



SAGINAW COMMUNITY SURVEY: PATTERNS OF VICTIMIZATION AND METHODOLOGICAL EXPERIMENTS

TECHNICAL REPORT

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East Lansing, MI: Michigan Justice Statistics Center, School of Criminal Justice, Michigan State University

Michigan Justice Statistics Center

The School of Criminal Justice at Michigan State University, through the Michigan Justice Statistics Center, serves as the Statistical Analysis Center (MI-SAC) for the State of Michigan. The mission of the Center is to advance knowledge about crime and justice issues in the state of Michigan while also informing policy and practice. The Center works in partnership with the Michigan State Police, Michigan's State Administering Agency (SAA), as well as with law enforcement and criminal justice agencies serving the citizens of Michigan.

For further information see: <http://cj.msu.edu/programs/michigan-justice-statistics-center/>

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Saginaw Community Survey: Patterns of Victimization and Methodological Experiments

Executive Summary

With the support of the Bureau of Justice Statistics, the Michigan Justice Statistics Center conducted a survey of residents of Saginaw, Michigan as a way of learning about the victimization experiences as well as the perceptions of residents about their neighborhoods and the police. The survey employed a randomly selected, address-based sample of Saginaw residents. Multiple methods of survey administration were used resulting in a final sample of 829 completed surveys. In addition to greater understanding of resident's victimization experiences and perceptions, the survey also tested several different strategies intended to increase response rates and to increase the number of respondents completing the survey through more cost-efficient web-based survey technology.

The current technical report presents details on the survey methodology as well as basic findings on levels of household and personal victimization. It also presents the results of the embedded methodological experiments. A series of articles and reports will follow this report and present in greater detail the findings in terms of victimization experience as well as perceptions of crime, the neighborhood, and the police. Among the key findings presented in this report are the following:

- There were no differences in households from the more affluent west side of Saginaw and those on the east side in terms of violent crime victimization. This was unexpected given that neighborhood levels of economic disadvantage typically result in higher levels of violent crime victimization. This will be examined in greater detail in future analyses of the survey results.
- West side households reported higher levels of property crime victimization.
- Households headed by someone described as white had slightly higher levels of victimization than households headed by someone described as black. The results should be interpreted cautiously, however, due to a modest number of households where this information was missing or classified as "other."
- Rental households were more likely to experience victimization in comparison to owner-occupied households.
- Men were more likely to experience violent and property crime victimization. Women were more likely to experience sexual assault.
- Consistent with the household findings, whites were slightly more likely to report being victimized than were blacks. Caution in interpreting these findings is suggested, however, because the group most likely to report being victimized reported their race as "other."
- Overall, Saginaw residents were much more likely to prefer completing the survey through a paper and pencil mail survey. This is the least cost-efficient mode for conducting this type of survey. The embedded experiment suggested that presenting the survey options in varying ways and providing an incentive-based "nudge" to complete the survey on the web can increase the number of respondents utilizing the more cost-efficient web-based technology.

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Saginaw Community Survey: Patterns of Victimization and Methodological Experiments

Community leaders, criminal justice officials, and criminological researchers can gain important insights into issues of crime, quality of neighborhood life, and attitudes toward the police and criminal justice system by tapping into the experiences and perceptions of residents. Reports of victimization can serve as a supplement to police incident reports for understanding more about patterns of crime and the impact of crime on residents. Residents' perspectives on the quality of neighborhood life, their perceived risk and fear of victimization can serve as important indicators for the health and vitality of the community and differences across neighborhoods. Citizen perceptions of the police and criminal justice system are critical components of the legitimacy of the criminal justice system in a democratic society.

Given the importance of knowing more about the experience and perspective of local residents around issues of crime and justice, the U.S. Bureau of Justice Statistics (BJS) implemented a competitive grant process for state Statistical Analysis Centers to conduct sub-national victimization surveys of the public. The Michigan Statistical Analysis Center, the Michigan Justice Statistics Center located in the School of Criminal Justice at Michigan State University, was awarded a grant by BJS to conduct a survey in Saginaw, MI.

In addition to increasing the understanding of victimization patterns and perceptions of residents in high crime urban settings, the survey was developed to address methodological issues of national significance. In particular, given the decline in landline telephone usage in communities throughout the United States, and the expense associated with mailing paper surveys, we developed an experiment to determine the feasibility of using web-based survey

methods for garnering participation in victimization surveys. The goals of this portion of the project, thus, were twofold. First, we wanted to determine the feasibility of a city-level victimization survey in high crime urban cities. Second, we set out to see whether or not web-based survey methods could offer a viable alternative to landline telephones as a medium for collecting data.

This technical report presents information about the research setting, methodology, and sample developed in the Saginaw survey. In subsequent sections we discuss the instrument used to gather information on victimization and resident perceptions of crime and justice. Basic results of the study are presented. In this report, we focus on initial findings on victimization patterns as well as an embedded methodological experiment on response rates. A technical appendix (C) describes the sample weighting procedures developed by Dr. Paul Lavrakas.

The technical report is intended to provide an overview of the study and basic findings on victimization patterns. Future papers will focus on a variety of additional topics including perceptions of the neighborhood and of the police. A series of papers and journal articles are in progress to address in more depth the variety of theoretical, methodological, and practical issues that can be studied through this survey.

Michigan as a Setting for Victimization Surveys

The Saginaw survey represents the first of several planned local level surveys. Following Saginaw, the Michigan Justice Statistics Center will be conducting similar surveys in Detroit and Battle Creek¹. Michigan is an ideal setting for this project for several reasons. First, the research will be conducted in urban cities that have experienced economic decline and disinvestment, loss

¹ Battle Creek was not an original Secure Cities jurisdiction. It is being included as a site to examine whether there are systematic city differences in response rates and patterns in a city with lower levels of crime compared to Saginaw and Detroit.

of police resources, and high rates of violent crime. Two of the three planned survey cities (Detroit, Saginaw)² experience some of the nation's highest rates of crime and violence (See Table 1). Along with Flint, they also represent three of the original State of Michigan's "Secure Cities." The Secure Cities Partnership reflects a collaboration between the Governor's Office, the Michigan State Police, and localities to address public safety in Michigan cities experiencing high levels of crime. This investment was intended to compensate in part for the significant loss in police personnel experienced in each of these cities over the prior decade. It is hoped that the series of surveys can help inform the State's focus on combating the enduring issues of crime and violence in these cities.

The economic and resource constraints facing these cities create risks for crime and constraints on the ability of the police and other criminal justice partners to respond to crime challenges. As crime has remained at very high levels while police resources have declined, there are reports of slow police response times and citizen dissatisfaction with police services. Table 2 provides figures on the decline in sworn officers per capita between 2002 and 2012 for each of these cities. As a result, each of these three cities has had to serve the same land area with fewer and fewer police officials across the last decade, with unknown effects. Specifically, Detroit had 28.9 sworn police officers per square mile in 2002, but this number shrank to 18.5 by 2012 (-64%). Similar declines were witnessed in Flint and Saginaw, who went from 7.1 and 6.6 officers per square mile in 2002, to 3.6 and 4.6 in 2012, respectively.

² Pontiac, Michigan was also part of the original Secure Cities Partnership and additional cities have been added since 2012.

Table 1 Violent and Property Crime in Select Michigan Secure Cities

	Population	Violent Crimes	Violent Crime Rate per 10,000	Property Crimes	Property Crime Rate per 10,000
Detroit – 2004	914,353	15,913	174	57,415	628
Detroit – 2014	684,694	13,616	199	32,983	482
Flint – 2004	120,681	2,324	193	7,254	601
Flint – 2014	99,166	1,694	171	3,891	392
Saginaw – 2004	59,427	1,589	267	2,721	458
Saginaw – 2014	50,030	845	169	1,209	242
U.S. - 2014			36		260

The public nature of the decision to reduce the size of each respective police department has the real possibility of influencing citizen decisions to report crimes to the police and thereby police incident data are likely also affected. This makes it critical to have victimization data to allow for cross-validation analyses to determine the extent of underreporting in these cities. As will be discussed subsequently, the victimization survey also included a number of “well-being” indicators that provide important information on fear, quality of life, and perceptions of the police for residents of these high crime cities.

Table 2 Sworn Police Officers in Select Michigan Secure Cities

City	2002 Population	2002 Sworn Officers	Rate/10,000	2012 Population	2012 Sworn Officers	Rate/10,000	Percent Change
Detroit	961,987	4,006	41.6	707,096	2,570	36.4	-12.7%
Flint	126,351	237	18.8	101,632	119	11.7	-37.6%
Saginaw	62,496	115	18.4	51,267	80	15.6	-15.2%

The city of Saginaw, MI had an estimated population of 49,347 people as of July 1, 2015, down 4.2% from the April 1, 2010 Census estimate (n = 51,508) (United States Census Bureau, 2016). From a racial and ethnic perspective, the city of Saginaw is a majority black or African American city, with 46.1% of residents reporting this race alone, while 37.5% report being only White, non-Hispanic. There is a sizable Hispanic or Latino population in Saginaw, at 14.3% according to the 2010 Census. The median household income for the city in 2014 dollars was \$29,049, with roughly 35.5% of the population living in poverty.

Sample

A multi-mode, address-based sampling approach was utilized in conducting the Saginaw Community Survey. The Saginaw River bisects the city, creating a natural barrier between a predominately white and more affluent population on the west side of the river, and a majority black and relatively disadvantaged population on the east side of the river. The goal was to obtain 900 completed surveys, with 450 from the east and west sides of the cities, respectively. We slightly oversampled the east side of the city given prior research indicating that survey completion rates are likely to be lower in economically disadvantaged neighborhoods. A total of 2,525 letters were distributed to eastside households yielding 373 completed surveys. A total of 2,000 letters were sent to west side households yielding 456 completed surveys. This suggested

the need to over-sample in more disadvantaged communities in future surveys. Overall, our minimum response rate (American Association for Public Opinion Research, 2016) was 22%.

The survey sample, consisting of 829 completed surveys, proved to be quite representative of the population of Saginaw. As displayed in Table C1 of Appendix C, the unweighted sample was quite representative across a variety of demographic characteristics. The sample over-represented white respondents and under-represented African-Americans, under-represented non-high school graduates, young people, and males. These differences were not dramatic and were consistent with findings from similar surveys. To correct for these issues, weighting procedures were used to adjust for both individual and household characteristics. The weights were applied as appropriate in presenting the findings.

As will be discussed in greater detail in the subsequent discussion of the embedded methodology experiment, respondents were offered the opportunity to complete the survey by pen and pencil, over the phone, or through a web-based version of the survey. Saginaw residents displayed a strong preference for the paper and pencil, mail survey. Indeed, 84% of the responses were to the paper and pencil survey, with 12% completing the web-based survey and 4% completing the survey over the phone.

