



# Kentucky Statewide Victimization Survey Phase 1 Report

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## Introduction

President Lyndon Johnson's Commission on Law Enforcement and Administration directed the initial development of crime victimization surveys. The commission conducted a series of pilot studies aimed at the creation of crime indices (Block & Block, 1984; Lynch, 2006; Rand, 2009). Prior to the pilot studies, most data regarding crime came from the FBI's Uniform Crime Report (UCR), which is limited by its sole focus on crimes reported to the police (Booth, Johnson, & Choldin, 1977; Cantor & Lynch, 2000). Additionally, the UCR is an instrument meant for police purposes; it describes crime in terms recognizable to law enforcement rather than lay persons (Cantor & Lynch, 2000). Police control of the instrument also makes the UCR data vulnerable to unscrupulous police departments, which may suppress report data and artificially deflate crime statistics (Lynch, 2006). Thus, the UCR was thought to underestimate the occurrence of crime, and a new instrument, the first incarnation of the victimization survey, the National Crime Survey (NCS), was created to address this (Levine, 1976).

The National Crime Survey, which was created in 1972 as a supplement to the UCR, was intended to capture unreported crimes (Lynch, 2006; Rand, 2006). The NCS, a survey sponsored by the Bureau of Justice Statistics (BJS), collected national crime data directly from face-to-face interviews with citizens. A trained interviewer would administer the survey to respondents age 12 and older within households throughout the country using a screening instrument in tandem with an incident survey (Rand, 2006). The original NCS survey collected information regarding the ways in which households experienced victimization, including details about the perpetrator and the aftermath of any crimes they experienced.

The NCS was redesigned in 1992, becoming the National Crime Victimization Survey (NCVS). To date, the NCVS has yielded impressive results despite concerns that the information would be redundant to police reports (Rand, 2006). The NCVS instrument provides ongoing measures of the risk of victimization, serves as an independent calibration of police reports, and assesses citizens' confidence in police effectiveness (Rand, 2006). The survey has served as a model for jurisdictions both regionally and internationally as it provides public safety officials with valuable crime data (Rand, 2006; Rand,

2009). Across the U.S., policymakers and law enforcement have sought to replicate the NCVS on the state and community level so as to measure the prevalence of crime in specific regions (Wetzels, Ohlemacher, Pfeiffer, & Strobl, 1993).

### **The Need for State Survey Instruments**

Although the NCVS has provided policy makers with much needed information throughout the years, state officials have often expressed a desire for measurement tools tailored for their specific locations. Regional surveys of victimization have been described as superior to the national instrument because they account for unique issues on the state, county, and township level (Levine, 1976). For example, different police departments vary in efficiency, procedure, and motivation to resolve cases, suggesting some crimes may not be recorded by their proper classification, if they are recorded at all (Booth et al., 2015; Milakovich & Weis, 1975). Kamisar (1972) surmised that police reports do not allow localities to dependably compare their crime rates, and as a result, reliance on these measures would lead to erroneous conclusions. To address these concerns, regional victimization surveys have grown in number over the past two decades as exploration into the methodological issues surrounding victimization surveys and the empirical measurement of crime has increased (Sparks, 1981; Wetzels et al., 1993). Regional victimization surveys, like national surveys, provide policymakers with crime statistics and serve as indicators of well-being (Cantor & Lynch, 2000). The quality of a community is often determined in part by the safety of the area, and regional survey statistics can be used to gauge safety and evaluate the performance of crime prevention efforts.

National surveys like the NCVS have several limitations that make them unfeasible for regional implementation, leading to the development of regional surveys. One of the greatest hindrances to state use of the NCVS is the expense of the multi-stage interviews. The follow-up required can also be prohibitive, as the NCVS interviews its sample every six months for three and a half years (Cantor & Lynch, 2000). In fact, the cost of this effort has become increasingly difficult for the U.S. Bureau of Justice Statistics to manage, and has led to a reduction in face-to-face interviews over the years (Rand, 2009). As the NCVS is becoming too costly for federal use, it is also likely far too expensive for

most states. Another issue with replicating a national survey on a regional scale is that the instrument does not address the specific regional contexts. Future iterations of the NCVS will rely increasingly on computer-assisted interviews, which will not be readily accessible in more secluded areas, such as those found in rural Kentucky (Rand, 2009). The NCVS description of crimes also may not correspond with state or county laws and certain questions may be more appropriate for more densely populated states or urban areas (Trickett, Ellingworth, Hope, & Pease, 1995).

Given the issues with national victimization surveys, the Commonwealth of Kentucky chose to create a survey of state residents to gain a more accurate depiction of reported and unreported crime. By developing a state-specific survey, Kentucky would be capable of independently measuring and reporting crime for a variety of uses including planning, policy evaluation, and the provision of important information to Kentucky's residents and lawmakers. In this situation, state officials would also have the ability to include survey items that are relevant to Kentucky's research goals, rather than rely on questions selected by those located outside the Commonwealth (Sparks, 1981). This would allow for the creation of crime prevention programs informed by state, rather than national, information. Additionally, the creation of a new instrument presents the unique opportunity to address some of the known limitations of national-level surveys. For example, the NCVS does not collect responses from those without permanent residences (Rand, 2009), which can hamper the accuracy of the results as homeless and transient groups often experience extremely high rates of criminal victimization (Fitzpatrick et al., 1993; Wenzel et al., 2000). Therefore, developing the state specific survey would proactively resolve these issues by providing the opportunity to make an instrument that reaches a greater proportion of the state's population, is more easily understood, and yields more complete data.

### **The Origin of the KSVS**

Although the current iteration of the Kentucky victimization survey was designed to address the sampling issues identified in past surveys, designing the instrument was a challenging endeavor. Through the years, numerous attempts have been made to create a valid survey, and several instruments were tested. The Kentucky Statewide Victimization Survey (KSVS) was developed from a selection of items

from the NCVS as well as previous versions of the Kentucky instruments, which were chosen by research staff from the Kentucky Justice and Public Safety Cabinet's Criminal Justice Statistical Analysis Center (CJSAC). The items were selected to cover the major types of criminal offenses that residents would likely encounter. Thus, the preliminary draft of the KSVS consisted of 82 items and encompassed a variety of open-ended, multiple-choice, and demographic items. Respondents were prompted to describe the following crimes:

- burglary
- robbery
- assault
- sexual assault
- intimate partner violence

Although this draft of the survey contained items that were relevant to the project's research interests, the survey was not ideal for effective distribution throughout the state, particularly using a mailed pen and paper format. Further edits were needed, thus the CJSAC partnered with the University of Kentucky Department of Educational Policy Studies and Evaluation (EPE) to improve suitability of the preliminary draft.

### **Using Previous Research to Further Development**

In the initial stages of survey development, efforts were made to gain a thorough understanding of previous crime victimization research, as it would allow for the creation of a Kentucky survey that would yield reliable results. In short, items should only be included in the Kentucky survey if victimization research indicated that they had theoretical support or relevance to the state's objectives. A lack of such backing risked reducing the survey's face or content validity, which could negatively impact the quality of the responses received. Thus, a review of the literature was conducted to assess not only the usage of victimization surveys in the past, but also to decipher which of the original 82 items could potentially be used for the new Kentucky survey. The literature review suggested there were many problem areas

that required attention, which included a need to rephrase certain items, eliminate others, and add content.

