# NATIONAL PUBLIC SURVEY ON WHITE COLLAR CRIME

## ATIONAL WHITE COLL

2010

## NTEGRITY QUA

National White Collar Crime Center

# The 2010 National Public Survey On White Collar Crime

by

Rodney Huff, Research Associate Christian Desilets, Research Attorney John Kane, Research Manager



Comments, recommendations, and/or general impressions of the content of this document are encouraged. All feedback should be directed through the contact methods below or via email to jkane@nw3c.org.





#### ©2010. NW3C, Inc. d/b/a the National White Collar Crime Center. All Rights Reserved.

1000 Technology Drive, Suite 2130 Fairmont, WV 26554 Phone: (877)628-7674

Permission is hereby given for this text to be reproduced, with proper attribution, by non-profit and public agencies engaged in training for criminal justice or other personnel. No resale or commercial use may be made of these materials. Printed in the United States of America December 2010

This project is supported by grant number 2009-BE-BX-K042, awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the SMART Office, and the Office for Victims of Crime. Points of view or opinions in this document are those of the author and do not represent the official position or policies of the United States Department of Justice.

## Acknowledgements

The efforts of a number of individuals on this project warrant recognition. Princeton Survey Research Associates International (PSRAI) administered the survey, with Larry Hugick offering helpful guidance. The following individuals were generous with both time and expertise in support of this project: Jay Albanese (Virginia Commonwealth University), Hank Brightman (Naval War College), George Burruss (Southern Illinois University, Carbondale), Mary Dodge (University of Colorado, Denver), Kent Kerley (University of Alabama-Birmingham), Nicole Leeper Piquero (Florida State University), Don Rebovich (Utica College), Debra Ross (Grand Valley State University), Kip Schlegel (Indiana University), Sally Simpson (University of Maryland), Susan Will (John Jay College), and Peter Yeager (Boston University)

We are very grateful to all the surveyed individuals who agreed to share their experiences; without their input, this study would have not been possible. We would also like to acknowledge the support of the Office of Justice Programs, Bureau of Justice Assistance, and the Board of Directors of NW3C. The following NW3C staff members are acknowledged for their contributions to the research and this report: Linda Huffman, Jason Boone, Josh Santy, and Adrian Mascari. Finally, we recognize the efforts of NW3C Director Donald J. Brackman and Deputy Director Mark R. Gage for their support and encouragement of this endeavor.

## Table of Contents

Executive Summary	
Introduction	10
Quantifying the Problem	12
Results	14
Household Victimization and Reporting Behaviors	14
Individual Victimization	16
Victimization and Technology	16
Crime Seriousness	17
Allocation of Resources	19
Limitations of Study	21
Discussion and Conclusion	22
Magnitude of the Problem	
Interpretation	23
Perceptions of Public Policy and the Current Economic Crisis	25
Endnotes	
Appendix A: Survey Methodology	
Appendix B: Survey Instrument	40
Appendix C: Table 4	55
Appendix D: Relationship between "Crisis" and "Resources" Variables	56

## Figures and Tables

Figure 1: Household Victimization Trends	14
Figure 2: Household Victimization Reporting Trends	15
Figure 3: Individual Victimization Trends	17
Figure 4 : Average Crime Seriousness Scores per Scenario	18
Figure 5: Average Crime Seriousness Based on Scenario Factors	19
Figure 6: Is the Government Devoting Enough Resources to Combat White Coll	lar
Crime?	20
Figure 7: Has White Collar Crime Contributed to the Economic Crisis?	20
Table 1: 12-Month Household Victimization Incidences and Reporting Behaviors.	16
Table 2: Sample Demographics	.35
Table 3: Sample Disposition	38
Table 4: Scenarios Included in Categorical Measurements of Crime Seriousness	55
Table 5: Table Showing Distribution of "Crisis" for Each Category of "Resources"	56

## **Executive Summary**

The 2010 National Public Survey on White Collar Crime was designed by the National White Collar Crime Center to measure the public's experience with white collar crime in the following areas:

- Victimization
- Reporting behaviors
- Perceptions of crime seriousness

The survey was administered from June to August, 2010 and employed random digit dialing techniques to provide a national sample. Landline and cell phone interviews of 2,503 adult participants were conducted in English and Spanish. Respondents were asked about experiences within their households concerning white collar crime within the past 12 months (see Appendix B for survey instrument), as well as about personal encounters with these crimes within the past 12 months. The experiences measured were mortgage fraud, credit card fraud, identity theft, unnecessary home or auto repairs, price misrepresentation, and losses occurring due to false stockbroker information, fraudulent business ventures, and Internet scams. The study found that:

- 24% of households and 17% of individuals reported experiencing at least one form of these victimizations within the previous year
- Respondents reported victimization at both household and individual levels most often as a result of credit card fraud, price misrepresentation, and unnecessary object repairs

In conjunction with direct victimization questions, respondents were asked whether or not the victimization was reported to law enforcement or other entities that might be able to assist the victim. Of the household victimizations:

- 54.7% were reported to at least one external recipient or agency (e.g., credit card company, business or person involved, law enforcement, consumer protection agency, personal attorney, etc.)
- Only 11.7% were reported to law enforcement or some other crime control agency

In an effort to gauge public perception of the seriousness of crime, respondents were presented with 12 scenarios that included various white collar crimes as well as traditional offenses. The scenarios were grouped into eight categories. These categories were, in turn, ordered into four dichotomies: (1) white collar/traditional crime, (2) crimes involving physical harm/money, (3) crimes involving organizational/individual offenders, and (4) crimes involving high-status/low-status offenders. Based upon the categorization, findings suggest that:

• Respondents viewed white collar crime as slightly more serious than traditional

crime types

- Offenses committed at the organizational level were viewed more harshly than those committed by individuals
- Crimes committed by high-status offenders (those in a position of trust) were seen as more troubling than those committed by low-status persons

By collecting responses related to victimization, reporting behaviors, and perceptions of crime seriousness, the present survey reveals valuable information concerning the public's experiences with white collar crime:

- Nearly one in four households was victimized by white collar crime within the previous year
- Few victimization reports reached crime control agencies

The survey also inquired about respondents' perceptions of the impact of white collar crime on the current economic crisis, as well as the level of resources appropriated by the government to fight white collar crime. The survey found that:

- A majority believed white collar crime has contributed to the current economic crisis
- Nearly half the participants said that government is not devoting enough resources to combat white collar crimes

## Introduction

Since NW3C conducted its last national survey in 2005, white collar crime has continued to be a topic "of almost daily news."<sup>1</sup> The substantial media coverage of white collar crime may be attributed to well-publicized events that have been associated with white collar criminality. Among them: The U.S. housing market collapse, the recent discovery of several massive Ponzi schemes,<sup>a</sup> and an instance of alleged rogue trading in France. Together, these factors have arguably attuned the national news media to white collar crime as an epidemic that can engender significant economic and political turmoil on a national, if not global, scale.

Take, for instance, the current recession. Precipitated by the collapse of the U.S. housing market in late 2007, the economic crisis has done much to frame white collar crime as a chronic social problem. Media accounts highlighted the fraudulent lending activities that permeated the mortgage industry prior to the housing bust. Stated-income loans became the subject of Congressional scrutiny<sup>2</sup> and were portrayed in the media (and by criminologists) as a major factor in the decline of the housing market and, by extension, in the global financial crisis.<sup>3</sup>

Contributing to the crisis was a string of headline-grabbing Ponzi schemes. The most publicized of these schemes was one orchestrated by financial advisor Bernard Madoff, who pleaded guilty to 11 federal crimes after bilking investors out of billions of dollars.<sup>4</sup> Another suspected Ponzi scheme that made headlines involved Allen Stanford, billionaire and chairman of Stanford Financial Group. Charged with "a massive, ongoing fraud" by the Securities and Exchange Commission, Stanford has been in custody since June 2009.<sup>5</sup> He pleaded not guilty to 21 criminal charges, including fraud, conspiracy, and obstruction.<sup>6</sup> His trial is scheduled to begin in January 2011.<sup>7</sup>

In early 2008, an alleged rogue trading operation was uncovered at the prestigious French bank Société Générale. Bank executives claim that, on January 19, they became aware of unauthorized trades that positioned the bank to lose as much as \$73 billion—far more than the bank's assets. To reduce this exposure, the executives decided to unwind the risky trades. In the process, the bank lost \$7.2 billion.<sup>8</sup> The incident has been described as "the largest rogue-trading loss in history."<sup>9</sup> Jerome Kerviel, then a thirty-one year-old junior derivatives trader, was identified as the perpetrator and became the subject of a criminal investigation. Kerviel was charged with breach of trust, forgery, and unauthorized computer access.<sup>10</sup> On October 5, 2010, Kerviel received a 3-year prison sentence and was ordered to pay Société Générale \$6.7 billion. He plans to appeal the ruling.<sup>11</sup>

a A Ponzi scheme is a fraudulent business enterprise that attracts investors with the promise of high returns. Unbeknownst to investors, there is no underlying wealth-generating mechanism or business plan. Instead, money brought into the scheme by new investors gets redistributed as "dividends" to early investors.

Despite Edwin Sutherland's initial definition of white collar crime as "a crime committed by a person of respectability and high social status in the course of his occupation,"<sup>12</sup> this phenomenon should not be understood in terms of corporate fraud alone. Though the underlying attributes (deception and a lack of physical force) remain constant, the means of commission have evolved and the individuals responsible have proliferated across socio-economic strata. White collar crime is a category of ever-broadening scope, including high-level corporate misconduct at one end of the spectrum and the phishing schemes of an everyday citizen acting alone at the other end. These fraudulent activities are now so common as to affect the general public on a day-to-day basis. Therefore, white collar crimes are defined for this study as illegal or unethical acts that violate fiduciary responsibility or public trust for personal or organizational gain. The definition spans both organizational and individual offenders and encompasses not only traditional forms of economic crime (e.g., embezzlement, money laundering, insurance fraud), but also high-tech crimes (such as Internet fraud), as well as crimes committed both inside and outside of the occupational setting.