Survey Instrument

The instrument used in the study was a modified version of the American Crime Survey Incident Level Questionnaire. The decision to use this survey followed a discussion with BJS officials, who suggested that this survey document would be an efficient and effective way to gather data given it could be compared with other cities and local municipalities that used the instrument. We modified the survey slightly to include scales pertinent to local level concerns regarding issues such as procedural justice, police-community relations, and fear and perceived

risk of victimization given high rates of crime and a police force that faced significant declines in resources and manpower. The survey instrument is included as an appendix (B) to this report.

Key Findings

Victimization Patterns – Household

The initial focus was on victimization at the household level. This included households experiencing violent crime victimization, a theft or burglary, or reporting a different type of victimization (e.g., identity theft; credit card fraud; vandalism). We focus on differences comparing the more affluent west side of the city and the more economically disadvantaged east side.

As Table 3³ indicates, there were no differences in terms of reported household victimization for violent crimes among east side and west side residents. Approximately 8% of east side and west side households reported violent crime victimization in the preceding year. In contrast, there were differences in terms of property and other types of victimization. Specifically, 22% of west side households reported being victimized by a household theft or burglary compared to 15% of east side households. Similarly, 15% of west side households compared to 9% of east side households reported an “other” type of victimization.

Households that involve renting as opposed to home ownership were significantly more likely to experience violent crime victimization. As Table 4 indicates, 13% of rental households experienced a violent crime victimization compared to 5% of owner households. There were no statistically significant differences for home ownership and property or other types of victimization.

³ Tables 3-5 reflect household sampling weights applied to the data. See Appendix C.

Table 3 Household Victimization by Area of City

Household Violent Victimization Prevalence				
	<u>None</u>		<u>At Least 1</u>	
Area	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
West	460	92.2	39	7.8
East	300	91.5	28	8.5
Total	760	91.9	67	8.1
Chi ² = .14 (df = 1); p > .05				
Household Theft/Burglary Prevalence				
	<u>None</u>		<u>At Least 1</u>	
Area	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
West	389	78.0	110	22.0
East	279	85.1	49	14.9
Total	668	80.8	159	19.2
Chi ² = 6.43 (df = 1); p < .05				
Household Other Victimization Prevalence				
	<u>None</u>		<u>At Least 1</u>	
Area	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
West	426	85.4	73	14.6
East	299	91.2	29	8.8
Total	725	87.7	102.0	12.3
Chi ² = 6.13 (df = 1); p < .05				

The additional household characteristic examined was the race of the head of household. As Table 5 displays, there were significant differences across all victimization types when comparing households headed by black, white, other, or mixed individuals. Several cautionary points are worth noting, however. There were approximately 4% of households for which there was no response for the race of the head of household (labeled as missing). More importantly, households where the head of household was

Table 4 Household Victimization by Home Ownership

Household Violent Victimization Prevalence				
	<u>None</u>		<u>At Least 1</u>	
Status	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Own	476	95.0	25	5.0
Rent	258	86.9	39	13.1
Other	22	91.7	2	8.3
Chi ² = 16.74 (df = 2); p < .05				
Household Theft/Burglary Prevalence				
	<u>None</u>		<u>At Least 1</u>	
Status	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Own	413	82.4	88	17.6
Rent	232	78.1	65	21.9
Other	20	80.0	5	20.0
Chi ² = 2.26 (df = 2); p > .05				
Household Other Victimization Prevalence				
	<u>None</u>		<u>At Least 1</u>	
Status	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Own	439	87.6	62	12.4
Rent	263	88.9	33	11.1
Other	20	80.0	5.0	20
Chi ² = 1.74 (df = 2); p > .05				

Table 5 Household Victimization by Race of Head of Household

Household Violent Victimization Prevalence				
	<u>None</u>		<u>At Least 1</u>	
HH Race	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Missing	32	86.5	5	13.5
White	409	92.3	34	7.7
Black	287	93.8	19	6.2
Other	4	66.7	2	33.3
Mixed	28	80.0	7	20.0
Chi ² = 14.82 (df = 4); p < .05				
Household Theft/Burglary Prevalence				
	<u>None</u>		<u>At Least 1</u>	
HH Race	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Missing	32	86.5	5	13.5
White	349	78.8	94	21.2
Black	260	85.0	46	15.0
Other	5	83.3	1	16.7
Mixed	23	65.7	12	34.3
Chi ² = 10.56 (df = 4); p < .05				
Household Other Victimization Prevalence				
	<u>None</u>		<u>At Least 1</u>	
HH Race	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Missing	34	89.5	4	10.5
White	383	86.7	59	13.3
Black	279	91.2	27	8.8
Other	5	83.3	1	16.7
Mixed	24	68.6	11	31.4
Chi ² = 15.93 (df = 4); p < .05				

described as “mixed,” reported consistently higher levels of violent, property and other types of household victimization. When comparing the magnitude of the difference in the prevalence of victimization by type across the two predominate races found in the city of Saginaw, white and black, there was only a small difference in the probability of violent victimization (white = 7.7%; black = 6.2), while households headed by white respondents experienced more theft/burglary and “other” types of victimization than black headed households.

Victimization – Individual Patterns

This initial set of analyzes on the individual victimization experiences in Saginaw focuses on differences by gender and race. As Table 6 indicates⁴, males were more likely to have been victimized for assaults than were females. Specifically, over 13% of males reported having been attacked, mugged, or threatened with violence compared to just under 9% of females. Males (10.7%) were also more likely to have experienced an attempted attack in contrast to females (6.7%). Women were more likely to experience forced sexual activity or attempted forced sexual activity, although the absolute numbers of reported forced sexual activity or attempted forced sexual activity were quite rare and thus the statistical test for gender differences was not considered reliable.

As indicated in Table 7, whites were slightly more likely to report being victimized by assault, mugging, or threats of violence; of attempted attacks, and forced or attempted forced sexual activity than black respondents. Overall, however, individuals reporting another race were significantly more likely to be victimized than both white and black respondents, although they represented a small fraction of the overall sample.

⁴ Tables 6 and 7 reflect individual sampling weights. See Appendix C.

Table 6 Individual Victimization by Gender

	Attacked, Mugged, or Threatened with Violence			
	<u>None</u>		<u>At Least 1</u>	
<u>Sex</u>	<u>N</u>	<u>%</u>	<u>n</u>	<u>%</u>
Male	566	86.5	88	13.5
Female	711	91.4	67	8.6
Chi ² = 8.64 (df = 1); p < .05				
	Attempted Attack			
	<u>None</u>		<u>At Least 1</u>	
<u>Sex</u>	<u>N</u>	<u>%</u>	<u>n</u>	<u>%</u>
Male	583	89.3	70	10.7
Female	724	93.3	52	6.7
Chi ² = 7.33 (df = 1); p < .05				
	Forced Sexual Activity			
	<u>None</u>		<u>At Least 1</u>	
<u>Sex</u>	<u>N</u>	<u>%</u>	<u>n</u>	<u>%</u>
Male	650	99.5	3	0.5
Female	770	99.1	7	0.9
Chi ² = 1.00 (df = 1); p > .05				
	Attempted to Force Sexual Activity			
	<u>None</u>		<u>At Least 1</u>	
<u>Sex</u>	<u>N</u>	<u>%</u>	<u>n</u>	<u>%</u>
Male	650	99.8	1	0.2
Female	770	99.2	6	0.8
Chi ² = 2.78 (df = 1); p > .05				

Table 7 Individual Victimization by Race

	Attacked, Mugged, or Threatened with Violence			
	<u>None</u>		<u>At Least 1</u>	
Race	n	%	n	%
White	627	90.5	66	9.5
Black	536	92.1	46	7.9
Other	63	68.5	29	31.5
Chi ² = 48.85 (df = 2); p < .05				
Mode				
	Attempted Attack			
	<u>None</u>		<u>At Least 1</u>	
Race	n	%	n	%
White	639	92.2	54	7.8
Black	550	94.7	31	5.3
Other	67	73.6	24	26.4
Chi ² = 47.46 (df = 2); p < .05				
Forced Sexual Activity				
	<u>None</u>		<u>At Least 1</u>	
Race	n	%	n	%
White	689	99.6	3	0.4
Black	582	100.0	0	0.0
Other	89	97.8	2	2.2
Chi ² = 10.59 (df = 2); p < .05				

The results are contrary to most research on the relationship between race and victimization where typically African-Americans report higher levels of victimization. These results will be explored in greater detail in future analyses of the Saginaw Community Survey.

To summarize the victimization patterns, there were both findings consistent with prior research and some that were unexpected. The findings that rental households and males were more likely to experience some forms of victimization were consistent with prior research. The finding of no difference between east side and west side households for violent victimization was unexpected given prior research showing that neighborhoods characterized by greater

socioeconomic disadvantage typically experience higher levels of violence. The contrary finding of households in the more affluent parts of Saginaw having higher levels of property offenses could reflect greater opportunities for people committing thefts and break-ins. As noted, these patterns will continue to be explored in future analyses of the Saginaw Community Survey.

Embedded Design Experiment

Saginaw, MI is characterized by extreme deprivation in large sections of the city, a police force that witnessed serious declines in manpower over the past decade, a declining city population, and high crime and violence rates. The Saginaw River bisects the city, creating a natural barrier between a predominately white and more affluent population on the west side of the river, and a majority black and relatively disadvantaged population on the east side of the river. This geographic division allowed us to use the address-based survey to examine for differences in survey response based on factors that in prior research have been shown to relate to neighborhood, household, and individual levels of affluence as well as race.

Our initial experiment set out to determine whether these populations would differ in how and under what conditions they would respond to a victimization survey. In particular, we set up three distinct modalities for respondents to complete the survey, including a toll free phone line they could call to have the survey read to them and have their responses recorded, an online survey that was compatible across computers, tablets, and smart-phones, as well as a paper and pencil survey with a self-addressed stamped envelope. We also differentiated the modalities offered to participants across these areas, including a mail and phone only option, an option to complete the mail, phone, or web option, and finally an option to complete the web or mail survey format and receive an immediate reward for participation.

Results – Response Mode Experiment

The results of our experiment in Saginaw, Michigan suggest that victimization surveys targeting such high crime cities will need to oversample predominately minority and impoverished areas of the city. Our goal in Saginaw was to garner participation by 450 respondents on each side of the river, and thus we sent out pre-notification letters to 2,000 households in the more affluent section of the city and 2,525 to the more disadvantaged zip codes. In the end, we received survey responses from 456 households in the more advantaged areas of Saginaw, and 373 completed surveys from households in the disadvantaged section of town. These baseline results suggest we would need to have sent out pre-notification letters to 3,046 households (i.e., $450/.1477$) on the east side of the Saginaw River, and 1,974 households (i.e., $450/.228$) on the west side—a difference of 35%—in order to reach the completed survey targets.

