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Do Three Strikes Laws Make Sense? Habitual Offender Statutes and Criminal Incapacitation[†]

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INTRODUCTION

Many states and the federal government have enacted “Three Strikes” laws that mandate extremely long prison terms for offenders who have been convicted of three serious or violent felonies.¹ Supporters often contend that Three Strikes laws are fair and will deter potential offenders, but the main argument used to promote such statutes focuses on incapacitation.² Those who favor Three Strikes laws argue that a small group of high-rate offenders commits most of the serious crimes and that these laws can identify and incapacitate such high-rate offenders, thereby greatly reducing crime.³

In this article, we examine the incapacitation argument on its own terms. Our analysis focuses solely on the relationship between incapacitation and the crime rate. We assume that Three Strikes laws will not deter criminals and that incarceration will neither reform criminals nor, as some opponents of prison argue, make them worse. We assume, as supporters of Three Strikes laws contend, that a small percentage of the criminal population commits most of the crimes. We then use a simple model to demonstrate that, even under these assumptions, it would be unrealistic to expect Three Strikes laws to reduce the crime rate significantly. We also demonstrate that, contrary to conventional wisdom, the reduction in crime produced by expanding the prison population may be less if a small group of high-rate offenders commit most of the crimes than if criminal activity is more widespread.

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1. See JOHN CLARK ET AL., U.S. DEP’T OF JUSTICE, “*Three Strikes and You’re Out*”: A Review of State Legislation I (Research brief 1997) (reporting that 24 states and the federal government enacted such laws between 1993-95).

2. See Michael Vitello, *Three Strikes: Can We Return to Rationality?*, 87 J. CRIM. L. & CRIMINOLOGY 395, 397 (1997) (stating that incapacitation and to a smaller extent deterrence are the main justifications for three strikes laws).

3. For a discussion of this and other justifications for three strikes laws, see *infra* Parts IIB and C.

I. THE HISTORICAL RELATIONSHIP BETWEEN INCAPACITATION AND INCARCERATION

A. THE INMATE EXPLOSION AND CHANGES IN THE CRIME RATE

The year 1980 marked the beginning of a prison population explosion in the United States. Prison inmates increased by 237% and jail inmates by 174% between 1980 and 1995.⁴ The incarceration rate doubled from 313 persons per 100,000 in 1985, to 615 per 100,000 in 1996.⁵

The rising incarceration rate was not the result of a proportional growth in the crime rate. Contrary to the widespread belief that the crime rate has sharply increased during the past two decades,⁶ the rate has been relatively stable since the mid-1970s.⁷ Indeed, both the Uniform Crime Reports (UCR) and the National Crime Victimization Survey Reports (NCVS) indicate that the crime rate is lower now than in the peak years of 1980–81.⁸ In 1976, the UCR showed

4. See BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CORRECTIONAL POPULATIONS IN THE UNITED STATES, 1980–1995 (visited July 20, 1998) <<http://www.ojp.usdoj.gov/bjs/glance/corr2.txt>> (listing jail and prison populations from 1980–95). Prisons are state or federal correctional facilities that confine inmates sentenced to more than one year. See *id.* Jails are local facilities that confine inmates serving short sentences (usually less than one year). In addition, jails house persons awaiting trial, as well as persons awaiting sentencing or transfer to other facilities. See *id.*

5. See CHRISTOPHER J. MUMOLA & ALLEN J. BECK, U.S. DEP'T OF JUSTICE, PRISONERS IN 1996, at 2 tbl.1 (showing rate change from year-end 1985 to mid-year 1996).

6. See, e.g., BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS 1995, at 151 tbl.2.31 (Kathleen Maguire & Ann L. Pastore eds., 1995) [hereinafter SOURCEBOOK] (noting that more than half of the respondents in 1991 and 1993 polls indicated that the crime rate was increasing in their area); Herbert Green, *Perception Versus Reality: Analysis of Crime Statistics*, 17 NATION'S CITIES WKLY., Feb. 21, 1994 (noting that public perceptions that crime is increasing are contrary to statistical evidence that crime in general is decreasing). But see Mark Warr, *The Polls—Poll Trends: Public Opinion on Crime and Punishment*, 59 PUB. OPINION Q. 296, 298-99 (Summer 1995) (finding public perceptions about crime have not changed dramatically while noting that the public is usually pessimistic about crime).

This distorted view of crime is not unique to the United States. See Alex Strachan Vahan, *Crime Rates Going Down Despite Public's Perception*, THE VANCOUVER SUN, Feb. 2, 1995, A1 (noting a wide gap in Canada between public perceptions that crime is spiraling out of control and statistics which show a decrease or negligible increase in crime).

7. As might be expected, the overall number of crimes has increased as the nation's population has grown. Thus crime rates, which account for changes in the population, generally are more suitable for comparison.

8. The Uniform Crime Reporting Program is administered by the FBI to measure and generate statistical information on crime rates in the nation. The FBI compiles the statistics in the UCR from arrest data voluntarily submitted by more than 16,000 police departments. Eight specific offenses, or "Index Crimes," are used to measure annual changes in the volume and rate of crime. The term "Crime Index" refers to the aggregation of these offenses. See FED. BUREAU OF INVESTIGATION, U.S. DEP'T. OF JUSTICE, CRIME IN THE UNITED STATES: UNIFORM CRIME REPORTS, 1995, at 1 [hereinafter CRIME IN THE U.S. 1995]. In order to modernize the collection of crime statistics, the FBI has redesigned the UCR program. The redesigned program, called the National Incident-Based Reporting System, will collect data on 22 categories of offenses. See *id.* at 2-3. The NCVS is operated by the Bureau of Justice Statistics and reports on annual criminal victimization rates. The statistics are compiled from interviews conducted by the Bureau of Census of more than 50,000 representative households. See CRAIG A. PERKINS ET AL., U.S. DEP'T. OF JUSTICE, CRIMINAL VICTIMIZATION IN THE UNITED STATES, 1994, at 2-3.

that Index Crimes—murder,⁹ forcible rape, robbery, aggravated assault, burglary, larceny-theft, and theft of a motor vehicle—were reported at a rate of 5287 crimes per 100,000 people.¹⁰ The rate peaked in 1980 at 5950 crimes per 100,000.¹¹ By 1996, the rate had declined by nearly 15% to 5079 crimes per 100,000.¹² The story is similar if only murder is examined.¹³ The murder rate was 8.8 homicides per 100,000 population in 1976 and reached a high of 10.2 homicides per 100,000 in 1980.¹⁴ It declined to 7.4 homicides per 100,000 in

Data for the NCVS has only been collected since 1973. Prior to 1992 the data focused on both reported and unreported instances of seven specific crimes—rape, robbery, assault, personal larceny, burglary, household larceny, and motor-vehicle theft. See BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CRIMINAL VICTIMIZATION IN THE UNITED STATES, 1992, at 1. The NCVS was redesigned in 1992 to improve reporting and provide a better measure of the incidence of crime. The changes particularly affected the reporting of assault and sexual crimes. See BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CRIMINAL VICTIMIZATION IN THE UNITED STATES, 1993, at 2-3. Data collected using the old methodology is not directly comparable with data collected after the redesign. See PERKINS ET AL, *supra*, at 2.

Although the NCVS and UCR are the two primary sources relied on for determining the level of crime in the nation, each has shortcomings. The UCR is based on police records of arrest reports made by victims or from independent police investigation. See DARYL A. HELLMAN & NEIL O. ALPER, ECONOMICS OF CRIME 5 (4th ed. 1997). Victims are not always willing to relate incidents to the police. See *id.* at 9-10. Moreover, for events involving multiple crimes, only the most serious is recorded. Thus the level of crime may be underreported. See *id.* at 10. Conversely, UCR statistics may exaggerate increases in crime. See NATIONAL CRIMINAL JUSTICE COMMISSION, THE REAL WAR ON CRIME 4 (Steven R. Donziger ed., 1996) [hereinafter REAL WAR ON CRIME]. A single crime involving multiple arrestees may be reported as multiple crimes. See *id.* In addition, police departments may overstate their arrest statistics to receive increased government funds. See *id.* Most importantly, police recording techniques have improved significantly over the last two decades so that a higher percentage of crimes reported to the police are now properly recorded. See *id.* Thus some reported increases in criminal activity may just reflect better record keeping. See *id.* See also HELLMAN & ALPER, *supra*, at 10 (noting that comparing crime rates for various years may be misleading since differences could be due to actual changes in level of crime or just different recording procedures).

The NCVS suffers from different methodological problems. It does not include any data for murder. See REAL WAR ON CRIME, *supra*, at 5. It also does not provide crime data on a state-by-state basis. See *id.* Thus there are only reliable figures for the entire nation, or a few broad geographic categories. HELLMAN & ALPER, *supra*, at 12-13. Despite these flaws, the NCVS is considered a more accurate gauge of crime trends by some criminologists because it relies on sophisticated polling techniques and includes crimes that were not reported to the police. See REAL WAR ON CRIME, *supra*, at 5. Nonetheless, the UCR is the more frequently cited measure of crime by law enforcement, the media, and politicians. See *id.* at 4.

9. This category includes murder and nonnegligent manslaughter. See CRIME IN THE U.S. 1995, *supra*, note 8, at 13.

10. *Id.* at 58 tbl.1. In 1979, arson was added to the list of index crimes. However, for most years arson data is not included in the published Crime Index total due to incomplete reporting by the police. *Id.* at 54, 57.

11. See *id.* at 58 tbl.1.

12. See FED. BUREAU OF INVESTIGATION, U.S. DEP'T OF JUSTICE, CRIME IN THE UNITED STATES: UNIFORM CRIME REPORTS, 1996, at 62 tbl.1 [hereinafter CRIME IN THE U.S. 1996].

13. The homicide statistics are the most accurate since they almost always are reported to the police due to the seriousness of the crime. Thus, they do not have the reporting problems of lesser offenses. See REAL WAR ON CRIME, *supra* note 8, at 4 (noting that UCR homicide rates are reliable since they are accurately reported to and recorded by the police).

14. See CRIME IN THE U.S. 1995, *supra* note 8, at 58 tbl.1.

1996.¹⁵ The NCVS shows similar trends.¹⁶

That the crime rate is now somewhat lower than in 1976 is not a reason for celebration.¹⁷ Although the property crime rate is similar to that of other industrialized nations, the United States has a much higher rate of violent crime resulting in injury.¹⁸ Moreover, despite the decline in the overall homicide rate during the past fifteen years, the homicide rate among teenagers is significantly higher today than in 1985.¹⁹ An accurate picture of crime today compared to the early 1980s would show that the risk of being a victim of homicide (and most other serious crimes) has declined somewhat for the majority of Americans who live outside poor urban areas, while the risk of being a victim of homicide has increased significantly for residents of poor urban areas (and particularly for young males).²⁰

15. See CRIME IN THE U.S. 1996, *supra* note 12.

16. See generally MICHAEL R. RAND ET AL., U.S. DEP'T OF JUSTICE, CRIMINAL VICTIMIZATION 1973-1995 (reporting on trends in the NCVS after making adjustments to data collected before the 1992 survey redesign). As measured by the NCVS, the violent crime rate was stable from 1974-77 and peaked in 1981. The rate declined sharply from 1994-95 to about the same level as 1986, which was the lowest in survey history. See *id.* at 2. The property crime rate declined steadily from 1974-95. See *id.* at 4.

17. See *supra* text accompanying notes 9-16.

18. See REAL WAR ON CRIME, *supra* note 8, at 11; Marc Mauer, *Americans Behind Bars: The International Use of Incarceration, 1992-1993*, in REPORT OF THE SENTENCING PROJECT 13 (1994) [hereinafter THE SENTENCING PROJECT].

19. The homicide rate for teenagers under 18 increased 172% from 1985-94. See JAMES ALAN FOX, TRENDS IN JUVENILE VIOLENCE, REPORT TO THE UNITED STATES ATTORNEY GENERAL ON CURRENT AND FUTURE RATES OF OFFENDING (Mar. 1996). Although the number of murders committed by teenagers has declined since 1994, it is still much higher than 1985. See JAMES ALAN FOX, STATE LEVEL TRENDS AND VARIATION IN TEEN MURDER (Jan. 22, 1997) (reporting that the 1995 murder rate for youths aged 14-17 declined but still was more than double that of 1985). See also CRIME IN THE U.S. 1995, *supra* note 8, at 212 tbl.32 (reporting that the arrest rate for murder and non-negligent manslaughter by those under 18 years old was 89.9% higher in 1995 than in 1986). More recently, a number of fatal shootings by students in middle and high schools have attracted national attention. See, e.g., Kim Murphy & Terry McDermott, *Shooter Kills 1, Injures 23 at Oregon School Rampage: A 15-year-old Student Suspended the Day Before for Bringing a Gun to Campus is Held*, L.A. TIMES, May 22, 1998, at A1 (noting that students shot and killed 13 persons and wounded numerous others at schools in the U.S. since October 1997). Such homicides, while tragic, are not a significant part of the youth violence problem. See Terrence Monmaney & Greg Krikorian, *Violent Crime, Media Share Blame, Experts Say Killings: Spate of Deaths Prompts Many Explanations*, L.A. TIMES, Mar. 26, 1998, at A16 (noting statements of some experts that such shooting are relatively rare). See also ELIZABETH DONAHUE ET AL., JUSTICE POLICY INST., SCHOOL HOUSE HYPE: SCHOOL SHOOTINGS AND THE REAL RISKS KIDS FACE IN AMERICA, (Policy Report 1998) (concluding that such incidents are extremely uncommon and not part of a measurable trend).