Ample press coverage of white collar crime has paralleled a surge in reports of fraudulent practices ranging from identity theft to Internet auction fraud. The Federal Trade Commission (FTC) documented an increase of more than 250,000 complaints of fraud, identity theft, and other crime complaints (a 27% increase) between 2007 and 2009.<sup>13</sup> In 2009 alone, more than 1.3 million complaints were compiled through the FTC's Consumer Sentinel database. Of these complaints, 700,000 were fraud-related, with total losses to individuals exceeding \$1.7 billion.<sup>14</sup> The Internet Crime Complaint Center (IC3)<sup>b</sup> also registered a sizable increase in yearly complaints. In 2009, IC3 received 336,655 complaints, which represented an increase of 22.3% compared to 2008. IC3 complainants reported losing an unprecedented \$559 million in 2009, an increase of more than 110% over the amount reported lost during the previous year.<sup>15</sup>

Certain varieties of white collar crime are often associated with significant financial losses. According to the Federal Bureau of Investigation (FBI), health care fraud is responsible for between 3 to 10 percent of total health care expenditures.<sup>16</sup> In 2007, the Centers for Medicare and Medicaid Services estimated that health care expenditures would amount to \$2.26 trillion by the end of the fiscal year.<sup>17</sup> Given this estimate, it is possible to calculate the costs of health care fraud as ranging between \$67.8 billion and \$226 billion in 2007 alone.<sup>18</sup>

The National Crime Victimization Survey found that the number of households with at least one member who experienced one or more types of identity theft increased 23% between 2005 and 2007.<sup>19</sup> The FTC's 2006 identity theft survey found that 3.7% of the adult population, or 8.3 million adults, discovered that they were victims of identity theft during the previous year. The survey also found that identity thieves made off with an estimated \$15.6 billion. These figures are considerably lower than those recorded by the FTC's 2003

b IC3 is a partnership between NW3C and the FBI aimed at tracking Internet-facilitated crimes and referring those crimes to law enforcement agencies for further investigation.

identity theft survey. However, it is difficult to say whether the prevalence and costs of identity theft actually declined between iterations of the survey, since these differences may reflect changes in the FTC's methodology.<sup>20</sup> Nevertheless, the figures indicate that identity theft remains costly and common. These specific types of crime represent only a small portion of ways in which white collar crime can be committed; they do, however, highlight the tremendous damage that it can cause. It is not surprising, then, that estimates from the FBI and the Association of Certified Fraud Examiners approximate the annual cost of white collar crime as being between \$300 and \$660 billion.<sup>21</sup>

### Quantifying the Problem

Despite the growing body of information concerning the costs of white collar crime, the extent of the problem remains largely unknown. Although certainly high, it is extremely difficult to quantify the true cost of such a pervasive problem. This can be attributed to a number of factors, including a lack of official statistical information and empirical studies devoted to the topic, as well as the nature of white collar crime and the evolving, high-tech methods of commission.

Few efforts have been devoted to assessing the white collar crime rate. Prior studies addressing this topic found 15%<sup>22</sup> and 46.5%<sup>23</sup> victimization rates among individual and household survey respondents, respectively. The most recent data collection (NW3C's replication of the 1999 survey) was completed in 2005.<sup>24</sup> Although there are more recent white collar crime surveys, they tend to have a narrow focus. For example, the National Crime Victimization Survey began including questions related to identity theft in 2004;<sup>25</sup> however, the larger focus of this survey remains on index crimes designated by the FBI (e.g., robbery, burglary, rape) with no other white collar crimes being captured. Similarly, recent initiatives from the FTC have included studies devoted to assessing the prevalence of identity theft<sup>26</sup> and consumer fraud.<sup>27</sup> While such surveys attempt to quantify the existence of specific crimes among the general population, the parameters used to identify white collar crime do not delineate the extent of the problem.

Complicating matters further is the lack of official statistics concerning white collar crime. Relatively few victimization reports reach law enforcement. Studies show that, while victimization seems to be on the rise, it is reported at a much lower rate than traditional crimes. Moreover, even fewer of the crime reports actually land in the hands of a crime control agency.<sup>28, 29</sup> It is also worth noting that statistical sources that track white collar crime often define it in a way that does not reflect the diversity of crime types. For instance, the FBI's Uniform Crime Reports gathers white collar crime statistics through a summary method in which property crime, forgery and counterfeiting, fraud and embezzlement are the focus<sup>30</sup>—a list that covers only a small subset of white collar crimes.

The scope of white collar crime is constantly changing, which poses a unique challenge to the law enforcement community. Advances in technology and greater accessibility

stimulate the diversification of methods used in the commission of high-tech and economic crimes. This presents formidable obstacles to policing these crimes. White collar crime cases are often more complex and resource-consuming than those involving traditional crimes. Additionally, many white collar crime investigations require specialized investigative techniques, equipment, and training; consequently, many smaller agencies are not prepared to handle such cases. This deficiency may be felt most acutely in criminal cases involving a computer. Given that most law enforcement agencies tend to focus upon traditional index crimes, it is often difficult for an agency to devote the resources, time, and attention required to deal with a complex white collar crime case.<sup>31</sup>

Obstacles also emerge when prosecuting such crimes. Remote computers are linked together almost seamlessly, often making it difficult to determine exactly "where" an activity is taking place. To complicate things further, there is often a question of when a web resource becomes subject to local laws. Is a web site legally created in one state or country subject to the laws of another? Additionally, the wording of older laws might be too specific, such as laws involving the abuse of telephones, and may not contain language general enough to apply to the same behavior when done online.

Finally, the very nature of white collar crime precludes comprehension of its true prevalence. Targets of white collar crime are not as likely as those of conventional crimes to be aware of their victimization. As criminologist David Friedrichs observes, "Someone who has been robbed is much more aware of his or her victimization than a person who overpays as a result of price-fixing..." In addition, the ambiguity of some laws makes it difficult for people to determine if they were actually the victim of a crime.<sup>32</sup>

Although it may be impossible to assess the true frequency of various types of white collar crime, it makes sense to systematically reach for an empirical understanding of white collar criminality as it relates specifically to known victims. This effort can inform police efforts to combat these types of crime, as well as suggest certain protective measures the public can take to avoid it. Nevertheless, due to an enduring focus on traditional crime, white collar crime victimization elicits relatively little attention from law enforcement. This observation, coupled with the scarcity of literature concerning the public's perceptions of and contact with white collar crime, highlights the need for more research in this area. In order to address this need, the current study was designed to provide a broad measure of the public's exposure to and perceptions of white collar criminality by soliciting responses to questions that reflect a wide range of victimization and crime seriousness categories.<sup>c</sup>

## Methodology

See Appendix A for information regarding the survey methodology.

c A more detailed treatment of the limitations of crime measurement appears in the Discussion section of this report.

## Results

The survey focused on three major areas concerning white collar crime: victimization, reporting behaviors, and perceptions of crime seriousness. The following sections will discuss each.

Following NW3C's previous public surveys, this survey focused on the individual's and household's exposure to a variety of white collar crimes. To gauge the pervasiveness of white collar crime, eight questions were asked to capture information on victimizations that range from being lied to about the price of a product to being affected by mortgage fraud. Respondents were asked to identify if they, or anyone within their household, had been victimized by these crimes. In an effort to minimize self-reporting errors, respondents were asked about victimizations that occurred within the past 12 months, increasing data reliability by employing a recent fixed timeframe method.

## Household Victimization and Reporting Behaviors

Respondents were asked whether someone within their household had been victimized by white collar crime within the past 12 months. Approximately 24% of the respondents indicated that someone experienced at least one type of victimization. Of those households reporting victimization, an average of 1.4 instances occurred. Figure 1 reflects crime trend information for those individuals reporting household victimization.



Figure 1 Household Victimization Trends<sup>d</sup>

d Households may be victimized by more than one crime type

Respondents reported that within the previous 12 months, their households were affected most often by credit card fraud, price misrepresentation, and unnecessary repairs.

In conjunction with direct victimization questions, respondents were also asked whether or not the victimizations were reported to either a crime control agency or another entity able to provide recourse, such as credit card companies or personal lawyers. Of the household victimizations (n=846), 54.7% were reported to at least one entity.

Figure 2 illustrates the reporting behavior patterns of respondents' households. Of the known household reports, <sup>e</sup> 30.9% were sent to credit card companies, 18.8% were sent to police, 15.6% were sent to banks, 14.8% were sent to the business or person involved in the incident, 11% were sent to an entity not listed, 5.1% were sent to the Better Business Bureau, 1.3% were sent to a district attorney or state attorney general, 0.8% were sent to a consumer protection agency, 0.6% were sent to a credit bureau, 0.6% were sent to a personal lawyer, and 0.4% were sent to IC3.

Figure 2 Household Victimization Reporting Trends



The finding that more than half of household victimizations were reported is encouraging. It has been documented that self-blame or the prospect of being stigmatized may prevent victims of certain crimes<sup>5</sup> from reporting it to authorities.<sup>33</sup> This reluctance to report crime has shown up in cases involving deception, in which victims feel shame or guilt as a result of being fooled. This has been observed in cases of more conventional offenses such as rape, where the victim's character may, however wrongly, come under scrutiny as a factor in the crime's commission.<sup>34</sup>

e "Known reports" (n=473) are reports of household victimization that were made to an external agency that the respondent could identify. A single victimization can be the subject of more than one report. In this case, 463 reported household victimizations yielded 473 known reports.

Although the survey found that more than half of household victimizations were reported, only 21.4% of household *reports* reached an entity with criminal investigative or prosecutorial power.

Table 1 shows the number of household victimizations by offense type, the percentage of those victimizations that were reported, and the percentage of reported victimizations that reached a crime control agency.<sup>f</sup>

Offense <sup>1</sup>	Number of Victimizations	% of Victimizations Reported	% of Reported Victimizations made to Crime Control Agency
Fraudulent Business Venture	59	37.3	31.8
Unnecessary Repairs (Object)	135	33.3	26.7
Price Misrepresentation	170	33.5	28.1
False Stockbroker Information	46	34.8	56.3
Monetary Loss (Internet)	96	60.4	27.6
Mortgage Fraud	26	26.9	42.9
Credit Card Fraud	240	83.3	20.5
Identity Theft	74	78.4	46.6

Moreover, in the aggregate, the data show that only 11.7% of total household victimizations were brought to the attention of any type of criminal justice agency.<sup>g</sup> The dearth of official reporting poses a significant problem for the law enforcement community—criminal investigations are not likely to be initiated against crimes that go unreported. Furthermore, reporting deficiencies undercut official statistics. With white collar crime already being marginally represented within official reports (e.g., the FBI's Uniform Crime Report), the indication that a majority of these crimes goes unreported to law enforcement suggests that these crimes will continue to be underestimated in official statistics.

#### Individual Victimization

To capture the prevalence of white collar crime on a personal level, the survey asked respondents whether they had personally been victimized by the same types of crime within the 12-month timeframe.