Items concerning weapons were reconsidered because previous research suggested that they were not relevant to the research objectives. Many previous crime surveys inquired about a perpetrator's weapons as a means to gauge the severity of the crime, as a more lethal weapon may indicate a more lethal intent (Felson & Melson, 1996). However, while weapon type may seem relevant, the literature suggests that such items do not provide useful information about the severity of the crime, the victim's experience, or the risk factors for victimization (Felson & Melson, 1996; Forde, 1993). A perpetrator's weapon choice is a better measure of the resources available to the offender rather than the ability to physically or psychologically harm the victim (Felson & Melson, 1996).

Items regarding respondents' fear of potential crime victimization were also eliminated after consulting the existing literature. Some researchers have suggested that the NCVS included questions about fear to determine the perceived safety of the region (Forde, 1993; Warr & Stafford, 1983); however, perceived safety can be determined more directly and accurately by asking residents about their perceived likelihood of being victimized. Being afraid of a crime, such as murder, does not necessitate one believing it is likely to occur (Warr & Stafford, 1983). Retaining the fear items would not add valuable information and would lower the odds of respondents finishing the survey (Nardi, 2006). Therefore, the items related to fear of crime were removed from the KSVS, and were replaced with those that ask respondents to gauge their perceived likelihood of victimization.

### **Constructing the Item Matrix**

Once the problematic survey items were revised or eliminated, additional edits were made to the KSVS. The most important of these were the use of an item matrix. As a survey construction method used to identify the logic for each item and justify its presence in the instrument with research literature, an item matrix is a crucial survey development tool because it outlines the survey and allows the developers to bolster its validity before administration (Connelly, 2009). Validity is strengthened by using the tool to systematically confirm that each item in the instrument is relevant and informative. In

addition, the item matrix provided guidance for categorizing and revising survey items so as to elicit superior response data.

The KSVS item matrix was constructed as a multi-column graphic table, which maintained the breadth of information in an organized manner. An example of the item matrix can be found in Table 1. The first column contains a listing of the survey stem items, which are the statements that are meant to generate a response from the respondent (Connelly, 2009). In the second column, the corresponding item's measurement purpose is documented. All the items on the survey must have a clearly defined measurement purpose that relates to the research goals of the survey. If no measurement purpose can be found while constructing the item matrix, then the item is considered spurious and can later be removed from the instrument. In the last column of the matrix, the description of the literary precedent for each item is provided. A copy of the complete item matrix for the 2016 iteration of the KSVS can be found in the Appendix of this document.

### **The 2015 KSVS Instrument**

The 2015 KSVS was able to accurately measure annual crime rates, as it asks respondents only to recall crimes from the past 12 months. This reference period fulfilled Kentucky's goal by allowing for year-to-year comparisons in a cost-effective manner. Although longer than the reference period of the NCVS, the period of a year is short enough that responses will not be severely hampered by inadequate recall, especially in the case of serious or notable crimes (Czaja, Blair, Bickart, & Eastman, 1994). With annual survey data regarding the incidence of crime, researchers will be able to detect shifts in the victimization rate over the years and determine the effectiveness of current and future public safety efforts and policies.

The new survey also contains items to measure the crime victimization of homeless and transient individuals, populations previously excluded from victimization surveys. The KSVS contains a filter question, "Do you have a permanent residence?" to identify responses from homeless citizens. Many survey items were reworded to be inclusive of homeless individuals. For instance, the items related to theft contain response choices that could be applicable to those with limited possessions. The items related to burglary include a "not applicable" response option for those who do not have a place to

stay. Further, possible stolen items are not categorized by monetary value. These aspects of the instrument, coupled with plans to administer the survey at shelters and group homes, will allow the state to determine the victimization experiences that are unique to homeless individuals. This information will be vital to developing programs to protect these individuals.

In addition to collecting data about residency, the KSVS includes items regarding respondents' characteristics and behaviors. For instance, the survey contains questions asking respondents how often they drink alcohol and if they used illegal substances in the past year. Previous studies have shown that alcohol and drug use increases the risk of crime victimization, as well as influencing the decision to report crime (Bender, Thompson, Ferguson, & Langenderfer, 2014; Thompson, Sitterle, Clay, & Kingree, 2010). These questions will allow researchers to investigate if this relationship is true within the state. The KSVS also includes items to collect demographics, such as the respondents' sex, race, age, and employment status. These items will help state officials to determine if any demographic groups are more vulnerable to crime, both reported and unreported. To ensure that complete data will be gained from all respondents, these demographic questions have exhaustive response categories, with an answer choice prepared for those who identify as more than one race and those who identify as a gender other than male or female. Research has shown that victims' backgrounds can affect whether crimes are reported and whether help is sought following trauma (McCart, Smith, & Sayer, 2010). Therefore, demographic items were included in the survey because they may yield valuable information about not only the predictors of crime victimization, but also the potential barriers to receiving help following victimization.

Additionally, residents are asked to select their annual income from a listing of salary ranges. This item will determine if income level impacts the likelihood of being victimized or the likelihood of reporting the crime to police. Previous research has found that lower income households experience higher rates of crimes such as theft and intimate partner violence than middle and upper income households (Levitt, 1999; Rennison & Planty, 2003). Lower income individuals are also at greater risk of not reporting victimization and of not seeking help services (Staggs & Riger, 2005). On the assumption that this holds true in Kentucky, the item was revised from its initial incarnation on the KSVS draft, which



asked respondents to write in their annual income. Money is a particularly sensitive issue in survey research and respondents may be inclined to report a false income (Nardi, 2006); this is concerning as over 18 percent of Kentucky residents live below the federal poverty line (U.S. Census Bureau, 2012). The revised item asks respondents to select from a wide range of values rather than write in their income, in the hope that this question will seem less intrusive and yield superior response data.

Aside from collecting crime and population statistics, the KSVS also collects information related to the aftermath of crime victimization. Research indicates that individuals often do not utilize local victim services even when they are aware of their availability (McCart et al., 2010). Thus, several items are present to determine if respondents accessed medical, mental health, or police services following victimization. Such questions will measure the degree to which residents are using community resources in response to crime, and if certain groups are more opposed to seeking services as compared to others. These responses will provide valuable information which can impact the allotment of public safety resources, as well as guide criminal justice policy efforts. Additionally, as discussed earlier in this paper, the survey includes a response matrix that measures the perceived likelihood of crime victimization, rather than respondents' fear of crime or comfort walking home at night. In the wake of crime, individuals often perceive a heightened risk of victimization (Lejeune & Alex, 1973; Warr & Stafford, 1983). To assess such crime-related anxieties, the matrix of Likert-type questions will indicate the apparent safety of the respondent locality. With this information, researchers and policymakers can infer how safe the state is perceived to be in the aftermath of crime. This aspect makes the KSVS similar to the NCVS, but it differs in that it does not rely on the less reliable measurement of fear to gauge public safety (Forde, 1993).

