



C A L I F O R N I A

DEPARTMENT OF JUSTICE

OFFICE OF GUN VIOLENCE PREVENTION

CALIFORNIA'S FIGHT AGAINST THE GHOST GUN CRISIS:
Progress and New Challenges

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EXECUTIVE SUMMARY

California has made enormous long-term progress on gun safety, and has transformed from a state with one of the highest rates of gun violence in the nation to one of the lowest.¹ If the gun death rate in the rest of the U.S. matched California's over the past decade, there would have been nearly 140,000 fewer American gun deaths over that one decade alone and potentially hundreds of thousands fewer gunshot injuries.² A child under 18 is less than half as likely to die from bullet wounds in California compared to the rest of the nation on average.³

This did not happen by accident.

California's safety transformation has relied on foundational gun violence prevention laws—a set of rules and requirements that provide guardrails against the firearm industry's basic profit motive to sell as many deadly weapons to as many people as possible, regardless of the dangers. These laws ensure the firearm industry is subject to oversight, inspections, and accountability. They ensure most gun sales must be conducted through licensed, accountable gun dealers. They ensure those dealers are required to block the sale of uniquely dangerous illegal weapons. And they require those dealers to conduct background checks to block the sale of firearms to people who cannot safely and legally possess them.

But over the past decade, and especially during the COVID-19 pandemic, California and the rest of the U.S. faced a devastating safety challenge: a fast-growing "ghost gun" industry selling finish-it-yourself gun products without dealer licenses, background checks, serial numbers, or other safety requirements.

The ghost gun industry is a "skip-the-background-check" industry. It grew out of efforts to evade and undermine gun violence prevention laws by skirting the law's definition of the word "firearm" itself. State and federal firearm laws, like background check requirements, apply to products that meet the *legal* definition of the term "firearm." That legal definition is broader than the term's everyday usage, ensuring that state and federal firearm laws apply to certain products that are not yet fully assembled or ready to fire. In particular, these laws apply to the core building block component of a gun—its frame or receiver—by itself. Ghost gun companies sought to bypass these firearm laws' protections by producing and selling gun build kits and frame and receiver products that were left just unfinished enough for sellers to claim that they were not technically firearms *yet*. As one ghost gun seller stated in marketing a nominally unfinished handgun frame: the product "is specifically designed to straddle the line between an ATF firearm classification and a DIY project that's easily accomplished by anyone even moderately handy."⁴

Do-it-yourself gun building is not new. Before the rise of the ghost gun industry, law-abiding individuals could already assemble their own legal guns for personal use from frames and receivers sold through regulated channels as "firearms." These frames and receivers were generally made and sold by licensed firearm manufacturers and dealers, and sold with identifying serial numbers, sale and manufacturing records, and background checks.

The difference the ghost gun industry offered—explicit in much of its advertising—was unfettered, skip-the-background-check access to untraceable guns. While more responsible businesses obtained licenses and complied with gun safety and consumer protection laws, ghost gun companies bypassed these requirements. They shipped nominally unfinished firearm products directly to buyers, including minors, who never passed a background check or even showed ID. They sold these products without meeting basic product safety and reliability standards. They sold them in bulk. And they sold them

without any traceable serial number or reported sale records, meaning that the most reliable metric for understanding the scope of the ghost gun crisis is the trail of harm left behind at crime scenes across our state.

This report publishes new data about ghost guns recovered by law enforcement from suspected criminal activity in California, along with other research, court documents, and narrative sources, to document the impact of the ghost gun crisis and California's response. It traces the origins of the ghost gun crisis and the proliferation of ghost guns in crime from 2013 to 2021, and documents our state's vital recent progress in reversing that trend.

This data shows that California was uniquely impacted by the ghost gun crisis. From 2017-2021, California accounted for 12% of all guns recovered from crime nationwide and traced by the federal Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). But California accounted for 55% of the crime guns reported to ATF that were identified as ghost guns.

This data also shows that ghost guns played a leading role in fueling increased gun crime during the COVID-19 pandemic. From 2019 to 2021, the number of ghost guns recovered from crime in California increased by 592%; this increase in ghost guns accounted for nearly 70% of the total increase in crime guns recovered in California over this period.

This data also provides hopeful news. Since 2021, California has taken strong action to address the ghost gun crisis through affirmative litigation in the courtroom, law enforcement actions, local gun safety ordinances, and in 2022 and 2023, by enacting the nation's most comprehensive ghost gun reform legislation. The number of ghost guns recovered as crime guns in California tripled from 2019 to 2020 and nearly doubled from 2020 to 2021. But from 2021 to 2023, California law enforcement agencies reported a 23% *decrease*. Just as ghost guns accounted for most of the pandemic-era increase in crime gun recoveries in California from 2019 to 2021, decreases in ghost gun recoveries have accounted for most of the subsequent decline in crime gun recoveries in our state.

This significant recent progress indicates that California's efforts present a model for policymakers in other states and at the national level to address the ghost gun crisis.

While this report documents and celebrates California's recent progress, the fight to protect our communities from ghost guns is not over. Court documents indicate that in the span of about six years, a single ghost gun company sold more than 200,000 unserialized ghost gun kits into California before litigation and legislative reforms stopped them from selling more. Every one of those products was designed to arm someone who did not pass a background check with an untraceable weapon designed to end life. Our communities continue to grapple with the consequences of the flood of ghost gun products already sold into our state, and unfortunately, law enforcement agencies are still recovering far more ghost guns from crime than before the pandemic, both in overall numbers and as a percentage of all crime guns.

The ghost gun industry also continues to seek out new ways to market skip-the-background-check access to untraceable firearms. This report warns that the ghost gun market is increasingly shifting toward consumer-level 3-D printers and computer numerical control (CNC) milling machines that can be programmed to produce or complete untraceable "downloadable firearms." Multiple entities have sought to sell or otherwise disseminate access to these machines and to the digital files and software

used to program them to produce firearms and firearm components. Some ghost gun companies also sell kits, parts, products, and services designed for use in completing a 3-D printed or CNC-milled weapon, often with machine gun or assault weapon features.⁵ California has passed nation-leading legislation to address these threats, including through new and expanded ghost gun laws that took effect as part of AB 1089 (Gipson) on January 1, 2024.

To help promote compliance, enforcement, and accountability, this report includes a **California Ghost Gun Laws Reference Guide** (starting on page 52), which provides a quick reference summary of California’s civil and criminal statutes governing ghost guns and unlicensed firearm manufacturing. Law enforcement officers, prosecutors, city attorneys, county counsels, advocates for victims and survivors, and other public safety stakeholders, should familiarize themselves with these laws and proactively use and enforce them.

Many people’s lives and safety depend on these efforts. In 2020, law enforcement officers in San Jose, California, arrested a man for felony domestic violence and removed a ghost gun that his abuse victim said he had pointed at her to violently threaten her. When officers informed the man that a court had issued a protection order against him barring him from keeping the gun under California law, he replied, *“Then I’ll just build another one.”*⁶ For survivors in danger and so many others, proactive implementation and enforcement of California’s ghost gun laws must be a safety priority. An industry that profits by marketing skip-the-background-check access to untraceable deadly weapons for “any and every” person,⁷ no matter how dangerous or how young, is not compatible with public safety, fair and decent business practice, or the laws of this state.

Data Highlights

- 1. From 2013 to 2021, the number of ghost guns recovered by law enforcement from suspected criminal activity in California increased dramatically every year.**
 - The number of reported ghost guns recovered from crime in California increased from three in 2013, to 174 in 2016, 1,572 in 2019, and nearly 11,000 in 2021. (As discussed in more detail on pages 12-13, this data likely substantially undercounts the true number of ghost guns recovered from crime.)
 - Ghost guns represented at least 0.01% of all crime guns reported to DOJ in 2013, 0.4% in 2016, 3.5% in 2019, and 18.5% in 2021.
- 2. Ghost gun recoveries spiked during the COVID-19 pandemic across different types of crime.**
 - From 2019 to 2021, there was a 592% increase in the number of ghost guns recovered from all crimes in California. The number of ghost guns recovered as crime guns tripled from 2019 to 2020 and then nearly doubled from 2020 to 2021.
 - The largest recorded increase in the number of ghost guns recovered from crime occurred between the second and third quarters of 2020.
 - This increase in ghost gun recoveries occurred across different types of crime. From 2019 to 2021, there was a:
 - 659% increase in ghost guns recovered from all violent crimes.
 - 1,037% increase in ghost guns recovered from violent gun crimes.
 - 667% increase in ghost guns recovered from homicides.
 - 4,600% increase in ghost guns recovered from gun homicides against a police officer.
 - 1,236% increase in ghost guns recovered from domestic violence and abuse crimes.
 - 852% increase in ghost guns recovered from crimes involving violations of court orders, parole, or probation.
 - 590% increase in ghost guns recovered from unlawful weapon possession offenses.
- 3. Ghost guns accounted for most of California's total pandemic-era increase in guns recovered from crime.**
 - From 2019 to 2021, amid large nationwide spikes in gun violence, law enforcement agencies in California reported a 30% increase in the total number of crime guns recovered from suspected criminal activity. This included a 9% increase in the number of (largely commercially manufactured) firearms recovered with serial numbers, but a 592% increase in unserialized ghost guns.
 - This increase in ghost gun recoveries accounted for more than two-thirds (69%) of the total increase in crime guns recovered in California over this period. Commercially manufactured, serialized firearms still represented a majority of guns recovered from crime in our state, but

the surge of unserialized ghost guns overwhelmingly drove the pandemic-era increase across different types of crime.

- From 2019 to 2021, increased ghost gun recoveries accounted for at least:
 - 57% of California’s total increase in crime guns recovered from all violent crimes.
 - 53.5% of California’s total increase from violent gun offenses.
 - 53.5% of California’s total increase from homicides.
 - 63% of California’s total increase from gun homicides against a police officer.
 - 36% of California’s total increase from domestic violence and abuse crimes.
 - 62% of California’s total increase from crimes involving violations of court orders, parole, or probation.
 - 97% of California’s total increase from weapon possession offenses.

4. In 2021, ghost guns represented a substantial percentage of all crime guns recovered in California.

- In 2021, ghost guns represented at least 18.5% of all crime guns recovered in California, including at least:
 - 15% of crime guns recovered from all violent crimes.
 - 18% of crime guns recovered from violent gun offenses.
 - 18% of crime guns recovered from homicides.
 - 32% of crime guns recovered from gun homicides against a police officer.
 - 19% of crime guns recovered from gun homicides and aggravated assaults against a family member.
 - 13% of crime guns recovered from domestic violence and abuse crimes.
 - 22% of crime guns recovered from crimes involving violations of court orders, parole, or probation.
 - 23% of crime guns recovered from weapon possession offenses.

5. The number of ghost guns recovered from crime in California peaked in 2021 and early 2022.

- The second and third quarters of 2021 set records for the most ghost guns recovered from crime, followed by the second quarter of 2022.

6. California has made significant progress in reversing the proliferation of ghost guns in crime since mid-2022.

- Among other important responses to the ghost gun crisis, California enacted nation-leading legislation to reform the ghost gun industry, with many major provisions taking effect in the middle of 2022. Since then, the number of ghost guns recovered as crime guns in California has dropped significantly.

- From 2021 to 2023, law enforcement agencies reported a 23% decrease in the number of ghost guns recovered from crime in California.
- The largest decrease in ghost gun recoveries occurred between the third and fourth quarters of 2022.
- The fourth quarter of 2023 saw the lowest number of ghost guns recovered since early 2020. (2023 is the most recent year analyzed for this report).

7. Progress against ghost guns has accounted for most of California’s recent decrease in guns recovered from crime.

- From 2021 to 2023, law enforcement agencies reported a 6% decrease in the number of guns recovered from crime in our state. This included a 1.7% decrease in the number of (largely commercially manufactured) crime guns recovered with serial numbers and a 23% decrease in the number of unserialized ghost guns.
- Declining ghost gun recoveries accounted for nearly three-quarters (73%) of California’s total decrease in guns recovered from crime from 2021 to 2023.

8. The number of ghost guns recovered from crime has substantially outpaced the number of firearms that were converted from ghost guns into legally serialized firearms.

- Starting in 2018, California law required unlicensed gun makers to apply to DOJ for a unique serial number, pursuant to a background check, when assembling or manufacturing any firearm that did not already have a serial number engraved on its frame or receiver. California law also generally required anyone in possession of an unserialized firearm to apply to DOJ for a serial number by January 2019. By applying for and engraving that serial number on their firearm, California residents could convert an unserialized ghost gun into a legally serialized firearm.
- From 2018 through 2023, DOJ received unique serial number applications for 7,784 firearms without serial numbers. Over the same period, California law enforcement agencies reported recovering nearly five times as many (37,064) unserialized ghost guns in connection with suspected criminal activity.