The survey showed that 16.5% of respondents have been a victim of white collar crime

f Crime control agencies, for the purpose of this survey, were identified as Police/Law Enforcement, Internet Crime Complaint Center (IC3), District Attorney or State Attorney General, or Consumer Protection Agency.

g Of the total number of household victimizations (n=846), 99 were reported to a law enforcement agency, generating 101 known reports to law enforcement agencies (some victimizations were reported more than once).

within the past year, with an average of 1.3 victimizations per respondent. Figure 3 represents individual victimization trends.<sup>h</sup>



Figure 3 Individual Victimization Trends

Consistent with the household victimization data, the crimes most commonly affecting individuals in the sample were credit card fraud, price misrepresentation, and unnecessary commercial repairs. Such findings are consistent with previous research which has shown that price misrepresentation, credit card fraud, and unnecessary commercial repairs are among the most prevalent forms of white collar crime.<sup>35, 36</sup>

#### Crime Seriousness

The survey also inquired about individual perceptions of crime seriousness. Respondents were asked to compare the seriousness of each of 12 scenarios to a traditional crime baseline of stealing a parked car on the street worth \$10,000. Of the 12 scenarios, 10 contained elements of white collar crime, while the remaining two were conventional offenses. Respondents were asked to rate each scenario on a seriousness scale ranging from one ("Much Less Serious") to five ("Much More Serious") relative to the baseline crime. Selection of the middle value ("3") indicated that the respondent believed that the crime scenario in question was "just as serious as" the baseline of auto theft.

Incorporating the ratings of all scenarios into a single measure, the survey's crime seriousness section had a mean  $(\bar{x})$  seriousness score of 4.04, indicating that a majority of respondents felt that the crime scenarios in question were more serious than the base crime of stealing a car. This was an interesting finding, considering the nature of the crimes included in this portion of the survey. While it is not surprising that a violent crime

h N=413; individuals may be victimized by more than one crime type.

(i.e., assault) received a higher seriousness rating ( $\overline{x} = 4$ ) than the base crime, it is interesting to note that crimes which in the past were seen as being less serious than traditional crime are also seen as more serious than the base crime.<sup>37</sup> Although this inflation of seriousness scoring may indicate that some respondents did not correctly understand the scoring mechanism utilized for the survey and produced skewed results, previous research indicates that this finding is not unusual in studies rating crime seriousness.<sup>38</sup> Such inflation, then, is not considered to be a significant limitation on the interpretation of results.

Figure 4 illustrates the mean seriousness ratings of the individual crime scenarios included in the survey. Surprisingly, a number of white collar crime scenarios were found to be more serious than a traditional violent offense. Only one crime, selling a counterfeit item at an online auction site, was considered less serious than the base crime.



#### Figure 4 Mean Crime Seriousness Scores per Scenario<sup>i</sup>

In an effort to further explore respondents' attitudes towards crime types, the scenarios were incorporated into categories expressing specific variables. Scenarios were grouped on the basis of common attributes that permitted comparison of the perceived seriousness of *white collar crime* to that of *traditional crime*, of *crime involving harm* to that of *crime involving financial loss*, of *crime involving an organizational offender* to that of *crime involving an individual offender*, and of *crime committed by a high-status offender* (e.g., an individual in a position of trust) to that of *crime committed by a low-status offender*.<sup>j</sup> Figure 5 represents the results obtained from this breakdown.

i A score of three indicates that respondents believed that the crime scenario in question was just as serious as the base line crime.

k Appendix C, Table 4 indicates the assignment of specific scenarios to categories.

According to the data, the public tends to view white collar crime as being slightly *more serious* than traditional offenses. This finding marks a divergence from a previously held general attitude towards white collar crime as being less serious or no more serious than traditional offenses.<sup>39</sup> Not surprisingly, crimes which involved direct physical harm to individuals were found to be more serious than those crimes which involved only a monetary loss. Public opinion falls more harshly on *organizational offenders* than on *individual offenders*, while crime involving *high*-status offenders tends to be seen as *more serious* than crime involving *low*-status offenders.

The survey examined only a limited number of white collar and traditional crime scenarios and cannot be considered an exhaustive exploration of crime seriousness ratings. However, these findings do suggest that white collar crimes are being seen as more serious than previously shown; some may even be taken more seriously than traditional crimes.



Figure 5 Average Crime Seriousness Based on Scenario Factors

#### Allocation of Resources

The survey also inquired about individual attitudes towards governmental response. Respondents were asked whether the government is devoting enough resources to combat white collar crime. Figure 6 illustrates the distribution of responses.

Asked if present efforts are enough, 43% of respondents said they believed the government is not allocating enough resources to combat white collar crime. On the other hand, 24% of participants believed that government is devoting enough resources, while another 33% were on the fence or did not know.



Figure 6 Is the Government Devoting Enough Resources to Combat White Collar Crime?

In addition, respondents were asked if they believed that white collar crime has contributed to the current economic crisis. Figure 7 shows the distribution of responses to this question. A majority of respondents (70%) believed that white collar crime has contributed to the economic crisis, while 13% took the opposite view. Seventeen percent (17%) were either on the fence or did not know.

Figure 7 Has White Collar Crime Contributed to the Economic Crisis?



#### Limitations of Study

This survey presented respondents with common types of white collar crimes and asked about victimization only for those specific types. Thus, it can be assumed that the actual rate of white collar crime victimization is likely higher than the reported number. There are several types of data that would not be captured under the current approach (or, in some cases, under any approach):

- Undetected behavior
  - Respondents can only report on crimes that they are aware of.

Example: Fraudulent schemes that are presumed to be legitimate at the time of the survey

- Criminal behavior erroneously perceived to be an exclusively civil matter
  - The public sometimes has an inaccurate idea of what sort of behavior may be considered criminal.

Example: Contractors billing for work that was not performed, which gets characterized as a contract dispute instead of fraud

- Known and detected crimes where the respondent is unaware that they are a victim
  - Unlike most street crimes, white collar crimes can victimize large, poorly defined categories of people.

Example: An employee who is successfully prosecuted for illegal disposal of waste materials, when many of the citizens who drink from the tainted water sources do not realize that they are victims

- White collar crimes of types that were not asked about
  - While respondents' known victimizations were recorded (See Appendix B for the survey questions), it was not practical to cover all types of white collar crime.
     Example: Affinity fraud carried out in a non-online context
- Detected and correctly identified criminal acts in which the respondent realizes they were a victim, but chooses not to speak about the incident
  - All surveys that rely on the answers of respondents are dependent on the respondents answering honestly. While the survey was designed to reduce the motivation for giving false answers (for example, by being anonymous and by being administered by a surveying firm with no stake in the results), any respondents who gave false information either hiding true incidents or inventing false ones necessarily made it harder to see the underlying patterns in the data.

Example: A scam victim who feels foolish for having been decieved and is too embarrassed to tell researchers about the incident

The current data provide a valuable snapshot of existing white collar crime victimization, but it should be understood that no survey that attempts to provide a measure of crime can do so with complete accuracy. In light of these observations and the findings of other crime reports,<sup>40</sup> results of the present study should be interpreted carefully. While this report captures information on a significant portion of the white collar crime problem, the true rate of victimization is likely to be higher.

## **Discussion and Conclusion**

This survey of a random sample of U.S. citizens provides insight into the public's encounters with and perceptions of white collar crime. Results of the survey show that:

- Nearly one household in four was victimized by white collar crime within the past year
- About one person in six was victimized by white collar crime within the past year
- Few reports of victimization reach law enforcement agencies
- White collar crime is seen as more serious than traditional crime
- A majority of U.S. citizens believe that white collar crime has contributed to the current economic crisis
- Almost half of U.S. citizens believe that the government is not allocating enough resources to combat white collar crime

#### The Magnitude of the Problem

Although the data captured in this study likely understates the problem, the data suggests that white collar crime significantly affects U.S. citizens. To put it in the context of other crimes, the Bureau of Justice Statistics' 2008 Criminal Victimization Survey computed a victimization report rate of 135 households per thousand (13.5%) for property crime and 19.3 individuals age 12 or over per thousand (1.93%) for violent crimes.<sup>41</sup> Even at an understated rate of 24.2% (for households), white collar crime victimization is occurring much more frequently than property crime and violent crime combined.<sup>42</sup>

"Street crimes" seem to have been decreasing in frequency across the board for some time. The Bureau of Justice Statistics' victimization studies<sup>43</sup> show that, since 1999, reported violent crime victimization has decreased by 41.2%, and reported property crime victimization has decreased by 32%. Likewise, the Federal Bureau of Investigation's uniform crime reports<sup>44</sup> (which rely on police reports instead of victim data) show that rates of violent crime reports have decreased by 15.2% since 2000, while rates of property crime reports have decreased by 16.1%. In a climate with so many indicators of ever-dwindling violent and property crime, the significance of rampant white collar crime victimization cannot be overstated.

#### Interpretation

These findings could be interpreted many ways, but one way to interpret such a high rate of white collar victimization, coupled with decreasing rates of other crime, is that criminals may be migrating from more traditional street crimes to white collar crimes.

Other information supports this conclusion as well. The U.S. government seized over \$272 million in counterfeit and pirated merchandise in 2008—a 38% increase from the year before.<sup>45</sup> The number of suspects referred to U.S. attorneys with an intellectual property (IP) theft-related lead charge increased 26% from 1994 to 2002. The number of defendants convicted in U.S. district court with an IP offense increased 51% over this same period.<sup>46</sup> The FBI's Financial Crimes Section experienced a 90% increase in corporate crime cases from fiscal year 2003 to fiscal year 2007, a steady increase in securities and commodities fraud cases, and a 176% increase in mortgage fraud cases.<sup>47</sup> Additionally, the number of compromised records before the Verizon Incident Response Team in 2008 (more than 285 million) was higher than the combined total from 2004 to 2007,<sup>48</sup> and 91% of those incidents were linked to organized criminal organizations.<sup>49</sup>

As to why criminals might migrate to white collar crime, there are compelling practical reasons to do so. For example, pirated DVDs made in Malaysia for around 70 cents have been found marked up more than 1,150 percent and sold on the streets in London for about \$9. The profit margin is more than three times higher than the markup for Iranian heroin and higher than the profit for Columbian cocaine.<sup>50</sup> That profit is weighed against the possible criminal penalties—in the U.S., that would be a maximum of ten years (but often substantially less) for criminal copyright infringement,<sup>51</sup> versus ten years to life for importing a kilogram of a substance that contains a detectable amount of heroin.<sup>52</sup> The cost-benefit ratio is starkly compelling. For traditional organized crime, which sees criminal activity as a business first, it is clearly the more sensible business model.