With respect to our experiment on preferred survey modalities among potential respondents, it was clear that residents on both sides of the river in Saginaw preferred to complete and return the paper version of the questionnaire. Overall, 83.7% of participants utilized the paper survey for their responses; including 82.2% of respondents on the west side of the river, and 85.5% of those living on the east side (see Table 8). There was a slightly, though not significantly, higher proportion of residents on the west side of the river that utilized the web option for responding (i.e., 13.2%) than residents on the east side of the city (i.e., 10.5%).

Interestingly, when respondents were presented with a simple statement highlighting that they could receive their \$5 immediately if they chose the web option to take the survey, versus those that were simply told that they could receive \$5 if they responded by paper or web survey, the rate of response through the web-based platform doubled in both the east and west portion of

the city. On the east side of the city, when respondents were not nudged to the web by the statement concerning the immediacy of the reward for participation 83.6% provided the paper survey and 10.2% chose the web option. When the nudge was present, 75.4% chose the paper option and 20.6% chose the web platform. These results were nearly identical for the west side, where the percent of respondents was 83.9% and 12.9%, respectively, when no mention of the immediacy of the reward was present, and 67.3% and 27.2% when the statement appear in the pre-notification letter.

Table 8: Unweighted Survey Responses by Questionnaire Modality and Area						
<i>Unweighted</i>						
Mode	Area					
	West		East		Total	
	n	%	n	%	n	%
Web	60	13.2	39	10.5	99	11.9
Paper	375	82.2	319	85.5	694	83.7
Phone	21	4.6	15	4.0	36	4.3
Chi ² = 1.68 (df = 2); p > .05						

The importance of these results is that community surveys seeking to tap into victimization, neighborhood perceptions, and attitudes toward the police can be conducted much more cost efficiently through web-based administration than paper and pencil mail surveys. Additional methodological experimentation will be included in the Detroit and Battle Creek surveys in order to test whether different approaches to engaging potential survey respondents can increase cost-efficiency while maintaining or increasing representativeness.

Table 9: Unweighted and Weighted Survey Responses by Area and Experimental Condition								
<i>Unweighted</i>								
Full Sample								
Mode	Experiment Condition							
	Mail Only		Mail-Web		Mail Web-Nudge		Total	
	n	%	n	%	n	%	n	%
Web	0	0.0	33	11.7	66	24.3	99	12.0
Paper	263	96.3	236	83.7	193	71.0	692	83.7
Phone	10	3.7	13	4.6	13	4.8	36	4.4
Chi ² = 77.98 (df = 4); p < .05								
West Only								
Mode	Experiment Condition							
	Mail Only		Mail-Web		Mail Web-Nudge		Total	
	n	%	n	%	n	%	n	%
Web	0	0.0	20	12.9	40	27.2	60	13.2
Paper	146	94.8	130	83.9	99	67.3	375	82.2
Phone	8	5.2	5	3.2	8	5.4	21	4.6
Chi ² = 50.29 (df = 4); p < .05								
East Only								
Mode	Experiment Condition							
	Mail Only		Mail-Web		Mail Web-Nudge		Total	
	n	%	n	%	n	%	n	%
Web	0	0.0	13	10.2	26	20.6	39	10.5
Paper	117	98.3	107	83.6	95	75.4	319	85.5
Phone	2	1.7	8	6.3	5	4.0	15	4.0
Chi ² = 31.99 (df = 4); p < .05								
note: percents represent within experimental condition totals.								

References

American Association for Public Opinion Research (2016). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. (retrieved 7/6/2016: from <https://www.esomar.org/knowledge-and-standards/research-resources/aapor-standard-definitions.php>)

United States Census Bureau (2016). Quick Facts: Saginaw City, Michigan. *Quick Facts*. Retrieved June 15, 2016, 2016, from <http://www.census.gov/quickfacts/table/PST045215/2670520,26145>

Appendix A: Pre-notification Letters Sent to Eligible Respondents

Condition #1: No Web-based Survey Offering

Dear Resident,

We would like to ask for your help with a research study that is being conducted by faculty at Michigan State University called **The Saginaw Community Study**. The purpose of this research is to gain a better understanding of how Saginaw residents feel about the conditions in their neighborhood, their experience with crime victimization, and their perceptions of the police.

In about a week, your household will receive a copy of the survey along with information that tells more about the project. We would very much appreciate an adult in your household completing the survey.

The survey should take about **15-20 minutes** of your time to complete. It may take more or less time depending on your answers and the level of detail you wish to provide.

If you would prefer to complete the survey over the telephone, we invite you to call the MSU Office for Survey Research at 1-800-XXX-XXXX during the hours of XX-XX.

We hope that you will consider participating in this important research project. As a way of thanking you for returning your completed questionnaire, we will send you \$5.

Should you have any questions about this study, how the results will be used, or need clarification on a question, please contact Debra Ruzs, Project Director, by phone at (517) 353-XXXX, email at ruszdebr@msu.edu, or regular mail at 1407 South Harrison Road, Suite 343, Michigan State University, East Lansing, MI 48823.

Thank you and we look forward to your participation and input.

Sincerely,

Edmund McGarrell
Professor
School of Criminal Justice
Michigan State University

Chris Melde
Associate Professor
School of Criminal Justice
Michigan State University



Conducted on behalf of

**The School of Criminal Justice
Michigan State University**

by the

Office for Survey Research
Institute for Public Policy and Social Research
Michigan State University

Should you have any questions about this study or how the results will be used or you need clarification on any of the questions, please contact Debra Ruz, Project Manager, by phone at (517) 353-1766 or by email at ruszdebr@msu.edu.

By completing and returning this survey, you indicate that you are at least 18 years of age and your voluntary agreement to participate in this research and have your responses included in the dataset.

Saginaw Community Survey

Start Here

- ▶ Please use a black or blue pen to complete this form.
- ▶ Mark to indicate your answer. If you want to change your answer, darken the box and mark the correct answer.

Community Satisfaction

1. In general, how do you rate your neighborhood as a place to live? Would you say:

- Excellent
- Good
- Fair
- Poor

2. People that live in my neighborhood are generally friendly.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

3. I am happy I live in this neighborhood.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

4. People around here take care of each other.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

5. People in this neighborhood can be trusted.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

6. People around here are willing to help their neighbors.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

7. This is a close-knit neighborhood.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

Perceived Risk of Victimization

8. How likely do you think it would be for someone to break into your house while you are home?

- Not at all Likely
- Somewhat Likely
- Likely
- Very Likely

9. How likely do you think it is that someone who has a gun or knife would try to rob you in your neighborhood?

- Not at all Likely
- Somewhat Likely
- Likely
- Very Likely

10. How likely do you think it is that someone will assault you in your neighborhood?

- Not at all Likely
- Somewhat Likely
- Likely
- Very Likely

Procedural Justice

11. The police in my neighborhood treat people with dignity and respect?

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

12. The police in my neighborhood take time to listen to people?

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

13. The police in my neighborhood explain their decisions to people they deal with?

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

Fear of Victimization

14. How afraid are you of someone breaking into your house while you are home?

- Not at all Afraid
- Somewhat Afraid
- Afraid
- Very Afraid

15. How afraid are you of someone robbing you with a gun or knife in your neighborhood?

- Not at all Afraid
- Somewhat Afraid
- Afraid
- Very Afraid

16. How afraid are you of someone assaulting you in your neighborhood?

- Not at all Afraid
- Somewhat Afraid
- Afraid
- Very Afraid

Police Legitimacy

17. I have a great deal of respect for the police.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

18. I feel proud of the police.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

19. Overall, the police are honest.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

20. The police enforce laws consistently when dealing with all people in my neighborhood.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

Collective Efficacy

21. People in my neighborhood are likely to call the police to report an accident.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

22. People in my neighborhood are likely to call the police to report a crime.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

23. People in my neighborhood are likely to provide information to police to help find a suspected criminal.

- Strongly Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Strongly Disagree

Experience of Fear

24. In the last year, have you ever felt fearful because you thought someone was breaking into your house while you were there?

- Yes
- No

25. In the last year, have you ever felt fearful because you thought someone was about to rob you with a gun or knife in your neighborhood?

- Yes
- No

26. In the last year, have you ever felt fearful because you thought someone was about to assault you in your neighborhood?

- Yes
- No

Your Household

► Continue answering about the adults in this household on the next page.

27. Do you own or rent the place where you're living?

- Own
 Rent
 Other (*describe below*)

28. How long have you lived at this address?

- 1 year or less
 Less than 5 years, more than 1 year
 5 years or more

29. Do you have a landline phone at home?

- Yes
 No

30. Do you have a cell phone?

- Yes
 No → *GO TO QUESTION 32*

31. Do you have a government-subsidized cell phone, a cell phone that you purchased that is a pay as you go phone, or one that you have a contract with a wireless phone company and you make monthly payments?

- Government-subsidized cell phone
 Pay as you go cell phone
 Contract with a wireless phone company

32. Do you have access to the internet at home?

- Yes
 No

33. Including you, how many people age 18 and older live in this household? Be sure to include yourself, all family members, roommates, and boarders.

Number of people age 18 and older

34. How many children ages 0-17 live in this household? Please include small children and infants.

Number of children ages 0-17

YOU (Adult 1)

- ▶ Starting with you complete each column for each person age 18 or older living in this household.

You will be Adult 1.

The information you provide will help you with some later questions.

