



# SCHAEFER CENTER FOR PUBLIC POLICY

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**Baltimore**

**Aerial Investigation Research Project  
Interim Findings from the Early Launch  
Community Survey, June 2020**

**Summary Report  
Includes High Crime/High Poverty  
Neighborhoods Comparison**



**UNIVERSITY OF  
BALTIMORE**

Schaefer Center for  
Public Policy

**Baltimore**  
**Aerial Investigation Research Project**  
**Interim Findings from the Early Launch Community Survey**  
**June 2020**

**Summary Report**  
**Includes High Crime Neighborhoods/High Poverty Comparison**

**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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# Baltimore Aerial Investigation Research Project

## Interim Findings from the Early Launch Community Survey

### INTRODUCTION

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.

As part of the pilot program, the AIR program is subject to extensive evaluation by four entities: RAND Corporation, The Policing Project at New York University School of Law, the University of Baltimore Schaefer Center for Public Policy (Schaefer Center), and Morgan State University. The Schaefer Center is responsible for conducting two surveys: an early launch survey in 2020 and a post-program survey in 2021. The evaluation by RAND, NYU and the Schaefer Center is funded by Arnold Ventures, LLC.

The full report summarizes the findings of the early launch survey, which was administered by via phone and web between June 2, 2020, and July 17, 2020. A total of 844 individuals participated in the survey. The AAPOR Response Rate 4 for the study is 5.2%.

This document includes recommendations, principal findings from all respondents and from those residing in high crime/high poverty neighborhoods, and a summary of the sampling design and data collection methodology. The full report is available at <https://schaefercenter.ubalt.edu/>.

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.

## RECOMMENDATIONS

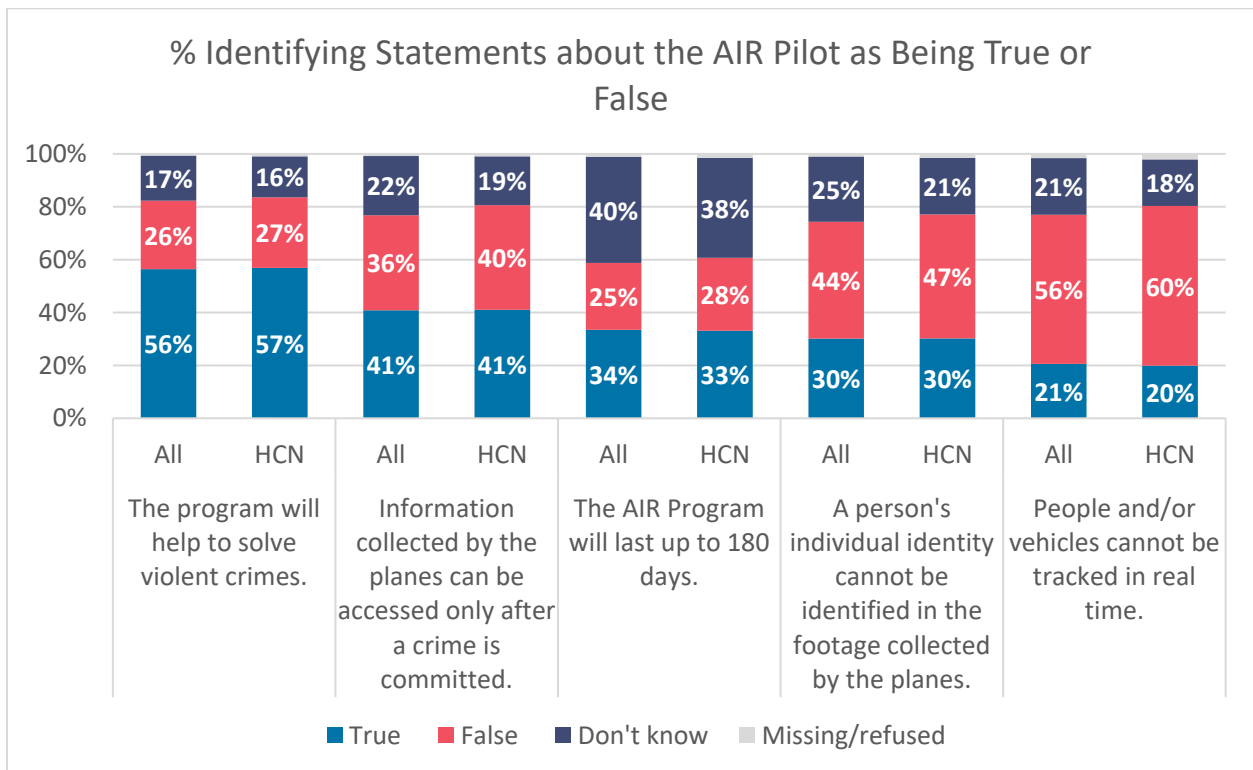
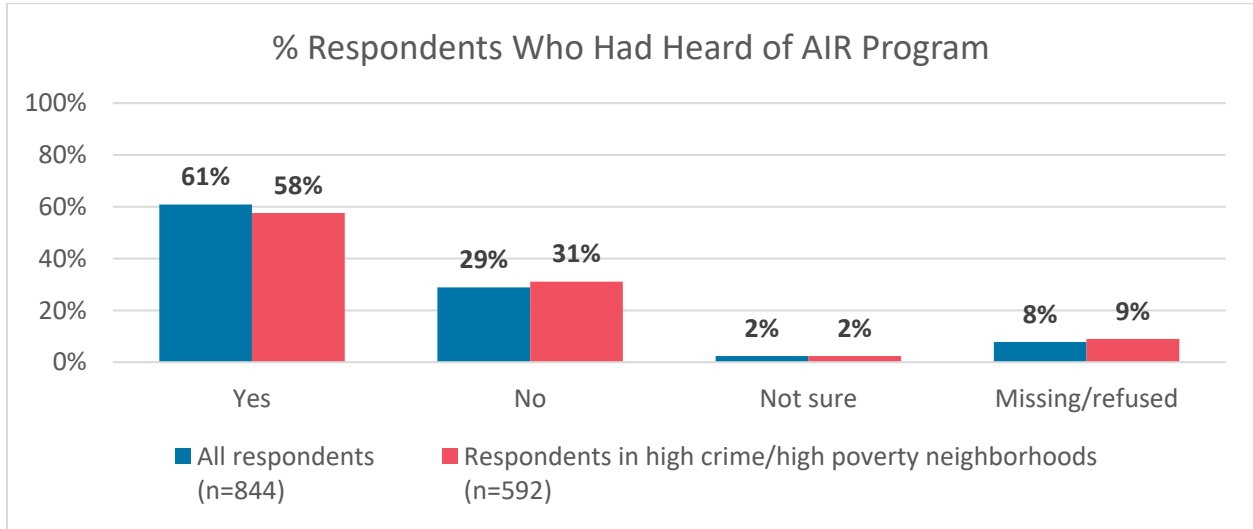
The Research Team offers three major recommendations regarding the AIR program:

- 1) *Expand communication about the program by the Baltimore City Police Department (BPD)* – Six in ten survey respondents had heard about the AIR program, and, of those, only 7% learned of it directly from the BPD. In addition, many respondents who knew about the AIR program did not fully understand the program. 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.
- 2) *Community outreach to discuss challenges of and seek feedback for police initiatives* - Survey findings suggest that there is much room for improvement in the context of police-community relationships and that participants did not fully understand the program. The involvement of community members in the development of police initiatives may serve as an important community outreach tool for both the AIR program and wider policing initiatives
- 3) *Targeted outreach with youth and young people* – Survey participants that showed the least amount of the support for the AIR program were young people age 18-34 years old. 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.

## PRINCIPAL FINDINGS

### AWARENESS AND KNOWLEDGE OF THE AIR PROGRAM

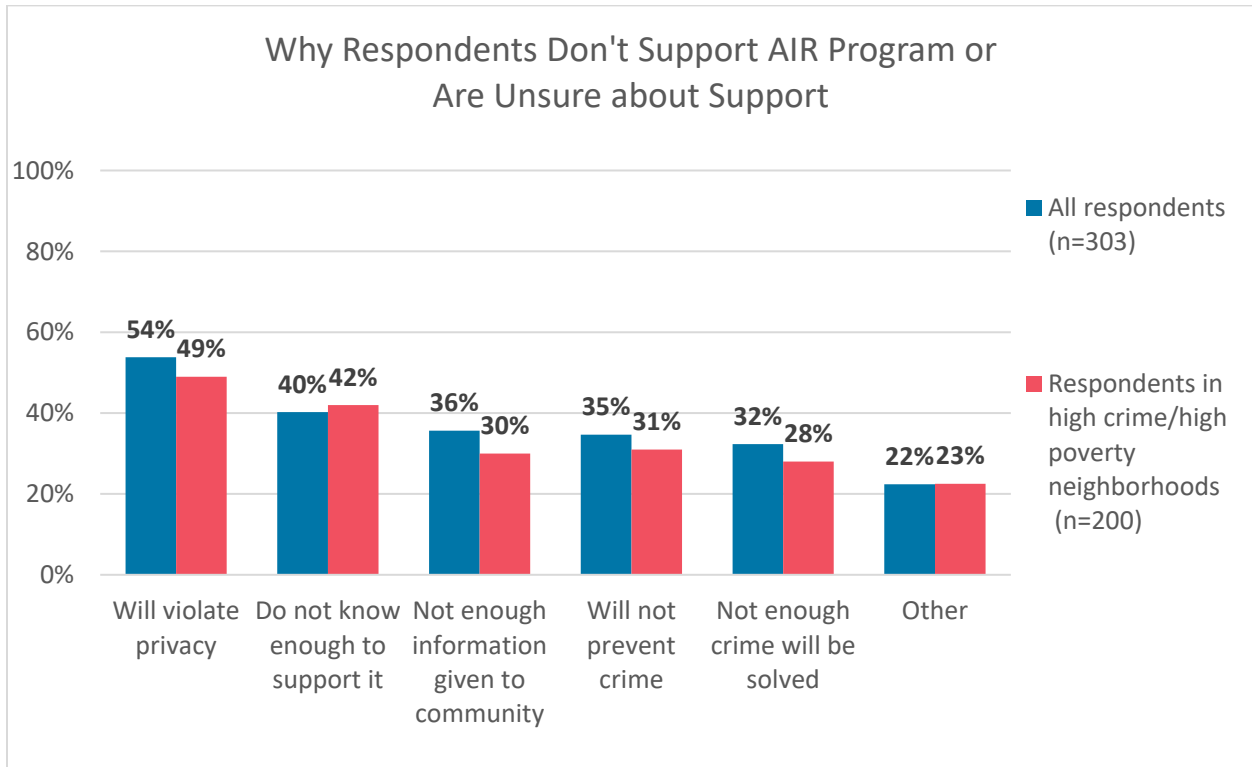
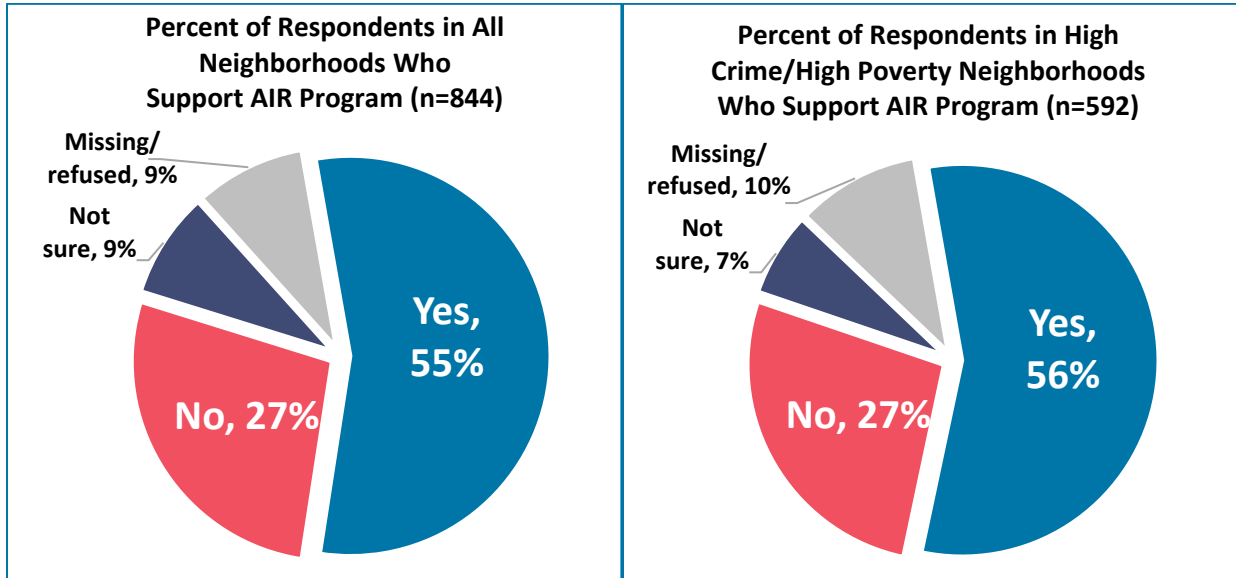
- *Approximately six in ten respondents had heard of AIR program.*
- *Most respondents could not correctly identify program components.*