20. This picture is consistent with opinion poll data showing that even citizens who stated that crime was the most serious problem facing the nation usually believed that their own neighborhood was safe. See Warr, *supra* note 6, at 296-97 (examining poll data and finding that respondents have a tendency to impute crime to places other than their own area and have less fear of crime in their own neighborhoods); Stephen Braun & Judy Pasternak, *A Nation With Peril on Its Mind: Crime Has Become the Top Concern of Many People. Much of the Anxiety is Fueled by the Perception of Violence, Not the Statistics*, L.A. TIMES, Feb. 13, 1994, at A1 (noting that 41% of poll respondents who felt safe in their neighborhood also felt crime was the most pressing national problem); Michelle Mahoney, *Preoccupied with Crime Perceptions Up, Incidents Down*, DENVER POST, May 30, 1996, at E1 (noting that the

B. INCREASED INCARCERATION

The rapid expansion of the prison population during the past fifteen years in the face of a steady crime rate was largely the result of two factors. The first was the launching of the "War on Drugs" during the Reagan administration.²¹ The drug war significantly increased the federal prison population. By 1995 there were 51,737 federal prisoners incarcerated for drug offenses,²² up from 4900 in 1980.²³ The increase in inmates incarcerated for drug offenses accounted for almost 80% of the total growth of federal prisoners between 1985 and 1995.²⁴ The number of state prisoners incarcerated for drug crimes also increased dramatically. In 1980, state prisons held 19,000 for drug crimes.²⁵ By 1995 the number had risen by nearly 1100% to 224,900.²⁶

The second factor contributing to the boom in the prison population was the enactment of stiffer criminal penalties for many crimes.²⁷ Legislatures reclassified misdemeanors as felonies.²⁸ Sentencing guidelines and mandatory minimum sentences increased penalties generally and restricted the ability of judges

majority of Americans polled believe crime is a serious problem in the country but is not a problem in their neighborhood). See also Lori Montgomery, *America's Fear of Crime Out of Proportion with Reality*, DETROIT FREE PRESS, Feb. 4, 1996, at 4E (reporting that although 78% of nationwide poll respondents believed crime and drugs were the most important problems in the nation very few felt at risk of becoming a crime victim in their neighborhood); Daniel M. Weintraub, *The Times Poll Residents Balk When Asked to Pay for "3-Strikes"*, L.A. TIMES, Apr. 2, 1994, at A1 (noting that while half of poll respondents believed crime was among state's two greatest concerns, 75% felt safe in their own community).

21. See LOIS G. FORER, *A RAGE TO PUNISH* 65-66 (1994). See also THE SENTENCING PROJECT, *supra* note 18, at 10 (showing that from 1980-1992, 46% of new court commitments were due to drug related offenses).

22. MUMOLA & BECK, *supra* note 5, at 11 tbl.14.

23. See ALLEN J. BECK & DARRELL K. GILLIARD, DEP'T OF JUSTICE, *PRISONERS IN 1994*, at 10 tbl.13. In 1980, the percentage of federal prisoners incarcerated for drug offenses was 25.2%. See *id.* By 1995, it was 59.9%. See MUMOLA & BECK, *supra* note 5, at 11 tbl.14.

24. See MUMOLA & BECK, *supra* note 5, at 11. The increase in inmate sentencing appears attributable primarily to changes in enforcement and sentencing statutes and not to increased drug use. See DRUG POLICY INFORMATION CLEARINGHOUSE, WHITE HOUSE OFFICE OF NAT'L DRUG CONTROL POLICY, *FACT SHEET: DRUG USE TRENDS*, April 1997, at 1 tbl.1 (showing that the percentage of persons who reported they had used illegal drugs at least once has remained relatively stable since 1979, while the percentage reporting use in the last three days has declined).

25. BECK & GILLIARD, *supra* note 23, at 11 tbl.14.

26. MUMOLA & BECK, *supra* note 5, at 10 tbl.13: The percentage of state inmates incarcerated for drug crimes during 1980 was 6%. See BECK & GILLIARD, *supra* note 23, at 11 tbl.14. In 1995 it was 22.7%. See MUMOLA & BECK, *supra* note 5, at 10 tbl.13.

27. See Alfred Blumstein, *Prisons*, in CRIME 387, 395-98 (James Q. Wilson & Joan Petersilia eds., 1995) (describing shifts in policies in the 1980s which led to harsher sentences and increased prison populations in most states). See also *The Nation: Stiffer Sentences Reported*, L.A. TIMES, June 8, 1987, at A2 (noting Department of Justice study showing that federal judges imposed stiffer sentences and revoked parole much more frequently compared to 1979).

28. In California, for example, there are now over 500 offenses classified as felonies. See generally CALIFORNIA CTR. FOR JUDICIAL EDUC. AND RESEARCH, *1997 CJER FELONY SENTENCING HANDBOOK* (Bancroft Whitney ed., 1997) (listing crimes defined as felonies and the corresponding sentences); see also Michael D. Harris, *Garcetti Calls For New 3-Strikes Laws*, L.A. DAILY J., June 9, 1994, at 2 (noting that more than 500 felonies qualify as a third strike).

to reduce prison and probation terms.²⁹ Sentence enhancements for the use of guns in the commission of a crime lengthened sanctions for traditional street crimes like robbery and burglary.³⁰ “Truth-in-sentencing” laws diminished the ability of inmates to reduce their time served through the accumulation of credits for work or good behavior in prison.³¹ Finally, and most importantly for this article, sharply enhanced sentences for repeat offenders were enacted in many states. The most publicized enhancements were Three Strikes statutes, which typically mandate life imprisonment for individuals convicted of three serious or violent felonies.³²

C. IMPACT OF PRISON EXPANSION ON THE CRIME RATE

The massive increase in the inmate population after 1980 was not accompanied by a substantial change in the crime rate. Rather, as noted earlier, the crime rate has remained relatively stable since 1980.³³ Opponents of increased incarceration argue that the stability of the crime rate during times of massive expansion of the prison population shows that longer prison terms are not an

29. See, e.g., Blumstein, *supra* note 27, at 397-98 (stating that there was a major transfer of discretion from judges to prosecutors in the 1980s).

30. See *id.* at 397 (noting that legislatures passed determinate sentencing statutes with enhancements for circumstances such as causing serious bodily injury or using a gun). For specific examples of such laws see, for example, CAL. PENAL CODE § 12021.5 (West Supp. 1997) (providing additional punishment for carrying a loaded or unloaded firearm during the commission of any street gang crime); *id.* § 12022.5 (providing additional punishment for use of a gun during commission of a felony or controlled substance offense); *id.* § 12022.7 (providing additional punishment for causing great bodily injury during commission of a felony). See also Jim Newton, *Wilson Signs 4 Bills That Take Aim at Crime*, L.A. TIMES, Sept. 26, 1997, at A1 (reporting on new statute that mandates even greater enhancements for wielding or firing a gun during the commission of a number of crimes).

31. The California three strikes law, for example, has a provision which requires convicted felons who have prior strikes to serve at least 80% of their sentences. See CAL. PENAL CODE § 667 (c)(5) (West Supp. 1997). Prior to the 1994 enactment of this legislation, felons given determinate sentences could earn enough “worktime” credits to reduce their prison terms up to 50%. See *id.* § 2933. Felons given indeterminate, or life sentences, could earn “goodtime” credits to reduce their minimum prison terms up to 33%. See *id.* § 2931. These provisions still apply to convicted felons who have no record of prior strikes. Those with prior strikes, however, can reduce their sentences only by a maximum of 20%. See *id.* § 667 (c)(5). See also *id.* § 2933.1(a) (limiting the worktime credits that can be earned by those convicted of violent felonies to 15%). See also *Decrying a “Reign of Terror By Violent Criminals”*, WASH. POST, Jan. 18, 1994, at D7 (reporting promise made by Governor of Virginia during State of the Commonwealth address to enact truth-in-sentencing legislation abolishing parole). The federal Violent Crime Control and Law Enforcement Act of 1994 encourages passage of such laws by providing truth-in-sentencing incentive grants to states that require violent offenders to serve 85% of their terms. See 42 U.S.C. § 13704 (1994).

32. Under the California statute, for example, a person convicted of a “third strike” receives a minimum sentence of 25 years and a maximum sentence of life imprisonment. See CAL. PENAL CODE § 667(e)(2) (West Supp. 1997).

33. See *supra* text accompanying notes 7-16. See also CALIFORNIA LEGISLATIVE ANALYST’S OFFICE, HANDBOOK FOR THE JOINT HEARING OF THE SENATE COMM. ON CRIMINAL PROCEDURE AND THE ASSEMBLY COMM. ON PUBLIC SAFETY, THE STATE OF PUBLIC SAFETY IN CALIFORNIA, at 13 (June 6, 1997) (noting that California’s crime rate remained relatively flat from 1972-95 while the incarceration rate increased over 300%).

effective way to fight crime.³⁴ However, this argument assumes that the crime rate would have remained stable even if the prison population had not expanded. It is conceivable, however, that the crime rate would have skyrocketed if harsher criminal sanctions had not been adopted.³⁵

One method of estimating the impact of the prison expansion on crime rates is to compare states that had a large growth in their prison population with demographically similar states that experienced smaller prison growth.³⁶ One study, for example, compared changes in the crime rate in California, where the total prison and jail population more than tripled during the 1980s, with changes in the crime rate in demographically similar states that had a much smaller increase.³⁷ The study projected crime rates expected to occur in the absence of prison expansion in California and then compared those projected rates with the crime rates that actually occurred.³⁸ The study found that actual crimes rates in California were lower than the projected rates and that, if the reduced rates were caused by increased imprisonment, each additional year of incarceration prevented approximately 3.5 crimes per prisoner.³⁹

The pattern of crime reduction was inconsistent, however, with a significant incapacitation effect. Incarceration rates for adults, for example, increased much more rapidly than incarceration rates for juvenile offenders during the 1980s.⁴⁰

34. See *id.* at 9 (noting that some researchers argue that increased sentences have no impact on the crime rate).

35. Advocates of longer prison terms argue that increased sentences prevent a large jump in the crime rate. See, e.g., *id.* (noting that some researchers make this argument regarding California's crime rate); James Wooton, *Truth In Sentencing—Why States Should Make Violent Criminals Do Their Time*, 20 U. DAYTON L. REV. 779, 780 (1995) (arguing that longer sentences reduce crime). See also Dan Lungren, *Three Cheers for Three Strikes: California Enjoys a Record Drop in Crime*, 80 POL'Y REV.: J. AMER. CITIZENSHIP, Nov.-Dec. 1996, at 34-38, (attributing drop in California crime rate to passage of three strikes law); Steven Pressman & Jennifer Kaae, *Three Strikes*, CAL. LAW., Oct. 1996, at 37 (reporting statements of San Diego District Attorney that there was an immediate decrease in crime once California's three strikes legislation went into effect); William Claiborne, *Tough Sentencing Law Sparks Legal Debate; State Attorney General to Challenge California Judge's Probation Sentence for a Repeat Felon*, WASH. POST, Dec. 31, 1994, at A3 (noting claim of Mike Reynolds who drafted and led the campaign for California's three strikes legislation that the tough sentencing provisions were responsible for reducing serious and violent crimes in the state); Andy Furillo, *Wilson Praises 3-Strikes Law, Links It to Drop in Crime*, SACRAMENTO BEE, Mar. 7, 1996, at A1 (reporting claim of Governor Wilson that California's three strikes legislation was the primary reason for a drop in state crime rate); Mark Gladstone, *California Crime Rate Declines Statistics: Lungren Sees Three Strikes, More Prisons, Community Policing as Factors*, L.A. TIMES, Jan. 30, 1997, at A3 (noting remarks of California Attorney General Dan Lungren that three strikes legislation and tougher sentencing laws were partly responsible for drop in crime rate).

36. The inmate population increased to some extent in almost every state during this period. See FRANKLIN ZIMRING & GORDON HAWKINS, *INCAPACITATION: PENAL CONFINEMENT AND THE RESTRAINT OF CRIME* 104 (1995).

37. *Id.* at 108-22.

38. The study, for example, projected California crime rates both on the assumption that the crime rate would have remained constant and on the assumption that the crime rate would have followed the trend of the median state of those five metropolitan states that had increased their prison population the least during the 1980s.

39. See ZIMRING & HAWKINS, *supra* note 36, at 117.

40. See *id.* at 123.

But reductions in the burglary rate, which accounted for more than half of the total estimated incapacitation effect, were concentrated among youthful offenders.⁴¹ The reduction in burglary, then, may be attributable more to independent trends among juvenile offenders than to increased incapacitation.⁴²

II. THREE STRIKES LAWS

A. STATUTORY SCHEMES

Enhanced penalties for repeat offenders are not a new feature of the criminal justice system. Even without statutory enhancements, a judge generally will impose a harsher sentence on a career criminal than on an offender with no prior record. Recently enacted statutes, however, often mandate much harsher sentence enhancements for repeat offenders than those traditionally imposed.⁴³

The most popular new sanctions for repeat offenders are Three Strikes laws.⁴⁴ These laws typically provide for long periods of imprisonment—terms of twenty-five-years-to-life are common—for offenders convicted of three serious or violent felonies or “strikes.”⁴⁵ The list of felonies qualifying as strikes varies significantly among those states that have adopted these statutes.⁴⁶ In a few states, such as New Jersey and Virginia, only a limited number of “violent” felonies such as murder, rape, armed robbery and kidnapping count as strikes.⁴⁷

41. *See id.* at 123-25.

42. *See id.* at 123.

43. *See* JOHN IRWIN & JAMES AUSTIN, IT'S ABOUT TIME: AMERICA'S IMPRISONMENT BINGE 49-50 (1994) (noting the passage of such habitual offender statutes); KEVIN N. WRIGHT, THE GREAT AMERICAN CRIME MYTH 158 (1985) (noting new legislation has led to tougher sentences for “hardened criminals”).

44. *See* CLARK ET AL., *supra* note I. The popularity of these statutes cuts across political lines. *See, e.g.,* Michael G. Turner et al., “Three Strikes and You’re Out” Legislation: A National Assessment, 59 FED. PROBATION, Sept. 1995, at 16, 32 (noting that support for three strikes legislation is not limited to a few regional politicians but is widespread and bipartisan); Ann Devroy, *President Insists Congress Enact Reforms in Welfare, Health Care; Veto Threatened If All Americans Are Not Covered*, WASH. POST, Jan. 26, 1994, at A1 (reporting President Clinton’s endorsement of a federal Three Strikes law during his 1994 State of the Union address); Pierre Thomas, *Violent Crime Strikes a Chord Coast to Coast; “3-Time Loser” Laws Find Diverse Support*, WASH. POST, Jan. 24, 1994, at A1 (noting that both liberal New York Democrat Mario Cuomo and conservative California Republican Pete Wilson gave similar speeches in support of Three Strikes legislation). Law enforcement personnel do not necessarily share the sentiment espoused by many politicians that increasing criminal sanctions is the most effective way to decrease crime. In a 1995 poll of 386 police chiefs and sheriffs across the country, longer prison sentences ranked fourth among a list of seven ways to reduce violent crime. SOURCEBOOK, *supra* note 6, at 168 tbl.2.48.