35. What is your first name? For later questions this is Adult number 1.

36. What is your age?

37. Are you male or female?

- Male
 Female

38. Are you of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

39. What is your race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

40. What is your highest grade, or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- ▶ *If there are more adults living in your household, continue answering the next column for the second adult. If you are the only adult, continue with Section A on page 7.*

Adult 2

- ▶ *These questions ask about the second adult living in this household. This will be Adult 2.*

41. What is Adult 2's first name? For later questions this is Adult number 2.

42. What is Adult 2's age?

43. Is Adult 2 male or female?

- Male
 Female

44. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

45. What is Adult 2's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

46. What is Adult 2's highest grade, or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- ▶ *If there are more adults living in your household, continue answering the next page for the third adult. If there are no other adults, continue with Section A on page 7.*

Adult 3

- *These questions ask about the third adult living in this household. This will be Adult 3.*

47. What is Adult 3's first name? For later questions this is Adult number 3.

48. What is Adult 3's age?

49. Is Adult 3 male or female?

- Male
 Female

50. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

51. What is Adult 3's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

52. What is Adult 3's highest grade, or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- *If there are more adults living in your household, continue answering the next column for the fourth adult. If there are no other adults, continue with Section A on the next page.*

Adult 4

- *These questions ask about the fourth adult living in this household. This will be Adult 4.*

53. What is Adult 4's first name? For later questions this is Adult number 4.

54. What is Adult 4's age?

55. Is Adult 4 male or female?

- Male
 Female

56. Is Adult 4 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

57. What is Adult 4's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

58. What is Adult 4's highest grade, or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- *Continue with Section A on the next page.*

Section A: Violent Crimes

- ▶ A **'violent crime'** is when another person who is physically present with you does something unlawful to you or another household member.
 - Violent crimes may have happened at home, on the street, at work or school, or anywhere else.
 - Include crimes where the offender was someone you know, a stranger, or even a family member.

59. In the past 12 months, were you or anyone else you listed attacked, mugged, or threatened with violence?

- Yes
 No

60. In the past 12 months, did anyone ATTEMPT to attack you or anyone else you listed?

- Yes
 No

61. In the past 12 months, did anyone force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

- Yes
 No

62. In the past 12 months, did anyone ATTEMPT to force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

- Yes
 No

- ▶ If you marked **'YES'** for any question above (59, 60, 61, or 62), continue with Question 63 on the next page. Otherwise skip to Section B on page 13.

Violent Crimes: Most Recent Incident

► You reported that you or someone else you listed experienced a violent crime in the past 12 months. Please start with the most recent incident.

If there were none, please to go Section B on page 13.

63. In what month and year did the most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

month			year				

64. Who did this happen to?

Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

	Adult #	First Name
Refer to Adults listed on pages 5 and 6.		

65. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

66. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

67. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

68. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO QUESTION 70
- By sight only → GO TO QUESTION 70
- Victim did not know the offender(s) → GO TO QUESTION 70

69. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or step parent
- Own child or step-child
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

70. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

71. Did the offender attack the victim?

- Yes → GO TO QUESTION 74 on the next page
- No

72. Did the offender ATTEMPT to attack the victim?

- Yes → GO TO QUESTION 74
- No

73. Did the offender threaten the victim with harm in any way?

- Yes
- No

74. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
- No → GO TO QUESTION 78

75. Was the victim forced or coerced to have sexual intercourse?

- Yes → GO TO QUESTION 78
- No

76. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes → GO TO QUESTION 78
- No

77. Was the victim sexually assaulted in some other way?

- Yes
- No

78. Did the victim suffer any injuries as a result of this incident?

- Yes
- No → GO TO QUESTION 80

79. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
- No

80. Did anyone report this crime to the police?

- Yes
- No → GO TO QUESTION 83 in the next column

81. Did the police come once the incident was reported to them?

- Yes
- No → GO TO QUESTION 83 in the next column

82. What did the police do while they were there?

Mark all that apply.

- Took a report
- Searched/looked around
- Took evidence (e.g. fingerprints)
- Questioned witnesses or suspects
- Promised to investigate
- Arrested someone
- Something else
- I don't know what the police did

83. Was anything stolen or taken during this incident?

- Yes
- No → GO TO QUESTION 85

84. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- A motor vehicle that the victim was in or near
- Something else

85. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes → Continue with the next most recent violent crime
- No → GO TO Section B, page 13

Violent Crimes: Next Most Recent Incident

► *These questions are about the next most recent violent crime that happened to you or someone else you listed in the past 12 months.*

If there were no other violent crimes, please to go Section B on page 13.

86. In what month and year did the next most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

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month

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year

87. Who did this happen to? *Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person's first name.*

Later questions will refer to this person or these persons as the "victim."

	Adult #	First Name
Refer to Adults listed on pages 5 and 6.		

88. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

89. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

90. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

91. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO QUESTION 93
- By sight only → GO TO QUESTION 93
- Victim did not know the offender(s) → GO TO QUESTION 93

92. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or step parent
- Own child or step-child
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

93. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

94. Did the offender attack the victim?

- Yes → GO TO QUESTION 97 on the next page
- No

95. Did the offender ATTEMPT to attack the victim?

- Yes → GO TO QUESTION 97 on the next page
- No

96. Did the offender threaten the victim with harm in any way?

- Yes
- No

97. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
- No → *GO TO QUESTION 101*

98. Was the victim forced or coerced to have sexual intercourse?

- Yes → *GO TO QUESTION 101*
- No

99. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes → *GO TO QUESTION 101*
- No

100. Was the victim sexually assaulted in some other way?

- Yes
- No

101. Did the victim suffer any injuries as a result of this incident?

- Yes
- No → *GO TO QUESTION 103*

102. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
- No

103. Did anyone report this crime to the police?

- Yes
- No → *GO TO QUESTION 106 in the next column*

104. Did the police come once the incident was reported to them?

- Yes
- No → *GO TO QUESTION 106 in the next column*

105. What did the police do while they were there?

Mark all that apply.

- Took a report
- Searched/looked around
- Took evidence (e.g. fingerprints)
- Questioned witnesses or suspects
- Promised to investigate
- Arrested someone
- Something else
- I don't know what the police did

106. Was anything stolen or taken during this incident?

- Yes
- No → *GO TO QUESTION 108*

107. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- A motor vehicle that the victim was in or near
- Something else

108. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes → *Continue with the next most recent violent crime*
- No → *GO TO Section B, page 13*

Violent Crimes: Third Most Recent Incident

109. Other than the incidents that you have already reported, in what month and year did the third most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

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month

year

110. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person's first name.

	Adult #	First Name
Refer to Adults listed on pages 5 and 6.		

111. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

112. Did anyone report this crime to the police?

- Yes
 No

113. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes → Continue with the next most recent violent crime in the next column
 No → GO TO Section B on the next page.

Violent Crimes: Fourth Most Recent Incident

114. Other than the incidents that you have already reported, in what month and year did the fourth most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

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month

year

115. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person's first name.

	Adult #	First Name
Refer to Adults listed on pages 5 and 6.		

116. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

117. Did anyone report this crime to the police?

- Yes
 No

118. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes
 No → GO TO Section B on the next page.

119. You've already described four violent crimes. Other than those incidents, how many more violent crimes happened to you or someone else you listed in the past 12 months?

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Additional violent crime incidents

Section B: Thefts and Break-ins

- ▶ *This section will ask about times in the past 12 months where someone may have stolen something, tried to steal something, or broken into this home.*
- ▶ *Do not include any incidents you reported in the previous section as a violent crime.*

120. In the past 12 months, did you or others in this household have anything stolen?

It could have been something you wear or carry, like a wallet or purse, watch, or jewelry.

It could have been electronic equipment, like a phone, tablet, or MP3 player.

- Yes
 No

121. In the past 12 months, was a car or other motor vehicle stolen or used without permission?

- Yes
 No

122. In the past 12 months, was anything stolen from a car?

It could have been hubcaps or other parts, a radio or stereo, gasoline, personal items, or anything else.

- Yes
 No

123. In the past 12 months, was anything stolen from this house or apartment, from the yard, or from any other building that is part of your home, like a garage or shed?

Think only of things that belong to you or others in this household.

- Yes
 No

124. In the past 12 months, so far as you know, did anyone ATTEMPT to steal something that belonged to you or others in this household?

- Yes
 No

125. In the past 12 months, did anyone break into this home, or attempt to break in, whether or not anything was stolen?

- Yes
 No

126. In the past 12 months, did you or others in this household have anything stolen while at work, or while away from your home?

- Yes
 No

- ▶ *If you marked 'YES' for any question above (120 through 126), continue with the next page. Otherwise skip to Section C on page 18.*

Thefts and Break-ins: Most Recent Incident

- ▶ *These next questions are about a theft or break-in that happened to you or others in this household in the past 12 months. If there was more than one, please start with the most recent.*
- ▶ *If there were no thefts or break-ins, please go to Section C on page 18.*

127. In what month and year did the most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

month			year			

128. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

129. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- ▶ *If the incident occurred in this home continue with question 130, otherwise go to question 133 in the next column.*

130. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO QUESTION 132 in the next column
- No

131. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO QUESTION 133

132. Was there any evidence, such as a broken lock or broken window that the offender got in by force or tried to get in by force?

- Yes
- No

133. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO QUESTION 135
- No

134. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

135. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO QUESTION 137
- No

136. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

137. What was the total value of the property that was taken?

\$

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 .00

138. Did you or anyone else report this incident to the police?

- Yes
- No

139. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO QUESTION 140 on the next page
- No → GO TO Section C on page 18

Thefts and Break-ins: Next Most Recent Incident

- ▶ *These next questions are about the next most recent theft or break-in in the past 12 months.*
- ▶ *If there were no thefts or break-ins, please go to Section C on page 18.*

140. In what month and year did the next most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

--	--

month

--	--	--	--

year

141. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

142. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- ▶ *If the incident occurred in this home continue with question 143, otherwise go to question 146 in the next column.*

143. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO QUESTION 145 in the next column
- No

144. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO QUESTION 146

145. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

146. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO QUESTION 148
- No

147. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

148. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO QUESTION 150
- No

149. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

150. What was the total value of the property that was taken?

\$

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151. Did you or anyone else report this incident to the police?

- Yes
- No

152. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO QUESTION 153 on the next page
- No → GO TO Section C on page 18

Thefts and Break-ins: Third Most Recent Incident

- ▶ *These next questions are about the third most recent theft or break-in in the past 12 months.*
- ▶ *If there were no thefts or break-ins, please go to Section C on page 18.*

153. In what month and year did the third most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

month			year			

154. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

155. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- ▶ *If the incident occurred in this home continue with question 156, otherwise go to question 159 in the next column.*

156. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO QUESTION 158 in the next column
- No

157. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO QUESTION 159

158. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

159. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO QUESTION 161
- No

160. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

161. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO QUESTION 163
- No

162. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

163. What was the total value of the property that was taken?

\$

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164. Did you or anyone else report this incident to the police?

- Yes
- No

165. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO QUESTION 166 on the next page
- No → GO TO Section C on page 18

Thefts and Break-ins: Fourth Most Recent Incident

- ▶ *These next questions are about the fourth most recent theft or break-in in the past 12 months.*
- ▶ *If there were no thefts or break-ins, please go to Section C on page 18.*

166. In what month and year did the fourth most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

month			year			

167. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

168. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- ▶ *If the incident occurred in this home continue with question 169, otherwise go to question 172 in the next column.*

169. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO 171 in the next column
- No

170. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO QUESTION 172

171. Was there any evidence, such as a broken lock or broken window, which the offender(s) got in by force or tried to get in by force?

