BULLSEYE ON THE NATION’S BACK: 
COMBATING THE HEIGHTENED THREAT 
OF PEDESTRIAN ECONOMIC CRIMINALS

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"I’m a criminal, but I’m not a major criminal. . . . Being a young white man, being that it was a white collar crime, I wasn’t scared of the consequences because I thought that it would be probation."\(^1\)

I. INTRODUCTION

Jason Carpenter was nineteen years old when he was sentenced to seventeen years in a federal prison for serving as the mastermind behind a massive Internet identity theft scheme, in which he misappropriated nearly $2 million using fraudulently obtained credit cards, stolen social security numbers, and personal information.\(^2\) Unlike most teenagers who engage in conventional hobbies, Carpenter was able to make identity theft his hobby, with the help of the readily accessible Internet.\(^3\) Carpenter believed the fraud he committed was not comparable to traditional crimes and characterized it as “victimless,” consequently believing that if he were ever caught, his punishment would amount to little more than a slap on the wrist.\(^4\)

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3 Id.

4 CNN, supra note 1, at 1.
Advancements in communications technology have changed our society in numerous ways. As technologies continue to develop and become more mainstream, so do their applications in the criminal law context, in both the commission of crimes, and the construction of criminal sentences. Although, ever-evolving advancements in computer and Internet technology are enormously beneficial, they generally come with a price.

For example, the Internet has made the habitual and familiar task of paying bills easier and more efficient for consumers, while increasing the likelihood of exposing confidential information to potential criminals. Furthermore, computer and Internet advancements provide criminals with a widely available and anonymous tool to use in the commission of crimes, enabling cybercrimes to become more mainstream than traditional crimes. An overhaul of the sentencing of convicted offenders who use computers to commit crimes is necessary to address the transformation of the criminal climate and the extensive concerns of the public.

One way that courts address the emergence and growth of computer crimes is to restrict an offender's computer or Internet access as a condition of a criminal sentence. Given the technological advancements of the past decade, sentencing courts are consistently faced with the question of how to construct a sentence for those offenders who have used the Internet to victimize minors or as an instrument in producing and distributing child pornography.

Computer and Internet improvements have dramatically expanded certain categories of crime, such as fraud, in addition to the methods by which offenders commit these crimes. As a result, it has become increasingly more diffi-

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9 These public concerns include the public's feeling that the government is not doing enough to address this issue. Id.
10 Robin Miller, Annotation, Validity of Condition of Probation, Supervised Release, or Parole Restricting Computer Use or Internet Access, 4 A.L.R. 6th 1, 14 (2005).
11 See Krause & Pazicky, supra note 6, at 202; see also Miller, supra note 10, at 14 (2005).
13 Wall Street Fraud and Fiduciary Duties: Can Jail Time Serve as an Adequate Deterrent for Willful Violations?: Hearing Before the Subcomm. on Crime and Drugs of the S.
cult for law enforcement entities and the government to police such crimes, further suggesting that new tactics are necessary in order to adequately address the growing problem of economic crimes.14

Judges confront several challenges when constructing reasonable sentences,15 as evident by the multitude of decisions delivered by United States Courts of Appeals in 2010 regarding the imposition of computer and Internet restrictions in sentences that are required as a term of supervised release.16 While the circuits are visibly split on the particular factors that carry the most weight, the circuits unanimously agree that such restrictions are appropriate when narrowly tailored to reflect the facts and circumstances of the offender and the underlying offense, while taking into consideration the applicable statutory sentencing goals.17

It is important to address the scope of the term “economic crime,” given the absence of an industry standard definition of economic and white-collar crimes.18 In the following discussion, the term “economic crime” primarily refers to the crimes that most frequently victimize the American public. These crimes can include computer fraud, wire fraud, embezzlement, identity theft,

Comm. on the Judiciary, 111th Cong. (2010) [hereinafter Senate Wall Street Fraud Hearing]; see also Kane & Wall, supra note 8, at 7.

14 Kane & Wall, supra note 8, at 7.
16 See United States v. Durham, 618 F.3d 921 (8th Cir. 2010) (finding error in a condition that restricted the defendant’s access to the Internet without prior approval from the probation office, the Court stated “I am not convinced Durham used his computer or Internet access for anything other than possessing child pornography . . . I believe the record in this case... is not sufficient to justify a complete ban on Internet access and I would conclude the district court plainly erred . . . .”); United States v. Heckman, 592 F.3d 400 (3d Cir. 2010) (finding an imposed condition of restricted Internet access too broad, the Court noted that it remains “sensitive to three factors that have guided our prior holdings in this area: (1) the length and (2) coverage of the imposed ban; and, (3) the defendant’s underlying conduct”); United States v. Russell, 600 F.3d 631 (D.C. Cir. 2010) (overturning a condition prohibiting the defendant from possessing or using a computer for any reason, noting his past and likely future employment in a technically-sophisticated capacity and appreciating that it was “hard to imagine white collar work in 2010 not requiring access to computers”).
17 See cases cited supra note 16.
18 See, e.g., Kane & Wall, supra note 8, at 1-2 (defining economic crimes as “… illegal or unethical acts that violate fiduciary responsibility or public trust for personal or organizational gain.”); see also Mark Motivans, Bureau of Justice Statistics, Federal Justice Statistics 2008 Statistical Tables, at 20, Nov. 3, 2010 available at http://bjs.ojp.usdoj.gov/index.cfm?ty=pdetail&iid=1745 (categorizing fraud, embezzlement, forgery, and counterfeiting as fraudulent property offenses using neither the term economic or white-collar crime); see also Expanding Services to Reach Victims of Identity Theft and Fraud, U.S. Dep’t of Justice, Office of Justice Programs, Office for Victims of Crime, http://www.ovc.gov/pubs/id_theft/definingidtheft.html (last visited May 14, 2011) (acknowledging the lack of a “cohesive definition” for identity fraud).
counterfeiting, and unauthorized access or misuse of credit cards. These crimes frequently fall within the inferred definitions of both economic crime and white-collar crime—but for purposes of this Comment, it is important to stress that the focus is on the more widespread types of economic crimes that threaten the population as a whole, as opposed to the large-scale corporate fraud cases.

This Comment proceeds in three parts. Part II presents an overview of the federal sentencing procedures and statutory provisions governing the construction of criminal sentences. Part III analyzes the increased popularity of including computer and Internet restrictions in criminal sentences, and describes how the United States Courts of Appeals have interpreted the sudden flurry of challenges to the restrictions that they have been continuously presented with since 2009. Part IV first examines the current economic climate and the increasingly prominent role computers and the Internet have in various aspects of everyday life. Part IV then discusses how computer and Internet restrictions have been prescribed to economic criminals and argues that it is critical for judges to accelerate the frequency at which they impose these restrictions, especially upon offenders who utilized a computer or the Internet in the commission of their crimes. This Comment argues that a systemic recalibration of sentencing practices for economic offenders who use computers and the Internet to their advantage is crucial due to the perpetually evolving nature of technological innovations that make the vast majority of Americans susceptible to victimization.

II. STATUTORY SENTENCING PROVISIONS PERMITTING THE RESTRICTED USE OF COMPUTERS AND THE INTERNET

The majority of convicted offenders are required to serve a portion of their sentence under community supervision, either following a term of imprisonment or as an alternative to incarceration. Community supervision, usually in the form of probation, allows offenders to be free from physical confinement while still being subject to some degree of court control. When imposing a sentence that includes community supervision ("supervised release"), sentencing judges prescribe conditions relative to the offender and the offense to which the offender must comply. The conditions attached to the terms of su-

19 Federal Justice Statistics 2008 Statistical Table, supra note 18, at 20.
21 Miller, supra note 10, at 1.
22 Id. at 14. The various classifications of community supervision include parole, probation, supervised release, and conditional release. While the definitions may slightly differ all classifications impose conditions upon the offender in the absence of physical confinement
Combating the threat of Pedestrian Economic Criminals

Supervised release include conditions required by statute for specific offenses, such as sex offenses, in addition to conditions specifically tailored by sentencing courts to reflect the offense and the offender.23

Special conditions tailored to reflect the individual and the offense are beneficial to include in a sentence for a number of reasons.24 However, while courts weigh the benefits of whether special conditions are pertinent to a sentence, they must also ascertain compliance with statutory provisions.25 The arguments opposing special conditions serve an important role throughout this Comment in demonstrating when it is appropriate to impose computer and Internet restrictions and how the analysis supporting their implementation must expand in application to economic crime offenders.


Judges undoubtedly have very broad discretion when issuing the terms and conditions of supervised release as part of a criminal sentence, whether or not a term of supervised release is mandatory.26 The conditions implemented by the court must be "reasonably related to the factors" contained within 18 U.S.C. § 3553, which refer to the nature of the offense, the offender's criminal history, as well as the offender's individual characteristics.27 In addition to the specifics of the offender and the underlying crime, courts must also consider the likelihood of recidivism and the necessity of protecting the public from the defendant's potential criminal conduct in the future.28 Beyond the statutory factors, sentencing courts have broad discretion in determining what constitutes a reasonably appropriate sentence for a particular offense, provided there is "no

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23 Id.
24 See 18 U.S.C. § 3553 (2006); 18 U.S.C. § 3583 (2006). See also United States v. Johnson (Johnson I), 2005 WL 22680, 6, 2-10 (N.D.N.Y. 2005), aff'd, 446 F.3d 272, 276 (2d Cir. 2006) (The factors and methodology of analysis is discussed in the district court's memorandum decision and order following a two day evidentiary hearing held to discuss the Second Circuit precedent regarding the imposition of Internet restrictions as a special condition attached to the sentence of supervised release).
25 Miller, supra note 10, at 1.
26 United States v. Miller, 594 F.3d 172, 183 (3d Cir. 2010); 18 U.S.C. § 3583 (2010). Note that some offenses, like possessing child pornography in Miller, statutorily require a mandatory term of supervised release, the duration of which must be five years and the very least up to a lifetime term, the duration length being determined by the sentencing judge. 18 U.S.C. § 3583(k).
greater deprivation of liberty than is reasonably necessary.”