45. *See, e.g.,* ARIZ. REV. STAT. ANN. § 13-604(S) (West Supp. 1996) (providing mandatory sentence of 25 years to life); CAL. PENAL CODE § 667(e)(2)(A) (West Supp. 1997) (providing mandatory minimum of greater of three times the sentence for the underlying crime or 25 years); COLO. REV. STAT. § 16-13-101(1)(c) (West 1996) (providing mandatory minimum of life but with parole eligibility after serving 40 years); MD. CODE ANN., Crimes and Punishment Art. 27, § 643B(c) (1996) (providing mandatory minimum of 25 years to life).

46. *See* Turner et al., *supra* note 44, at 32 (noting that with the exception of murder and kidnapping there is little consensus among states as to which crimes should be considered strikes).

47. *See* N.J. STAT. ANN. § 2C:43-7.1 (West 1995) (requiring that all three strikes must be either

Most states, however, also include the “serious” felony of residential burglary as a strike.⁴⁸ And some states extend the definition of strikes even further. In California, the first two strikes must be either violent or serious felonies, but the third strike may be any felony.⁴⁹ Because relatively minor crimes such as petty theft can be prosecuted as felonies under California law if the offender has a prior felony conviction,⁵⁰ an individual risks being sentenced to twenty-five-years-to-life for stealing a pair of pants.⁵¹ Similarly, in the State of Washington the crime of promoting prostitution qualifies as a strike.⁵²

Three Strikes statutes that limit strikes to violent felonies like robbery, kidnapping, and rape do little to change prior sentencing practices.⁵³ Few individuals are convicted three times for these offenses, and those convicted are likely to serve long prison terms without regard to Three Strikes laws.⁵⁴ On the other hand, Three Strikes statutes that define strikes to include nonviolent

murder, aggravated manslaughter, first-degree kidnapping, aggravated sexual assault, robbery, or carjacking); VA. CODE ANN. § 19.2-297.1 (Michie Supp. 1997) (defining acts of violence as first and second degree murder, manslaughter, mob-related felonies, kidnapping, malicious assault, robbery, carjacking, criminal sexual assault, and arson).

48. Those states include Arizona, California, Colorado, Delaware, Indiana, Louisiana, Pennsylvania, South Carolina, Tennessee, Texas, Washington and Wisconsin. *See also* Turner et al., *supra* note 44, at 32 (reporting that 60% of the Three Strikes laws enacted as of February 1995 included burglary as a strike).

49. *See* CAL. PENAL CODE §§ 667(c)-(d) (West Supp. 1997). *See also id.* § 667.5 (listing violent felonies); *id.* § 1192.7 (listing serious felonies).

50. In California, a felony is any crime punishable by imprisonment in the state prison or by death. *See* CAL. PENAL CODE § 17(a) (West Supp. 1997). A misdemeanor is any other crime except those public offenses classified as infractions. *See id.* Many criminal offenses, however, fall into the category known as “wobblers.” These are crimes which are not statutorily defined as either felonies or misdemeanors. Whether in a particular case the wobbler will be considered a felony or misdemeanor depends upon the prosecutor’s charging decision and the actual punishment imposed by the trial court. *See id.* § 17(b) (describing circumstances under which such crimes are considered misdemeanors); Loren L. Barr, Comment, *The “Three Strikes” Dilemma: Crime Reduction At Any Price?*, 36 SANTA CLARA L. REV. 107, 117-19 (1995) (describing prosecutorial discretion in charging a wobbler as a felony and the authority of the trial court to then reduce it to a misdemeanor). A large number of crimes qualify as wobblers including petty theft with a prior petty theft or felony conviction. *See id.* at 116 n.91.

51. *See* Tony Perry & Maura Dolan, *Two Counties at Opposite Poles of “3-Strikes” Debate: San Francisco is Restrictive in Applying Law, San Diego Takes Hard Line. Approaches Reflect Will of Electorate*, L.A. TIMES, June 24, 1996, at A1 (noting third strike conviction for the theft of bluejeans). Moreover, third strike prosecutions for petty theft are not uncommon. *See, e.g., id.* (noting that there have been third strike convictions for the theft of a six-pack of beer and theft of a pint of whiskey); Harriet Chiang, *Uneven Justice Under 3 Strikes—Counties Vary in How They Enforce Law*, S.F. CHRON., Sept. 23, 1996, at A1 (noting case where grandfather received sentence of twenty-five years to life for stealing four videotapes which he intended to sell to buy diapers and food for his grandchildren).

52. *See* WASH. REV. CODE ANN. §§ 9.94A.030, 9.94A.392 (West Supp. 1996).

53. *See* CLARK ET AL., *supra* note 1, at 13 (contending that there will be little impact in states where Three Strikes laws apply only to the most violent crimes because repeat offenders who commit such crimes would have received long sentences under previous statutes).

54. *See* Harvey Berkman, *Ill. Jails 92 Over 15 Years*, NAT’L L.J., Feb. 28, 1994, at 3 (describing small number of persons falling under narrowly drawn Illinois three-strikes legislation). *See also* Campaign for Effective Crime Policy, *The Impact of Three Strikes and You’re Out Laws: What Have We Learned*, Sept. 1996, at i, 1 (noting that narrowly drawn Three Strikes laws are rarely enforced).

felonies such as burglary or drug sales are likely to produce large changes in sentencing practices.⁵⁵ California's broad Three Strikes statute, for example, was estimated to approximately double the pre-enactment size of the prison population by the year 2004 if fully implemented.⁵⁶

B. JUSTIFYING THREE STRIKES LAWS

Four justifications typically are offered for imprisonment: deterrence, rehabilitation, incapacitation, and retribution.⁵⁷ Under a deterrence rationale, an offender is imprisoned to discourage him from committing additional crimes

55. See Turner et al., *supra* note 44, at 19, 32 (noting that four states included drug offenses as strikes as of February 1995).

56. The initial projection of the California Department of Corrections (CDC) estimated that the prison population would increase by 149,000 from a 1994 base of 120,000 by the year 2004. See Legislative Analyst's Office, *The "Three Strikes and You're Out Law"—A Preliminary Assessment* 6 (1995). Since then the estimate has been revised downward repeatedly. See, e.g., *id.* (noting that the CDC estimates will be less than originally expected); Legislative Analyst's Office, *The "Three Strikes and You're Out" Law: An Update* 1, 6 (1997) [hereinafter *Legislative Analyst's Office: Three Strikes Update*] (noting that the CDC has consistently overestimated the number of persons who will be imprisoned for a second or third strike). See also Dan Morain, *Impact of 3 Strikes Less Than Expected; New Crime Numbers Show Fewer Being Sentenced Under the Law, Which Will Lessen the Need for More Prisons*, L.A. TIMES, Oct. 25, 1996, at A3 (noting that new estimate of the prison population by the year 2000 was 50,000 less than that made in March 1994). Recent projections estimate that the prison population will be 242,265 inmates by mid-year 2006. See *Legislative Analyst's Office: Three Strikes Update, supra*, at 6. The lower numbers are due in part to better techniques for estimating the impact of the law. See *id.* at 1 (noting that the CDC is making more accurate estimates due to increased experience with the law); Legislative Analyst's Office, *The Impact of the "Three Strikes and You're Out" Law on California's Justice System* 3 (1996) [hereinafter *Legislative Analyst's Office: Impact of Three Strikes*] (noting that the CDC now is accounting for factors that have decreased the potential impact of the law); Morain, *supra*. In addition, more third strike cases go to trial, causing a huge backlog of cases waiting adjudication. See *Legislative Analyst's Office: Impact of Three Strikes, supra*, at 3; Alan Abrahamson, *25% of Three-Strikes Cases Go to Trial, Straining Courts; Justice: Defendants Facing Mandatory 25 Years to Life in Prison Reject Deals and Gamble on Acquittals. But Plea-Bargaining Still Thrives in Overloaded System*, L.A. TIMES, July 2, 1996, at A18. More importantly, however, full implementation can and has been avoided due to plea bargaining, the dropping of prior felonies (by prosecutors or judges), and charging some crimes ("wobblers") as misdemeanors rather than felonies. See *id.* (noting high number of strike cases which are plea bargained or where judge reduces sentence or charge); Morain, *supra* (noting reluctance to fully implement the law). See also CLARK ET AL., *supra* note 1, at 13 (noting that judicial and prosecutorial discretion may dilute the impact of the law). Enforcement of the law also varies greatly among geographical regions. See *id.*, at 4-5 (showing large variation among five counties in use of the law). Much of this is due to philosophical and policy preferences of different district attorneys and electorates. See Pressman & Kaae, *supra* note 35, at 37 (reporting on different rates of prosecutions and convictions of third strike defendants among various California counties). See also Chiang, *supra* note 51, at A1 (noting that San Diego and Alameda County prosecutors have widely divergent views regarding the application of three strikes law); Perry & Dolan, *supra* note 51, at A1 (noting same). Even though the law has not been fully enforced, the impact already has been felt and is expected to substantially increase the prison population in the future. See *Legislative Analyst's Office: Impact of Three Strikes, supra*, at 1; *Legislative Analyst's Office: Three Strikes Update, supra*.

57. See, e.g., JOHN KAPLAN ET AL., *CRIMINAL LAW* § 1, at 35-91 (3d ed. 1996). Denunciation sometimes is given as an additional justification for punishment. Under this rationale, an offender is punished so that society may show its disapproval and intolerance of the offender's act. See NIGEL WALKER, *PUNISHMENT, DANGER, AND STIGMA: THE MORALITY OF CRIMINAL JUSTICE* 28 (1980).

(specific or special deterrence) and to deter other potential offenders from committing crimes (general deterrence).⁵⁸ Under a rehabilitation rationale, the goal of prison is the reformation of an offender so that, after release, he will not have the desire to commit additional crimes.⁵⁹ Under an incapacitation rationale, imprisonment is justified because it prevents an inmate from committing crimes against the public during the period of confinement.⁶⁰ Finally, under a retribution rationale, an offender is incarcerated simply because he deserves to be punished, even if he would not commit another crime and even if the punishment would have no deterrent effect on other potential offenders.⁶¹

These rationales are not mutually exclusive. Imprisonment might simultaneously punish, reform, and incapacitate the offender while deterring others from committing the same offense. Proponents of Three Strikes laws, for example, argue that the statutes will deter potential offenders⁶² and provide just punishment to career criminals who cannot be deterred.⁶³ Nevertheless, the primary justification for Three Strikes laws is incapacitation.⁶⁴

C. THREE STRIKES LAWS AND SELECTIVE INCAPACITATION

Much of the appeal of Three Strikes statutes is grounded in the idea of the selective incapacitation of the most dangerous offenders. If a small group of incorrigible career criminals is responsible for a majority of serious crimes, then removing those offenders from the street by sentencing them to long prison terms might have a big impact on the crime rate.⁶⁵ Supporters of Three Strikes

58. See HERBERT L. PACKER, *THE LIMITS OF THE CRIMINAL SANCTION* 39 (1968). General deterrence refers to discouraging other potential offenders from committing crimes, while special deterrence refers to inhibiting the person being punished from committing additional crimes once released. *See id.* at 39, 45.

59. *See id.* at 53. This article uses the male pronoun when referring to offenders. Males constitute a large majority of all offenders and an even larger majority of violent offenders. Therefore, most studies have focused on male offenders. The analysis of this article, however, applies equally to female offenders.

60. *See id.* at 48. This theory is premised on the belief that certain offenders (or those committing certain offenses) will continue to commit the same or associated crimes unless they are imprisoned. *See id.* at 49. It thus assumes we can accurately predict and identify those offenders who pose such a danger of recidivism. *See id.* at 49-51.

61. *See id.* at 37.

62. *See, e.g.,* Phil Wyman & John G. Schmidt, Jr., *Three Strikes You're Out (It's About Time)*, 26 U. WEST L.A. L. REV. 249, 251, 257 (1995). Wyman is a former California state senator and was an ardent supporter of the Three Strikes legislation passed in 1994.

63. *See id.* at 267. Rehabilitation obviously is not a stated goal of Three Strikes legislation, because the prison term is so long for the third strike that the offender's behavior after release from prison is relatively unimportant. *See also id.* at 254-55 (arguing that those offenders caught under Three Strikes have shown they cannot be rehabilitated).

64. Although an offender cannot commit offenses against the public while in prison, he may commit crimes against other prisoners. Proponents of stiffer sentences seldom, if ever, consider such crimes in weighing the costs and benefits of longer sentences.

65. *See, e.g.,* Mario M. Cuomo, "Three Strikes," *Two Views: Harsh, Sure, But Fair*, N.Y. TIMES, Jan. 29, 1994, at A19 (stating that studies have indicated that 15% of offenders are responsible for 85% of personal injury offenses); Timothy Egan, *A 3-Strike Law Shows It's Not as Simple as It Seems*, N.Y.

legislation argue that such statutes will end the criminal careers of such high-rate offenders.⁶⁶

The notion that incarcerating a modest number of the most dangerous offenders would significantly reduce the crime rate is sometimes referred to as the "Six Percent Solution."⁶⁷ The phrase refers to the oft-repeated statistic that 6% of criminal offenders commit 70% of crimes or 6% of violent offenders commit 70% of violent crimes.⁶⁸

The statistics underlying the "Six Percent Solution" derive from studies by Marvin Wolfgang of cohorts of boys born in Philadelphia in 1945 and in 1958.⁶⁹ These cohort studies reveal that 6% of the boys in the 1945 cohort accounted for over 50% of the total offenses of the cohort.⁷⁰ In the 1958 cohort, 7.5% of the boys were responsible for 61% of the offenses.⁷¹

These cohort studies showed that most crime was committed by a small portion of the *boys*, but they do not indicate that most crime was committed by a small portion of the *criminals*.⁷² Six percent of the boys in a cohort is a much larger number than 6% of the boys who are criminals. Incarcerating 6% of the males in the United States would require an extraordinary prison expansion. Even if, using a conservative measure, we restrict potential criminals to males between the ages of fourteen and forty-four, we get a pool of over sixty-two

Times, Feb. 15, 1994, at A1 (noting claim by supporters of Washington state's Three Strikes law that federal statistics show 6% of criminals commit 70% of crimes).

66. See, e.g., *Financial Costs of '3 Strikes Law'*, L.A. TIMES, Jan. 10, 1996, at B8 (describing claim by state Attorney General Daniel Lungren that California's Three Strikes law is "having an immediate impact on the 7% of all criminals who commit between 50% and 70% of all crimes"); Cuomo, *supra* note 65 (stating that a Three Strikes law "would give us a heavy hammer to use against these career criminals"); Egan, *supra* note 65 (describing claims by proponents that Washington's Three Strikes law will remove from society a core group of incorrigible violent criminals); Bill Jones, *Impact of 'Three Strikes' Draws Praise, Criticism: Pro Evidence Shows Law is Working*, FRESNO BEE, Jan. 21, 1996, at B7 (reporting that California Secretary of State who co-sponsored the Three Strikes law stated that 6% of criminals are responsible for 70% of the state's crime).