- Yes
- No

172. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO QUESTION 174
- No

173. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

174. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO QUESTION 176
- No

175. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

176. What was the total value of the property that was taken?

\$

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 .00

177. Did you or anyone else report this incident to the police?

- Yes
- No

178. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO QUESTION 179
- No → GO TO Section C on the next page

179. You've already described four thefts or break-ins. Other than those incidents, how many more thefts or break-ins happened to you or others in this household in the past 12 months?

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 Additional thefts or break-ins

Section C: Other Kinds of Crime

- ▶ *These last few questions will ask you about other kinds of crimes that you or someone else you listed may have experienced, such as, identify theft or vandalism.*
- ▶ *Do not include any incidents you may have reported in the previous sections.*

180. In the last 12 months has this home or the property of anyone in this household been vandalized?

Think about any vandalism done to your home, or to any motor vehicles owned by members of this household in the last 12 months.

- Yes
 No → GO TO QUESTION 182

181. How many times in the last 12 months has this happened?

Number of vandalism incidents

182. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use any existing credit cards without permission?

- Yes
 No → GO TO QUESTION 184

183. How many times in the last 12 months has this happened?

Count multiple uses of the same card number before discovery as one time.

Number of times

184. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use other accounts without permission?

Include accounts such as cell phones, bank accounts, debit cards, or check cards.

- Yes
 No → GO TO QUESTION 186 in the next column

185. How many times in the last 12 months has this happened?

Count multiple uses of an account before discovery as one time.

Number of times

186. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use their personal information to obtain new credit cards or loans, or for other fraudulent purposes?

- Yes
 No → GO TO QUESTION 188

187. How many times in the last 12 months has this happened?

Count multiple times before discovery as one time.

Number of times

188. Which category best fits the approximate total income of all persons in your household over the past 12 months?

Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

- \$0 to \$10,000
 \$10,001 to \$20,000
 20,001 to \$30,000
 \$30,001 to \$40,000
 \$40,001 to \$50,000
 \$50,001 to \$60,000
 \$60,001 to \$75,000
 \$75,001 to \$100,000
 \$100,001 to \$150,000
 \$150,001 or more

▶ *Please continue onto the back page.*

42. What is Adult 2's age?

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43. Is Adult 2 male or female?

- Male
- Female

44. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

45. What is Adult 2's race?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

46. What is Adult 2's highest grade, or level of school completed?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

▶ *If there are more adults living in your household, continue answering the next page for the third adult. If there are no other adults, continue with Section A on page 7.*

▶ *These questions ask about the third adult living in this household. This will be Adult 3.*

47. What is Adult 3's first name? For later questions this is Adult number 3.

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48. What is Adult 3's age?

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49. Is Adult 3 male or female?

- Male
- Female

50. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

51. What is Adult 3's race?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

52. What is Adult 3's highest grade, or level of school completed?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

▶ *If there are more adults living in your household, continue answering the next column for the fourth adult. If there are no other adults, continue with Section A on the next page.*

▶ *These questions ask about the fourth adult living in this household. This will be Adult 4.*

53. What is Adult 4's first name? For later questions this is Adult number 4.

54. What is Adult 4's age?

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55. Is Adult 4 male or female?

- Male
- Female

56. Is Adult 4 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

57. What is Adult 4's race?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

58. What is Adult 4's highest grade, or level of school completed?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

▶ *Continue with Section A on the next page.*

▶ A **'violent crime'** is when another person who is physically present with you does something unlawful to you or another household member.

- *Violent crimes may have happened at home, on the street, at work or school, or anywhere else.*
- *Include crimes where the offender was someone you know, a stranger, or even a family member.*

59. In the past 12 months, were you or anyone else you listed attacked, mugged, or threatened with violence?

- Yes
- No

60. In the past 12 months, did anyone ATTEMPT to attack you or anyone else you listed?

- Yes
- No

61. In the past 12 months, did anyone force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

≤ Yes

≤ No

62. In the past 12 months, did anyone ATTEMPT to force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

≤ Yes

≤ No

▶ *If you marked 'YES' for any question above (59, 60, 61, or 62), continue with Question 63 on the next page. Otherwise skip to Section B on page 13.*

You reported t

- ▶ You reported that you or someone else you listed experienced a violent crime in the past 12 months. Please start with the most recent incident.

If there were none, please to go Section B on page 13.

63. In what month and year did the most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

month		year			

64. Who did this happen to?

Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

	Adult #	First Name
Refer to Adults listed	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>

65. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

66. Where did it happen?

- ≤ In the victim's home or yard
- ≤ In the victim's neighborhood, but not their home or yard
- ≤ Somewhere else in this city
- ≤ Outside of this city

67. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- ≤ Yes
- ≤ No

68. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- ⊖ Well known
- ⊖ A casual acquaintance → *GO TO QUESTION 70*
- ⊖ By sight only → *GO TO QUESTION 70*
- ⊖ Victim did not know the offender(s) → *GO TO QUESTION 70*

69. How did the victim know that offender?

- ⊖ Spouse at time of incident
- ⊖ Ex-spouse at time of incident
- ⊖ Parent or step parent
- ⊖ Own child or step-child
- ⊖ Brother or sister
- ⊖ Boyfriend or girlfriend
- ⊖ Friend
- ⊖ Some other relationship

70. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- ⊖ Yes
- ⊖ No
- ⊖ Don't know

71. Did the offender attack the victim?

- ⊖ Yes → *GO TO QUESTION 74 on the next page*
- ⊖ No

72. Did the offender ATTEMPT to attack the victim?

- Yes → *GO TO QUESTION 74*
- No

73. Did the offender threaten the victim with harm in any way?

- Yes
- No

74. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
- No → *GO TO QUESTION 78*

75. Was the victim forced or coerced to have sexual intercourse?

- Yes → *GO TO QUESTION 78*
- No

76. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes → *GO TO QUESTION 78*
- No

77. Was the victim sexually assaulted in some other way?

- Yes
- No

78. Did the victim suffer any injuries as a result of this incident?

- Yes
- No → *GO TO QUESTION 80*

79. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
- No

80. Did anyone report this crime to the police?

- Yes
- No → *GO TO QUESTION 83 in the next column*

81. Did the police come once the incident was reported to them?

- Yes
- No → *GO TO QUESTION 83 in the next column*

82. What did the police do while they were there?

Mark all that apply.

- Took a report
- Searched/looked around
- Took evidence (e.g. fingerprints)
- Questioned witnesses or suspects
- Promised to investigate
- Arrested someone
- Something else
- I don't know what the police did

83. Was anything stolen or taken during this incident?

- Yes
- No → *GO TO QUESTION 85*

84. What was stolen or taken?

Mark all that apply.

- ⊖ Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- ⊖ Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- ⊖ A motor vehicle that the victim was in or near
- ⊖ Something else

85. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- ⊖ Yes → *Continue with the next most recent violent crime*
- ⊖ No → *GO TO Section B, page 13*

Violent Crimes: Next Most Recent Incident

These questions are about the next most recent violent crime that happened to you or someone else you listed in the past 12 months.

If there were no other violent crimes, please to go Section B on page 13.

86. In what month and year did the next most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

month			year			

87. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

	Adult #	First Name
Refer to Adults listed		

88. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

89. Where did it happen?

- ⊖ In the victim's home or yard
- ⊖ In the victim's neighborhood, but not their home or yard
- ⊖ Somewhere else in this city
- ⊖ Outside of this city

90. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- ⊖ Yes
- ⊖ No

91. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- ⊖ Well known
- ⊖ A casual acquaintance → GO TO QUESTION 93
- ⊖ By sight only → GO TO QUESTION 93
- ⊖ Victim did not know the offender(s) → GO TO QUESTION 93

92. How did the victim know that offender?

- ⊖ Spouse at time of incident
- ⊖ Ex-spouse at time of incident
- ⊖ Parent or step parent
- ⊖ Own child or step-child
- ⊖ Brother or sister
- ⊖ Boyfriend or girlfriend
- ⊖ Friend
- ⊖ Some other relationship

93. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- ⊖ Yes
- ⊖ No
- ⊖ Don't know

94. Did the offender attack the victim?

- ⊖ Yes → GO TO QUESTION 97 on the next page
- ⊖ No

95. Did the offender ATTEMPT to attack the victim?

- ⊖ Yes → *GO TO QUESTION 97 on the next page*
- ⊖ No

96. Did the offender threaten the victim with harm in any way?

- ⊖ Yes
- ⊖ No

97. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

Yes

No → *GO TO QUESTION 101*

98. Was the victim forced or coerced to have sexual intercourse?

Yes → *GO TO QUESTION 101*

No

99. Was there an attempt to force or coerce sexual intercourse from the victim?

Yes → *GO TO QUESTION 101*

No

100. Was the victim sexually assaulted in some other way?

Yes

No

101. Did the victim suffer any injuries as a result of this incident?

Yes

No → *GO TO QUESTION 103*

102. Did the victim stay overnight in a hospital as a result of these injuries?

Yes

No

103. Did anyone report this crime to the police?

Yes

No → *GO TO QUESTION 106 in the next column*

104. Did the police come once the incident was reported to them?

- ≤ Yes
- ≤ No → *GO TO QUESTION 106 in the next column*

105. What did the police do while they were there?

Mark all that apply.

- ≤ Took a report
- ≤ Searched/looked around
- ≤ Took evidence (e.g. fingerprints)
- ≤ Questioned witnesses or suspects
- ≤ Promised to investigate
- ≤ Arrested someone
- ≤ Something else
- ≤ I don't know what the police did

106. Was anything stolen or taken during this incident?

- ≤ Yes
- ≤ No → *GO TO QUESTION 108*

107. What was stolen or taken?

Mark all that apply.

- ≤ Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- ≤ Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- ≤ A motor vehicle that the victim was in or near
- ≤ Something else

108. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- ≤ Yes → *Continue with the next most recent violent crime*
- ≤ No → *GO TO Section B, page 13*

Violent Crimes:

Third Most Recent Incident

109. Other than the incidents that you have already reported, in what month and year did the third most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

month		year			

110. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person’s first name.

Adult # First Name

Refer to Adults listed		

111. What happened?
Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

112. Did anyone report this crime to the police?

≤ Yes

≤ No

113. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

≤ Yes → *Continue with the next most recent violent crime in the next column*

≤ No → *GO TO Section B on the next page.*

Violent Crimes: Fourth Most Recent Incident

114. Other than the incidents that you have already reported, in what month and year did the fourth most recent violent crime happen?

