



Three Strikes in California

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1. Introduction

Criminal sentences resulting in admission to a California state prison are determined by both the nature of the criminal incident as well as the criminal history of the person convicted of the offense. Cases with convictions for multiple offenses may lead to multiple sentences that are either served concurrently or consecutively. Characteristics of the offense (such as the use of a firearm) or aspects of the person's criminal history (such as a prior conviction for a serious or violent offense) may add to the length of the base sentence through what are commonly referred to as offense or case enhancements, respectively.

California's Three-Strikes law presents a unique form of sentence enhancement that lengthens sentences based on an individual's criminal history. Consider an individual with one prior serious or violent felony conviction (one "strike") who is subsequently convicted of another felony. Under Three Strikes, the sentence for the subsequent felony will be double the length specified for the crime regardless of whether the new conviction is for a serious or violent offense. For an individual with two prior violent or serious felony convictions, a third conviction for a serious or violent felony would receive an indeterminate prison term of at least 25 years to life, with the exact date of release determined by the Parole Board.

KEY TERMS AND DEFINITIONS

An individual may receive a **strike** from a serious or violent conviction. In this paper, we describe Three-Strikes sentencing using three mutually exclusive groups:

- **Without Strike Enhancement:** Individual does not receive strike enhancements for a particular sentence, but may have received other case or offense enhancements.
- **Doubled-Sentence Enhancement:** Individual with prior strike(s) receives a doubled-sentence for subsequent felony conviction (commonly referred to as a "second strike").
- **Third-Strike Enhancement:** Individual with two prior strikes receives a minimum term of 25 years to life for subsequent serious/violent felony conviction.

Unless otherwise specified, results are presented in terms of unique admissions. If a person is admitted on multiple felonies that receive both a doubled-sentence and third-strike enhancement, the admission will be characterized as a third-strike enhancement.

California is one of 24 states, along with the federal government, that enacted some form of Three-Strikes sentencing in the 1990s. California's law, enacted in 1994, contains the most severe sentence enhancements, applies to a particularly broad group of felonies, and has been used more extensively in sentencing criminal cases than in any other state (Chen 2008). California's law is also unique in that the doubled-sentence enhancement can be applied to all felonies, not just those classified as serious or violent.

The majority of people admitted to prison in California do not receive enhancements under the Three-Strikes law, and third-strike enhancements occur at a much lower rate currently than in the past.¹ Prison admissions with a doubled-sentence enhancement make up only 28% of people who are currently incarcerated, but often the offense that led to enhanced sentencing is not a serious or violent felony. Moreover, while accounting for a very small percent of the people admitted to state prison each year, people with third-strike enhancements account for a much larger percent of the currently incarcerated prison population given their lengthy sentence, and an even larger proportion of people serving very long sentences (defined as 20 or more years). Many people currently serving third-strike sentences received their third strike during the 1990s and early 2000s, with around 1,400 individuals receiving a life term for a non-serious, non-violent offense.

In this report, we document the frequency of enhancements under the state's Three-Strikes law among two samples: (1) people admitted to state prison since 2015, and (2) people who are incarcerated in state prison as of January 2022. We compare the characteristics of those whose sentences are lengthened by provisions of Three Strikes to those without strike enhancements, including comparisons of demographics, offense characteristics, age-at-admission to prison, total time served, mental health level of care, and assessed risk of committing a new offense. We explore the offenses that most frequently generate either a doubled-sentence or a 25-to-life indeterminate sentence and the precise manner by which these enhancements lengthen prison sentences. We analyze variation across counties in the rate at which people are admitted to prison with a strike enhancement, benchmarking admission rates against the level of felony arrests in the county. Finally, we present a review of the scholarly research evaluating the effects of Three Strikes on crime rates.

¹ As we will discuss below, the passage of Proposition 36 in 2012 narrowed the applicability of the third-strike sentence, contributing to the decline in third-strike enhanced sentences.

KEY FINDINGS

- **Three-Strikes enhancements affect a large share of the currently incarcerated prison population, but a smaller share of admissions to prison.** Less than one-third of prison admissions since 2015 involve a strike enhancement, with most receiving a doubled-sentence enhancement and a smaller percentage receiving a third-strike enhancement. At a given point in time however, individuals with strike enhancements constitute a larger proportion of the incarcerated population because they serve longer sentences
- **Nearly 65% of admissions to prison with a doubled-sentence enhancement are for a non-violent, non-serious offense.**
- **Given the longer sentences imposed for serious or violent offenses, the reverse is true for people currently incarcerated: approximately 71% of those with doubled-sentence enhancements were convicted of a serious or violent offense.**
- **Black individuals are heavily over-represented among people serving sentences with third-strike enhancements, and to a lesser degree, with doubled-sentence enhancements.** Overrepresentation exists relative to the racial/ethnic composition of the prison population, and overwhelmingly relative to the racial/ethnic composition of the resident population of California.
- **Judicial and prosecutorial discretion can mitigate the severity of strike enhancements.** The data suggests that judges and prosecutors may mitigate the severity of doubled-sentence enhancements by choosing (or accepting) lower sentence length options, but the effect of discretion on overall sentence length is modest.
- **The use of strike enhancements varies widely across counties.** While third-strike sentences are considerably more rare today than in past years and the ordering across counties has changed over time, high-use and low-use counties documented in the early 2000s are largely similar in terms of rank today.
- **The implementation of Three Strikes does not explain statewide declines in crime over time.** Early evaluations claiming large impacts on crime fail to account for national crime trends and also suffer from methodological flaws. More recent research suggests that Three Strikes may have a modest deterrent effect on relatively less serious crime, but likely does not account for the declines in California's crime rates beginning in the mid-1990s. Crime fell contemporaneously throughout the nation, and comparisons of crime trends in California to states that did not pass Three-Strikes laws reveal very similar trends over the subsequent two decades.

2. The History and Evolution of Three Strikes in California

California's Three-Strikes law was enacted in 1994 through both an act of the state legislature (passed in March 1994) as well as through the passage by California voters of a state proposition (passed in November 1994). California was one of many states in the early and mid-1990s that passed Three-Strikes legislation targeting people who habitually offend, drawing upon a baseball metaphor suggesting that three serious/violent felony convictions represented a sufficient number of failed chances to justify permanent (or near permanent) removal from non-institutional society (Shichor 1997, Chen 2008). The enactment of Three-Strikes laws across the country represented a continuation of a wave of state and federal legislation passed during the 1980s and 1990s that emphasized stiffer sentencing with the aim of increasing deterrence and incapacitation. Several researchers as well as a consensus report by the National Academies of Sciences conclude that this wave of legislation was largely responsible for the near five-fold increase in the nation's prison incarceration rate from the late 1970s through the early 2000s (Blumstein and Beck 1999; Raphael and Stoll 2013, National Research Council 2014). California's incarceration rate increased in lock-step with the national rate from the late 1970s through the mid-2000s.

Other legislation with similar intent that preceded or occurred concurrently with the wave of Three-Strikes laws include the passage of state truth-in-sentencing laws requiring people to serve minimum percentages of their sentences, the introduction of mandatory minimum sentences for specific offenses, the increased use of case and offense enhancements based on criminal history and aggravating circumstances, and a diminished role for parole boards in determining release decisions for individuals sentenced to state or federal prison.

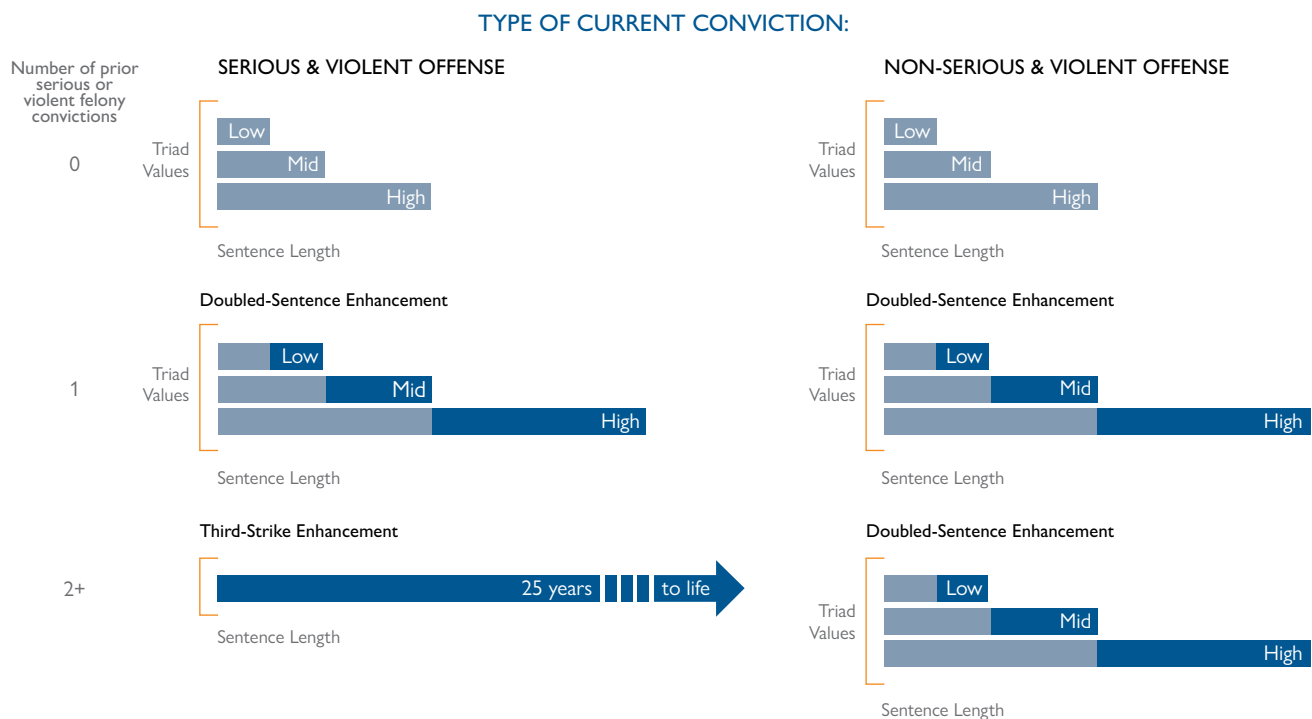
California's Three-Strikes law mandates lengthier sentences for new felonies for people with prior convictions for a serious or violent felony (Couzens and Bigelow 2017). Serious or violent offenses are defined in sections 1192.7(c) (the section of the penal code altered by the state proposition) and 667.5(c) (the section altered by the legislature) of the California Penal Code, respectively.² Prior serious or violent felony convictions count as individual strikes on a person's criminal history. In addition, certain convictions for offenses committed as a juvenile as well as offenses committed in other states may count as prior strikes for the purposes of sentencing in California criminal courts.

2 A list of felony offenses deemed violent under section 667.5 (c) of the penal code can be viewed here, https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=PEN§ionNum=667.5. A list of felony offenses that constitute serious offenses under section 1192.7(c) can be viewed here https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=PEN§ionNum=1192.7. A review of both lists reveals a fair degree of overlap across the two lists, the broad inclusion of most felony offenses committed against a person (e.g., murder, attempted murder, rape, robbery, assault with grave bodily injury, carjacking), and some notable property offenses such as first-degree burglary.

California's Three-Strikes Law in Practice

Simply put, there are two scenarios in which someone can receive the doubled-sentence enhancement (Figure 1). First, individuals with one prior conviction for a serious or violent offense who are convicted of any new felony receive double the sentence that they otherwise would receive for the new offense. This doubling occurs regardless of whether the new offense is among the serious or violent offenses in the penal code. Second, individuals with two prior serious or violent convictions who are convicted of a new, non-serious, non-violent felony offense also receive a sentence that is double the length prescribed by the penal code. In contrast, to receive the third-strike enhancement, individuals with two prior serious or violent offenses must be convicted of a third serious or violent offense. These individuals are sentenced to an indeterminate sentence of 25 years to life. Individuals receiving an enhancement due to prior strikes must serve their time in a state prison.