When considering whether to impose a term of supervised release with conditions following imprisonment, 18 U.S.C. § 3583 requires consideration of a series of factors prior to the attachment of special conditions to a criminal sentence. These factors include the “nature and circumstances” of the particular offense, the recommended guidelines for the particular category of crime and “any pertinent policy statement” issued by the U.S. Sentencing Commission, avoidance of “unnecessary sentence disparities” among those similarly situated, and the need for victim restitution. Additionally, the provision contemplates policy considerations, including the necessity to deter future criminal behavior, “protect the public from further crimes of the defendant,” and the demand for effective “correctional treatment” of the defendant.

Only after consideration of these factors in relation to the facts and circumstances of a case may a sentencing court implement special conditions of supervised release. A condition is considered appropriate so long as it is reasonably related to the statutory factors, “involves no greater deprivation of liberty than is reasonably necessary,” and is consistent with policy statements of the U.S. Sentencing Commission, providing judges with a wide range of discretion in determining what conditions shall be imposed as terms of supervised release. When the terms of supervised release are challenged on appeal, they are reviewed de novo to determine whether an error has occurred based on a judge’s abuse of discretion. On appeal, the court reviews the contested special conditions—specifically, whether a nexus exists between the offense and the purposes and objectives of sentencing procedures. The imposition of conditions of supervised release may be affirmed only if there is evidence that a tangible relationship exists between the given circumstances of the case and offender and the statutory sentencing goals. Upon analysis, if it is determined that there is a greater deprivation of liberty than is reasonably necessary, the court will vacate and remand the conditions of supervised release to the district court so that conditions are reconstructed in a manner reasonably necessary and in accordance

29 See Burroughs, 613 F.3d at 239-40.
30 18 U.S.C. § 3583(c) (requiring the court to consider the factors set forth in sections 3553(a)(1), (a)(2)(B), (a)(2)(D), (a)(4), (a)(5), (a)(6), and (a)(7); 18 U.S.C. § 3553 (2010).
32 Id.
33 See Miller, 594 F.3d at 183 (not requiring that every factor be satisfied or present when issuing a special condition of supervised release however, the condition must be “reasonably related” to the crime or criminal history of the defendant).
35 United States v. Johnson (Johnson II), 446 F.3d 272, 277 (2d Cir. 2006).
36 Id. at 277, 281.
37 United States v. Voelker, 489 F.3d 139, 144 (3d Cir. 2007).
with the appellate decision.\textsuperscript{38}

United States Courts of Appeals have seen dramatic increases in the number of cases before them on review involving sentences that impose computer and Internet restrictions on an offender as a condition of supervised release.\textsuperscript{39} Judges were given immense discretion in 2005 when the Supreme Court, in \textit{United States v. Booker}, determined that the U.S. Sentencing Guidelines were to serve only as an advisory instrument, concluding that the guidelines were no longer legally binding.\textsuperscript{40} The holding drastically impacted criminal sentencing and expanded judicial discretion in the absence of mandatory guidelines.\textsuperscript{41}

\textit{Booker} particularly affects one segment of the law—sentencing practices that impose terms of supervised release with special conditions following an offenders release from prison.\textsuperscript{42} Despite \textit{Booker}, the guidelines still serve a highly imperative function in conjunction with the statutory provisions of § 3553 and § 3583.\textsuperscript{43} However, increased judicial discretion has contributed to greater sentencing disparities among criminals convicted of similar crimes.\textsuperscript{44} Such disparities are evident in cases involving supervised release conditions with computer and Internet restrictions because they provide judges with greater flexibility in determining which sentencing devices are best for offenders on an individual basis.\textsuperscript{45}

II. TRADITIONAL APPLICATIONS AND CHALLENGES TO COMPUTER AND INTERNET RESTRICTIONS AS CONDITIONS OF

\textsuperscript{38} \textit{Heckman}, 592 F.3d at 412.
\textsuperscript{39} See U.S. v. Angle, 598 F.3d 352, 355 (7th Cir. 2010); United States v. Blinkinsop, 606 F.3d 1110, 1114 (9th Cir. 2010); \textit{Burroughs}, 613 F.3d at 242; \textit{Durham}, 618 F.3d at 934; \textit{Heckman}, 592 F.3d at 405; U.S. v. Love, 593 F.3d 1, 11 (D.C. Cir. 2010); \textit{Miller}, 594 F.3d at 184-85; United States v. Owad, 363 F. App’x 789, 791 (2d Cir. 2010), cert. denied, 130 S.Ct. 2362; \textit{Russell}, 600 F.3d at 636; United States v. Tome, 611 F.3d 1371, 1375 (11th Cir. 2010), \textit{petition for cert. filed}, (U.S. Oct. 21, 2010) (No. 10-7160).
\textsuperscript{41} See e.g., United States v. Pugh, 515 F.3d 1179, 1189-90 (11th Cir. 2008).
\textsuperscript{42} \textit{Id}. at 1187-1189.
\textsuperscript{43} \textit{Booker}, 543 U.S. at 258; see also \textit{Senate Wall Street Fraud Hearing}, supra note 13.
\textsuperscript{44} See Lanny A. Breuer, Assistant Attorney General, United States Dept’ of Justice, Address at the American Bar Association National Institute on White Collar Crime, Justice Department Documents, Feb. 25, 2010 [hereinafter \textit{Breuer Address}]; \textit{Senate Wall Street Fraud Hearing}, supra note 13.
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Court imposed restrictions on computer and Internet access vary greatly as a result of both broad judicial discretion, and factors that are particular to the offender. Since 2009, the United States Courts of Appeals have routinely approved computer and Internet restrictions as conditions of supervised release provided that they are properly tailored to the facts of the crime, the characteristics of the defendant, and the importance of sentencing goals. Although all sentencing courts must consider the statutory factors, depending on the jurisdiction and the nature of the offense, courts typically focus on one or several factors most pertinent to the case before them, as opposed to determining that the conditions are in strict compliance with every statutory factor. Nonetheless, no matter which factors a court chooses to focus on in a given case, the conditions of a supervised release restricting computer or Internet usage must be reasonably related to the statutory factors considered, “provide no greater deprivation of liberty than is reasonably necessary,” and be consistent with the policy statements of the U.S. Sentencing Commission.

The following discussion presents recent cases before the Courts of Appeals and analyzes the reasoning behind courts’ decisions to construct conditions that restrict an offender’s computer or Internet access immediately following their release from prison. When determining whether computer restriction conditions are reasonably related to statutory and sentencing objectives, Circuits deviate in the weight they attribute to certain factors.

Despite their differences, the approaches taken by Courts of Appeals within the past decade (including recent decisions) all support promulgating limitations of an offender’s computer or Internet use when the individual’s conviction demonstrates criminal use of these technologies in pursuit of a personal benefit. By taking a similar approach with economic criminals who use tech-

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46 Pugh, 515 F.3d at 1189-90 (using an example from the Ninth Circuit, affirming a 25 year sentence for an offender of a $40 million fraud scheme while several days later another court sentenced an offender of a $1 billion fraud scheme to only five years imprisonment).
47 See discussion supra note 39.
48 Miller, 594 F.3d at 183; United States v. Perazza-Mercado, 553 F.3d 65, 70 (1st Cir. 2009).
50 Correll, supra note 45, at 683-91.
51 See U.S. v. Mitnick, 145 F.3d 1342 (9th Cir. 1998) (holding that defendant, who pled guilty to possession of unauthorized access devices with intent to defraud, was properly sentenced to a broad computer restriction condition in light of the offense and sentencing goals); Owad, 363 F. App’x at 791 (holding the computer restriction special condition was reasonably related to the offense and the need to prevent the public from future offenses of the defendant); United States v. Suggs, 50 F. App’x 208, 210-11 (6th Cir. 2002) (holding restriction conditions were reasonable for defendant who pled guilty to mail fraud, wire fraud, and money laundering given the circumstances of the underlying offense and defen-
nology to prey on their victims, sentencing judges would be structuring sentences that more realistically satisfy sentencing goals in light of broader concerns of the criminal justice system such as prison overcrowding and victim restitution.

Today special conditions restricting an offender’s computer or Internet use are most often imposed upon individuals convicted of crimes characterized as sex offenses, particularly those relating to the distribution and possession of child pornography and eliciting sex with a minor through the Internet. There has been a steady increase of these cases before the Courts of Appeals on review in the past ten years with particularly noteworthy accelerations in 2009 and 2010. The following discussion demonstrates how courts have increasingly utilized computer and Internet restrictions as an additional sentencing mechanism for achieving sentencing goals aimed at a particular subset of offenders. This Comment will later recommend in Part III how the application should be expanded to economic crime offenders to better reflect the nature of the offense and offender while still accomplishing the goals of sentencing.

A. Endorsing Computer Restrictions Based on Offense and Offender Specific Characteristics

Perhaps the most obvious question—in cases restricting an offender’s computer or Internet use—is whether technologies contribute to any degree to the commission of the crime. Often, the federal cases that have restricted an offender’s computer or Internet access as a condition of supervised release involve those convicted of possessing or distributing child pornography through computers and the Internet. Additionally there have been a number of cases

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52 See, e.g., Miller, supra note 10, at 14. This annotation outlines every instance in which a special condition restricting computer or Internet use has been implemented. The discussion of the validity of the restrictions is divided into two main categories, child pornography and other crimes.


54 See *Burroughs*, 613 F.3d at 243 (arguing that while a computer or use of the Internet may be utilized to some degree in the commission of a crime it is not to be construed to mean that anyone convicted of the same offense shall have computer or Internet restrictions attached as a condition of their sentence).

55 See, e.g., *Angle*, 598 F.3d at 361; Correll, supra note 45, at 683.
where, typically through the use of Internet chat rooms, offenders have elicited sex with minors.\textsuperscript{56} When the offender blatantly used a computer or the Internet without a factual doubt to commit his or her offense, sentencing courts have routinely imposed restrictions without hesitation.\textsuperscript{57} Due to the rapid pace at which computer technologies are advancing, a determination of the extent to which a computer or the Internet served in the commission of a crime is not always clear.\textsuperscript{58}

The role of a computer in the commission of an offense is therefore a primary consideration courts weigh not only when imposing a sentence, but also by the appellate courts when reviewing cases challenging technological restrictions.\textsuperscript{59} As a result of the constant evolution of modern technology, measuring the extent to which computers or the Internet serve as a criminal tool becomes increasingly difficult; nonetheless, courts must still consider this factor when determining whether to impose computer and Internet restrictions.\textsuperscript{60}

Courts of Appeals weigh the severity of the underlying crime, as well as a defendant’s criminal history and personal characteristics as they may relate to computer or Internet behavior, when constructing conditions of supervised release.\textsuperscript{61} Determining the appropriate breadth and duration of a criminal sentence bears a direct relationship with the extent to which the technological tools were used to facilitate a crime.\textsuperscript{62} The following subsections present the factors most frequently weighed by Courts of Appeals in their analysis of whether sex offenders in particular have utilized computer technologies to a degree that warrants special conditions.