67. Although the idea has been around for some time, this phrase seems to have originated in 1994 with newspaper columnist William Raspberry. See William Raspberry, *Crime and the 6 Percent Solution*, WASH. POST, Mar. 14, 1994, at A19 (using the phrase to refer to the claim made by numerous politicians that 6% of offenders are responsible for violent crimes).

68. See *supra* notes 65-66 (reporting different claims made by several politicians). See also Marc Mauer, *Politics, Crime Control . . . and Baseball?*, CRIM. JUST., Fall 1994, at 30-31 (noting how this statistic frequently has been offered to prove a very small group of offenders cause much of the crime problem).

69. See PAUL E. TRACY ET AL., *DELINQUENCY CAREERS IN TWO BIRTH COHORTS* (1990) (describing cohorts in both studies); see also MARVIN E. WOLFGANG ET AL., *DELINQUENCY IN A BIRTH COHORT* 27 (1972) (describing cohort in 1945 study).

70. See WOLFGANG ET AL., *supra* note 69, at 88, 105 (reporting that 627 of the 9945 boys in the cohort committed 51.9% of the offenses).

71. See TRACY ET AL., *supra* note 69, at 279-80 (reporting that 982 of the 13,160 boys in the cohort committed 61% of the offenses).

72. See Mauer, *supra* note 68, at 30-32 (stating that the misreading of this "six-percent" statistic is one of three common misperceptions of the criminal justice system upon which three strikes legislation is largely based).

million individuals.⁷³ Incarcerating the most active 6% of these potential offenders would require a prison population of 3.7 million, which is approximately three times the current state and federal prison population.⁷⁴ In addition, a more complete examination of the Wolfgang cohort studies reveals surprisingly widespread criminal activity. About one-third of the boys in each cohort had committed at least one offense before their eighteenth birthday,⁷⁵ and almost one-fifth had committed two or more offenses.⁷⁶

In sum, the Wolfgang cohort studies provide little evidence that incarcerating a small number of career criminals solves the crime problem. Rather, the cohort studies suggest that a significant percentage of young males engage in substantial criminal activity at some point in their adolescence.⁷⁷ Even if it were possible—which it is not⁷⁸—to identify accurately the most criminally active 6% of the male population, it would require a massive expansion of the prison system to incarcerate these offenders.

The failure of the “Six Percent Solution” as a mechanism for significantly reducing the crime rate does not mean that most criminals commit crimes at about the same rate. Indeed, there is substantial evidence from self-reports by inmates that offense rates vary widely. The seminal inmate surveys were performed by the Rand Corporation in the 1980s and the results were reported in *Selective Incapacitation*.⁷⁹ Rand surveyed over 2000 inmates in California, Michigan, and Texas. Inmates were asked to report their involvement in various criminal activities during the two calendar years preceding their last incarceration. Most inmates reported a modest level of criminal activity. Among inmates who committed at least one robbery, for example, the median number of robberies reported was five. A small portion of inmates, on the other hand, reported much higher activity levels. The most active 10% of robbers, for example, on average reported committing 87 or more robberies. Similarly, among burglars the median number of burglaries committed was 5.45, but the most active 10% of burglars reported committing 232 or more burglaries.⁸⁰

73. See U.S. BUREAU OF THE CENSUS, STATISTICAL ABSTRACT OF THE UNITED STATES 17 (117th ed. 1997) (reporting a 1997 population of 61,573,000 males falling within this age range).

74. By mid-year 1996 there were over one million inmates in federal and state prisons. If jails are included, the number of inmates rises to over 1.6 million. See MUMOLA & BECK, *supra* note 5, at 1.

75. See TRACY ET AL., *supra* note 69, at 38, 275 (reporting that 34.9% of the 1945 cohort and 32.8% of the 1958 cohort had committed one or more offenses before reaching the age of eighteen).

76. See *id.* at 38-39 (reporting that 18.7% of the 1945 cohort and 19.1% of the 1958 cohort committed more than one offense).

77. See also ELIZABETH G. HILL, LEGISLATIVE ANALYST'S OFFICE, CRIME IN CALIFORNIA 23 (1994) (citing a 1987 California study showing that 35% of men in the state had been arrested once by the age of 29). The study likely underestimated criminal activity since it did not include all offenses committed by juveniles.

78. See *infra* text accompanying notes 84-88.

79. See PETER W. GREENWOOD, U.S. DEP'T OF JUSTICE, SELECTIVE INCAPACITATION (1982).

80. See *id.* at 46 (citing to JAN CHAIKEN & MARCIA CHAIKEN, RAND CORP., VARIETIES OF CRIMINAL BEHAVIOR, (1982)). Because of the extremely high number of crimes reported by the most active offenders, the mean number of crimes committed was far higher than the median. Moreover, the mean

More recent prisoner surveys in Wisconsin and New Jersey report similarly skewed distributions of offense rates.⁸¹

Whether the extremely high offense rates reported by the most active offenders are accurate remains uncertain.⁸² Nevertheless, the skewed offense rates reported in the prisoner surveys suggest to some analysts that selectively incapacitating high-rate offenders could yield substantial social benefits. The authors of *Selective Incapacitation*, for example, noted that “incarcerating one robber who is above the ninetieth percentile for one year would prevent more robberies than incarcerating eighteen offenders who are below the median.”⁸³ The problem, the authors points out, “lies in identifying those with high rates.”⁸⁴

Selective Incapacitation uses a seven-factor test to classify offenders according to their likely offense rate. These factors are:

1. Prior conviction for the instant offense type.
2. Incarcerated more than 50% of the preceding two years.
3. Conviction before age sixteen.
4. Served time in a state juvenile facility.
5. Drug use in preceding two years.
6. Drug use as a juvenile.
7. Employed less than 50% of the preceding two years.⁸⁵

This seven-factor test accurately identified the high-rate offenders among the surveyed inmates. A selective incapacitation policy based on this test, therefore, appeared to have substantial potential to reduce crime. In California, for example, incarcerating low-rate and intermediate-rate robbers for relatively short terms while incarcerating high-rate robbers for extended terms could produce a 20% reduction in crime without increasing the prison population.⁸⁶

of the sample was an unstable estimate of the true mean because its value was highly sensitive to the number of offenses reported by the most extreme offenders. Thus Rand used a truncated mean in estimating incapacitation effects: within each state, all offenders who reported offense rates higher than the 90th percentile had their offense rate set at the 90th percentile rate. *See id.* at 55-56.

81. *See* John J. DiIulio, Jr. & Anne Morrison Piehl, *Does Prison Pay?*, THE BROOKINGS REV., Fall 1991, at 28, 32 (Wisconsin survey reported median pre-incarceration offense rate, excluding drug sales, of 12 and a mean rate of 141); Anne Morrison Piehl & John J. DiIulio, Jr., *‘Does Prison Pay’ Revisited?*, THE BROOKINGS REV., Winter 1995, at 21 (New Jersey survey reported mean offense rate over 20 times as high as median offense rate).

82. *See* WILLIAM SPELMAN, CRIMINAL INCAPACITATION 21-22 (1994) (noting potential problems such as biased samples, faulty memories, and deliberate overstatements or understatements of offense rates).

83. GREENWOOD, *supra* note 79, at 45.

84. *Id.* at 47.

85. *See id.* at 50.

86. *See id.* at 78-79.

Unfortunately, the seven-factor Rand test failed to identify high-rate offenders in subsequent samples with the same accuracy demonstrated in the original survey.⁸⁷ As Rand researchers noted in a follow-up study, the likely benefits of selective incapacitation, premised on the seven-factor Rand test, are less promising than the original report suggests.⁸⁸

Even assuming potential high-rate offenders could be identified accurately using multifactor tests like that developed by Rand, whether such tests should be used in sentencing is unclear.⁸⁹ Two factors in the Rand test, for example, are “lack of full-time employment prior to incarceration” and “drug use as a juvenile.”⁹⁰ Some might argue that it is wrong to sentence an offender to a longer prison term because he was unable to find employment,⁹¹ or because he used drugs as a minor.⁹² Other factors, not in the Rand test, that might prove to be useful predictors of a high-rate offender are even more problematic. It would be unfair to consider immutable characteristics such as race, sex, or national origin in determining sentence length, even if these factors were good predictors of recidivism.⁹³ Using deeply personal choices such as religious affiliation and

87. See I CRIMINAL CAREERS AND “CAREER CRIMINALS” 130-31 (Alfred Blumstein et al. eds., 1996) [hereinafter CRIMINAL CAREERS].

88. See PETER W. GREENWOOD & SUSAN TURNER, RAND CORP., SELECTIVE INCAPACITATION REVISITED: WHY THE HIGH-RATE OFFENDERS ARE HARD TO PREDICT (1987).

89. For a general discussion of the ethical issues surrounding selective incapacitation, see Michael Tonry, *Prediction and Classification: Legal and Ethical Issues*, in 9 CRIME AND JUSTICE: A REVIEW OF RESEARCH 367, 383-400 (Michael Tonry & Norval Morris eds., 1987); see also Jacqueline Cohen, *Incapacitation as a Strategy for Crime Control: Possibilities and Pitfalls*, in 5 CRIME AND JUSTICE I, 37-40 (Michael Tonry & Norval Morris, eds., 1983).

90. See GREENWOOD, *supra* note 79, at 50.

91. See MARK H. MOORE ET AL., DANGEROUS OFFENDERS 75 (1984) (finding employment status “suspect” for identifying frequent offenders); ANDREW VON HIRSCH, DOING JUSTICE 87-88 (1976) (finding it objectionable and offensive to use as sentencing criteria joblessness and other factors that concern an offender’s social status rather than blameworthiness); Cohen, *supra* note 89, at 38-39 (noting that status variables such as unemployment may be viewed as ascribed characteristics over which people have no control to the extent that people have limited opportunities to affect their status outcomes). See also Tonry, *supra* note 89, at 397-98 (stating that various factors such as education, vocational skills and income are widely regarded as inappropriate grounds for sentencing decisions because they have a skewed impact on persons of lower social and economic status). *But see* Cohen, *supra* note 89 at 39 (noting that unemployment often is considered a legitimate criterion for sentencing and a reliable predictor that an offender poses a greater risk of committing more offenses in the future).

92. *But see* MOORE ET AL., *supra* note 91, at 74-75 (describing authors as “ambivalent” about whether drug use should be considered as a factor for identifying high-rate offenders).

93. The Constitution prohibits the use of only a few factors—race, ethnicity, political beliefs, religion, and possibly sex—as predictors for sentencing purposes. See Tonry, *supra* note 89, at 372, 397. In addition, many people object to using these and other factors for policy reasons. See *id.* (stating that many find it unjust to use such factors since they are beyond the offender’s control); MOORE ET AL., *supra* note 91, at 75 (arguing that demographic characteristics such as religion, race and age should not be used to predict high-rate offenders); Cohen, *supra* note 89, at 38-39 (discussing objections to the use of age, race and sex as factors since they involve punishment based on an offender’s ascribed, unchangeable characteristics rather than his blameworthiness). The accuracy of using such factors is also suspect. See Barbara D. Underwood, *Law and the Crystal Ball: Predicting Behavior with Statistical Inference and Individualized Judgment*, 88 YALE L.J. 1408, 1434-36 (1979) (arguing that uncontrollable factors such as race should not be used by decisionmakers as predictors so as to protect against unwarranted bias that affects accuracy and to prevent stigmatization). See also Cohen, *supra*

marital status in sentencing also raises difficult ethical questions.⁹⁴

Three Strikes laws avoid these ethical dilemmas by using prior criminal convictions to decide sentence length. Basing selective incapacitation on an offender's prior criminal record also is simple to administer. Supporters of Three Strikes laws argue that if a prior criminal record accurately predicts that an individual will be a high-rate offender in the future, then sentencing repeat offenders to extended prison terms will meaningfully reduce the crime rate.⁹⁵

In Parts III and IV of this article, we use a simple model to examine the claim that habitual offender statutes such as Three Strikes laws can significantly reduce the crime rate through the selective incapacitation of high-rate offenders. We conclude that even if such statutes sentence high-rate offenders to long prison terms, they will have little impact on the crime rate because most high-rate offenders will spend most of their criminal career in prison even without such statutes. Moreover, if the retirement of offenders is considered, sentencing repeat offenders to long prison terms may be less effective than modestly increasing the prison terms of all offenders.

III. MODELING INCAPACITATION

A. ASSUMPTIONS OF THE MODEL

The model assumes that there are two types of offenders—high-rate and low-rate. Offenders do not retire from a life of crime, and they continue to commit crimes at the same rate throughout their criminal careers.⁹⁶ The probability that an offender will commit a crime on any particular day is independent of the number of crimes previously committed or when those crimes took place. Thus, an individual predicted to commit five crimes per year might commit ten or more crimes during a particular year or might commit no crimes at all.⁹⁷

Each time an offender commits a crime, a chance exists that he will be arrested, convicted, and incarcerated. The model assumes that the likelihood of incarceration for an offense is the same for all offenders. High-rate offenders have neither a lower probability of incarceration for each offense because they

note 89, at 40-42 (noting problems of accurately predicting high-rate offenders and empirical problems in using predictions as the basis of differential sentencing).

94. See Underwood, *supra* note 93, at 1437-38 (arguing against the use of marital status as a predictive factor on autonomy grounds because it involves protected private choice).

95. See *supra* text accompanying notes 65-66.

96. More precisely, the model assume that offenders have a criminal career of infinite length. This assumption, although unrealistic, substantially simplifies the model and provides the strongest case for incapacitation. In Part V we examine the impact of criminal retirement on the efficiency of alternative incapacitation policies.

97. Neither result is likely, however. At a rate of five crimes per year, the individual has a 1.36% chance per day of committing a crime. Assuming independent trials (known as a Poisson process) with a 1.36% chance per day of committing a crime, zero crimes will be committed during a 365-day period less than 1% of the time. Ten or more crimes will be committed about 3% of the time. For simplicity, the crime rate is expressed in expected number of crimes permitted per year in the text. All calculations, however, are made using a daily rate.

are more skilled nor a higher probability because they are more closely watched by the police. Finally, the model assumes that there are no sentence enhancements for repeat offenders; rather, all convicted offenders receive the same sentence.