If you are unsure, make your best guess – including the month the incident occurred.

month			year			

115. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 5 and 6. Then write in that person's first name.

<i>Adult #</i>	<i>First Name</i>
<div style="display: flex; align-items: center;"> <div style="background-color: #e0e0e0; width: 10px; height: 100%; margin-right: 5px;"></div> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 2px;"> </div> </div>	
<div style="display: flex; align-items: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 2px;"> </div> </div>	
<div style="display: flex; align-items: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 2px;"> </div> </div>	
<div style="display: flex; align-items: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 2px;"> </div> </div>	

Refer to Adults listed

116. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

117. Did anyone report this crime to the police?

- ≤ Yes
- ≤ No

118. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- ≤ Yes
- ≤ No → *GO TO Section B on the next page.*

119. You've already described four violent crimes. Other than those incidents, how many more violent crimes happened to you or someone else you listed in the past 12 months?

Additional violent crime incidents

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Section B:

Thefts and Break-ins

- ▶ *This section will ask about times in the past 12 months where someone may have stolen something, tried to steal something, or broken into this home.*
- ▶ *Do not include any incidents you reported in the previous section as a violent crime.*

120. In the past 12 months, did you or others in this household have anything stolen?

It could have been something you wear or carry, like a wallet or purse, watch, or jewelry.

It could have been electronic equipment, like a phone, tablet, or MP3 player.

- ≤ Yes
- ≤ No

121. In the past 12 months, was a car or other motor vehicle stolen or used without permission?

- ≤ Yes
- ≤ No

122. In the past 12 months, was anything stolen from a car?

It could have been hubcaps or other parts, a radio or stereo, gasoline, personal items, or anything else.

- ≤ Yes
- ≤ No

123. In the past 12 months, was anything stolen from this house or apartment, from the yard, or from any other building that is part of your home, like a garage or shed?

Think only of things that belong to you or others in this household.

- ≤ Yes
- ≤ No

124. In the past 12 months, so far as you know, did anyone ATTEMPT to steal something that belonged to you or others in this household?

- ≤ Yes
- ≤ No

125. In the past 12 months, did anyone break into this home, or attempt to break in, whether or not

anything was stolen?

- ⊖ Yes
- ⊖ No

126. In the past 12 months, did you or others in this household have anything stolen while at work, or while away from your home?

- ⊖ Yes
- ⊖ No

- ▶ *If you marked 'YES' for any question above (120 through 126), continue with the next page. Otherwise skip to Section C on page 18.*

Thefts and Break-ins:

Most Recent Incident

- ▶ *These next questions are about a theft or break-in that happened to you or others in this household in the past 12 months. If there was more than one, please start with the most recent.*
- ▶ *If there were no thefts or break-ins, please go to Section C on page 18.*

127. In what month and year did the most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

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month

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year

128. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

129. Where did it happen?
<input type="checkbox"/> In this home or yard
<input type="checkbox"/> In this neighborhood

- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 130, otherwise go to question 133 in the next column.

130. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO QUESTION 132 in the next column
- No

131. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO QUESTION 133

132. Was there any evidence, such as a broken lock or broken window that the offender got in by force or tried to get in by force?

- Yes
- No

133. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO QUESTION 135
- No

134. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

135. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO QUESTION 137
- No

136. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

137. What was the total value of the property that was taken?

\$

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 .00

138. Did you or anyone else report this incident to the police?

- Yes
- No

139. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO QUESTION 140 on the next page
- No → GO TO Section C on page 18

Thefts and Break-ins:
Next Most Recent Incident

- ▶ These next questions are about the next most recent theft or break-in in the past 12 months.
- ▶ If there were no thefts or break-ins, please go to Section C on page 18.

140. In what month and year did the next most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

month			year			

141. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

142. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► *If the incident occurred in this home continue with question 143, otherwise go to question 146 in the next column.*

143. Did the offender actually get inside the home, structure, or building?

- Yes → *GO TO QUESTION 145 in the next column*
- No

144. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → *GO TO QUESTION 146*

145. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

146. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → *GO TO QUESTION 148*
- No

147. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

148. Was a car or other motor vehicle stolen during this incident?

- Yes → *GO TO QUESTION 150*
- No

149. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

150. What was the total value of the property that was taken?

\$

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 .00

151. Did you or anyone else report this incident to the police?

- ⊖ Yes
- ⊖ No

152. Did another theft or break-in happen to you or others in this household in the past 12 months?

- ⊖ Yes → GO TO QUESTION 153 on the next page
- ⊖ No → GO TO Section C on page 18

**Thefts and Break-ins:
Third Most Recent Incident**

- ▶ These next questions are about the third most recent theft or break-in in the past 12 months.
- ▶ If there were no thefts or break-ins, please go to Section C on page 18.

153. In what month and year did the third most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

month		year			

154. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

155. Where did it happen?

- ⊖ In this home or yard

- ⊖ In this neighborhood
- ⊖ Somewhere else in this city
- ⊖ Outside of this city

► *If the incident occurred in this home continue with question 156, otherwise go to question 159 in the next column.*

156. Did the offender actually get inside the home, structure, or building?

- ⊖ Yes → *GO TO QUESTION 158 in the next column*
- ⊖ No

157. Did the offender ATTEMPT to get inside the home, structure, or building?

- ⊖ Yes
- ⊖ No → *GO TO QUESTION 159*

158. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- ⊖ Yes
- ⊖ No

159. Was something stolen or taken without permission that belonged to you or others in this household?

- ⊖ Yes → *GO TO QUESTION 161*
- ⊖ No

160. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- ⊖ Yes
- ⊖ No

161. Was a car or other motor vehicle stolen during this incident?

- ⊖ Yes → *GO TO QUESTION 163*
- ⊖ No

162. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

163. What was the total value of the property that was taken?

\$

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 .00

164. Did you or anyone else report this incident to the police?

- Yes
- No

165. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO QUESTION 166 on the next page
- No → GO TO Section C on page 18

**Thefts and Break-ins:
Fourth Most Recent Incident**

- ▶ These next questions are about the fourth most recent theft or break-in in the past 12 months.
- ▶ If there were no thefts or break-ins, please go to Section C on page 18.

166. In what month and year did the fourth most recent incident happen?

If you are unsure, make your best guess – including the month the incident occurred.

--	--

month

--	--	--	--

year

167. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

168. Where did it happen?

- ⊖ In this home or yard
- ⊖ In this neighborhood
- ⊖ Somewhere else in this city
- ⊖ Outside of this city

▶ *If the incident occurred in this home continue with question 169, otherwise go to question 172 in the next column.*

169. Did the offender actually get inside the home, structure, or building?

- ⊖ Yes → *GO TO 171 in the next column*
- ⊖ No

170. Did the offender ATTEMPT to get inside the home, structure, or building?

- ⊖ Yes
- ⊖ No → *GO TO QUESTION 172*

171. Was there any evidence, such as a broken lock or broken window, which the offender(s) got in by force or tried to get in by force?

- ⊖ Yes
- ⊖ No

172. Was something stolen or taken without permission that belonged to you or others in this household?

- ⊖ Yes → *GO TO QUESTION 174*
- ⊖ No

173. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- ⊖ Yes
- ⊖ No

174. Was a car or other motor vehicle stolen during this incident?

- ⊖ Yes → *GO TO QUESTION 176*
- ⊖ No

175. Did anyone ATTEMPT to steal a car or other motor vehicle?

- ⊖ Yes
- ⊖ No

176. What was the total value of the property that was taken?

\$

--	--	--	--	--

.00

177. Did you or anyone else report this incident to the police?

- ⊖ Yes
- ⊖ No

178. Did another theft or break-in happen to you or others in this household in the past 12 months?

- ⊖ Yes → *GO TO QUESTION 179*
- ⊖ No → *GO TO Section C on the next page*

179. You've already described four thefts or break-ins. Other than those incidents, how many more thefts or break-ins happened to you or others in this household in the past 12 months?

Additional thefts or break-ins

--	--

Section C:

- ▶ *These last few questions will ask you about other kinds of crimes that you or someone else you listed may have experienced, such as, identify theft or vandalism.*
- ▶ *Do not include any incidents you may have reported in the previous sections.*

180. In the last 12 months has this home or the property of anyone in this household been vandalized?

Think about any vandalism done to your home, or to any motor vehicles owned by members of this household in the last 12 months.

- ⊖ Yes
- ⊖ No → GO TO QUESTION 182

181. How many times in the last 12 months has this happened?

--	--

Number of vandalism incidents

182. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use any existing credit cards without permission?

- ⊖ Yes
- ⊖ No → GO TO QUESTION 184

183. How many times in the last 12 months has this happened?

Count multiple uses of the same card number before discovery as one time.

--	--

Number of times

184. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use other accounts without permission?

Include accounts such as cell phones, bank accounts, debit cards, or check cards.

- ⊖ Yes
- ⊖ No → *GO TO QUESTION 186 in the next column*

185. How many times in the last 12 months has this happened?

Count multiple uses of an account before discovery as one time.

Number of times

--	--

186. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use their personal information to obtain new credit cards or loans, or for other fraudulent purposes?

- ⊖ Yes
- ⊖ No → *GO TO QUESTION 188*

187. How many times in the last 12 months has this happened?

Count multiple times before discovery as one time.

Number of times

--	--

188. Which category best fits the approximate total income of all persons in your household over the past 12 months?

Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

- ⊖ \$0 to \$10,000
- ⊖ \$10,001 to \$20,000
- ⊖ 20,001 to \$30,000
- ⊖ \$30,001 to \$40,000
- ⊖ \$40,001 to \$50,000
- ⊖ \$50,001 to \$60,000
- ⊖ \$60,001 to \$75,000
- ⊖ \$75,001 to \$100,000
- ⊖ \$100,001 to \$150,000
- ⊖ \$150,001 or more

► *Please continue onto the back page.*

Please use the space below to provide any additional comments or concerns you may have

**Thank you for completing
this survey. Please return it
in the postage-paid envelope
provided.**

Appendix C

Saginaw (MI) Survey Weighting Report

Paul J. Lavrakas, Ph.D.

This report is written to provide details on the weighting that was done for the Saginaw Local Victimization Survey data gathered by the Michigan State University Office of Survey Research in 2016.

The weighting was done by Paul J. Lavrakas, a Senior Research Fellow with OSR, and Debra Rusz, Research Project Manager/Analyst at OSR.

Background

Researchers at OSR met with and exchanged emails with the study's PIs, Drs. Ed McGarrell and Chris Melde, on many occasions in June and July 2016 to discuss the nature of the weighting that needed to be done for their Saginaw victimization survey. It was decided that they needed both Household-level weights and Person-level weights. This approach is consistent with what they learned in discussions with senior statisticians at their funding agency (U.S. Department of Justice).