FIGURE 1. Illustrative Example of Sentence Length Based on Current Conviction Type and Prior Conviction History



Note. This simplified visualization depicts how Three-Strikes enhancements affect sentence lengths for a single felony. As noted, individuals can be convicted on multiple felonies, with different attached strike enhancements, in a single sentence. In addition, sentences for each felony can be served either concurrently or consecutively.

Several additional factors compound the effects of Three Strikes on sentence length. Doubled-sentence and third-strike enhancements can apply to multiple felonies within a single sentence. Enhancements specified under Three Strikes can greatly increase the prison sentence length if they are applied consecutively.

With some exceptions,³ the Three-Strikes law requires consecutive sentencing when there are multiple felonies (Brown and Jolivet 2005). While not all sentences involving multiple felonies and strike enhancements require consecutive sentencing, multiple felonies with strike-enhanced sentences are more likely to receive consecutive sentences than cases that do not involve strike enhancements.

Sentencing credits are another factor that determine an individual's length of stay in prison. Eligible individuals can earn time off their sentence through good behavior or participation in rehabilitative and educational programming. People who were sentenced under the Three-Strikes law were limited in the number of credits they were allowed to earn, which increased the amount of time they served relative to the general population. This was changed with the passage of Proposition 57 in 2016, which empowers CDCR to make its own credit rules. Credit earning no longer depends on one's strike status. As of March 2022, the credit-earning rate is 33% for individuals serving a sentence for a violent offense and 50% for individuals serving a sentence for a non-violent offense.⁴

Among state-level Three-Strikes laws, California's initial law was unique in mandating a third-strike enhancement and doubled-sentence enhancement for any felony (Sutton 2013).⁵ A 2005 report by the California Legislative Analyst's Office (LAO) found that 46% of individuals serving third-strike sentences at that time had been convicted of non-serious, non-violent felonies (Brown and Jolivet 2005).

3 Consecutive sentencing is not applied if the felony offenses are committed on the "same occasion" or had the "same set of operative facts." Judges also have the power to dismiss individual strike allegations, affording the courts greater flexibility. See Penal Code § 1385, and *People v. Superior Court (Romero)*, 13 Cal. 4th 497(1996).

4 See additional information about CDCR's credit-earning policies here: <https://prisonlaw.com/wp-content/uploads/2022/03/Time-Credits-in-CDCR-March-2022.pdf>.

5 An additional example of the particularly punitive nature of California Three-Strikes law concerns the fact it is possible to receive multiple strikes from a single criminal case. For example, the 1997 case *People v. Fuhrman*, resulted in two qualified strikes from the same court proceeding that were sentenced to consecutive terms (Brown and Jolivet 2005). The individual initially committed vehicle theft, and later that day, bank robbery, and received two strikes.

California's Sentencing Reforms

California's Three-Strikes law has changed since its initial inception. Proposition 36, passed in 2012, narrowed the application of third-strike sentences to convictions only for new serious or violent offenses, with some exceptions permitted.⁶ In addition, Proposition 36 also included a provision for the possible resentencing of individuals serving third-strike sentences for non-serious, non-violent offenses committed prior to 2012 (Couzens and Bigelow 2017). There are over a thousand such people sentenced prior to 2012 who are currently incarcerated in California prisons who were either not eligible for resentencing, or did not go through the resentencing process.⁷

Three-Strikes enhancements also interact with more recent reforms such as the Public Safety Realignment Act (AB109) that divert some individuals with convictions for less serious offenses to county jails rather than state prisons. As we noted, a new felony conviction after a first serious/violent conviction requires a prison term. As a result, individuals sentenced for a non-serious/non-violent felony who would have been sentenced to a county jail under AB 109 must instead serve their time in state prison if they have a prior strike.⁸ This implies that the application of doubled-sentence enhancements is likely limiting the prison-reducing effects of Realignment.

Judicial & Prosecutorial Discretion

There are several mechanisms through which judges and prosecutors can exercise discretion in the application of a strike-enhanced sentence. While the original intent of the law was to limit prosecutorial and judicial discretion, the law includes provisions for prosecutors to dismiss prior strikes “in the furtherance of justice,” and a state Supreme Court ruling granted similar discretion to judges. Moreover, even after an individual is convicted with an offense eligible for a doubled-sentence or third-strike enhancement, the prosecutor has discretion to petition the court to dismiss validated strikes when the strike sentencing is perceived to be too severe (Walsh 2004). The use of such petitions may reflect strategic behavior on the part of prosecutors during plea bargaining, or in some instances concerns that an enhanced sentence would be too severe.

6 For people with two prior serious/violent offenses who are convicted for a new incident involving multiple new felonies, only the serious/violent convictions receive the 25-year-to-life sentence. All felonies not deemed serious/violent are sentenced with the doubled-sentence enhancements — i.e., a doubling of the prescribed sentence length.

7 The passage of Proposition 57 in 2016 introduced additional reforms that may impact the release of a subset of people currently serving third-strike, 25-to-life sentences. Proposition 57 creates an administrative parole review for individuals convicted of non-violent offenses (as defined in section 667.5(c) of the penal code) for release once the full term for the felony conviction with the lengthiest sentence has been served. For people with third-strike sentences for offenses not specified in this section of the penal code, the proposition created the possibility of an early release once the high term of the felony conviction with the lengthiest sentence has been completed - not the minimum 25 years originally imposed. Initial regulations excluded indeterminate sentences from eligibility for parole review under Proposition 57. Following litigation and a decision by the Second District Court of Appeals in 2018, the regulations were changed to include people serving an indeterminate sentence for a non-violent offense. See <https://www.cdcr.ca.gov/blog/proposition-57-indeterminately-sentenced-third-striker-nonviolent-parole-process-frequently-asked-questions/>

8 See Penal Code § 1170(h)(3).

An early salient example of prosecutorial discretion in the application of Three Strikes is evident in a December 2000 special directive issued by then Los Angeles County District Attorney, Steven Cooley.⁹ The directive narrowed the range of cases that would constitute presumptive Three-Strikes cases to those where the third strike was a serious/violent felony and where the two priors were substantially severe offenses. The policy document also articulated a narrower application of doubled-sentence enhancements and advised line prosecutors to avoid the use of potential strike enhancements in coercive plea bargaining. Much of the content of this directive eventually became statewide law with the passage of Proposition 36 in 2012, though Proposition 36 did not alter the doubling of sentences for prior strike(s). While the Los Angeles District Attorney was ahead of state policy by more than a decade, a journalistic account of Three Strikes in practice indicated that other prosecutors in the state also exercised discretion in the application of Three Strikes.¹⁰ A survey of prosecutors in the early 2000s suggests that similar discretion was being exercised in 25 to 45% of cases (Walsh 2004).

Judges may also exercise discretion in doubled-sentence enhancements. Each felony carrying a determinate sentence in California has a prescribed sentencing triad, with specific lower, middle, and upper values. For example, someone convicted of one count of felony second-degree burglary with no prior serious or violent convictions could face a lower sentence of 16 months, a middle sentence of two years, or a maximum sentence of three years (i.e., the triad values for second degree burglary). The judge hearing the case has discretion in selecting either the lower, middle, or upper sanctions of the sentencing triad. Someone convicted of a single count of this offense with a serious or violent prior conviction must be sentenced to double the prescribed sentencing triad values. In this example, that would constitute prison terms of either 32 months, four years, or six years. Judges attempting to dampen the effect of this enhancement may be more likely to opt for the lower or middle sanctions, knowing that the doubled-sentence enhancement will be applied.

Given the discretion afforded in the application of strike enhancements, it is not surprising that researchers have documented variation across counties in the application of Three Strikes. Brown and Jolivet (2005) find that in 2004 the rate of people incarcerated with strike enhancements per 100,000 felony arrests ranged from lows of 113 and 332 in San Francisco and Alameda counties, respectively, to highs of 1,357 and 1,518 in San Diego and Kern counties, respectively. It is also likely that strike enhancements vary within counties by the judges assigned to the case as well as by the policies set by the elected prosecutor and the specific deputy district attorney prosecuting the case.

⁹ See LA County District Attorney's Office Special Directive 00-02 issued on December 19, 2000 here, <https://web.archive.org/web/20030303211049/http://da.co.la.ca.us/3strikes.htm#directive>.

¹⁰ See Bazelon, Emily, "Arguing Three Strikes," *New York Times Magazine*, May 21, 2010, <https://www.nytimes.com/2010/05/23/magazine/23strikes-t.html>.

3. The Application of Three-Strikes Sentencing in California

California's Three-Strikes law is now nearly three decades old. Initial assessments in 1994 by the LAO of the likely impact of Three Strikes on the state's prison population predicted that the new law would add more than 100,000 incarcerated individuals to the state's prison population. While an increase of this magnitude did not materialize, perhaps due to the discretion afforded to judges and prosecutors, over one-third of individuals who are currently incarcerated are serving longer sentences as a result of Three Strikes and it is likely that several hundred thousand prison terms have been lengthened since the introduction of Three Strikes.

In this section, we analyze administrative data from CDCR on the incarcerated population in January 2022 (the "current prison population") as well as data for all people admitted to a state prison since 2015 (the "flow into prison") to characterize the impact of Three Strikes on prison sentences in California.¹¹ We use the data to answer the following questions:

- How frequently are sentences enhanced by Three Strikes?
- How does Three-Strike sentencing impact sentence length in practice?
- Who is most impacted by Three-Strike sentencing?
- How consistently is Three-Strike sentencing applied across counties?

A. How frequently are sentences enhanced by Three Strikes?

There are several ways to characterize the relative magnitude of prison sentences enhanced by Three Strikes. One possibility would be to tabulate the percent of people admitted to prison over a given time period, such as a year, that receive enhanced sentences under the law. An alternative would be to calculate the percent of the prison population at a given point in time whose current sentence was lengthened by either a doubled-sentence or third-strike enhancement (and in some instances by both).

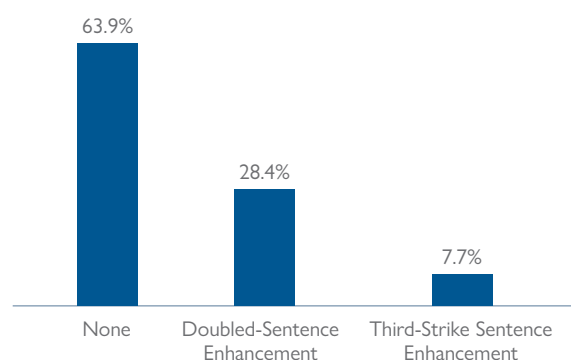
¹¹ The current prison population may be affected by the expedited release policies CDCR enacted to increase physical distancing and reduce the transmission of Covid-19. Similarly, both the current population and the flow may be impacted by changes in law enforcement and prosecution policies in response to the Covid-19 pandemic and subsequent statewide shelter-in-place order that took effect on March 19, 2020. Additional information about CDCR's expedited release policies in response to Covid-19 can be found here: <https://www.cdcr.ca.gov/covid19/frequently-asked-questions-expedited-releases/>.

Since the prison population at a given point in time will be disproportionately composed of people serving long sentences, the percent with strike enhancements among the currently incarcerated will be greater than the percent of people admitted to prison over a given time period that are subject to strike enhancements.¹²

Our analysis of administrative data from CDCR confirms this. We grouped all individuals incarcerated in January 2022 into three mutually exclusive groups: (1) those without strike enhancements, (2) those with at least one doubled-sentence enhancement but no third-strike enhancement¹³, and (3) those with at least one third-strike enhancement, who may also have a doubled-sentence enhancement.¹⁴ We then examine the prevalence of strike enhancements among the currently incarcerated and among individuals admitted to prison since 2015.

Figure 2 presents the distribution of the currently incarcerated across these three groups, while Figure 3 presents the distribution across these three groups for all prison admissions from January 2015 to January 2022.