\textsuperscript{56} See Crandon, 173 F.3d at 127-28.
\textsuperscript{57} See Crandon, 173 F.3d at 127-28 (explaining how Crandon explicitly used the Internet as a means of facilitating a sexual relationship with a minor, which provided the court with enough detail to conclude that due to the defendant’s criminal implementation of the Internet, Internet restrictions were reasonably related to the offense).
\textsuperscript{58} See United States v. Holm, 326 F.3d 872, 878 (7th Cir. 2003) (using a different approach, the court, instead of broadly analyzing the defendant’s Internet usage, took it a step further in determining whether victimization of minors occurred through the “outbound use” of the Internet on behalf of the defendant).
\textsuperscript{59} Johnson II, 446 F.3d at 283. (referring to a series of precedential cases in numerous circuits in which the degree of computer and Internet involvement in the commission of the crime contributed to the validity of the restrictions); compare U.S. v. Paul, 274 F.3d 155, 169 (5th Cir. 2001), and Crandon, 173 F.3d at 127-28, with U.S. v. Freeman (Freeman I), 316 F.3d 386, 391-92 (3d Cir. 2003), and Holm, 326 F.3d at 874, 879.
\textsuperscript{60} See U.S. v. White, 244 F.3d 1199, 1206 (10th Cir. 2001). Even in 2001, the 10th Circuit took into consideration the “realities of the Internet and its rapidly changing technology" when considering the reasonableness of computer and Internet conditions of supervised release. \textit{Id.}
\textsuperscript{61} See, \textit{e.g.}, Paul, 274 F.3d at 169-70.
\textsuperscript{62} Voelker, 489 F.3d at 144-46.
1. Instrumentality of Computers and the Internet

One particularly significant factor sentencing and appellate courts consider when determining the reasonableness of computer and Internet access restrictions is the amount of computer or Internet use in the commission of the underlying crime. When a computer or the Internet was a fundamental tool in the facilitation of criminal activity, such as conversing with minors or using the Internet to distribute child pornography, Courts of Appeals have determined that computer restrictions are reasonably related to the nature of the offense. Additional emphasis is placed on the reasonableness of restrictions when the underlying crime would not have been possible but for the use of a computer or the Internet.

The Third Circuit’s decision in United States v. Crandon illustrates one of the clearest examples of wide support of computer restrictions as a direct result of computer use in the commission of the crime. Thirty-nine year-old Richard Crandon of New Jersey developed a sexual relationship over the Internet with a fourteen year old girl living in Minnesota. The Internet relationship developed over a period of several months before Crandon traveled to Minnesota for three days to engage in sexual relations with the minor, which included taking and developing sexually explicit photographs. Following a second visit and an attempt to return to New Jersey with the minor, Crandon was arrested and eventually pled guilty to receiving child pornography and was sentenced to 78 months in prison with a three-year term of supervised release.

On appeal, Crandon challenged the Internet restrictions contained in his term of supervised release by arguing that the restrictions were not related to his offense. The Third Circuit rejected Crandon’s argument and affirmed the three-year Internet restriction. The court determined there was an unequivocal relationship between his crime and the restrictions, as demonstrated by his use of the Internet to advance a relationship with a minor over a span of several

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63 See Johnson I, 2005 WL 22680, at *6 (N.D.N.Y. 2005) (holding an evidentiary hearing to specifically discuss the issue of restricting Internet access due to tensions within the Second Circuit regarding conflicting precedents restricting Internet access).
64 See id.
65 Id.
66 Crandon, 173 F.3d at 128.
67 Id. at 125.
68 Id.
69 Id.
70 Id. at 127. The challenged condition stated that Crandon was not allowed to “[P]ossess, procure, purchase, or otherwise obtain access to any form of computer network, bulletin board, Internet, or exchange format involving computers unless specifically approved by the U.S. Probation Office.” Id.
71 Id. at 128.
months.\textsuperscript{72} In cases similar to \textit{Crandon}, in which clear evidence establishes a defendant's use of a computer or the Internet to commit a crime, Courts of Appeals have favored the imposition of restrictions.\textsuperscript{73}

On the other hand, when the facts of a crime indicate that when computer technologies serve only a limited role in the commission of the underlying crime, courts are hesitant to apply or approve of computer and Internet restrictions, especially those that are broadly defined.\textsuperscript{74} In other words, the use of a computer or the Internet to commit a crime does not automatically justify the subsequent restriction of the offender's computer and Internet use.\textsuperscript{75} For example, cases in which a computer served exclusively as a means to possess child pornography, courts have viewed strict restrictions as too broad, resulting in a greater deprivation of the offender's liberty than reasonably necessary to accomplish sentencing goals.\textsuperscript{76}

When the degree of computer use in the commission of a crime is unclear, Courts of Appeals emphasize the importance of evaluating the specific evidence of the crime.\textsuperscript{77} Specific facts are necessary to draw a correlation between the offense and the justification for the restrictions; the court must be able to articulate how the resulting restrictions are vital to prevent recidivism and to help protect the public.\textsuperscript{78} When evaluating the facts of an underlying crime, Courts of Appeals look at whether a computer served as a powerful tool actively used to commit a crime.\textsuperscript{79} For example, a court finding that a defendant used the Internet to seek out and exploit relationships with minors is typically going to give this fact more weight during sentencing than they would if a defendant used a computer solely to store child pornography.\textsuperscript{80} Circuits may disagree about the details of computer and Internet restrictions, but overall sentencing and appellate courts agree restrictions are reasonable and appropriate as long as they adequately reflect the offense and offender involved.\textsuperscript{81}

\begin{footnotes}
\item[72] \textit{Crandon}, 173 F.3d at 127-28.
\item[73] See, e.g., \textit{Angle}, 598 F.3d at 361; \textit{Johnson II}, 446 F.3d at 283; \textit{Tome}, 611 F.3d at 1376.
\item[74] See U.S. v. Peterson, 248 F.3d 79, 83 (2d Cir. 2001) (holding that restrictions were not "reasonably necessary" when the underlying crime lacked a connection with computer or the Internet).
\item[75] \textit{Id.}; U.S. Holm, 326 F.3d 872, 877-79 (7th Cir. 2003).
\item[76] \textit{Burroughs}, 613 F.3d at 243; U.S. v. Holm at 877-879.
\item[77] See U.S. v. Freeman (\textit{Freeman II}), 94 F. App'x 40, 44 (3d Cir. 2004).
\item[78] See U.S. v. Holm, 326 F.3d at 879 (holding that a sweeping Internet restriction was too broad but the restriction on computer use was too narrow given the variety of ways the Internet can be accessed.)
\item[79] U.S. v. Brigham, 569 F.3d 220, 234 (5th Cir. 2009); \textit{Voelker}, 489 F.3d at 146.
\item[80] See, e.g., \textit{Voelker}, 489 F.3d at 146.
\item[81] See \textit{Durham}, 618 F.3d at 934-36; See also \textit{Tome}, 611 F.3d at 1376; See also \textit{Blinkinsop}, 606 F.3d at 1119-21; See also \textit{Russell}, 600 F.3d at 636-37.
\end{footnotes}
2. Severity and Scope of Computer and Internet Restrictions

The use of a computer or the Internet as an instrument in the commission of a crime significantly impacts the structure of computer restriction conditions of supervised release. It also impacts the scope and appropriate amount of time a restriction on computer or Internet use should be imposed upon the offender. Courts of Appeals have consistently held that an absolute ban is inappropriate and unduly harsh absent a nexus connecting the offender with the exploitation of computers or the Internet in committing the crime. It is difficult to justify restricting all Internet or computer use when the defendant was not engaging in predatory behavior or attempting to facilitate victimization. In such cases courts have determined that restricting computer and Internet access is typically a greater deprivation of rights than reasonably necessary.

Although courts tend to reject broad restrictions that limit every aspect of a defendant’s Internet access, computer and Internet restrictions as a concept are generally applauded across the board. On review, courts regularly vacate and remand ambiguously defined sentences back to sentencing courts, requesting more precisely defined computer and Internet conditions, specific to the offense and the individual. A variety of options are available for modifying the remanded restrictions as a means of differentiating between permissible and impermissible use. Alternatives include requiring permission from a probation officer before using the Internet, allowing offenders to use computers as long as they are not connected to the Internet, limiting restrictions to work or personal computers only, and the implementation of filtering software designed to block access to particular websites.

