (68.26%)	397 (100%)
65 years or older	63 (32.81%)	129 (67.19%)	192 (100%)
Crime Level			
Low crime neighborhood	66 (27.62%)	173 (72.38%)	239 (100%)
High crime neighborhood	198 (36.73%)	341 (63.27%)	539 (100%)

Note: Most frequent responses for each factor highlighted in light blue.

The Chi squared tests indicated that there were statistically significant differences in awareness of the AIR program's existence across race (χ^2=17.85, p<0.001), education (χ^2=20.91, p<0.001), employment status (χ^2=10.49, p=0.005), gender (χ^2=12.07, p<0.001), and living in a low crime versus high crime neighborhood (χ^2=5.74, p=0.017). Specifically, White residents had the highest proportion of respondents indicating awareness of the program (78.91%) followed by Black residents (64.96%) and residents of other races (52.00%). Those with a college degree (associate's degree or higher) were more likely to report awareness of the AIR program (75.99%) compared with those who did not have at least an associate's degree (59.47%). Those who were employed had a greater proportion of respondents who reported awareness of the AIR program (73.08%), while those who were not employed or were retired/disabled had similar rates of awareness of the AIR program (62.50% and 61.18%, respectively). There was a higher proportion of male respondents who reported awareness of the AIR program (75.95%) compared to female respondents (62.91%).

There were no statistically significant differences across age groups in the awareness of the AIR program's existence (χ^2=0.01, p=0.965).

SUPPORT FOR THE AIR PROGRAM

Support for the AIR program was examined across demographic factors of race, educational attainment, employment status, gender, age, and neighborhood crime level using Chi squared tests (Table 20).

Table 20: Relationship between Support of AIR Program and Demographic Variables

	Support for AIR Program		
	No/Unsure	Yes	Total
Race			
Black	148 (33.18%)	298 (66.82%)	446 (100%)
White	96 (51.89%)	89 (48.11%)	185 (100%)
Other	19 (38.00%)	31 (62.00%)	50 (100%)
Education (Associate's Degree or higher)			
Yes	168 (47.73%)	184 (52.27%)	352 (100%)
No	98 (29.08%)	239 (70.92%)	337 (100%)
Employment Status			
Employed	169 (46.56%)	194 (53.44%)	363 (100%)
Not employed	36 (40.91%)	52 (59.09%)	88 (100%)
Retired/disabled	59 (25.11%)	179 (74.89%)	238 (100%)
Gender			
Female	152 (35.76%)	273 (64.24%)	425 (100%)
Male	108 (41.54%)	152 (58.46%)	260 (100%)
Age Group			
18-34 years old	68 (64.76%)	37 (35.24%)	105 (100%)
35-64 years old	150 (37.78%)	247 (62.22%)	397 (100%)
65 years or older	50 (26.46%)	139 (73.54%)	189 (100%)
Crime Level			
Low crime neighborhood	103 (43.46%)	134 (56.54%)	237 (100%)
High crime neighborhood	200 (37.59%)	332 (62.41%)	532 (100%)

Note: Most frequent responses for each factor highlighted in light blue.

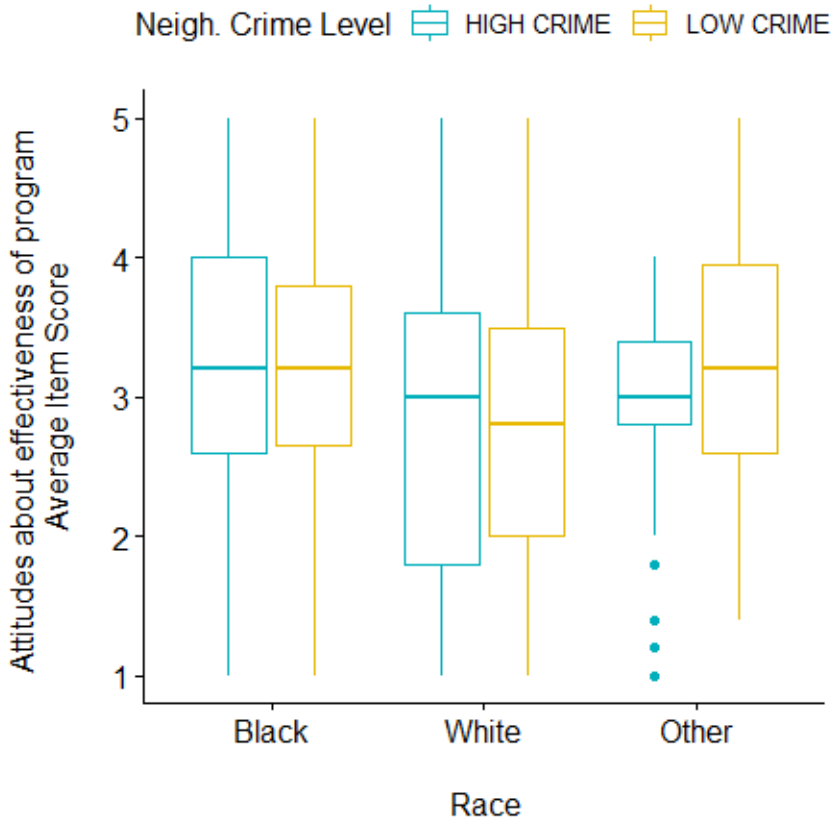
There were statistically significant differences in support for the AIR program's existence across race (χ^2=19.32, p<0.001), education (χ^2=24.48, p<0.001), employment status (χ^2=27.98, p<0.001), and age (χ^2=42.11, p<0.001). Specifically, White respondents had the lowest proportion of respondents indicating support for the AIR program (48.12%). Those without a college degree (at the associate's degree level or higher) were more likely to report support for the AIR Program (70.92%) compared with those who did have a college degree (52.27%). Those who were retired/disabled had the greatest proportion of respondents by employment status who reported support for the AIR program (74.89%). Younger residents (ages 18-34 years old) had the lowest proportion of support (35.24%) among age groups.

There were no statistically significant differences in support for the AIR program across gender (χ^2=2.05, p=0.153) or neighborhood crime level (χ^2=2.12, p=0.145).

ATTITUDES ABOUT THE EFFECTIVENESS OF THE AIR PROGRAM

Attitudes about the effectiveness of the AIR program across both race and neighborhood crime level were examined, and the distributions are plotted in Figure 21. The findings suggest that, across the majority of categories, there is a wide range in the distribution of scores, indicating an inconsistency in residents' attitudes about the effectiveness of the AIR program. The residents of "other" races living in high crime neighborhoods had the most consistent responses, and they were concentrated around the neutral response. Additionally, White respondents were more likely to have lower scoring responses about the effectiveness of the AIR program in both high and low crime neighborhoods.

Figure 21: Attitudes about Effectiveness of Program by Race and Neighborhood Crime Level



Note: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree

The two-way ANOVA confirmed that there are statistically significant differences across race ($F=14.70$, $p<0.001$) but not across neighborhood crime level ($F=0.04$, $p=0.845$) in attitudes of the effectiveness of the AIR program (

Table 21). There was no interaction between these two factors.

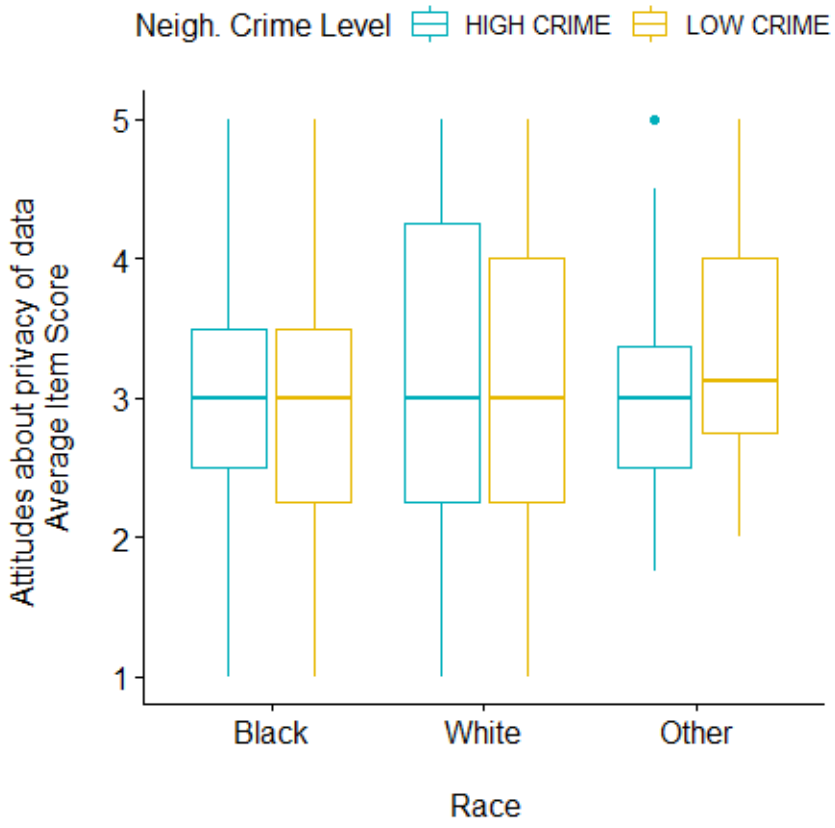
Table 21: Attitudes about Effectiveness of AIR Program by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	14.70	<0.001	0.038
Neighborhood crime level	0.04	0.845	0.000
Race*neighborhood crime level	0.61	0.544	0.002

BELIEFS ABOUT PRIVACY AND THE AIR PROGRAM

Beliefs about privacy and the AIR Program were examined across both race and neighborhood crime level. The distributions are plotted in Figure 22. There is a wide range in the distribution of scores across all categories, indicating inconsistency in respondents' beliefs about surveillance planes violating their privacy.

Figure 22: Beliefs about Privacy by Race and Neighborhood Crime Level



Note: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree

The two-way ANOVA confirmed that there is a statistically significant difference across race (F=3.84, p=0.022) but not across neighborhood crime level (F=1.33, p=0.250) in belief about privacy and the AIR program, and that there was no interaction between these two factors (Table 22).

Table 22: Beliefs about Privacy by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	3.84	0.022	0.132
Neighborhood crime level	1.33	0.250	0.002
Race*neighborhood crime level	0.87	0.421	0.003

SUMMARY

Awareness of the AIR program and support for it varied across a number of different demographic indicators, including race, education, and employment status; awareness of the program also differed by gender and neighborhood crime level, while support for the program also varied by age. Looking specifically at the scales concerning effectiveness of the AIR program suggests that views on whether the program is effective or ineffective differ by race but not neighborhood level, with the same pattern shown for the scale about privacy and the AIR program.