A changing populace helps contribute to the problem. Many white collar crimes require significantly higher levels of education or specialized technical skills than street crimes. Both of these things are becoming more available in our society as literacy rates,<sup>53</sup> computer use,<sup>54</sup> and educational attainment<sup>55</sup> continue to skyrocket. Another factor is the general aging of America. Physical crimes favor the young,<sup>56</sup> while fraud is generally associated with older perpetrators.<sup>57</sup> White collar crime may be more attractive to older, more educated lawbreakers.

Another reason criminals migrate to white collar crime is opportunity. Take traditional on-the-job white collar crime, for example. At one time, relatively few individuals had the means to commit many of these white collar crimes. As recently as the 1960's, a small portion of America's work force had easy access to corporate information.<sup>58</sup> However, by 2009, 86 million Americans were employed in management, professional, sales, and office professions, out of the total workforce of almost 140 million.<sup>59</sup> In other words, 61% of the

total workforce is now in a position to sell trade secrets, embezzle funds, or commit other white collar crimes of the on-the-job variety. Making it worse is the increasing presence of computers in office environments. The rise of business computing means that a great deal of sensitive documents and information that might once have been physically secured in locked cabinets or safes is now transmitted by email or stored on company servers. Although it is difficult to quantify the extent to which this information is rendered more vulnerable by the use of digital storage and retrieval systems, it stands to reason that the information is now less secure and, hence, more likely to be exploited for criminal purposes.

Coupled with increased access to corporate information is the fact that more of the nation's wealth is embodied in information or information products.<sup>60</sup> The value of a pirated CD is found in the information encoded on the disc, rather than in the cheap plastic medium itself. When the Business Software Alliance reports that \$51.4 billon worth of software was stolen ("pirated") in 2009,<sup>61</sup> they are reporting on the hypothetical value of lost sales of information, not on the loss of the worth of plastic discs (which were likely legitimately purchased). The concept of wealth itself is increasingly represented in non-physical units. There was a time when, if thieves did not steal hard currency, they were invariably stealing something other than money. Now, money can be stolen through the manipulation of digital banking information stored in computer hard drives.

The advent of the Internet is also a major possible factor in the increased popularity of white collar crime. Its utility in facilitating traditional scams, for example, is quite high. Compared to "traditional" scam techniques, the Internet provides an incredibly cheap, relatively anonymous means of reaching potential victims. In the offline environment, a scam that only snares one target out of a thousand is unlikely to offer a high enough return on investment to be worth pursuing. On the other hand, the online version of that same scam can be enacted several thousand times at once with the use of a mailing list (or any other means of electronic mass distribution). If the criminal sends the opening gambit of the scam to twenty thousand potential victims, he or she may well get twenty replies in an afternoon. This is done with very little set-up cost, very little time investment, and relative anonymity compared to performing the scam in person. This also allows criminals to more easily pursue distributed victimization strategies, where the dollar loss is spread out across such a wide group of victims that no one case is worth investigating. Ten thousand geographically dispersed ten dollar victimizations are presumably significantly less likely to be reported, much less investigated, than a single victimization of even \$5,000 would be.

This means a single white collar criminal (or group of criminals) can easily be at the center of what seems like a world-wide crime wave. A single fraudster (e.g., Robert Soloway, convicted in 2008 of fraud and criminal spamming) can flood the Internet with unsolicited and fraudulent emails. In Soloway's case, it was to the tune of trillions of emails, which made him thousands of dollars a day<sup>62</sup> from 1997 to 2007<sup>63</sup> (and for which he received a sentence of 47 months). Similarly, hacker Albert Gonzalez recently received a 20-year

sentence for leading a group of ten people who stole, then sold 40 million credit card numbers from customers of companies with unsecured wireless access points in the Miami area.<sup>64</sup>

Advanced information technologies and communication devices (such as netbook, laptop, and desktop computers; cell phones; and iPads) make white collar crimes easier to commit, while having little impact on street crime, as they are primarily used for interacting with nonphysical constructs, which is the general province of white collar crime. These technologies have become increasingly common across diverse social strata in recent years.<sup>65</sup> Unlike the portable communications technologies of the 1980's, they are no longer tools restricted to those who possess high levels of wealth. The widespread adoption of these technologies in the U.S. is in many ways a positive sign, but a logical consequence of a larger online population is that there are more opportunities to either commit a white collar crime or become a victim of one.

Rapidly developing communications and information technologies, combined with their rapid and widespread adoption, pose difficulties to law enforcement agents that investigate and prosecute high-tech crime. In their struggle with high-tech criminality, crime control agents encounter a situation analogous to the Red Queen's race in Lewis Carroll's Through *the Looking-Glass.* There, the Red Queen and Alice find themselves in a foot race where they seem to be getting nowhere. Perplexed at not having made any progress, Alice observes that, in her country, people tend to get to somewhere else after running very fast for some time. The Red Queen replies: "A slow sort of country! ... Now, here, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"<sup>66</sup> Likewise, crime control agents must continually run as fast as they can to keep pace with criminals who use advanced technologies to defraud others; they must keep abreast of technological innovations and their criminal uses if they are to have a chance at thwarting or apprehending these sophisticated criminals. Lack of specialized training and a continued focus on traditional types of crime put law enforcement agents at a tremendous disadvantage in their race against high-tech criminality.

Further complicating white collar crime control is the chronic underreporting of these types of crimes to law enforcement agencies. Survey respondents indicated that the majority of crime complaints went to an entity without criminal authority, albeit one that might provide assistance in redress (such as the credit card company or the person or company involved in the fraud). Only 11.9% of household victimizations were reported to a law enforcement agency. The lack of official reporting may be cause for alarm within the law enforcement community and makes it difficult to address this problem.

#### Perceptions of Public Policy and the Current Economic Crisis

The study provides important empirical information concerning public perception of white collar crime's role in the current economic crisis, as well as governmental efforts to reduce

white collar crime. A majority of respondents (70%) indicated that they believe that white collar crime has contributed to the current economic crisis. Another 13% said it has not contributed to the crisis, and another 17% said that they were unsure about the role played by white collar crime.

The study also asked whether respondents agreed that the government is devoting enough resources to fighting white collar crime. Nearly half of the sample (43%) disagreed with this statement, while 24% agreed. Another 33% were either unsure or not committed to an opinion.

One might expect that respondents who feel that white collar crime has contributed to the economic crisis may also feel that government must not be devoting enough resources to fighting it. Implicit is the assumption that the economic crisis, or specific features of its unfolding, is evidence that government funding is insufficient and that an increase would result in the prevention or curtailment of white collar crimes believed to contribute to the economic recession.

An inquiry into the relationship (if any) between these two perceptions prompted the testing of the following hypothesis: Those who agree that white collar crime has contributed to the economic crisis are *more likely* to believe that government is *not* devoting enough resources to fight white collar crime.<sup>k</sup> Below is a summary of the findings, followed by an interpretation (see Appendix D for a more detailed statistical analysis).

The patterns of responses revealed by the analysis provide evidence for the stated hypothesis. The analysis suggests that those who believe that white collar crime has contributed to the economic crisis are *more likely* to believe that government is *not* devoting enough resources to fight white collar crime. However, a measure of association between these two perceptions showed only a moderate relationship.

It is understood that the data presented here may be used to inform public policy; and, while NW3C is not committed to a particular policy position, it may be helpful to discuss the possible interpretations of the data as they relate to public policy issues.

Some policy makers may interpret the survey's findings as signaling public demand for greater response from government. After all, the findings indicate that white collar crime victimization is much more prevalent than traditional crimes. It also appears that the public's perception of white collar crime is catching up to academia's portrayal of it as being significantly more harmful than traditional crime. Consistent with this view is the majority's belief that white collar crime has intensified or at least played a role in the current economic recession. Most importantly, nearly half of the sample (43%) felt that the government is not devoting enough resources to address white collar crime.

k A contingency table was created to test this hypothesis and to explore the association between the two variables that captured these perceptions (see Table 2). A contingency table shows the distribution of one variable for each category of another variable.

Although the survey's findings do not indicate unambiguous public support for expansion of governmental crime control efforts, it is important to note that the survey documents a high level of white collar crime relative to traditional crime. This observation certainly warrants the attention of the law enforcement community. Furthermore, considering the observed decline in traditional crime (i.e., "street crime") and the proliferation of access to advanced and affordable information technology at all socioeconomic levels, one may infer from the prevalence of white collar crime that street criminals may be turning increasingly to white collar crime to expropriate money or sensitive information from others. These emergent trends arguably put a premium on law enforcement's ability to adapt to a rapidly changing criminogenic environment.

## Endnotes

- 1 Salinger, L.M. (2005). Introduction (p.vii). In Salinger, L.M. (ed.) *Encyclopedia of White-Collar and Corporate Crime*. Thousand Oaks, CA: Sage Publications.
- 2 Guttentag, J. (2007, August 25). Stated-income loans face new scrutiny. *Seattle Times*. Retrieved September 8, 2010 from http://seattletimes.nwsource.com/html/realestate/2003852076\_guttentag26. html.
- 3 Nguyen, T. H. & Pontell, H. N. (2010). Mortgage origination fraud and the global economic crisis: A criminological analysis. *Criminology & Public Policy*, *9*(3), 591-612.

Isidore, Chris. (2007, March 19). 'Liar loans': Mortgage woes beyond subprime. *CNNMoney.com*. Retrieved September 8, 2010 from http://money.cnn.com/2007/03/19/news/economy/next\_subprime/.