FIGURE 2: Percent of People Incarcerated in California in Jan. 2022 Without Strike Enhancements, a Doubled-Sentence Enhancement Only, and a Third-Strike Enhancement

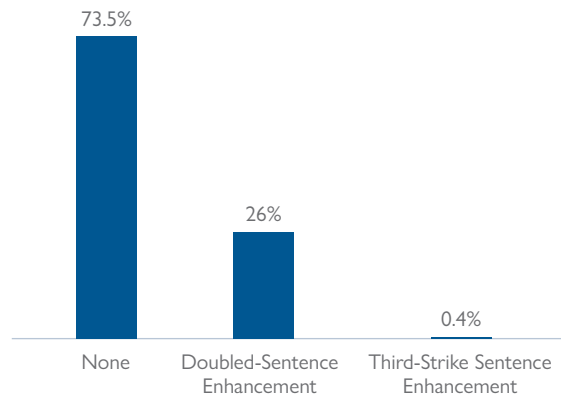


12 This distinction is essentially the difference between the prevalence of a given characteristic among a population (the proportion of a population with a given condition) and the incidence of a given characteristic (the rate at which persons develop the condition).

13 Note, many people who have their sentence doubled technically do not have two prior strikes as a result of the second conviction. Since doubling can be applied to any subsequent conviction for someone with one prior, many individuals receive doubled-sentence enhancements without actually acquiring their second strike.

14 Recall that people with third-strike sentences of 25-to-life for a third serious or violent felony may still have to serve additional doubled-sentence enhancements for other felonies associated with the incident.

FIGURE 3: Percent of Admissions Since 2015 Without Strike Enhancements, a Doubled- Sentence Enhancement Only, and a Third Strike Enhancement



Approximately 36% of people incarcerated in January 2022 were serving a sentence enhanced by Three Strikes, with 28.4% (around 28,000 individuals) serving a term enhanced by a doubled-sentence and 7.7% (around 7,500 individuals) serving a term enhanced by a third strike. In contrast, 26.4% of admissions to prison since 2015 (around 58,000 admissions) carried a longer sentence due to a strike enhancement, with 26% given a doubled-sentence enhancement, and less than half of a percentage point of admissions (around 1,000 admissions) carrying a third-strike enhancement. [Figures 2 and 3](#) reveal the relative importance of lengthy sentences in determining the state's incarceration rate. While only 0.4% of admissions since 2015 carry a third-strike sentence, individuals with third-strike enhancements account for 7.7% of the currently incarcerated population in January 2022, a number 19 times greater.

[Figure 4](#) shows the current prison population and prison admissions with a doubled-sentence enhancement, broken down by whether the strike-enhanced felony is a serious or violent offense. Recall that doubled-sentence enhancements may be applied to all new felonies for those with at least one prior serious or violent offense regardless of whether the current offense is serious or violent. [Figure 4](#) shows that 29% of people serving doubled-sentence enhancements in January 2022 (about 8,100 individuals) had a strike enhancement for a non-serious, non-violent offense. In contrast, 71% (about 19,900 individuals) of people serving doubled-sentence enhancements had a strike enhancement for a serious or violent offense.

Figure 4 presents the comparable calculations for all admissions since 2015: 65% of admissions in the doubled-sentence group received the strike enhancement for a non-serious, non-violent offense (around 36,700 admissions), while the remaining 35% of admissions in the doubled-sentence group received the strike enhancement for a serious or violent offense (around 20,100 admissions). In other words, while most incarcerated individuals with a doubled-sentence enhancement at a given point in time are currently serving their sentence for a strike-enhanced serious or violent offense, most admissions that are serving a doubled-sentence enhancement are for non-serious, non-violent offenses. This difference reflects the relatively longer sentences for serious or violent felonies and the fact that a prison population at a given point in time will be disproportionately composed of people who are sentenced to longer terms.¹⁵

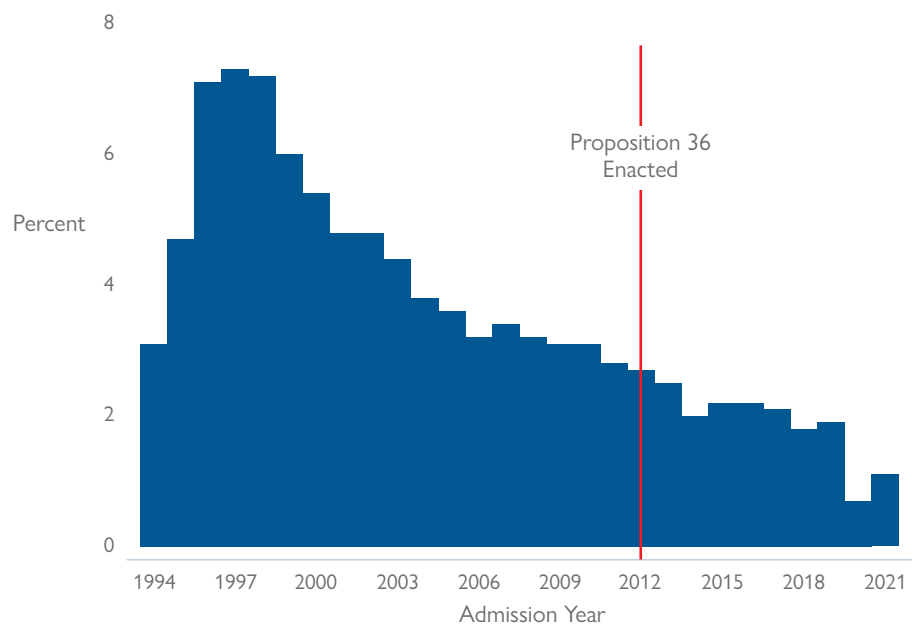
FIGURE 4: Percent of Individuals Incarcerated with a Doubled-Sentence Enhancement by whether the Strike Enhancement is for a Serious/Violent Offense



¹⁵ Note, the passage of Proposition 57 (2016) may shorten the prison terms for some of the individuals who receive doubled-sentence enhancements. Specifically, the proposition permits consideration for early release for those convicted of non-violent and non-serious offenses once the person has served the non-doubled triad value sanctioned.

Figure 5 shows the distribution of people incarcerated in January 2022 who are serving time on third-strike sentences by the year that they received the sentence. Around 62% of people currently serving time on a third-strike enhancement (around 4,700 individuals) were convicted prior to 2006, reflecting the very long sentences associated with a third strike as well as the lower likelihood of receiving a third-strike enhancement since the passage of Proposition 36.

FIGURE 5: Distribution of Currently Incarcerated Individuals with a Third-Strike Enhancement by the Year the Sentence was Imposed



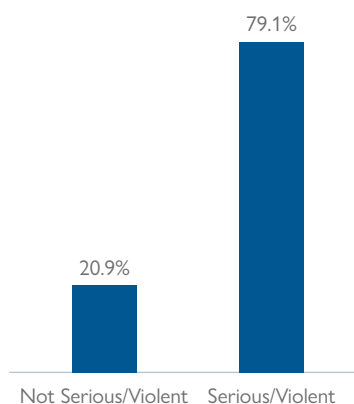
Note: Roughly 7,500 people are serving sentences with third-strike enhancements in January 2022.

Prior to November 2012, individuals with two prior serious or violent convictions could receive a third-strike enhancement for any new felony. Proposition 36 narrowed the application of the 25-to-life sentences to those convicted of a new serious or violent offense, with exceptions based on current offense or criminal history. In brief, persons convicted of a non-serious or non-violent offense may still receive a 25-to-life sentence if (1) the current felony conviction is for a specified controlled substance, sex offense, or weapon offense or (2) the prior conviction is for a specified sexual, violent, homicide, or weapon offense. While Proposition 36 included a provision for resentencing, such resentencing is not automatic and requires legal action on behalf of the incarcerated individual.

Individuals sentenced with a traditional third-strike sentence for a non-violent or non-serious offense may be denied their resentencing request if the court determines resentencing would “pose an unreasonable risk of danger to public safety.”¹⁶ As of 2022, around 3,200 individuals have been released under the reform.¹⁷

Figure 6 shows that 79% of people incarcerated as of January 2022 received a third-strike sentence for a third serious or violent offense (around 6,000 individuals), with 21% receiving the third-strike sentence for a non-serious, non-violent offense (around 1,600 individuals). Figure 7 stratifies the population into those convicted for the third strike before and after the passage of Proposition 36. Roughly 23% of individuals currently incarcerated on a third-strike enhancement who were sentenced prior to the passage of Proposition 36 received their sentence for a non-violent, non-serious offense (around 1,500 individuals). For those convicted after Proposition 36, this declines to 9% (around 100 individuals).

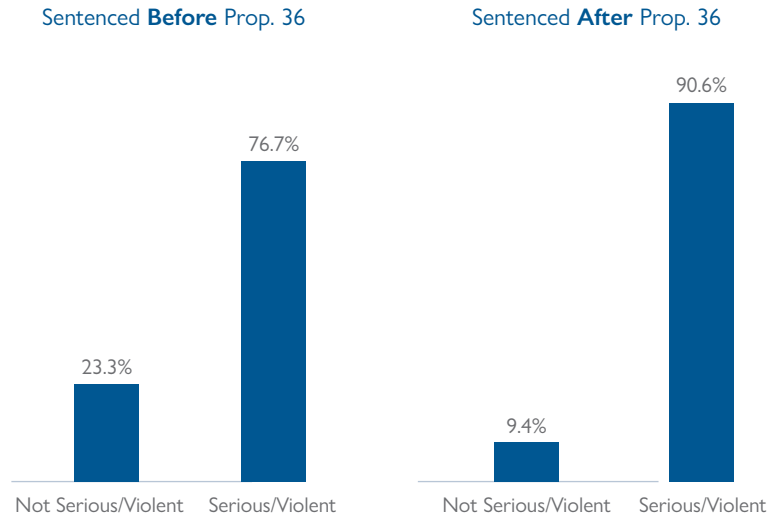
FIGURE 6: Distribution of People Currently Incarcerated with Third-Strike Sentences by Whether the Strike Enhancement is for a Serious or Violent Conviction



16 Additional details on Proposition 36 eligibility can be found: <https://www.courts.ca.gov/documents/Three-Strikes-Amendment-Couzens-Bigelow.pdf>.

17 Information on resentencings can be found: <https://www.cdcr.ca.gov/3-judge-court-update/>

FIGURE 7: Distribution of People Currently Incarcerated with Third-Strike Sentences by Whether the Strike Enhancement is for a Serious or Violent Conviction for Those Sentenced Before Passage of Proposition 36 and Those Sentenced After



B. How does Three-Strike sentencing impact sentence length?

Criminal cases that generate prison sentences often involve multiple felonies (for example, robbery and aggravated assault), multiple counts for given felonies (for example, a sentence involving more than one robbery), and may involve additional criminal conduct occurring on different dates and in different jurisdictions. Overall sentences are determined by the time imposed for each individual felony, any enhancements attached to individual felonies, and by whether time imposed on each felony is specified to be served consecutively or concurrently. Some sentences are complex, involving multiple felonies, some to be served consecutively and some concurrently, along with enhancements attached to specific felonies. Sentences may exist with a mix of multiple doubled-sentence enhancements and in some instances third-strike enhancements, which are applied at the individual felony level. However, it is important to note that for a given felony offense, an individual cannot receive both a doubled-sentence and third-strike enhancement, though they can receive multiple of one or both enhancements if sentenced on multiple felonies.

The direct effect of Three Strikes on prison sentences occurs at the felony level. For this reason, in this subsection we use data on non-stayed, non-vacated, and non-dismissed felony convictions for people incarcerated as of January 2022 to illustrate how doubled-sentence and third-strike enhancements lengthen prison sentences.

[Tables 1](#) and [2](#) list the felonies that are observed most frequently among sentences that are lengthened either through a doubled-sentence or third-strike enhancement. The top 20 felonies account for roughly 60% of all felonies where a doubled-sentence enhancement is imposed ([Table 1](#)) and 65% of felonies with a third-strike enhancement ([Table 2](#)). Many of the offenses in the tables are statutorily classified as serious or violent offenses. The second column in each table shows the share of each felony that are categorized as serious or violent. For both doubled-sentence and third-strike enhancements, second-degree robbery and first-degree burglary are the first and second most common felonies. Assault with a deadly weapon is third among felonies with a doubled-sentence enhancement and fourth among felonies with a third-strike enhancement.