9. California was uniquely impacted by the ghost gun crisis.

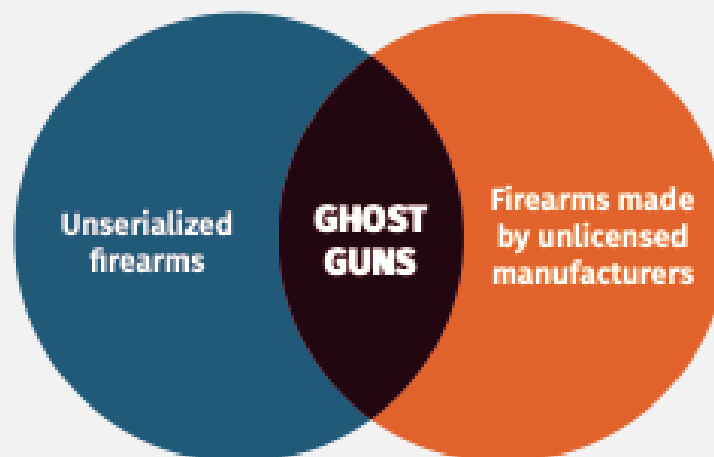
- From 2017 to 2021, law enforcement agencies nationwide submitted crime gun records to ATF to trace 1.9 million guns recovered from suspected criminal activity. California accounted for 12% of the total number of crime guns submitted to ATF over this period but 55% of those identified as ghost guns.
- The state with the second highest number of suspected ghost guns reported to ATF was Maryland, which accounted for 5% of the nation’s recovered ghost guns. The City of Los Angeles alone accounted for 7% of such guns.

WHAT ARE GHOST GUNS?

“Ghost guns” are guns that are produced without an identifying serial number by individuals who do not have a license to manufacture firearms.

These “privately made,” unserialized weapons are colloquially called “ghost guns” because they are often untraceable through traditional law enforcement investigative methods. The absence of a serial number can make it very difficult for law enforcement investigating gun crimes to trace the manufacture, sale, or existence of a ghost gun. **The absence of a serial number also indicates that the gun was likely built from components sold through unregulated or illegal channels without a sale or manufacturing record and without any background check.**

Ghost guns are distinct from firearms produced by traditional *licensed* firearm manufacturers, who are required to engrave identifying serial numbers on the frame or receiver of any firearm they produce. Ghost guns are also distinct from “privately made” but serialized guns that were produced by *unlicensed* individuals from regulated, serialized frames and receivers.



Most ghost guns have been assembled using handgun frames or long gun receivers sold in nominally unfinished form, either as a standalone product or as part of a bundled ghost gun build kit. These products are frequently marketed as “80%” frames or receivers to convey that they are close to fully completed. However, this is a colloquial product description, not a precise or legal term. Unfinished frame and receiver products are designed to be quickly and easily finished by untrained amateurs. The ghost gun industry’s marketing has emphasized that these products are easy to complete and that they are sold without background checks, traceable sale records or serial numbers, or other basic safety precautions.

Increasingly, ghost guns are also being produced using consumer-level computer-operated machines, including 3-D-printers and computerized numerical control (CNC) milling machines. These machines can be programmed to automatically produce or finish frames and receivers and other core firearm components. 3-D printers work through “additive manufacturing” that layers material to form a desired object, while CNC milling machines work through “subtractive manufacturing” that carves away material to form a desired object.

CLARIFYING COMMON MISCONCEPTIONS ABOUT GHOST GUNS

Ghost guns are weapons that are both unserialized and “privately made.” This means that (1) the firearm was assembled by individuals who do not have a federal license to manufacture firearms, and (2) that the firearm does not have a lawfully engraved serial number.⁸

1. Some privately made firearms have serial numbers. They are not ghost guns.

Some unlicensed individuals assemble guns using building block components (frames or receivers) that were sold as “firearms” through regulated channels with serial numbers and background checks. California has also authorized individuals to apply to DOJ for serial numbers to convert unserialized firearms they made or possess into lawfully serialized weapons. If these privately made firearms are engraved with valid serial numbers, they would be traceable through traditional law enforcement investigative methods and would generally not be considered ghost guns.

2. Not all guns without serial numbers are ghost guns.

Over the past decade, most crime guns recovered without serial numbers in California were identified as privately made ghost guns. But law enforcement agencies also sometimes recover commercially manufactured firearms that do not have legible serial numbers because someone has illegally “obliterated” (defaced or removed) the serial number that was originally engraved on the firearm to try to prevent law enforcement from tracing the weapon. These unserialized firearms are often difficult to trace in criminal investigations. But because they were originally manufactured with serial numbers by licensed manufacturers, they were at least originally likely made and sold through regulated channels and are generally not considered ghost guns. Some older antique firearms are also exempt from serial number requirements and are not considered ghost guns.

3. Not all ghost guns are made using 3-D printers.

3-D printers and other computer-operated machines like CNC milling machines represent a fast-growing focus for the ghost gun market. But many ghost guns recovered from crimes over the past decade have been assembled from nominally unfinished frames or receivers and gun build kits that do not require a 3-D printer or any other machine to assemble a fully operable weapon.

4. Ghost guns are usually detectable by metal detectors and screening machines.

Guns that are undetectable by metal detectors and similar screening machines pose special risks to public safety and are generally illegal to make, sell, or possess under California and federal law. Many ghost guns consist primarily of non-metal polymer material, especially those produced using 3-D-printers, which has raised concerns about their ability to evade metal detectors and other screening devices. However, most ghost guns include at least some metal components and have other features that are detectable by commonly used security screening machines.



PART 1: INTRODUCTION TO THE GHOST GUN CRISIS

In May 2013, an investigative reporter published a story about a ghost gun “build party” in southern California.⁹ He wrote that he and other attendees paid cash for gun build kits designed to be assembled into AK-47-type rifles from products sold without any ID, license, serial number, sale or manufacturing record, or other “fussy irritations like, say, passing a background check[.]”¹⁰ The reporter noted that a rifle’s core building block is its lower receiver, “which house[s] the mechanical parts, making a gun a gun,” and that sales of these components “are tightly regulated[.]” In fact, the lower receiver of a long gun and the frame of a handgun are so integral to the weapon—like the chassis of a car—that for decades, California and federal gun safety laws like serial number and background check requirements have applied to the sale and manufacture of these core components themselves without any other parts attached. But the receiver in the reporter’s gun kit was sold without any serial number, sale record, or background check. It was an untraceable “ghost” product left nominally unfinished so the sellers could claim it was not technically a receiver yet. “[B]ut one bend in a vise later and, voilà, it’s a receiver, ready for trigger guards to be riveted on,” he wrote. “It’s shockingly easy to build an untraceable gun.”¹¹

In that same month, May 2013, a self-described crypto-anarchist published digital files online for printing what he called the world’s first 3-D-printed handgun, along with similar files for AR-15 rifle receivers and magazines.¹² He asked, “How can we prevent democracy from happening or ruin the democracy that has broken out?”¹³ He said his goal was to try to “really lower the barrier to access to arms”¹⁴ and “pull the world” toward an era of ubiquitous downloadable guns on demand where “any and every citizen has near instant access to a firearm through the Internet.”¹⁵ “Anywhere there’s a computer and an Internet connection, there would be the promise of a gun,” he said.¹⁶

A few weeks later, in June 2013, a young man who had failed a background check to purchase a gun in California committed a mass shooting in Santa Monica with an assault rifle law enforcement believed he assembled at home from ghost gun products.¹⁷ A congressional staff report concluded that:

[The gunman] first shot and killed his father. . . and brother. . . at their home. He then pulled over and carjacked [a woman], forcing her to drive at gunpoint to Santa Monica College. [He] shot at numerous cars, pedestrians, and a bus en route, killing the college’s groundskeeper. . . and his daughter[.] Upon arriving at the campus, he then fatally shot another woman. . . He then entered the school library, where he attempted to kill several library patrons who were hiding in a safe room. . . According to authorities, [he] fired approximately 100 rounds in total.

[The gunman] had a history of mental illness. . . [He] attempted to buy a weapon in 2011, but a background check conducted by the California Department of Justice found him ineligible and denied the purchase. . . Authorities believe that [he] assembled his AR-15 rifle using parts he bought in pieces from a number of different sources, including an 80% completed lower receiver. Police found a drill press at [his] home, a tool that can make holes in the lower receiver to complete the weapon.¹⁸

In the years after that mass shooting tragedy, the ghost gun industry grew rapidly. Early ghost gun products often required some technical expertise and effort to source and assemble firearm parts, but

technological advances and the growth of Internet marketplaces focused on ghost gun products made it increasingly fast and easy for untrained amateurs to obtain and finish ghost guns.¹⁹ More and more communities suffered the devastating consequences.

Ghost guns have been used to kill and maim Californians in mass shootings,²⁰ domestic violence shootings,²¹ shootings at schools,²² restaurants,²³ and movie theaters,²⁴ in deadly armed robberies,²⁵ gang and community violence shootings,²⁶ hate crime shootings and attacks by violent extremists,²⁷ in shootings targeting law enforcement officers and other emergency responders,²⁸ and in unintentional shootings by children.²⁹

Ghost gun products were sold without background checks to minors,³⁰ adjudicated domestic abusers,³¹ violent domestic extremists,³² and traffickers funneling guns to international cartels, terror groups, and conflict zones.³³

Ghost guns proliferated at an alarming rate and contributed to record nationwide spikes in shootings during the Covid-19 pandemic in particular.³⁴ From 2019 to 2021, law enforcement agencies reported a 9% increase in the number of crime guns recovered *with* serial numbers in California but a 592% increase in the number of unserialized crime guns identified as ghost guns.³⁵ This proliferation of ghost guns fueled our state's pandemic-era increase in gun crime, accounting for most (nearly 70%) of the total increase in crime gun recoveries in California from 2019 to 2021.³⁶

As discussed further below, this data likely substantially undercounts the true number of ghost guns recovered from crimes in California; it also does not include the larger number of ghost guns used to perpetrate crime and violence in our state that have not been recovered by law enforcement and properly identified and reported to DOJ.

Thankfully, in recent years, California has taken strong action to address this crisis through affirmative litigation in the courtroom, enforcement actions, local gun safety ordinances, and by enacting the nation's most comprehensive state legislation to reform the ghost gun industry and strengthen safety requirements for manufacturing firearms. Most of California's new legislative reforms took effect on June 30, 2022; some took more recent effect in 2023 and 2024.

The data presented in the section below shows that these recent efforts have had a substantial positive impact.



PART 2: DATA REPORT ON GHOST GUNS RECOVERED FROM CRIME

This section presents new and updated data to document the impact of the ghost gun crisis in California, including the alarming proliferation of ghost guns in crime from 2013-2021, and our state's significant recent progress in reversing that trend.

This report analyzes records reported to the California Department of Justice (DOJ) by law enforcement agencies across California regarding “crime guns” that were recovered from suspected criminal activity and/or reported to DOJ as guns held in evidence in a criminal case. For over two decades, California law has required state and local law enforcement agencies to report information to DOJ about all crime guns recovered by the agency, meaning firearms that were illegally possessed, used in a crime, or suspected of having been used in a crime.³⁷

When reporting a recovered crime gun to DOJ, law enforcement agencies are prompted to include information about the type of crime from which the gun was recovered, as well as information about the gun itself, including the identifying serial number engraved on the frame or receiver of the weapon. If there is no legible serial number, the agency is prompted to indicate why, including whether it believes the firearm is unserialized because:

- It is a ghost gun (a privately made firearm produced without any serial number by an unlicensed manufacturer);³⁸
- It is a commercially manufactured firearm whose original serial number has been “obliterated” (defaced or removed from where it had been engraved on the weapon); or
- It is an antique firearm that was manufactured before manufacturers were required to serialize firearms.

The data figures below provide DOJ's analysis of crime guns recovered by law enforcement in California and reported as having no legible serial number engraved on the weapon. These data figures break this information down to show the number of these unserialized crime guns that the reporting law enforcement agency identified as “Ghost Guns” produced by unlicensed manufacturers without any serial number. These data figures also show the number of “Other Unserialized Guns,” which includes crime guns that the reporting law enforcement agency identified as commercially manufactured firearms whose original serial number had been obliterated, antique firearms, and other unserialized crime guns reported with information indicating that the weapon had no legible serial number but without sufficient information to otherwise determine why the weapon was unserialized.³⁹

Data Note and Limitations:

There are some limitations to this data. DOJ's analysis relies on crime gun information reported by law enforcement agencies and personnel, who must make judgements in some cases about the recovered firearm and the crime with which it was associated. Different agencies may classify similar conduct differently; for instance, an agency that recovers a crime gun from someone who illegally threatened an intimate partner with the weapon might report that the crime gun was recovered in connection with a domestic violence offense, a criminal threats offense, an aggravated assault offense, a violation of a

protection order, etc. DOJ's data systems are also dynamic and law enforcement agencies may regularly update or revise crime gun record reports, so crime gun statistics may shift depending on when data is extracted and analyzed.

Additionally, an increase in the number of crime guns recovered by law enforcement does not by itself indicate that more gun crime has occurred. Multiple crime guns may be recovered in connection with a single offense, or a single gun may be associated with multiple crimes. If a law enforcement agency focuses more resources on proactively recovering illegally used and possessed guns and promptly reporting records to DOJ, that agency may record an increase in the number of recovered crime guns and a decrease in actual gun crime. If an agency trains its personnel to more accurately identify ghost guns as ghost guns, they might also report an increase in the number of recovered crime guns identified as ghost guns.

That said, DOJ crime gun data shows that during the COVID-19 pandemic, there was a large increase in crime gun recoveries across California, alongside a large increase in gun violence, and that starting in 2022, there has been a decrease in crime gun recoveries alongside a substantial decrease in gun violence. This data also shows that ghost guns played a leading role in driving these trends.