Notes: "All" shows responses from all respondents (n=514); "HCN" shows responses from respondents in high crime/high poverty neighborhoods (n=341). All the statements are true based upon the terms of the AIR Program MOU.

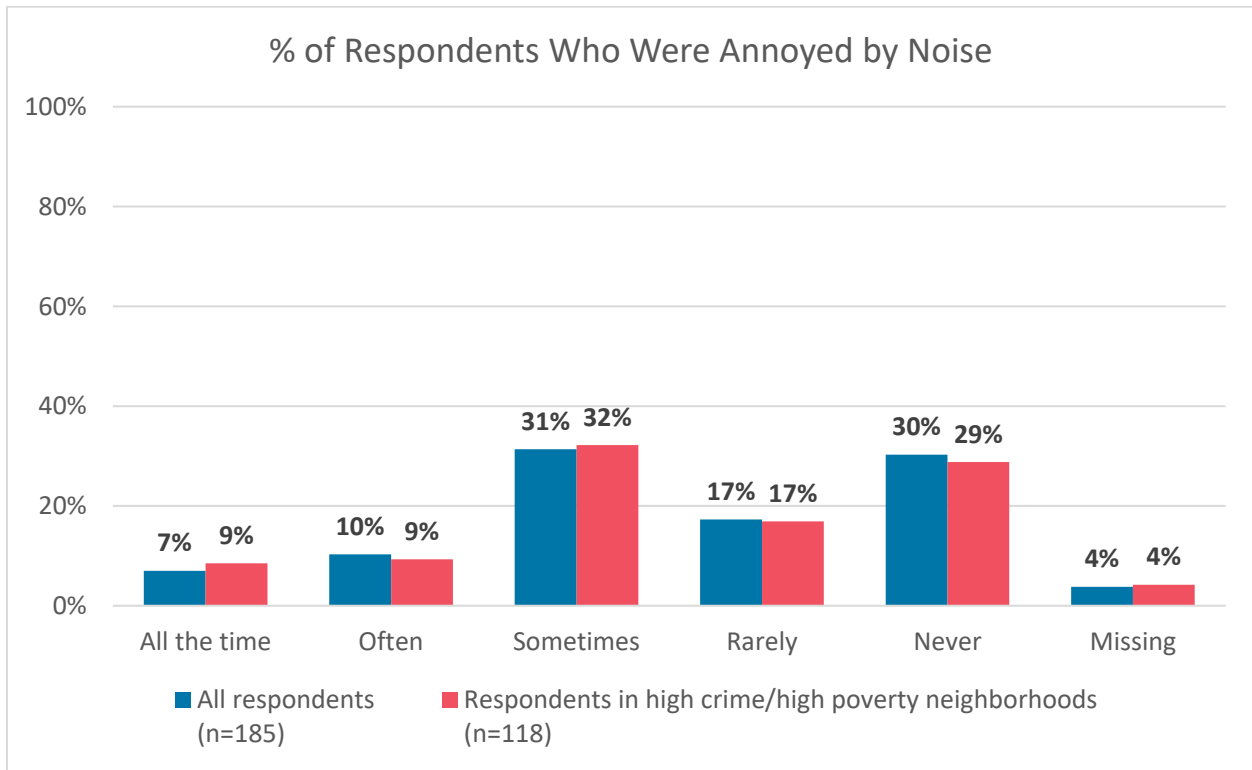
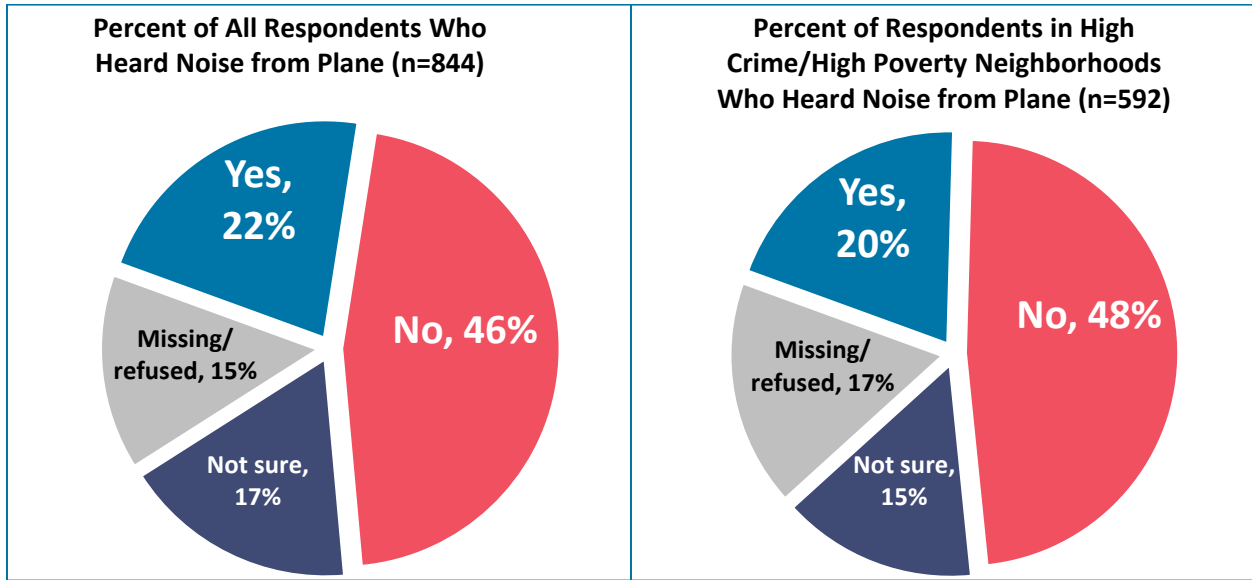
**SUPPORT FOR THE AIR PROGRAM**