TABLE 1: **Twenty Most Frequent Felonies Flagged for a Doubled-Sentence Enhancement Among the Currently Incarcerated in January 2022**

FELONY	PERCENT OF FELONIES WITH DOUBLED-SENTENCE ENHANCEMENT	PERCENT SERIOUS OR VIOLENT
Robbery 2nd	12.4	100.0
Burglary 1st	5.8	100.0
Assault with a Deadly Weapon	4.4	99.7
Possess/Own Firearm by Felon or Addict	3.7	9.7
Possession/Manufacture of Deadly Weapon by Prisoner	3.6	0.0
Assault with Force Likely to Produce Great Bodily Injury	3.1	54.1
Assault by Prisoner with Deadly Weapon	2.8	94.8
Possession of Controlled Substance in Jail/Prison	2.5	0.00
Attempted Murder 2 nd	2.3	100.0
Criminal Threat to Cause Great Bodily Injury/Death	2.2	100.0
Evade or Attempt to Evade Peace Officer while Driving Recklessly	2.2	0.0
Battery on Non-Prisoner	2.0	0.0
Carjacking	2.0	100.0
Assault with a Firearm	1.9	100.0
Corporal Injury on Specific Persons Resulting in Traumatic Condition	1.8	24.1
Lewd & Lascivious Acts w/ Child Under 14 Years	1.7	100.0
Vehicle Theft	1.5	0.00
Burglary 2nd	1.4	0.00
Attempted Murder 1 st	1.4	100.0
Murder 1 st	1.4	100.0
All Other Felonies	40.0	50.0

Note: This table presents felony convictions that were non-stayed, vacated, or dismissed. Individuals currently serving multiple felonies with doubled-sentence enhancements will appear multiple times in this table. The felony descriptions appear as they do in the data and may not be consistent with person-first language used elsewhere in this report. Offense categories highlighted in bold have less than one-quarter of felony convictions categorized as serious/violent. Non-serious, non-violent convictions may be categorized as serious/violent only if certain enhancements (some examples include: use of a gun, gang enhancement, causing great bodily injury) are attached to the underlying felony. The shares of doubled-sentence enhanced felonies flagged as serious or violent with less than 50 counts were suppressed due to small sample sizes..

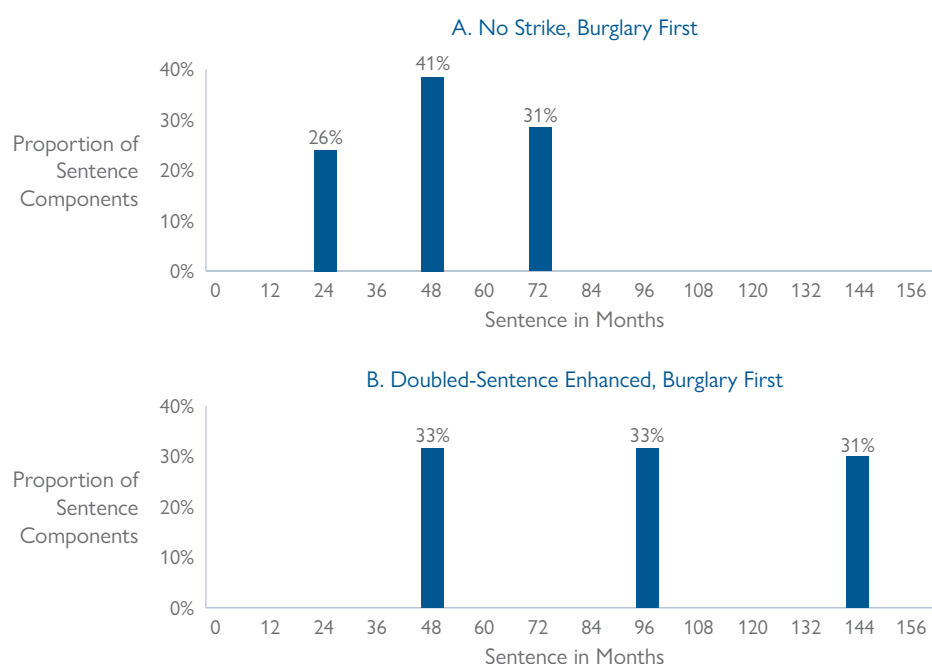
TABLE 2: **Twenty Most Frequent Felonies Flagged for a Third-Strike Enhancement Among the Currently Incarcerated in January 2022**

FELONY	PERCENT OF FELONIES WITH SENTENCES WITH A THIRD-STRIKE ENHANCEMENT	PERCENT SERIOUS OR VIOLENT
Robbery 2nd	18.9	100.0
Burglary 1st	8.3	100.0
Poss/Own Firearm by Felon or Addict	4.3	0.0
Assault with a Deadly Weapon	3.5	99.6
Robbery 1st	3.3	100.0
Lewd & Lascivious Acts w/ Child Under 14 Years	3.3	100.0
Carjacking	2.6	100.0
Rape w/Force/Violence/Fear of Bodily Injury	2.5	100.0
Murder 1st	2.2	100.0
Attempted Robbery 2nd	1.9	100.0
Assault with a Firearm	1.7	100.0
Assault with Force Likely to Produce Great Bodily Injury	1.7	53.7
Attempted Murder 1st/P667(b)-(i)	1.7	100.0
Criminal Threat to Cause Great Bodily Injury/Death	1.5	100.0
Evade or Attempt to Evade Peace Officer while driving Recklessly	1.4	0.0
Murder 2nd	1.3	100.0
Inflict Corporal Injury on Spouse/Cohabitant	1.3	35.1
Possession/Manufacture of Deadly Weapon by Prisoner	1.3	0.0
Terrorist Threat	1.0	100.0
Burglary 2nd	0.90	0.0
All Other Felonies	35.4	54.1

Note: This table presents felony convictions that were non-stayed, vacated, or dismissed. Individuals currently serving multiple third-strike enhancements will appear multiple times in this table. The felony descriptions appear as they do in the data and may not be consistent with person-first language used elsewhere in this report. Offense categories highlighted in bold have less than one-quarter of felony convictions flagged as serious/violent. Non-serious, non-violent convictions may be categorized as serious/violent only if certain enhancements (some examples include use of a gun, gang enhancement, causing great bodily injury) are attached to the underlying felony. The shares of third-strike enhanced felonies flagged as serious or violent with less than 50 counts were suppressed due to small sample sizes.

To illustrate the effect of a doubled-sentence enhancement on determinate sentences, [Figure 8](#) displays the empirical distributions of the sentences levied for first-degree burglary.¹⁸ The figure compares the empirical distribution of the sentence imposed for felonies with doubled-sentence enhancements and felonies without any strike enhancements.¹⁹ For felonies without strike enhancements, we observe concentrations in the empirical distribution at 24, 48, and 72 months (the sentencing triad values for first degree burglary).²⁰ For those with doubled-sentence enhancements, we observe concentrations at double these values (48, 96, and 144 months). In other words, a doubled-sentence enhancement mechanically doubles the sentence imposed for a given felony, though we will see below that judges tend to mitigate this outcome by selecting lower values from the triad when doubled-sentence enhancements are imposed.

FIGURE 8: Distribution of the Sentence Attached to First-Degree Burglary for Felonies not Flagged with a Doubled-Sentence Enhancement and those that are Flagged with a Doubled-Sentence Enhancement, People Incarcerated as of January 2022



¹⁸ We restrict the felony convictions to those that are flagged as either the initial felony, a felony to be served consecutively, or a felony to be served concurrently. Some sentence components are flagged to be served consecutively at one-third the triad value, with imposed time equal to one third the prescribed triad values (see Penal Code § 1170.1(a)). For clarity in the visual, we omit these felonies from Figure 8.

¹⁹ Note, if the felony involves multiple counts and the counts are sentenced to be served consecutively, the time attached to each felony would be multiplied by the number of counts in calculating the felony's total sentence length.

²⁰ We observe a small proportion of sentences that appear to depart from the triad values prescribed in the penal code, but are excluded from Figure 8.

The felony-level sentencing distribution for first-degree burglary subjected to third strikes is as expected and does not require a figure. Nearly all such cases receive a sentence of 25 years to life.²¹

We noted earlier that Three Strikes often requires consecutive sentencing for prison sentences enhanced due to prior strikes that involve multiple counts and/or felonies (in particular, when the different counts/felonies are driven by offenses that are not committed on the “same occasion” or that do not have the “same set of operative facts”). We observe two dimensions along which a person can be sentenced to either concurrent or consecutive sentences: (1) when someone is convicted of multiple counts of a single felony (for example, three counts of first-degree burglary), and (2) when a person is convicted of multiple felonies in a single incident (for example, one count of robbery, one count of auto theft).

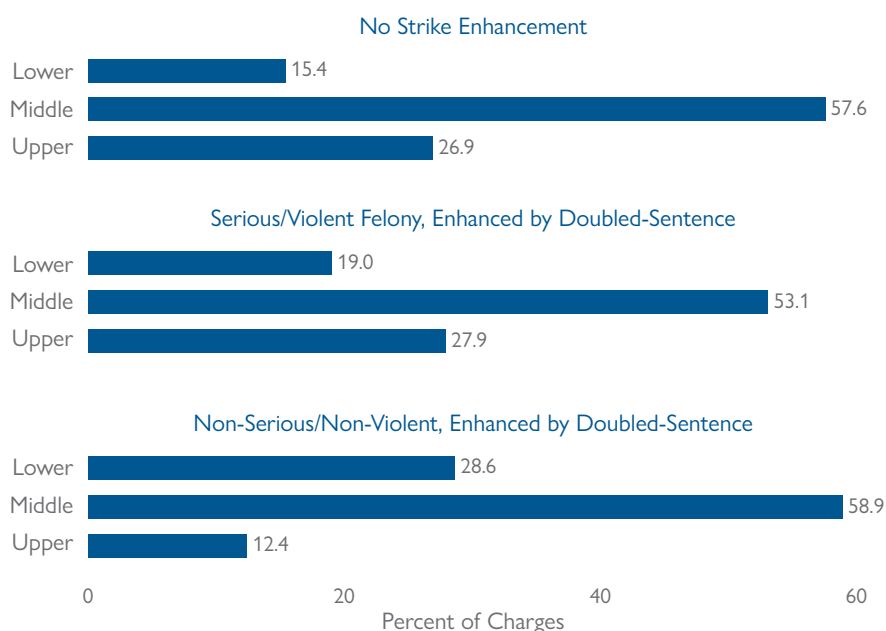
Most felonies involve only a single count. However, we see that multi-count felonies with a strike enhancement are more likely to receive consecutive sentences for each count. Among felonies with multiple counts, doubled-sentence enhanced felonies are the most likely to receive consecutive sentences (80%), followed by third-strike enhanced felonies (74%), and then felonies without any strike enhancements (73%).

Far more common are cases where there are multiple felonies contributing to a sentence (i.e., separate felonies rather than multiple counts on a specific felony). Among the incarcerated population in January 2022, 62% were convicted on multiple felony offenses. Those with a doubled-sentence enhancement had the highest share of convictions with multiple felonies (64%), compared to those without strike enhancements (61%) and third strike enhancements (58%). Among sentences with multiple felonies, we observe the highest percent with consecutive sentences for doubled-sentence enhanced sentences (85%), followed by third-strike enhanced sentences (81%), and felony sentences without any strike enhancements (76%).

For sentences with a doubled-sentence enhancement, judges (or prosecutors through the terms of the plea bargain) can minimize the effect of an enhancement by imposing the lower value of the sentencing triad. [Figure 9](#) presents a comparison of the sentences imposed on felonies without strike enhancements or felonies with doubled-sentence enhancements. For felonies convictions with a doubled-sentence enhancement, we further subdivide into those which are serious or violent offenses and those which are not. Here, the analysis is at the felony level (i.e. a person incarcerated on multiple felonies will appear multiple times in the chart).

21 Sentences with a third-strike enhancement are indeterminate sentences, with a specified minimum (25 years or 300 months) and a maximum (life). Discretion is afforded to the Board of Parole Hearings (BPH) to decide when and whether someone may be released after serving the minimum sentence. In contrast, doubled-sentence enhancements are determinate sentences, though the 2016 passage of Proposition 57 added a degree of indeterminacy to these sentences. To be specific, under Proposition 57 people with a current non-violent conviction are eligible for release by the BPH after they have served the non-doubled value of their sentence.