These assumptions are not realistic, of course. Some offenders may give up their lives of crime, and high-rate offenders may become low-rate offenders or vice-versa. The decision to commit one crime may depend on when the last crime was committed. Some offenders may engage in crime sprees followed by a period in which they commit no offenses. Other offenders may engage in criminal activity on a periodic schedule, perhaps committing a new offense only when the loot from the previous crime has been spent.

Some types of offenders also may avoid detection better than others. It is reasonable to believe, for example, that high-rate offenders generally are more skilled than low-rate offenders and thus face a lower probability of arrest for each offense,⁹⁸ although the cumulative likelihood of incarceration of high-rate offenders is much greater because of the large number of offenses they commit.⁹⁹

Finally, first-time offenders obviously do not receive the same sentence as repeat offenders. Indeed, the focus of this article is the analysis of sentence enhancements for repeat offenders. The simple case of identical sentences, however, is a useful benchmark for later analysis.

B. A SIMPLE MODEL OF INCAPACITATION

The fraction of time an offender will spend on the street can be predicted by the offender's crime rate, his probability of incarceration (per offense), and the average sentence length. The crime rate of offender i is λ_i so that λ_H is the crime rate of a high-rate offender and λ_L is the crime rate of a low-rate offender. For each offender i , the probability of incarceration for each crime is J_i and the average sentence length is S_i .

The fraction of the criminal career of offender i that will be spent on the street is shown by Equation 1.¹⁰⁰

$$\eta_i = \frac{1}{1 + \lambda_i J_i S_i} \quad (1)$$

98. See CRIMINAL CAREERS, *supra* note 87, at 61 (noting that high-rate offenders may be skilled at both committing crimes and avoiding arrest).

99. It is sometimes argued that high-rate offenders also are more likely to have prior criminal convictions and therefore may be watched more closely by law enforcement officials than low-rate offenders. This would increase their apprehension rate. See *id.* Nevertheless, many scholars believe that the high-rate offenders are apprehended at a lower rate than low-rate offenders. See, e.g., PETER W. GREENWOOD ET AL., RAND CORP., THREE STRIKES AND YOU'RE OUT: ESTIMATED BENEFITS AND COSTS OF CALIFORNIA'S NEW MANDATORY SENTENCING LAW 55 tbl.D.3 (1994) (assuming high-rate offenders are half as likely to be arrested as low-rate offenders); GREENWOOD & TURNER, *supra* note 88, at 33, 48 (same).

100. The fraction of an offender's career spent in prison, therefore, is $\lambda JS / (1 + \lambda JS)$.

The intuition underlying Equation 1 is straightforward.¹⁰¹ As the offense rate, λ , becomes greater or the prison term, S , becomes longer, the number of crimes that will be prevented each time an offender is incarcerated will increase. The number of crimes that an offender will commit while free between prison terms, on the other hand, will remain unchanged.¹⁰² An increase in the offense rate or the prison term, therefore, decreases the fraction of the offender's criminal career that is spent on the street.¹⁰³

An increase in the probability of incarceration, J , does not change the number of crimes that will be prevented each time an offender is incarcerated. It will, however, reduce the number of crimes committed between prison terms and thus will also decrease the portion of the offender's criminal career spent on the street.¹⁰⁴

Equation 1 can be illustrated by considering Albert who commits, on average, five crimes per year on the street, who has a 10% chance of being imprisoned for each crime, and who receives a three-year sentence if convicted. Thus the crime rate of the offender, λ , is five, the probability of incarceration, J , is .10, and the average sentence length, S , is three. Inserting these values into Equation 1, it can be calculated that Albert will spend 40% of his criminal career on the street.¹⁰⁵ This makes sense. There is a 10% chance that Albert will be imprisoned each time he commits a crime, so Albert will commit, on average, ten crimes before being incarcerated. At a rate of five crimes per year, Albert can expect to spend two years on the street before being imprisoned. Albert will then spend three years in prison, after which he will be released. This pattern will be repeated for the length of his criminal career, so that Albert can expect to spend two out of every five years on the street during his criminal career.¹⁰⁶

For a group of offenders who have the same λ , J , and S , Equation 1 also

101. The basic model represented by Equation 1 was developed in Benjamin Avi-Itzhak & Revel Shinnar, *Quantitative Models in Crime Control*, 1 J. CRIM. JUST. 185 (1973). The model has been used frequently to calculate incapacitation effects. See, e.g., GREENWOOD, *supra* note 79, at 6 n.5 (using the model and citing to others who similarly employ it); SPELMAN, *supra* note 82, at 12-16 (noting that this model is the most celebrated of those used and examining two of its best-known applications). Equation 1 is the equilibrium fraction of offenders who are on the street at any time. For a new cohort of offenders, the fraction on the street will be somewhat higher; on the first day, for example, all of the new cohort of offenders will be on the street. Equation 1, therefore, underestimates, to some extent, the portion of active offenders on the street. Since new offenders are disproportionately on the street, such offenders make up a somewhat larger percentage of the offenders entering prison than would be predicted by Equation 1.

102. The incarceration rate per crime, J , is the same for high and low rate offenders. Thus although high-rate offenders commit more crimes per day while free than do low-rate offenders, they do not commit more total crimes between prison terms because they are apprehended more quickly.

103. From Equation 1: $\partial\eta/\partial\lambda = -JS/(1 + JS\lambda)^2$. $\partial\eta/\partial S = \lambda J/(1 + JS\lambda)^2$. Since J , S and λ are greater than zero, an increase in λ or S will reduce the portion of an offender's criminal career that is spent on the street.

104. From Equation 1: $\partial\eta/\partial J = -\lambda S/(1 + JS\lambda)^2$. Since S and λ are greater than zero, an increase in J will reduce the portion of an offender's criminal career than it spent on the street.

105. Evaluating Equation 1 for $\lambda = 5$, $J = .1$, and $S = 3$. $\eta = 1/(1 + (5 \times .1 \times 3))$. $\eta = .40$.

106. This result assumes an individual's criminal career is long enough for him to be incarcerated and released several times.

shows the expected portion of the group on the street at any particular time. If there are, for example, 100 identical offenders like Albert, then on average forty offenders will be on the street and sixty offenders will be in jail on any particular day. More generally, if there are N offenders in group i then Equation 2 represents the expected number of offenders on the street on any given day.

$$\text{Offenders on the Street} = \frac{N_i}{1 + \lambda_i J_i S_i} \quad (2)$$

The expected number of crimes, C_i , committed per year by offender i is equal to the offender's crime rate, λ , multiplied by the portion of the year that the offender remains on the street, as shown by Equation 3.¹⁰⁷

$$C_i = \frac{\lambda_i}{1 + \lambda_i J_i S_i} \quad (3)$$

Accounting for multiple types of offenders is straightforward. If there are N_H high-rate offenders and N_L low-rate offenders, then Equation 4 represents the total number of offenders on the street and Equation 5 represents the expected number of crimes per year.

$$\text{Offenders on the Street} = \frac{N_H}{1 + \lambda_H J_H S_H} + \frac{N_L}{1 + \lambda_L J_L S_L} \quad (4)$$

$$\text{Crimes per Year} = \frac{N_H \lambda_H}{1 + \lambda_H J_H S_H} + \frac{N_L \lambda_L}{1 + \lambda_L J_L S_L} \quad (5)$$

C. A NUMERICAL SIMULATION

Equations 4 and 5 can predict the impact of alternative incapacitation policies on the crime rate. To illustrate, assume a population consisting of 1000 high-rate offenders who each commit sixty crimes per year, and 9000 low-rate offenders who each commit five crimes per year. Assume also that all offenders face a five percent chance per crime of being incarcerated and that the prison term is two years. These assumptions are generally consistent with scholarly estimates of the distribution of high-rate and low-rate offenders for serious property crimes such as burglary and robbery.¹⁰⁸ The assumptions are also generally consistent with estimates of the risk of incarceration and the expected prison term if

107. Equation 1 calculates the fraction of a year that an offender is expected to be on the street. Since λ represents the expected number of crimes the offender will commit each year if not incarcerated, multiplying λ by Equation 1 gives the expected number of crimes per year.

108. See generally SPELMAN, *supra* note 82, at 63-100.

incarcerated for such crimes.¹⁰⁹

If no offenders were incarcerated, then high-rate offenders would commit 60,000 crimes per year and low-rate offenders would commit 45,000 crimes per year for a total of 105,000 crimes per year.¹¹⁰ Introducing a modest two-year prison term and a 5% incarceration rate changes these results dramatically. Crimes by high-rate offenders are reduced to 14% of their former level as these offenders spend 86% of their criminal careers in prison.¹¹¹ The impact on low-rate offenders is much smaller. Low-rate offenders continue to spend 67% of their careers on the street and only 33% in prison.¹¹²

The two-year prison term reduces total crimes per year from 105,000 to 38,571, a reduction of more than 63%. The composition of offenders also changes dramatically. In the absence of any sanction, high-rate offenders commit 57% of the crimes. After the imposition of the two-year prison term, however, high-rate offenders commit only 22% of the crimes.¹¹³

The total inmate population of 3857 consists of 3000 low-rate offenders and 857 high-rate offenders. If these inmates had been on the street rather than in prison for the prior year, the low-rate offenders would have committed 15,000 crimes and the high-rate offenders would have committed 51,429. Thus, incarcerated high-rate offenders account for 77% of the crimes prevented by incapacitation. This result is consistent with surveys showing that if inmates are asked about their offense rates in the period just prior to incarceration, a small portion of the inmates will have committed a large percentage of the total crimes

109. A recent analysis of the 1978 Rand survey data estimated the probability of arrest in California as 9.1% for business robbery, 5.6% for street robbery, and 3.3% for burglary. The probability of incarceration after arrest was 46% for robbery and 57% for burglary. See SPELMAN, *supra* note 82, at 35-39. The expected time served nation-wide if incarcerated has been estimated as 1.975 years for robbery and .927 years for burglary. See *id.* at 210.

110. 1000 high-rate offenders \times 60 crimes per year = 60,000 crimes per year. 9000 low-rate offenders \times 5 crimes per year = 45,000 crimes per year.

111. From Equation 1, if $\lambda_H = 60$, $J_H = .05$, and $S_H = 2$, then an offender will spend 14% of his career on the street. $\eta = 1/(1 + \lambda JS)$. $\eta = 1/(1 + (60 \times .05 \times 2)) = .14$. The number of crimes committed by high-rate offenders is $N_H \lambda_H / (1 + \lambda_H J_H S_H)$. If $N_H = 1000$, $\lambda_H = 60$, $J_H = .05$, and $S_H = 2$, then the number of crimes will be $(1000 \times 60) / (1 + (60 \times .05 \times 2)) = 8571$.

112. From Equation 1, if $\lambda_L = 5$, $J_L = .05$, and $S_L = 2$, then an offender will spend 67% of his career on the street. $\eta = 1/(1 + \lambda JS)$. $\eta = 1/(1 + (5 \times .05 \times 2)) = .67$. The number of crimes committed by low-rate offenders is $N_L \lambda_L / (1 + \lambda_L J_L S_L)$. If $N_L = 9000$, $\lambda_L = 5$, $J_L = .05$, and $S_L = 2$, then the number of crimes will be $(9000 \times 5) / (1 + (5 \times .05 \times 2)) = 30,000$.

113. If no criminal sanction exists, high-rate offenders will commit 60,000 out of 105,000 crimes. Thus the proportion of crimes committed by high-rate offenders is $60,000 \div 105,000 = .57$. If a two-year sanction exists, then the 143 high-rate offenders still on the street will commit a total of 8571 crimes per year while the 6000 low-rate offenders still on the street will commit a total of 30,000 crimes. Thus the proportion of crimes committed by high-rate offenders is $8571 \div 38,571 = .22$. These figures assume that an inmate will commit no crimes when incarcerated. In fact, crime is common in prison. Because prison crime is directed mostly against other inmates it generally is ignored in the weighing of the costs and benefits of incarceration. While we believe that crimes against inmates, and inmate welfare more generally, should not be ignored in the cost-benefit calculation, in this article we have followed conventional practice and focused only on crimes committed against the public at large.

reported.¹¹⁴

The results of this simulation are summarized in Table 1.

TABLE 1

	<i>Low-Rate Offenders</i>	<i>High-Rate Offenders</i>	<i>Total</i>
<i>Number in the Offender Group</i>	9000	1000	10,000
<i>Offenses per Year</i>	5	60	
<i>Chance of Prison per Offense</i>	5%	5%	
<i>Expected Prison Term if Incarcerated</i>	2 years	2 years	
<i>Percentage of Criminal Career Spent on the Street</i>	67%	14%	
<i>Percentage of Criminal Career Spent in Prison</i>	33%	86%	
<i>Number in the Offender Group on the Street</i>	6000	143	6143
<i>Percentage of the On-the-Street Offenders</i>	98%	2%	
<i>Number of Offenders in Prison</i>	3000	857	3857
<i>Crimes per Year by Offenders on the Street</i>	30,000	8571	38,571
<i>Crimes per Year Prevented by Incapacitation</i>	15,000	51,429	66,429
<i>Percentage of the Inmate Population</i>	78%	22%	
<i>Percentage of Crimes Prevented by Incapacitation</i>	23%	77%	63%

D. DECLINING MARGINAL EFFECTIVENESS OF INCARCERATION

The most striking result of the simulation is the large impact that even a short prison term has on the number of offenses committed by high-rate offenders. In the above example, offenders faced only a 5% risk of incarceration and a two-year sentence, which is equivalent to a sanction of only 36.5 days in jail for each offense committed.¹¹⁵ This short expected prison term reduced by 86% the number of crimes committed by high-rate offenders.

This result has significant implications for Three Strikes and other habitual offender statutes. Supporters of habitual offender statutes often argue that a small group of career criminals is responsible for a large portion of the crimes and that putting those offenders behind bars will significantly reduce the crime rate.¹¹⁶ This reasoning is flawed because high-rate offenders will spend the majority of their criminal careers in prison, even if the prison term is modest and the apprehension rate is low. Most high-rate offenders are likely to be behind bars regardless of Three Strikes laws.

This does not mean, of course, that sentencing repeat offenders to longer terms is a mistake. It does suggest, however, that selective incapacitation is unlikely to have a dramatic impact on the overall crime rate. In the numerical

114. See GREENWOOD, *supra* note 79, at xii-xiii (referring to Rand Survey 1977); ZIMRING & HAWKINS, *supra* note 36, at 82.