Courts have affirmed absolute bans on computer or Internet usage only in extremely limited circumstances where absolute bans had narrowly defined

82 Voelker, 489 F.3d at 144-148.
83 See Perazza-Mercado, 553 F.3d at 71; Krause & Pazicky, supra note 6, at 201, 202.
84 See Heckman, 592 F.3d at 408; Love, 593 F.3d at 12; U.S. v. Scott, 316 F.3d 733, 734 (7th Cir. 2003); Voelker, 489 F.3d at 146.
85 See Voelker, 489 F.3d at 144-145 (vacating and remanding the decision partly because the District Court failed to explain why such an expansive ban was imposed on the defendant’s Internet usage).
86 See U.S. v. Holm, 326 F.3d 872, 878-79 (7th Cir. 2003); Love, 593 F.3d at 12; U.S. v. Sales, 476 F.3d 732, 737 (9th Cir. 2007).
87 See U.S. v. Holm, 326 F.3d 872, 878-79 (7th Cir. 2003); Sales, 476 F.3d at 737.
88 See Love, 593 F.3d at 11-12; Sales 476 F.3d at 738; Holm, 326 F.3d at 878-79.
89 See U.S. v. Holm, 326 F.3d 872, 878 (7th Cir. 2003).
90 See Sales, 476 F.3d at 737.
91 See U.S. v. Thielemann, 575 F.3d 265, 278 (3d Cir. 2009), cert. denied, 130 S.Ct. 1109 (2010).
92 See White, 244 F.3d at 1206.
93 See U.S. v. Craig, No. 09-20273, 2010 WL 2546082, at *1 (5th Cir. 2010) (explaining that as of the date of this case, the 5th Circuit had upheld two absolute bans on computer
restrictions that could adequately produce the same results of the sentencing goals, including the prevention of recidivism, the need to protect the public from future crimes, and the rehabilitation of the individual.\textsuperscript{94} In \textit{Crandon}, the Third Circuit determined that a three-year broadly defined computer and Internet use restriction was reasonable, given the nature in which the defendant used the Internet to advance a sexual relationship with a minor in conjunction with the need protect the public from a repeat offense.\textsuperscript{95}

Similarly, in 2009, the Eleventh Circuit in \textit{United States v. Dove} upheld a lifetime term of supervised release that included a special condition restricting Dove from possessing or using a computer with active Internet access.\textsuperscript{96} Much like Crandon, Dove used the Internet as a device for developing a relationship with a girl whom he believed to be thirteen at the time, but who was actually an undercover investigator.\textsuperscript{97} Dove traveled from South Carolina to Florida to meet the girl; he was arrested and later pled guilty to traveling in interstate commerce with the intent to engage in illicit sexual conduct with a minor.\textsuperscript{98} Although Dove was sentenced to fifty-eight months in prison, the term of supervised release following imprisonment was for the remainder of Dove’s lifetime.\textsuperscript{99} In balancing the statutory sentencing goals with the nature and circumstances of Dove’s crime, the Court articulated that each factor must be an independent consideration contributing to the ultimate determination of whether restrictions are appropriate.\textsuperscript{100}

\section*{3. Personal Characteristics and Criminal History of the Offender}

In evaluating the reasonableness of computer and Internet restrictions, courts consider personal characteristics and criminal history of an offender as critical factors.\textsuperscript{101} As one might expect, the more extensive an individual’s criminal history, the more likely it is for courts to view computer and Internet restrictions as a reasonable component of a criminal sentence.\textsuperscript{102}

\textsuperscript{94} See White, 244 F.3d at 1205-06.
\textsuperscript{95} \textit{Crandon}, 173 F.3d at 127-128.
\textsuperscript{97} \textit{Id.} at 431.
\textsuperscript{98} \textit{Id.} at 430.
\textsuperscript{99} \textit{Id.} Dove argued that the District Court abused it’s discretion by imposing both the lifetime sentence of supervised release as well as the special conditions, both of which were affirmed.
\textsuperscript{100} \textit{Id.} at 433.
\textsuperscript{101} See Tome, 611 F.3d at 1375-76.
\textsuperscript{102} \textit{Id.} at 1376. The Court argued in Tome that given the seriousness of his prior criminal record, which is in essence a demonstration that he has failed at rehabilitation, the year long complete Internet access ban was reasonable in order to protect the public and aid in Tome’s rehabilitation since prior attempts were unsuccessful. \textit{Id.} at 1376-77.
has a similar prior conviction, courts often view that factor as sufficient justification for restricting the offender’s future computer or Internet access.\textsuperscript{103}

For such criminals, who have disregarded the law and the court’s instructions repeatedly, courts are likely to reject a defendant’s argument that any technological restrictions amount to a greater deprivation of liberty than reasonably necessary.\textsuperscript{104} A defendant with a criminal history demonstrates the potential to re-offend in a similar manner and that imprisonment alone is not capable of achieving the intended result.\textsuperscript{105} In 2010, the Tenth Circuit in \textit{U.S. v. Angle} emphasized that the defendant had prior sex offense convictions before his conviction for using the Internet to solicit sex with a minor.\textsuperscript{106} The court found that given Angle’s nearly twenty years of criminal history, restricting personal access to the Internet as a condition of supervised release was entirely reasonable.\textsuperscript{107} Similarly, when a defendant has violated conditions of supervised release or probation in the past, the courts take into account such unwillingness to conform and use it as additional weight in favor of imposing computer restrictions.\textsuperscript{108}

Even if an individual has a criminal history that is unrelated to the present offense, courts still consider that history when balancing factors during sentencing.\textsuperscript{109} When a defendant has a minimal criminal history (or none at all), courts are more likely to disapprove of ambiguous restrictions because the breadth of such restrictions are unnecessary, given that available alternatives can be narrowly tailored to that individual.\textsuperscript{110}

Likewise, courts may consider other personal characteristics when determining the duration and scope of computer and Internet restrictions.\textsuperscript{111} One popular

\begin{itemize}
  \item\textsuperscript{103} See \textit{Angle}, 598 F.3d at 361; \textit{Heckman}, 592 F.3d at 408.
  \item\textsuperscript{104} See, e.g., \textit{Tome}, 611 F.3d at 1377. In \textit{Tome} the court cited to multiple incidents when the defendant disobeyed prior conditions of supervised release. Such unwillingness on behalf of the defendant was taken seriously in developing a sentence with these factors in mind. \textit{Id}.
  \item\textsuperscript{105} See, e.g., \textit{Angle}, 598 F.3d at 361; See also \textit{Tome}, 611 F.3d at 1377.
  \item\textsuperscript{106} \textit{Angle}, 598 F.3d at 361 (giving additional weight to the fact that the defendant used the Internet to solicit a minor for sex when the Internet was still for the most part new and undeveloped).
  \item\textsuperscript{107} \textit{Tome}, 611 F.3d at 1377. Defendant who had previously been convicted of Internet sex offenses with a minor violated initial supervised release computer restrictions multiple times to communicate with other sex offenders, some of whom had criminal child pornography convictions. \textit{Id}.
  \item\textsuperscript{108} \textit{Heckman}, 592 F.3d at 408. The Third Circuit characterized defendant as a serial offender which was a relevant characteristic that needed to be weighed despite the fact that his previous criminal behavior did not involve the use of the Internet. \textit{Id}.
  \item\textsuperscript{109} \textit{Johnson II}, 446 F.3d at 282.
  \item\textsuperscript{110} \textit{Perazza-Mercado}, 553 F.3d at 73 (explaining that defendant’s “propensity for inappropriate behavior towards young girls” was one such type of personal characteristic that should be considered when tailoring the limitations of computer and Internet restrictions).
\end{itemize}
argument asserted by defendants when opposing computer restrictions is that restricting their ability to use a computer or the Internet will negatively impact either their occupation or future employment opportunities.\textsuperscript{112} When a defendant has an extensive education or professional history working in a particular field, courts generally favor a more tailored computer or Internet restriction that takes into account the defendant's professional life.\textsuperscript{113} The reverse is true as well. When a defendant does not demonstrate a particular need for computer or Internet use for employment purposes, courts are more likely to reject occupation-based challenges to restrictions on Internet usage.\textsuperscript{114}

B. The Role of Sentencing Objectives and Public Policy in Establishing the Validity of Computer and Internet Restrictions

Sentencing provisions serve to deter a defendant from committing similar crimes in the future, while protecting the public from future victimization.\textsuperscript{115} When formulating a sentence, a court determines the likelihood of recidivism in light of the particular crime and the defendant's criminal history.\textsuperscript{116} Consequently, difficulties arise as to determining the types of computer or Internet restrictions that are appropriate in light of the nature and circumstances of the offense.\textsuperscript{117}

1. Rehabilitation of the Offender

Courts of Appeals have emphasized the importance of supervised release as

\textsuperscript{112} See, e.g., Angle, 598 F.3d at 361 (affirming restrictions because Internet use "was not integrally connected" to the defendant's profession which included previously working as a salesman and a mechanic); Crandon, 173 F.3d at 128 (affirming computer and Internet restrictions because the need to protect the public of potential future crimes by the defendant was greater than the negative implications of restricting possible employment opportunities); U.S. v. Holm, 326 F.3d 872, 878 (7th Cir. 2003) (remanding computer restriction conditions for tailoring because broad restrictions could limit the future employment of a defendant who worked in the telecommunications industry for 30 years); Johnson II, 446 F.3d at 282-83 (affirming an absolute Internet ban because defendant, an engineer with sophisticated computer skills could circumvent less restrictive computer monitoring programs used by probation offices); U.S. v. Riley, 576 F.3d 1046, 1049 (9th Cir. 2009) (defendant, a technical engineer, opposing a broad computer restriction pertaining to all materials involving minors, arguing that it would prevent him from working on computer programs developed for minors).

\textsuperscript{113} See Peterson, 248 F.3d at 83; U.S. v. Russell, 600 F.3d 631, 638 (D.C. Cir. 2010).

\textsuperscript{114} See U.S. v. Alvarez, 478 F.3d 864, 868 (8th Cir. 2007) (affirming limited Internet access restrictions because the defendant did not demonstrate a "day-to-day vocational need" for Internet access given his employment history working in retail).

\textsuperscript{115} Johnson II, 446 F.3d at 283.

\textsuperscript{116} Id.

\textsuperscript{117} See Owad, 363 Fed.Appx. at 791.
a rehabilitative tool necessary for transitioning criminals back into society, following their release from prison.\textsuperscript{118} Proper rehabilitation and offender treatment requires computer and Internet restrictions for at least some period of time in situations, when either were used in the commission of a crime.\textsuperscript{119} A key ingredient of the rehabilitation process is identifying the motivations contributing to the underlying criminal behavior in order to stop ongoing cycles of criminal conduct.\textsuperscript{120} Allowing an offender to have continued access to the Internet hampers the rehabilitation process of offenders who have used the Internet as a criminal device because the Internet itself operates as a source of criminal motivation.\textsuperscript{121} Also, when the cessation of predatory behavior is a goal of the rehabilitation, unrestricted Internet access could prove to be a problem because the offender has already proven that usage contributes to their criminal behavior.\textsuperscript{122}

On rare occasions, courts have viewed computer and Internet restrictions as negatively impacting an individual's progress in the rehabilitation process.\textsuperscript{123} A crucial element of the rehabilitation process often involves returning to an occupation already well established prior to the conviction. In these situations, the restrictions could be a hindrance to full rehabilitation\textsuperscript{124}—particularly when the offender has special training or a profession that involves using a computer, where it would be unreasonable to force the offender to find a new profession that does not involve the use of a computer.\textsuperscript{125}

In \textit{United States v. Perazza-Mercado}, the First Circuit rejected a total ban on the defendant's home Internet use as a matter of first impression, following the defendant's conviction of unlawful sexual conduct with a minor under the age of twelve.\textsuperscript{126} The defendant, who was a teacher prior to his conviction, would have had to find a new occupation that does not involve minors as part of his rehabilitation.\textsuperscript{127} Because of the opportunities the Internet provides for seeking alternative careers and education, the court held that defendant's use of the Internet was indispensable as a means of satisfying the vocational and educa-

\textsuperscript{118} See \textit{Crandon}, 173 F.3d at 127-28; U.S. v. Holm, 326 F.3d 872, 879 (7th Cir. 2003); \textit{Johnson I}, 2005 WL 22680 at *6; \textit{Perazza-Mercado}, 553 F.3d at 71; \textit{Tome} 611 F.3d at 1376.