### **Piloting the 2015 KSVS**

The next step in development was piloting the newly created 2015 KSVS to ensure that it was understandable and reflected the state's research goals. The CJSAC piloted the survey in 2016 by asking Kentucky law enforcement officials, who were undergoing annual training to respond to the survey draft. Responses were collected from 49 participants. As part of the pilot, the respondents were

asked to give suggestions for improving the instrument. The pilot uncovered limitations in the KSVS, preventing it from being an ideal instrument for the state's research goals. The 2015 version did not ask respondents if their local police were effective and respectful. State police expressed concern that there were not enough answer choices available in the various response matrices. They also indicated that response matrix for the threatening behavior items did not give respondents the opportunity to indicate if they knew the perpetrator or if they reported the incident to police. Furthermore, it was suggested that additional open-ended items be added to help officials probe into potential areas of concern.

The CJSAC again partnered with the University of Kentucky's Department of Education Policy and Evaluation (EPE) to revise and develop an updated version of the KSVS. The process began with validation analyses of the pilot responses. These preliminary analyses, which consisted of a Rasch PCM and a factor analysis, determined that the scales used by the 2015 survey were likely unidimensional and would yield valid responses. However, some of the scale items were problematic, and a much larger pilot sample would be needed to have more meaningful conclusions. Following the validation analyses, new items were added to the survey to address the gaps noticed by the criminal justice professionals. Five new items were created to measure respondents' perceptions of law enforcement. Significant changes were made to the items measuring the occurrence of violent crime, with additional response choices being given to these items. To make the 2016 KSVS briefer, most of the new items were added into response matrices. Ideally, this adjustment will prevent respondent fatigue and elicit more complete response data. Once the survey items and new response categories were completed, an item matrix was created for the new 2016 version of the instrument to assess the merit of the additions (see Appendix).

### **The Current KSVS Instrument**

The 2016 KSVS consists of 68 items and five response matrices developed to measure the incidence of victimization during the past 12 months. This length of time was chosen because the stakeholders desired the instrument to be cost-effective and provide year-to-year comparisons, and a

year was considered to be a short enough to not be hampered by inadequate recall (Czaja, Blair, Bickart, & Eastman, 1994). With annual survey data regarding the incidence of crime, researchers will be able to detect shifts in the victimization rate over the years and determine the effectiveness of current and future public safety efforts and policies.

To assure that each survey item only relates to a single concept or, in other words, are unidimensional, the 2016 version continues to require that respondents report only one type of victimization at a time, thus reducing confusion. The items are also organized by crime classifications, and items are grouped according to whether they reflect a property crimes, violent crimes, stalking, or other types of incidences. This method was chosen for the ease of coding like crimes together, and to reduce the cognitive load on respondents. A notable change included the addition of items related to the perceived effectiveness of law enforcement. These new items were added to the first section of the KSVS as it pertains to perceptions of safety determining law enforcement's contribution to citizens' feelings of safety.

The 2016 KSVS's response matrices have been improved with the addition of more response categories. Revising the response matrices was difficult because these edits increased the page length. However, the items were reformatted in a variety of ways to maintain the page length and the aesthetic of the survey. The changes will allow researchers to discern more complete information about violent crime and threatening behaviors. Furthermore, the responses to these new items will enable researchers to determine if any offender or victim characteristics relate to the prevalence or the likelihood of reporting violent or threatening crime. An example of one of the 2016 KSVS is shown in Figure 1.

<b>7. In the past 12 months, has anyone...</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
a. Broken into a place where you were staying?	<input type="checkbox"/>	<input type="checkbox"/>	
<i>If yes, did you report this to the police?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Broken into your vehicle(s)?	<input type="checkbox"/>	<input type="checkbox"/>	

<i>If yes, did you report this to the police?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Used your financial information (credit card number, bank account, etc.) without your permission?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>If yes, did you report this to the police?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Figure 1.** Example of 2016 KSVS Response Matrix

Following the 2016 redesign, the current KSVS collects responses beyond the scope of types of major crimes, and now relates to the following constructs of interest:

- **Perceptions of Risk:** Aside from collecting crime statistics, the developers of the KSVS intended for the instrument to measure other constructs that may be associated with victimization. To assess crime-related anxieties, the survey contains a response matrix of Likert-type questions measuring the perceived likelihood of criminal victimization. From this matrix, researchers and policymakers can infer how unsafe the community seems to its citizens. Thus, the KSVS differs from the NCVS in that it does not include items related to a fear of crime. Research suggests that items related to fear are an inadequate measure of crime-related anxieties because fear is more indicative of the perceived severity of the crime rather than the safety of respondents' communities (Warr & Stafford, 1983).
- **Property Offenses:** The survey measures property offenses in a series of questions, which attempt to ascertain the types of property crime that an individual may have experienced. Likewise, the instrument makes use of a question adapted from the National Crime Victimization Survey that outlines the various kinds of items that could be stolen. Both self-report and official statistics consistently demonstrate that individuals are much more likely to experience property crime within a given period, but reporting regarding the theft of certain kinds of items may be less likely (Baumer & Lauritsen, 2010; Block & Block, 1984). Likewise, some items may appear to be of little monetary value but may have tremendous significance or could be used to hide other assets, especially among some segments of the population

(Fitzpatrick, La Gory, & Ritchey, 1993). Given that the instrument also collects information about victim characteristics, researchers will be able to assess the nature of the relationship between these attributes and the experience of property offenses.

- **Interpersonal Threat Characteristics:** A response matrix is utilized which allows respondents to describe the various kinds of threatening behavior faced in a given period. Many of these types of behavior have been linked to the experience of interpersonal violence and other crimes like stalking (Brewster, 2000; Mustaine & Tewksbury, 1999). Additional information is solicited from those that respond positively to one or more threatening behaviors including the likelihood of reporting and whether the individual was involved in an intimate relationship. As with other constructs, the design of the instrument will also allow researchers to consider how various traits including demographic and other characteristics may impact threat risk, as well as whether the experience represents a one-time occurrence or a more sustained pattern of behavior.
- **Law Enforcement Performance:** Several questions are included in the KSVS that identify attitudes regarding community law enforcement. Other items describe any contact that the participant may have had over the past year. The survey also captures information regarding the respondent's demographic information and other characteristics, thus the relationship between these factors can be explored.
- **Sources of Violent Crime:** A response matrix allows respondents to concurrently describe perpetrators and identify their type of victimization. These responses will enable researchers to determine if any offender characteristics relate to the prevalence or the likelihood of reporting crime. Similarly, the survey also asks respondents to provide demographic information, such as gender and income, to assess the relationship between crime victimization and victim characteristics.
- **Community Resource Utilization:** The survey measures community resource utilization as well. Several items are present to determine if respondents accessed medical, mental health, community based, or police services following victimization. The survey is being administered to

two groups. The first is a random sample of adults that are registered voters in the Commonwealth of Kentucky. The survey will also be administered to those individuals that are receiving services from providers of overnight shelter affiliated with the Kentucky Interagency Council on Homelessness (KICH). The responses from these two groups will provide valuable information, inform the allotment of public safety resources, and guide criminal justice policy efforts.