Conversations with the PIs also identified the characteristics that would be used to create the Household-level weights and the characteristics that would be used to create the Person-level weights.

The Saginaw survey used an address-based sample to select addresses in that city from which to try to gather data. In all, data were gathered from 827 Saginaw households. One adult per cooperating household served as the respondent for her/his household. This person was asked to report data about herself/himself, as well as about other adults in her/his household. In total, victimization data were gathered about 1,451 adults living in Saginaw. This is an average of 1.75 adults per household in the survey.⁵

Population parameters for Saginaw were obtained by OSR staff from recent American Community Survey (ACS) data gathered by the U.S. Bureau of the Census.⁶ The ACS provides researchers in the United States with the most current, accurate, and authoritative population parameters available at the local city level.

Population Parameters for Saginaw

For the Household-level weighting, ACS population parameters for Saginaw households were obtained by the OSR for the three following characteristics:

⁵ The most recent data from the U.S. Bureau of the Census for Saginaw is that it has 37,456 adult residents and 19,376 households. Thus, there is an average of 1.93 adults per household; which is nearly identical to the U.S. national average. The most likely reason that this average (1.93) is greater than what was found in the survey (1.75) is that there was greater nonresponse from Saginaw households that have more than two adult residents. This is highly consistent with what is found in most general population surveys in the U.S. That is, households with three or more adults living at the residence are less likely to cooperate with surveys than are households with one or two adults in residence.

⁶ These are 2014 data reflecting five-year estimates.

- Geographic area: data showing the number of adults per Saginaw census block group. These data were aggregated to show the number of adults living on the east and west sides of the Saginaw River.
- Household Occupancy status: data showing the number of Saginaw households that are owner-occupied and the number that are renter-occupied.
- Household Income: data showing the number of Saginaw households that fall into each of 16 annual income categories ranging from “Less than \$10,000” to “\$200,000 or more.”

For the Person-level weighting, ACS population parameters were obtained for Saginaw adults by the OSR for the five following characteristics:

- Race: data showing the number of adults in Saginaw who report being White, Black, some other race, or multiple races.
- Education: data showing the number of adults in Saginaw in each of five educational attainment categories ranging from “No High School Diploma” to “Graduate Degree.”
- Age: data showing the number of adults in Saginaw whose ages falls into each of 19 age categories ranging from “18-19 years” to “85 years or older.”
- Sex: data showing the number or adults in Saginaw who are Female and who are Male.
- Hispanicity: data showing the number of adults in Saginaw who report that they are of “Hispanic, Latino or Spanish origin.”

Goals of Weighting Survey Data

Statistical weighting is performed with the primary goal of trying to “correct for” aspects of the survey design that could have biased the unweight data. These includes (1) differential noncoverage of the target population nonresponse in which the noncovered (missing) part of the population would have provided materially different data than the part that was covered by the sampling frame, (2) the particular sampling design that was used to select the initially designed survey sample, and (3) differential nonresponse in which sampled nonresponders would have provided materially different data than sampled responders provided.

The characteristics (i.e., variables) that are used in weighting are likely to reduce bias providing both of the following conditions are true:

- The characteristics used in the weighting to correct for noncoverage and nonresponse are correlated with whatever domain of constructs the survey is measuring – in this case crime victimization and other crime-related constructs.
- The characteristics used in weighting to correct for noncoverage and nonresponse are correlated with noncoverage and/or nonresponse.

In the Saginaw crime victimization survey it is highly likely that the both conditions are true. That is, crime victimization is known to correlate with each of the characteristics used in weighting and noncoverage and nonresponse in surveys is known to correlate with each of the characteristics used in the weighting. Therefore it is highly likely that the weighting that was performed and described below has made a meaningful impact on reducing bias that exists in the unweighted data.

Another goal in creating weights is to try to minimize the variance that is added to the weighted data set as a result of the weighting. This issue is also addressed below.

Unweighted Sample Characteristics vs. Population Values

Table B1 shows how the characteristics of the Saginaw survey samples of households and persons compared to their respective population values.

As shown in Table B1, the unweighted sample composition of households from whom data were gathered was biased in the direction of having too many households in the East side of Saginaw and too few in the West side; and having too many owned households and too few rented households. Regarding annual household income, the unweighted sample of households was very close to the population parameter.

Table C1			
Saginaw Survey UNWEIGHTED Sample Characteristics vs. Population Parameters			
	Population Value	Unweighted Sample Value	Population-Sample Difference
Geography			
East	39.5%	45.0%	-5.5pp
West	60.5%	55.0%	+5.5pp
Household occupancy			
Owner	60.9%	66.9%	-6.0pp
Renter	39.1%	28.5%	+10.6pp
HH Income			
\$10000 or less	18.3%	18.1%	+0.2pp
\$10001-\$20000	17.9%	20.3%	-2.4pp
\$20001-\$30000	14.8%	16.0%	-1.2pp
\$30001-\$40000	13.8%	11.8%	+2.0pp
\$40001-\$50000	9.7%	9.2%	+0.5pp
\$50001-\$60000	6.8%	7.6%	-0.8pp
\$60001-\$75000	7.4%	6.5%	+1.1pp
\$75001-\$100000	5.5%	4.7%	+0.8pp
\$100001-\$150000	4.5%	4.1%	+0.4pp
\$150001 or more	1.2%	1.2%	0.0pp
Race			
White	50.7%	54.7%	-4.0pp
Black	42.6%	37.6%	+5.0pp
Other	6.7%	2.5%	+4.2pp
Education			

No High School Diploma	22.0%	10.7%	+11.3pp
H.S. Diploma, no college	35.1%	33.0%	+2.1pp
Some College, Tech School	32.7%	39.5%	-6.8pp
Bachelor's Degree	7.0%	11.4%	-4.4pp
Graduate Degree	3.2%	5.4%	-2.2pp
Age			
18-29 years old	24.5%	17.3%	+7.2pp
30-44 years old	23.9%	18.3%	+5.6pp
45-64 years old	36.2%	39.8%	-3.6pp
65 or more years old	15.4%	23.6%	-8.2pp
Sex			
Female	53.0%	56.9%	-3.9pp
Male	47.0%	43.1%	+3.9pp
Hispanicity			
No, is not Hispanic origin	87.4%	88.2%	-0.8pp
Yes, is Hispanic Origin	12.1%	11.8%	+0.3pp

As also shown in Table B1, the unweighted sample composition of persons about whom data were gathered was biased in the direction of having too many Whites and too few Blacks and those of other racial designations; far too few person who did not graduate from high school and too many who continued their education beyond high school; too few adults under the age of 45 years and too many over the age of 44 years; and too few males and too many females. Regarding Hispanicity, the unweighted sample was very close to the population parameter.

Of note, the sample composition's deviations for the population parameters for race, education, age, and gender are entirely consistent with what is found in almost all general population surveys.

Weighting the Household-level Data

The survey data set with 827 completed interviews was first weight at the Household level. This was done in five steps:

1. First, they were weighted to bring the geographical distribution of the sample back into line with the population distribution. The following SPSS syntax was used for this purpose:

```

COMPUTE AREAWT=1.
IF (WTAREA=1)AREAWT=605/550.
IF (WTAREA=2)AREAWT=395/450.
FREQ AREAWT.

```

2. Second, the sample dataset was weight by the variable AREAWT and then weighting was done to bring the owner/renter distribution of the sample back into line with its population distribution. The following SPSS syntax was used for this purpose:

```

WEIGHT BY AREAWT.
FREQ WTQ27.

```

```

COMPUTE Q27WT=1.
IF (WTQ27=1)Q27WT=609/676.
IF (WTQ27=2)Q27WT=391/285.
FREQ Q27WT WTAREA WTINCOME.

```

3. Third, the sample dataset was weighted by the product of the AREAWT and the Q27WT variables. The variable for this product was named TEMPWT1. Then weighting was done to bring the sample income distribution⁷ back into line with its population parameter.⁸ The following SPSS syntax was used for this purpose:

```

COMPUTE TEMPWT1=AREAWT*Q27WT.
FREQ TEMPWT1.

```

```

WEIGHT BY TEMPWT1.
FREQ WTQ27 WTAREA WTINCOME.

```

```

COMPUTE INCOMEWT=1.
IF (WTINCOME=1)INCOMEWT=183/197.
IF (WTINCOME=2)INCOMEWT=179/207.
IF (WTINCOME=3)INCOMEWT=148/158.
IF (WTINCOME=4)INCOMEWT=138/114.
IF (WTINCOME=5)INCOMEWT=97/88.
IF (WTINCOME=6)INCOMEWT=68/73.
IF (WTINCOME=7)INCOMEWT=74/65.
IF (WTINCOME=8)INCOMEWT=55/43.
IF (WTINCOME=9)INCOMEWT=45/38.
IF (WTINCOME=10)INCOMEWT=12/12.
FREQ INCOMEWT.

```

⁷ In the survey, 11.6% of the cases failed to provide income data. Thus, with the approval of the PIs, an imputation process was used by Dr. Lavrakas to ascribe an income value to each of these cases rather than allow them to have their income remain missing. This imputation process used a multivariate technique for this ascription that took into consideration a case's answers to each of the following questions: (a) owner/renter status, (b) age, (c) Internet access at home, (d) possessing a government-provided cell phone, and (e) satisfaction with one's local neighborhood.

⁸ The reader may note that Table B1 shows that the distribution for income in the unweighted household sample was very close to the distribution of its population parameter. However, the first two steps of the weighting shifted the weighted sample distribution for income enough to justify weighting on income in Step 3.

- Fourth, the sample dataset was weighted by the product of the TEMPWT1 and the INCOMEWT variables. The variable for this product was named TEMPWT2. The following SPSS syntax was used for this purpose:

```
COMPUTE TEMPWT2=TEMPWT1*INCOMEWT.  
FREQ TEMPWT2.
```

```
WEIGHT BY TEMPWT2.  
FREQ WTQ27 WTAREA WTINCOME.
```

- Fifth, the final step of the household weighting was to bring the weighted sample size back to 827. In this step, the final household weighting variable, FINALHHWT, was created. The following SPSS syntax was used for this purpose:

```
WEIGHT BY TEMPWT2.  
FREQ WTAREA WTQ27 WTINCOME.
```

```
COMPUTE FINALHHWT= TEMPWT2*(827/865).
```

Any analyses that are done at the household level should use the FINALHHWT variable if weighted data are meant to be analyzed.