FIGURE 9: Distribution of Felony-Specific Determinate Sentences by Whether the Sentence is the Lower, Middle, or Upper Value of the Triad, Felonies Without Strike Enhancements and Felonies with a Doubled-Sentence Enhancement



Rather than comparing actual time imposed per felony, [Figure 9](#) shows the percent of sentences where the lower, middle, and upper values of the sentencing triad are levied. The low value for the triad is imposed 15% of the time for non-strike enhanced felonies, 19% of the time for serious or violent felonies with a doubled-sentence enhancement, and 29% of the time for non-serious, non-violent felonies with a doubled-sentence enhancement. The likelihood that the highest value of the sentencing triad is imposed is lowest for non-serious, non-violent felonies with a doubled-sentence enhancement (12%, compared with 28% for serious or violent felonies with a doubled-sentence enhancement, and 27% for non-strike enhanced felonies).

These disparities in the likelihood of sentencing to the lower, middle, or upper values from the sentencing triads may reflect differences in offense severity across the three groups used in [Figure 9](#). To explore whether this is the case, Table 3 presents results from a series of regression models where the dependent variable is an indicator that either the lower value is imposed (the first two columns) or the upper value is imposed (the last two columns) and the key explanatory variables are (1) an indicator that the felony is non-serious, non-violent but has a doubled-sentence enhancement, and (2) an indicator that the felony is serious or violent and has a doubled-sentence enhancement. The regression models are estimated with felony-level data and are restricted to felonies without a strike enhancement or a doubled-sentence enhancement. In this way, the coefficients can be interpreted as the average difference in the outcome relative to felonies where no doubled-sentence enhancement is applied.

TABLE 3: Linear Probability Model Estimates of Differences in the Likelihood of Imposing the Lower and Upper Triad Values Without and With Conditioning on Offense Fixed Effects

	DEPENDENT VARIABLE= LOWER VALUE IMPOSED		DEPENDENT VARIABLE= UPPER VALUE IMPOSED	
Prior Serious-Violent/Current Felony not Serious-Violent	0.132 ^a (0.003)	0.043 ^a (0.003)	-0.145 ^a (0.003)	-0.049 ^a (0.004)
Prior Serious-Violent/Current Felony Serious-Violent	0.036 ^a (0.002)	0.026 ^a (0.002)	0.010 ^a (0.003)	0.016 ^a (0.002)
Statute Fixed Effects	No	Yes	No	Yes

Standard errors are in parentheses. The analysis sample of felonies include all felonies receiving a determinate sentence where the person convicted either does not have strike enhancements or a doubled-sentence enhancement, but no third-strike enhancements. Additionally, we have removed all non-stayed, vacated, or dismissed felonies. Since the omitted category is felonies not receiving a doubled-sentence enhancement, the coefficient can be interpreted as the difference in the outcome relative to felonies without strike enhancements were imposed. The models including felony fixed effects include a complete set of dummy variables for all possible statute values.

a. Coefficient statistically significant at the one percent level of confidence.

For both outcomes, we first present estimates with no controls and then estimates that adjust for a complete set of statute fixed effects. The first set of estimates will correspond to the differences relative to felonies without a strike enhancement presented in Figure 9. The second set of estimates show how much of these differences remain after adjusting for differences across groups in offense distributions.

Regarding the likelihood of selecting the lower triad value, the unadjusted difference between instances where the current felony is non-serious, non-violent but receives a doubled-sentence enhancement relative to felonies without strike enhancement is 13.2 percentage points. Adjusting for differences between these two groups in the felony distribution lowers this difference to 4.3 percentage points. This suggests that most of the lower propensity to select the lower triad value for non-serious, non-violent offenses that have doubled-sentence enhancements can be attributed to these offenses being less serious on average. For felonies with a doubled-sentence enhancement that are serious or violent, adjusting for statute fixed effects reduces the disparity from 3.6 to 2.6 percentage points. While much of the patterns pertaining to selecting the lower triad value is attributable to differences in the conviction offense, it appears that to a modest degree prosecutors and judges mitigate the severity of the doubled-sentenced enhancement by selecting lower triad values, especially for people convicted of non-serious, non-violent offenses carrying a doubled-sentence enhancement.

Regarding the propensity to choose the upper values, again we see that differences in the offense distribution account for much of the difference between non-serious, non-violent felonies with a doubled-sentence enhancement and felonies without strike enhancement, with an unadjusted difference of -14.5 percentage points reduced (in absolute value) to -4.9 percentage points. For serious or violent offenses on the other hand, prosecutors and judges appear to be more likely to select the upper value with a statistically significant difference of one percentage point that increases to 1.6 percentage points when we condition on statute fixed effects. In other words, in some cases prosecutors and judges are mitigating the sentencing length, but in others they are not.

In summary, felony-level analysis of sentencing reveals that when levied, doubled-sentences and third-strike sentences are being implemented in the manner specified by law. Doubled-sentence enhancements will double the prescribed time while third-strike enhancements result in 25-to-life indeterminate sentences. Judges and prosecutors moderate doubled-sentences to some degree by selecting lower triad values, especially for those involving non-serious, non-violent offenses. Finally, when applicable due to either multiple counts or multiple felonies, consecutive sentencing occurs more frequently in sentences with strike enhancements. This is especially true for sentences involving doubled-sentence enhancements.

C. Who is impacted by Three-Strike sentencing?

The analysis thus far has focused on overall frequency with which strike enhancements are applied and the specific manner in which Three Strikes impacts sentencing. In this subsection, we focus on the characteristics and mental health level of care of people serving sentences with strike enhancements.

Table 4 presents a comparison of various demographic characteristics for people incarcerated in January 2022. The incarcerated population is split into the three mutually exclusive groups defined in **Figure 1**: those without strike enhancements, those with doubled-sentence enhancements but no third-strike enhancement, and those with at least one third-strike enhancement and potentially doubled-sentence enhancements. We begin by comparing the current age, age at admission to prison, and age at the time of the offense for these three groups. Individuals with third-strike enhancements are currently the oldest, and were the oldest at admission to prison and when they committed the offenses for which they are currently incarcerated. While people with doubled-sentence enhancements appear to be slightly older than individuals without strike enhancements, the two populations are fairly similar along these three age measures. Nearly half of the sub-population without a strike enhancement committed their conviction offense prior to their 26th birthday (47%), while the percentage is smaller among individuals with doubled-sentence enhancements (28%), and much smaller among individuals with third-strike enhancements (10%).

TABLE 4: Descriptive Statistics for the Currently Incarcerated (January 2022) for Those Without Strike Enhancements, a Doubled-Sentence Enhancement, and a Third-Strike Enhancement

	NO STRIKE ENHANCEMENT	DOUBLED- SENTENCE ENHANCEMENT	THIRD-STRIKE ENHANCEMENT
Current age			
25th Percentile	30.9	32.0	49.7
Median	39.2	38.8	56.3
75th Percentile	50.5	47.2	62.0
Age at admission			
25th Percentile	23.5	25.3	30.3
Median	29.4	30.8	36.1
75th Percentile	38.4	38.5	42.6
Age at time of offense			
25th Percentile	21.1	23.7	29.9
Median	26.8	29.5	35.9
75th Percentile	35.0	37.5	42.4
Under 26 at time of offense (percent)	47.1	28.3	10.4
Race/Ethnicity (percent)			
American Indian/ Alaskan Native	1.1	1.3	1.4
Asian or Pacific Islander	1.7	1.0	0.4
Black	24.6	32.6	45.1
Hispanic	48.4	43.5	27.4
Other	4.4	3.0	3.3
White	19.8	18.7	22.4

Table 4 continued

	NO STRIKE ENHANCEMENT	DOUBLED- SENTENCE ENHANCEMENT	THIRD-STRIKE ENHANCEMENT
Sex			
Male	95.5	96.9	99.4
Female	4.5	3.1	0.6
Time Served as of January 2022			
25th Percentile	2.9	2.9	13.9
Median	7.6	6.1	20.4
75th Percentile	15.5	12.0	24.8
Time served, 20 or more years (percent)	17.2	8.8	52.2

Note: Due to rounding, the totals may not add up to 100%. The offense age for no strike enhancements is calculated with the earliest offense date for an individual's current prison commitment, while the doubled-sentence and third-strike enhancements are calculated using the time at which the individual received their earliest strike enhancement for their current prison commitment. The terms used to describe the race and/or ethnicity of individuals in this report were provided by the data owner to reflect the way in which the data were originally collected and then coded, with the exception of 'Cuban' and 'Mexican' being consolidated under 'Hispanic'; and 'Unknown' and 'Other' being consolidated due to small sample sizes. Race, ethnicity, and sex were not self-reported by the individuals represented in the tables

While Black individuals are disproportionately represented in the California prison population, this is especially the case among individuals serving time with a strike enhancement. Among individuals with a third-strike enhancement, a doubled-sentence enhancement, and without strike enhancements, the percent Black is approximately 45, 33, and 25%, respectively. In contrast, only about six percent of the resident population in California is Black. Individuals serving time with a strike enhancement are overwhelmingly male (as is the prison population overall). Moreover, people incarcerated with third-strike enhancements have been in prison for lengthy periods, with a current median value of 20.4 years of time served.

Table 5 displays distributions of these three groups by the level of mental health care they receive within CDCR. Individuals with third-strike and doubled-sentence enhancements are somewhat more likely to be classified as receiving services from CDCR's two largest outpatient mental health programs (the Correctional Clinical Case Management System (CCMS) and the Enhanced Outpatient Program (EOP) and less likely to be housed among the general prison population relative to people without strike enhancements.²²

²² These two programs are the two principal outpatient mental health programs within CDCR's Mental Health Services Delivery System (MHSDS). CCCMS involves outpatient care, an assigned primary care physician, therapy and group therapy and periodic assessments of medication and other care needs. EOP is the highest level of outpatient care in CDCR and is reserved for patients whose symptoms impact their ability to function in the general population. EOP participants receive more treatment interventions and are housed in separate units from the general population. For more information, see the information presented here: <https://www.cdcr.ca.gov/bph/wp-content/uploads/sites/161/2020/10/Mental-Health-Delivery-System-rem.pdf>.

TABLE 5: Distribution of the Currently Incarcerated (January 2022) by Mental Health Services Level of Care for Those Without Strike Enhancements, a Doubled-Sentence Enhancement, and a Third-Strike Enhancement

	NO STRIKE ENHANCEMENT	DOUBLED- SENTENCE ENHANCEMENT	THIRD-STRIKE ENHANCEMENT
Mental health level of care			
General Population	69.6	61.5	58.5
Correctional Clinical Case Management System (CCCMS)	23.9	27.3	30.3
Enhanced Outpatient Program (EOP)	5.2	8.9	9.7
Mental Health Crisis Beds (Crisis Bed)	0.1	0.2	0.2
Alternative Care Facility	0.8	2.0	1.4
Undesignated	0.4	0.1	0.0

Note: Due to rounding, the totals may not add up to 100%.

Table 6 displays the distribution across risk categories as defined by the California Static Risk Assessment (CSRA) instrument. People with doubled-sentence enhancements are the most likely to be classified as at high risk of committing a new offense upon release. Individuals with third-strike enhancements have the highest percent classified at the lowest level of risk (83% of individuals with third-strike enhancements compared to 45% of individuals with doubled-sentence enhancements and 63% of individuals without strike enhancements).

TABLE 6: Distribution of the Currently Incarcerated (January 2022) by California Static Risk Assessment Score for Those Without Strike Enhancements, a Doubled-Sentence Enhancement, and a Third-Strike Enhancement

	NO STRIKE ENHANCEMENT	DOUBLED- SENTENCE ENHANCEMENT	THIRD-STRIKE ENHANCEMENT
California Static Risk Assessment Score			
Low risk	62.8	44.7	83.0
Moderate risk	18.5	22.1	11.1
High risk, drug offense	1.3	1.9	0.2
High risk, property offense	3.5	5.6	1.1
High risk, person offense	13.9	25.7	4.5

Note: The CSRA risk score is calculated using the following information: (1) demographic factors: sex and age at release; (2) total felonies; (3) seven categories of prior felonies; (4) nine categories of prior misdemeanor convictions; and (5) total violations while sentenced to incarceration or under post-release supervision. The score refers to the risk of an individual committing a new offense.