- *Approximately half of respondents supported AIR program.*
- *Most common reason for not supporting program was privacy concerns.*



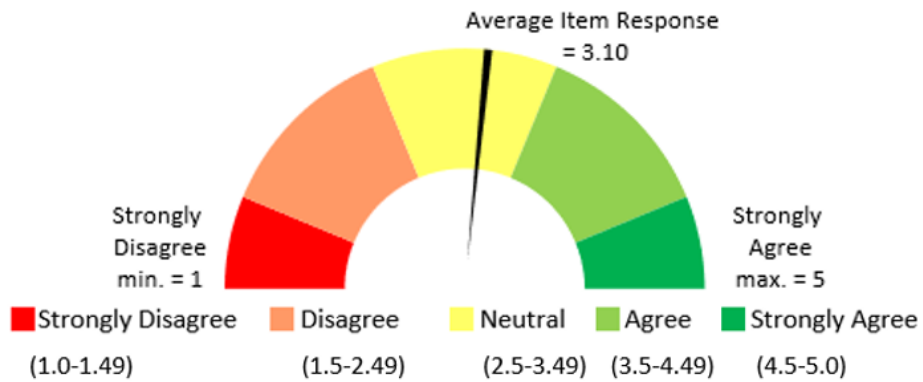
### NOISE FROM THE AIR PLANES

- *Less than one-quarter of respondents heard noise from AIR planes.*
- *Most were annoyed “sometimes” or less frequently.*
- *These results may be due to the limited number of planes or the length of the pilot.*