SECTION V: PERCEPTIONS OF POLICE – OVERALL FINDINGS

Survey respondents' perceptions of police are important to understanding residents' beliefs about the AIR program as a tool for the police. Thus, the survey instrument was designed to measure five common concepts within the policing literature: (1) perceptions of police legitimacy, (2) perceptions of procedural justice, (3) perceptions of police bias, (4) willingness to partner with police, and (5) willingness to contact police to report a crime. Due to the history of police-community relations in Baltimore and the city's relatively high crime rate, it is important to consider the survey responses both as a whole and with specific attention to race and neighborhood crime level. This section looks at the overall survey responses, while the next section (Section VI) considers the relationships with race and neighborhood crime level.

For each of the survey scales in this section, the existing literature served as a base to select items that captured these topics. Overall, four of these scales had Cronbach's alpha scores in the desirable range of 0.70-0.90, indicating that items within each scale have good reliability with one another (Table 23). The scale related to willingness to partner with the police had a score below the desirable range but still above the acceptable threshold of 0.60.

Table 23: Perceptions of Police

Variables	Minimum-Maximum	Avg. Item Score (St. Dev)	α *	Missing
Police Legitimacy	1.00 – 5.00	2.73 (0.90)	0.84	N=181 (21.45%)
Procedural Justice	1.00 – 5.00	2.80 (0.99)	0.93	N=224 (26.54%)
Police Bias	1.00 – 5.00	3.41 (0.93)	0.75	N=202 (23.93%)
Willing to Partner with Police	1.00 – 4.00	2.58 (0.71)	0.62	N=195 (23.10%)
Willing to Contact Police	1.00 – 4.00	3.20 (0.66)	0.79	N=191 (22.63%)

Values for Scale Ranges:
Police Legitimacy, Procedural Justice, Police Bias: 1 strongly disagree; 5 strongly agree.
Willing to Partner with Police, Willing to Contact Police: 1 very unlikely; 4 very likely.
* *Cronbach's alpha score between 0.70-0.90 indicates that the items in the scale have good reliability with one another.*

PERCEPTIONS OF POLICE LEGITIMACY

Perceptions of the police's legitimacy center around two inherent concepts: trust in the police and perceived obligation to obey the police (Gau 2011; Mazerolle et al., 2013; Sargeant & Kochel, 2018; Heen et al., 2018). Survey respondents were asked several items about their beliefs about police legitimacy, including questions about trusting the police as well as feeling protected by police, comfort around the police, and support for police actions. How

Perceptions of police legitimacy center around trust in the police and perceived obligation to obey the police. More positive perceptions of police legitimacy may drive how respondents support initiatives that target crime.

respondents view the legitimacy of police, and by proxy how much respondents trust the police and thus feel obligated to obey the police, may drive how respondents support initiatives that target crime.

Participants rated their perceptions of police legitimacy at an average score of 2.73 (S.D.=0.90), or approximately neutral (Table 24). Thus, on average, participants felt neutral in their perceptions of the legitimacy of the police.

Table 24: Perceptions of Police Legitimacy Frequency Table

Question	N	Respondent Level of Agreement							Mean Question Response [1]
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Total	
		1	2	3	4	5			
People in my community are well protected by the police.	844	18.2%	23.9%	22.2%	15.4%	3.9%	16.3%	100%	2.62
The police can be trusted to make decisions that are right for my community.	844	17.7%	22.9%	24.1%	15.0%	3.3%	17.0%	100%	2.64
People should always listen to police officers even if they believe that a police officer is wrong.	844	20.3%	21.8%	15.3%	19.3%	6.0%	17.4%	100%	2.72
The police are a part of my neighborhood.	844	17.1%	27.8%	13.7%	20.9%	4.1%	16.4%	100%	2.66
I feel comfortable around the police.	844	12.0%	14.9%	16.5%	30.3%	10.3%	16.0%	100%	3.17
I generally support how the police act in my community.	844	12.4%	17.3%	20.4%	25.8%	7.0%	17.0%	100%	3.03
Average Scale Item Score [2]									2.73

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average perceptions of police legitimacy item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.

PERCEPTIONS OF PROCEDURAL JUSTICE

Procedural justice refers to the level of approval for the police's decision-making process (Gau, 2011; Mazerolle et al., 2013). Often, procedural justice can function as a mechanism for police legitimacy – if police are perceived to act with procedural justice, they are likely to be viewed with higher legitimacy in the community. Respondents' perceptions of procedural justice within police decision-making can directly influence how they support initiatives implemented by police departments. Here, procedural justice was measured by asking respondents questions about if police treat people with respect, treat people fairly, take time to listen to people, explain their decisions, and make decisions based on facts and law and not their own personal opinions.

Procedural justice refers to the level of approval for the police's decision-making process. Perceptions of procedural justice within police decision-making can directly influence how support for initiatives implemented by police departments.

Participants rated their perceptions of procedural justice at an average score of 2.80 (S.D.=0.99) or approximately neutral (Table 25). Thus, on average, participants did not agree or disagree on if procedural justice is present in their community.

Table 25: Perceptions of Procedural Justice Frequency Table

Question	N	Respondent Level of Agreement							Mean Question Response [1]
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Total	
		1	2	3	4	5			
Police in my community treat people with dignity and respect.	844	12.1%	12.7%	28.0%	22.4%	5.6%	19.3%	100%	3.11
Police in my community treat people fairly.	844	10.9%	15.5%	26.7%	23.0%	5.0%	18.9%	100%	3.07
Police in my community take time to listen to people.	844	12.4%	16.0%	25.6%	21.0%	5.1%	20.0%	100%	3.03
Police in my community explain their decisions to the people they deal with.	844	14.6%	18.6%	26.5%	15.2%	3.0%	22.3%	100%	2.89
Police in my community make decisions based on facts and the law, and not their own personal opinions.	844	12.9%	18.7%	28.4%	14.7%	3.0%	22.3%	100%	2.93
Average Scale Item Score [2]									2.80

Notes:

[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.

[2] The average perceptions of procedural justice item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.

PERCEPTIONS OF POLICE BIAS

Survey respondents were asked several items about their perceptions of police bias, including questions about if police treat people differently based on race/ethnicity, how much they earn, or age. Participants rated their perceptions of police bias at an average score of 3.41 (S.D.=0.93) or at approximately neutral (Table 26). Thus, on average, participants perceived that police were neither biased nor unbiased.

Perceptions of police bias included questions about if respondents believed that police in their community treated people differently based on their race/ethnicity, how much they earn, or their age.

Table 26: Perceptions of Police Bias Frequency Table

Question	N	Respondent Level of Agreement							Mean Question Response [1]
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Total	
		1	2	3	4	5			
Police officers treat people differently based on their race/ethnicity.	844	3.9%	9.7%	18.8%	21.2%	25.7%	20.6%	100%	3.80
Police officers treat people differently based on how much they earn.	844	4.7%	18.6%	21.8%	20.1%	12.7%	22.0%	100%	3.40
Police officers treat people differently based on their age.	844	4.0%	15.2%	22.2%	27.7%	10.8%	20.1%	100%	3.43
Average Scale Item Score [2]									3.41

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average perceptions of police bias item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.

WILLINGNESS TO PARTNER WITH POLICE

When participant perceive higher ratings of police legitimacy and procedural justice, they are more likely to be willing to cooperate with the police in several capacities, including reporting crime or assisting with inquiries for information (White et al., 2016; Sargeant & Kochel, 2018). These attitudes of cooperation may also translate into support for police initiatives. For example, participants who are more willing to cooperate with police may be more likely to support the AIR program.

The survey measured two components of willingness to cooperate with police. The first, called "willingness to partner with police," was developed by asking participants to rate their willingness to partner with police in several crime-control efforts to examine how this willingness to partner with police relates to support for the AIR program. Respondents were asked to rate how likely they were to patrol the streets as part of an organized community group, help the police solve a crime or find a suspect, or attend a community meeting.

To understand respondents' willingness to partner with police, they were asked how likely they were to patrol the streets as part of an organized community group, help the police solve a crime or find a suspect, or attend a community meeting.

Participants rated their willingness to partner with police at an average score of 2.58 (S.D.=0.71) or at approximately likely (Table 27). Thus, on average, participants were willing to partner with police.

Table 27: Willingness to Partner with Police Frequency Table

Question	N	Respondent Perception of Likelihood						Mean Question Response [1]
		Very Unlikely	Unlikely	Likely	Very Likely	Missing	Total	
		1	2	3	4			
Patrol the streets as a part of an organized community group.	844	22.7%	29.0%	21.4%	8.2%	18.7%	100%	2.24
Help and assist the police to solve a crime or find a suspect.	844	13.2%	18.2%	33.9%	13.2%	21.6%	100%	2.73
Attend a community meeting with the police to discuss crime in your neighborhood.	844	7.2%	12.3%	38.4%	23.9%	18.1%	100%	2.99
Average Scale Item Score [2]								2.58

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average willingness to partner with the police item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.

WILLINGNESS TO CONTACT POLICE

The second measure of willingness to cooperate with police concerned respondents' willingness to contact police to report criminal activity, including when they were victim of a crime, to report a minor (misdemeanor) crime, to report a major (felony) crime, or to report suspicious activity.

Participants were asked about their likelihood of contacting the police to report criminal activity, including when they were a victim, to report a minor (misdemeanor) crime, to report a major (felony) crime, or to report suspicious activity

Participants rated their willingness to contact police at an average score of 3.20 (S.D.=0.66) or at approximately likely (Table 28). Thus, on average, participants were willing to contact the police to report criminal activity.

Table 28: Willingness to Contact Police Frequency Table

Question	N	Respondent Perception of Likelihood						Mean Question Response [1]
		Very Unlikely	Unlikely	Likely	Very Likely	Missing	Total	
		1	2	3	4			
To report any crime where you were the victim.	844	2.6%	5.8%	28.0%	44.9%	18.7%	100%	3.44
To report a minor (misdemeanor) crime, such vandalism.	844	6.8%	16.4%	32.3%	25.5%	19.1%	100%	2.98
To report a serious (felony) crime, such as an assault.	844	1.8%	3.4%	28.4%	47.2%	19.2%	100%	3.52
To report suspicious activity.	844	8.6%	14.9%	31.0%	24.8%	20.6%	100%	2.98
Average Scale Item Score [2]								3.20

Notes:
[1] Mean question response is calculated as the average score for each individual question across all respondents, excluding participants with missing data on that individual question.
[2] The average willingness to contact police item score was calculated by adding together scores for each participant on all items on the scale and taking the average of that sum. Participants with missing data for any item were excluded from this calculation, as their scores could not be summed with missing data.

SUMMARY

Baltimore City has a complicated history of policing, which has had an impact on relations between the Baltimore Police Department and city residents. Distrust and suspicion of the police by residents would likely impact their view of new policing technologies, including the AIR program. Thus, this survey attempted to learn more about respondents' perceptions of police.

Overall, respondents were neutral in their perceptions of police, including perceptions of police legitimacy (Figure 23), procedural justice (Figure 24), and police bias (Figure 25). In addition, respondents suggested they were likely to partner with police for crime-control efforts (Figure 26) and to contact police to report criminal activity (Figure 27).