D. How consistently is three-strike sentencing applied across counties?

In a report by the LAO, Brown and Jolivet (2005) present a comparison of the propensity of California's largest 15 counties to apply three-strike enhancements in 2004. Using tabulations from CDCR on the number of people with doubled-sentence and third-strike enhancements by county of longest sentencing, the authors present tabulations of the number of people with a strike enhancement per 100,000 felony arrests made in the county between 1995 and 2004.²³ The authors found large differences across counties, with the highest rates among Kern, San Diego, and Los Angeles counties and the lowest rates among Contra Costa, Alameda, and San Francisco counties.

We update this analysis for the same set of counties using the incarcerated population as of January 2022 as well as the flow of prison admissions between 2015 and 2020. The first two columns of [Table 7](#) present the number of individuals with a third-strike or doubled-sentence enhancement per 100,000 arrests made between 1995 and 2004 from Brown and Jolivet (2005).²⁴ The next two columns present similar figures for 2022, where we first tabulate the number of

²³ The authors don't explicitly note that they are dividing by cumulative felony arrests over this time period. However, they do provide raw counts of individuals whose sentences were enhanced by the doubled-sentence or third-strike, as well as the overall rates per 100,000. From these data, we solved for the denominator of the arrests for each county. We then used arrests by county retrieved from the California Department of Justice (DOJ) Open Justice Webpage to attempt to reproduce the felony arrest denominator by county. Summing arrests for the years 1995 through 2004 comes closest to the denominator values for most counties. The felony arrest data can be found at <https://openjustice.doj.ca.gov/data>.

²⁴ Note, the authors present the rate per 100,000 arrests for individuals with doubled-sentence and third-strike enhancements combined. However, they present data for raw counts of these two populations. We use these counts in conjunction with the rates to back out the arrests denominator and then calculate separate rates per 100,000 arrests for individuals whose sentences were lengthened by the doubled-sentence and third-strike enhancement. Summing these two categories for any county gives the value reported in Brown and Jolivet (2005).

people with a third-strike enhancement and the number with a doubled-sentence enhancement but no third-strike enhancements and then tabulate a rate relative to the sum of felony arrests occurring between 1995 and 2020. The final two columns take a slightly different approach, comparing the flow of new third-strike sentences and doubled-sentences between 2015 and 2020 to cumulative felony arrests between 2015 and 2020.²⁵ We order the counties similarly to that presented in Brown and Jolivet (2005), where counties are ordered from those with the highest rates to those with the lowest rates based on the 2004 data.

TABLE 7: Comparison of Cross-County Variation in Doubled-Sentence and Third-Strike Enhanced Sentences Per 100,000 Arrests: LAO Estimates for 2004 and Updated Estimates for 2022

	LAO ESTIMATES 2004		ESTIMATES JANUARY 2022 CROSS SECTION		NEW SENTENCES PER 100,000 FELONY ARRESTS, 2015 THROUGH 2020	
	THIRD STRIKES	DOUBLED- SENTENCE	THIRD STRIKES	DOUBLED- SENTENCE	THIRD STRIKES	DOUBLED- SENTENCE
Kern	358	1,160	82	373	43	3,908
San Diego	201	1,156	66	264	47	3,153
Los Angeles	231	1,096	87	276	61	3,317
Riverside	187	1,018	96	468	99	5,514
Santa Clara	291	914	94	160	61	2,154
Sacramento	226	777	109	334	88	4,351
San Joaquin	114	803	41	197	19	1,694
San Mateo	158	713	56	156	23	2,463
Fresno	137	728	59	245	61	3,495
Orange	144	705	47	140	34	1,349
San Bernardino	171	653	49	227	31	3,284
Ventura	99	704	39	186	41	1,685
Contra Costa	70	285	34	82	25	445
Alameda	60	263	30	107	11	504
San Francisco	17	96	8	27	5	259

Note: The LAO estimates come from Brown and Jolivet (2005). The authors report the number of incarcerated persons in 2004 by county of commitment with doubled-sentence and third-strike enhancements as well as a rate per 100,000 arrests for doubled-sentences and third-strike sentences combined. We back out the arrest totals by county to calculate third-strike and doubled-sentence incarceration rates per 100,000 arrests for this year. Our 2022 estimates calculate the ratio of people incarcerated in January 2022 with third-strike and doubled-sentence enhancements per 100,000 arrests, where we use the sum of arrests from 1995 through 2020 in the denominator. The final two columns present the ratio of new admissions with third and doubled-sentence enhancements per 100,000 felony arrests, using all admissions and felony arrests occurring between 2015 and 2020.

²⁵ Note, we stop at the end of 2020 due to the fact that arrests figures for 2021 have not yet been published.

We should caution that the scales across these alternative measures are not exactly the same. For example, Brown and Jolivet normalize the population at a given point in time by cumulative arrests over the first 10 years of Three Strikes. The third and fourth columns normalize the strike population by cumulative arrests over 26 years. Finally, the last two columns show admissions with strike enhancements relative to arrests where both the numerator and denominator reflect more recent sentencing and arrest outcomes. Hence, with some exceptions it is difficult to look at these alternative measures and assess whether the use of strike enhancements is increasing or decreasing over time, though the rates in the final two and first two columns are likely more comparable with one another. However, the difference across counties displayed in any given column occurs for a metric that is measured in a comparable manner for each county, so we can assess whether the counties that were identified as the high-use/low-use counties in 2004 are in similar relative positions today.²⁶

There are several notable patterns in Table 7. First, the ordering is fairly similar across years. While Brown and Jolivet identified Kern, San Diego, Los Angeles, and Riverside as the counties with the highest overall rates of strike sentences in 2004, the top four counties in 2022 are now Riverside, Kern, Sacramento, and Los Angeles. In 2004, the four counties with the lowest rates were San Francisco, Alameda, Contra Costa, and Ventura. In 2022, these counties are San Francisco, Alameda, Contra Costa, and Orange.

Second, while it is difficult to compare the different measures, the comparison of the flow measure for three-strikes enhancements for 2015 through 2020 to the stock measure for 2004 suggests that three-strike enhancements are less frequent now than in the past. Note, that in 1994 everyone sentenced with a third-strike enhancement that year would still be in prison as of 2004, given that third strikes receive 25-to-life and at that time the policy had been in place for only 10 years. This means the count of individuals with a third-strike enhancement in 2004 should be equal to (or be roughly equal to) the flow of individuals with a third-strike enhancement between the passage of Three Strikes and that date. The third-strike rate using admissions for 2015 to 2020 is comparable to the third-strike rate for 2004. Comparison of these two columns indicates that third-strike sentences relative to felony arrests are uniformly and substantially less likely in recent years relative to when the law was first introduced.

Similar to the early analysis, there are large differences across counties in the use of strike enhancements relative to felony arrests.

²⁶ In future work, we will use data from the dispositions of felony cases observed in DOJ's Automated Criminal History System (ACHS) database to identify variation in the imposition of doubled-sentence and third-strike enhancements among eligible persons, how it changes over time, place, and with demographics and sentence characteristics.

4. Empirical Research on the Effects of Three Strikes on Crime

The goal of Three-Strike laws and habitual-offender enhancements more generally are to identify individuals who serially and frequently offend and either deter future offending through stiff penalties and/or prevent offending by removing these individuals from non-institutional society for lengthy periods of time. Criminologists usually refer to this as general deterrence and incapacitation. There is a large body of research on general deterrence and many high-quality literature reviews summarizing the evidence (see for example Chalfin and McCrary 2017, and Nagin 2013). The common findings suggest that increases in the severity of punishment does not appear to impact criminal activity, however, criminal behavior is responsive to punishment certainty and swiftness. In other words, increasing the length of a potential prison sentence for an offense that already carries a prison sentence does not appear to increase deterrence. However, factors that increase the likelihood of punishment (for example, higher police staffing levels as demonstrated in Chalfin and McCrary 2018) or the swiftness of a sanction (see the evaluation of Hawaii's HOPE Pretrial program in Davidson et. al. 2019) show evidence of general deterrence.

There is ample evidence that incarceration can reduce crime in non-institutional society through incapacitation, though this effect varies considerably across time and place. Existing empirical research finds that average incapacitation effects tend to be larger when incarceration rates are lower, such as in the United States during the 1980s (Johnson and Raphael 2012) or in European Union countries (Buonanno and Raphael 2013; Barbarino and Mastrobuoni 2014). By contrast, in settings and time periods with relatively high incarceration rates such as the U.S. during the late 1990s and 2000s (Liedke, Piehl, Useem 2006; Johnson and Raphael 2012) or California at the state's peak incarceration rate in 2006 (Lofstrom and Raphael 2016), average criminal incapacitation effects tend to be much smaller especially for serious and violent offenses.

These findings have led many researchers to conclude that the crime-abating effect of incarceration exhibits diminishing returns, with smaller average effects at higher levels. Several factors may drive these diminishing returns. One possibility is that people who come into contact with the criminal justice system vary considerably in their propensity to offend and that as the use of prison expands, the system increasingly incarcerates a greater number of individuals that are less likely to commit new crimes. The second, often-cited factor concerns the effects of age. Namely, higher incarceration rates often result from longer sentences where people are incarcerated for lengthier periods of time. Criminal offending declines precipitously with age, even among people with heavy involvement during

their youth and early adulthood (Blonigen 2010, Raphael and Stoll 2013). While there are certainly older people who commit serious offenses, the strong age-crime relationship means very long sentences have lesser incapacitation effects.

All of these factors are relevant for thinking about the possible crime-abating effects of Three Strikes. Regarding general deterrence, existing empirical work on deterrence suggests that this effect is likely to be minimal, though the extreme sentence increases associated with a third strike represents a particularly severe sentence increment relative to what has been studied in the past. Fortunately, there is careful research on this question pertaining specifically to California that we discuss below.

Regarding incapacitation, in practice, the Three-Strikes law identifies people who frequently offend, a fact that might suggest large incapacitation effects. However, strike enhancements also incarcerate people into their advanced ages when they would be less likely to commit crime, a fact likely to reduce the size of the incapacitation effect.

Initial assessments of the effects of Three Strikes noted the very quick declines in crime following the law's passage. For example, California's former Attorney General Dan Lungren published an article in the Hoover Institute's Policy Review titled "Three Cheers for Three Strikes" (Lungren 1996). The article cites the fact that in the first year of implementation California crime totals, as well as crime rates, declined. However, researchers have pointed out that California's crime rates were already declining before the passage of Three Strikes, and that crime was also falling in other states without Three-Strikes laws. Zimring, Kamin, and Hawkins (1999, 2001) present a careful analysis of arrests in Los Angeles, San Diego, and San Francisco. The authors demonstrate that the proportion of arrests involving people who were eligible for either a doubled-sentence or third-strike enhancement did not decline with the passage of Three Strikes, a pattern one would have expected had the law created a large deterrent effect. Based on crime trends in other states as well as their analysis of arrest patterns, the authors conclude that Three Strikes had minimal impact on the state's crime rate.

Evaluating the effects of Three Strikes on California's crime rates requires identifying similar states that did not implement a Three-Strikes law against which to compare California's crime rates. Ideally, such comparison states would have similar crime trends to California prior to the passage of Three Strikes, allowing an analysis of whether crime trends in California fell faster relative to the comparison states following the implementation of the law.