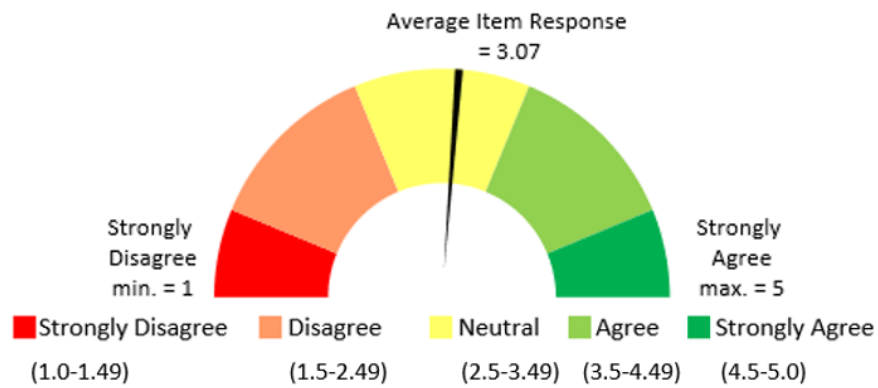


## PERCEPTIONS OF AIR PROGRAM

### Attitudes about Effectiveness of Program Gauge – All Respondents (n=721)



### Beliefs about Privacy Gauge – All Respondents (n=714)



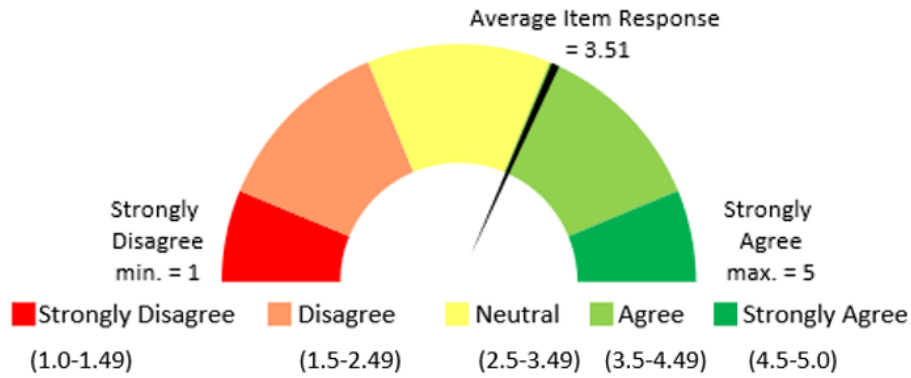


PERCEPTIONS OF AIR PROGRAM – INDEX DETAILS

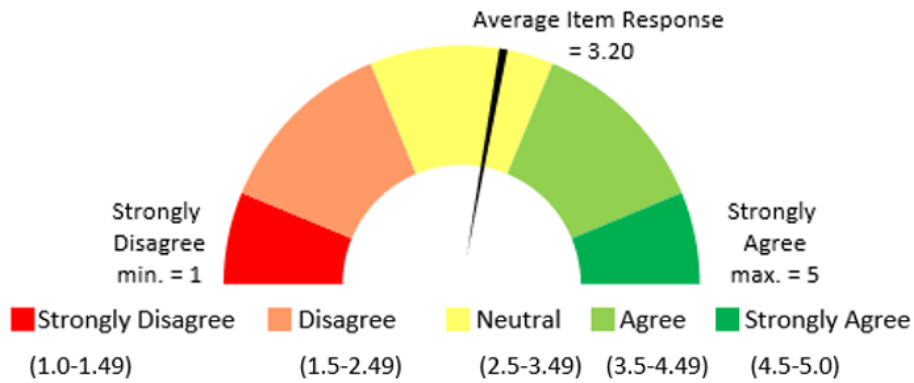
<b>ATTITUDES ABOUT THE EFFECTIVENESS OF THE AIR PROGRAM</b>		
<p><i>Definition:</i> Survey respondents were asked several questions about their beliefs of the potential effectiveness of the AIR program, including questions relating to the usefulness of the AIR program at gathering evidence, preventing people from engaging in crime, and encouraging people to report criminal activity.</p>	<p><i>Range of responses:</i> 1 = strongly disagree the program is effective; 5 = strongly agree the program is effective</p> <p><i>Average item score:</i> · All respondents = 3.10 Participants did not believe the program was either effective or ineffective. · Respondents in high crime/high poverty neighborhoods = 3.16 Participants did not believe the program was either effective or ineffective.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? <span style="color: green;">✓</span> Neighborhood Crime Level? <span style="color: red;">✗</span></p> <p>Interaction between Race &amp; Neighborhood Crime Level? <span style="color: red;">✗</span></p>
<b>BELIEFS ABOUT PRIVACY AND THE AIR PROGRAM</b>		
<p><i>Definition:</i> Survey respondents were asked several items about their beliefs about privacy and the AIR program, including questions relating to the AIR planes gathering their private information, if the AIR planes violate their privacy, and if the AIR planes are worth a potential loss of privacy.</p>	<p><i>Range of responses:</i> 1 = strongly agree that the program protects privacy; 5 = strongly agree that the program violates privacy</p> <p><i>Average item score:</i> · All respondents = 3.07 Participants did not believe the program was either violating or protecting their privacy. · Respondents in high crime/high poverty neighborhoods = 3.07 Participants did not believe the program was either violating or protecting their privacy.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? <span style="color: green;">✓</span> Neighborhood Crime Level? <span style="color: red;">✗</span></p> <p>Interaction between Race &amp; Neighborhood Crime Level? <span style="color: red;">✗</span></p>

PERCEPTIONS OF NEIGHBORHOOD CONDITIONS AND CRIME

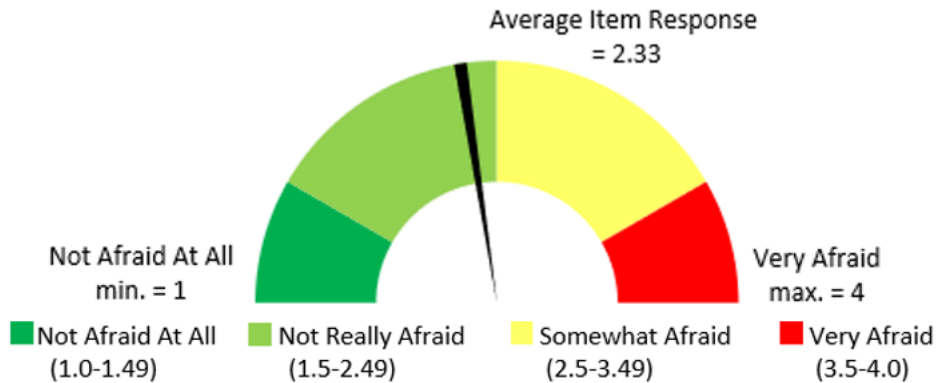
**Social Cohesion & Interaction Gauge – All Respondents (n=734)**



**Perceptions of Neighborhood Safety Gauge – All Respondents (n=747)**



**Fear of Being a Victim of a Crime Gauge – All Respondents (n=713)**

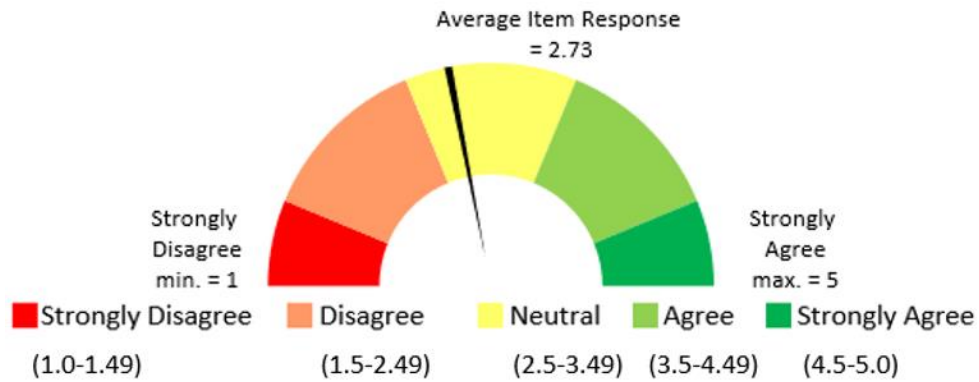


PERCEPTIONS OF NEIGHBORHOOD CONDITIONS AND CRIME – INDEX DETAILS

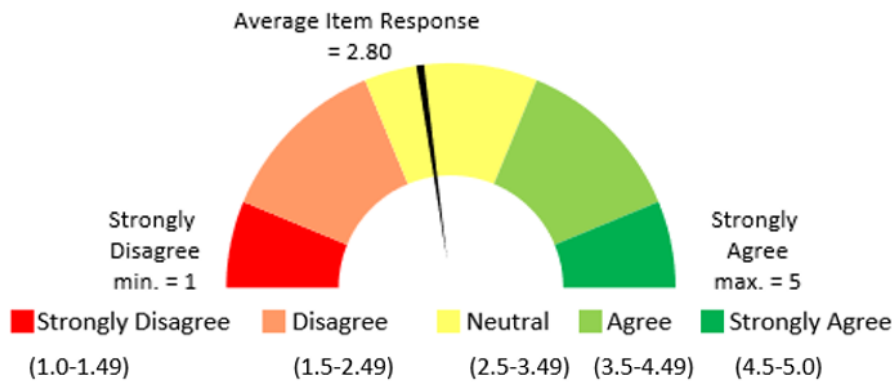
<b>SOCIAL COHESION &amp; INTERACTION</b>		
<p><i>Definition:</i> Social cohesion refers to the connections, values, and trust among a group of people. It includes a willingness to help neighbors, trust among neighbors, and interaction among neighbors. Generally, neighborhoods that have higher ratings of social cohesion tend to have lower instances of crime.</p>	<p><i>Range of responses:</i> 1 = lowest social cohesion; 5 = highest social cohesion</p> <p><i>Average item score:</i> · All respondents = 3.51 Participants did not agree or disagree that their neighborhood had social cohesion and interaction. · Respondents in high crime/high poverty neighborhoods = 3.40 Participants perceived that their neighborhood had positive social cohesion and interaction.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? ✓ Neighborhood Crime Level? ✓ Interaction between Race &amp; Neighborhood Crime Level? ✗</p>
<b>PERCEPTIONS OF NEIGHBORHOOD SAFETY</b>		
<p><i>Definition:</i> Neighborhood safety includes asking if respondents generally feel their neighborhood is safe, they avoid certain streets or buildings, they feel comfortable walking alone, they carry a weapon to feel safe, and people sell or use drugs on the street. Perceptions of safety may directly influence how respondents view the police and initiatives targeting crime, such as the AIR program.</p>	<p><i>Range of responses:</i> 1 = not safe; 5 = very safe</p> <p><i>Average item score:</i> · All respondents = 3.20 Participants perceived that their neighborhood was neither safe nor unsafe. · Respondents in high crime/high poverty neighborhoods = 3.03 Participants perceived that their neighborhood was neither safe nor unsafe.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? ✓ Neighborhood Crime Level? ✓ Interaction between Race &amp; Neighborhood Crime Level? ✓</p>
<b>FEAR OF BEING A VICTIM OF A CRIME</b>		
<p><i>Definition:</i> 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.</p>	<p><i>Range of response:</i> 1 = not afraid; 4 = very afraid</p> <p><i>Average item score:</i> · All respondents = 2.33 Participants reported they were not really afraid of being a victim of a crime in their neighborhood. · Respondents in high crime/high poverty neighborhoods = 2.40 Participants reported they were not really afraid of being a victim of a crime in their neighborhood.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? ✓ Neighborhood Crime Level? ✓ Interaction between Race &amp; Neighborhood Crime Level? ✗</p>