Figure 23: Police Legitimacy Gauge

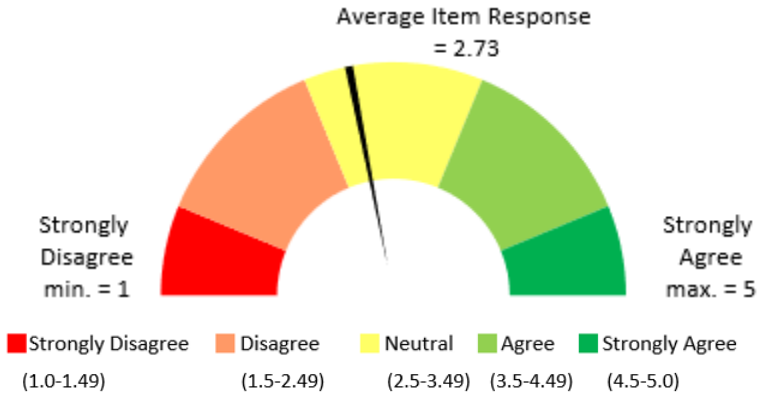


Figure 24: Procedural Justice Gauge

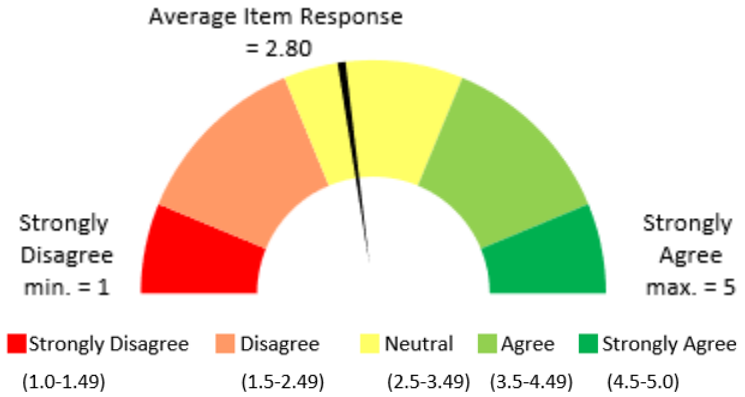


Figure 25: Police Bias Gauge

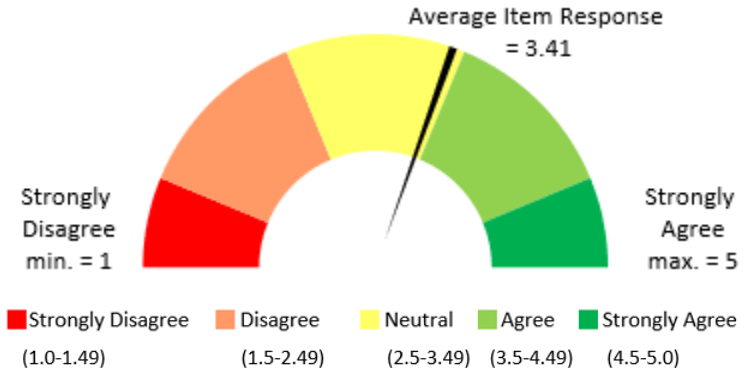


Figure 26: Willingness to Partner with Police Gauge

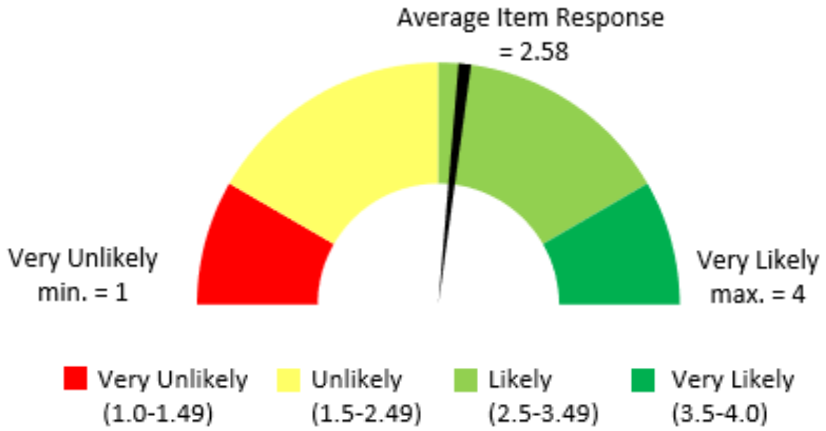
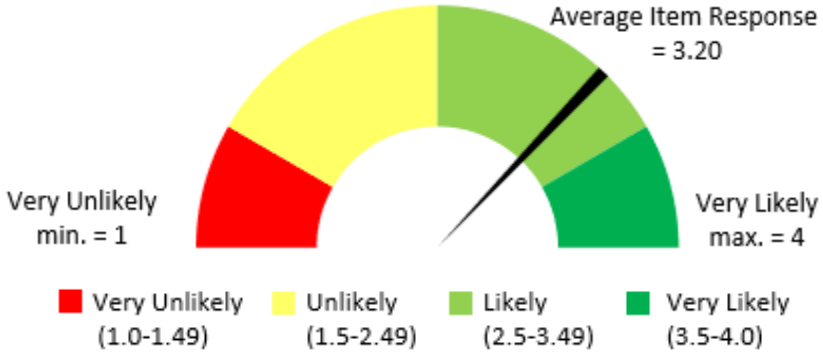


Figure 27: Willingness to Contact Police Gauge



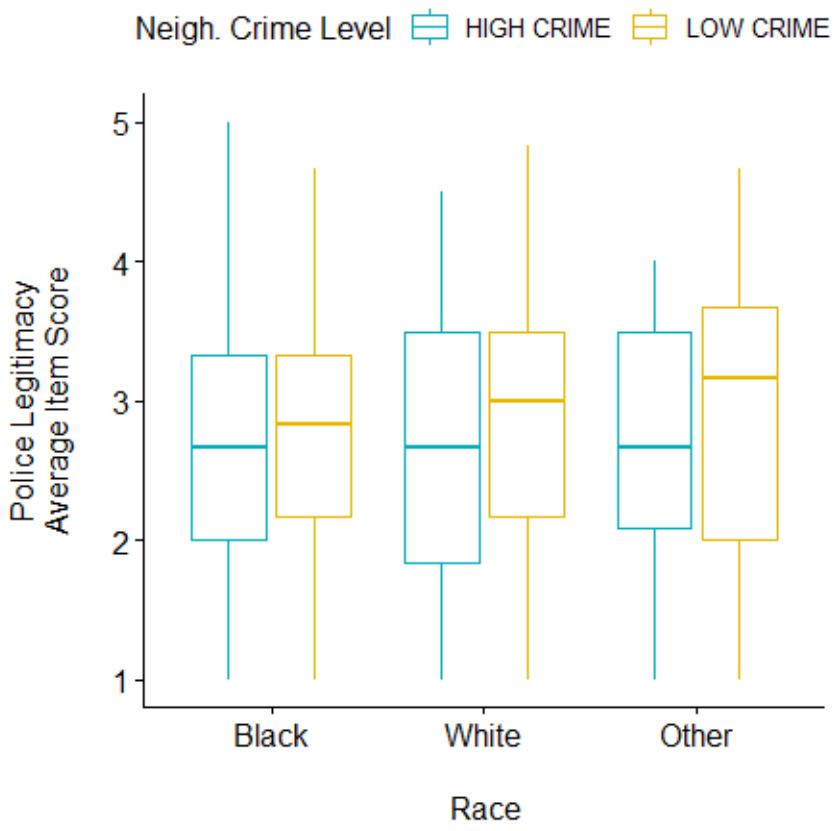
SECTION VI: PERCEPTIONS OF POLICE – FINDINGS BY RACE AND NEIGHBORHOOD CRIME LEVEL

As echoed above in Sections II and IV, we examine the perception of police by race and neighborhood crime level in this section. Baltimore residents of different races and living in neighborhoods with different crime levels have different interactions with the police, which suggests they may also have different perceptions of police legitimacy, procedural justice, and police bias as well as different willingness to partner with or contact the police. The criminological literature has found that Black residents are more likely than their White neighbors to report negative experiences and/or dissatisfaction with police (e.g., Jefferson & Walker, 1993; Johnson et al., 2017; Taylor et al., 2001). Additionally, the effect of race on perceptions of the police may interact with neighborhood characteristics, as Black residents are often overrepresented in impoverished, disorganized, and higher-crime neighborhoods, which is associated with an increased likelihood of policing (Anderson, 1999; Fagan & Davies, 2000; Brunson & Miller, 2006). Therefore, this section of the report looks how the scales for perceptions of police differ by race and neighborhood crime level.

PERCEPTIONS OF POLICE LEGITIMACY

Beliefs about police legitimacy were examined across both race and neighborhood crime level. The distributions are plotted in Figure 28. Across all categories, the distributions of scores look relatively similar. Within each Race category, respondents in high crime neighborhoods did report slightly lower perceptions of police legitimacy on average.

Figure 28: Police Legitimacy by Race and Neighborhood Crime Level



Note: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree

The two-way ANOVA confirmed that there are no statistically significant differences across race (F=0.26, p=0.770) or across neighborhood crime level (F=3.08, p=0.080) in perceptions of police legitimacy, and no interaction between these two factors (Table 29).

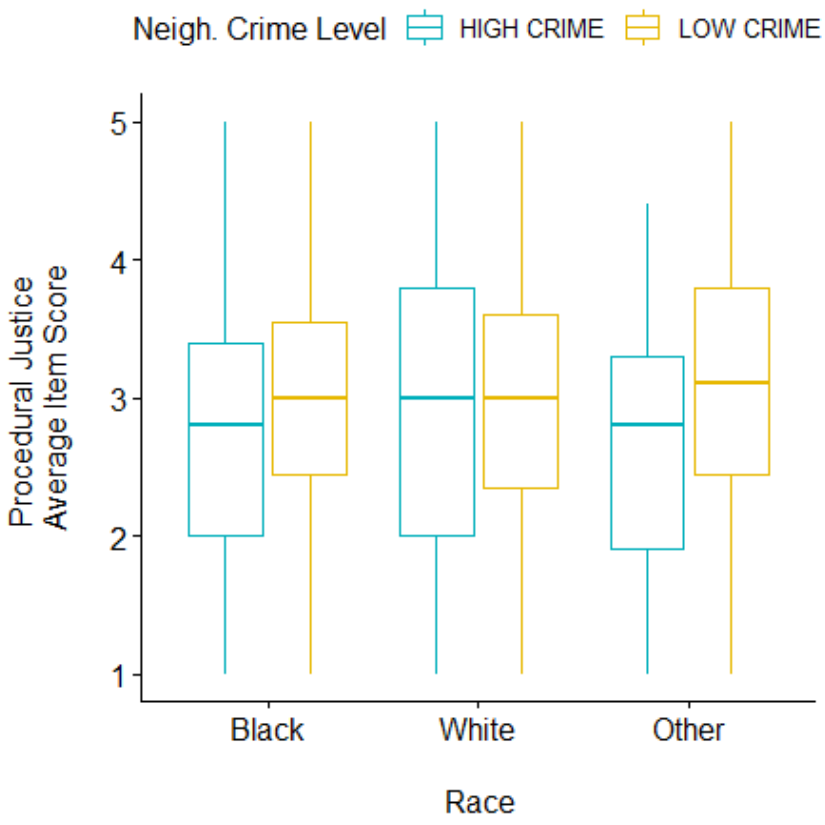
Table 29: Police Legitimacy by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	0.26	0.770	0.000
Neighborhood crime level	3.08	0.080	0.005
Race*neighborhood crime level	0.25	0.779	0.001

PERCEPTIONS OF PROCEDURAL JUSTICE

Perceptions of procedural justice were examined across both race and neighborhood crime level. The distributions are plotted in Figure 29. Across all categories, the distributions of scores look relatively similar. However, in high crime neighborhoods the distributions of scores consistently include more lower ratings of procedural justice as compared to low crime neighborhoods within each race category.