- 4 Henriques, D. B. & Berenson, A. (2008, December 14). The 17th floor, where wealth went to vanish. *The New York Times*. Retrieved August 26, 2010, from http://www.nytimes.com/2008/12/15/ business/15madoff.html?\_r=1.
- 5 Securities and Exchange Commission, Plaintiff v. Stanford International Bank Ltd., Stanford Group Company, Stanford Capital Management LLC, R. Allen Stanford, James M. Davis, Laura Pendergest-Holt, Defendants, <u>case no. 3:09-cv-00298-L</u> Retrieved October 18, 2010 from http://www.sec.gov/litigation/ complaints/2009/comp20901.pdf.
- 6 Cricinfo staff. Handcuffed Stanford pleads not guilty. *Cricinfo*. Retrieved October 18, 2010 from http://www.cricinfo.com/westindies/content/story/410506.html.
- 7 Driver, A & Hays, K. (2009, December 17). Judge sets Allen Stanford trial for January 2011. *Reuters*. Retrieved October 18, 2010 from http://www.reuters.com/article/idUSTRE5BG4YF20091217?loomia\_o w=t0:s0:a49:g43:r1:c1.000000:b30623572:z0.
- 8 Bennhold, K. & Clark, N. (2008, August 2). Report says French bank trader's managers were negligent. *The New York Times*. Retrieved September 13, 2010 from http://www.nytimes. com/2008/08/02/business/worldbusiness/02socgen.html.
- 9 Clark, N. & Bennhold, K. (2010, June 25). A Societe Generale trader remains a mystery as his criminal trial ends. *The New York Times*. Retrived September 13, 2010 from http://www.nytimes. com/2010/06/26/business/global/26socgen.html?\_r=1&ref=jerome\_kerviel.
- 10 BBC. (2010, June 9). *SocGen trader Kerviel accused of taking "inhuman" risks*. Retrieved September 13, 2010 from http://www.bbc.co.uk/news/10279656.
- 12 Sutherland, E.H. (1983). *White collar crime: The uncut version* (p.7). New Haven: Yale University Press.
- 13 Federal Trade Commission. (2010). *Consumer Sentinel Network Data Book*. Retrieved September 15, 2010, from http://www.ftc.gov/sentinel/reports/sentinel-annual-reports/sentinel-cy2009.pdf.

- 14 Federal Trade Commission. (2010). *Consumer Sentinel Network Data Book*. Retrieved September 15, 2010, from http://www.ftc.gov/sentinel/reports/sentinel-annual-reports/sentinel-cy2009.pdf.
- 15 National White Collar Crime Center. (2005). *IC3 2009 Internet fraud-crime report.* Fairmont, WV: National White Collar Crime Center.
- 16 Federal Bureau of Investigation. (2007). *Financial crimes report to the public*. Retrieved September 17, 2010 from http://www.fbi.gov/publications/financial/fcs\_report2007/financial\_crime\_2007.htm#health.
- 17 Federal Bureau of Investigation. (2007). *Financial crimes report to the public*. Retrieved September 17, 2010 from http://www.fbi.gov/publications/financial/fcs\_report2007/financial\_crime\_2007.htm#health.
- 18 National Health Care Anti-Fraud Association. (2007). *The problem of health care fraud*. Retrieved September 17, 2010, from http://www.nhcaa.org/eweb/DynamicPage.aspx?webcode=anti\_fraud\_ resource\_centr&wpscode=TheProblemOfHCFraud#2.
- 19 Baum, K. & Langton, L. (2010). *Identity theft reported by households, 2007*. Retrieved September 20, 2010 from http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2294.
- 20 Federal Trade Commission. (2006). 2006 identity theft report. Retrieved September 17, 2010, from http://www.ftc.gov/os/2007/11/SynovateFinalReportIDTheft2006.pdf.
- 21 Association of Certified Fraud Examiners. (2005). 2004 *report to the nation on occupational fraud and abuse.* Retrieved September 20, 2005, from http://www.cfenet.com/pdfs/2004RttN.pdf.
- 22 Titus, R. M., Heinzelmann, F., & Boyle, J. M. (1995). Victimization of persons by fraud. *Crime & Delinquency*, 41(1), 54-72.
- 23 National White Collar Crime Center. (2006). *The national public survey on white collar crime*. Morgantown, WV: National White Collar Crime Center.
- 24 National White Collar Crime Center. (2006). *The national public survey on white collar crime*. Morgantown, WV: National White Collar Crime Center.
- 25 Baum, K. (2006). *Identity theft*, 2004. Retrieved September 20, 2010, from http://bjs.ojp.usdoj.gov/index. cfm?ty=pbdetail&iid=972.
- 26 Federal Trade Commission. (2006). 2006 identity theft report. Retrieved September 17, 2010, from http://www.ftc.gov/os/2007/11/SynovateFinalReportIDTheft2006.pdf.
- 27 Federal Trade Commission. (2007). *Consumer fraud in the United States: The second FTC survey.* Retrieved September 20, 2010, from http://www.ftc.gov/opa/2007/10/fraud.pdf.
- 28 Titus, R. M., Heinzelmann, F., & Boyle, J. M. (1995). Victimization of persons by fraud. *Crime & Delinquency*, 41(1), 54-72.
- 29 National White Collar Crime Center. (2006). *The national public survey on white collar crime*. Morgantown, WV: National White Collar Crime Center.
- 30 Barnett, C. (2002). *The measurement of white-collar crime using Uniform Crime Reporting (UCR) data.* Washington, D.C.: U.S. Department of Justice.

- 31 Friedrichs, D. O. (2007). *Trusted criminals: White collar crime in contemporary society*(pp. 249-250). Belmont, CA: Wadsworth.
- 32 Friedrichs, D. O. (2007). *Trusted criminals: White collar crime in contemporary society*(pp. 43-45). Belmont, CA: Wadsworth.
- 33 Kidd, R. F. & Chayet, E. F. (1984). Why do victims fail to report? The psychology of victimization. *Journal of Social Issues*, 40, 1, 39–50.
- 34 Shover, N., Fox, G. L., & Mills, M. (2001). Consequences of victimization by white-collar crime. In N. Shover and J.P. Wright (Eds.), *Crimes of privilege: Readings in white-collar crime* (pp. 74–86). New York: Oxford University Press.
- 35 Titus, R., Heinzelmann, F., & Boyle, J.M. (1995). Victimizations of persons by fraud. *Crime and Delinquency*, *41*, 54–72.
- 36 National White Collar Crime Center. (2006). *The national public survey on white collar crime*. Morgantown, WV: National White Collar Crime Center.
- Holtfreter, K., Van Slyke, S., & Bratton, J. (2008) Public perceptions of white-collar crime and punishment. *Journal of Criminal Justice*, *36*, *1*, 50-60. See also National White Collar Crime Center. (2006). *The national public survey on white collar crime*. Morgantown, WV: National White Collar Crime Center.
- 38 Rossi, P., Waite, E., Bose, C., & Berk, R. (1974). The seriousness of crimes: Normative structure and individual differences. *American Sociological Review*, *39*, 224–37.
- Holtfreter, K., Van Slyke, S., & Bratton, J. (2008) Public perceptions of white-collar crime and punishment. *Journal of Criminal Justice*, *36*, *1*, 50-60. See also National White Collar Crime Center. (2006). *The national public survey on white collar crime*. Morgantown, WV: National White Collar Crime Center..
- 40 For example, reports of crimes involving the Internet have grown exponentially in recent years. See National White Collar Crime Center. (2004). *IC3 2009 Internet fraud report*. Fairmont, WV: National White Collar Crime Center.
- 41 Rand, M. (2009, September 2). Criminal victimization, 2008. *Bureau of Justice Statistics*. Retrieved October 26, 20101 from http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=1975.
- 42 While the absolute numbers remain quite high, the actual victimization level appears at first glance to have declined from previous NW3C surveys. However, there have been significant changes made between this survey and the surveys that preceded it. The recorded victimization levels are therefore not fully comparable.

Changes in NW3C's survey methodology, particularly the questions asked, are likely to have contributed to the lower numbers. The present survey asks fewer questions related to victimization than the 2005 survey. It was determined that certain questions shared common elements that may have confused respondents. For instance, omitted from the present survey is a question that, in previous NW3C surveys, captured instances of fraudulent emails. It was decided in a subject matter expert meeting that this question, along with another question concerning Internet-facilitated fraud, contained redundant elements. This redundancy may have led respondents to count the same instance of crime twice. The exclusion of this question and others from the present survey may have

impacted the measurement of crime and produced a lower level of incidence relative to previous surveys.

- 43 Rand, M. (2009). Criminal victimization, 2008 (Table 2). *U.S. Department of Justice, Office of Justice Programs*. Retrieved October 1, 2010 from http://bjs.ojp.usdoj.gov/content/pub/pdf/cv08.pdf.
- 44 Federal Bureau of Investigation. (2010). *Crime in the United States 2009 (Table 1A)*. Retrieved October 1, 2010 from http://www.fbi.gov/ucr/cius2009/data/table\_01a.html.
- 45 U.S. Customs and Border Protection. *IPR seizure statistics*. Last accessed on 6/17/09, at http://cbp.gov/ xp/cgov/trade/priority\_trade/ipr/seizure/.
- 46 Motivans, M. (2004, October). *Intellectual property theft*, 2002. Retrieved on October 7, 2010 from http:// bjs.ojp.usdoj.gov/content/pub/pdf/ipt02.pdf.
- 47 Federal Bureau of Investigation. (2008). *Financial crimes report to the public fiscal year 2007*. Retrieved October 7, 2010 from http://www.fbi.gov/publications/financial/fcs\_report2007/financial\_crime\_2007. htm.
- 48 Verizon Business RISK Team. (2009). *Data breach investigations report (p. 6)*. *Verizon*. Retrieved October 7, 2010 from http://www.verizonbusiness.com/resources/security/reports/2009\_databreach\_rp.pdf.
- 49 Verizon Business RISK Team. (2009). *Data breach investigations report (p. 2). Verizon*. Retrieved October 7, 2010 from http://www.verizonbusiness.com/resources/security/reports/2009\_databreach\_rp.pdf.
- 50 UK National Criminal Intelligence Service SU/Drug Project, 2004., *cited in* Treverton, Gregory F. (2009). *Film Piracy, Organized Crime, and Terrorism, 2009*. Santa Monica, CA: The Rand Corporation. Retrieved June 17, 2009 from http://www.rand.org/pubs/monographs/2009/RAND\_MG742.pdf.
- 51 18 USC § 2319
- 52 21 USC § 960
- 53 The illiteracy rate in America was 14.8% in 1970, and decreased to 6.9% in 2000. Source: UNESCO Institute for Statistics. (2002). *World illiteracy rate 1970 – 2000 (prognosis for 2005 – 2015), age 15 years and over*. Retrieved October 8, 2010 from http://www.uis.unesco.org/en/stats/statistics/UIS\_Literacy\_ Regional2002.xls.
- 54 Home computer ownership has grown from 8.2% of American households in 1984 to 61.8% of American households in 2003 (the last year for which data was collected). Internet access at home grew from 18% of households in 1997 (the first year in which the question was asked) to 68.7% in 2009. Source: U.S. Census. (2010). *Internet use in the United States: October 2009, Appendix Table A. Households with a computer and internet use: 1984 to 2009.* Retrieved on October 7, 2010 from http:// www.census.gov/population/www/socdemo/computer/2009.html.
- 55 The percentage of high school graduates increased from 24.5% of the American population to 80.4% of the population between 1940 and 2000. Similarly, the percentage of Americans with Bachelor's degrees increased from 4.6% to 24.4% in the same period of time. Source: Bauman, K., & Graf, N (2003, August). *Educational attainment: 2000* (Figure 3). Retrieved on October 8, 2010 from http:// www.census.gov/prod/2003pubs/c2kbr-24.pdf.
- 56 Between 1975 and 2005, rates of homicide offending were consistently almost three times as high for

Americans between 18 and 24 as between 25 and 34, about twice as high for Americans between 25 and 34 as between 35 and 49, and almost negligible over 49. In the aggregate, 18-34 year olds were responsible for 65% of homicides during that period. Source: Bureau of Justice Statistics. (2010). *Homicide trends in the U.S.* Retrieved October 8, 2010 from http://bjs.ojp.usdoj.gov/content/homicide/ teens.cfm.