Two factors however, complicate finding such comparison states. First nearly half of the states in the country implemented some form of Three Strikes in the 1990s, though few were as punitive as California's law and most did not result in many

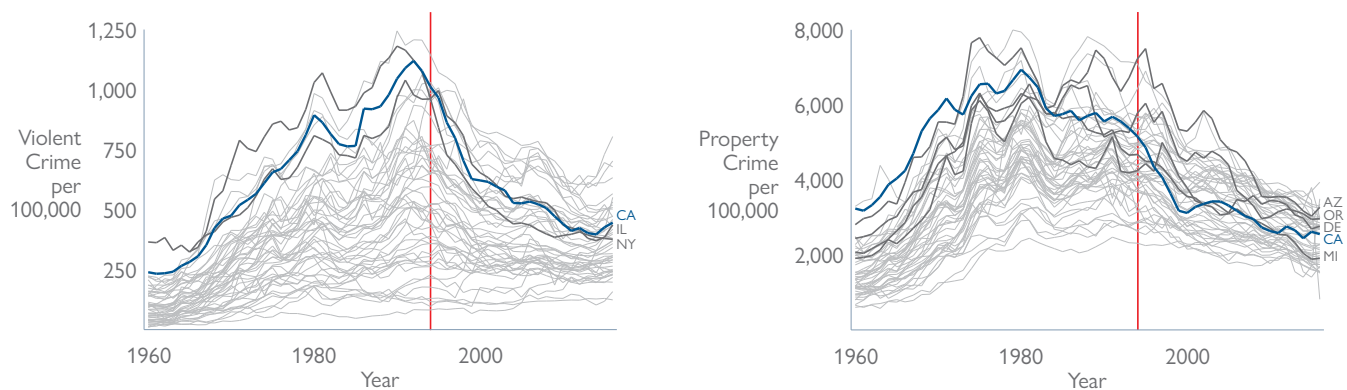
enhanced sentences (Chen 2008). Second, California's crime rates prior to the passage of Three Strikes were high relative to most states. California experienced some of the largest increases in crime since the 1960s, a fact complicating comparisons between California and the rest of the nation.

Figure 10 illustrates the latter of these two challenges. The figure displays crime trends, measured as violent crime per 100,000 residents (left-hand side graphs) and property crimes per 100,000 (right-hand side graph) for every state in the nation for the period 1960 through 2016. California's crime rate is highlighted with a bolded blue line, while crime trends for states without Three-Strikes laws with roughly comparable trends (to be discussed shortly) are bolded with thicker gray lines. California's long-term crime trends appear to be exaggerated versions of those observed in other states. For example, violent crime rates increased in nearly all states with peaks in the mid 1990s, though California's rate increased to among the highest in the nation. Similarly, violent crime rates subsequently fell in nearly all states, with California experiencing particularly large declines. The results are similar for property crimes, though California's property crime rate peaks earlier (in the late 1970s) relative to the violent crime rate peak.

Figure 11 refines these comparisons in several ways. First, we compare crime trends in California to the average trend for the remaining 49 states (the top two charts in **Figure 11**). Second, we focus in on the period 1980 forward, a time period where sentencing in states throughout the U.S. became decisively more severe. The combined average more clearly illustrates the disparity in crime levels prior to Three Strikes and crime trends in California relative to the rest of the nation.²⁷ Violent crime rates in California were much higher relative to the rest of the nation through the 1990s. We also see violent crime fall sharply in California during the late 1990s; however, the decline in California and elsewhere began prior to the passage of Three Strikes. There is also a decline in property crime rates after the passage of Three Strikes in California, a pattern that appears to be the continuation of a trend that started prior to the law's passage. Similar to violent crime rates, we see relatively high property crime rates in California relative to the rest of the country.

²⁷ We use state-level uniform crime reporting (UCR) data on crime totals from 1980 to 2016, published publicly by the Federal Bureau of Investigation (FBI). The data cover all states and a separate series for Washington, D.C. The time series for all other states presents the population-weighted average for the remaining 49 states and D.C.

FIGURE 10: Comparison of California Violent and Property Crime Rates to the Rest of the Nation, 1960 through 2016

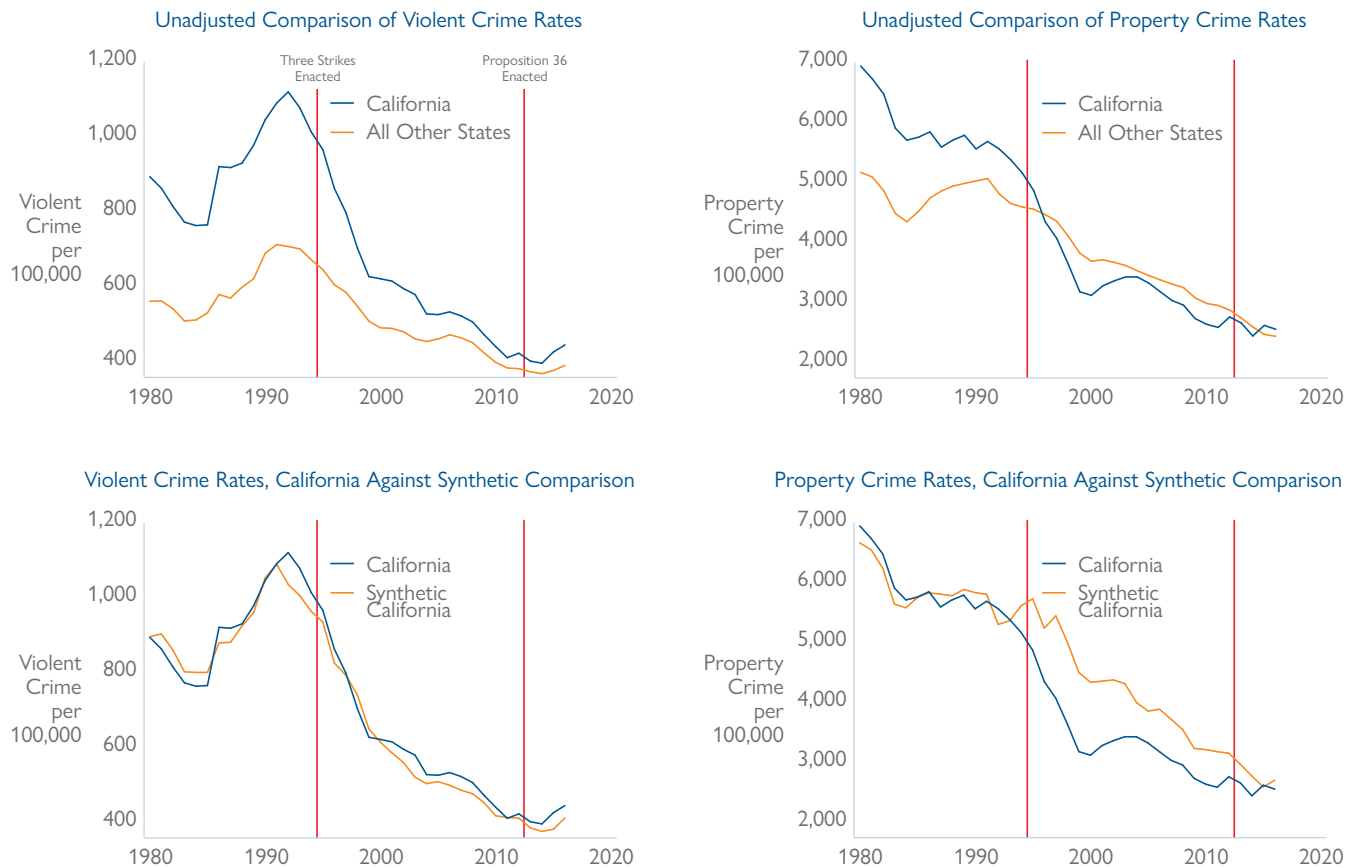


The bottom two figures compare California crime trends to the average for the smaller group of states with (1) similar crime trends prior to 1994, and (2) that did not pass a Three-Strikes law during the 1990s. These comparison states are selected via an algorithm intended to identify states with crime trends that match California's pre-1994 crime trends as closely as possible. This provides us a "synthetic California" composed of states with similar pre-1994 crime levels and trends where a Three-Strikes law was not implemented.²⁸ Note, the comparison states correspond to those with trends highlighted in Figure 10 with thick gray lines.

For violent crime rates (lower left-hand chart), the average crime rates for "synthetic California", or the synthetic comparison group, follow the trends in California's violent crime rate quite closely during the pre-Three-Strikes period (1980 through 1993). We see that the large declines in violent crime rates in California also occurred in the comparison states, which did not implement a Three-Strikes law. Similarly, the property crime rates for "synthetic California" closely matches the property crime rate for California in the pre-Three-Strikes period. However, property crime rates in California declined more quickly relative to "synthetic California", though by 2016, the rates converge and are more comparable.

28 The synthetic comparison group identifies Illinois and New York as the key comparison states that best match California's pre-1994 violent crime rate. The estimator places weights of 60% on Illinois violent crime rate and 40% on New York violent crime rate to generate "synthetic California". For property crime rate, the identified states and weights that generate "synthetic California" are Arizona (36.7%), Delaware (23.3%), Michigan (31%), and Oregon (9%). Note, while New York did not pass the equivalent of a Three-Strikes law during the 1990s, the state had a persistent offender law in place for many years prior. We rerun this model for violent crime rates, omitting New York from the pool of potential comparison states to "synthetic California". Doing so yielded an estimator that placed all weight (100%) on Illinois. Comparing California's violent crime rate to Illinois's violent crime rate only yields patterns very similar to what we observe in Figure 10. The code and data for this synthetic comparison analysis are available upon request.

FIGURE 11: Comparison of California Violent and Property Crime Rates to the Rest of the Nation and “Synthetic California”, 1980 through 2016



Figures 10 and 11 describe the long-term crime trends in California surrounding the passage of Three Strikes, crime in the remainder of the U.S., and crime trends in states with similar pre-1994 trends to California. Beyond this descriptive analysis however, there are several peer-reviewed studies that we can learn from that employ a variety of methods that attempt to estimate the causal effects of Three Strikes on crime rates, with several focused specifically on the California law. In a widely-cited study, Shepherd (2002) uses variation across and within California counties in the frequency with which strike-enhanced sentences are imposed to estimate a model of crime rates where the key dependent variables are county-level crime rates and the key policy variables are the probability of arrest, the probability of a sentence to incarceration conditional on arrest, and the proportion of prison admissions involving a sentence enhanced according to the provisions of Three Strikes. Using data on the first two years of implementation of Three Strikes, the author finds a reduction in serious/violent offenses and an increase in larceny and attributes these changes to the new law. Shepherd estimates that during the first two years of implementation (1995 and 1996), Three Strikes deterred 8 murders, 10,672 robberies, 3,952 aggravated assaults, 384,488 burglaries, but led to 17,700 additional larcenies.

Using Shepherd's estimates and crime totals published by the California Department of Justice (2021), we tabulate what total crime would have been in the absence of Three Strikes²⁹ and calculate these impacts as a percent of the estimated crime rates in 1995-1996 if Three Strikes had not been in effect. The estimates imply reductions in crime of 0.1% for murder, 5.1% for robbery, 1.1% for aggravated assault, 36.6% for burglary, and a 1% increase for larceny theft. Shepherd argues that since strikes apply to serious or violent felonies likely to result in prison sentences of two or more years, these effects should reflect pure deterrence effects of the law.

While these effects are suggestive of large impacts, there are reasons to question these results due to methodological concerns and trends in other states. The methodological issue concerns the specification of the model used to estimate these effects. The estimation employs two-stage-least-squares with likely endogenous instruments used in the first stage models for the arrest probability, the likelihood of being sent to prison, and the implementation of Three-Strikes enhancements. For example, police expenditures are used as an instrument for the arrest probability, a variable that may well impact crime rates independently of arrest rates and may itself be reverse caused by crime (both factors that would violate the necessary identifying assumption). Most importantly, the first-stage models for the Three-Strikes rate includes crime (the dependent variable) as a determinant of county propensity to impose strike enhancements, a fact that mechanically biases the results.³⁰ Regarding the magnitude of the impact, the results in this paper suggest that crime would have spiked to abnormally high levels in California in the absence of Three Strikes, a trend running counter to that of all other states and to California itself, as crime was trending downward in the years preceding the policy change.