Figure 29: Procedural Justice by Race and Neighborhood Crime Level



Note: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree

The two-way ANOVA confirmed that there are no statistically significant differences across race (F=0.57, p=0.569), but there is a statistically significant difference across neighborhood crime level (F=4.29, p=0.039) in perceptions of procedural justice, and no interaction between these two factors (Table 30).

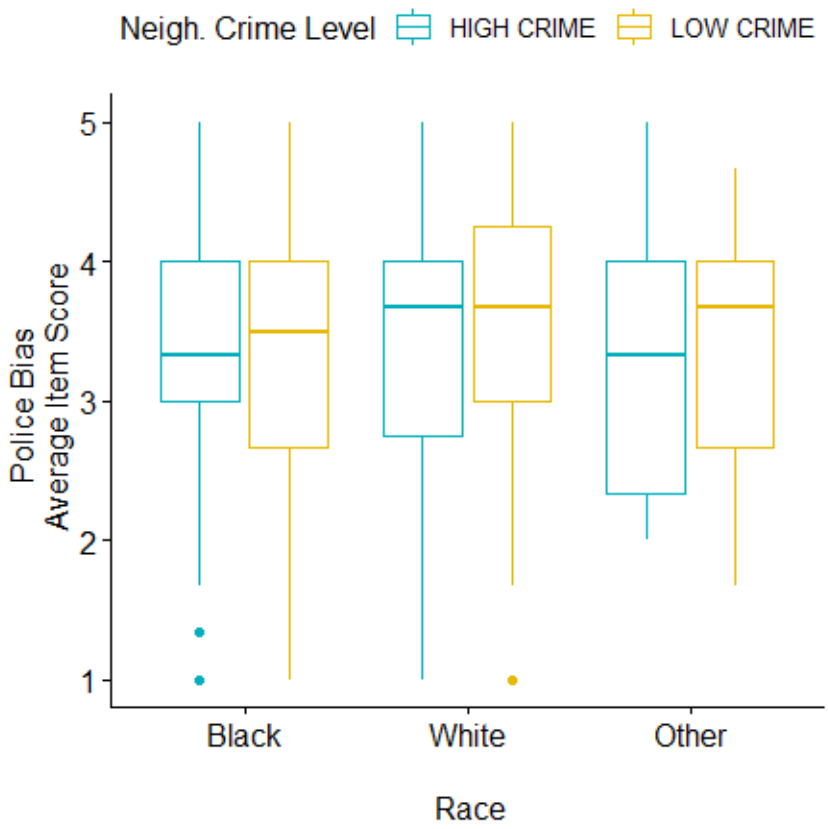
Table 30: Perceptions of Procedural Justice by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	0.57	0.569	0.000
Neighborhood crime level	4.29	0.039	0.007
Race*neighborhood crime level	0.38	0.683	0.001

PERCEPTIONS OF POLICE BIAS

Perceptions of police bias were analyzed across both race and neighborhood crime level, and the boxplots are shown in Figure 30. Across all categories, the distributions of scores look relatively similar and there are no major differences in race or neighborhood crime level in the perceptions of police bias.

Figure 30: Police Bias by Race and Neighborhood Crime Level



Note: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree

The two-way ANOVA confirmed that there are no statistically significant differences across race (F=0.44, p=0.645), or across neighborhood crime level (F=0.19, p=0.660) in perceptions of police bias, and no interaction between these two factors (Table 31).

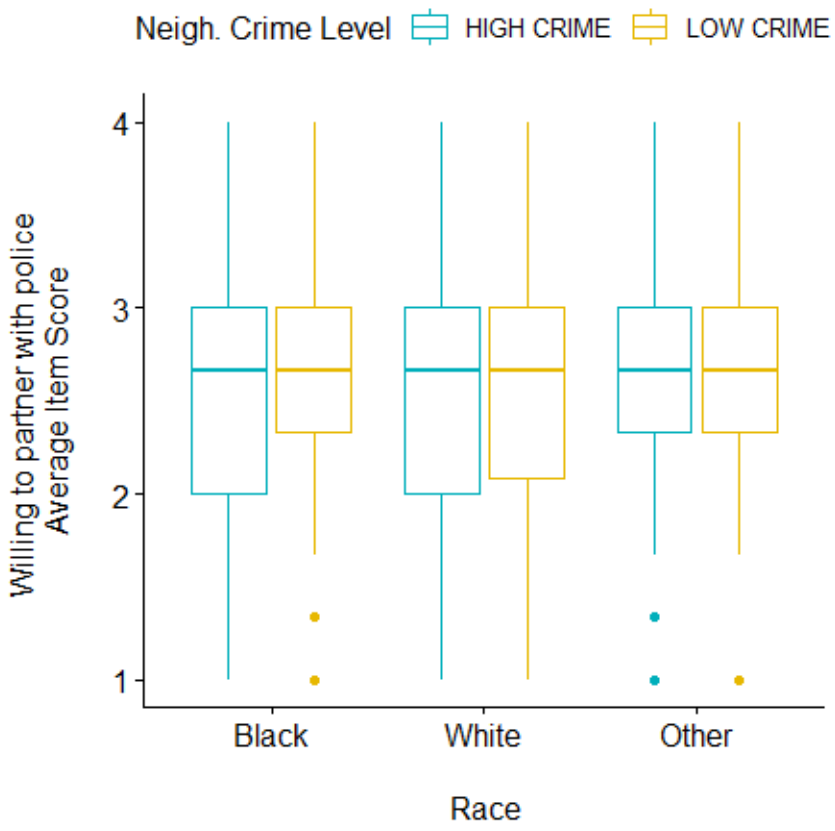
Table 31: Police Bias by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	0.44	0.645	0.001
Neighborhood crime level	0.19	0.660	0.000
Race*neighborhood crime level	0.03	0.975	0.000

WILLINGNESS TO PARTNER WITH POLICE

Willingness to partner with police was examined across both race and neighborhood crime level. The distributions are plotted in Figure 31. Across all categories, the distributions of scores look relatively similar and there are no major differences in race or neighborhood crime level in the willingness to partner with police.

Figure 31: Willingness to Partner with Police by Race and Neighborhood Crime Level



Note: 1= Very Unlikely, 2= Unlikely, 3= Likely, 4= Very Likely

The two-way ANOVA confirmed that there are no statistically significant differences across race (F=0.64, p=0.529) or neighborhood crime level (F=1.61, p=0.205) in willingness to partner with police, and no interaction between these two factors (Table 32).

Table 32: Willingness to Partner with Police by Race and Neighborhood Crime Level

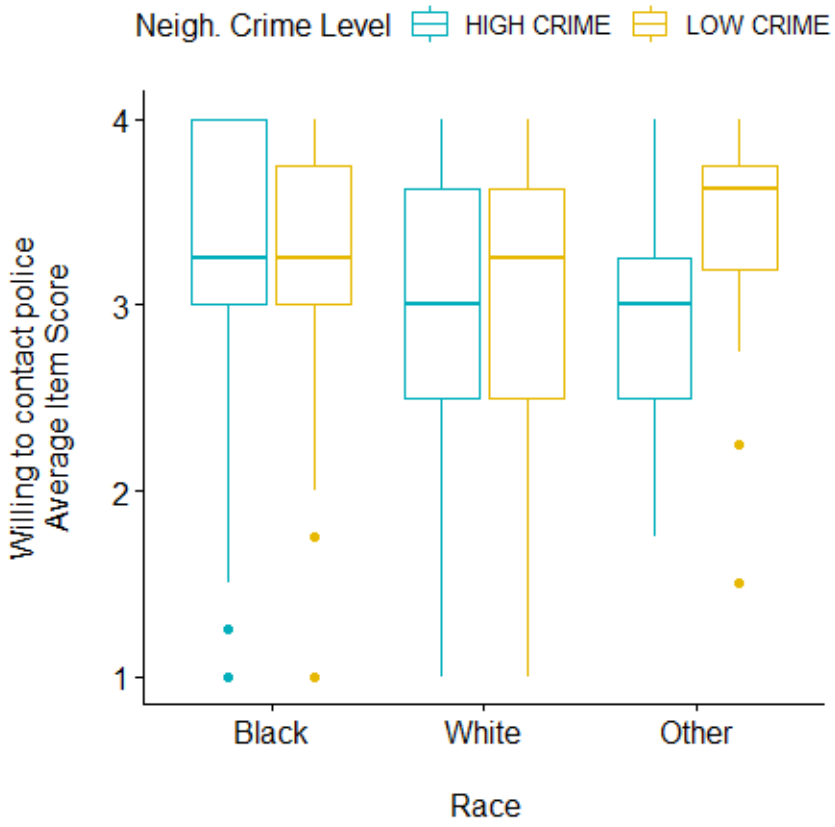
	F	p. value	Partial Eta Squared
Race	0.64	0.529	0.003
Neighborhood crime level	1.61	0.205	0.003
Race*neighborhood crime level	0.16	0.085	0.001

WILLINGNESS TO CONTACT POLICE

Willingness to contact police across both race and neighborhood crime level was examined. The distributions are shown in Figure 32. The results suggest several differences between factors in the willingness to contact police. Black respondents had the consistently highest scores overall, with similar distributions in high and low crime neighborhoods. White respondents in both high and low crime

neighborhoods had slightly longer distributions, indicating more respondents with a lower average willingness to contact the police. Other race respondents had a split across neighborhood crime level in their willingness to contact police, with those in low crime neighborhoods having a greater willingness to contact the police.

Figure 32: Willingness to Contact Police by Race and Neighborhood Crime Level



Note: 1= Very Unlikely, 2= Unlikely, 3= Likely, 4= Very Likely

The two-way ANOVA confirmed that there are statistically significant differences across race (F=9.60, p<0.001) but not across neighborhood crime level (F=0.28, p=0.598) in willingness to contact the police, and there is no interaction between these two factors (Table 33).