\textsuperscript{119} See \textit{Johnson I}, 2005 WL 22680, at *6.

\textsuperscript{120} Id. at 6.

\textsuperscript{121} Id.

\textsuperscript{122} \textit{Perazza-Mercado}, 553 F.3d at 72-74.

\textsuperscript{123} U.S. v. Russell, 600 F.3d 631, 637-38 (D.C. Cir. 2010).

\textsuperscript{124} Id. at 637-38.

\textsuperscript{125} See U.S. v. Russell, 600 F.3d 631 at 637-638; \textit{Voelker}, 489 F.3d at 148-49.

\textsuperscript{126} \textit{Perazza-Mercado}, 553 F.3d at 73-74. Defendant argued that the Internet restriction "would unnecessarily hinder his ability to engage in Internet use essential to his rehabilitation" asserting that he needed to use the Internet as part of his rehabilitation program. \textit{Id.}

\textsuperscript{127} Id.
tional objectives of imposing supervised release. The court argued that the defendant’s use of the Internet from his home, either to find a new source of employment or to acquire a new set of skills through online educational programs, would benefit his rehabilitation. Thus, courts have asserted that restrictions must be tailored appropriately when computer restrictions would significantly impede upon an offender’s rehabilitation, especially when an individual is faced with the challenge of returning to a particular line of work or finding a new occupation altogether.

2. Recidivism and Necessity of Protecting the Public

National statistics on recidivism rates are outdated, making predictions increasingly difficult, given that recent advances in computer technology have the ability to increase the likelihood of recidivism among certain categories of offenders. The most recent report in 2007 by the Bureau of Justice Statistics found that 1,248,337 offenders who were on parole were considered at-risk for reoffending. Restrictions on computer and Internet access can be considered an impairment on rehabilitation in some situations, but in others, the restrictions might prevent the goals of protecting the public and preventing recidivism.

When weighing the relevant factors in imposing computer restrictions, courts balance the effects of banning an offender from using the Internet and the possibility of recidivism if the Internet is not banned. In situations where the Internet was used as a crucial instrument in the commission of a crime, courts have found that a sufficient nexus exists between the nature of the of-
fense and the goals of deterring future criminal conduct in light of protecting
the public from such conduct.\footnote{See, e.g., Thielemann, 575 F.3d at 278.} Similarly, when an offender has exhibited per-
sonal characteristics suggesting a higher rate of recidivism than a traditional
first time offender, computer restrictions serve the “dual statutory goals of pro-
tecting the public” and the offender from the commission of future offenses.\footnote{Paul, 274 F.3d at 170.}
When structuring a sentence of supervised release containing computer and
Internet restrictions, the court must consider the defendant’s personal charac-
teristics unique to that individual and how banning computer or Internet use
would impact that person individually, in terms of preventing recidivism.\footnote{See discussion, supra note 42.}

C. Narrowly Tailored Restriction Conditions on Remand in Light of the
Importance of the Internet and Computers in the Modern World

As the modern technological world continues to advance, so does the impor-
of restrictions, whether limiting an individual’s employment or impacting the
individual’s ability to successfully accomplish rehabilitation, is a common is-

\footnote{See Perazza-Mercado, 553 F.3d at 73; United States v. Holm, 326 F.3d 872, 878 (7th Cir. 2003); See Krause & Pazicky, supra note 6, at 4 (arguing that simply as a matter of public policy absolute restrictions banning Internet use may not only interfere with the reha-
bilitation of an offender but also may impact an offender’s ability to pay restitution to vic-
tims).}

\footnote{Voelker, 489 F.3d at 144-45.}

\footnote{See, e.g. U.S. v. Holm, 326 F.3d 872, 878 (7th Cir. 2003) (recommending on remand that periodic searches of the offender’s home computer and utilization of monitoring soft-
ware would be a reasonably narrow condition).}
computers or the Internet were imperative in the commission of the crime.\textsuperscript{142} The options available for narrowly tailoring a computer or Internet restriction continue to become more advanced as new technologies develop, giving Courts of Appeals more alternatives to consider when determining appropriate computer or Internet restrictions.\textsuperscript{143} In this way, courts can implement restrictions that are tailored to reflect the scope and severity of the offender’s crime in order to best accomplish the sentencing goals and ultimate rehabilitation of the offender.\textsuperscript{144} An additional benefit of tailoring offender specific restriction conditions is that they may contain modification provisions allowing probation officers to “allow the restriction to adjust to ongoing developments in technology.”\textsuperscript{145}

One pertinent issue before many Courts of Appeals is how to handle computer and Internet restrictions imposed on individuals who would benefit greatly from such restrictions, yet are severely impacted by the restrictions in attaining the goals of sentencing, such as rehabilitation.\textsuperscript{146} For example, in United States v. Russell,\textsuperscript{147} the defendant held various white-collar jobs, and possessed degrees in engineering and strategic intelligence; preventing him from engaging in his established occupation might have greatly impacted his rehabilitation process.\textsuperscript{148} In situations similar to Russell, courts have been creative by crafting sentences that meet sentencing goals, yet do not have as paralyzing of an impact as an absolute ban on an offender’s career.

Some courts, in an effort to limit Internet restrictions, require the offender to

\begin{footnotes}
\item[143] Krause & Pazicky, supra note 6, at 4-5.
\item[144] Miller, 594 F.3d at 187-188. In Miller, the court held that computer monitoring software on the defendant’s computer was the proper degree of restriction to be applied because it was reasonable to the nature of the offense, unlike the lifetime Internet ban the lower court imposed after Miller was convicted of receiving and possessing child pornography. Id.
\item[145] U.S. v. Russell, 600 F.3d 631, 638 (D.C. Cir. 2010).
\item[146] See, e.g., Angle, 598 F.3d at 361 (upholding Internet restriction conditions when Internet access is not “integrated connected” to a defendant’s occupation); Holm, 326 F.3d at 878 (holding special condition as written would limit defendant’s “future productivity and jeopardize his rehabilitation” given defendant’s nearly 30 years of experience working in computerized telecommunications); U.S. v. Riley, 576 F.3d 1046, 1049 (9th Cir. 2009) (finding that restricting access to any materials related to minors was overbroad when defendant was a technical engineer who worked with computer programming); Tome, 611 F. 3d at 1377 (affirming Internet restrictions when defendant failed to establish that Internet access was a daily vocational necessity); Voelker, 489 F.3d at 149 (vacating and remanding to tailor conditions due to ramifications imposed on defendant’s occupation as a respiratory therapist and future employment training).
\item[148] See discussion, supra note 146.
\end{footnotes}
get permission from his or her probation officer as a prerequisite to accessing the Internet. This is just one example of using less restrictive means to accomplish a sentencing goal, as opposed to a complete ban on Internet access. When a supervised release condition allows the offender to use the Internet with prior permission granted by the probation officer, the court still plays a role in supervising the offender’s post-release activity, without imposing a greater deprivation of liberty than is reasonably necessary. Such a restriction provides for an appropriate medium between restricting Internet usage entirely and allowing for windows of opportunity to re-offend without any sort of restriction on computer or Internet access.

Similarly, the availability of monitoring software allows an individual limited access to the Internet, while protecting the public and preventing an offender from using the Internet for criminal purposes to commit similar repeat offenses. When the computer or Internet was used to some degree in the commission of a crime—but not to an extent to warrant a complete ban on computer access—Courts of Appeals often suggest use of this type of monitoring software, allowing individuals to partake in activities such as accessing e-mail, while restricting access to pornography Web sites.

III. A SYMBIOTIC RELATIONSHIP: ECONOMIC CRIMES AND THE NECESSITY FOR COMPUTER AND INTERNET RESTRICTIONS

A. The Economic Climate, Modern Technology and Economic Crimes

Over the past decade, emerging computer and Internet technologies have improved the efficiency with which our society works, while simultaneously creating a new realm of criminal opportunities. Economic crimes, in particular, have become increasingly prevalent in both the corporate world and individual consumers’ day-to-day lives. Additionally, the recent economic recession has contributed to a surge in economic crimes, forcing law enforcement to shift both their awareness and resources to an expanding variety of criminal conduct

149 Durham, 618 F.3d at 944.
150 Id. (holding that by imposing restrictions that only partially deprived him of his liberty, the court did not abuse their discretion).
151 Burroughs, 613 F.3d at 243-44.
152 Holm, 326 F.3d at 878.
153 Freeman II, 94 F.App’x at 42-44. On remand, the Court required special conditions to address the fact that the defendant used his computer to download illegal pornographic images, while not taking away all of his computer access. Freeman I, 316 F.3d at 387-88.
154 Freeman I, 316 F.3d at 392 (suggesting “a more focused restriction” enforced by occasional inspections of the individuals hard drive).
155 Kane & Wall, supra note 8, at 3, 8, 14.
that is substantially different compared to traditional crimes. As a result, law enforcement, through the guidance of the legal system, must develop specialized programs to protect the public from serious financial harm. A common assumption is that economic crimes primarily involve corporate offenders responsible for complex and sophisticated schemes; however, this is becoming less true as technology continues to improve.

The National White Collar Crime Center ("NW3C") has described computers as "a doorway to a world of opportunity on the Internet that is not policed by any single law enforcement agency." The recent economic recession further contributes to the shift in the common type of offenders from criminal masterminds to the "guy next door." Unlike traditional crimes and those who commit them, it is difficult to statistically determine a standard profile of victims of economic crimes because of the lack of victimization reports. What is certain, however, is the increasingly diverse set of offenders who commit economic crimes. Economic offenders now include teenagers like Jason Carpenter, who see the crime as "fun and easy" and assume that, if caught, any punishment would be limited to probation solely because of the white-collar nature of the crime. Another example of the expansive diversity of economic crimes is demonstrated in a December 2009 case in which a sixty-year-old man in California pled guilty to 103 felony counts of money laundering and forty-eight counts of computer access fraud for stealing $2.7 million from his employer, $1 million of which was laundered over the computer within a period of twenty-four hours. The longtime certified public accountant was sentenced to twelve years in prison. The following sections provide a general overview of economic crimes and the factors that have contributed to their recent increase in popularity.