- 57 Data from 2008-2010 show that the majority of perpetrators of organizational fraud, worldwide, were between the ages of 36 and 50. These data also show that median damages rose with age. The Association of Certified Fraud Examiners. (2010). *Report to the nations on occupational fraud and abuse:* 2010 global fraud study (pages 56-57). Retrieved October 7, 2010 from http://www.acfe.com/rttn/rttn-2010.pdf.
- 58 From 1960 to 2004, agricultural employment fell from 8.4% to 1.6% of the total workforce. Industrial jobs fell from 33.4% to 20%. Manufacturing fell from 26.1% to 11.8%. Meanwhile, service employment rose from 58.1% to 78.4%. Source: Bureau of Labor Statistics. (2005, May). *Comparative civilian labor force statistics, 10 countries, 1960-2004 (Table 7)*. Retrieved October 8, 2010 from http://www.bls.gov/fls/ flslforc.pdf.
- 59 Bureau of Labor Statistics. (2010). *Labor force statistics from the current population survey, Table 9: Employed persons by occupation, sex, and age*. Retrieved October 5, 2010 from http://www.bls.gov/cps/ cpsaat9.pdf.
- 60 Between 1967 and 1997, the share of the information economy in America's GNP is estimated to have grown from 46% to 63%. It seems likely that this trend has continued in the 13 years since this measurement was taken. Source: Nath, H., Apte, U., & Karmarkar, U. (2008). Information Services in the US Economy: Value, Jobs, and Management Implications. *California Management Review, Vol. 50, No.3,* 12-30.
- 61 Business Software Alliance. (2010, May). *Seventh annual BSA/IDC global software 09 piracy study (p. 9)*. Retrieved on October 12, 2010 from http://portal.bsa.org/globalpiracy2009/studies/ globalpiracystudy2009.pdf. have grown from 46% to 63%.
- 62 Popkin, J. (2008, September 22). 'Pure greed' led spammer to bombard in-boxes. *NBC News*. Retrieved October 5, 2010 from http://www.msnbc.msn.com/id/26797741/.
- 63 Sullivan, J. (2008, July). *Government's sentencing memorandum no. cr07-187mjp, U.S. v. Soloway*. Retrieved October 5, 2010 from http://www.spamsuite.com/webfm\_send/338.
- 64 Qualters, S. (2010, March 26). Computer hacker Albert Gonzales sentenced to 20 years. *The National Law Journal*. Retrieved October 7, 2010 from http://www.law.com/jsp/article.jsp?id=1202446860357&rs s=newswire.
- 65 As illustrated by Pew Research Center's "Digital Divide" report series, which show a continuous, steady decrease in the gap between broadband adoption levels for different races and different income levels. Source: Smith, A (2010, August). *Home broadband 2010*. Pew Research Center's Internet & American Life Project, Washington D.C.. Retrieved October 26, 2010 from http://pewinternet.org/ Reports/2010/Home-Broadband-2010.aspx.

For that matter, minority members actually outpace Caucasians in both cell-phone ownership and use of cell phones to go online Source: Smith, A (2010, July). *Mobile access 2010*. Pew Research Center's Internet & American Life Project, Washington D.C.. Retrieved October 26, 2010 from http:// pewinternet.org/Reports/2010/Mobile-Access-2010.aspx.

66 Carroll, L. (2002). Alice's adventures in wonderland and through the looking-glass (p.141). New York: Random House, Inc.

## Appendix A: Methodology

The National Public Survey on White Collar Crime, sponsored by the National White Collar Crime Center, obtained telephone interviews with a representative sample of 2,503 adults in the United States. Telephone interviews were conducted by landline (1,667) and cell phone (836, including 360 respondents without a landline phone). The survey was conducted by Princeton Survey Research Associates International (PSRAI). Interviews were done in English and Spanish by Princeton Data Source from June 30 to August 8, 2010. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is ±2.2 percentage points. Details on the design, execution, and analysis of the survey are discussed below.

#### DESIGN AND DATA COLLECTION PROCEDURES

#### Sample Design

A combination of landline and cellular random digit dial samples was used to represent all adults in the continental United States who have access to either a landline or cellular telephone. Both samples were provided by Survey Sampling International, LLC according to PSRAI specifications.

Numbers for the landline sample were drawn with equal probabilities from active blocks (area code + exchange + two-digit block number) that contained one or more residential directory listings. The cellular sample was not list-assisted, but was drawn through a systematic sampling from dedicated wireless 100-blocks and shared service 100-blocks with no directory-listed landline numbers.

An Additional sample was released in Nassau and Suffolk counties for an oversample of 300 registered voters on Long Island.

#### **Contact Procedures**

Interviews were conducted from June 30 to August 8, 2010. As many as ten attempts were made to contact every sampled landline telephone number, and as many as seven attempts were made for every cellular number. A sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of the sample ensures that complete call procedures are followed for the entire sample. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each phone number received at least one daytime call when necessary.

For the landline sample, interviewers asked to speak with the male/female with the most recent birthday. If no male/female was available, interviewers asked to speak with the adult

of the other gender with the most recent birthday. For the cellular sample, interviews were conducted with the person who answered the phone. Interviewers verified that the person was an adult and in a safe place before administering the survey.

#### WEIGHTING AND ANALYSIS

Weighting is generally used in survey analysis to compensate for sample designs and patterns of non-response that might bias results. The sample was weighted to match national adult general population parameters. A two-stage weighting procedure was used to weight this dual-frame sample.

The first stage of weighting corrected for different probabilities of selection associated with the number of adults in each household and each respondent's telephone usage patterns.<sup>1</sup> This adjustment also adjusts for the overlapping landline and cell sample frames and the relative sizes of each frame and each sample.

This first-stage weight for the i<sup>th</sup> case can be expressed as:

WT<sub>i</sub> = 
$$\frac{1}{\left(\frac{S_{LL}}{S_{CP}} \times \frac{1}{AD_{i}}\right)}$$
 if respondent has no cell phone

$$WT_{i} = \underbrace{1}_{SCP} \times \frac{1}{AD_{i}} + R$$
 if respondent has both kinds of phones

 $WT_i = \frac{1}{R}$  if respondent has no landline phone

Where SLL = size of the landline sample SCP = size of the cell phone sample ADi = Number of adults in the household R = Estimated ratio of the land line sample frame to the cell phone sample frame

The equations can be simplified by plugging in the values for SLL = 1,667 and SCP = 836. Additionally, we will estimate the ratio of the size of landline sample frame to the cell phone sample frame R = 0.94.

<sup>1</sup> In other words: whether respondents have only a landline telephone(s), only a cell phone, or both kinds of telephone.

WT<sub>i</sub> = 1 if respondent has no cell phone  $\left(\frac{1,667}{836} \times \frac{1}{AD_i}\right)$ 

WT<sub>i</sub> = 1 if respondent has both kinds of phones  

$$\left(\frac{1,667}{836} \times \frac{1}{AD_i}\right) + 0.94$$

 $WT_i = 1$  if respondent has no land line phone 0.94

The second stage of weighting balanced sample demographics to population parameters. The sample is balanced by form to match national population parameters for sex, age, education, race, Hispanic origin, region (U.S. Census definitions), population density, and telephone usage. The White, non-Hispanic subgroup is also balanced on age, education and region. The basic weighting parameters came from a special analysis of the Census Bureau's 2009 Annual Social and Economic Supplement (ASEC) that included all households in the continental United States. The population density parameter was derived from Census 2000 data. The telephone usage parameter came from an analysis of the July-December 2009 National Health Interview Survey.<sup>m</sup>

Weighting was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the *Deming Algorithm*. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights ensures the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Table 2 compares weighted and unweighted sample distributions to population parameters.

Table 2         Sample         Demographics			
	Parameter	<u>Unweighted</u>	<u>Weighted</u>
Gender			
Male	48.5%	44.4%	48.4%
Female	51.5%	55.6%	51.6%
Age			
18-24	12.6%	8.8%	12.4%

m Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December, 2009. National Center for Health Statistics. May 2010.

25-34	17.8%	14.4%	17.5%
35-44	18.2%	14.1%	17.7%
45-54	19.6%	21.5%	19.9%
55-64	15.1%	17.9%	15.2%
65+	16.6%	23.3%	17.2%
Education			
Less than HS Graduate	14.1%	8.9%	12.7%
HS Graduate	34.7%	31.0%	34.2%
Some College	24.1%	25.2%	24.7%
College Graduate	27.1%	34.9%	28.5%
Race/Ethnicity			
White/not Hispanic	68.8%	76.8%	70.0%
Black/not Hispanic	11.5%	8.6%	11.1%
Hispanic	13.7%	10.3%	13.1%
Other/not Hispanic	6.0%	4.3%	5.8%
<u>Region</u>			
Northeast	18.5%	17.6%	18.3%
Midwest	22.0%	25.6%	22.5%
South	36.8%	37.6%	36.9%
West	22.7%	19.2%	22.2%
County Pop. Density			
1 - Lowest	20.1%	24.5%	20.6%
2	20.0%	21.5%	20.3%
3	20.1%	21.0%	20.1%
4	20.2%	17.1%	19.8%
5 - Highest	19.6%	15.9%	19.2%
Household Phone Use			
LLO	11.0%	9.1%	10.7%
Dual	63.6%	76.5%	65.0%
СРО	25.4%	14.4%	24.3%

#### Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The design effect, or *deff*, represents the loss in statistical efficiency that results from a disproportionate sample design and systematic non-response. The total sample design effect for this survey is 1.24.