It is also important to emphasize that for several reasons, the crime gun data reported to DOJ likely substantially undercounts the true number of ghost guns recovered from crime in California.⁴⁰

- First, not all law enforcement agencies report all recovered crime gun records to DOJ. Federal and tribal law enforcement agencies are authorized but not required to do so and as a result, some ghost guns recovered by federal and tribal agencies in trafficking and other criminal investigations in California may be absent from California DOJ data. In recent years, ATF officials estimated that over 40% of cases investigated by that agency in Southern California involved ghost guns.⁴¹ Missing federal and tribal crime gun data may help explain why ATF data shows about 11% more ghost guns recovered from crime in California from 2017-2021 compared to crime gun data reported to DOJ over the same period.⁴² Additionally, while California law requires state and local law enforcement agencies to report all recovered crime guns to DOJ, gaps in state and local reporting occur.⁴³
- Second, law enforcement agencies do not always accurately identify and report recovered ghost guns as ghost guns. ATF's 2022 National Firearms Commerce and Trafficking Assessment noted that "many of the firearm kits sold by [ghost gun companies] are similar to Glock or Sig Sauer pistol models whose 20-year patent has expired," and that privately made firearms "oftentimes resemble commercially manufactured firearms or incorporate parts from commercially manufactured firearms bearing that manufacturer's name, so some firearms are [reported] using a commercial manufacturer's name rather than identifying as one privately made by an individual."⁴⁴

This misidentification may have played a role in driving large increases and decreases in the number of crime guns reported to DOJ as unserialized crime guns *other than ghost guns*. From 2013 to 2021, alongside a large increase in ghost gun recoveries, law enforcement agencies across California also reported a 91% increase in the number of crime guns identified as commercially made firearms that were unserialized because their original serial number had been obliterated.⁴⁵ Then from 2021 to 2023, alongside a substantial decrease in the number of

ghost guns recovered from crime, law enforcement agencies across California reported a 21% decrease in the number of crime guns reported as commercially made firearms that were unserialized because their serial number had been obliterated.⁴⁶ This trend suggests that some privately made ghost guns that never had any serial number in the first place may have been misidentified as commercially manufactured weapons whose serial numbers had been obliterated. To account for the likelihood that some ghost guns were misreported in this manner, this report provides data both about (1) the number of crime guns that were identified as unserialized ghost guns by the reporting law enforcement agency *and* (2) the number of other crime guns reported to DOJ without legible serial numbers.

- Third, data regarding ghost gun recoveries only includes crime guns that were reported as having no legible serial number engraved on the weapon. But some ghost guns may be misidentified as *serialized* crime guns if they have a fake serial number. ATF’s National Firearms Commerce and Trafficking Assessment noted that the growth of the ghost gun sector has “increased the prevalence of ‘counterfeit firearms’” that are “manufactured and designed to effectively resemble a firearm made by a known licensed manufacturer and may exhibit characteristics such as brand logos or type face text, and serial numbers.”⁴⁷ “These duplicative, counterfeit, or erroneous markings can be mistaken for authentic serial numbers and markings causing law enforcement to not recognize the firearm as a [privately made ghost gun].”⁴⁸ If a law enforcement agency recovers these weapons and reports them as having serial numbers, those weapons would generally not be reflected in this report or other statistics about ghost guns or unserialized guns recovered from crime.
- Fourth, statistics about ghost guns and unserialized crime guns recovered from crime would not include privately made firearms made by unlicensed individuals from unserialized ghost gun products *if* that individual followed California law by properly applying for and engraving a serial number on the weapon to convert the ghost gun into a traceable, serialized firearm. If that individual legally converted their ghost gun into a serialized weapon but then illegally used or possessed that gun in another crime, that firearm would be reported as a *serialized* crime gun instead of an unserialized ghost gun. The ghost gun data cited in this report documents the number of firearms that were identified as unserialized ghost guns at the time they were recovered from suspected criminal activity.
- Finally, these ghost gun statistics only include the number of ghost guns that were physically recovered by law enforcement agencies and reported to DOJ. They do not reflect the total number of ghost guns that were illegally sold or manufactured in California, or the number used to unlawfully harm and intimidate people across our state.

For all of these reasons, the ghost gun data in this report likely does not capture the full impact of the ghost gun crisis. Nonetheless, this data paints a clear picture of a fast-growing ghost gun crisis driven by the rapid and devastating proliferation of ghost guns in crime from 2013 to 2021, especially during the pandemic, until effective litigation, enforcement, and legislative responses began to reverse this trend in 2022.

Figure 1. Number of Ghost Guns Recovered as Crime Guns in California, By Year.

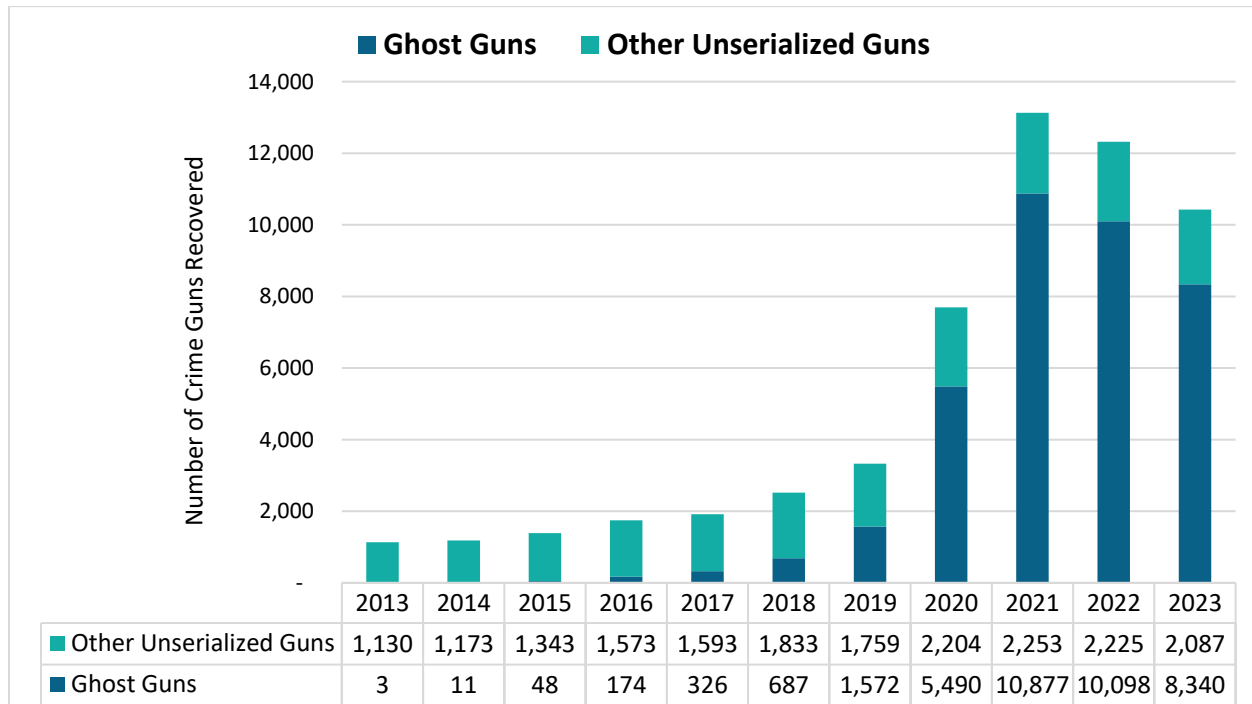


Figure 1 shows the number of recovered crime guns reported to DOJ each year that were identified as ghost guns or other unserialized crime guns. (“Other unserialized guns” includes crime guns reported as having no legible serial number because they were antiques, because the manufacturer serial number had been “obliterated,” or because the reporting law enforcement agency did not provide sufficient information to classify why the weapon had no serial number).

These crime gun records show that from 2013 to 2021, there was an enormous increase every year in the number of ghost guns recovered from suspected criminal activity in California, especially during the COVID-19 pandemic. The number of ghost guns recovered from crime tripled from 2019 to 2020 and then nearly doubled from 2020 to 2021. From 2019 to 2021, the total number of unserialized crime guns recovered in California increased by 294% and the number identified as ghost guns increased by 592%.

2022 was the first year since 2012 where law enforcement agencies reported a decrease in the number of ghost guns and unserialized guns recovered from crime. Comprehensive new ghost gun reform legislation took effect in California on June 30, 2022.

From 2021 to 2023, there was a 21% decrease in the total number of unserialized guns recovered as crime guns, and a 23% decrease in the number of unserialized guns identified as ghost guns. In comparison, there was a much smaller 1.7% decrease in the number of crime guns recovered *with* serial numbers over this period.

Figure 2. Total Number of Ghost Guns Recovered as Crime Guns in California, By Quarter

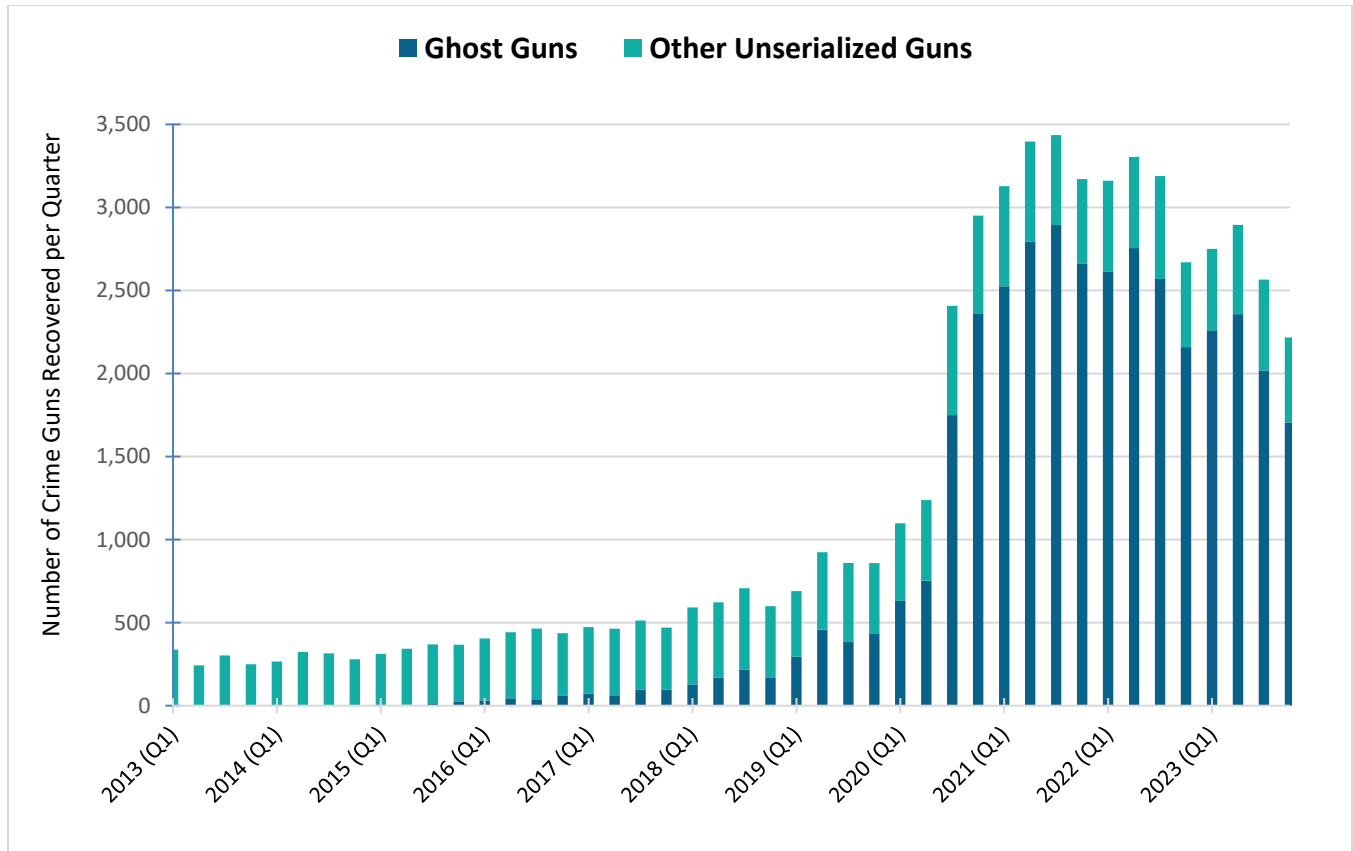


Figure 2 provides additional detail about the number of ghost guns and other unserialized guns recovered as crime guns per three-month quarter from 2013 to 2023. (Q1 means January through March).

The largest increase in ghost gun recoveries in California occurred in mid-2020, between the second and third quarters: the number of ghost guns recovered from crime during this period more than doubled from 752 in the second quarter of 2020 to 1,749 in the third quarter.

The second and third quarters of 2021 set records for the most ghost gun recoveries in California (2,795 and 2,894, respectively) followed by the second quarter of 2022 (2,755).

The largest decrease in ghost gun recoveries occurred between the third and fourth quarters of 2022. Most provisions of California’s ghost gun reform legislation took effect at the end of the second quarter of 2022 on June 30, 2022. (A new federal ghost gun rule also took effect in August 2022, although California’s ghost gun reforms took effect first and included much broader requirements).

The last quarter of 2023 saw the lowest number of ghost guns recovered as crime guns (1,705) since the second quarter of 2020. (2023 is the most recent year of data analyzed for this report).