156 See generally Breuer Address, supra note 44.
157 See James B. Comey, Jr., Go Directly to Jail: White Collar Sentencing After Sarbanes-Oxley Act, 122 HARV. L. REV. 1728, 1729-30 (2009) (asserting that all white-collar offenders implementing large schemes are "sophisticated actors"); Knight, supra note 2.
159 See Knight, supra note 2 (providing an example of someone who does not fit the traditional profile of an identity theft offender).
160 KANE & WALL, supra note 8 at 6, 12.
161 See Knight, supra note 2 (recounting the story of a teenager convicted of an extensive identity theft scheme who was sentenced to seventeen years in a federal prison for buying approximately $2 million worth of merchandise using fraudulent credit cards created with the personal identifying information of over 1,000 individuals).
162 Id. (quoting Jason Carpenter in an interview with CNN following his conviction).
164 Id. Stephen Anthony Frlekin worked for a pet insurance company when he stole money from the company’s bank account and transferred the money into his personal overseas bank accounts.
1. Accessibility of Computers as a Readily Available Criminal Instrument

Contrary to public perceptions, the majority of criminals who use computers to commit economic crimes are neither computer professionals nor experts. Many offenders, particularly those arrested for identity theft, have prior violent crime or felony drug convictions. Unlike other regulated tools typically used to commit traditional crimes, such as firearms; computers and the Internet are readily available to practically the entire population of the United States via computers and mobile devices such as laptops, cell phones, and tablets. While extremely beneficial to consumers, the widespread availability of such devices provide criminals with easy and anonymous access to a limitless array of potential victims. Furthermore, these technologies provide criminals with opportunities to engage in non-Internet crimes, for example using computers to create counterfeit money or misappropriating employer funds through billing or payroll schemes.

As computer and Internet technologies continue to develop, the American population grows increasingly dependent on using the technologies as part of their daily lives. The Third Circuit has described the Internet as a universal tool with a “ubiquitous presence” for even the most basic computer users. The dependence on computer technologies has created an entirely new crop of criminals who, with the assistance of never-ending technological advancements, have the opportunity to take advantage of the country’s unsuspecting Internet users via relatively unsophisticated means. Not only does the Internet function as a criminal device, but it also serves as an educational and communications tool for cyber offenders. Further, threats have become omni-

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165 See Knight, supra note 2.
166 Id.
167 See Knight, supra note 2; AARON SMITH, AMERICANS AND THEIR GADGETS, PEW INTERNET & AMERICAN LIFE PROJECT (2010), available at http://pewinternet.org/Reports/2010/Gadgets/Report (finding that 85% of American adults own a cell phone while 75% own a computer).
170 See, e.g., KANE & WALL, supra note 8, at 6-14; Knight, supra note 2.
172 Voelker, 489 F.3d at 145.
174 Id.
present to the public through schemes targeting access to personal information. These schemes, designed to steal identities and financial information, include data mining on social networking sites, enticing unknowing victims through phishing scams, and get rich quick, overpayment, and "romance fraud" scams.  

2. Computers and The Financial Crisis

Furthermore, the recent economic recession indicates that it is crucial to transform sentencing practices imposed on economic criminals to include the more frequent imposition of computer and Internet restrictions through supervised release. The recession contributed to substantial salary cuts and a dramatic rise in unemployment rates that had a sweeping financial impact on over half of the American population. As a result, there became an intensely desperate need to recover losses, and a need to find sources of income to keep individuals and families afloat. The Pew Internet and American Life Project, in a study regarding impacts of the recession, found that 69% of American Internet users turned to the Internet for assistance in coping with the effects of the recession. 

The Internet has served as a useful and easily accessible tool to assist the American population in recovery from the economic crisis; however, an unfortunate consequence is that many Americans have exposed personal identifying information such as social security numbers and financial information beyond

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175 See National White Collar Crime Center, Internet Fraud, 1-3 (2008) (explaining that romance fraud occurs when a scammer builds a romantic relationship with an unsuspecting victim via social networking sites, dating sites, or Internet chat rooms. After gaining a victim's trust, the scammer usually persuades the victim to send them money because of a fictional tragedy or personal circumstance).

176 See LEE RAINIE AND AARON SMITH, THE INTERNET AND THE RECESSION, PEW INTERNET & AMERICAN LIFE PROJECT (2009) [hereinafter PEW INTERNET & RECESSION SUMMARY], available at http://pewinternet.org/Reports/2009/11-The-Internet-and-the-Recession/1-Summary-of-findings.aspx (explaining that more than two-thirds of Americans have used the Internet as a way to cope with the financial recession); Expanding Services to Reach Victims of Identity Theft and Fraud, UNITED STATES DEP’T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, OFFICE FOR VICTIMS OF CRIME, http://www.ovc.gov/pubs/ID_theft (last visited May 14, 2011) (explaining that the more you go online, the better chance you have of becoming a victim of an online crime).

177 See PEW INTERNET & RECESSION SUMMARY, supra note 176. In a study of the impacts of the recession and the Internet, 52% of Americans admit they were "hard hit" by the recession. The most common impacts specifically being: unemployment or loss of job, investment depreciations over 50%, salary and work hour decreases, terminated benefits, and decline in home value. Id.


179 See PEW INTERNET & RECESSION SUMMARY, supra note 176.
the private realm.\textsuperscript{180} The availability of that information makes the casual Internet user more susceptible to identity theft and other types of fraud.\textsuperscript{181} Additionally, the recession has caused the number of potential offenders to multiply,\textsuperscript{182} resulting in a sizeable number of first-time offenders.\textsuperscript{183} The popular perception of white-collar criminal demographics has radically changed, presenting society with a potpourri of individuals more likely than ever to commit economic crimes.\textsuperscript{184}

3. Defining and Addressing Economic Crimes

There is no industry standard as to what constitutes an economic crime or white-collar crime.\textsuperscript{185} In the NW3C’s most recent national public survey, the organization broadly defined white-collar crime as “illegal or unethical acts that violate fiduciary responsibility or public trust for personal or organizational gain”; such a definition encompasses both the organizational offenders in the workplace who have dominated recent media stories, as well as individual offenders seeking personal gain.\textsuperscript{186} The most commonly recognized types of economic crimes include identity theft, unauthorized use of credit cards, misuse of personal identifying information to apply for loans and accounts, and fraud committed through e-mail and the Internet.\textsuperscript{187} Internet fraud is perhaps

\textsuperscript{183} Knight, supra note 2; Expanding Services to Reach Victims of Identity Theft and Fraud, UNITED STATES DEP’T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, OFFICE FOR VICTIMS OF CRIME, http://www.ovc.gov/pubs/ID_theft (last visited May 14, 2011).
\textsuperscript{184} KANE & WALL, supra note 8, at 4-5.
\textsuperscript{185} See id. at 2-4 (defining it as “illegal or unethical acts that violate fiduciary responsibility or public trust for personal or organizational gain.”); Mark Motivans, Bureau of Justice Statistics, Federal Justice Statistics 2008 Statistical Tables, Nov. 3, 2010 available at http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=1745 (categorizing fraud, embezzlement, forgery, and counterfeiting as fraudulent property offenses using neither the term economic or white-collar crime); Expanding Services to Reach Victims of Identity Theft and Fraud, UNITED STATES DEP’T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, OFFICE FOR VICTIMS OF CRIME, http://www.ovc.gov/pubs/ID_theft (last visited May 14, 2011).
\textsuperscript{186} KANE & WALL, supra note 8, at 4.
the largest threat to the unsuspecting American public because of the anonymity the Internet provides for committing criminal activities.\textsuperscript{188} Internet fraud covers a wide array of criminal activity including identity theft, credit card fraud, auction fraud, business opportunity schemes, the non-delivery of merchandise, payment or services, securities fraud, and overpayment scams.\textsuperscript{189}

Significantly, the sentences imposed on criminals became especially lenient following \textit{Booker}, in which the Supreme Court determined that the U.S. Sentencing Guidelines serve only an advisory purpose.\textsuperscript{190} The decision impacted not only offenders of traditional crimes, but also white-collar and economic crimes.\textsuperscript{191} Since \textit{Booker}, statistics have indicated that federal judges routinely sentence economic crime offenders well below the now-advisory sentencing guidelines.\textsuperscript{192} This explains to some extent why potential economic criminals believe they will receive a light sentence if caught. The resulting significant leniency in sentencing after \textit{Booker}\textsuperscript{193} is especially problematic in light of the growing number of criminal opportunities that computers and the Internet provide.