PSRAI calculates the composite design effect for a sample of size *n*, with each case having a weight, *wi* as:

$$deff = \frac{n \sum_{i=1}^{n} w_i^2}{\left(\sum_{i=1}^{n} w_i\right)^2} \qquad formula 1$$

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect ( $\sqrt{deff}$ ). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left(\sqrt{deff} \times 1.6 \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}\right)$$
 formula 2

where  $\hat{p}$  is the sample estimate and *n* is the unweighted number of sample cases in the group being considered.

The survey's *margin of error* is the largest 95% confidence interval for any estimated proportion based on the total sample — the one around 50%. For example, the margin of error for the entire sample is ±2.2 percentage points. This means that in 95 out every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 2.2 percentage points away from their true values in the population. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording, and reporting inaccuracy, may contribute additional errors.

#### **RESPONSE RATE**

Table 3 reports the disposition of all sampled telephone numbers dialed from the original telephone number samples. The response rate estimates the fraction of all eligible samples that were ultimately interviewed. At PSRAI, it is calculated by taking the product of three component rates:<sup>n</sup>

n PSRAI's disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

- Contact rate the proportion of working numbers where a request for interview was made<sup>o</sup>
- Cooperation rate the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused
- Completion rate the proportion of initially cooperating and eligible interviews that were completed

Thus, the response rate for the landline samples was 13 percent. The response rate for the cellular samples was 18 percent.

Table 3 Sample	Disposition	
Landline	Cell	
33032	15136	T Total Numbers Dialed
1892	329	OF Non-residential
1730	18	OF Computer/Fax
5		OF Cell phone
13661	6038	OF Other not working
2441	299	UH Additional projected not working
13304	8452	Working numbers
40.3%	55.8%	Working Rate
814	100	<b>UH</b> No Answer / Busy
3206	2681	UO <sub>NC</sub> Voice Mail
97	7	UO <sub>NC</sub> Other Non-Contact
9187	5664	Contacted numbers
69.1%	67.0%	Contact Rate
1392	855	UO <sub>R</sub> Callback
5973	3175	UO <sub>R</sub> Refusal
1822	1634	Cooperating numbers
19.8%	28.8%	Cooperation Rate
62	67	IN1 Language Barrier
	684	IN2 Child's cell phone
1760	883	Eligible numbers
96.6%	54.0%	Eligibility Rate

o PSRAI assumes that 75 percent of cases that result in a constant disposition of "No answer" or "Busy" are actually not working numbers.

93	47	R Break-off
1667	836	I Completes
94.7%	94.7%	Completion Rate
13.0%	18.3%	Response Rate

## Appendix B: Survey Instrument

Hello, my name is \_\_\_\_\_\_ and I'm calling for Princeton Survey Research. We're conducting a national survey about some important issues today, and would like to include your household.

#### **RECORD SEX:**

- D1 Record Respondent's Sex (DO NOT ASK)
  - 1 Male
  - 2 Female
- 1. Before we get to the main survey topic, I need to ask about your use of technology... Do you, yourself, use the Internet?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q2-Q4 OF INTERNET USERS (Q1=1):

- 2. How often do you use the Internet in a typical day...[READ]
  - 1 Less than 2 hours
  - 2 2 to 4 hours
  - 3 4 to 8 hours, OR
  - 4 More than 8 hours?
  - 9 (DO NOT READ) Don't know/Refused
- 3. Please tell me if you now use the Internet for each of the following? (First,) what about... (INSERT, READ AND RANDOMIZE)?

**READ IF NECESSARY**: Do you now use the Internet for this purpose, or not?

- a. For work
- b. For school
- c. For research
- d. For shopping
- e. For email
- f. For Social Networking, such as Facebook or MySpace

- g. For online banking
- h. For bill payments
- 1 Yes, now use the Internet for this purpose
- 2 No, do not
- 8 Don't know
- 9 Refused
- 3i. Other than what I just mentioned, do you now use the Internet for any other pupose? (IF YES, ASK: What is that?)
  - 1 Yes (RECORD VERBATIM RESPONSE)
  - 2 No
  - 8 Don't know
  - 9 Refused
- 4. Where do you access the Internet the most...[**READ**]
  - 1 At home
  - 2 At work
  - 3 At school, OR
  - 4 At the library?
  - 5 (VOL. DO NOT READ) Other (SPECIFY)
  - 8 (DO NOT READ) Don't know
  - 9 (DO NOT READ) Don't know/Refused

#### ASK Q5 IF NOT "AT HOME" IN Q4 (Q4=2-9). IF Q4=1 AUTOFILL Q5 AS CODE 1:

- 5. Do you have a computer in your home, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q6-8 IF HAVE HOME COMPUTER (Q6=1):

- 6. Do you have anti-virus software on your home computer?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused
- 7. Do you have firewall software on your home computer?
  - 1 Yes

- 2 No
- 8 Don't know
- 9 Refused
- 8. Do you have a high-speed Internet connection on your home computer, such as a cable modem or DSL modem?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL:

9. Now turning to the main survey topic of crime...We're interested in your opinions about the seriousness of certain crimes. I'm going to read you a list of different crime situations and ask you to compare each to the following specific crime situation – where someone steals a car parked on the street that is worth \$10,000. Here's the (first/next) situation... (INSERT, READ AND RANDOMIZE)? Do you think this is a less serious crime, about as serious, or a more serious crime than someone stealing a parked car worth \$10,000?

**IF MORE SERIOUS OR LESS SERIOUS:** Would you say it is MUCH less/more serious or SOMEWHAT less/more serious?

- a. A burglar steals \$10,000 worth of jewelry from a private residence while the owner is away on vacation.
- b. A bank teller becomes friends with a customer and embezzles \$10,000 out of his personal account over the course of two years.
- c. A computer hacker steals personal patient information from a healthcare clinic's database and then sells this information to a third party for \$10,000.
- d. A large manufacturing company adds false charges to an invoice, costing a small business owner \$10,000.
- e. A company overbills another company it supplies with heavy equipment, making an extra \$10,000 in unwarranted profits.
- f. Someone attempts to rob several joggers in the park. Although they fail to make off with any money, the joggers sustain non-fatal injuries and receive treatment at the hospital.
- g. A hacker sends out viruses on the Internet and infects many personal computers with software that allows the hacker to distribute millions of spam messages.
- h. A pharmaceutical company falsely advertises as safe an anti-depressant drug it knows to be unsafe. The drug is later found to be linked to a string of random violent acts, costing the lives of several people.

- i. A former employee of a U.S. defense contractor sells nuclear secrets and other classified information he acquired during his employment to foreign governments.
- j. A Wall Street financial firm conspires to manipulate the precious metals market, profiting at the expense of other traders and owners of precious metals who are unaware of the price-fixing scheme.
- k. A person sells a counterfeit antique bracelet on an online auction site, misrepresenting its true value and making an extra \$1,000.
- 1. An insurance agent sells an insurance policy at an inflated price to an unsuspecting customer and pockets an extra \$20,000.
- 1 Much less serious
- 2 Somewhat less serious
- 3 About as serious
- 4 Somewhat more serious
- 5 Much more serious
- 8 Don't know
- 9 Don't know/Refused
- 10. Now I would like to ask you a few questions about everyday activities that might either increase or decrease your chances of becoming a victim of fraud. (First,) how often do you... (INSERT, READ AND RANDOMIZE)

**READ FOR FIRST ITEM, THEN REPEAT AS NECESSARY:** Would you say never, seldom, occasionally, frequently, or always?

- a. Respond to telephone, email, or in-person solicitations, in order to become eligible for goods, services, or prizes?
- b. Deliberately give out personal information, such as your address or social security number, in order to become eligible for contests or services?
- c. Research the organizations or individuals you do business with when they are unknown to you for example, a seller from eBay, or a contractor from the phone book?
- 1 Never
- 2 Seldom
- 3 Occasionally
- 4 Frequently
- 5 Always
- 8 Don't know
- 9 Don't know/Refused

**READ TO ALL:** Now I have some questions about experiences you or others in your household have had WITHIN THE LAST 12 MONTHS. If any of these experiences have happened more than once in the last 12 months, please think about the MOST RECENT incident.

- 11. In the last 12 months, has anyone succeeded in getting someone in your household to invest money or time in a business venture such as a work-at-home plan, a franchise, or stock purchase that turned out to be fake or fraudulent?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q11a EXPERIENCED INCIDENT (Q11=1):

- 11a. Was this incident reported, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q11b IF REPORTED INCIDENT (Q11a=1):

- 11b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)
  - 5 Credit Card Company
  - 6 Business/Person involved in the swindle
  - 7 District Attorney or State Attorney General
  - 8 Personal Lawyer
  - 9 Other (SPECIFY)
  - 98 Don't know
  - 99 Don't know/Refused

#### ASK Q11c IF EXPERIENCED INCIDENT (Q11=1):

- 11c. Were you, yourself, a victim of this incident?
  - 1 Yes
  - 2 No
  - 8 Don't know

9 Refused

#### ASK Q11d IF R IS NOT PERSON VICTIMIZED (Q11c=2-9):

- 11d. In the last 12 months, have you, yourself, ever experienced a similar incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL

- 12. In the last 12 months, has someone in your household paid for repairs to a vehicle, appliance, or a machine in your home that were later discovered unperformed OR that were later discovered to be completely unnecessary?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q12a EXPERIENCED INCIDENT (Q12=1):

- 12a. Was this incident reported, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q12b IF REPORTED INCIDENT (Q12a=1):

- 12b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)
  - 5 Credit Card Company
  - 6 Business/Person involved in the swindle
  - 7 District Attorney or State Attorney General
  - 8 Personal Lawyer
  - 9 Other (SPECIFY)
  - 98 Don't know

46

99 Don't know/Refused

#### ASK Q12c IF EXPERIENCED INCIDENT (Q12=1):

- 12c. Were you, yourself, a victim of this incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q12d IF R IS NOT PERSON VICTIMIZED (Q12c=2-9):

- 12d. In the last 12 months, have you, yourself, ever experienced a similar incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL

- 13. In the last 12 months, has anyone MISREPRESENTED to ANYONE in your household the price of a product or service by charging more than the originally stated cost?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q13a EXPERIENCED INCIDENT (Q13=1):

- 13a. Was this incident reported, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q13b IF REPORTED INCIDENT (Q13a=1):

- 13b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)