Figure 3. Percentage of All Crime Guns Recovered in California Identified as Ghost Guns and Unserialized Guns, By Year

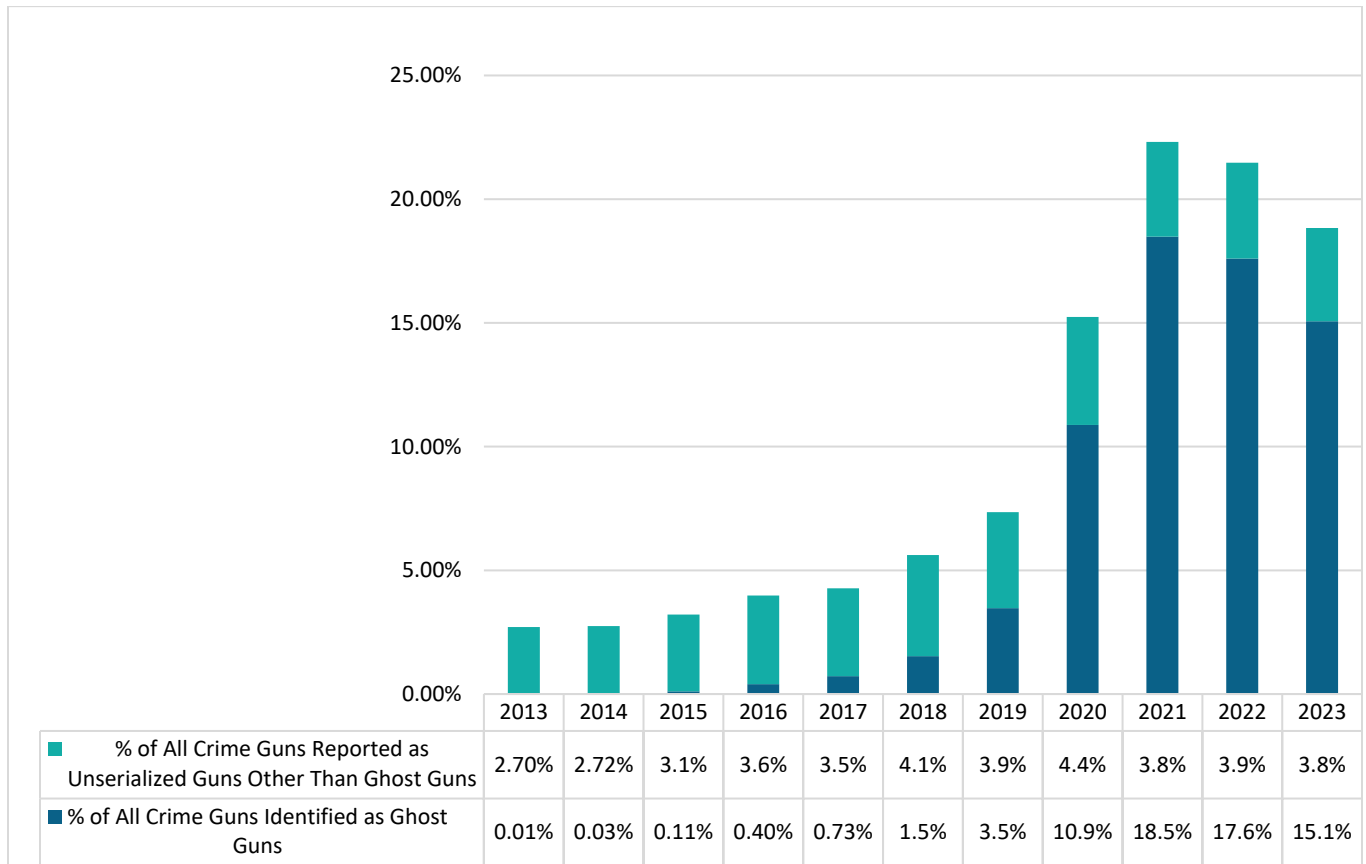


Figure 3 shows that ghost guns and other unserialized guns represented a fast-growing percentage of all crime guns reported to DOJ every year between 2013 and 2021, then began to decrease as a percentage of all crime guns in 2022 and 2023. By 2021, 22.3% of all recovered crime guns were reported without serial numbers and at least 18.5% of all recovered crime guns were identified as ghost guns. Again, this likely undercounts the true percentage of all crime guns that were ghost guns.

Despite the declines in 2022 and 2023, ghost guns still represent a much larger percentage of all crime guns recovered in California compared to the years before the pandemic.

Figure 4. Number of Crime Guns Reported to DOJ by Year and Type (Serialized, Ghost Gun, Other Unserialized Crime Guns).

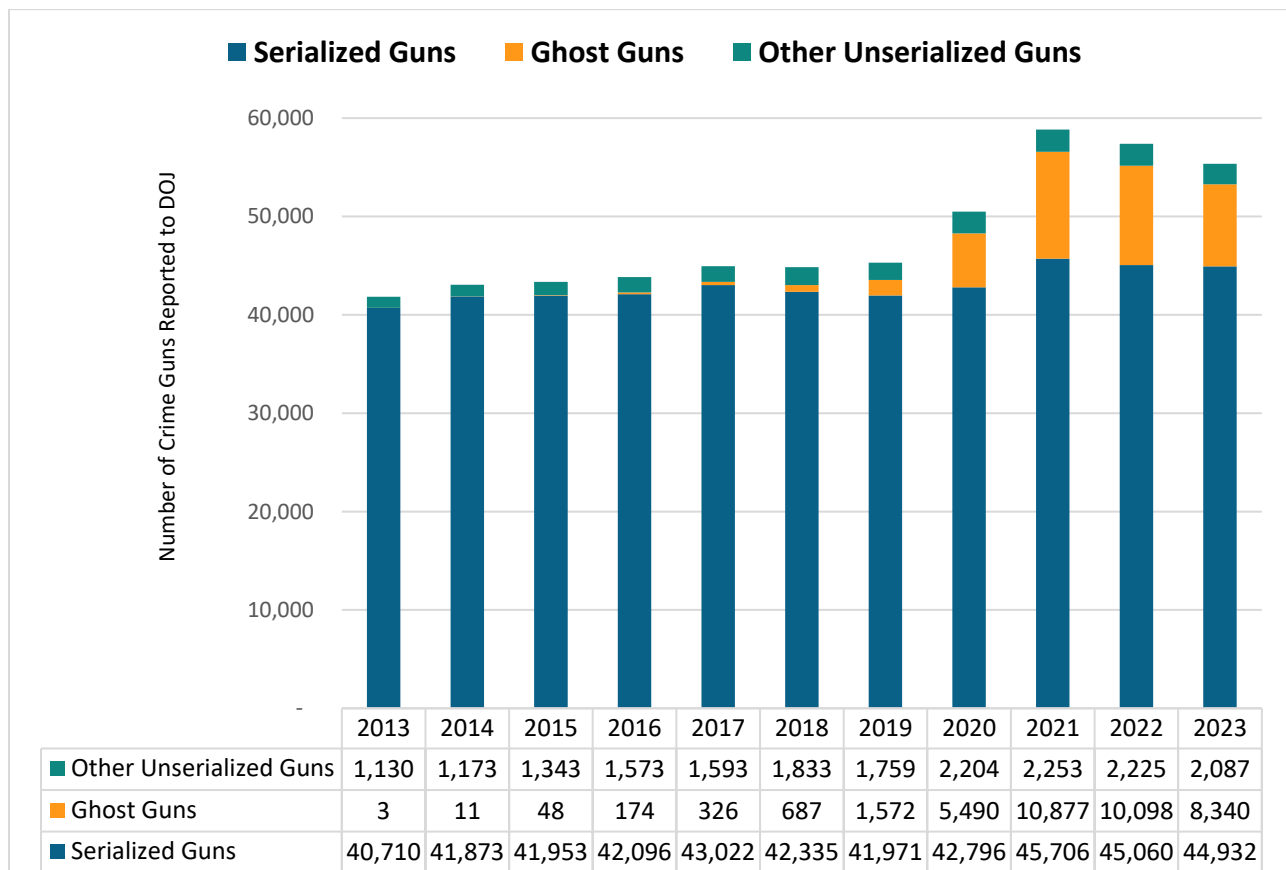


Figure 4 shows that trends in ghost gun recoveries accounted for *most* of the substantial pandemic-era increase and subsequent decrease in crime gun recoveries in California.

During the COVID-19 pandemic, California and the rest of the nation faced a significant increase in gun violence. In 2020, the U.S. suffered the largest single-year spike in homicides on record, driven by record spikes in fatal shootings.⁴⁹ California achieved its second lowest gun homicide rate on record in 2019, but mirrored national trends and suffered large increases in gun homicide in 2020 and 2021.⁵⁰

Over this same period, from 2019 to 2021, law enforcement agencies across California also reported a 30% increase in the total number of crime guns recovered from suspected criminal activity.⁵¹ While most recovered crime guns were still identified as traditional, serialized firearms, the surge of unserialized ghost guns accounted for most of the pandemic-era *increase* in guns recovered from crime. From 2019 to 2021, unserialized guns accounted for nearly three-quarters (72%) of the total increase in recovered crime guns in California, and unserialized guns identified as ghost guns accounted for more than two-thirds (69%) of the total increase.⁵² (Note, again, this data likely undercounts the true number of recovered crime guns that were ghost guns).

Just as the proliferation of ghost guns drove most of the total increase in crime gun recoveries in California from 2019 to 2021, progress against ghost guns also drove most of the subsequent decrease in crime gun recoveries from 2021 to 2023. According to provisional CDC data, California’s gun homicide rate decreased by about 23% from 2021 to 2023.⁵³ As California made substantial progress in

reducing gun violence, there was also a 6% decrease in the number of crime guns recovered from suspected criminal activity in the state.⁵⁴ The number of crime guns recovered *with* serial numbers decreased by 1.7%. In comparison, the total number recovered *without* serial numbers decreased by 21%, and the number identified as unserialized ghost guns decreased by 23%.⁵⁵

The declining number of unserialized guns recovered from crime accounted for 78% of the total decrease in crime gun recoveries in California from 2021 to 2023, and the declining number identified as ghost guns accounted for 73% of the total decrease.⁵⁶

Figure 5. Ghost Guns Recovered from All Violent Crimes.

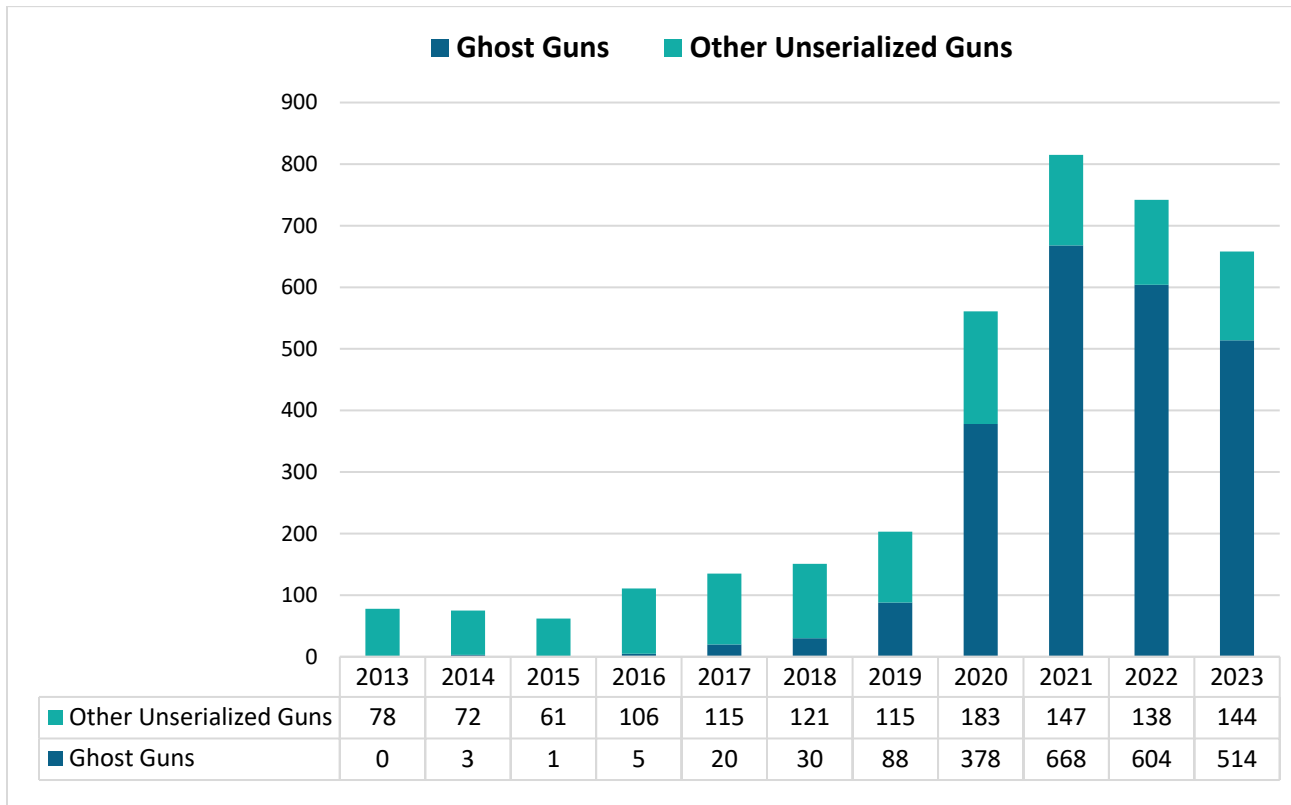


Figure 5 shows the number of unserialized guns and ghost guns recovered from individuals suspected of all violent crimes in California. The number of ghost guns recovered from all violent crimes increased by 659% between 2019 and 2021.

By 2021, law enforcement agencies reported recovering 815 unserialized crime guns from violent crimes, including 668 identified as ghost guns (representing 17.8% and 14.6%, respectively, of all crime guns recovered from violent crimes).