115. Two years equals 730 days. Five percent of 730 days is 36.5 days.

116. See *supra* text accompanying notes 65-66.

simulation, for example, after the imposition of a two-year prison term for convicted offenders, only 22% of the remaining crimes were perpetrated by high-rate offenders. Even if all these high-rate offenders could be identified accurately and imprisoned for life, the number of crimes committed would be reduced by only 22%.

The model also shows that inmate populations will not mirror the on-the-street offender population. In the numerical simulation, with a two-year term only 2% of the offenders remaining on the street were high-rate offenders while 98% were low-rate.¹¹⁷ On-the-street offenders had a mean crime rate of about six offenses per year.¹¹⁸ On the other hand, 22% of the inmates were high-rate offenders, more than ten-times the percentage of high-rate offenders found in the on-the-street population.¹¹⁹ Inmates had a mean crime rate of seventeen offenses per year, almost three times the mean rate of on-the-street offenders.¹²⁰

The sharply different composition of the inmate and on-the-street offender populations means that the offense rate of current inmates is an unreliable predictor of the offense rate of the additional inmates who would be imprisoned if the prison population were expanded. If relatively modest prison terms already imprison most high-rate offenders, then additional inmates snared by longer sentences will consist mostly of low-rate offenders. Incapacitation, therefore, will display declining marginal efficiency: as the average prison term increases, the amount of crime prevented by each additional inmate will decline.¹²¹

117. If the prison term and probability of incarceration are the same for high-rate and low-rate offenders the portion of offenders on-the-street who are high-rate is:

$$\text{Portion of Offenders on the Street who are High-Rate} = \frac{N_H (1 + JS\lambda_L)}{N_H + N_L + N_L\lambda_H JS + N_H\lambda_L JS}$$

118. There were 6000 low-rate offenders and 143 high-rate offenders on the street. $143 \div 6143 = .023$. Each of the 6000 low-rate offenders were expected to commit five crimes for a total of 30,000 crimes. Each of the 143 high-rate offenders were expected to commit 60 crimes for a total of 8571 crimes. $38,571 \div 6143 = 6.27$. See *supra* Table 1.

119. If the prison term and probability of incarceration are the same for high-rate and low-rate offenders, then the portion of offenders in prison who are high-rate is:

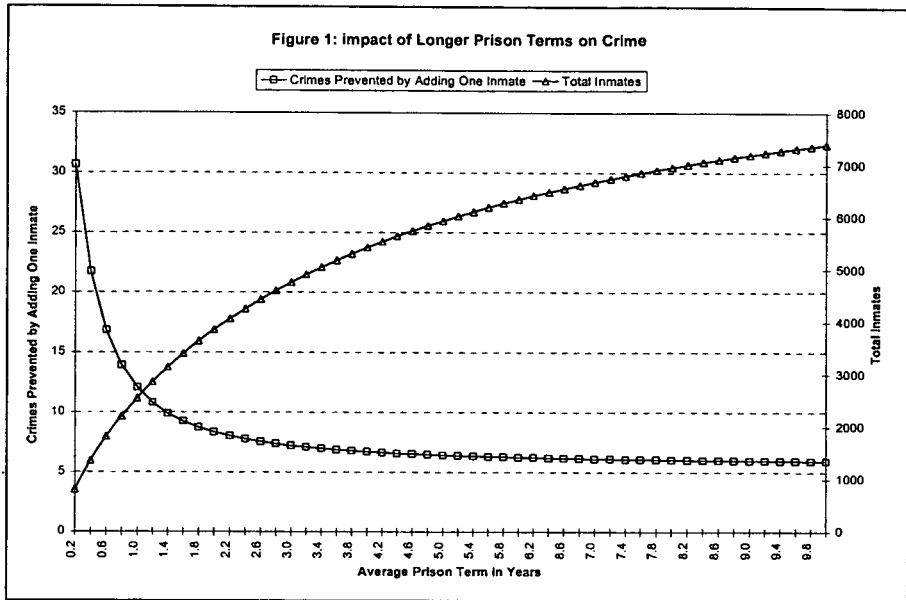
$$\text{Portion of Offenders in Prison who are High-Rate} = \frac{N_H\lambda_H (1 + JS\lambda_L)}{N_L\lambda_L (1 + JS\lambda_H) + N_H\lambda_H (1 + JS\lambda_L)}$$

120. Among inmates, 857 high-rate offenders would have committed 51,429 crimes if not imprisoned and 3000 low-rate offenders would have committed 15,000 crimes. Total crimes that would have been committed are $51,429 + 15,000 = 66,429$. Total inmates are $857 + 3000 = 3857$. $66,429 \div 3857 = 17.22$.

121. If the prison term and probability of incarceration are the same for high-rate and low-rate offenders, then the number of crimes prevented by adding an additional inmate is:

$$\text{Crimes Prevented by adding an Additional Inmate} = \frac{N_L\lambda_L^2(1 + JS\lambda_H)^2 + N_H\lambda_H^2(1 + JS\lambda_L)^2}{N_L\lambda_L(1 + JS\lambda_H)^2 + N_H\lambda_H(1 + JS\lambda_L)^2}$$

Figure 1 illustrates the impact of increasing the prison term if the offender population consists of 90% low-rate and 10% high-rate offenders, as in the previous numerical example.¹²²



When the prison term is short and the inmate population is small, increasing the prison population by lengthening the prison term has a large incapacitation effect. If, for example, the prison term is only two-fifths of a year, adding an additional inmate will prevent about twenty-two crimes. High-rate offenders will make up about 31% of the additional inmates.

As the prison term increases and the inmate population rises, the marginal benefit of lengthening the prison term diminishes because the new inmates are more likely to be low-rate offenders. If an additional inmate is added when the prison term is already four years, for example, less than six crimes will be prevented because only a 3% chance exists that the inmate will be a high-rate offender.¹²³

122. As in the previous example, low-rate offenders commit five crimes per year and high-rate offenders commit 60 crimes per year.

123. If the prison term and probability of incarceration are the same for high-rate and low-rate offenders, then the change in the number of crimes prevented by adding an additional inmate with respect to a change in the sanction is:

$$\frac{\partial \text{Crimes Prevented by Adding an Additional Inmate}}{\partial S} = \frac{2JN_H N_L \lambda_H \lambda_L (1 + JS\lambda_H)(1 + JS\lambda_L)(\lambda_H - \lambda_L)^2}{(N_L \lambda_L (1 + JS\lambda_H)^2 + N_H \lambda_H (1 + JS\lambda_L)^2)^2}$$

Because J , N_H , N_L , λ_H , λ_L and S are positive, the right-hand expression in the above equation will be

When determining whether tougher prison sentences are worth the additional cost, commentators commonly compare the cost of keeping offenders in prison with the social harm of the crimes that would have been committed if those offenders already in prison had been on the street. To calculate the number of crimes that would be prevented by expanding the prison population, commentators often rely on studies that report the crimes that *current* inmates would have committed if they were not imprisoned.¹²⁴ This approach is seriously flawed because the average crime rate of *current* inmates is likely to be much higher than the average crime rate of the *additional* inmates who would be incarcerated if harsher sentences were enacted.

For illustrative purposes, our numerical simulation assumed only two types of offenders. The two central results, however, are more general. First, even a short prison term sharply reduces the number of crimes committed by high-rate offenders. Second, the marginal effect of increasing the prison term declines rapidly.

The declining marginal effectiveness of incarceration is illustrated by Figure 2, which shows the impact on the number of crimes committed if the prison term is increased for both offenders who commit five and offenders who commit sixty crimes per year.¹²⁵ The number of offenders of each type is adjusted so that the aggregate crimes per year committed by each class of offenders would be 10,000 if there were no sanction.¹²⁶

As can be observed from Figure 2, even a short prison term will incapacitate most high-rate offenders. A one-year sentence incapacitates 75% of the sixty-crime-per-year offenders and a four-year term incapacitates over 90% of these high-rate offenders. Imprisonment removes low-rate offenders from the street less quickly. A four-year term still leaves half of the low-rate offenders on the street. Because relatively modest prison terms incarcerate most high-rate offenders, additional offenders imprisoned as a result of increasing the prison term will be mostly low-rate.

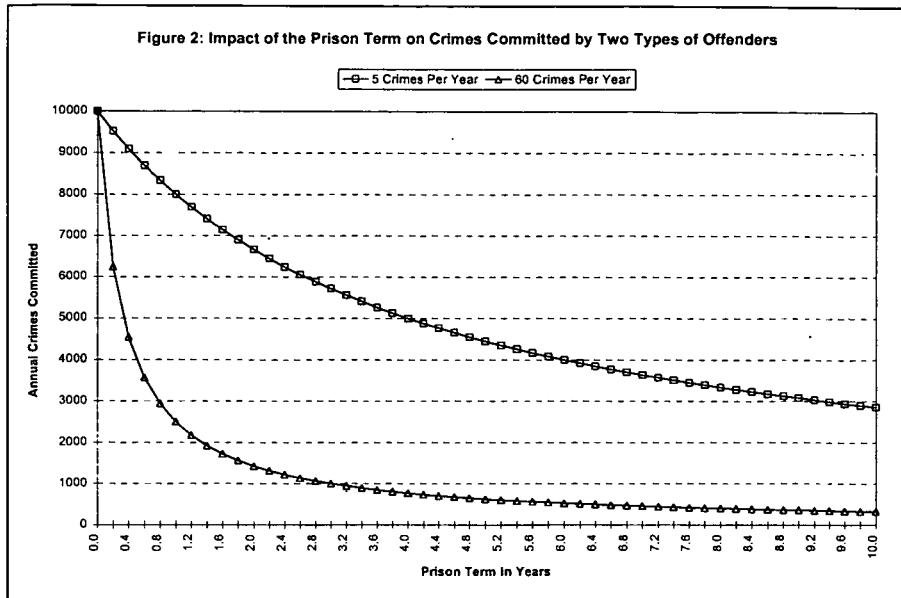
The model also suggests that the self-reports of inmates regarding their preconviction offense rates should be viewed with some skepticism. Inmate surveys typically exhibit a highly skewed distribution, with the most active offenders reporting that they committed hundreds of burglaries or robberies during the year prior to their incarceration. As noted earlier, the accuracy of

negative. As S increases, then, the number of crimes prevented by adding an additional inmate will decrease.

124. See, e.g., Phillip G. Romero, *How Incarcerating More Felons Will Benefit California's Economy: Report from Governor's Office of Planning and Research*, Mar. 31, 1994 (using data from Rand survey to project number of crimes which would be prevented by incarcerating additional criminals under Three Strikes law).

125. Again, the model assumes that there is a 5% risk of incarceration for each crime committed, so that the expected prison term per crime committed is one-twentieth of the stated length.

126. This requires 2000 offenders who each commit five crimes per year and 167 offenders who each commit 60 crimes per year.



these self-reports is difficult to verify.¹²⁷ That the reported crime rates of the most active offenders are exaggerated seems likely, however.¹²⁸ For an offender to be able to commit hundreds of crimes prior to his incarceration, he would need to be either highly skilled or extraordinarily lucky. Even assuming the incarceration rate were only 1%, which would be well below most estimates, an offender committing two hundred crimes per year would have only a thirteen percent chance of avoiding prison for an entire year.¹²⁹

E. INCAPACITATION AND THE DISTRIBUTION OF OFFENSE RATES AMONG OFFENDERS

Proponents of Three Strikes laws often argue that incapacitation is particularly effective if, as suggested by inmate surveys, a small portion of the active offenders commit most of the crimes. The intuition is straightforward—selective incapacitation will imprison high-rate offenders in disproportionate numbers, so that incarcerating a relatively small number of criminals will prevent a large number of crimes.¹³⁰

127. See *supra* text accompanying note 82.

128. The extremely high offense rates of the most frequent offenders have a large influence on the mean offense rates. To reduce this influence and to account for the possibility of exaggerated offense rates, some researchers have truncated the distribution of offenses at the 90th percentile; that is, inmates with offense rates above the 90th percentile are assumed to have the same offense rates as inmates at the 90th percentile. See SPELMAN, *supra* note 82, at 75.

129. If an offender has a .99 chance of avoiding arrest for one crime, his chance of avoiding arrest for 200 crimes is $.99^{200}$ or .134.

130. See *supra* Table I.

When deciding whether or not to expand the prison population, however, the *average* number of crimes prevented per inmate is irrelevant; rather, the *marginal* number of crimes prevented by adding an additional inmate must be considered. Figure 3 shows how the average and marginal number of crimes prevented per inmate varies with the size of the inmate population. Results are shown for both a world where offenders have an identical offense rate and a world where the offense rate is skewed.

The skewed-rate assumes, as did the numerical example in Part III C, an offender population of 9000 low-rate offenders, each with a crime rate of five crimes per year, and 1000 high-rate offenders, each with a crime rate of sixty crimes per year. The uniform-rate assumes 10,000 offenders, each with a crime rate of 10.5 crimes per year. These crime rates were chosen so that the same number of crimes, 105,000, would be committed by each population in the absence of criminal sanctions.

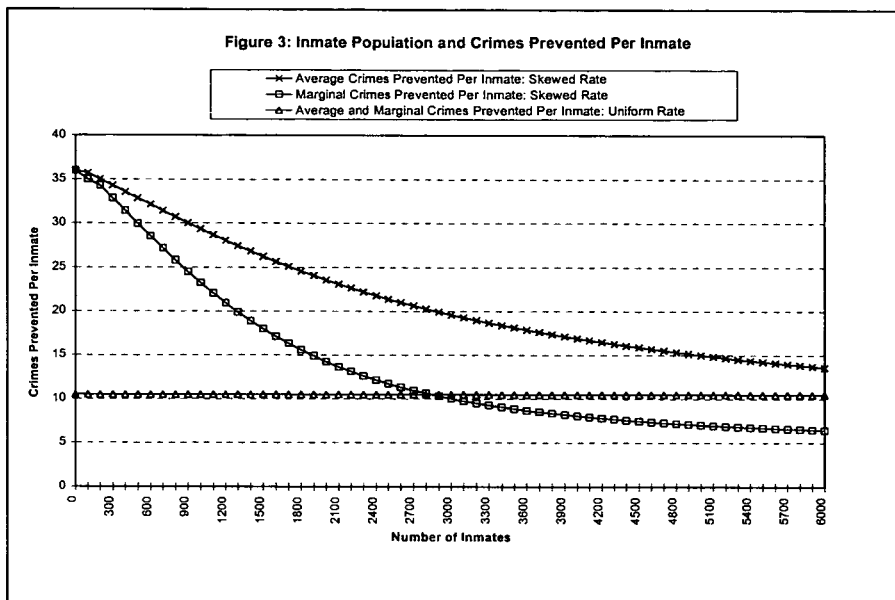


Figure 3 shows that the *average* number of crimes prevented per inmate is always higher in the skewed-rate population than in the uniform-rate population. The *marginal* number of crimes prevented per inmate, however, is greater in the skewed-rate than in the uniform-rate only when the number of inmates is low. In this example, the crossover point occurs when the inmate population reaches about 2800 inmates or 28% of the offender population.¹³¹

131. An inmate population of this size is produced by a prison sentence of about 1.2 years in the skewed-rate and a prison sentence of about eight years in the uniform-rate.