Chen (2008) analyzes a longer time period (1986–2005), using similar methods as Shepherd (2002), but does not employ a problematic instrumental variables strategy. The primary aim is to test for a reduction in crime rates with the passage of Three-Strikes laws, driven presumably by deterrence, and a reduction in existing trends associated with cumulative incapacitation as time passes. Chen documents the significant implementation differences between California and other states that passed Three-Strikes laws. California's law was the most expansive in terms of the sets of felonies subject to enhancement (i.e. to receive the doubled-sentence enhancement, your current conviction could be any non-serious, non-violent felony). Along with other factors, this has led California to apply strike

29 Specifically, we add total crimes for 1995 and 1996 as well as crime averted according to Shepherd estimated to calculate what crime would have been. We then divide the effect size by this total and multiple by 100 to generate a percentage reduction. The 1995 and 1996 crime values reported in by CAL DOJ (2021) are 2,910 and 3,530 for murder, 94,137 and 104,581 for robbery, 167,390 and 188,337 for aggravated assault, 311,778 and 353,817 for burglary, and 828,838 and 901,826 for larceny theft.

30 Including crime in the first-stage specification creates a direct positive correlation between the predicted Three- Strikes variable used in the second stage and the error term of the crime equation.

enhancements most extensively in terms of both the proportion of sentences enhanced as well as the sheer numbers of people impacted by Three Strikes.

Chen finds evidence that rates of robbery, burglary, larceny, and motor vehicle theft fell faster in states with Three-Strikes laws relative to other states, but little evidence that California's crime rates fell faster than those for other states with Three Strikes. She finds this using panel data regression models controlling for state and year fixed effects, permitting differential linear time trends beyond the time fixed effects in states with Three-Strikes laws that vary before and after implementation, and separate trends beyond the overall Three-Strike trends for California and the state of Washington. This is notable given the much greater application of the law in California and the limited number of strike enhancements applied in other states. The author does not use the results to make a comparison of California's crime rates post-1994 against a counterfactual that would have occurred in the absence of Three Strikes.

Helland and Tabarrok (2007) focus specifically on the deterrent effect of facing a third strike during the first few years that the California law was implemented. The authors compare the rearrest rates of people released from prison in California in 1994, following the passage of Three Strikes. The principal comparison involves juxtaposing the rearrest rates of people released with two prior convictions for serious/violent offenses alongside the rearrest rates of people with at least one prior serious/violent conviction who were subsequently charged with a second serious/violent offense but convicted of a lesser, non-strikeable felony. The theory is that the two groups should be more comparable in terms of age, demographics, and criminal history (a fact they confirm in comparisons of case and history characteristics for these two groups) yet the two groups face very different penalties should they be convicted for a third offense. People with one prior serious/violent offense face a sentence that is double in length relative to prescribed triad values while people with two prior serious/violent offenses face a 25-to-life sentence for any felony (note that this study was conducted prior to the implementation of Proposition 36). To the extent that the law is deterring potential offenses, we should observe lower rearrest rates among people released with two prior serious/violent convictions.

The authors demonstrate that over the subsequent three years following release, those eligible for a third-strike enhancement are about one-fifth less likely to be rearrested. However, both groups exhibit a very high-rearrest rate, with 48% of those not eligible for a third-strike enhancement rearrested within three years in contrast to 40% of those eligible for a third-strike enhancement. The authors use their findings to perform a back-of-the-envelope, cost-benefit analysis contrasting the budgetary expenditures on extra incarceration with the dollar value of the benefits from crimes prevented. The calculations are rough approximations based on many assumptions. The authors assume that the decline in arrests and

the implied decline in offenses for this population is distributed across offense categories in proportion to the distribution of total crime in the state across felony categories. If the decline in rearrests prevented more serious offenses on average, their estimates would be too low, and vice versa if the decline in arrests reflects prevented offenses that are less serious than the average felony offense committed in the state. The authors also make a rough adjustment for crimes not reported to the police. Keeping these caveats in mind, the authors estimate that each dollar of spending devoted to incarcerating individuals convicted under Three Strikes generates about 22 cents in benefits in terms of crime prevention. They contrast this finding with interventions (hiring more police, violence prevention efforts) where research findings indicate that benefit-cost ratios exceed one, implying that these interventions provide greater benefits than costs to society.

A reanalysis of these data conducted by Roodman (2017) suggest that the public safety benefits of Three Strikes in California are likely even smaller than the cost-benefit analysis provided in Helland and Tabarrok (2007). Reanalyzing the original data, Roodman uses the two groups as defined in the original study to probe the robustness of the findings and to test for differential effects of third-strike eligibility on the likelihood of rearrest for specific felony offenses. In addition to pointing out some imbalances between the two groups that may partially explain the higher arrest rates among the group not facing the third-strike sentence,³¹ Roodman demonstrates that the reduction in arrests is explained entirely by a 31% reduction in the likelihood of an arrest for a drug offense. Roodman finds no significant effect on rearrests for aggregate violent offenses and property offenses, as well as no effect for the individual offenses that constitute major index felony offenses as defined by the Federal Bureau of Investigations (murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft). Given these findings, Roodman's reanalysis indicates that the benefit-cost ratio is likely much lower than the rough calculation provided by Helland and Tabarrok.³²

There are several peer-reviewed studies that claim to find evidence that Three-Strikes laws lead to increases in serious crime. Marvell and Moody (2001) argue that the severe penalties for a third-strike enhancement for any felony (note that

31 The two-trials, doubled-sentence eligible group were slightly younger on average at first arrest and had slightly more prior arrests.

32 Iyengar (2008) provides another example of an attempt to use slight differences in criminal history to identify quasi-exogenous variation in the potential sentence for a new offense with the aim of estimating deterrent effects of Three Strikes, though the devised empirical strategy reflects a misreading of the law. The author argues that two people with two or more prior felonies and comparable criminal histories, one where earlier offense are serious/violent offenses and the other where later offense are serious/violent offenses, face differential likelihood of harsher punishment and thus should recidivate at different rates if Three Strikes serves as a deterrent. To use the author's example, imagine two people, Joe and Bob, each with two prior convictions, one for first-degree burglary and one for felony larceny (burglary being a serious/violent offense and larceny not). Suppose that Joe was convicted of first-degree burglary first and theft second, while Bob's criminal history has the opposite ordering. Iyengar argues that for subsequent offenses, Joe faces a 25-year-to-life term while Bob does not. She finds a relative decline in future offending for people where the more serious offenses occur earlier in their criminal history relative to people where the more serious offense occurs later. Roodman (2017) points out that the paper's identification strategy is based on a misreading of the law. Specifically, subsequent felonies that are not serious/violent do not count as strikes for the purpose of making someone eligible for Three Strikes. Moreover, one might expect a different offending trajectory for someone with a sequence of conviction offenses that decline in severity with time relative to someone with a sequence that is increasing in severity, holding constant the number and nature of prior offenses. Given the mischaracterization of strike eligibility, it is difficult to interpret the findings from the Iyengar study.

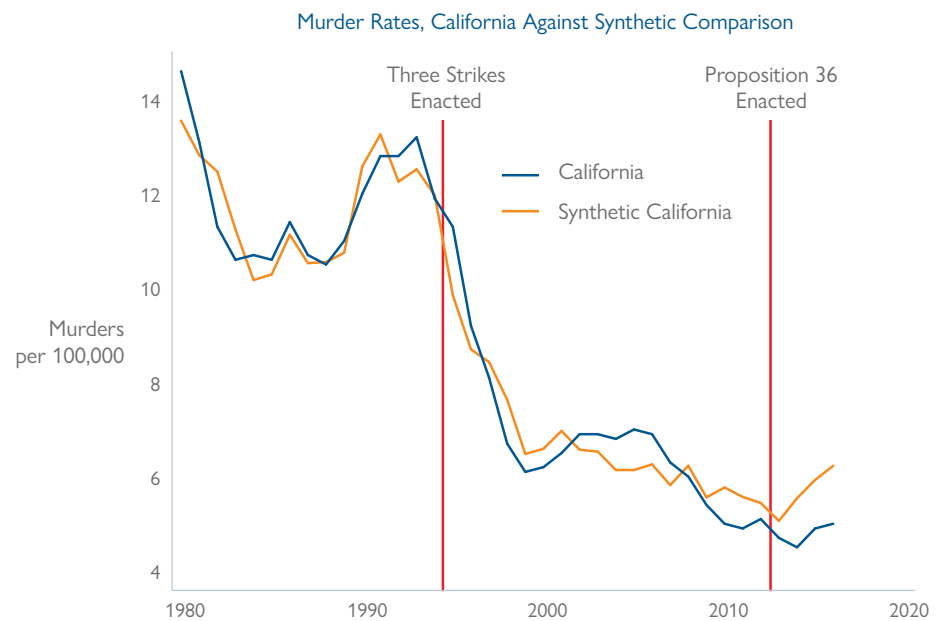
this study was also conducted prior to the implementation of Proposition 36) creates an incentive for people who are potentially facing a life sentence to kill any potential witnesses and perhaps to resist arrest with deadly force. Using state-level panel data regressions, the authors find a positive partial correlation between murder rates and the passage of Three-Strikes laws holding constant state and year-fixed effects, state-specific time trends, and several lags of the dependent variable. Kovandzic, Sloan, Vieraitis (2002, 2004) reproduce this finding using city-level panel data where the key dependent variable is an indicator for the city being located in a state with a Three-Strikes law.

While the authors advance a theoretically plausible hypothesis, there are reasons to be cautious about these findings. Pre-intervention crime trends in states that passed Three-Strikes laws are quite different from those that did not (as is demonstrated by Kovandzic, Sloan, Vieraitis 2002). More importantly, one might argue that rising murder rates may be the impetus for passing Three-Strikes laws to begin with, and thus there may be a reverse-causal relationship between crime rates and the passage of these laws. While Marvell and Moody (2001) as well as a Kovandzic, Sloan, Vieraitis (2004) present assessments for reverse causality using Granger causality tests, they make no effort to identify exogenous variation in the passage of Three-Strikes laws. The results are consistent with the proposition that states with rising crime rates pass severe sentencing legislation.

More generally however, when we compare murder rate trends in California to those from states with similar rates during the 1990s, we do not see California's murder rates experiencing a relative increase. [Figure 12](#) presents this comparison. Again, we see a close correspondence between murder rate trends in California and the comparison states identified by the algorithm, prior to the passage of Three Strikes in these states. We then observe sharp declines in murder rates in California and the comparison states that are in lockstep with one another. We do not observe an increase in murder rates in California following the implementation of Three Strikes.³³

33 The synthetic comparison estimator selects the following states to generate "synthetic California" for murder (with weights in parentheses): Illinois (9.0%), Michigan (3.6%), Missouri (16.2%), Mississippi (21.1%), New York (28.4%), and Texas (21.7%). Rerunning the model omitting New York yields similar results.

FIGURE 12: Comparison of California Murder Rates to “Synthetic California”, 1980 through 2016



To summarize, changes in crime trends in the state shortly after the Three-Strikes law was enacted were interpreted as Three Strikes causing large reductions in crime. However, researchers have shown that crime fell throughout the country, even in states without Three Strikes. While the research base isn't particularly large, extant published research tends to be mixed, with the research claiming large crime-reduction effects as well as large criminogenic impacts on murder suffering from methodological problems. The balance appears to suggest that there may be modest general deterrence for people eligible for a third-strike enhancement, but deterrence appears to affect drug arrests only.

5. Conclusion

California's Three-Strikes law is nearly three decades old. While the majority of people sentenced to prison in California are not sentenced under Three Strikes, a sizable minority of admissions and a larger share of the currently incarcerated have sentences that are longer than they otherwise would be due to the provisions of the law. People serving a third-strike enhancement tend to be older (with a median age of 56), and account for 37% of people serving sentences of 20 years or more. Black people are heavily over-represented among those with strike enhancements, both relative to the overall prison population and even more so relative to the resident population of the state. While recent reforms have restricted the application of third-strike enhancements for non-serious, non-violent offenses, doubled-sentence enhancements are still imposed for less serious offenses. In fact, the majority of prison admissions with doubled-sentence enhancements do not include any felonies considered serious and/or violent.

The longer sentences associated with Three Strikes contributed to the overall incarceration rate in the state and likely created the population pressures leading to federal overcrowding litigation and the decade of reform beginning with realignment in 2011 aimed at alleviating this pressure. Beyond Three Strikes, other aspects of California's sentencing practices such as case and offense enhancements and the use of consecutive sentencing have also contributed to long prison sentences. Subsequent reports will focus on these factors.

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