Ghost guns accounted for a majority (57%) of the total increase in crime guns recovered from violent crimes in California from 2019 to 2021.⁵⁷

From 2021 to 2023, the number of ghost guns recovered from violent crimes decreased by 23%. This decline in ghost gun recoveries accounted for 64% of the total decrease in guns recovered from violent crimes in California from 2021 to 2023.⁵⁸

Figure 6. Ghost Guns Recovered from Violent Gun Offenses.

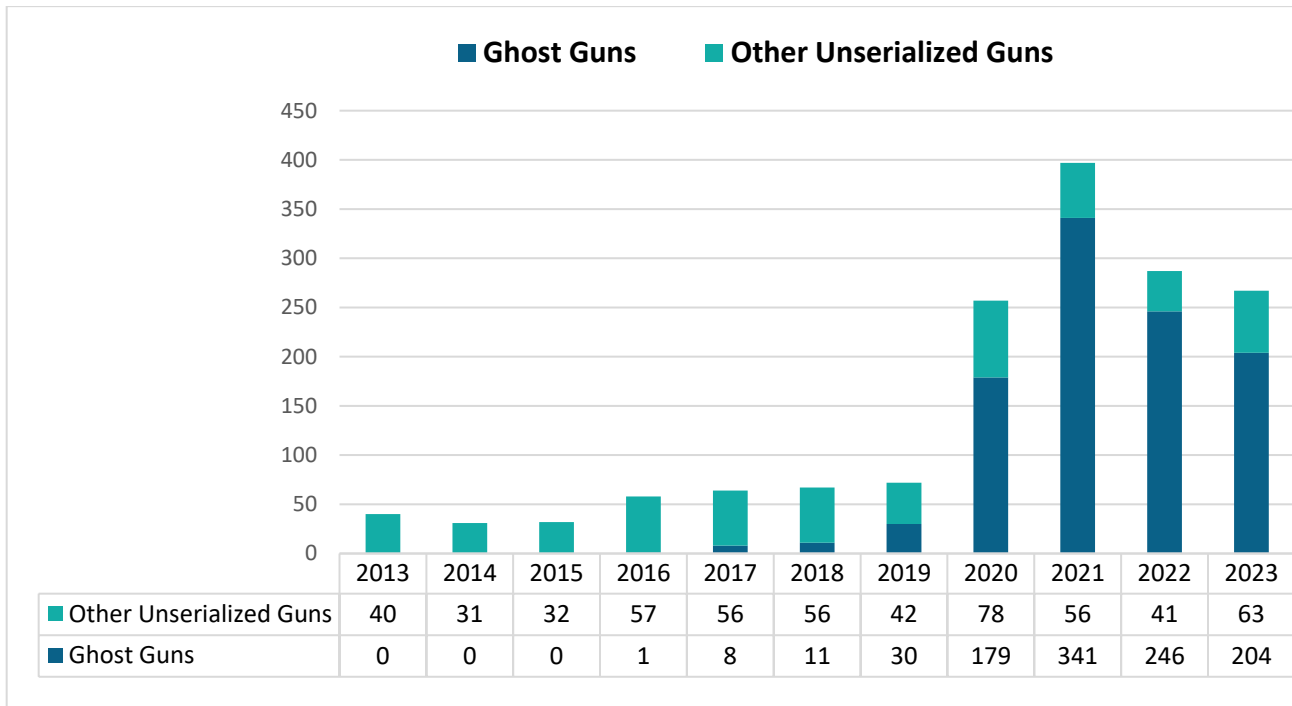


Figure 6 shows the number of unserialized guns and ghost guns recovered from individuals suspected of violent gun crimes in California. (This analysis includes crime gun records reported to DOJ in which the reporting agency indicated the firearm was recovered in connection with one of the following offenses perpetrated with a gun: homicide, aggravated assault, robbery, rape, or sexual assault). The number of ghost guns recovered from these violent gun crimes increased by 1,037% between 2019 and 2021.

By 2021, law enforcement agencies reported recovering 397 unserialized crime guns from individuals suspected of violent gun crimes, including 341 identified as ghost guns (representing 21.4% and 18.4%, respectively, of all crime guns recovered from these offenses).

Ghost guns accounted for a majority (at least 53.5%) of the total increase in crime guns recovered from violent gun crimes in California from 2019 to 2021.⁵⁹

The number of ghost guns recovered from violent gun crime offenses decreased by 40% from 2021 to 2023. This decline in ghost gun recoveries accounted for all of the total decrease in guns recovered from violent gun offenses in California from 2021 to 2023; there was a small increase in recoveries of serialized firearms from these offenses offset by a larger decline in unserialized ghost guns.⁶⁰

Figure 7. Ghost Guns Recovered from Homicides.

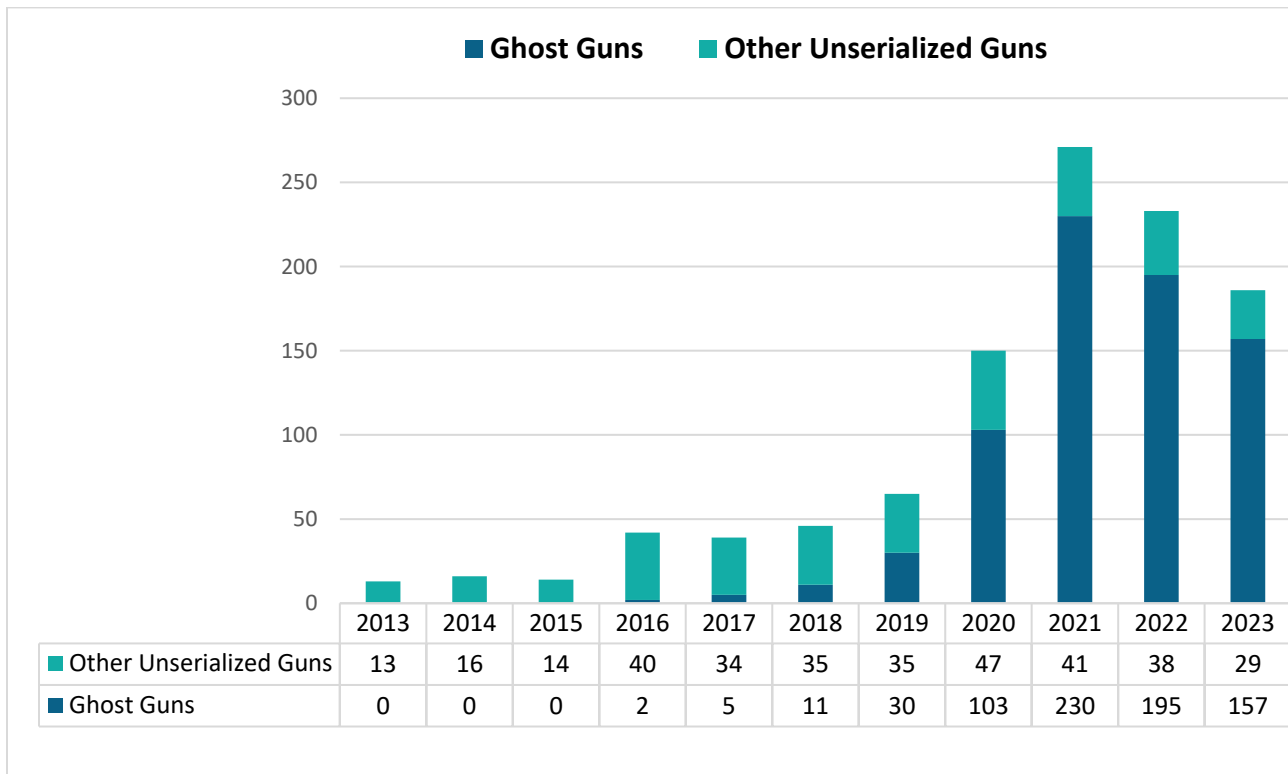


Figure 7 shows the number of unserialized guns and ghost guns recovered from individuals suspected of homicide offenses in California. The number of ghost guns recovered from homicides increased 667% between 2019 and 2021.

By 2021, law enforcement agencies reported recovering 271 unserialized crime guns from individuals suspected of homicide offenses, including 230 identified as ghost guns (21.7% and 18.4%, respectively, of all crime guns recovered from homicide offenses).

Ghost guns accounted for at least 53.5% of the total increase in crime guns recovered from homicide offenders in California from 2019 to 2021.⁶¹

The number of ghost guns recovered from homicide offenses decreased by 31.7% from 2021 to 2023. This decline in ghost gun recoveries accounted for 91% of the total decrease in guns recovered from homicides in California from 2021 to 2023.⁶²

Figure 8. Ghost Guns Recovered from Gun Homicides Against a Police Officer.

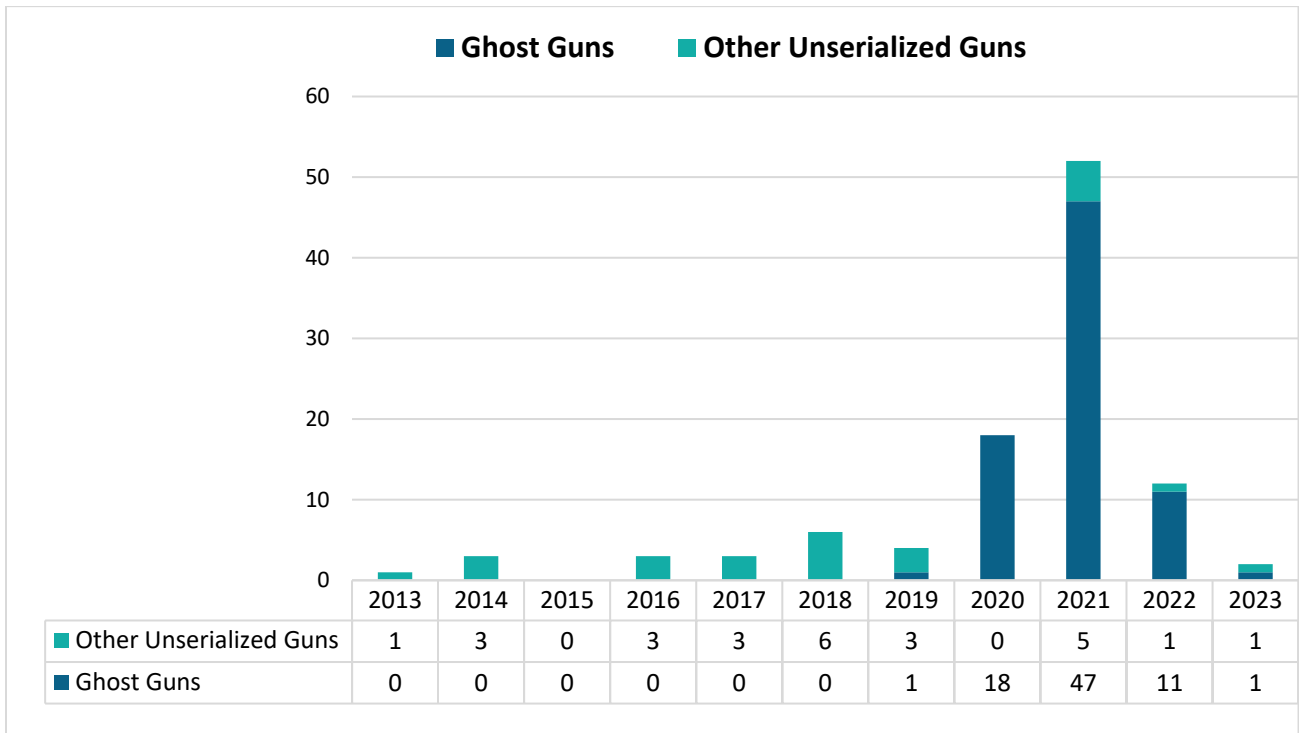


Figure 8 shows the number of unserialized guns and ghost guns recovered from individuals suspected of committing a homicide by firearm against a police officer in California. The number of ghost guns recovered from these homicides increased by 4,600% between 2019 and 2021.

In 2021, law enforcement agencies reported recovering 52 unserialized crime guns from these offenses, including 47 identified as ghost guns (35.9% and 32.4%, respectively, of all crime guns recovered from these offenses).

Ghost guns accounted for at least 63% of the total increase in crime guns recovered from gun homicides against a police officer in California from 2019 to 2021.⁶³

This number dropped precipitously in 2022 and 2023. This decline in ghost gun recoveries accounted for all of the total decrease in guns recovered from these homicides in California from 2021 to 2023; there was a small increase in recoveries of serialized firearms from these homicides offset by a larger decline in unserialized ghost guns.⁶⁴

Figure 9. Ghost Guns Recovered from Domestic Violence and Abuse Crimes.