- 5 Credit Card Company
- 6 Business/Person involved in the swindle
- 7 District Attorney or State Attorney General
- 8 Personal Lawyer
- 9 Other (SPECIFY)
- 98 Don't know
- 99 Don't know/Refused

#### ASK Q13c IF EXPERIENCED INCIDENT (Q13=1):

- 13c. Were you, yourself, a victim of this incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q13d IF R IS NOT PERSON VICTIMIZED (Q13c=2-9):

- 13d. In the last 12 months, have you, yourself, ever experienced a similar incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL

- 14. In the last 12 months, has anyone in your household been given misleading stock or financial information that resulted in a financial loss?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q14a EXPERIENCED INCIDENT (Q14=1):

- 14a. Was this incident reported, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q14b IF REPORTED INCIDENT (Q14a=1):

- 14b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)
  - 5 Credit Card Company
  - 6 Business/Person involved in the swindle
  - 7 District Attorney or State Attorney General
  - 8 Personal Lawyer
  - 9 Other (SPECIFY)
  - 98 Don't know
  - 99 Don't know/Refused

#### ASK Q14c IF EXPERIENCED INCIDENT (Q14=1):

- 14c. Were you, yourself, a victim of this incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q14d IF R IS NOT PERSON VICTIMIZED (Q14c=2-9):

- 14d. In the last 12 months, have you, yourself, ever experienced a similar incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL

- 15. In the last 12 months, has someone in your household lost money due to a fraudulent transaction conducted on the Internet?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q15a EXPERIENCED INCIDENT (Q15=1):

15a. Was this incident reported, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

#### ASK Q15b IF REPORTED INCIDENT (Q15a=1):

- 15b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)
  - 5 Credit Card Company
  - 6 Business/Person involved in the swindle
  - 7 District Attorney or State Attorney General
  - 8 Personal Lawyer
  - 9 Other (SPECIFY)
  - 98 Don't know
  - 99 Don't know/Refused

#### ASK Q15c IF EXPERIENCED INCIDENT (Q15=1):

- 15c. Were you, yourself, a victim of this incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q15d IF R IS NOT PERSON VICTIMIZED (Q15c=2-9):

- 15d. In the last 12 months, have you, yourself, ever experienced a similar incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL

- 16. In the last 12 months, has someone in your household taken on a mortgage in which you were misled about the terms of repayment or interest rates?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q16a EXPERIENCED INCIDENT (Q16=1):

- 16a. Was this incident reported, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q16b IF REPORTED INCIDENT (Q16a=1):

- 16b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)
  - 5 Credit Card Company
  - 6 Business/Person involved in the swindle
  - 7 District Attorney or State Attorney General
  - 8 Personal Lawyer
  - 9 Other (SPECIFY)
  - 98 Don't know
  - 99 Don't know/Refused

#### ASK Q16c EXPERIENCED INCIDENT (Q16=1):

- 16c. Were you, yourself, a victim of this incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q16d IF R IS NOT PERSON VICTIMIZED (Q16c=2-9):

- 16d. In the last 12 months, have you, yourself, ever experienced a similar incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL

17. In the last 12 months, has someone in your household discovered that someone

else has used their existing credit or debit card accounts to make charges without permission?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

#### ASK Q17a EXPERIENCED INCIDENT (Q17=1):

- 17a. Was this incident reported, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q17b IF REPORTED INCIDENT (Q17a=1):

- 17b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)
  - 5 Credit Card Company
  - 6 Business/Person involved in the swindle
  - 7 District Attorney or State Attorney General
  - 8 Personal Lawyer
  - 9 Other (SPECIFY)
  - 98 Don't know
  - 99 Don't know/Refused

#### ASK Q17c IF EXPERIENCED INCIDENT (Q17=1):

- 17c. Were you, yourself, a victim of this incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q17d IF R IS NOT PERSON VICTIMIZED (Q17c=2-9):

17d. In the last 12 months, have you, yourself, ever experienced a similar incident?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

#### ASK ALL

18. In the last 12 months, has someone in your household discovered that their personal information had been used by someone else to obtain new credit cards or accounts without permission?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

#### ASK Q18a EXPERIENCED INCIDENT (Q18=1):

- 18a. Was this incident reported, or not?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK Q18b IF REPORTED INCIDENT (Q18a=1):

- 18b. To whom was this incident reported? (DO NOT READ; ACCEPT MULTIPLE RESPONSES; PROBE ONCE FOR ADDITIONAL MENTIONS: Was it reported to anyone else?)
  - 1 Police or related Law Enforcement
  - 2 Internet Crime Complaint Center (IC3)
  - 3 Better Business Bureau
  - 4 Other Consumer Protection Agency (SPECIFY)
  - 5 Credit Card Company
  - 6 Business/Person involved in the swindle
  - 7 District Attorney or State Attorney General
  - 8 Personal Lawyer
  - 9 Other (SPECIFY)
  - 98 Don't know
  - 99 Don't know/Refused

#### ASK Q18c IF EXPERIENCED INCIDENT (Q18=1):

18c. Were you, yourself, a victim of this incident?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

#### ASK Q18d IF R IS NOT PERSON VICTIMIZED (Q18c=2-9):

- 18d. In the last 12 months, have you, yourself, ever experienced a similar incident?
  - 1 Yes
  - 2 No
  - 8 Don't know
  - 9 Refused

#### ASK ALL

19a. Before we close, I have just a few remaining questions...Please tell me if you agree, disagree, or neither agree nor disagree with the following statement: The government is devoting enough resources to combating white-collar crimes like fraud.

IF NECESSARY: Do you agree, disagree, or neither agree nor disagree with this statement?

- 1 Agree
- 2 Disagree
- 3 Neither agree nor disagree
- 8 Don't know
- 9 Refused

#### ASK Q19b IF AGREE OR DISAGREE (Q19a=1,2):

19b. Do you STRONGLY agree/disagree or SOMEWHAT agree/disagree?

- 1 Strongly
- 2 Somewhat
- 8 Don't know
- 9 Refused

#### ASK ALL

20a. What about this statement...?

White collar crime has contributed to or intensified the current economic crisis.

IF NECESSARY: Do you agree, disagree, or neither agree nor disagree with this statement?

- 1 Agree
- 2 Disagree
- 3 Neither agree nor disagree

- 8 Don't know
- 9 Refused

### 20b IF AGREE OR DISAGREE (Q20a=1,2):

- 20b. Do you STRONGLY agree/disagree or SOMEWHAT agree/disagree?
- 1 Strongly
- 2 Somewhat
- 8 Don't know
- 9 Refused

## Appendix C

**Table 4** Scenarios Included in Categorical Measurements of Crime Seriousness

Category	Scenario
White Collar Crime	2-5, 7-12
Traditional Crime	1,6
Crimes Involving Physical Harm	6, 8
Crimes Involving Monetary Loss Only	1-5, 11, 12
Crimes Involving Organizational Offenders	4, 5, 8, 10
Crimes Involving Individual Offenders	1, 2, 3, 6, 7, 9, 11, 12
Crimes Involving High Status Offenders	4, 5, 8, 10
Crimes Involving Low Status Offenders	1, 2, 3, 6, 7, 9, 11, 12

## Appendix D: Relationship between "Crisis" and "Resources"

A contingency table<sup>p</sup> (see Table 5) was created to test the following hypothesis that those who agree that white collar crime has contributed to the economic crisis are *more likely* to believe that government is *not* devoting enough resources to fight white collar crime. The contingency table allows us to explore the association between the variables that captured these perceptions. The following is a summary of the findings.

		White collar crime has contributed to the crisis			
		Agree	Disagree	Unsure	Total
Government is devoting enough resources	Agree	385 22.0%	112 34.7%	91 22.1%	588 23.7%
	Disagree	859 49.1%	129 39.9%	86 20.9%	1074 43.2%
	Unsure	507 29.0%	82 25.4%	235 57.0%	824 33.1%
Total		1751 100.0%	323 100.0%	412 100.0%	2486 100.0%

Table 5 Contingency Table Showing Distribution of "Crisis" for Each Category of "Resources"<sup>q</sup>

Who *agreed* that the government is devoting enough resources to combating white collar crime?

- 22% of those who agreed that white collar crime has contributed to the economic crisis
- 35% of those who did not agree that white collar crime has contributed to the economic crisis
- 22% of those who were unsure about whether white collar crime has contributed to the economic crisis

p A contingency table shows the distribution of one variable for each category of another variable.

q "Crisis" refers to the independent variable which appears in this table as: "White collar crime has contributed to the crisis" (an abbreviated form of the corresponding survey item). "Resources" refers to the dependent variable which appears as: "Government is devoting enough resources" (also an abridged version of the corresponding survey item). Furthermore, whole numbers in this table represent response frequencies (i.e., the number of times a certain response was given), while percentages represent the proportions of respondents falling in one category of the independent variable who also fall in a specified category of the dependent variable. These *column* percentages should therefore be read *across* the table.

Who *disagreed* that the government is devoting enough resources to combating white collar crime?

- 49% of those who agreed that white collar crime has contributed to the economic crisis
- 40% of those who did not agree that white collar crime has contributed to the economic crisis
- 21% of those who were unsure about whether white collar crime has contributed to the economic crisis

Thus, the contingency table reveals the following<sup>r</sup>: D's (34.7%) were *more likely* than A's (22.0%) and U's (22.1%) to *agree* that the government is devoting enough resources to combat white collar crime. Conversely, A's (49.1%) were *more likely* than D's (39.9%) and U's (20.9%) to *disagree* that the government is devoting enough resources to combat white collar crime.

These patterns of responses provide evidence for the stated hypothesis. The cross tabulation seems to suggest that those who believe that white collar crime has contributed to the economic crisis are *more likely* to believe that government is *not* devoting enough resources to fight white collar crime.

It appears, then, that an association between these perceptions does exist. But how strong is this association? The Lambda<sup>s</sup> value computed for the relevant variables was .106, signifying only a moderate association. This association, of course, does not *prove* a causal relationship; rather, it may be a manifestation of an underlying complex of ideas and attitudes regarding the efficacy of government intervention that was not captured by this survey.

- A's = those who agree that white collar crime has contributed to the economic crisis
- D's = those who disagree that white collar crime has contributed to the economic crisis
- U's = those who are unsure that white collar crime has contributed to the economic crisis

r For the purpose of this analysis, we adopt a form of shorthand to refer to the groups of respondents involved. Thus:

s Lambda is a "percentage reduction error" measurement of association appropriate for nominal variables. It tells us the extent to which knowing the value of one variable improves our ability to predict the value of another variable.