### **Transitioning to Phase 2: Plans for 2016 KSVS Sampling Frame**

As mentioned earlier, the CJSAC began its survey design efforts with a draft of the instrument administered during the 2008 Kentucky Victimization Survey, and an evaluation of the sample and design. The 2008 instrument also sought to address many of the sampling issues of the NCVS and its other state-level predecessors. To ensure that the respondents were representative of the Commonwealth's population, rather than the nation's, a sample of 5,000 adults was selected from among Kentucky's registered voters. Although this method ensured that valid responses were collected from various parts of the state, the 2008 Kentucky Victimization Survey overlooked the homeless and transient population. Therefore, the current iteration of a state victimization survey will not only sample a significantly larger number of registered voters, but will also sample homeless or transient individuals by being administered to those receiving overnight shelter throughout the state.

The target population for the 2016 KSVS is all individuals 18 years or older who reside in the Commonwealth of Kentucky, and will include all adults receiving services and overnight shelter from organizations affiliated with the Kentucky Interagency Council on Homelessness (KICH). There are about 2,150 beds available in the KICH operated shelters, but many of these facilities accept both adults and children. The 2014 K-Count suggested that about 1,925 adults were housed in the emergency shelters on the given count day. Thus, 2,000 surveys will be allocated for the KICH affiliated homeless service providers. The sampling frame from which the remaining sample will be drawn is the 2014 voter registration file prepared by the Kentucky Office of Voter Registration.

Due to the rural composition of the Commonwealth, responses will vary widely between counties. In order to obtain more precise estimates of population quantities, a stratified random sample has been drawn. Kentucky's 120 counties are classified into 15 Area Development Districts (ADDs), which provides a meaningful stratification variable to help assess crime victimization in different geographic areas of the Commonwealth. As of January 1, 2015, Lexington (Fayette County) and Louisville (Jefferson County) are designated as first-class cities, which are cities possessing a mayor-alderman form of government. These two counties are also of particular interest. Thus, strata will be the 15 ADDs plus Lexington and Louisville, for a total of 17 strata. Since Lexington and Louisville are part of the original 15 ADDs (the Bluegrass ADD and the KIPDA ADD, respectively), we adjusted the counts pertaining to those two ADDs to reflect that those cities are excluded.

Sample size determination for a stratified sampling plan requires a number of specific assumptions, such as knowledge of the strata variances. The strata variances are with respect to a specific measured quantity of interest. However, the KSVS consists of many questions, so there is not a specific quantity for which there is an estimate of strata variances. Moreover, there are no pragmatic choices for estimates using results from, say, the NCVS. Thus, we considered a simple random sample for each stratum for the purpose of sample size determination if we assume that we are interested in the proportion of people who respond yes to a dichotomous, yes/no, question on the survey. To produce a maximum sample size, we assume this proportion ( $p$ ) is 0.5. We assume a margin of error (MOE) of 5% and a 95% confidence level. Typically, one should assume a response rate (RR) of 25%-30%, so to be conservative we assume 25%. The sample size determination formula is then

$$n = \left\lceil \frac{z_{1-\alpha/2}^2 p(1-p)}{MOE^2 / RR} \right\rceil = 1,537$$

where  $z_{1-\alpha/2}$  is the  $1 - \alpha/2$  quantile from a standard normal distribution. We proceeded to round this number up to 1,600. Since we have 17 strata, we would need  $1,600 * 17 = 27,200$  surveys, which we round up to 28,000. Combining this with the 2,000 surveys for the homeless shelters yields a total sample size of 30,000. Note that this number is very small with respect to the 3,364,922 individuals in our target population, thus no finite population correction factor has been used. Using this sample size

of 30,000, we can ensure that 95% confidence intervals for key population quantities of interest will have a MOE of 5%.

We proceeded to use proportional allocation for our sample selection, which means the probability of selection is  $28,000/3,364,049 \approx 0.0083$ . The denominator has been adjusted by subtracting the 873 individuals who were 18 years or older that were calculated in the 2014 K-Count county results. We calculated the number of Kentucky non-homeless adults by ADD, multiplied the strata sizes by 0.0083, and then rounded the number to the next closest integer. This gave us the sample sizes for each stratum. We note that due to rounding error, the total sample size was only 27,998. Thus, we added one additional sample to the two strata with the smallest sample sizes, which were Gateway and Buffalo Trace.

The 2014 Kentucky voter registration file was entered into the R programming language, which has numerous suites of functions for survey sampling. We used R to draw the stratified sample from the voter registration file with the sample sizes for each strata derived above. This produced a file of 28,000 individuals to whom the surveys are being sent. The remaining 2,000 surveys will be distributed across all of the KICH operated shelters based on their reported capacity of beds. Note that the voter registration file only contains names and addresses of individuals and no other social or demographic information. Thus, we are not able to employ oversampling to, for example, obtain a more representative sample of minorities.

### **Planned Distribution Methodology**

As with several previous iterations, the KSVS will be distributed via U.S. mail. Non-response follow-up among the sample of registered voters will follow the methods outlined by Dillman (Shi, 2008). These include initial contact with selected individuals via a postcard to notify them of their inclusion in the sample and follow-up within 7 to 14 days with the initial survey packet. Non-respondents are then contacted with a postcard about 14 days after the initial survey administration. Another replacement questionnaire is mailed about 14 days after the postcard reminder, and a final replacement packet is mailed to those that still have not responded using certified mail. This method is



proposed to increase the response rate at each stage, eventually achieving a response of about 72%. Given the cost of sending certified mail to such a potentially large number of respondents, the CJSAC worked with the mailing and fulfillment service to design a high visibility, full color mailed packet in a large envelope for the final phase. Return envelopes will be color-coded for each phase to aid project staff in tracking the number of responses gathered through each mailing effort. The survey team did not utilize any incentives for this project.

Responses to the survey itself are anonymous since they will not include any identifying information. In order to aid in tracking of responses, the survey envelopes will be pre-coded with an alphanumeric identifier, and are color-coded to facilitate tracking during each phase of the mailing effort. When surveys are returned, the identifier will allow members of the research team to remove this individual from the list for further follow-up, thus saving money on postage and printing costs. The survey instrument will then be separated from the envelope, a technique to ensure anonymity. Since the KSVS does not include any identifiable information respondents will not be linked to their particular survey submission. Consent documents will be provided in the research packet that will be retained by the respondent. The documents will contain information about the survey itself as well as contact information for the researcher and a call-in number through which they can receive telephone-based screening/assessment and intervention for immediate crisis needs. These support services are targeted towards individuals who require additional follow-up after completing the Kentucky Statewide Victimization Survey, and will include referrals to community-based services as needed.