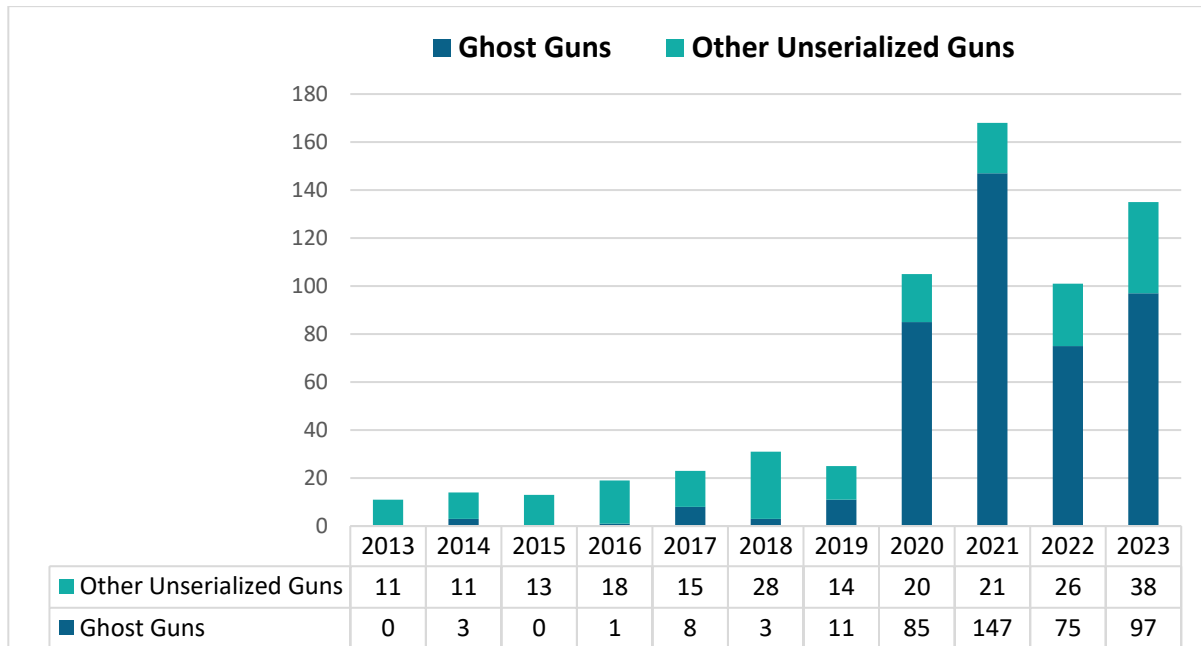


Figure 9 shows the number of unserialized guns and ghost guns recovered from individuals suspected of domestic violence and abuse crimes against a family member or intimate partner in California. (This analysis includes crime gun records reported to DOJ in which the reporting agency indicated the firearm was recovered in connection with one of the following offense categories: “Domestic violence,” “family offense,” “cruelty to wife,” “cruelty to child,” “homicide against a family member,” or “aggravated assault against a family member.” Note that this likely does not include all domestic violence offenses; in some relevant cases, a reporting law enforcement agency may, for instance, report the underlying crime as an “assault,” “criminal threat,” or “violation of a protection order” instead of identifying the crime as one connected to family or intimate partner violence or abuse).

The number of ghost guns recovered from these domestic violence and abuse crimes increased by 1,236% between 2019 and 2021.

By 2021, law enforcement agencies reported recovering 168 unserialized crime guns from these offenses, including 147 identified as ghost guns (14.9% and 13.0%, respectively, of all crime guns recovered from these offenses).

Ghost guns accounted for at least 36% of the total increase in crime guns recovered from these domestic violence and abuse crimes in California from 2019 to 2021.⁶⁵

The number of ghost guns recovered from these offenses decreased by 34% from 2021 to 2023. This decline accounted for all of the total decrease in guns recovered from these offenses in California from 2021 to 2023; there was a small increase in recoveries of serialized firearms from these offenses offset by a larger decline in unserialized ghost guns.⁶⁶

Figure 10. Ghost Guns Recovered from Crimes Involving Violations of Court Orders, Parole, and Probation.

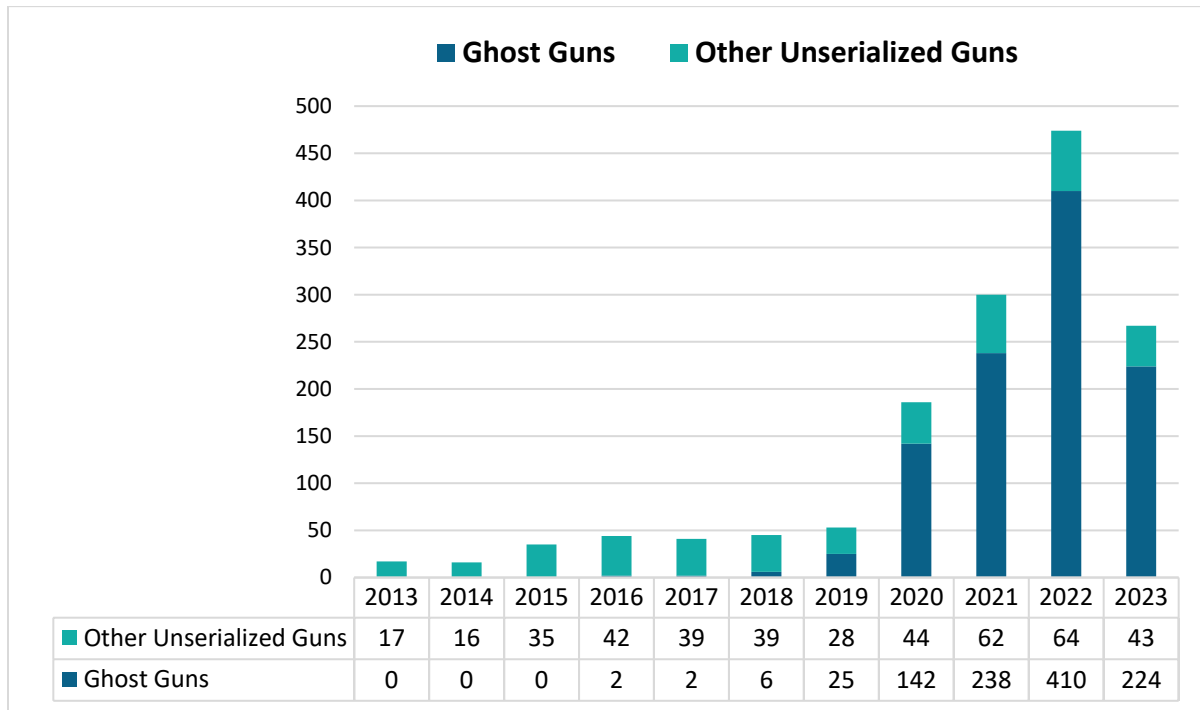


Figure 10 shows the number of unserialized guns and ghost guns recovered from individuals suspected of illegally violating court orders, parole, and probation. The number of ghost guns recovered from these offenses increased by 852% between 2019 and 2021 and continued to increase significantly in 2022.

In 2021, law enforcement agencies reported recovering 300 unserialized crime guns from these offenses, including 238 identified as ghost guns (28.4% and 22.5%, respectively, of all crime guns recovered from these offenses). In 2022, law enforcement agencies reported recovering 474 unserialized crime guns from these offenses, including 410 identified as ghost guns (36.2% and 31.3%, respectively, of all crime guns recovered from these offenses).

Ghost guns accounted for at least 62% of the total increase in crime guns recovered from individuals suspected of offenses involving violations of court orders, parole, or probation in California from 2019 to 2021.⁶⁷

After increasing significantly in 2022, the number of ghost guns recovered from these offenses decreased by 45% from 2022 to 2023. This decline accounted for 48% of the total decrease in guns recovered from these offenses in California from 2022 to 2023.⁶⁸

Figure 11. Ghost Guns Recovered from Weapon Possession Offenses.

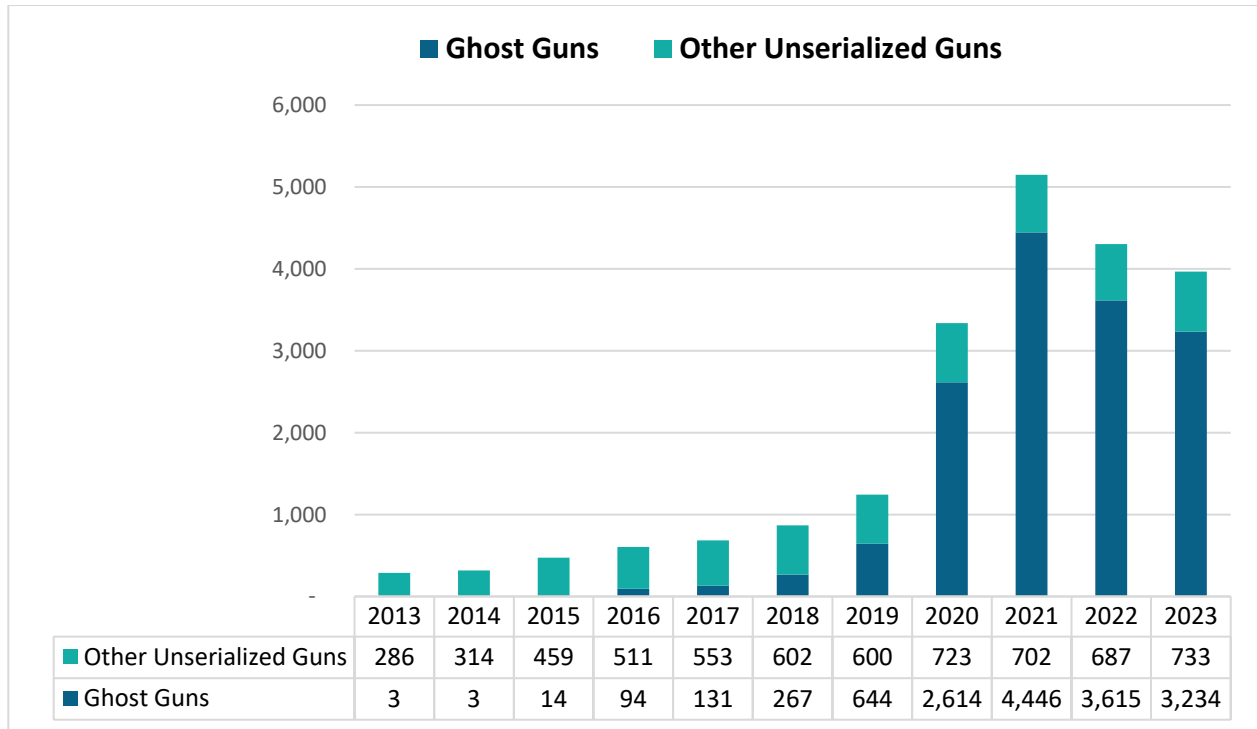


Figure 11 shows the number of unserialized guns and ghost guns recovered from individuals suspected of weapon possession offenses. The number of ghost guns recovered from these offenses increased by 590% between 2019 and 2021.

In 2021, law enforcement agencies reported recovering 5,148 unserialized crime guns from these offenses, including 4,446 identified as ghost guns (26.3% and 22.8%, respectively, of all crime guns recovered from weapon possession offenses).

Ghost guns accounted for at least 97% the total increase in crime guns recovered from individuals suspected of unlawful weapon possession offenses in California from 2019 to 2021.⁶⁹

The number of ghost guns recovered from unlawful weapon possession offenses decreased by 27% from 2021 to 2023. This decline accounted for all of the total decrease in guns recovered from these offenses in California from 2021 to 2023; there was an increase in recoveries of serialized firearms from these offenses offset by a larger decline in unserialized ghost guns.⁷⁰

Figure 12. Unserialized Crime Guns by Type of Firearm (Handgun vs Long Gun).

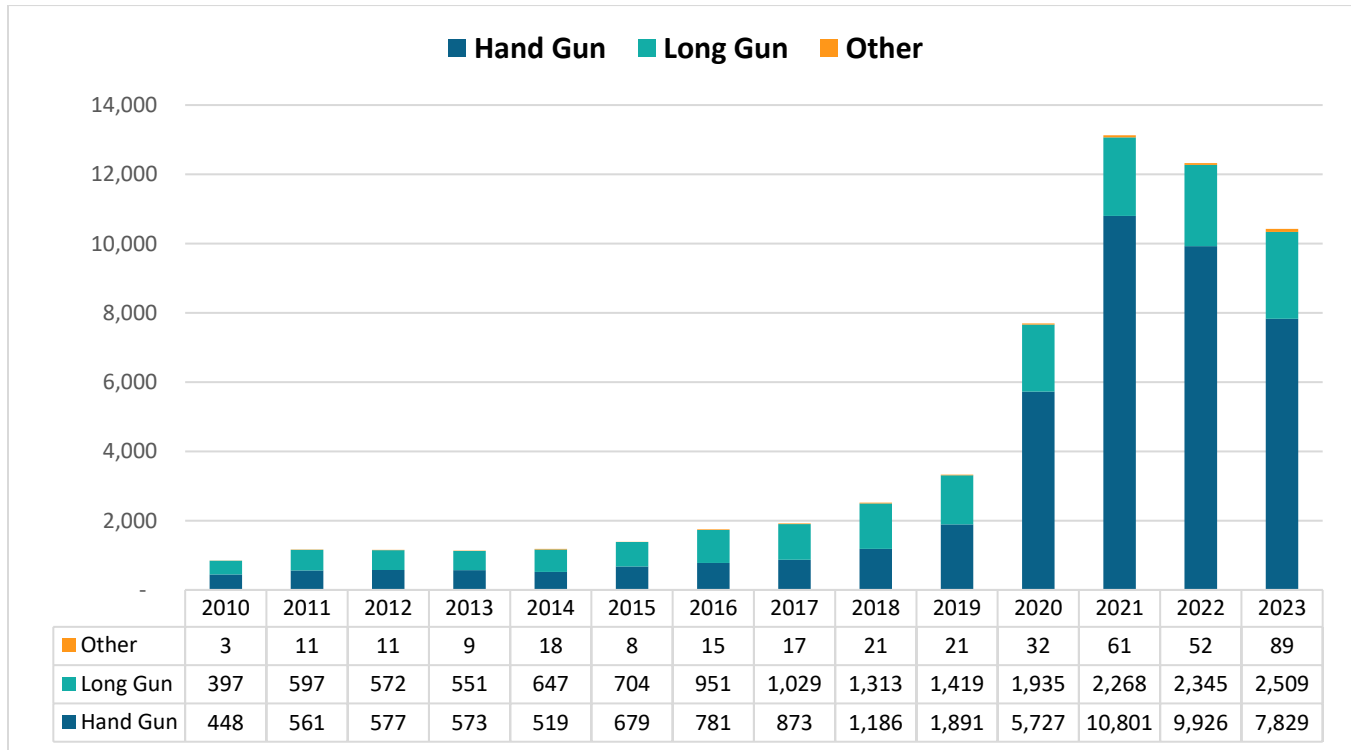


Figure 12 shows the number of unserialized handguns and long guns (including rifles and shotguns) recovered as crime guns in California. Prior to 2019, about half of the unserialized crime guns recovered by law enforcement in California were long guns and about half were handguns. But handguns came to dominate the ghost gun market starting in 2019: from 2019 to 2021, the number of unserialized long guns recovered from crime increased by 60% while the number of unserialized handguns recovered from crime increased by 471%. By 2021, 82% of all unserialized crime guns recovered in California were handguns.