PERCEPTIONS OF POLICE

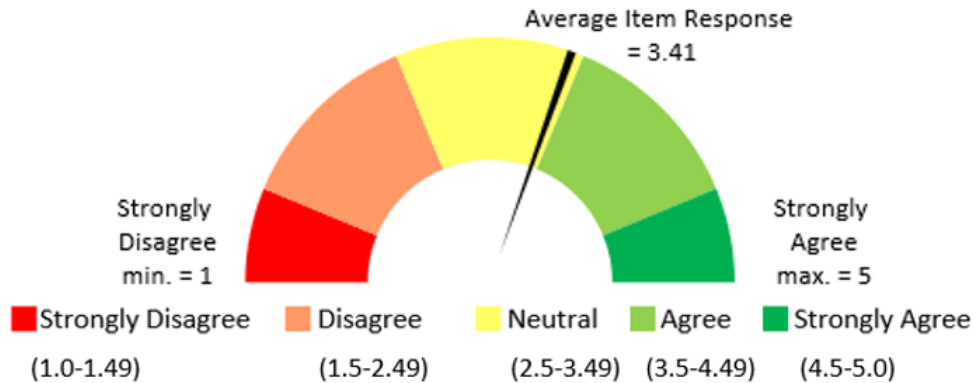
**Police Legitimacy Gauge – All Respondents (n=663)**



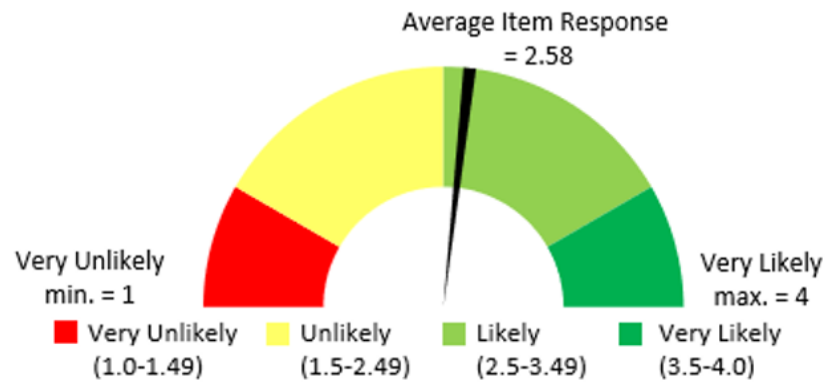
**Procedural Justice Gauge – All Respondents (n=620)**



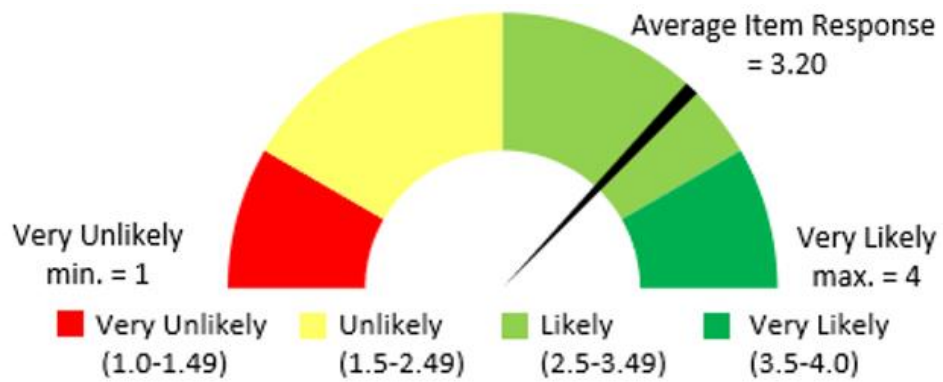
**Police Bias Gauge – All Respondents (n=642)**