Table 33: Willingness to Contact Police by Race and Neighborhood Crime Level

	F	p. value	Partial Eta Squared
Race	9.60	<0.001	0.028
Neighborhood crime level	0.28	0.598	0.000
Race*neighborhood crime level	2.49	0.084	0.008

SUMMARY

For three of the five scales dealing with respondents' perceptions of police – specifically, the scales on police legitimacy, police bias, and the willingness to partner with police – there were no statistically significant differences in response by race or by neighborhood crime level. In contrast, the scale on perceptions of procedural justice had a statistically significant difference by neighborhood crime level but not race, while willingness to contact police had a statistically significant difference by race but not neighborhood crime level.

SUMMARY AND RECOMMENDATIONS

As a result of the mostly descriptive nature of this report, the findings of this study need to be interpreted with caution when attempting to attribute causal relationship between factors. Nevertheless, the results from this study have important implications for improving relations between police and the community as well as views on the use of new technologies for crime prevention and control. The survey results generated several findings.

FINDINGS

In general, survey participants as a whole had a neutral or positive perception of the three major topics asked about in the survey: Perceptions of Neighborhood Conditions and Crime, Perceptions of the AIR Program, and Perceptions of Police (Table 34). While there were individual respondents who expressed negative opinions on these topics and the more specific questions comprising them, there were no topics in which the overall average response by all survey respondents was negative.

Table 34: Overall Findings from Survey Responses

Topic	General Survey Response
Perceptions of Neighborhood Conditions and Crime	
Social Cohesion & Inclusion	Positive
Neighborhood Safety	Neutral
Fear of Being a Victim of a Crime	Not really afraid
Perceptions of AIR Program	
Effectiveness of the AIR Program	Neutral
Privacy and the AIR Program	Neutral
Perceptions of Police	
Police Legitimacy	Neutral
Procedural Justice	Neutral
Police Bias	Neutral
Willingness to Partner with Police	Willing
Willingness to Contact Police	Willing

However, it is also useful to consider the results specifically by race and by neighborhood crime level, as African American or Black residents as well as those in high crime neighborhoods are more likely to be impacted by the operations of the AIR program. A summary of these findings is shown in Table 35. There was a statistically significant difference in responses by race to the three scales in Perceptions of Neighborhood Conditions and Crime and in Perceptions of the AIR Program, but no significant difference by race in Perceptions of Police. In contrast, while there was a statistically significant difference for the three scales on neighborhood conditions and crime, there was no difference for the two scales that were specific to the AIR program and for four of the five scales related to policing. These results suggest that,

for these survey respondents at least, issues of race and neighborhood crime level have an effect on their perceptions of their daily neighborhood conditions but not on more citywide issues.

Table 35: Findings from Survey Responses by Race and Neighborhood Crime Level

Topic	Statistically Significant Difference by		Interaction
	Race	Neighborhood Crime Level	
Perceptions of Neighborhood Conditions and Crime			
Social Cohesion & Inclusion	Yes	Yes	No
Neighborhood Safety	Yes	Yes	Yes
Fear of Being a Victim of a Crime	Yes	Yes	No
Perceptions of AIR Program			
Effectiveness of the AIR Program	Yes	No	No
Privacy and the AIR Program	Yes	No	No
Perceptions of Police			
Police Legitimacy	No	No	No
Procedural Justice	No	Yes	No
Police Bias	No	No	No
Willingness to Partner with Police	No	No	No
Willingness to Contact Police	Yes	No	No

PERCEPTIONS OF THE AIR PROGRAM

Even though the use of surveillance planes was widely covered by the local media since 2016, only 61% of survey respondents had heard about the AIR program. In addition, the majority of those who are aware of the program reported hearing about it from local TV and radio (77%), followed by newspapers (25%). Only 7% had heard about the program directly from a Baltimore Police Department (BPD) public announcement. The BPD public announcement had potential for building trusting relationship between police the local community while it was informing the public about specific elements of the AIR program. However, the BPD's message posted on their website, as well as other outreach measures and community meetings, may have not reached as widely into the community as anticipated. This may be in part due to the reliance of social media and websites to deliver information on the AIR program in a community that may not consistently have access to internet. In addition, the pilot program launched during the initial stages of the Covid-19 outbreak in Baltimore, and the BPD had to move public presentations about the program from in-person community meetings to virtual presentations as a part of the response to the pandemic. This would have presented a challenge for households with limited or no internet access. Further, many households in the city also were focused on the immediate challenges created by the city and state response to the virus (e.g., state residents were encouraged to stay home even as essential workers still needed to work; decreased frequency of public transportation) and so may not have been able, at the time of the pilot program's start, to learn more about it.

While there has been mixed media coverage of the AIR program and some resistance to use of surveillance planes, more than half of the respondents supported the program (55%). Approximately 27% of respondents said they did not support the AIR program and 9% said they were not sure if they supported it. Respondents also consistently supported the use of the AIR program in investigating homicides (65%), non-fatal shootings (61%), armed robberies (63%), and carjackings (60%). It is important to point out that even though some respondents did not support the AIR program overall, they expressed their support for use of the program for specific crime such as homicides and armed robberies.

Participants who were less likely to support the AIR program tended to be White, between 18-34 years old, college degree holders (at the associate's level or higher), and were not retired or disabled. Of the total 36% of respondents who did not support the AIR program or were not sure if they did, the leading concerns were with the program violating privacy (54%), not knowing enough about the program to support it (40%), and not believing that enough information was provided to the community about the AIR program (36%).

Overall, survey respondents did not believe that the program either violated or protected their privacy. However, White respondents were more likely than their Black neighbors to report a belief that the program violates their privacy. This held true in both low and high crime neighborhoods.

PERCEPTIONS OF POLICE

Perceptions of the police likely play a role in building support (or opposition) for police initiatives such as the AIR program. In this study, there are several findings concerning the community's perceptions of the police, and these may provide context for the perceptions of the AIR program. First, participants were generally neutral in their ratings of the legitimacy of the police, with no statistically significant differences across race or neighborhood crime level. Respondents were similarly neutral in their ratings of police bias. While these ratings are not negative, participants overall also did not believe the police were unbiased or viewed the police as legitimate in their positions as law enforcement officers of the community.

In addition to this, the survey measured perceptions of procedural justice, including if police treat community members fairly. Generally, participants were neutral in their ratings of procedural justice among the police. However, those in higher crime neighborhoods consistently rated procedural justice as lower than their counterparts in lower crime neighborhoods within each racial category. Thus, while the average participant did not perceive the existence of procedural justice, this rating was lower for those in higher crime neighborhoods.

Finally, the willingness to engage with police was measured in two ways: willingness to partner with police and willingness to contact police. First, willingness to partner with police included items such as attending community meetings or assisting the police with solving a crime or finding a suspect. Generally, participants were likely to be willing to partner with the police, with no statistically significant differences

across race or neighborhood crime level. Willingness to contact police included items such as reporting crimes or suspicious activity. Again, participants were likely to be willing to contact police. There were slight differences across race, with residents of races other than White or Black in high crime neighborhoods being the least likely to contact police to report crime. Overall, these results indicate that respondents are open to engaging with the police on issues related to crime.

PERCEPTIONS OF NEIGHBORHOOD CONDITIONS

Perceptions of neighborhood conditions and crime may play a role in influencing support for police initiatives such as the AIR program. In this study, several findings highlight respondents' perceptions of their own neighborhoods, which may provide more context for the perceptions of the AIR program. First, respondents' social cohesion and interaction in their neighborhoods was measured. This included if neighbors get along and are willing to help each other. Participants overall agreed that their neighborhoods were socially cohesive. Within each racial category, participants in lower crime neighborhoods rated the levels of social cohesion in their neighborhoods higher than their counterparts in higher crime neighborhoods. Specifically, White respondents in low crime neighborhoods reported the consistently highest levels of social cohesion in their neighborhoods.

Second, respondents' perceptions of neighborhood safety, including their comfort walking alone and if they avoid certain buildings or streets, were measured. Overall, participants rated their perceptions of neighborhood safety at neutral, indicating that their neighborhoods are neither safe nor unsafe. As might be expected, participants in lower crime neighborhoods reported higher perceptions of safety than those in higher crime neighborhoods among both White and Black respondents. Specifically, White respondents in lower crime neighborhoods reported the consistently highest levels of neighborhood safety.

Finally, respondents' fear of being a victim of a crime in their neighborhood were measured. This included having their property damaged, having someone break into their home, or being robbed, shot, or murdered. Overall, participants reported that they were not really afraid of being a victim of a crime in their neighborhood. While ratings across most categories varied widely, White respondents in lower crime neighborhoods reported the consistently lowest levels of fear of being a victim to a crime in their neighborhood.

KEY RECOMMENDATIONS

As this is a descriptive report, the findings of this study need to be interpreted with caution, and a causal relationship should not be assumed between respondents' perceptions and demographic characteristics. Nevertheless, the results from this study have important implications for improving Baltimore City residents' relationships with police and perceptions of the use of technological tools such as the surveillance plane for crime prevention. Recommendations resulting from this survey are discussed below.

1. Expand communication about the program by the Baltimore City Police Department

Communication about the AIR program needs to be expanded more broadly, especially beyond social media and websites. With a small minority of respondents (7%) reporting that they heard about the program directly from BPD, it is clear that respondents do not see BPD as the source of information on the program; however, they may have learned about the program from BPD information carried by other sources, such as television or radio news programs or newspapers.

BPD should consider developing a strategic communications plan to more directly disseminate information about the program. The plan should take into consideration the ways that people access information and their expectations for information. For example, while BPD had originally scheduled three community forums in March 2020 to talk to city residents about the AIR pilot program, two of the three meetings had to be moved online once Covid-19 restrictions on public gatherings came into effect. While the BPD may have reached additional viewers by providing these meetings via live streaming, this is likely a different audience than would have attended community meetings in a city with a known "digital divide" (Horrigan, 2020).

In addition, a substantial portion of the respondents who knew about the AIR program did not fully understand the program. For example, approximately 45% believed that a person can be identified from the surveillance plane footage, while a majority of respondents (56%) believed that a person or vehicle can be tracked in real time by the surveillance planes. This level of false beliefs about the program likely contributes to the narrative that the AIR program will violate citizens' privacy, and might reduce confidence in the work the BPD has done with the technology provider and evaluation partners to ensure that citizen privacy is protected.

To ensure that the public knows about the program and has accurate information about how the program operates, BPD should consider engaging in on-going and repetitive efforts to disseminate accurate information about the program. This will facilitate community engagement in policy implementation and potentially improve citizen views of police legitimacy and feelings of procedural justice.

2. Community outreach to discuss challenges of and seek feedback for police initiatives

Recent empirical work and community surveys conclude that a troubled relationship exists between police and the Baltimore community (Greenberger, 2016; Crime and Justice Institute, 2019; Anderson, 2020b). In this survey on the AIR program, however, participants generally felt neutral about the existence of police legitimacy, procedural justice and police bias in their communities. While the average response was not negative, these findings indicate that there is much room for improvement in the context of police-community relationships.