From 2021 to 2023, the number of unserialized handguns recovered from crime decreased by 28%, but unserialized long gun recoveries defied this trend and increased by 11%. In 2023, 75% of unserialized crime guns recovered in California were handguns.

This data shows that trends in California’s ghost gun crisis have been driven primarily by large increases and then decreases in the number of unserialized handguns recovered from crime. Notably, though, the number of unserialized long guns recovered from crime has continued to increase every year since 2013 and has represented a growing percentage of all ghost guns recovered from crime since 2022. This may signal shifts in the ghost gun market toward products designed to produce semiautomatic and assault-type rifles, including CNC machines marketed as allowing users to mill a complete and unserialized AR-15 rifle receiver.⁷¹

Figure 13. Comparing Unique Serial Number Application Requests Submitted to DOJ vs. Ghost Guns Recovered from Crime.

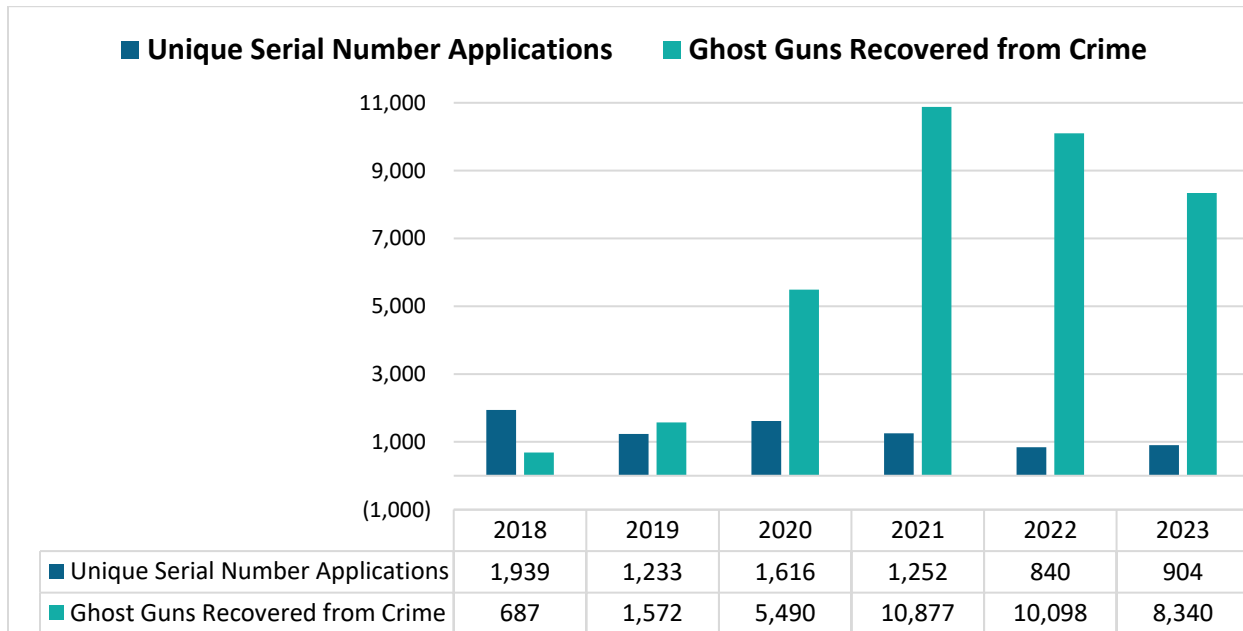


Figure 13 shows (in blue) the number of applications the California DOJ received each year from individuals who followed California law by requesting a unique serial number for any otherwise unserialized firearm they assembled or possessed. For comparison, this figure also shows data (in orange) about the much larger number of unserialized ghost guns recovered as crime guns in California over the same period.

Starting July 1, 2018, California law has required individuals producing firearms without a firearm manufacturer license to apply to DOJ for a unique serial number for any firearm that did not already have a serial number engraved on the frame or receiver.⁷² If that individual passed a background check and was approved to receive a unique serial number from DOJ, they were required to engrave that serial number on their firearm within 10 days. State law also required California residents to follow this process and apply to DOJ for a serial number for any unserialized firearms in their possession by January 1, 2019,⁷³ and required new residents to do so within 60 days of moving into the state with an unserialized firearm.⁷⁴ By following these laws, California residents could convert unserialized, privately made ghost guns into lawfully serialized weapons.

In accordance with these requirements, from 2018 through 2023, DOJ received unique serial number applications for 7,784 otherwise unserialized firearms. But over the same period, California law enforcement agencies reported recovering nearly *five times* as many (37,064) unserialized ghost guns in connection with suspected criminal activity.

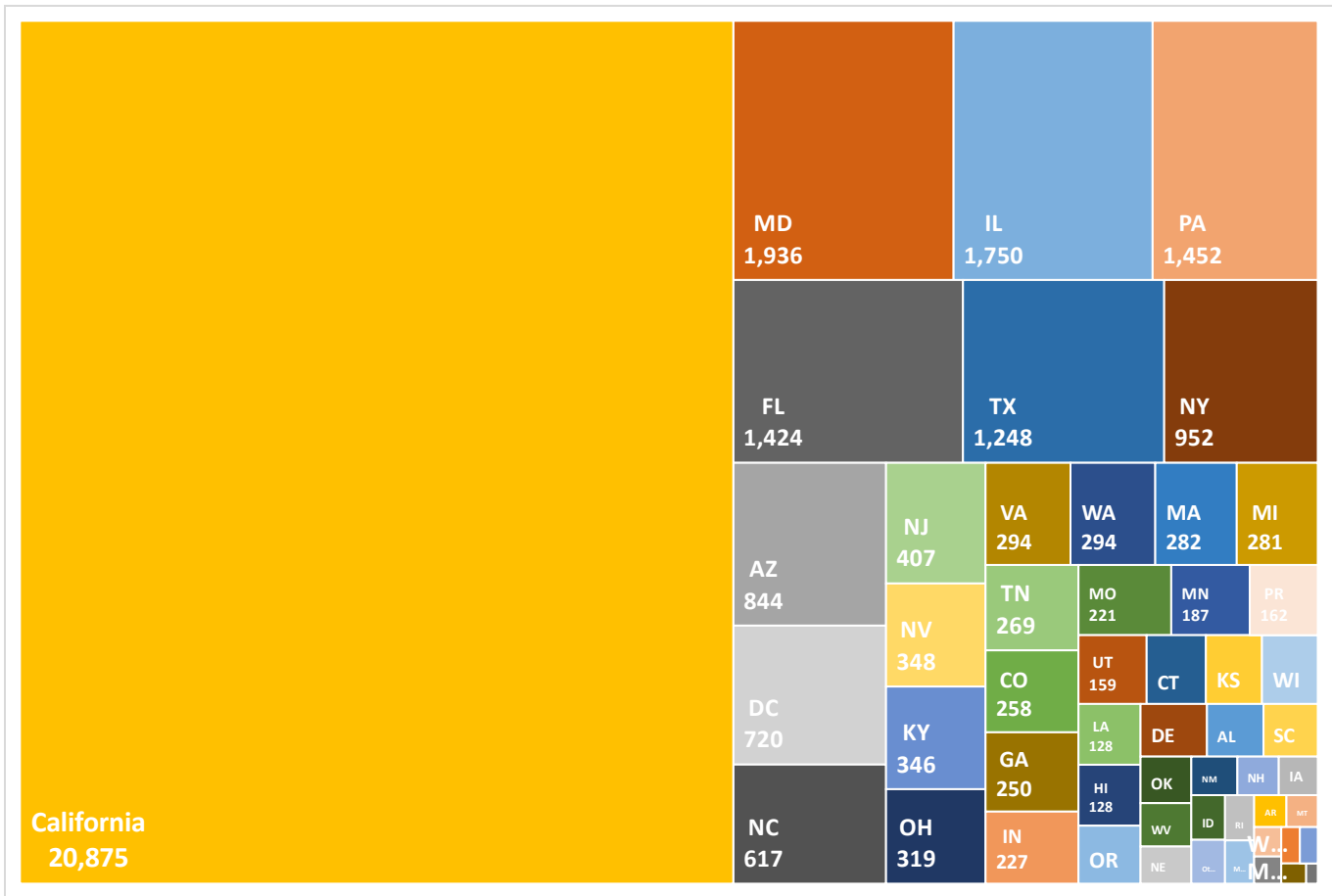
Figure 14. Total Number of Arrests in California for Specified Ghost Gun-Related Criminal Offenses, by Year.

Penal Code Section	Arrest Offense	2019	2020	2021	2022	2023
29180(b)	Illegally Manufacturing Unserialized Firearm	37	102	286	382	369
29180(c)	Illegally Owning Unserialized Firearm	24	91	271	597	643
29180(d)	Illegally Selling/ Transferring Ownership of Firearm Produced Without Manufacturer License	3	4	11	7	10
29180(e)/(f)	Illegally Aiding/Abetting Manufacture of an Unserialized Firearm, or Manufacture of Any Firearm by Person Who Is Prohibited from Possessing Firearms	2	4	26	19	21

Figure 14 shows the number of arrests in California reported to DOJ in connection with offenses related to illegal ghost gun possession, trafficking, and manufacturing.

According to DOJ’s analysis of arrest records reported through the Automated Criminal History System (ACHS), law enforcement agencies across California have reported substantially more arrests related to ghost gun possession, trafficking, and manufacturing crimes since 2019.⁷⁵ Legislation enacted in 2022 amended and expanded some of these criminal prohibitions, effective June 30, 2022, but these offenses have generally been in effect in some form in California at least since January 1, 2019.⁷⁶

Figure 15. Number of Ghost Guns Submitted to ATF for Crime Gun Tracing, by State Where Ghost Gun was Recovered (2017-2021).



State/Territory Where Ghost Gun Was Recovered	Number of Recovered Ghost Guns Reported to ATF (2017 - 2021)
Alabama	101
Alaska	23
Arizona	844
Arkansas	35
California	20,875
Colorado	258
Connecticut	138
Delaware	119
Florida	1,424
Georgia	250
Hawaii	128
Idaho	51
Illinois	1,750
Indiana	227
Iowa	51
Kansas	131
Kentucky	346
Louisiana	128
Massachusetts	282
Maryland	1,936
Maine	25
Michigan	281
Minnesota	187
Missouri	221
Mississippi	43
Montana	34
Nebraska	64

State/Territory Where Ghost Gun Was Recovered	Number of Recovered Ghost Guns Reported to ATF (2017 - 2021)
Nevada	348
New Hampshire	54
New Jersey	407
New Mexico	60
New York	952
North Carolina	617
North Dakota	17
Ohio	319
Oklahoma	80
Oregon	122
Pennsylvania	1,452
Rhode Island	45
South Carolina	97
South Dakota	22
Tennessee	269
Texas	1,248
Utah	159
Vermont	8
Virginia	294
Washington	294
West Virginia	75
Wisconsin	130
Wyoming	27
Washington, D.C.	720
Puerto Rico	162
Other territories	50
U.S. Total	37,980



PART 3: THE ORIGINS OF THE GHOST GUN CRISIS

In 1968, the U.S. enacted landmark gun violence prevention legislation in response to rising rates of gun violence and the assassinations of multiple leaders, including Martin Luther King, Jr., and President John F. Kennedy, who was shot with a firearm purchased and shipped through the mail.⁸⁵ For over half a century, these federal laws have required people engaged in the business of manufacturing, importing, or selling firearms to obtain licenses from a federal oversight agency, ATF, and follow a set of requirements that assist law enforcement in investigating and preventing gun crimes.⁸⁶

- Licensed firearm manufacturers and importers must generally ensure that each firearm they manufacture or import into the country has a unique serial number engraved on the weapon's frame or receiver, along with other markings identifying the firearm's manufacturer or importer, model, and caliber or gauge.⁸⁷
- Licensed manufacturers, importers, and dealers must keep records of the firearms they manufacture, import, acquire, sell, or distribute.⁸⁸
- All people are generally prohibited from selling or transferring firearms to individuals who are legally disqualified from accessing firearms based on factors such as age, criminal history, mental health-related adjudications, substance abuse, immigration status, or certain court orders.⁸⁹

In adopting these laws, Congress stated that its “principal purposes” were “to make it possible to keep firearms out of the hands of those not legally entitled to possess them. . . and to assist law enforcement. . . in combating . . . crime.”⁹⁰ Congress recognized the need to address what it called “a matter of serious national concern”—the “ease with which any person can anonymously acquire firearms . . . including criminals, juveniles without the knowledge or consent of their parents or guardians. . . groups who would supplant duly constituted public authorities, and others” who presented a danger to public safety.⁹¹ And it stated that national gun violence prevention laws were needed to “control the indiscriminate flow of [guns] across State borders,” “[e]nsure that strong local or State laws are not subverted by a deadly interstate traffic in firearms,” and end “mail order murder.”⁹²

Importantly, since 1998, federal law has also required federally licensed firearm dealers to initiate background checks prior to selling or delivering a firearm to an unlicensed buyer.⁹³

California law has included similar requirements⁹⁴ and other, much stronger safety protections to ensure, among other things, that people seeking to purchase or acquire firearms from any seller have passed both a thorough background check and a safety test to demonstrate familiarity with gun laws and safety practices.⁹⁵

These laws apply to the sale and manufacture of products that the law defines as “firearms”.