### **Data Processing and Editing**

Data will be processed from the paper versions of the returned surveys into Microsoft Excel, and will be cleaned. During this process the dataset will be examined for typographical errors, missing values, incorrectly coded items, and other problems, which will be corrected when possible. Sampling weights will be determined using the demographic information collected in the survey with population estimates provided by national surveys, like the American Communities Survey (ACS). There might be the ability to do some sort of post stratification or raking for weighting, but since we are already using

a stratified sampling design, this could provide a less transparent way to obtain weights. Exactly how unit and item nonresponse will be handled has not yet been determined. Once the research team begins receiving surveys and observing the type of missingness that is present, greater thought will be given to this problem. Unit nonresponse could, potentially, be handled by a post stratification approach that was mentioned above. For item nonresponse, we will consider developing a parametric or semiparametric model using completed surveys in each ADD. We will use predictions from these models to impute missing values for item nonresponse.

Although the CJSAC has conducted five previous versions of the victimization survey using both mail and telephone administration methods, due to funding and personnel limitations, none of these have had a sufficient sample size to provide a realistic regional picture of criminal victimization. Our expectation is that this sixth edition will help to rectify this issue and will provide important and useful information that will be relevant to individuals outside of Kentucky's immediate borders. This includes evidence regarding the utility of a mailed survey among these two diverse populations, victimization data for members of the state's population as well as a sample of low-income individuals, a population which is seldom included in survey-based research. It will also build on the information already available from the NCVS, National Incident Based Reporting System (NIBRS), Uniform Crime Report (UCR), and other official systems, which often capture only an incomplete figure of criminal victimization and crime within a location. The final expected outcome of the statewide victimization survey is to demonstrate some promising practices and techniques that allow researchers to better access difficult-to-reach populations.

### **Conclusions and Recommendations**

The 2016 KSVS is distinct from previous surveys because its items and methodologies were rooted both in crime research and known best practices of survey development and design. This instrument is better suited than past Kentucky surveys to yield valid responses, particularly given the self-administered format. The validation analyses suggest that the item scales are likely unidimensional, and the response matrices condensed the document into a more functional format. Furthermore, this

survey expanded the target population for state crime research by considering individuals that are often overlooked by crime victimization surveys by including homeless populations in its sample. The KSVS experienced many modifications to accommodate homeless and transient individuals, (e.g. including response choices suitable for those with limited possessions and housing options). Furthermore, this survey provides respondents with contact information for a mental health professional that can screen their immediate needs, provide telephone-based follow-up, and recommend resources within their own community.

As this project continues, a few recommendations have surfaced that may improve the expected outcomes. First, the Kentucky Statewide Victimization Survey (KSVS) may benefit from a name change and an acronym that is readily recalled and easy to pronounce. An easier acronym may make the survey more recognizable to residents and, as a consequence, less intimidating. Second, there are numerous items that use words and phrases that may be too difficult or ambiguous for some residents to understand, such as the word “effective”. The language of the survey, particularly that of the new items, should be simplified. Finally, the CJSAC may benefit from working with local news networks, ad councils, or radio broadcasters to educate the public about the KSVS. As the survey deals with a sensitive topic and contains items related to sexual assault and drug use, working with these outlets could help to assure that the sampling frame knows responses will be anonymous. Raising public awareness may also help citizens become invested in the project, thus improving the quality of response data.

## REFERENCES

Acierno, R., Resnick, H.S., & Kilpatrick, D.G. (1997). Health impact of interpersonal violence 1: Prevalence rates, case identification, and risk factors for sexual assault, physical assault, and domestic violence in men and women. *Behavioral Medicine, 23*(2), 53-64.

This article addresses the relationship between an experience of interpersonal violence and health outcomes, outlining the scope of interpersonal violence in the U.S. and providing a rationale for why cases may be misidentified. The authors also consider risk factors, which may increase the likelihood

that an individual will experience a subsequent assault. These include age, race, income, psychopathology, substance use, and having experienced a previous physical and/or sexual assault. Screening suggestions are provided for clinicians who may interact with these victims in a professional capacity.

Block, C. R., & Block, R. L. (1984). Crime definition, crime measurement, and victim surveys. *Journal of Social Issues, 40*, 137-159.

While victimization surveys are widely used to measure the effectiveness of crime prevention, help initiatives, and the results of crime, the authors conjecture that these surveys are underused and misinterpreted. This paper discussed the history of victimization surveys, which began as tools that assess the “dark figure” of crime. It also makes a point to note how these victim accounts of crime differ from police definitions, and are valuable for documenting citizens’ differing victimization experiences.

Block, R., & Skogan, W. G. (1986). Resistance and nonfatal outcomes in stranger-to-stranger predatory crime. *Violence and Victims, 1*(4), 241-253.

This paper examines NCS data regarding stranger crimes, specifically robbery, rape, and other types of assault, and whether the outcome of the crime was influenced by whether or not the victim resisted. The results demonstrated that resistance decreased the likelihood of a successful robbery, but increased the odds of being physically harmed. Physical resistance to rape increased the likelihood that the rape would happen, as well as the risk of bodily injury. Nonphysical resistance to rape (i.e. screaming) reduced the odds of being successfully robbed or raped, and decreased the likelihood of bodily harm.

Booth, A., Johnson, D. R., & Choldin, H. M. (1977). Correlates of city crime rate: Victimization surveys versus official statistics. *Social Problems, 25*(2), 187-197.

This article examines possible factors that contribute to crime victimization. After comparing responses to victim surveys and the UCR, it was found that the factors contributing to crime depended on the instrument referenced. Therefore, there was not enough evidence to suggest that one factor was a better indicator than another.

Brewster, M. P. (2000). Stalking by former intimates: Verbal threats and other predictors of physical violence. *Violence and Victims, 15*, 41-56.

This study sought to find if there was a link between verbal threats and the occurrence of intimate partner violence. The results show that history of stalking and verbal threats lead to an increased occurrence of intimate partner violence and physical injury in the future.

Campbell, J., Snow-Jones, A., Dienemann, J., Kub, J., Schollenberger, J., O'Campo, P.O. Carlson-Gielen, A., & Wynne, C. (2002). Intimate partner violence and physical health consequences. *Archives of Internal Medicine, 162*, 1157-1163.

This study compared the physical health problems of women who had experienced abuse to women who had never experienced abuse during their lifetime. Women reporting abuse were found to have more headaches, STIs, gynecological problems (e.g. bleeding, vaginal infections, and pelvic infections), loss of appetite, and chronic stress. The study recommended that women regularly displaying these problems should be screened for intimate partner abuse and extended supportive services.

Cantor, D., & Lynch, J. P. (2000). Self-report surveys as measures of crime and criminal victimization. *Measurement and Analysis of Crime and Justice, 4*, 85-138.

This paper discusses self-administered victimization surveys and their history. The authors point out that national surveys have many shortcomings. For example, The NCVS is very costly to implement, and has required a transition to computer-assisted interviews. The reliability of the data is questionable, as previous administrations should have major shifts in the statistics following revisions of the NCVS methodology. Further, the NCVS has limited applicability to smaller regions, and is prone to missing populations (e.g. homeless individuals, underserved victims).

Classen, C.C., Palesh, O.G. & Aggarwal, R. (2005). Sexual revictimization: A review of the empirical literature. *Trauma, Violence, and Abuse, 6*(2), 103-129.