Coupled with the findings that participants did not fully understand the program and the recommendation for expanded BPD communication regarding the AIR program, the involvement of community members in the development of police initiatives may serve as an important community outreach tool. Outreach such as this could promote a healthier relationship between the police and city residents, the latter of whom would be able to engage in the process of developing new police initiatives and to provide input on implementation, facilitating police legitimacy and perceptions of procedural justice. In line with their work through the Consent Decree, the BPD can apply recommendations for collaboration with community members in order gather feedback on and garner support for the utility of the AIR program while simultaneously considering the wider concerns of citizens during the policy development process.

3. Targeted outreach with youth and young people

Across the topics examined in this report, young people aged 18-34 years old showed the least amount of the support for the AIR program. Of this age group, approximately 35% supported the AIR program, compared to approximately 62% of 35-64-year-old respondents and approximately 74% of respondents age 65 years and older. This is not particularly surprising given the context of policing in Baltimore and the recent protests against police violence against Black people in the United States, including in Baltimore. These protests include or are led by young people who are actively speaking out against the police and feature calls for reform, defunding, or abolition of law enforcement. The survey findings echo the mixed perceptions of procedural justice and police legitimacy across the nation. In establishing initiatives such as the AIR program where major questions exist regarding citizen rights, the BPD should address the concerns and needs of young people in order to facilitate a greater understanding of the AIR program and potentially shift public perception among this age group.

LIMITATIONS

Several contextual limitations associated with this study may have contributed to engagement in surveying and the low response rate (5.2%). First, this study used survey data that were collected during the COVID-19 pandemic. As a response to the pandemic, the city went into a state of lock down after Governor Hogan announced in March 2020 that the State of Maryland has received a Disaster Declaration (State of Maryland, 2020). Consequently, for the safety of both interviewers and respondents, the data were collected remotely through telephone, mail, and online surveys, whereas the original data plan included in-person surveying. Individuals who may have otherwise responded might also have been focused more on health and care of themselves, their relatives, and their friends as well as on dealing with the economic and other consequences of the lock down (such as decreases in available public transportation); these individuals might simply not have had the time or energy to respond.

In addition, the low response rate might suggest that people lack a willingness to respond to any study. Respondent fatigue is a well-documented phenomenon. It is important to mention that since early 2017, when the City of Baltimore and the U.S. Department of Justice entered into a Consent Decree to resolve issues within the Baltimore Police Department, residents have been targeted by numerous surveys, community polls, and research studies. Additionally, this survey was being conducted during intense media coverage of the nationwide protests over the killing of George Floyd, among other Black U.S. citizens, as well as mostly negative local media coverage of the use of surveillance planes as a crime control tool. Negative perception of law enforcement and use of surveillance planes may have impacted residents' responses to the study overall and to survey items particularly.

Finally, in this age of widespread mobile phone ownership, internet access and digital communications, a substantial portion of Baltimore households still lack access to the internet (Horrigan, 2020). The combination of the COVID-19 pandemic, respondents' fatigue, and the lack of internet access may have contributed to a lower response rate. Nevertheless, there is no agreed upon minimum acceptable response rate, and, thus, rather than look primarily on the response rate, the focus should be on how the survey was created and distributed and the response data collected.

Even with the low response rate, the study does a fairly good job of representing the population from which the survey sample was originally drawn. While Appendix B presents more information on how the demographics of the survey sample compares to Baltimore's adult population, the report published next year by the Schaefer Center will include a more thorough analysis, including weighting the data when necessary.

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APPENDIX A: SAMPLE AND SAMPLING PROCEDURE

The Schaefer Center research team based the survey sampling procedure on the goal of trying to obtain a substantial proportion of responses from those most affected by crime in the city and, as a result, potentially most affected by the results and effectiveness of the AIR program.

The Schaefer Center team created a crime/poverty index for all Baltimore City census block groups with data from the Baltimore Police Department and the U.S. Census Bureau. The purpose of the index was to identify the areas of the city with the highest concentrations of crime and poverty to ensure that the residents most impacted by violent crime would have a higher probability of being included in the survey. Seventy-five percent (75%) of the addresses included in the sampling frame were from census block groups with the highest concentration of crime and poverty. The remaining 25% of the addresses were from the rest of the city. This strategy ensured the opinions of residents in areas most impacted by violent crime would be documented.

To identify high crime neighborhoods, crime incident data was downloaded from the Open Baltimore portal and filtered to include specific violent offenses: homicides, shootings, robberies (which include carjackings and crimes occurred on the street, in commercial buildings, and in residential homes), aggravated assaults, and common assaults. The data spanned from January 1, 2019, to March 31, 2020, and contained the location of the crime incident. Geographic Information Systems (GIS) format was used to map out location of these violent offenses, and they were aggregated to the census block group level.

All census block groups in the city were then ranked on two dimensions of crime: presence and strength. The first dimension was based on the presence of violent offenses that occurred within each census block group, where block groups were ranked from 0 to 5 on the presence of each of the violent offense types (homicides, shootings, robberies, aggravated assaults, and common assaults), with a ranking of 5 indicating the presence of all offenses. A ranking of 4 indicated that at least three offense types were present; a ranking of 3 indicated that at least two offense types were present, one of which must be homicide; a ranking of 2 indicated that at least one offense type was present, but it was not homicide; and a ranking of 1 indicated that at least one offense type was present, but it was not homicide or shootings. All other census block groups were ranked at zero.

The second dimension was based on the magnitude of the violent offenses that occurred within each census block group. The block groups were ranked again from 0 to 5, and these scores were based on the number of crimes in relation to the average block group. For each crime, block groups were flagged if the crime rate was more than one standard deviation above the average block group. Block groups were then ranked based on the number of crimes they were flagged for. When a block group was flagged for at least three of the crimes, or at least two crimes if they were homicide and shootings, they were ranked at the highest score (5) on this dimension. A ranking of 4 indicated that homicides and shootings were both greater than average or homicides alone were greater than one standard deviation above the mean. A

ranking of 3 indicated that at least three crimes were above average, one of which must be homicides at least one standard deviation above the average. A ranking of 2 indicated at least two crimes were at least one standard deviation above the mean. A ranking of 1 indicated at least one crime was at least one standard deviation above the mean. All other census block groups were ranked at zero.

The final step in identifying block groups for oversampling in the survey sample used demographic data. Block groups that ranked at the highest ranking (5) for either presence or magnitude of crime were assessed by their poverty rate.[12] Those block groups who had a poverty rate greater than 25% were included in the high crime/high poverty grouping (N = 79). Block groups that did not have the highest rankings of either presence or magnitude of crime but had a poverty rate of 20% or greater were examined for their potential inclusion in the high crime/high poverty grouping. A manual inspection of these block groups was conducted, and three block groups were moved to the high crime/high poverty grouping, mainly due to the unusually high rates of one particular offense type within the census block group.

Using census block groups as a sampling frame, through its sample vendor the research team used address-based sampling (ABS) to select a random sample of 32,000 residential addresses from the identified census block groups, with 75% of the sample being from the high crime/high poverty grouping and the remaining 25% from the rest of the city's block groups. The addresses were then phone matched by the vendor.

A total of 20,649 addresses (64.5%) were matched to a phone number. Of the matched phone numbers, 59.3% were matched to a cell phone number, and the remaining 40.7% were matched to a landline phone number. Sample records with a telephone phone number were called by a vendor, and those that did not have a telephone number match (N=11,351) were mailed a letter inviting them to either call into the call center to complete the survey or to go to the project website (http://airsurvey.ubalt.edu) with a unique code to access the web version of the survey. After about two weeks of calling, sample records with a phone number but an invalid number (e.g., disconnected, business, and fax numbers) were mailed an invitation letter.

Data collection for the study commenced on June 2, 2020, with the start of outbound calling. The invitation letters were mailed out over 5 waves between June 11 to June 24, and the project web site was available for completing the survey until July 17, 2020. Outbound calls were made Monday-Friday 10 a.m.-9:00 p.m. EST and Saturday and Sunday from noon to 6:00 p.m. EST. For outbound calls, up to five attempts were made to each record, and a message was left on the first encounter of a voicemail, informing the respondent about the purpose of the call and giving them the information needed to complete the survey online or to call back into the call center.

[12] Poverty data was sourced from the 5-year American Community Survey (ACS) Estimates (2014-2018). More information about the American Community Survey can be found at https://www.census.gov/programs-surveys/acs/about.html.

A total of 844 individuals participated in the survey (Table 36). Of these, 646 completions were via telephone, of which 146 were considered as "partially complete." Additionally, 198 completions were via web survey, of which two were considered "partially complete." A partial completion is defined as a respondent who has been reached and who responded to at least the first substantive question of the survey but did not reach the demographics section of the survey. The AAPOR4 response rate for the study is 5.2%.[13]

Table 36: Sample Disposition - Detail

Dispositions	Phone Sample	Mail Only Sample	Total
Completed Interview	**676**	**168**	**844**
Complete	531	165	696
Partial complete	145	3	148
Eligible, Contacted Respondent - Interview Not Completed	**5,296**	**10**	**5,306**
Refusal and break-off	2	6	8
Refusal	896	1	897
Callback	161	1	162
Answering machine	4,105	-	4,105
Mid-terminate	30	-	30
Deceased respondent	-	2	2
Language barrier	102	-	102
Unknown eligibility	**8,791**	**11,173**	**19,964**
Always busy	934	-	934
No answer	6,596	1	6,597
Call blocking	869	-	869
Letter mailed to address but no response or returned mail	-	10,213	10,213
Returned mail	392	959	1,351
Not Eligible	**5,886**	**-**	**5,886**
Not a Baltimore City resident	350	-	350
Fax/data line	72	-	72
Non-working/disconnected	5,179	-	5,179
Business, government office, other organization	219	-	219
No eligible respondent	12	-	12
Quota filled	6	-	6
Duplicate listing	48	-	48
Total	**20,649**	**11,351**	**32,000**

Note: Potential respondents in the phone sample with bad phone numbers (4,837 households) - fax/data, non-working, language barrier, etc.- received a letter inviting them to complete the survey online or by calling in to the survey center toll-free number.

[13] APPOR4 refers to the American Association for Public Opinion Research, and the response rate was estimated using their calculator, version 4.0, available at https://www.aapor.org/AAPOR_Main/media/MainSiteFiles/Response-Rate-Calculator-4-0-Clean-18-May-2016.xlsx.

APPENDIX B: SAMPLE DEMOGRAPHICS

This appendix discusses the details of the demographics of the survey respondents and compares the sample to the demographics of Baltimore City adult residents.

Table 37 shows the demographics of the survey respondents. Of those who reported their demographic information, 61.47% identified as female and 65.59% identified as Black or African American. The median participant in this study is between 45-54 years old with an income between $50,000-$59,999. Approximately half (48.84%) of respondents have an educational level of an associate's degree or higher, and the majority of respondents (70.14%) live in high crime neighborhoods. The larger representation of female respondents is not surprising as women usually report larger involvement within their community and report a higher level of fear of crime than men. Additionally, women are also more likely to take precautionary measures in response to their fear of crime (Warr, 2000; Weitzer & Kubrin, 2004).