B. Applications of Computer and Internet Restrictions in Economic Crimes: Restrictions Provide Greater Accuracy of Achieving Sentencing Goals

Economic crimes are similar to the aforementioned sex offense crimes inasmuch as both categories of offenses manipulate technology in a predatory manner and share the element of anonymity, thus encouraging parties to presume that getting caught is less likely, compared to their traditional crime counterparts.\textsuperscript{194} Because of these similarities, constructing comparable sen-
tences that impose computer and Internet restrictions on economic offenders may be a more efficient means of deterring criminal behavior and protecting the public.\footnote{See id. at *6; KANE \& WALL, supra note 8, at 16, 20.} Although few economic crime cases have come before Courts of Appeals on review challenging the imposition of computer and Internet restrictions,\footnote{See e.g., U.S. v. Barsumyan, 517 F.3d 1154 (9th Cir. 2008); see also U.S. v. Dupes, 513 F.3d 338 (2d Cir. 2008), cert. denied, 552 U.S. 1272.; see also Mitnick, 145 F.3d 1342.} Courts of Appeals have almost always upheld well-tailored computer and Internet restrictions when reviewing economic crime cases of all varieties.\footnote{See supra note 197.} The prevailing approval of the appellate courts provides a sizeable opportunity for reforming the sentencing practices of economic offenders in response to recent criminal and economic trends.\footnote{See e.g., Krause \& Pazicky, supra note 6, at 201; PEW INTERNET \& RECESSION SUMMARY, supra note 176; Expanding Services to Reach Victims of Identity Theft and Fraud, UNITED STATES DEP’T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, OFFICE FOR VICTIMS OF CRIME, http://www.ovc.gov/pubs/ID_theft (last visited May 14, 2011).}

In terms of economic crimes specifically, there are few precedents for appellate courts to refer to for assistance when reviewing the validity of computer restrictions as special conditions of supervised release in sentencing.\footnote{See supra note 197.} Because this absence of guidance leaves enormous room for flexibility, sentencing and appellate courts can take advantage of this lack of precedent to better tailor sentences in a way that is consistent with the statutory goals of sentencing, while addressing the increasing threat of economic crime.\footnote{See U.S. v. Craig, No. 09-20273, 2010 WL 2546082, at *1 (5th Cir. June 23, 2010); See also Barsumyan, 517 F.3d 1154; Dupes, 513 F.3d 338; Mitnick, 145 F.3d 1342; Owad, 363 F. App’x 789; Peterson, 248 F.3d at 83; Sales, 476 F.3d 732; Scott, 316 F.3d at 734; U.S. v. Silvious, 512 F.3d 364 (7th Cir. 2007); Suggs, 50 F. App’x 208; Vinson, 147 F. App’x at 774.} The below discussion examines the application of computer and Internet restrictions to economic criminals and demonstrates a substantial overlap with similar applications in the sex offender context.\footnote{See supra note 197.}

1. Nature of the Offense and Personal Characteristics of the Offender as Reasonably Related to the Achievement of Sentencing Goals

Economic crimes differ from the sex offenses discussed in Part II in that a
greater percentage of economic crimes are committed using both employer computer networks and individual computers. For example, United States v. Mitnick demonstrates the imposition of computer and Internet restrictions as a consequence of using a computer to commit an economic crime. Upheld on appeal by the Ninth Circuit in 1998, Mitnick established the legality of imposing Internet restrictions in cyber crime cases. Mitnick illustrates how the reasoning applied by the U.S. District Court of the Central District of California in formulating the sentence can be applied to economic crimes committed online or with computers.

Mitnick, who at the time was considered by the United States Department of Justice as "the most wanted computer criminal in United States history," had an extensive criminal history of computer fraud convictions for hacking into computer networks.

Upon hearing there was a warrant out for his arrest for hacking into the computer and voicemail systems of Pacific Bell, he became a fugitive for over two years, during which time he also hacked into the computer systems and stole the proprietary software of Motorola, Novell, Fujitsu, and Sun before he was arrested by the FBI in 1995. When he initially committed the hacking offense against Pacific Bell he was still under supervised release for a prior computer hacking conviction which contained a special condition providing that Mitnick was not to illegally access computer or telecommunications networks.

Following a sentence of four years in prison, Mitnick was subject to a term of supervised release which included special conditions prohibiting the use of any sort of computer or electronic equipment without permission from a probation officer. In holding that the restrictions were appropriate given Mitnick's

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202 See, e.g., Suggs, 50 F. App'x at 209 (reviewing a sentence for a defendant indicted for a fraudulent computer resale scheme using his personal computer and separately indicted for fraud he committed through an investment company in which he was president); Vinson, 147 F. App'x at 765 (defendant, as vice president of a corporation, diverted $159,990.72 of corporate payments to his personal account and later pled guilty to false tax return, wire fraud, and mail fraud).
203 Mitnick, 145 F.3d 1342; See Krause & Pazicky, supra note 6, at 201 et. seq.
205 Mitnick, 1998 WL 255343, at *1-2; See Krause & Pazicky, supra note 6, at 201.
206 Krause & Pazicky, supra note 6, at 201. Mitnick not only had a criminal history of hacking into computer and telecommunications networks, but he also previously had his probation revoked for violating conditions of his probation sentence.
207 Id. Ultimately Mitnick pled guilty to four counts of wire fraud, two counts of computer fraud, and one count of illegally intercepting a wire communication.
208 Id. The conviction for which Mitnick was already on supervised release was for federal crimes related to hacking into the computer systems of Digital Equipment Corporations.
209 Mitnick, 1998 WL 255343, at *1 (setting restrictions that banned Mitnick's "access to computers, computer-related equipment, and certain telecommunications devices, including cellular telephones, without the prior approval of Mitnick's probation officer.")
criminal history and "egregious nature," the Ninth Circuit determined the computer restrictions were no more restrictive than what was necessary and upheld the restrictions as constructed by the District Court.210 While the unpublished opinion of the Ninth Circuit was brief, without extensive insight as to how to apply such restrictions, similar cases since 1998 have covered substantial ground in determining the appropriateness and legality of imposing computer restrictions.211

As recent Courts of Appeals decisions in child pornography cases indicate, it is imperative that some nexus exists between the underlying economic or white-collar offense and computer or Internet usage in the commission of the crime.212 A restriction on Internet use is not justified if computer or Internet technology was not instrumental in the commission of the underlying crime.213 The limited number of cases reviewed by the Courts of Appeals suggest that the attachment of special conditions are reasonable only when the computer or Internet use is related to the conviction.214 Thus, when an economic offender uses a computer or the Internet as a criminal instrument just as sex offenders do to distribute child pornography, computer and Internet restrictions of supervised release are equally imperative.215 When computer and Internet restrictions are imposed on individuals convicted of child pornography and other related sex offenses, the targeted criminal pool is relatively narrow.216 On the other hand, "white collar crime can affect anyone, regardless of their status or individual characteristics" in ways that include (but are not limited to) identity theft, forgery, counterfeiting, property theft, credit card fraud, and embezzle-

& Pazicky, supra note 6, at 201.
210 Mitnick, 1998 WL 255343, at *1; Krause & Pazicky, supra note 6, at 201.
211 Krause & Pazicky, supra note 6, at 201
212 Peterson, 248 F.3d at 83 (rejecting computer and Internet restrictions because there did not appear to be a relationship between Peterson's underlying offense of bank larceny nor was there such a relationship with his prior incest conviction).
213 See, e.g., Scott, 316 F.3d at 735 (finding that the child pornography on defendant's computer was not relevant to his fraud conviction and did not bear a direct relationship to the offense).
214 See Peterson, 248 F.3d at 83 (rejecting computer restrictions because they were not directly related to the offense before the court, only to a prior conviction); Scott, 316 F.3d at 734 (finding that the child pornography images found on defendant's work computer lacked a relationship to defendant's underlying guilty plea of fraud).
215 See Dupes, 513 F.3d at 344 (holding that similar conditions, such as computer and Internet restrictions upon individuals convicted of non-sex offenses, are authorized provided that the conditions are not overly broad).
216 See, e.g., Angle, 598 F.3d 352 (convicting defendant of possession of child pornography, attempted receipt of child pornography, and attempt to entice a minor using the Internet); Thielemann, 575 F.3d 265 (explaining how a defendant pled guilty to receipt of child pornography); Love, 593 F.3d at 1 (explaining how a defendant pled guilty to transporting or shipping material involving child pornography).
In several instances, defendants convicted of economic crimes prove to have a prior sex offense. When it is clear that the defendant continues to engage in criminal behavior, judges have imposed computer and Internet restrictions as a catchall for previously convicted sex offenders posing a continued threat to the public. This practice provides an additional way to promote sentencing goals when a defendant has failed to satisfy the goals under earlier sentences.

Because computers and the Internet have become necessary tools of our personal and professional lives, the potential numbers of offenders and victims of computer-based white collar crime has drastically expanded. Sentencing courts are becoming more stringent in an effort to discourage pedestrian economic crimes through the sentences they impose and the messages attached to them. In 2010, Senior District Judge Jack Weinstein stated that a sentence consisting of two years imprisonment followed by three years of supervised release for a defendant who pled guilty to tax fraud was to “send a clear message that any involvement in tax fraud will result in a substantial prison sentence.” These types of crimes could have a devastating impact on victims, so it is important that courts not only recognize how computer and Internet restrictions can operate as a device for achieving the goals of sentencing, but also how modifications to existing sentencing practices can communicate a message to prospective criminals that may dissuade them from such criminal behavior in the first place.

2. Rehabilitation of the Offender

Just as computer and Internet restrictions aid the rehabilitation of an offender in child pornography cases, similar restrictions imposed upon economic offenders can serve as a form of rehabilitation in preventing further illegal and predatory use of computer technologies. Well-tailored computer and Internet restrictions help promote the goals of rehabilitation is by assuring future employers that the offender will not have the chance to reoffend. In this way, computer and Internet restriction conditions of supervised release act as a

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217 Kane & Wall, supra note 8, at 6-14.
218 See, e.g., Dupes, 513 F.3d at 341; Peterson, 248 F.3d at 84.
219 Dupes, 513 F.3d at 344.
220 Kane & Wall, supra note 8, at 14.
222 Id.
223 See Kane & Wall, supra note 8, at 14; Joffe, 2010 WL 2541667 at *2.
224 Perazzo-Mercado, 553 F.3d at 71-73.
225 See Mitnick, 145 F.3d 1342; Vinson, 147 F. App’x at 774.
safety system in monitoring and evaluating an offender's progress, 226 allowing the legal system to intervene to address the problems before an individual reoffends. 227

In 2007, the Sixth Circuit affirmed the revocation and subsequent twenty-four-month sentence imposed on a defendant convicted of wire fraud and possession of credit cards with the intent to defraud a mere nine days following his release from prison for a prior credit card fraud conviction. 228 The defendant was caught at the airport on his way to New York City with a list of credit card numbers, names, and banks after having booked online plane tickets and hotel accommodations with credit cards not issued under his name. 229 Because the defendant was on supervised release following his prison term, his violations were an immediate indication that rehabilitation had been unsuccessful and he continued to pose a serious threat to the community. 230 The district court judge stated in the sentencing opinion defendant’s prior sentence "hasn’t done you a bit of good because you went right back to exactly the same sort of criminal conduct, committed the same sort of fraud again." Consequently he was sentenced to twenty-four months in prison for violating conditions of his supervised release. 232 The district court and the Sixth Circuit stressed the importance of how quickly the defendant violated his conditions of supervised release and how they were similar in nature to his prior credit card fraud convictions. 233