Weighting the Person-level Data

The survey data set with data for 1,451 adults was first weighted at the Household level, and then was weighted at the Persons' level. This was done in six steps:

- First, the dataset was weighted by the household weight (FINALHHWT) in which each person was reported as living. Then a race weight was computed at the person level. This variable, RACEWT, was multiplied by the household weight to create a new weighting variable, PTEMPWT1. The following SPSS syntax was used for this purpose:

```
WEIGHT BY FINALHHWT.
```

```
COMPUTE RACEWT=1.  
IF (RACE3=1)RACEWT=507/570.  
IF (RACE3=2)RACEWT=426/349.  
IF (RACE3=3)RACEWT=67/28.  
FREQ RACEWT.
```

```
COMPUTE PTEMPWT1=FINALHHWT*RACEWT.  
FREQ PTEMPWT1.
```

- Second, the person-level dataset was weighted by PTEMPWT1. Then weighting was done to bring the educational attainment distribution back to the population parameter. To do this a variable, EDUCWT, was created. Then a new weighting variable, PTEMPWT2 was created from the product of PTEMPWT1 and EDUCWT. The following SPSS syntax was used for this purpose:

*WEIGHT BY PTEMPWT1.
FREQ RACE3 EDUCATION GENDER AGE4 HISPANIC.*

*COMPUTE EDUCWT=1.
IF (EDUCATION=1)EDUCWT=220/109.
IF (EDUCATION=2)EDUCWT=351/330.
IF (EDUCATION=3)EDUCWT=327/386.
IF (EDUCATION=4)EDUCWT=70/109.
IF (EDUCATION=5)EDUCWT=32/53.
FREQ EDUCWT.*

*COMPUTE PTEMPWT2=PTEMPWT1*EDUCWT.
FREQ PTEMPWT2.*

3. Third, the person-level dataset was weighted by PTEMPWT2. Then weighting was done to bring the age distribution back to the population parameter. To do this a variable, AGEWT, was created. Then a new weighting variable, PTEMPWT3 was created from the product of PTEMPWT2 and AGEWT. The following SPSS syntax was used for this purpose:

*WEIGHT BY PTEMPWT2.
FREQ RACE3 EDUCATION GENDER AGE4 HISPANIC.*

*COMPUTE AGEWT=1.
IF (AGE4=1)AGEWT=245/199.
IF (AGE4=2)AGEWT=239/192.
IF (AGE4=3)AGEWT=362/373.
IF (AGE4=4)AGEWT=154/228.
FREQ AGEWT.*

*COMPUTE PTEMPWT3=PTEMPWT2*AGEWT.
FREQ PTEMPWT3.*

4. Fourth, the person-level dataset was weighted by PTEMPWT3. However, at this point it was determined that the weighted sample distribution for race had become distorted and a correction was created. This correction required the creation of the variable, FIXRACEWT. This new weighting variable was multiplied by PTEMPWT3 to create PTEMPWT4. The following SPSS syntax was used for this purpose:

*WEIGHT BY PTEMPWT3.
FREQ RACE3 EDUCATION GENDER AGE4 HISPANIC.*

*COMPUTE FIXRACEWT=1.
IF (RACE3=1)FIXRACEWT=507/458.
IF (RACE3=2)FIXRACEWT=426/414.
IF (RACE3=3)FIXRACEWT=67/70.
FREQ FIXRACEWT.*

*COMPUTE PTEMPWT4=PTEMPWT3*FIXRACEWT.
FREQ PTEMPWT4.*

5. Fifth, the person-level dataset was weighted by PTEMPWT4 and frequencies were run to determine how well the FIXRACEWT variable worked and that it did not cause a distortion in the other weighting characteristics. It was found that it did not create any distortion. The following SPSS syntax was used for this purpose:

```
WEIGHT BY PTEMPWT4.  
FREQ RACE3 EDUCATION GENDER AGE4 HISPANIC.
```

6. Sixth, in the final step of the person-level weighting process it was determined that the weighted distributions for Gender and Hispanicity were very close to their respective population parameters, and it was decided that no other weighting was necessary – other than to bring the weighted person-level sample size back to 1,451. The following SPSS syntax was used for this purpose:

```
COMPUTE FINALPERSONWT=PTEMPWT4*(1451/1663).  
FREQ FINALPERSONWT.
```

Any analyses that are done at the person level should use the FINALPERSONWT variable if weighted data are meant to be analyzed.

Weighted Sample Characteristics vs. Population Values

Upon completion of the household-level weighting, and the person-level weighting, analyses were conducted to compare the weighted distributions of the nine sample characteristics that were used in the weighting with their population parameters.

As shown in Table B2, the effect of the weighting at the Household level and at the Person level was to bring all the weighted sample characteristics back to within ± 3 pp of their population parameters. And in almost all cases, they were brought within ± 1 pp of their parameters.

In the case of the Owner/Renter variable, the larger-than- ± 1 pp discrepancy can be attributable to those persons who reported something other than living in an owned or rented home.⁹

In the case of Hispanicity, the larger-than- ± 1 pp deviation is attributable to some persons who are not able or willing to provide an accurate answer to that question.¹⁰

⁹ This is common to all general population surveys in the U.S., in that there are some persons who neither rent nor own the home in which they live (e.g., ministers and priests who are provided residences as part of their assignment to a congregation).

¹⁰ This is common to all general population surveys in the U.S., in that there are some persons who refuse to answer the Hispanic question and some others who do not understand the concept of one's "origin."

Table C2			
Saginaw Survey WEIGHTED Sample Characteristics vs. Population Parameters			
	Population Value	Weighted Sample Value	Population-Sample Difference
Geography			
East	39.5%	39.5%	0.0pp
West	60.5%	60.5%	0.0pp
Household occupancy			
Owner	60.9%	62.8%	-1.9pp
Renter	39.1%	37.2%	+1.9pp
HH Income			
\$10000 or less	18.3%	18.3%	0.0pp
\$10001-\$20000	17.9%	17.9%	0.0pp
\$20001-\$30000	14.8%	14.9%	-0.1pp
\$30001-\$40000	13.8%	13.8%	0.0pp
\$40001-\$50000	9.7%	9.7%	0.0pp
\$50001-\$60000	6.8%	6.8%	0.0pp
\$60001-\$75000	7.4%	7.4%	0.0pp
\$75001-\$100000	5.5%	5.5%	0.0pp
\$100001-\$150000	4.5%	4.5%	0.0pp
\$150001 or more	1.2%	1.2%	0.0pp
Race			
White	50.7%	50.7%	0.0pp
Black	42.6%	42.6%	0.0pp
Other	6.7%	6.7%	0.0pp
Education			

No High School Diploma	22.0%	22.0%	0.0pp
H.S. Diploma, no college	35.1%	35.0%	+0.1pp
Some College, Tech School	32.7%	32.9%	-0.2pp
Bachelor's Degree	7.0%	7.1%	-0.1pp
Graduate Degree	3.2%	3.1%	+0.1pp
Age			
18-29 years old	24.5%	24.4	+0.1pp
30-44 years old	23.9%	23.9	0.0pp
45-64 years old	36.2%	36.3	-0.1pp
65 or more years old	15.4%	15.4	0.0pp
Sex			
Female	53.0%	54.3%	-1.3pp
Male	47.0%	45.7%	+1.3pp
Hispanicity			
No, is not Hispanic origin	87.4%	85.3%	+2.1pp
Yes, is Hispanic Origin	12.1%	14.7%	-2.6pp

In conclusion, the weighting was highly successful in reducing any bias that exists in the unweighted sample that is associated with nonresponse and/or noncoverage that correlated with these nine characteristics.

Effects of Weighting on Sample Variance

As noted above, a goal of weighting is to (hopefully) reduce bias without creating an unsatisfactory large inflation effect on variance. Weighting for nonresponse and noncoverage almost always increases the variance, and the extent to which it does is reflected in a statistic termed the “design effect,” which is commonly shown as *deff*.

If the weighting that is done for a survey causes no change in the variance then *deff* will equal 1.0. But for most surveys *deff* exceeds 1.0. This means that the data in the weighted dataset have greater variance (i.e., they are measured with less precision) than would be the case for a simple random unweighted sample with the same number of completed questionnaires. This loss of precision due to increased variance is reflected in the statistical term, the “effective sample size,” which is commonly shown as ESS.

Variance Associated with the Household-level Weighted Saginaw Dataset

As shown in Table B3, the size of the population of households in Saginaw for which this survey was conducted totaled 19,376. The sample of completed interviews totaled 827 households.

Had this been a simple random sample of 827 households with no noncoverage and no nonresponse, the margin of sampling error (MOSE) on a dichotomous variable (0/1) distributed 50%/50% at the 95% degree of confidence would have been $\pm 3.3\text{pp}$. However the weighting that was done to address issues of noncoverage and nonresponse created a very small inflation to the variance ($deff=1.02$) which in turn lowered the Effective Sample Size (ESS) to approximately 786 completions. This in turn raises the MOSE very slightly to $\pm 3.4\text{pp}$.

Table C3		
Weighting and Variance in the Saginaw Survey		
	Household Survey Dataset	Persons Survey Dataset
Population (N)	19,376 Households	37,456 Adults
Unweighted Sample (n)	827	1,451
$(\Sigma W)^2$	686926.02	3939020.22
$\Sigma(W^2)$	873.41	3981.92
ESS for Weighted Sample	786.49	994.76
95% MOSE for unweighted sample	±3.3pp	±2.5pp
95% MOSE for weighted sample	±3.4pp	±3.0pp

<i>deff</i>	1.02	1.21

That the *deff*(1.02) is barely different from 1.00 indicates that a negligible inflation of variance was caused by the weighting. The fact that this occurred is a testimony to the quality of the sample that was gathered in Saginaw and thus how well it represented the target population.

Variance Associated with the Person-level Weighted Saginaw Dataset

Also as shown in Table B3, the size population of adults in Saginaw for which this survey was conducted totaled 37,456. The sample of persons about which data were collected totaled 1,451 adults.

Had this been a simple random sample of 1,415 adults with no noncoverage and no nonresponse, the margin of sampling error (MOSE) on a dichotomous variable (0/1) distributed 50%/50% at the 95% degree of confidence would have been $\pm 2.5\text{pp}$. However the weighting that was done to address issues of noncoverage and nonresponse created an inflation to the variance ($deff=1.21$) which in turn lowered the Effective Sample Size (ESS) to approximately 995 completions. This in turn raises the MOSE to $\pm 3.0\text{pp}$.

That the *deff*(1.21) is not very different from 1.00 indicates that only a small inflation of variance was caused by the weighting. The fact that this occurred is a testimony to the quality of the sample that was gathered in Saginaw and thus how well it represented the target population.