F. SUMMARY

Supporters of incapacitation have argued that a relatively small number of career criminals are responsible for most of the serious crimes and that tougher sentences—especially for repeat offenders—might significantly reduce the crime rate by incapacitating those offenders. Longer prison sentences, however, are unlikely to produce a large drop in the crime rate through incapacitation of high-rate offenders because most high-rate offenders will spend most of their lives behind bars even if the prison term is short. The widely-held view that incapacitation is most effective if a small number of high-rate offenders commit most of the crimes is true with respect to the *average* number of crimes prevented per inmate. It is also true with respect to the number of *additional* crimes prevented by expanding the prison population where the prison population is small. It is not true, however, where the prison population is large. In that case, fewer crimes will be prevented by a prison expansion if a small group of offenders commits most of the crimes than if offense rates are more uniform.

IV. THREE STRIKES LAWS AND SELECTIVE INCAPACITATION

A. HABITUAL OFFENDER STATUTES AND SELECTIVE INCAPACITATION

Selective incapacitation of high-rate offenders is desirable even if it produces only a modest reduction in the crime rate. Basing selective incapacitation on prior adult convictions is attractive because it avoids many of the ethical problems of relying on factors such as the offender's employment history, education, or prior drug use. Statutes requiring enhanced sentences for habitual offenders can produce selective incapacitation because high-rate offenders are far more likely to fall within the statutes' grasp than low-rate offenders.

Consider, for example, a high-rate offender who commits sixty offenses per year. If the high-rate offender has a 5% chance of apprehension and conviction each time he commits an offense and if each conviction is a "strike," then he will receive a strike, on average, after about four months of street time. A low-rate offender who commits five offenses per year, on the other hand, will receive a strike, on average, once every four years.¹³² A high-rate offender can expect to acquire three strikes after only one year on the street while a low-rate offender will take twelve years of street time to acquire three strikes.

The average criminal career lasts five to ten years.¹³³ A low-rate offender, therefore, will never obtain three strikes unless he is apprehended and convicted

132. If the probability of conviction is five percent, an offender can expect to receive one conviction for every 20 offenses committed. At a crime rate of 60 offenses per year, a high-rate offender can be expected to commit 20 crimes in four months. At a crime rate of five offenses per year, a low-rate offender can be expected to commit 20 crimes in four years.

133. See CRIMINAL CAREERS, *supra* note 87, at 91-94 (describing different studies which estimate the length of criminal careers). The average career is about five years. For repeat offenders who are convicted at age 30, the residual criminal career appears to average around 10 years. See *id.* at 92, 94.

at a higher than average rate or has a longer than average criminal career. A high-rate offender is almost certain to acquire three strikes before retirement unless his criminal career is unusually short or he is especially clever at avoiding conviction.

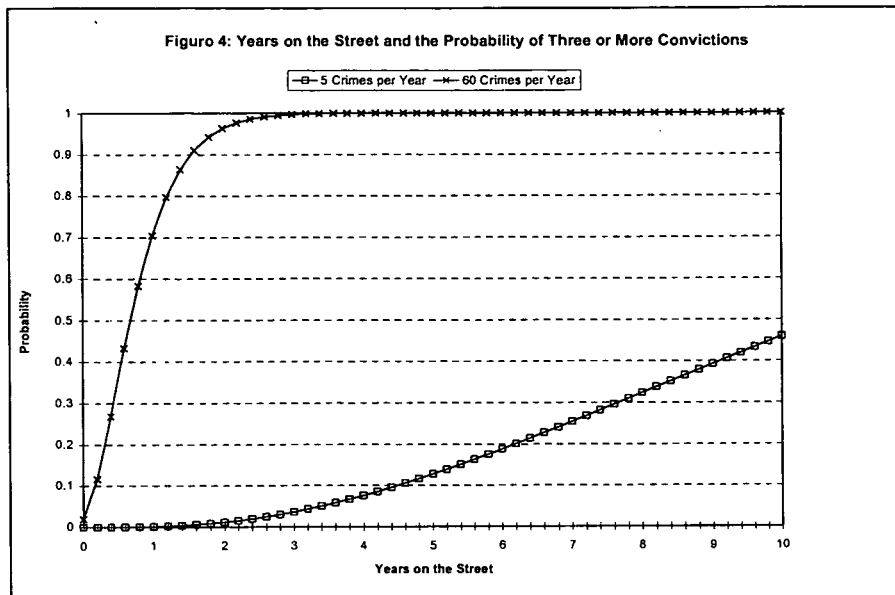
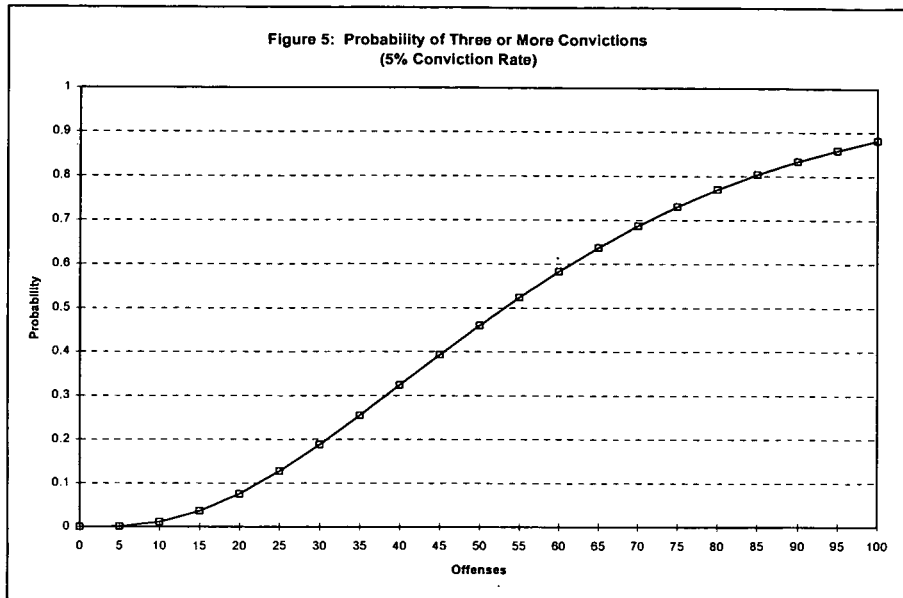


Figure 4 shows the relationship for a 5% conviction rate between the number of years spent on the street and the probability of receiving three or more convictions, for both low-rate offenders who commit five crimes per year and high-rate offenders who commit sixty crimes per year.

At low offense levels, the likelihood of acquiring three convictions rises disproportionately with the number of offenses. An individual who commits twenty offenses during his criminal career has less than an 8% chance of receiving three convictions, while an individual who commits forty offenses has a greater than 32% chance.¹³⁴ Figure 5, which again assumes a 5% conviction rate, illustrates the relationship between the number of offenses and the likelihood of three or more convictions.

There is some merit, then, to the claim by supporters of Three Strikes statutes that these statutes are an effective method of targeting high-rate offenders. The statute must be structured, however, to avoid accidentally bringing low-rate offenders within its grasp. A low-rate offender might be punished under a Three Strikes statute for three reasons: (1) poor luck or skill; (2) an overbroad Three Strikes law; or (3) an unusually long criminally career.

134. Probabilities were calculated using the cumulative binomial distribution function in Microsoft Excel.



1. Poor Luck or Skill.

An offender might be so unlucky or inept that he is convicted often, even though he commits few offenses. Even at a 5% conviction rate, one out of every 8000 offenders will be unlucky enough to be convicted the first three times he commits a crime. A modest increase in the conviction rate will significantly increase the likelihood of multiple convictions. Consider two offenders who each commit twenty burglaries during their criminal careers. Skillful Sally, who has a 2% chance of conviction for each burglary, faces less than a 1% chance of three convictions.¹³⁵ Bungling Bill, on the other hand, who has a 10% chance of conviction, faces a 32% risk of three convictions. Bungling Bill's conviction rate is five times greater than Skillful Sally's, but he is more than forty-five times as likely to fall within the grasp of a Three Strikes law. Unfortunately, drafting an habitual offender statute that will avoid bringing the unlucky or inept low-rate offender within its grasp is difficult.

2. An Overbroad Statute.

Some Three Strikes statutes include as strikes relatively minor crimes, such as petty theft and drug possession. Under such statutes, an individual who is a low-rate offender with respect to serious crimes may be a high-rate offender for purposes of the Three Strikes statute. California, for example, includes residential burglary as a strike and counts *any* felony as a strike for purposes of the third strike. Because petty theft and possession of small amounts of illegal drugs can be charged as a felonies, an individual who commits two burglaries and one

135. The likelihood of three or more convictions is approximately .71%.

petty theft can be sentenced for twenty-five-years-to-life under the California Three Strikes law. The broad scope of the California statute makes it much more likely that nonserious, relatively low-rate offenders will fall within its grasp. A study of offenders sentenced under the California Three Strikes law during its first two years of operation found that more than three-quarters of second strikes and nearly half of third strikes were received for nonviolent and nonserious offenses.¹³⁶ Some of these offenders undoubtedly were still committing more dangerous offenses as well, but others are likely to have retired from serious or violent crime at the time they received their third strike.

3. Offending Over a Long Period.

A low-rate offender who remains active for many years may commit a large number of crimes even though his offense rate is low. An offender who commits five crimes per year, for example, will have a greater than 70% probability of being convicted of three or more offenses if he remains criminally active for fifteen years on the street. Such an offender arguably is as blameworthy as a high-rate offender who has committed the same number of offenses over a shorter period, but incarcerating such a low-rate offender will prevent far fewer crimes per year.¹³⁷ States that include minor offenses as strikes also may sentence older offenders to long prison terms when these offenders no longer pose a significant danger to society. Under the California Three Strikes law, offenders can be sentenced from twenty-five-years-to-life for petty theft or possession of small quantities of drugs, even though they have not been convicted of a serious or violent offense for many years.¹³⁸

One way to help limit Three Strikes laws to high-rate offenders is to require, at least for nonviolent offenses, that all the strikes be committed within a specified period of street time.¹³⁹ Many states have adopted this approach with

136. See *Legislative Analyst's Office: Three Strikes Update*, *supra* note 56, at 2.

137. Incarcerating a long-term, low-rate offender might prevent more crimes than incarcerating a high-rate offender who was about to give up his criminal career. Unfortunately, it is impossible to know how many years an offender has left in his criminal career. The previous length of an individual's criminal career is an uncertain guide to the length of time that he will continue to commit crimes in the future. See *infra* Part V.

138. Consider the facts underlying *People v. Superior Court (Romero)*, in which the California Supreme Court ruled that a judge has the discretionary power to strike to dismiss allegations of prior felony convictions that are being used as a basis for sentencing under the Three Strikes law. 917 P.2d 628 (Cal. 1996). The prosecutor had charged Romero with a third strike for possession of a little more than one-tenth of a gram of cocaine. See *id.* at 631. Romero's two prior strikes were felony convictions received eight and ten years earlier for burglary and attempted burglary. If convicted as a third striker, Romero would have faced a sentence of twenty-five-years-to-life. The trial court, however, used its discretion to dismiss the allegations regarding the prior strikes and sentenced Romero to six years. See *id.* For an in-depth analysis of *Romero* and its significance, see Michael Vitiello, "Three Strikes" and the *Romero* Case: *The Supreme Court Restores Democracy*, 30 LOY. L.A. L. REV. 1643 (1997).

139. The New Jersey Three Strikes law factors in the timing of the third strike which only applies if the third qualifying felony was committed either within 10 years of the most recent prior strike or within 10 years of the offender's last release from confinement. See N.J. STAT. ANN. § 2C:43-7.1(h)(2)(c) (West 1995).

respect to motor vehicle violations. Such a system treats drivers who are convicted of several traffic violations within a short period, typically three to five years, more harshly than drivers who commit the same number of violations over a longer period. Often the punishment for excessive convictions during the specified period is suspension of driving privileges, essentially a form of incapacitation. This approach makes sense. A driver who amasses three speeding tickets over a twenty-year period is not so great a threat to other drivers that he needs to be removed from the roads. But a driver who earns the same number of tickets in a six-month period should be riding the bus.

Crimes that qualify for strikes under most Three Strikes laws are far more serious, of course, than traffic offenses. A criminal convicted of kidnapping or armed robbery for a third time is likely a serious danger to society, even if those offenses occur over two or three decades. But an individual convicted a third time for these violent offenses would be punished harshly even in the absence of a Three Strikes law. Three Strikes laws have their greatest impact in the sentencing of individuals who commit nonviolent offenses. For such offenses, the punishment for a third conviction in the absence of a Three Strikes law would be substantially lower than the twenty-five-years-to-life required by some Three Strikes statutes.¹⁴⁰ If the cost of incarceration is high, a twenty-five-years-to-life sentence for a nonviolent offender is difficult to justify unless the offender would commit crimes at a high rate if not incarcerated.

Three Strikes statutes are designed to incapacitate selectively high-rate offenders of serious crimes. The selectivity of such statutes is compromised if the statutes do not exclude offenses that occurred in the distant past or if the statutes apply to minor offenses.¹⁴¹ This presents a serious problem because the number of low-rate offenders is so large that incarcerating even a small portion of them for terms of twenty years or more imposes a significant burden on the criminal justice system.

B. HIGH-RATE OFFENDERS WITH LOW APPREHENSION RATES

In our earlier numerical examples, we assumed that high-rate and low-rate offenders face the same probability of incarceration each time they commit an offense. Some commentators believe, however, that high-rate offenders are likely to be more skilled, and therefore more difficult to apprehend and convict than low-rate offenders. The Rand model of the California Three Strikes law, for example, assumed that the incarceration rate of high-rate offenders was half the

140. See, e.g., *Romero*, 917 P.2d at 631 (noting that the defendant only could be sentenced to between one and six years for cocaine possession if he were not sentenced as a third striker). See also *supra* note 138 (discussing facts of *Romero* case).