Table 37: Demographics of Survey Participants

Variables	N	Percent	Valid Percent
Age Group			
18-24 years old	15	1.78%	2.16%
25-34 years old	90	10.66%	12.97%
35-44 years old	123	14.57%	17.72%
45-54 years old	129	15.28%	18.59%
55-64 years old	145	17.18%	20.89%
65-74 years old	120	14.22%	17.29%
75 years or older	72	8.53%	10.37%
Missing/refused	150	17.77%	
Gender			
Male	262	31.04%	37.81%
Female	426	50.47%	61.47%
Nonbinary	5	0.59%	0.72%
Missing/refused	151	17.89%	
Race			
White	185	21.92%	27.09%
Black	448	53.08%	65.59%
Other	50	5.92%	7.32%
Missing/refused	161	19.08%	
Ethnicity			
Latinx	24	2.84%	3.48%
Not Latinx	665	78.79%	96.52%
Missing/refused	155	18.36%	
Education			
Up to a High School Degree	199	23.58%	28.76%
Some college, Associates, or Vocational Training	194	22.99%	28.03%
Bachelor's or higher	299	35.43%	43.21%
Missing/refused	152	18.01%	
Employment Status			
Yes (at least part time)	364	43.13%	52.83%
Not employed	88	10.43%	12.77%
Retired/disabled-not able to work	237	28.08%	34.40%
Missing/refused	155	18.36%	
Crime Level			
Low crime neighborhood	252	29.86%	29.86%
High crime neighborhood	592	70.14%	70.14%

The collection of survey data was conducted through mixed modes – via telephone (either a landline or cellphone) and the internet – and the response rate varies for each mode and is affected by the survey design (such as survey lengths, number of calls, and length of data collection period). The number of surveys conducted over the internet has increased in recent years as a less expensive and more convenient way of conducting surveys. However, a substantial segment of the population in Baltimore

does not has access to internet, and the results from the survey uncovered significant demographic differences between those who participated in the phone survey and those who filled out the questionnaire through the survey website. For example, the respondents in phone survey tended to be older, female, Black, and without college degree (Table 38).

Table 38: Demographics of Survey Participants by Survey Mode

Variables	By Phone N=646 (Valid %)	By Web N=198 (Valid %)
Age Group		
18-24 years old	8 (1.60%)	7 (3.57%)
25-34 years old	40 (8.03%)	50 (25.51%)
35-44 years old	71 (14.26%)	52 (26.53%)
45-54 years old	94 (18.88%)	35 (17.86%)
55-64 years old	114 (22.89%)	31 (15.82%)
65-74 years old	104 (20.88%)	16 (8.16%)
75 years or older	67 (13.45%)	5 (2.55%)
Missing/refused	148	2
Gender		
Male	168 (33.67%)	94 (48.45%)
Female	330 (66.13%)	96 (49.48%)
Nonbinary	1 (0.20%)	4 (2.06%)
Missing/refused	147	4
Race		
White	82 (16.77%)	103 (53.09%)
Black	374 (76.48%)	74 (38.14%)
Other	33 (6.75%)	17 (8.76%)
Missing/refused	157	4
Ethnicity		
Latinx	15 (3.04%)	9 (4.62%)
Not Latinx	479 (96.96%)	186 (95.38%)
Missing/refused	152	3
Education (Associate's or higher)		
Yes	207 (41.73%)	147 (75.00%)
No	289 (58.27%)	49 (25.00%)
Missing/refused	150	2
Employment Status		
Yes (at least part time)	225 (45.55%)	139 (71.28%)
Not employed	66 (13.36%)	22 (11.28%)
Retired/disabled-not able to work	203 (41.09%)	34 (17.44%)
Missing/refused	152	3
Crime Level		
Low crime neighborhood	160 (24.77%)	92 (46.46%)
High crime neighborhood	486 (75.23%)	106 (53.53%)
Missing/refused	0	0

In addition, web survey participants tended to provide responses to most questions while phone survey participants tended not to answer or refused to answer many of the questions. This is potentially a function of the administration of the survey method. For example, it is assumed that participants talk on their cellphones in more open places where they may have less privacy, and this may affect how they respond to survey questions, especially those that cover sensitive topics. In addition, the quality of connection may influence whether the participant answered the questions or not. In a self-administered web survey, respondents were able to control the survey tempo and time and thus were able and willing to see and answer the survey questions.

Sample demographics also varied across their neighborhood crime level (Table 39), with clear distinctions across race, educational attainment, employment status, and gender. Specifically, respondents in high crime neighborhoods were more likely to be female, Black, and not hold a college degree. Additionally, a lower proportion of those in higher crime reported at least part time employment, with a greater proportion either being unemployed or retired/disabled.

Table 39: Demographics of Survey Participants by Neighborhood Crime Level

Variables	High Crime N=592 (Valid %)	Low Crime N=252 (Valid %)
Age Group		
18-24 years old	11 (2.35%)	4 (1.77%)
25-34 years old	51 (10.90%)	39 (17.26%)
35-44 years old	75 (16.03%)	48 (21.24%)
45-54 years old	89 (19.02%)	40 (17.70%)
55-64 years old	113 (24.15%)	32 (14.16%)
65-74 years old	87 (18.59%)	33 (14.60)
75 years or older	42 (8.97%)	30 (13.27%)
Missing/refused	124	26
Gender		
Male	161 (34.40%)	101 (44.89%)
Female	304 (64.96%)	122 (54.22%)
Nonbinary	3 (0.64%)	2 (0.89%)
Missing/refused	124	27
Race		
White	76 (16.41%)	109 (49.55%)
Black	355 (76.67%)	93 (42.27%)
Other	32 (6.91%)	18 (8.18%)
Missing/refused	129	32
Ethnicity		
Latinx	14 (3.01%)	10 (4.46%)
Not Latinx	451(96.99%)	214 (95.54%)
Missing/refused	127	28
Education		
Up to a High School Degree	156 (33.40%)	43 (19.11%)
Some college, Associates, or Vocational Training	155 (33.19%)	39 (17.33%)
Bachelor's or higher	156 (33.40%)	143 (63.56%)
Missing/refused	125	27
Employment Status		
Yes (at least part time)	223 (47.85%)	141 (63.23%)
Not employed	68 (14.59%)	20 (8.97%)
Retired/disabled-not able to work	175 (37.55%)	62 (27.80%)
Missing/refused	126	29

Baltimore Population-at-Large Demographics

In 2018, Baltimore's population was an estimated 614,700 residents, of whom over 486,000 were over age 18.[14] As seen in Table 40, survey respondents were generally older than the city's residents, with 2.16% of respondents (for whom demographics were known) between ages 18-24 compared to 12.72% of the city's adult population, and 12.97% of the respondents between ages 25-34 compared to 23.80% of adult city residents. The older age groups tended to be overrepresented by respondents, with the largest disparity in those 65-74 years old (17.29% of respondents compared to 9.74% of the adult population).

Table 40: Demographics of Baltimore Adult Population

Variables	N	Percent (approximations)
Age Group		
18-24 years old	61,903	12.72%
25-34 years old	115,805	23.80%
35-44 years old	74,984	15.41%
45-54 years old	75,779	15.58%
55-64 years old	77,164	15.86%
65-74 years old	47,392	9.74%
75 years or older	33,454	6.88%
Gender		
Male	223,817	46.01%
Female	262,664	53.99%
Race		
White	187,152	30.45%
Black	383,918	62.46%
Other	43,630	7.10%
Ethnicity		
Latinx	31,503	5.12%
Not Latinx	583,197	94.88%
Education		
Up to a High School Degree	218,426	44.90%
Some college, Associates, or Vocational Training	127,336	26.17%
Bachelor's or higher	140,719	28.93%
Employment Status		
Yes (at least part time)	279,034	55.92%
Not employed	219,931	44.08%

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates for 2014-2018.

[14] All demographic information for the City of Baltimore's population overall is from the U.S. Census Bureau, American Community Survey 5-Year Estimates for 2014-2018. Due to data limitations, percentages of age, gender, and college degree of city residents are only for adult residents (i.e., those age 18 and over); percentages for race and ethnicity are of all city residents regardless of age; and percentages for employment status are for city residents ages 16 and over.

As with the sample population, there are more adult female residents of Baltimore than male residents. However, the share of the Baltimore general population is more evenly distributed – with women comprising 53.99% and men 46.01% – than the gender breakdown of the sample population. The distribution of the sample by race and ethnicity roughly mirrored that of the city population-at-large, with 27.09% of respondents identifying as White and 65.59% identifying as Black compared to 30.45% and 62.46% of the city's population at large. Similarly, 5.12% of the city's adult population is Hispanic or Latino compared to 3.48% of sample population.

The share of respondents who were employed was also similar to that of the city's population at large (52.83% and 55.92%, respectively). In contrast, while respondents were evenly divided by education – those with at most a high school degree, those with some college, an associate's degree, or vocational training, and those with a bachelor's degree or higher each represented one-third of the respondents – the city's adult population is less evenly distributed by education, with almost 45% of adults achieving at most a high school degree, while less than 30% had some college, an associate's degree, or vocational training, and less than 30% had a bachelor's degree or above.

APPENDIX C: FULL SURVEY INSTRUMENT

AIR COMMUNITY SURVEY INSTRUMENT

S1. Before we start, can you verify that you are over 18 years of age?

1. Yes
2. No

S2. Are you a Baltimore City Resident?

1. Yes
2. No

S3. How long have you lived in Baltimore City?

1. Less than 1 year
2. 1-5 years
3. 5+ Years

S4. Do you recall receiving a letter about a survey on the Ariel Investigation Research Pilot Program?

1. Yes
2. No
3. Don't Know

S5. What is the nearest intersection to where you live or name your neighborhood?

1. Enter Intersection
2. Enter Neighborhood
3. Refused

S6. What is the zip code of the place where you live?

_____ (ENTER ZIP CODE)

88888 Don't know
99999 Refused

I. Perceptions of neighborhood conditions, crime, and personal safety

Q1.1 – Social Cohesion and Neighbor Interaction.