This article provides a review of approximately 90 empirical studies regarding sexual revictimization. Factors which have a demonstrated impact on the likelihood of experiencing repeated victimization include the occurrence of sexual victimization in childhood, the severity of this abuse, the experience of

multiple traumas, especially childhood physical abuse, and the temporality of sexual victimization. Likewise, some evidence suggests that family functioning and the victim's racial/ethnic background may play a role. Higher rates of distress and certain psychiatric disorders are found among individuals who have experienced revictimization, as are interpersonal relationship issues, maladaptive coping strategies, and other negative consequences.

Czaja, R., Blair, J., Bickart, B. & Eastman, E. (1994). Respondent strategies for recall of crime victimization incidents. *Journal of Official Statistics*, 10(3), 257-276.

This study determines that a victim's recall of crime is influenced by the length of the reference period used to prompt their response, as well as if they involved the use of anchoring period. Both of these methods are used by the NCVS, which starts by giving subjects a six-month reference period, and then uses preceding surveys as an anchoring point for subsequent data collections. The results found that neither reference point nor anchoring period influenced subjects' reporting of crime, but they did impact whether the subjects correctly remembered when the crime happened. The longer the period, the greater the difficulty victims had to remember the exact date.

Elliott, D. M., Mok, D. S., & Briere, J. (2004). Adult sexual assault: Prevalence, symptomatology, and sex differences in the general population. *Journal of Traumatic Stress*, 17(3), 203-211.

Using survey research, this study examined the prevalence of adult sexual assault. Twenty-two percent of women and 3.8% of men surveyed reported a sexual assault. Being younger, female, divorced, and previously a victim of assault were determined to be risk factors of experiencing adult sexual assault. Assaulted men and women displayed more physical problem than their non-assaulted counterparts, with assaulted men presenting the greatest physical symptoms.

Farrell, G. (1992). Multiple victimisation: Its extent and significance. *International Review of Victimology*, 2, 85-102.

This study describes the fact that in many situations victims of crime may experience multiple/repeat victimizations. Patterns of victimization appear to be similar despite different crime types and a diverse array of methods of study and/or analysis.

Finkelhor, D., Hotaling, G., Lewis, I., & Smith, C. (1990). Sexual abuse in a national survey of adult men and women: Prevalence, characteristics, and risk factors. *Child Abuse & Neglect, 14*, 19-28.

This article describes the results of the first national survey of childhood sexual abuse. Over a quarter of women and 16% of men reported victimization during their childhood. There was a higher rate of abuse for men and women who grew up in unhappy homes, lived without one of their parents, or lived in the western United States.

Kamisar, Y. (1972). How to use, abuse--and fight back with--crime statistics. *Oklahoma Law Review, 25*, 239-258.

This paper discusses the problems of relying solely on police statistics for crime data. The author points out that unscrupulous police departments may under-record crime in order to make their jurisdictions seem safer or better managed. Some crimes may be inaccurately recorded because citizens and police do not define crime in the same manner.

Kuijpers, K.F., van der Knaap, L.M., & Winkel, F.W. (2012). Risk of revictimization of intimate partner violence: The role of attachment, anger, and violent behavior of the victim. *Journal of Family Violence, 27*, 33-44.

This article examines the victim-related psychological factors, which may influence repeated experiences of intimate partner violence. Given that victims of this type of violence are known to be at high risk for revictimization, the authors attempted to better understand the ways in which victim behavior affects the likelihood of experiencing subsequent victimization.

Langton, L., Berzofsky, M., Krebs, C., & Smiley-McDonald, H. (2012). *Victimizations not reported to the police, 2006-2010*. Washington, DC: U.S. Department of Justice Bureau of Justice Statistics.

This report uses information captured during administration of the National Crime Victimization Survey to better understand the amount of criminal victimizations that go unreported to law enforcement entities, and the reason(s) that crime victims propose regarding their failure to report. The most common included a fear of reprisal or of getting the offender in trouble, a feeling that the police would not or could not help, the feeling that the crime was a personal matter/ wanting to deal with it in another way, or the

fact that the victim does not feel that the crime is important enough to report. Some participants also provided other reasons for not reporting, although these were not specified, or selected some combination of factors that might have influenced their decision.

Levine, J. P. (1976). The potential for crime overreporting in criminal victimization surveys. *Criminology*, 14(3), 307-330.

This article critiques the methodology typically used by victim surveys, suggesting that they tend to artificially inflate crime rates. The wording and definitions used by victim surveys may lead to respondent's misunderstanding of what is being asked of them. Often, respondents can't remember as far back as the survey requests, and they will fabricate events when memory fails. The author suggests clearer, more simply worded surveys.

Lynch, J. P. (2006). Problems and promise of victimization surveys for cross-national research. *Crime and Justice*, 34, 229-287.

This article discusses the problems determining the reliability and the validity of victim surveys. It mentions that cross-national surveys are difficult to compare because crime is defined and measured differently throughout the country. Nationwide surveys provide more accurate information about the nation as a whole, but locally-focused surveys are better for getting specific information about the experience of victims in a given geographic area.

McDermott, M.J. (1979). *Rape victims in 26 American cities* (Analytic Report No. SD-VAD-6). Washington, DC: National Criminal Justice Information and Statistics Service, United States Department of Justice.

This report outlines rape and attempted rape victimizations in 26 American cities using information collected during the National Crime Victimization Survey. Incident characteristics are provided, as are those about the rape victim and his or her perceptions of the offender. Major analyses include examinations of rape rates in relation to victim and offender characteristics (e.g. age, race/ethnicity, income, etc.), elements of the victimization (e.g. time, place, etc.), and consequences of rape and



attempted rape attacks including self-protective measures, experience of injury, and reporting behaviors.

Rand, M. R. (2009). Redesigning the national crime victimization survey. Bureau of Justice Statistics.

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This report discusses the history and development of the National Crime Victimization Survey. The piece outlines the changes made during the 2006 revision, and details the transition away from facilitated interviews to computer-assisted surveys to collect information. It also mentions the NCVS funding issues and the impact of declining crime rates.

Sparks, R. F. (1981). Surveys of victimization- An optimistic assessment. *Crime and Justice*, 3, 1-60.

This article reviews the history of victim surveys and their use. It mentions that the NCVS has many issues that hamper the quality of its data. For example, many of the variables are intertwined with the respondents' class, and the survey used terms and items that are not easily endorsed by poorer respondents. Problems with definition could mean that the NCVS underestimates crime. However, the NCVS is helpful when used in tandem with police statistics and other sources of information.

Stozer, R.L. (2009). Violence against transgender people: A review of United States data. *Aggression and Violent Behavior*, 14, 170-179.

This article examines the three primary sources of data in the United States that document the rates and types of violence experienced by transgender persons across the lifespan. These include self-report surveys and/or needs assessments as well as police reports, and social service records/hotline calls. Based on an examination of this information, the authors suggest that violence against transgender persons begins at an early age and lasts throughout the lifespan. The authors also found that transgendered individuals are at risk for multiple types and indices of violence, particularly violent behavior of a sexual nature.

Walby, S. & Allen, J. (2004). *Domestic violence, sexual assault, and stalking: Findings from the British Crime Survey*. London: Home Office, Research, Development, and Statistics Directorate.