### Willingness to Partner with Police Gauge – All Respondents (n=649)



### Willingness to Contact Police Gauge – All Respondents (n=653)



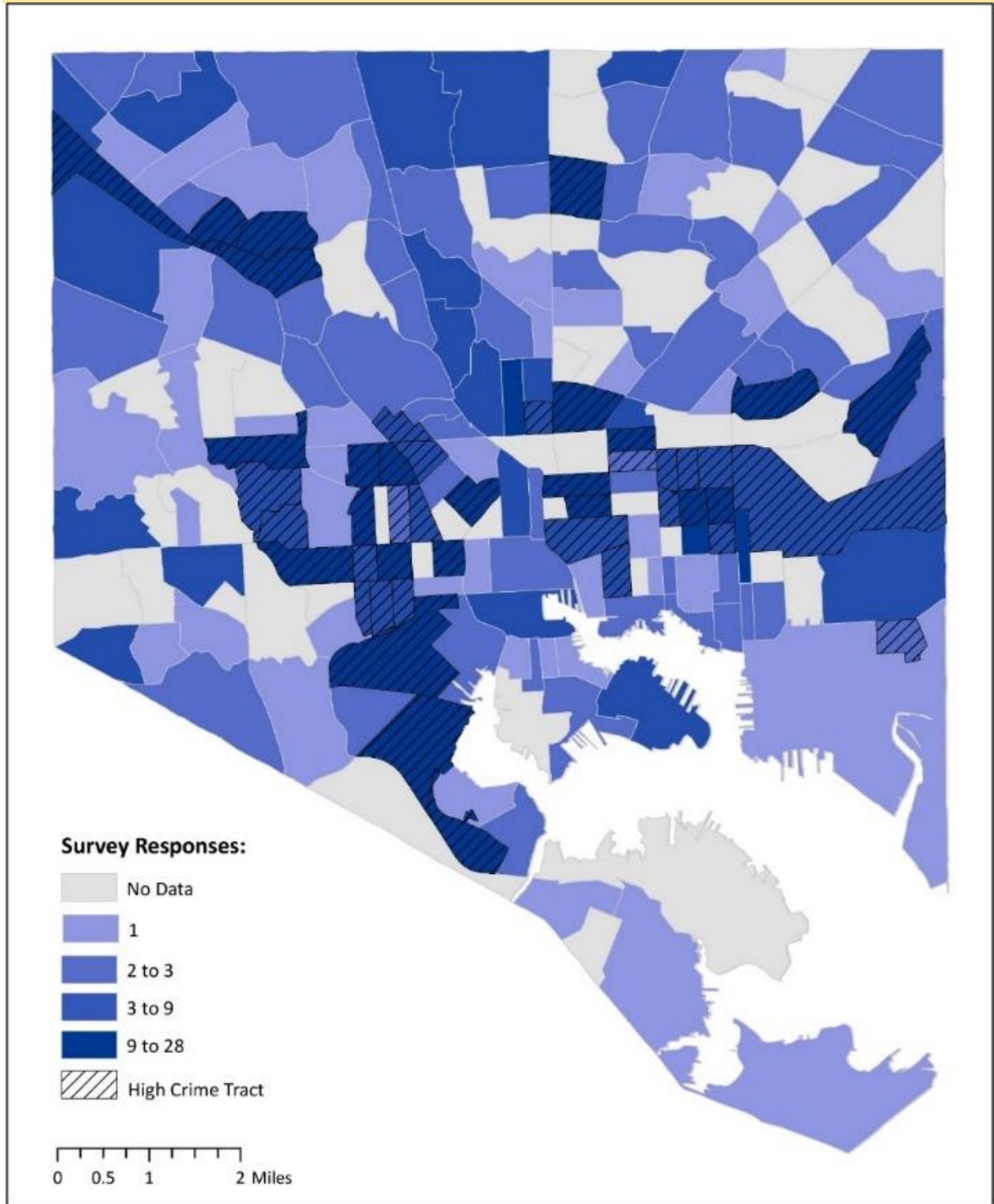
PERCEPTIONS OF POLICE – INDEX DETAILS

<b>POLICE LEGITIMACY</b>		
<p><i>Definition:</i> 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.</p>	<p><i>Range of responses:</i> 1 = strongly disagree that police and actions are legitimate; 5 = strongly agree that police and actions are legitimate</p> <p><i>Average item score:</i> · All respondents = 2.73 Participants felt neutral in their perceptions of the legitimacy of the police. · Respondents in high crime/high poverty neighborhoods = 2.69 Participants felt neutral in their perceptions of the legitimacy of the police.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? <span style="color: red;">✗</span> Neighborhood Crime Level? <span style="color: red;">✗</span>  Interaction between Race &amp; Neighborhood Crime Level? <span style="color: red;">✗</span></p>
<b>PROCEDURAL JUSTICE</b>		
<p><i>Definition:</i> 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 support for initiatives implemented by police departments.</p>	<p><i>Range of responses:</i> 1 = strongly disagree that police act with procedural justice; 5 = strongly agree that police act with procedural justice</p> <p><i>Average item score:</i> · All respondents = 2.80 Participants did not agree or disagree on the existence of procedural justice. · Respondents in high crime/high poverty neighborhoods = 2.74 Participants did not agree or disagree on the existence of procedural justice.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? <span style="color: red;">✗</span> Neighborhood Crime Level? <span style="color: green;">✓</span>  Interaction between Race &amp; Neighborhood Crime Level? <span style="color: red;">✗</span></p>

<b>POLICE BIAS</b>		
<p><i>Definition:</i> 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.</p>	<p><i>Range of responses:</i> 1 = strongly disagree that police act with bias; 5 = strongly agree that police act with bias</p> <p><i>Average item score:</i> · All respondents = 3.41 Participants perceived that police were neither biased nor unbiased. · Respondents in high crime/high poverty neighborhoods = 3.40 Participants perceived that police were neither biased nor unbiased.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? <span style="color: red;">✗</span> Neighborhood Crime Level? <span style="color: red;">✗</span></p> <p>Interaction between Race &amp; Neighborhood Crime Level? <span style="color: red;">✗</span></p>
<b>WILLING TO PARTNER WITH POLICE</b>		
<p><i>Definition:</i> 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.</p>	<p><i>Range of responses:</i> 1 = very unlikely to partner with police; 4 = very likely to partner with police</p> <p><i>Average item score:</i> · All respondents = 2.58 Participants were willing to partner with police. · Respondents in high crime/high poverty neighborhoods = 2.56 Participants were willing to partner with police.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? <span style="color: red;">✗</span> Neighborhood Crime Level? <span style="color: red;">✗</span></p> <p>Interaction between Race &amp; Neighborhood Crime Level? <span style="color: red;">✗</span></p>
<b>WILLING TO CONTACT POLICE</b>		
<p><i>Definition:</i> 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.</p>	<p><i>Range of responses:</i> 1 = very unlikely to contact police; 4 = very likely to contact police</p> <p><i>Average item score:</i> · All respondents = 3.20 Participants were willing to contact the police to report criminal activity. · Respondents in high crime/high poverty neighborhoods = 3.22 Participants were willing to contact the police to report criminal activity.</p>	<p><i>Differences statistically significant by:</i></p> <p>Race? <span style="color: green;">✓</span> Neighborhood Crime Level? <span style="color: red;">✗</span></p> <p>Interaction between Race &amp; Neighborhood Crime Level? <span style="color: red;">✗</span></p>