A primary argument for rejecting expansion of computer restrictions as conditions of supervised release upon economic offenders is the belief that an individual's occupation and future employment will be negatively impacted by such restrictions and constitute a greater deprivation of liberty than reasonably necessary. 234 Where there exists an explicit relationship between the underlying offense and the convicted individual’s occupation computer and Internet restrictions have been upheld, as was the case in Mitnick. 235 The Ninth Circuit in Mitnick alluded to the strength of an argument asserting that computer restrictions could be detrimental to an individual, especially those with professions in certain industries such as telecommunications; however, the Court emphasized

226 See U.S. v. Drummond, 255 F. App’x. 60, 68 (6th Cir. 2007).
227 Id.
228 Id. at 62.
229 Id.
230 Id. at 68.
231 U.S. v. Drummond, 255 F. App’x at 68.
232 Id.
233 Id.
234 See, e.g., Mitnick, 1998 WL 255343, at *1 (rejecting such an argument in Mitnick stating that as long as there was a reasonably direct relationship between the restrictions and the underlying offense of possessing unauthorized access devices with the intent to defraud, the court did not abuse their discretion in constructing the restrictions).
that Mitnick was not absolutely banned from computer and Internet usage.\textsuperscript{236}

Taking into consideration the methodology that the Ninth Circuit applied in \textit{Mitnick} in conjunction with the case law and tailoring recommendations made by the Courts of Appeals in the more recent child pornography cases, it is evident that given the proper tailoring of the sentencing court, individuals convicted of economic crimes could be comparably sentenced to these restrictions without constituting a greater deprivation of liberty than reasonably necessary.\textsuperscript{237}

Imposing restrictions for a limited period of time assures employers that criminal conduct will not be repeated during the course of employment while concurrently protecting the offender from the temptations of engaging in criminal Internet behavior while at work.\textsuperscript{238} The restrictions, as opposed to a longer prison sentence, encourage former offenders to seek employment in areas in which they may have substantial training and education and also allows for them to continue working while protecting the employer and rehabilitating the vocational needs of the individual.\textsuperscript{239}

3. \textit{Increased Necessity to Protect the Internet Dependent Public Through Deterrence}

Since economic offenses are continuously multiplying in numbers, federal government and law enforcement agencies have responded by creating task forces designed to deal specifically with economic criminals and cyber offenders.\textsuperscript{240} While recidivism data is outdated even for traditional crimes, there exists even less information evaluating the risk of re-offending economic criminals.\textsuperscript{241} Those cases that have made it to the Courts of Appeals on review along...
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with commentary from law enforcement demonstrates that the threat of recidivism does exist and that offenders of violent crimes are likely to commit economic crimes in the future. In one instance, a defendant found guilty of tax evasion and copyright infringement had his term of supervised release revoked three times due to his inability and unwillingness to adhere to the multiple conditions of his supervised release. Recognizing the heightened threat of recidivism and the defendant’s ongoing non-compliance, the judge sentenced the defendant to a term of imprisonment that was longer than that recommended by the sentencing guidelines. For individuals who are not repeat offenders, computer and Internet restrictions, instead of a prison sentence, may be the most effective method to prevent recidivism given the underlying nature of the crimes.

Because some crimes can be committed using computers and the Internet, the very nature and broad scope of these crimes warrant the application of a policy that protects a sizeable portion of the population. While the potential offenders and victims of child pornography offenses are relatively targeted and can be directly observed by law enforcement as a potential victim base consistent with more traditional crimes, it is increasingly difficult to define a segment of the population most likely to be victims of economic crimes. Because of the widespread use of the Internet by a majority of the population and the resulting inability to define demographic segments of the population most likely to be victimized, the sentencing goal of protecting the public is substantially maximized since the majority of users have the potential of being a victim of economic crime without even knowing it.

C. Beyond Sentencing Goals: Why Computer and Internet Restrictions are Necessary in Light of the Growth of Technologies

Other than the statutory goals of sentencing and the importance of the comparison between the underlying offense and offender, there are additional reasons why computer and Internet restrictions must be imposed on economic offenders utilizing computer technologies similar to how they have been ap-

\[\text{References}\]

242 See, e.g., U.S. v. Craig, No. 09-20273, 2010 WL 2546082, at *1 (5th Cir. 2010); Dupes, 513 F.3d at 341; Peterson, 248 F.3d at 80-81.
244 Id.
247 See KANE & WALL, supra note 8, at 12.
248 Id.
plied to child pornography offenders.

1. Crime Control and Dissatisfaction with Law Enforcement

Given the varied nature and scope of economic crimes, it is exceedingly difficult for law enforcement to determine standard methods that best prevent and control economic offenses.249 Law enforcement tends to focus on less complex (traditional) crimes, which are more familiar, and thus devote less attention to catching and punishing economic offenders who take advantage of technological advancements.250 The challenges that have occurred as a result of these earlier failures need to be remedied in part by the training and education of law enforcement.251 Frequently imposing computer restrictions on offenders could serve as an additional deterrence mechanism by making possible offenders think twice before committing the crime and knowing that white collar crime "will not be tolerated."252

The public has expressed dissatisfaction with law enforcement in addressing the spread of economic crimes impacting everyday Internet users.253 This has signaled a national response to devote more resources and to develop new tactics to address public dissatisfaction and the challenges victims face like restoring personal credit following identity theft.254 The unique nature of online economic crimes, where many victims of identity theft do not know that they have been victimized until months or even years later, calls for a unique sentencing scheme in order to be effective.255

The Attorney General in 2009 demanded that the "traditional mission" of law enforcement and fighting crime be reinvigorated as a result of the financial crisis and the growth of economic fraud.256 Steps need to be taken to shift more attention to the prosecution and sentencing of economic offenders to signal to the public and warn potential offenders that law enforcement agencies are addressing current trends that have previously been ignored.257 The goal is to

249 See Oversight of the FBI: Hearing before the S. Comm. on the Judiciary, 111th Cong. 6 (2009) (statement of Director of the FBI Robert S. Mueller III); KANE & WALL, supra note 8, at 20.
250 KANE & WALL, supra note 8, at 7.
251 Id.
252 Id.; Senate Wall Street Fraud Hearing, supra note 13.
253 KANE & WALL, supra note 8, at 17-20.
255 Id.
257 See National White Collar Crime Center, 2007 Internet Crime, 7-13 (Fed. Bureau of
make the punishments such as computer and Internet restrictions known to potential offenders so that some may be deterred after weighing the pros of committing the crime against the cons of possible punishment.\textsuperscript{258}

2. Public Perception and Fear of Victimization

The highly-publicized corporate scandals of Enron and WorldCom are not the only reasons that the public is familiar with white-collar crime; in recent years, there has been a dramatic increase in the victimization of individuals.\textsuperscript{259}

The number of criminal complaints involving the Internet reported to law enforcement saw an increase from 72,940 in 2008 to 146,663 in 2009, a surge much greater than the differences between previous years.\textsuperscript{260} The increase can be explained in part by the technological advancements and availability of computers and the Internet, which provide criminals with easier and often undetected access to victims.\textsuperscript{261} A recent survey on Americans and their gadgets found that 91\% of adults own a product of the explosion of technological advancements such as cell phones, mp3 players, desktop and laptop computers, game consoles and tablets.\textsuperscript{262} Much like how the Second Circuit stated in \textit{U.S. v. Johnson} that computers provide potential sex offenders with “unique access to minors,” in the present climate, the Internet provides a similar form of unique access to an even greater portion of the population that cannot be categorized as easily.\textsuperscript{263} Since victims are often chosen randomly, public concern has made it clear that economic crimes are viewed as being equivalent in seriousness and harm to traditional crimes by the American public, and that government and law enforcement need to alter their efforts in order to effectively prevent and police white-collar and economic crimes.\textsuperscript{264}

In utilizing the analysis established when imposing computer and Internet

\footnotesize{\textsuperscript{258} KANE & WALL, \textit{supra} note 8, at 17-20; \textit{The Need for Increased Fraud Enforcement in the Wake of the Economic Downturn, Hearing Before S. Comm. on the Judiciary, 111th Cong. 99-100 (2009)} (statement of Chairman Sen. Patrick Leahy).

\textsuperscript{259} Id. at 4, 8; \textit{NAT’L WHITE COLLAR CRIME CTR., 2009 INTERNET CRIME REPORT, 3 (2010)}.

\textsuperscript{260} \textit{NAT’L WHITE COLLAR CRIME CTR., 2009 INTERNET CRIME REPORT, 3 (2010)}.

\textsuperscript{261} KANE & WALL, \textit{supra} note 8, at 4-7.


\textsuperscript{263} Johnson II, 221 F.3d at 99; \textit{See also} KANE & WALL, \textit{supra} note 8, at 4-7 (analyzing the results of the 2005 survey the clearest and finding that the most significant demographic factor that could be used to characterize victims was whether or not they were Internet users which is a majority of the population).

\textsuperscript{264} KANE & WALL, \textit{supra} note 8, at 20.
restrictions upon sex offenders, particularly those who used a computer as an instrument in the commission of their crime, courts should expand the application of such restrictions to those convicted of committing economic and white-collar crimes. Imposing computer and Internet restrictions on these types of offenders would both satisfy the goals of sentencing such as protecting the public and deterrence, while also taking other factors into consideration that make crimes committed over the Internet and with computers unique.265

IV. CONCLUSION

The progression of computer and Internet technology has made a tremendous impact on the modern world and our society. Despite the overwhelming number of benefits technological advancements have contributed to the daily lives of Americans, they have also contributed to an explosion of new forms of criminal behavior powered by computers and the Internet.266 The developments have altered the applicability of traditional law enforcement techniques and sentencing mechanisms in order to deal more effectively with those convicted of sexual offenses.267 Similar restrictions have been imposed, although infrequently, on a growing number of economic criminals who target the vulnerability of the nation’s computer and Internet using population.268 The expansion of imposing computer and Internet restrictions to a greater number of economic offenders must occur in order to modernize the criminal justice system and keep up with the continued threats of victimization to the American population.

265 See, e.g., Breuer Address, supra note 44.
266 KANE & WALL, supra note 8, at 1-4.
267 See supra note 42.
268 See Barsumyan, 517 F.3d 1154; Mitnick, 145 F.3d 1342; Peterson, 248 F.3d at 83; Sales, 476 F.3d 732; Scott, 316 F.3d at 734; Silvious, 512 F.3d 364; Suggs, 50 F. App’x 208; Vinson, 147 F. App’x at 774.