This report outlines the findings from the British Crime Survey, conducted among a nationally representative sample of individuals who were asked to describe their experiences with domestic violence, sexual assault, and/or stalking during their lifetime as well as in the previous year. Among those respondents that reported interpersonal violence within the past 12 months, the majority suggested that they had experienced multiple incidents, with females reporting an average of 20 and male respondents reporting an average of 7 occurrences.

Warr, M., & Stafford, M. (1983). Fear of victimization: A look at the proximate causes. *Social Forces*, 61, 1033-1043.

This article discusses how fear of crime is measured in crime victimization studies. It addresses that many studies assume that fear of crime is a function of the crime's likelihood to occur. Using a mailed survey, the study found that fear of crime is more a function of the crime's severity than its likelihood.

Wenzel, S. L., Koegel, P., & Gelberg, L. (2000). Antecedents of physical and sexual victimization among homeless women: A comparison to homeless men. *American Journal of Community Psychology*, 28(3), 367-390.

This study compares physical and sexual victimization of homeless females to the victimization of homeless males. Mental health problems and drug abuse were found to be predictors of victimization for both homeless women and men. The study finds that the experiences of homeless men and women are similar, and safe residences and health resources are need to combat victimization among both populations.

Wieclaw, J., Agerbo, E., Mortensen, P. B., Burr, H., Tüchsen, F., & Bonde, J. P. (2006). Work related violence and threats and the risk of depression and stress disorders. *Journal of Epidemiological Community Health*, 60, 771-775.

This study sought to examine the risk of depression and stress disorders following criminal victimization. The study found that exposure to workplace violence is associated with higher risk of depression and other disorders in men and women. Workplace threats lead to more depression in women and more stress in men.

### Appendix, Item Matrix for Kentucky Statewide Victimization Survey

Item	Purpose	Precedent in Literature
<b>In the past 12 months,</b>		
did anyone...		
Threaten you?	Measures the incidence of verbal assault/intimidation, and differentiates these incidents from aggravated assault.	Threats of violence (explicit, implicit, or conditional/coercive) can be predictors of family violence (Brewster, 2000). Threats have been shown to be better predictors of future violence than history of victimization. Threats are a risk factor for psychological disorders (Wieclaw et al., 2006).
Break into the place you are staying?	Differentiates the burglaries from other types of theft-related crime.	Not often supplied by data based on police reports (Cantor & Lynch, 2000). Nationally, 25.7% of households report that their homes were burglarized (NCVS, 2014). Homeless individuals are at great risk of having their living place broken into because they occupy spaces that are not secure (Fitzpatrick, La Gory, & Ritchey, 1993).
Steal your vehicle?	Measures the occurrence of auto theft.	Likelihood of auto theft is dependent on where the car is parked, and those who park in public lots may perceive the risk to be higher than those who park in a garage (Lemieux & Felson, 2012). Auto theft has a lower perceived risk than other crimes, and is

		considered one of the less serious property crimes (Warr & Stafford, 1983).
Steal something from you using physical force?	Measures the incidence of victimization by violent robbery, and differentiates these responses from those indicating victimization by non-violent theft.	Differentiates the victims of violent theft from the victims of non-violent theft. The majority of robbery victims are physically attacked in some way (Block & Skogan, 1986).
Steal something from you without using physical force?	Measures occurrence of non-violent theft.	Differentiates the victims of violent theft from the victims of non-violent theft (NCVS, 2014). A minority of robbery victims are not physically attacked in some way (Block & Skogan, 1986).
Attack you with a weapon?	Measures the incidence of victimization by aggravated assault.	People commonly experience injury as the result of crime (Campbell et al., 2002).
Force you into unwanted sexual intercourse?	Measures the incidence of forcible rape.	Thirteen to 25% of women experience forcible sexual assault or rape during their lifetime, as do many men (Elliot, Mok, & Briere, 2004).
In my community, crime is...	Measures the perceived frequency of crime.	In areas where crime is more frequent, citizens perceive it to be more dangerous (Warr & Stafford, 1983).

Law enforcement is _____ at protecting those in my community.	Measures the respondent perception of the police.	Perceptions of the police differ based on law enforcement's treatment of the citizens (Huq, Tyler, & Schulhofer, 2011).
Have you had any contact with law enforcement in your community?	Differentiates the attitudes of respondents that have and have not interacted with police	People with poor experiences dealing with police are more likely to perceive them negatively (Huq, Tyler, & Schulhofer, 2011).
During my contacts with law enforcement in my community I have been treated with respect?	Measures occurrence of positive and negative experiences with police.	Members of minority groups tend to receive poorer treatment from police (Huq, Tyler, & Schulhofer, 2011; Tyler and Fagan, 2008).
How would you describe the contacts that you have had with law enforcement in your community?	Allows respondents to further describe experiences with police.	Experiences with police can vary widely based on race/ethnicity or conflict (Tyler & Wakslak, 2004).

In the past 12 months, has anyone...		
Broken into a place where you were staying?	Measures burglary.	Differentiates the burglaries from other types of theft-related crime, which is information not often supplied by data based on police reports (Cantor & Lynch, 2000). Nationally, 25.7% of households report that that their homes were burglarized (NCVS, 2014). Homeless individuals are at great risk of having their living place broken into because they occupy spaces that are not secure (Fitzpatrick, La Gory, & Ritchey, 1993).
Broken into your vehicle(s)?	Measures burglary of vehicles.	Differentiates motor vehicle-related theft from other types of theft-related crime, which is information not often supplied by data based on police reports (Cantor & Lynch, 2000).
Used your financial information (credit card number, bank account, etc.) without your permission?	Differentiates identity theft from other types of theft-related crime.	Identity theft is information not often supplied by data based on police reports, but is a growingly common crime (Cantor & Lynch, 2000).
In the past 12 months, were any of the following items stolen from you?	Measures the occurrence of robbery.	Ten percent of households reported being victims of theft in 2013(NCVS, 2014). Although homeless individuals tend to have limited possessions, they have a high probability of being victims of theft because they lack a protected space (Fitzpatrick, La Gory, & Ritchey, 1993).

During the past 12 months, has

someone....