## MORE INFORMATION ON RESPONDENTS

### NUMBER OF RESPONSES BY CENSUS TRACT





## DEMOGRAPHICS OF RESPONDENTS

Demographic Variable	Percent of			
	City Residents	All Respondents	City Residents in High Crime/ High Poverty Neighborhoods	Respondents in High Crime/ High Poverty Neighborhoods
<b>Age Group</b>				
18-24 years old	12.7%	2.2%	12.6%	2.4%
25-34 years old	23.8%	13.0%	20.9%	10.9%
35-44 years old	15.4%	17.7%	15.2%	16.0%
45-54 years old	15.6%	18.6%	17.9%	19.0%
55-64 years old	15.9%	20.9%	16.1%	24.2%
65-74 years old	9.7%	17.3%	10.0%	18.6%
75 years or older	6.9%	10.4%	7.3%	9.0%
<b>Gender</b>				
Male	46.0%	37.8%	46.4%	34.4%
Female	54.0%	61.5%	53.6%	65.0%
Nonbinary	NA	0.7%	NA	0.6%
<b>Race</b>				
Black	62.5%	65.6%	87.6%	76.7%
White	30.5%	27.1%	8.1%	16.4%
Other	7.1%	7.3%	4.4%	6.9%
<b>Ethnicity</b>				
Latinx	5.1%	3.5%	4.5%	3.0%
Not Latinx	94.9%	96.5%	95.5%	97.0%
<b>Education</b>				
Up to a High School Degree	44.9%	28.8%	64.4%	33.4%
Some college, Associates, or Vocational Training	26.7%	28.0%	25.1%	33.2%
Bachelor's or higher	28.9%	43.2%	10.5%	33.4%
<b>Employment Status</b>				
Yes (at least part time)	55.9%	52.8%	57.7%	47.9%
Not employed	44.1%	12.8%	42.2%	14.6%
Retired/disabled, not able to work		34.4%		37.6%

Note: Percent of survey respondents are percentages of those for whom demographic characteristic is known. City resident demographics are from the U.S. Census Bureau, American Community Survey 5-Year Estimates for 2014-2018. Due to data limitations, percentages of age, gender, and education of city residents are only for adult residents (i.e., those age 18 and over), except for education of high crime/high poverty neighborhoods education, which are for ages 25 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. The share of city residents who are not employed include individuals classified as unemployed as well as individuals who are retired, disabled, students, or otherwise do not work.

## METHODOLOGY

The survey questionnaire was developed by the Schaefer Center project team based on the existing literature on criminal justice and policing. The project team also evaluated the quality of the survey instrument by computing a measure of internal consistency reliability – Cronbach’s Alpha ( $\alpha$ ).

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 likely 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.

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, while the second dimension was based on the magnitude of the violent offenses that occurred within each census block group. Finally, block groups that ranked highest for either presence or magnitude of crime were assessed for their poverty rate. Those block groups with a poverty rate greater than 25% were included in a high crime/high poverty grouping. Block groups that did not have the highest rankings for 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, mainly due to the unusually high rates of one particular offense type within the block group. In total, 82 block groups (12.6%) were identified as high crime/high poverty.

Through its sample vendor, the research team used address-based sampling 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. The final sample included 92.6% of all possible addresses in the high crime/high poverty census block groups.

Sample records with a telephone phone number were called by a vendor, and those that did not have a telephone number match or where the number was invalid (e.g., disconnected, business, and fax numbers) were mailed a letter inviting them to either call into the call center to complete the survey or go to the project website with a unique code to access the survey. Only residents with an access code provided by the research team were eligible to complete the survey.

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.

## APPENDIX – DEMOGRAPHICS BY AGE

Demographic Variable	Age			
	18-34 years old	35-64 years old	65 years or older	Total
<b>Gender</b>				
Female	56 (13.2%)	239 (56.2%)	130 (30.6%)	425
Male	45 (17.2%)	155 (59.4%)	61 (23.4%)	261
<b>Race</b>				
Black	33 (7.4%)	267 (59.7%)	147 (32.9%)	447
White	53 (28.6%)	96 (51.9%)	36 (19.5%)	185
Other	18 (36.7%)	23 (46.9%)	8 (16.3%)	49
<b>Education</b>				
Up to a high school degree	18 (9.1%)	103 (52.0%)	77 (38.9%)	198
Some college, associate's, or vocational training	18 (9.3%)	116 (60.1%)	59 (30.6%)	193
Bachelor's or higher	68 (22.7%)	176 (58.9%)	55 (18.4%)	299

## ABOUT THE SCHAEFER CENTER FOR PUBLIC POLICY

Established in 1985 with a mission to bring the University of Baltimore's academic expertise to bear in solving problems faced by government and nonprofit organizations, the Schaefer Center has grown into one of Maryland's preeminent policy centers offering invaluable assistance in support of Maryland's public sector.

Housed in the University of Baltimore's College of Public Affairs, the Schaefer Center complements its professional staff by drawing upon the expertise of faculty and students in the university's other three schools – Criminal Justice, Health and Human Services, Public and International Affairs – in its research, consulting and professional development work.

The Schaefer Center offers program evaluation, policy analysis, survey research, strategic planning, workload studies, opinion research, management consulting, and professional development services. It is through the Schaefer Center that the University of Baltimore and the College of Public Affairs meet a central component of the University's mission of applied research and public service to the Baltimore metropolitan area and to the state of Maryland.

Since its creation more than 35 years ago, the Schaefer Center has completed over 500 research and professional development projects for various local, state and federal agencies as well as nonprofit organizations. Through its newest program, the Maryland Certified Public Manager® Program offered to nonprofit and government managers, the Schaefer Center is building the management capacity in Maryland's public organizations.

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