141. One of the factors California prosecutors consider in determining whether to waive prior strikes in the interest of justice is when the prior offense occurred. See *Perry & Dolan*, *supra* note 51 (noting that this factor is used by San Diego prosecutors). How much weight, if any, is given to this factor varies widely, however.

rate of low-rate offenders.¹⁴² In this section, we discuss how a lower incarceration rate for high-rate offenders changes our results.

1. Crimes Prevented Per Inmate.

If high-rate offenders are more difficult to apprehend and convict than low-rate offenders, high-rate offenders will make up a smaller portion of the prison population, and the average number of crimes prevented per inmate will be reduced. As noted earlier, however, whether it is desirable to expand the prison population by lengthening sentences depends not on the average number of crimes prevented per inmate, but on the number of additional crimes that adding an additional inmate will prevent.

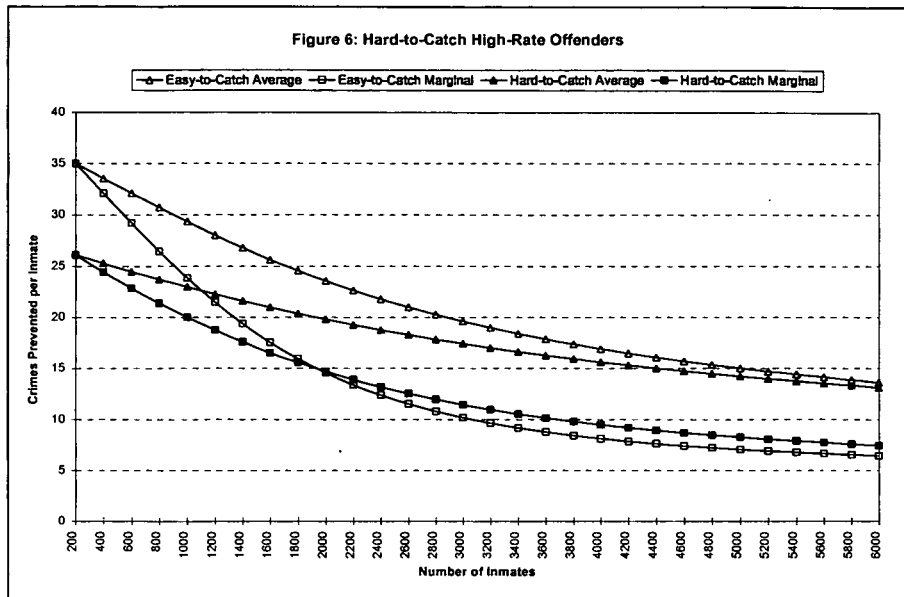
Hard-to-catch high-rate offenders will reduce the crimes prevented by adding an additional inmate when the prison population is small, but will increase the number of crimes prevented by adding an additional inmate when the prison population is large. If high-rate offenders are hard to catch, then such offenders will make-up a smaller portion of the first offenders apprehended. When the prison population is small, therefore, hard to catch high-rate offenders reduce the number of additional crimes prevented by adding an additional inmate.

When the prison population is large, the analysis is more complex. That high-rate offenders are more difficult to catch means that high-rate offenders will make up a larger portion of the offenders who remain on the street, increasing the likelihood that newly incarcerated inmates will be high-rate offenders. If the prison population is large, the greater concentration of high-rate offenders remaining on the street may more than offset the lower incarceration rate for such offenders.¹⁴³ This phenomenon is illustrated by Figure 6.

Figure 6 shows the impact of hard-to-catch high-rate offenders on the average and marginal number of crimes prevented per inmate, using the numerical example developed in Parts III and IV. Again, there are 9000 low-rate offenders, each with an offense rate of five crimes per year, and 1000 high-rate offenders, each with an offense rate of sixty crimes per year. In the example in Part III, high-rate and low-rate offenders each faced a 5% chance per crime of incarceration. Figure 6 compares that case with the case where high-rate offenders face only a 2.5% chance of incarceration. For any size prison population the average number of crimes prevented per inmate is greater if high-rate offenders are easy to catch than if high-rate offenders are hard to catch. The marginal number of crimes prevented per inmate, on the other hand, is greater if high-rate inmates are easy to catch only if the inmate population is less than about 2000 inmates.

142. See GREENWOOD ET AL., *supra* note 99, at 55 tbl.D3.

143. The reasoning here is similar to that in Part III, where we demonstrated that if a small number of offenders committed most of the offenses, then the average number of crimes prevented per inmate would increase, but the effect on the marginal number of crimes prevented was unclear.



2. Selective Incapacitation.

Hard-to-catch high-rate offenders undermine the ability of Three Strikes laws to provide effective selective incapacitation. If high-rate offenders are difficult to apprehend, they are less likely to acquire the multiple convictions required to fall within the ambit of Three Strikes. Indeed, if the incarceration rate is inversely proportional to the offense rate, then high-rate and low-rate offenders will be equally likely to be convicted of three strikes.

V. INCAPACITATION AND CRIMINAL CAREERS

The analysis up to this point has assumed that an offender's criminal activity will continue indefinitely. In fact, most offenders are only active for a relatively short period during their youth. The average career of an active offender is estimated to last between five and ten years.¹⁴⁴ The peak ages for criminal activity are the late teens and early twenties.¹⁴⁵ Only a small portion of offenders continue to commit offenses after the age of forty.¹⁴⁶ Concluding that an offender who is still committing offenses at the age of thirty-five must be near the end of his criminal career, however, would be wrong. That he has

144. See SPELMAN, *supra* note 82, at 14 (noting this is the most common estimate for the average adult offender).

145. See, e.g., Blumstein, *supra* note 27, at 392 (stating that crime rates are extremely age-sensitive, with the peak activity occurring in the late teen years); HILL, *supra* note 77 (reporting that official police records and national survey data indicate that the vast majority of offenders are teenagers and men in their twenties). Criminal activity declines sharply for offenders in their thirties. See *id.*

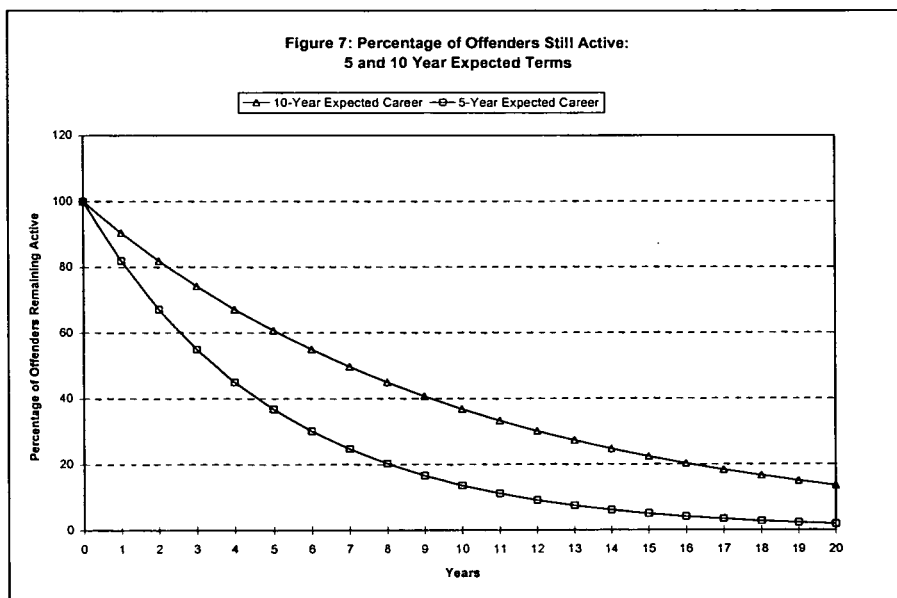
146. See HILL, *supra* note 77; see also Blumstein, *supra* note 27, at 392-93 (describing sharp drop in crime rates for older offenders).

remained an offender at such a relatively late age suggests that he finds criminal activity particularly attractive. The expected residual criminal career of older offenders is likely to be at least as long as that of younger offenders.¹⁴⁷ The markedly lower crime rate of older men arises largely because retiring offenders are not replaced by new offenders of the same age.¹⁴⁸ Few individuals commit their first offense in middle-age.

It is not unreasonable, therefore, to model the retirement of offenders as an exponential decay, where a fixed percentage of the remaining offender group retires each year. This is shown by Equation 6.

$$P(t) = P(0)e^{-kt} \quad (6)$$

where $P(t)$ is the population of offenders in year t , $P(0)$ is the original population of offenders, and k is the annual rate of retirement. The annual rate of retirement is .2 if the average criminal career length is five years. The annual rate of retirement is .1 if the average criminal career length is ten years. Figure 7 shows the portion of an original cohort of offenders who will remain active after a period of years.



Offender retirement significantly reduces the number of crimes that incapacitation prevents because retired inmates would not be committing crimes if they

147. See *CRIMINAL CAREERS*, *supra* note 87, at 92-94 (noting that the mean residual career is longest for those "persisters" who started offending at age 18 and are still active offenders at age 30). The residual career does decline for such offenders at around age 41. See *id.* at 92.

148. See Blumstein, *supra* note 27, at 409 (noting the rate at which offenders retire increases appreciably once they have passed the early forties).

were on the street. If an inmate is no longer an active offender, then his imprisonment does not prevent any crimes through incapacitation. The incapacitation effect of any prison term, then, must be reduced by the portion of the term served after which the prisoner is no longer an active offender. This wasted portion will depend on the length of the prison term and the average length of a criminal's career, as Table 2 illustrates. For an inmate serving an extremely long

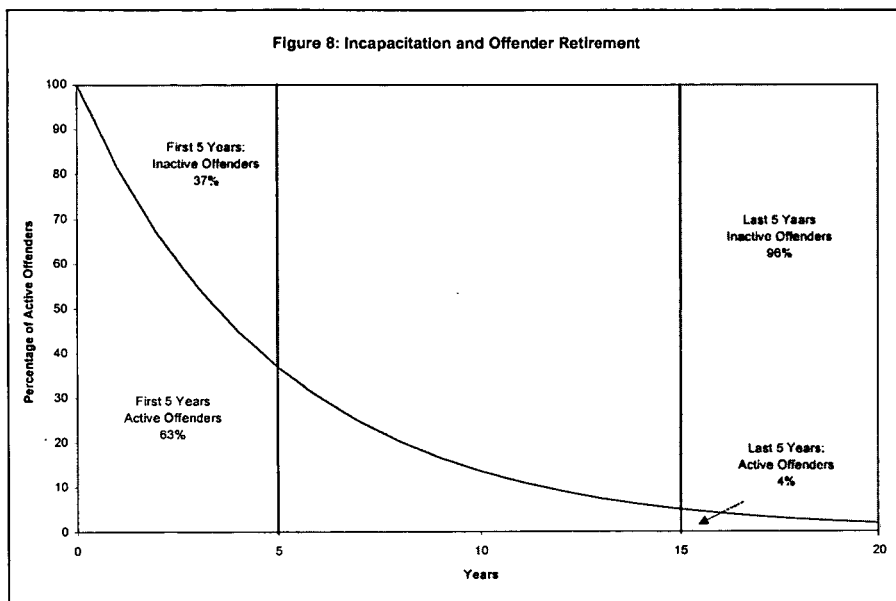
TABLE 2

<i>Prison Term</i>	<i>Portion of the Sentence where Inmate is No Longer an Active Offender</i>	
	<i>5-year career length</i>	<i>10-year career length.</i>
1 year	9%	5%
2 years	18%	9%
3 years	25%	14%
4 years	31%	18%
5 years	37%	21%
10 years	57%	37%
15 years	68%	48%
20 years	75%	57%

sentence, the last years in prison are likely wasted because the inmate would no longer be an active offender if released. This substantially reduces the incapacitation effect of Three Strikes laws. Under California law, an offender who commits a third strike must serve a minimum sentence of twenty years.¹⁴⁹ Even if the expected length of a criminal career is five years, only 4% of the inmates serving twenty-year sentences would still be active offenders if released in the last five years of their sentences. If the expected length of a criminal career is ten years, less than 18% of the inmates serving twenty-year sentences would still be active offenders in the last five years of their sentences. During the first few years of their prison sentences, on the other hand, most inmates would be active offenders if released. For the first five years of a prison term, for example, 63% of the inmates serving twenty-year sentences are active offenders if the expected criminal career length is five years.

Figure 8 shows the declining incapacitation effect of prison if the average offender is active for five years. The unshaded area below the curve shows the portion of prison time that provides effective incapacitation, while the shaded area above the curve shows the portion of prison time that is wasted because the inmate would no longer be an active offender if released. In this example, the first five years prevents fifteen times more crimes than the last five years of a twenty-year sentence. Sentencing repeat nonviolent offenders to long prison terms, therefore, is likely to be an inefficient use of prison space.

149. The mandatory minimum sentence is 25 years to life. See CAL. PENAL CODE § 667(e)(2) (West Supp. 1997). The offender must serve at least 80% of the sentence. See *id.* § 667.5(c)(5).



The declining incapacitation effect of prison does not preclude justifying long prison sentences on the grounds of incapacitation. Some offenders may have committed crimes so heinous that even a small risk of repetition is unacceptable. Other offenders may have characteristics that suggest that they are particularly likely to continue to commit crimes if released. Lengthy incarceration might also be justified for retribution or on deterrence grounds. Nevertheless, the high likelihood that the last years of a long sentence will be served by inmates who are no longer active offenders suggests that statutes that automatically assign such sentences to offenders with multiple convictions of serious but nonviolent crimes are unlikely to make the best use of scarce prison space.

CONCLUSION

Supporters of Three Strikes laws argue that a small group of high-rate offenders commit most of the serious crimes and that Three Strikes laws can significantly reduce the crime rate by incapacitating such offenders. But most high-rate offenders will spend the bulk of their criminal careers in prison even if the prison term is modest and the apprehension rate is low. Because most high-rate offenders are already imprisoned for most of their criminal careers, only a modest reduction in crime can be achieved by incarcerating them for longer terms. Moreover, offender retirement may reduce sharply the incapacitation effect of long-term incarceration. If the five-to-ten-year estimates of the length of the average criminal career are accurate, the last years of long prison sentences will prevent few crimes because most of the inmates serving such sentences would no longer be active offenders if released.