First, I would like to ask for your opinions about your neighborhood. Please tell me how much you agree or disagree with the following statements about the social atmosphere in your neighborhood.

a) People around here are willing to help their neighbors.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

b) People in this neighborhood can be trusted

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

c) People in this neighborhood generally get along with each other

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

d) People in this neighborhood share the same values

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

e) People in this neighborhood visit each other's homes or talk in the streets

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

Q1.2 - Perceptions of neighborhood safety.

a) My neighborhood is safe

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

b) I avoid certain streets or buildings in my neighborhood

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

c) I feel comfortable walking alone in my neighborhood

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

d) I carry a weapon to feel safe in my neighborhood

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

e) People sell or use drugs on the street in my neighborhood

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

Q1.3 - Fear of being a victim.

a) Having your property/car damaged by vandals

1. Not Afraid at all
2. Not Really Afraid
3. Somewhat Afraid
4. Very Afraid
5. DON'T KNOW
6. REFUSED

b) Having your car stolen or being car-jacked

1. Not Afraid at all
2. Not Really Afraid
3. Somewhat Afraid
4. Very Afraid
5. DON'T KNOW
6. REFUSED

c) Having someone break into your home

1. Not Afraid at all
2. Not Really Afraid
3. Somewhat Afraid
4. Very Afraid
5. DON'T KNOW
6. REFUSED

d) Being robbed or mugged by a stranger

1. Not Afraid at all
2. Not Really Afraid
3. Somewhat Afraid
4. Very Afraid
5. DON'T KNOW
6. REFUSED

e) Being shot or shot at

1. Not Afraid at all
2. Not Really Afraid
3. Somewhat Afraid
4. Very Afraid
5. DON'T KNOW
6. REFUSED

f) Being murdered

1. Not Afraid at all
2. Not Really Afraid
3. Somewhat Afraid
4. Very Afraid
5. DON'T KNOW
6. REFUSED

II. Perceptions of the AIR Program

Q2.1 Knowledge of AIR

a) Before today, had you heard about the AIR Program and the use surveillance planes?

1. Yes
2. No
3. I am not sure
4. REFUSED

If Q2.1a>1 Skip to Q2.2a

b) Where did you hear about the program?

.

1. Newspaper
2. Local tv or radio
3. Baltimore Police department announcement
4. Community organizations
5. Religious organization, such as a church
6. People in my community
7. Friends or family
8. Other: Please Specify

c) Based upon your knowledge of the program, do you think the following statements are true or false?

1. Information collected by surveillance planes can be accessed only after a crime is committed

    1. True
    2. False
    3. DON'T KNOW
    4. REFUSED

2. The program will help to solve violent crimes

    1. True
    2. False
    3. DON'T KNOW
    4. REFUSED

3. The program will is lasting a limited time of up to 180 days

    1. True
    2. False
    3. DON'T KNOW
    4. REFUSED

4. The results of the program will be evaluated by independent researchers

    1. True
    2. False
    3. DON'T KNOW
    4. REFUSED

5. A person's individual identity cannot be identified in the footage collected by the surveillance planes.

    1. True
    2. False
    3. DON'T KNOW
    4. REFUSED

6. People and/or vehicles cannot be tracked in real time

    1. True
    2. False
    3. DON'T KNOW
    4. REFUSED

Q2.2 – Plane surveillance support.

a) Do you support the surveillance planes flying over your neighborhood?

1. Yes
2. No
3. I do not know
4. REFUSED

If Q2.2a=1 skip to Q2.3

b) Why do you not support or are unsure about supporting the AIR program?

1. I do not think it will help solve enough crimes
2. I do not think it will prevent people from engaging in criminal activity
3. I think it will violate people's privacy
4. I do not think the police department provided enough information to the community
5. I do not know enough about the program overall to support it
6. Other: Please Specify
7. DON'T KNOW
8. REFUSED

Q2.3 – Support of plane surveillance for investigating crime.

How much do you support the use of the surveillance planes as a tool for investigating the following crimes?

a) Car-Jackings
    1. Strongly Against
    2. Against
    3. Neutral
    4. Support
    5. Strongly Support
    6. DON'T KNOW
    7. REFUSED

b) Armed Robberies
    1. Strongly Against
    2. Against
    3. Neutral
    4. Support
    5. Strongly Support
    6. DON'T KNOW
    7. REFUSED

c) Non-fatal shootings
    1. Strongly Against
    2. Against
    3. Neutral
    4. Support
    5. Strongly Support
    6. DON'T KNOW
    7. REFUSED

d) Murders and/or homicides
    1. Strongly Against
    2. Against
    3. Neutral
    4. Support
    5. Strongly Support
    6. DON'T KNOW
    7. REFUSED

Q2.4 – Attitudes about the effectiveness of plane surveillance

Now I would like to ask you about your beliefs about the potential effectiveness of the police using surveillance planes.

a) Surveillance planes gathering evidence in open public places, like parks and streets, is useful for police

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

b) Surveillance planes gathering evidence in open private places, like porches and backyards, is useful for police

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

c) Surveillance planes gathering evidence for serious crimes, like shootings and homicides, will help the police solve these crimes.

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

d) Surveillance planes will prevent people from engaging in criminal activity

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

e) Surveillance planes will encourage people to report criminal activity to the police

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

Q2.5 – Plane surveillance privacy scale.

a) Surveillance planes violate my privacy

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

b) The surveillance planes gather too much private information about me

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

c) The information collected from the surveillance planes is worth my loss of privacy

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

d) Surveillance planes are excessive monitoring

1. Strongly Disagree
2. Disagree
3. Unsure either way
4. Agree
5. Strongly Agree
6. REFUSED

Q2.6 Have you ever heard noise from the surveillance plane?

1. Yes
2. No
3. Don't Know
4. REFUSED

If Q2.6> 1 skip to Q3.1

Q 2.6a. Can you hear the noise from the surveillance plane when you are:

1. On your property, but outside your home
    1. Yes
    2. No
    3. Don't Know
    4. REFUSED
2. In your home with the windows OPEN
    1. Yes
    2. No
    3. Don't Know
    4. REFUSED
3. In your home with the windows CLOSED
    1. Yes
    2. No
    3. Don't Know
    4. REFUSED

Q 2.6B Over the past few weeks, how often have you felt annoyed by the noise from the surveillance plane?

1. Never
2. Rarely
3. Sometimes
4. Often
5. All the time
6. DON'T KNOW
7. REFUSED

III. Perceptions of the police

Q3.1 - Police Legitimacy.

Now, I would like to ask you about your perceptions of the police in your community. Please tell me how much do you agree or disagree with the following statements about the police in your community?

a) People in my community are well protected by the police.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

b) The police can be trusted to make decisions that are right for my community.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

c) People should always listen to police officers even if they believe that a police officer is wrong.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

d) The police are a part of my neighborhood

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
6. DON'T KNOW
7. REFUSED

e) I feel comfortable around the police

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

f) I generally support how the police act in my community

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

Q3.2 - Procedural Justice.

How much do you agree or disagree with the following statements about the police in your community treat people?

a) Police in my community treat people with dignity and respect.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

b) Police in my community treat people fairly.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

c) Police in my community take time to listen to people.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

d) Police in my community explain their decisions to the people they deal with.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

e) Police in my community make decisions based on facts and the law, and not their own personal opinions.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

Q3.3 - Perceptions of Police Bias.

How much do you agree or disagree with the following statements about how the police in your community treat people?

a) Police officers treat people differently based on their race/ethnicity.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

b) Police officers treat people differently based on how much they earn

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

c) Police officers treat people differently based on their age.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree
6. DON'T KNOW
7. REFUSED

Willingness to cooperate with the police

Q4.1 - Willingness to Partner with the Police

Now we would like to ask you about your likelihood of partnering with or contacting the police in your community. How likely are you to work together with the police by doing the following?

a) Patrol the streets as a part of an organized community group.

1. Very Unlikely
2. Unlikely
3. Likely
4. Very Likely
5. DON'T KNOW
6. REFUSED

b) Help and assist the police to solve a crime or find a suspect

1. Very Unlikely
2. Unlikely
3. Likely
4. Very Likely
5. DON'T KNOW
6. REFUSED

c) Attend a community meeting with the police to discuss crime in your neighborhood

1. Very Unlikely
2. Unlikely
3. Likely
4. Very Likely
5. DON'T KNOW
6. REFUSED

Q4.2 - Contacting Police . How likely would you be to call the police for the following?

a) To report any crime where you were the victim

1. Very Unlikely
2. Unlikely
3. Likely
4. Very Likely
5. DON'T KNOW
6. REFUSED

b) To report a minor (misdemeanor) crime, such vandalism

1. Very Unlikely
2. Unlikely
3. Likely
4. Very Likely
5. DON'T KNOW
6. REFUSED

c) To report a serious (felony) crime, such as an assault

1. Very Unlikely
2. Unlikely
3. Likely
4. Very Likely
5. DON'T KNOW
6. REFUSED

d) To report suspicious activity

1. Very Unlikely
2. Unlikely
3. Likely
4. Very Likely
5. DON'T KNOW
6. REFUSED

IV. DEMOGRAPHIC CHARACTERISTICS

Thank you very much for your openness in responding to these questions so far, we really appreciate your participant. I have one final section of questions I would like to ask about you in order to get some demographic information.

D1 Age: Which category below includes your age?

1. 18-24 years old
2. 25-34 years old
3. 35-44 years old
4. 45-54 years old
5. 55-64 years old
6. 65-74 years old
7. 75 years or older
8. Refused

D2. What is your gender?

1. Female
2. Male
3. Other (specify)
4. Prefer not to answer/Refused

D3. Are you: (Choose all that apply)

1. White
2. Black or African American
3. Native American or American Indian
4. Asian / Pacific Islander
5. Other (specify)
6. Refused

D3A. Are you Hispanic or Latino?

1. Yes
2. No
3. Refused

D4 Education: What is the highest degree or level of school you have completed? *If currently enrolled, highest degree received.*

1. No schooling completed
2. Kindergarten to 8th grade
3. Some high school, no diploma
4. High school graduate, diploma or the equivalent (for example: GED)
5. Some college credit, no degree
6. Trade/technical/vocational training
7. Associate degree
8. Bachelor's degree
9. Master's degree
10. Professional degree
11. Doctorate degree
12. Refused

D5 What is your marital status?

1. Single, never married
2. Married or domestic partnership
3. Widowed
4. Divorced
5. Separated
6. Refused

D6 Which of the following categories best describes your employment status?

1. Employed, working 1-39 hours per week
2. Employed, working 40 or more hours per week
3. Self-employed
4. Temporarily out of work as a result of the COVID-19/Coronavirus Epidemic
5. Out of work and looking for work
6. Out of work but not currently looking for work
7. A homemaker
8. A student
9. Military
10. Retired
11. Disabled, not able to work
12. Refused

D7. Do you identify with any of the following political parties?

1. Republican
2. Democrat
3. Independent
4. Libertarian
5. Other: Please Specify _____
6. Refused

D8. In the past twelve months, have you or a member of your family been a victim of a violent crime?

1. Yes
2. No
3. Refused

D9. What was the combined income from all of the members of your household in 2019?

1. $0 – $9,999
2. $10,000 – $19,999
3. $20,000 – $29,999
4. $30,000 – $39,999
5. $40,000 – $49,999
6. $50,000 – $59,999
7. $60,000 – $69,999
8. $70,000 – $79,999
9. $80,000 – $89,999
10. $90,000 – $99,999
11. $100,000 or more
12. Refused

Those are all of the questions that I have. Thank you for your time.