Stolen something from you using force?	Measures violent robbery.	Differentiates the victims of violent theft from the victims of non-violent theft (NCVS, 2014). The majority of robbery victims are physically attacked in some way (Block & Skogan, 1986).
Stolen something from you using a weapon?	Measures the occurrence of robbery using a weapon	Theft and threat of theft is considered more serious if a weapon is involved (Lemieux & Felson, 2012; Jensen & Brownfield, 1986).
Physically attacked you?	Measures the occurrence of assault.	The experience of physical assault is common among both males and females, and the experience of physical violence is more common in younger individuals (Acierno, Resnick, & Kilpatrick, 1997).
Physically attacked you with a weapon?	Measures the occurrence of assault with a weapon.	The 2012 NCVS found that 5% of respondents were victims of crimes involving weapons (Truman, Langton, & Planty, 2012). Use of a weapon may indicate that the offender intended to do harm (Felson & Messner, 1996).
Threatened to physically harm you?	Measures the occurrence of threatening behavior.	Threats of violence (explicit, implicit, or conditional/coercive) can be predictors of violence in spousal and family relationships (Brewster, 2000). Threats have been shown to be better predictors of future violence than history of victimization. Threats are a risk factor

Threatened to physically harm you using a weapon?	Measures the occurrence of severely threatening behavior.	for psychological disorders (Wieclaw et al, 2006). Assaults and threats are considered more serious if a weapon is involved (Lemieux & Felson, 2012; Jensen & Brownfield, 1986).
Forced you into sexual intercourse?	Measures the occurrence of forcible rape and sexual assault.	Thirteen to 25% of women experience sexual assault or rape during their lifetime, as do many men (Elliot, Mok, & Briere, 2004). Homeless women have been shown to have an increased risk of experiencing sexual assault (D'Ercole & Struening, 1990).
Forced you into sexual intercourse using a weapon?	Measures the use of weapons to complete a rape.	Use of weapons is rare in sexual assaults (Elliot, Mok, & Briere, 2004). Other forms of physical violence, verbal threats, and drugs and alcohol tend to be used to coerce victims (Stermac et al, 1998). Weapon type may be irrelevant to offender's intent (Felson & Messner, 1996).
Forced you into sexual activity (e.g. kissing, fondling, touching)?	Measure occurrence of sexual assault.	Thirteen to 25% of women experience sexual assault or rape during their lifetime, as do many men (Elliot, Mok, & Briere, 2004).
Forced you into sexual activity (e.g. kissing, fondling, touching) using a weapon?	Measures the use of weapons to complete a sexual assault.	Use of weapons is rare in sexual assaults (Elliot, Mok, & Briere, 2004).



<p>In the past 12 months, did someone make you feel threatened by...</p> <p>Following/spying on you?</p> <p>Calling you on the telephone without your permission?</p> <p>Sending you messages without your permission (letters, e-mails, texts, etc.)?</p> <p>Standing outside your home, school, workplace, etc.?</p> <p>Showing up at the same places you were?</p> <p>Leaving you unwanted items?</p> <p>Making verbal threats?</p> <p>Physically threatening you?</p> <p>Threatening you in another way not mentioned? (please describe)_____</p>	<p>Measures stalking and other threatening forms of interpersonal violence.</p>	<p>Stalking and related crimes have grown in concern. Menacing behaviors have been linked to later sexual assaults, domestic abuse, and murder (Mustaine &amp; Tewksbury, 1999).</p>
<p>Who did this to you?</p>	<p>Differentiates stranger crime from intimate partner crime</p>	<p>Many incidences of threats and stalking are committed by current or former intimate partners, which places victims at a greater risk of being attacked in the future (Brewster, 2000).</p>
<p>Was this reported to the police?</p>	<p>Used to compare responses to police statistics.</p>	<p>Threats and stalking often involve persons known to the victim (Brewster, 2000). Victims are less likely to report crimes involving people</p>

		that they know, or are non-violent (Lemieux & Felson, 2012; Wong & Van der Schoot, 2012).
In the past 12 months, did anything which you thought was a crime happen to you because of your...	Measures the occurrence of bias-motivated crimes.	Bias-motivated, or hate crimes are any crime that is motivated by the offender's hatred of another's race, gender, sexual orientation, religion, nationality, or disability (Rayburn, Earleywine, & Davison, 2003). These are differentiated from other crimes as they are considered to have a greater psychological impact than other crimes, and are motivated by different factors than non-bias-motivated crime (Dunbar, 2006).
In the past 12 months, did you do any of the following because you were the victim of a crime?	Measures the occurrence of bias-motivated crime.	Crime victims experience stress disorders that require psychological treatment (McCart, Smith, & Sawyer, 2010). Relatively few victims seek treatment from mental health professional (Jaycox, Marshall, & Schell, 2004; Norris, Kaniasty, & Sheer, 1990). People commonly experience injury and other health problems as the result of crime (Campbell et al., 2002).  Crime victims display unique forms of traumatic stress that require various types of medical and psychological treatment (McCart, Smith, & Sawyer, 2010).

How often do you drink an alcoholic beverage?	Used to determine if alcohol is a predictor of being victimized.	Alcohol increases the chances of being victimized by crime (Bender, Thompson, Ferguson, & Langenderfer, 2014).
In the past 12 months, which of the following drugs have you used?	Used to determine if recreational drug use is a predictor of victimization.	Use of drugs has been found to correlate with the likelihood of reporting crime to the police (Thompson, Sitterle, Clay, & Kingree, 2010), and those who use illegal drugs are at a greater risk of victimization (Bender, Thompson, Ferguson, & Langenderfer, 2014).
Do you have a permanent residence?	To distinguish homeless respondents from residents.	Permanent residence is a factor that influences the likelihood of crime victimization, as homeless individuals experience more crime and a more diverse array of crime types (Wenzel, Koegel, & Gelberg, 2000). The opportunity theory of crime victimization holds that an individual's living situation contributes to the probability of experiencing crime (Fitzpatrick, La Gory, & Ritchey, 1993).
With which gender do you identify?	Measures the demographics of the respondents.	The occurrence and severity of victimization is often impacted by gender. Women are more likely to be target for crimes such as stalking (Mustaine & Tewksbury, 1999).
In what year were you born?	Measures the demographics of the respondents.	For some crimes, the risk of victimization is influenced by age (Asencio, Merrill, & Steiner, 2014).

With which race(s) do you identify?	Measures the demographics of the respondents.	Race is a factor influencing the likelihood of criminal victimization (McCart, Smith, & Sawyer, 2010). Being a visible racial minority increases the risk of bias-motivated crime victimization (Rayburn, Earleywine, & Davison, 2003).
Are you of Hispanic, Latino, or Spanish origin?	Measures the ethnicity of the respondents.	Being visibly ethnic increases the risk of bias-motivated crime victimization (Rayburn, Earleywine, & Davison, 2003).
As of today, what is your marital status?	Obtains the demographic information from respondents.	Marital and relationship status has an impact on the risk of victimization for certain crimes (Martin, Taft, & Resick, 2006). Unmarried persons are generally more likely to experience victimization through property crime and violent crime (Miethe, Stafford, & Long, 1987).
As of today, what is the highest degree or level of schooling you have completed?	Obtains the demographic information from respondents.	Educational level is positively related to crime victimization, possibly because more educated persons are more likely to recall and report crime on surveys (Tseloni, 2000).
As of today, you are: <ul style="list-style-type: none"> <li>• Employed</li> <li>• Self-employed</li> <li>• Unemployed and currently looking for work</li> <li>• Unemployed and not currently looking for work</li> </ul>	Obtains the demographic information from respondents.	Employment status has been shown to be a factor in contributing the probability being victimized by crime and reporting to the police (Rennison, 2007).

- A student
- Retired
- Currently serving in the military
- Unable to work

What do you think your total household income will be this year (this includes any earnings, annuities, interest from investments, state or federal assistance, etc.)?

Obtains the demographic information from respondents.

Income is associated with the likelihood of reporting victimization (McCart, Smith, and Sawyer, 2010; Wong & Van der Schoot, 2012)