That *legal* definition of “firearm” is broader than the term’s everyday colloquial usage. Since 1968, federal law has expressly defined the word “firearm” to include products that are not yet finished or assembled and not yet capable of being fired. Lawmakers did this for good reason: if gun safety laws

like background check requirements only applied to fully assembled guns, the loophole market for unfinished or disassembled firearm products would predictably swallow the law whole.

As a result, the *legal* definition of “firearm” in federal law has, for over half a century, expressly included products that are not yet complete or capable of being fired if they are “designed to or may readily be converted” to function an operable gun.⁹⁶ Additionally, the frame of a handgun and the receiver of a long gun are such integral parts of the weapon that the legal definition of “firearm” under federal law⁹⁷ and most California gun laws⁹⁸ has also expressly included the frame or receiver itself, including the frame or receiver of a product that is not yet ready to fire but is designed to or may readily be converted to do so.⁹⁹

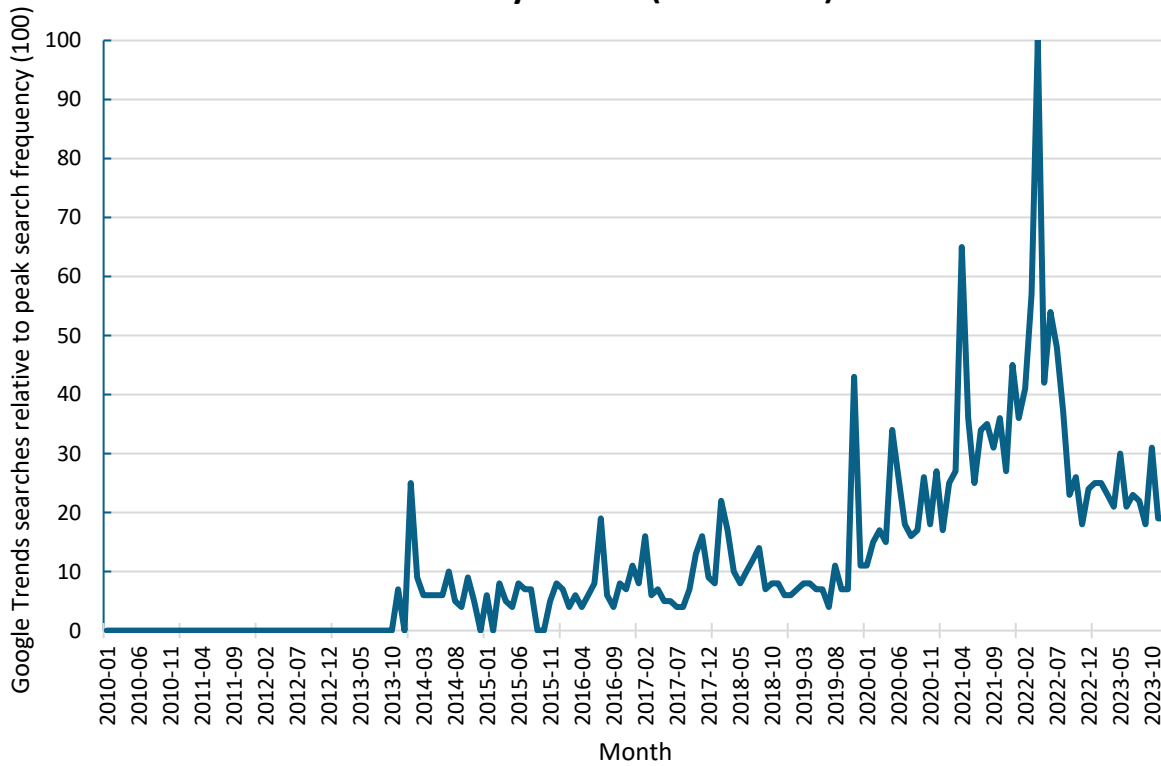
Applying these legal definitions, for decades, ATF classified unfinished frame and receiver products as “firearms” based on determinations that they could be completed in a relatively short period of time.¹⁰⁰ This ensured that people engaged in the business of manufacturing and selling these firearm products were required to obtain firearm licenses, serialize the frame or receiver, keep sale and manufacturing records, and conduct background checks on their purchasers.

But around 2006, ATF began changing course, without providing any justification for this shift.¹⁰¹ In a series of published agency determinations evaluating whether unfinished frame or receiver products met the legal definition of “firearm” under federal law, ATF began to mechanically analyze which specific operations still needed to be performed to complete the frame or receiver, instead of evaluating the product’s overall design or how quickly and easily those operations could be completed.¹⁰² This shift provided ghost gun companies with a roadmap for developing nominally unfinished, skip-the-background-check frame and receiver products. As a leading gun violence prevention researcher warned, “ATF not only lowered the bar but provided specific, written instructions on how to come as close as possible to it’s-a-firearm status without crossing the line.”¹⁰³ This emboldened the ghost gun industry to brazenly advertise that its untraceable frame and receiver products could be quickly and easily finished, by anyone, and without the basic protections required of sellers of “firearms.” One ghost gun marketing a nominally unfinished handgun frame stated that the product was “specifically designed to straddle the line between an ATF firearm classification and a DIY project that’s easily accomplished by anyone even moderately handy.”¹⁰⁴

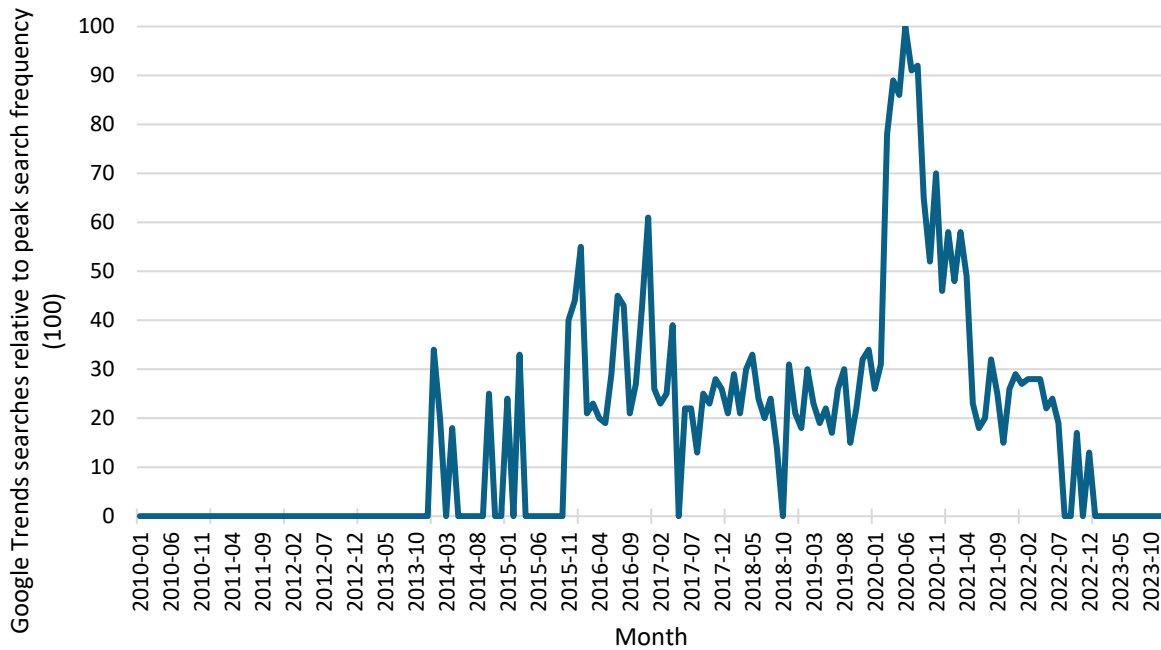
Initial advertisements for “80%” unfinished products focused on unfinished receivers for AR-type rifles, and sales of these and related ghost gun products began to proliferate around 2009 as an attempt to circumvent California’s strengthened assault weapon laws.¹⁰⁵ Later, this market grew and expanded especially with respect to handguns, as numerous companies began producing and marketing gun build kits and products focused on semiautomatic pistols.¹⁰⁶

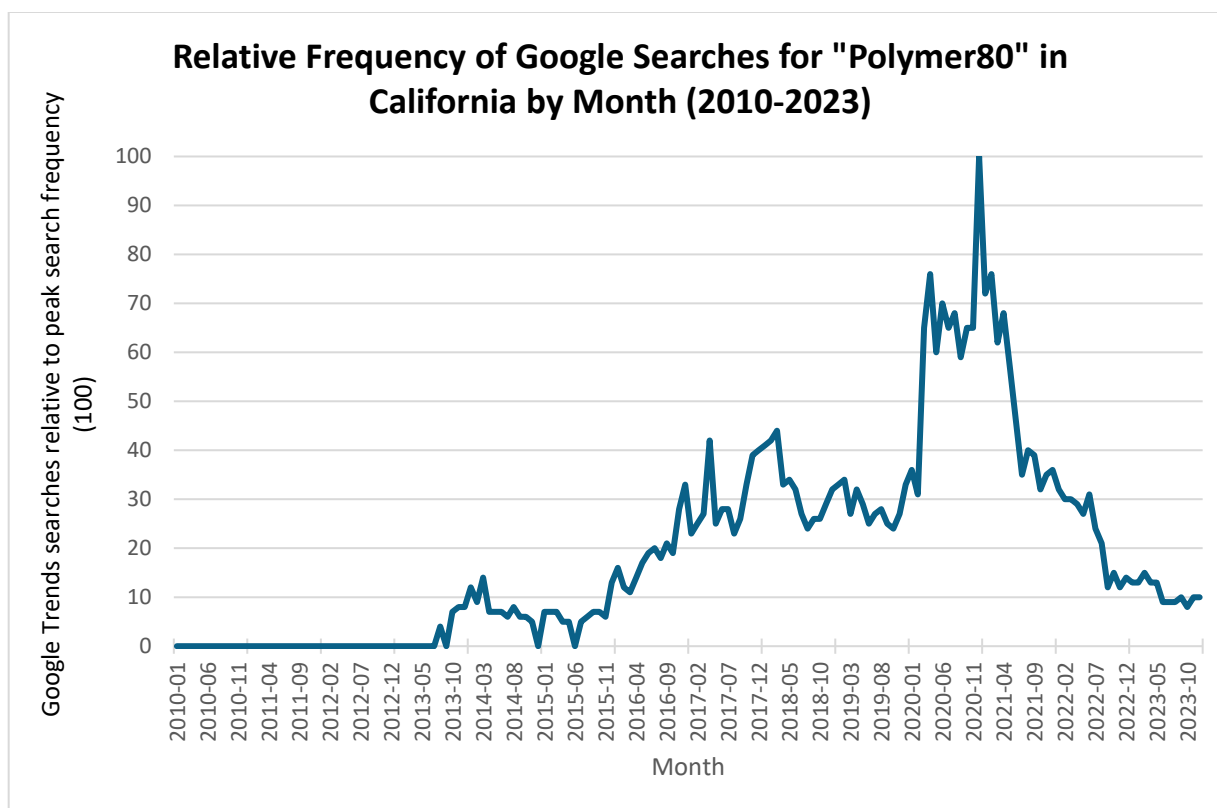
The ghost gun industry grew rapidly. Between January 2015 and May 2020, the number of companies in the U.S. selling unfinished frames or receivers for ghost guns over the Internet more than tripled.¹⁰⁷ Google Trends analysis shows that web searches for ghost gun-related products and terms increased significantly from 2019 to 2022 especially.¹⁰⁸

Relative Frequency of Google Searches for "Ghost Gun" in California by Month (2010-2023)



Relative Frequency of Google Searches for "80% kit" in California by Month (2010-2023)





During this period, the ghost gun industry continued to develop new products designed to make it faster and easier than ever for untrained amateurs to produce weapons ready to fire and kill. These “innovations” included bundled all-in-one gun build kits that combined unfinished frames or receivers with other firearm parts and jigs (molded templates that fit around an unfinished frame or receiver and provide labeled holes and guides telling the gun builder exactly where to drill or file off material to complete the weapon). One company described its “80%” unfinished pistol kit by saying, “Our goal was for you to be able to go from opening the mail, to a competition or defense ready pistol in under 15 minutes.”¹⁰⁹ Another said its unfinished frames could be used “to make instant custom handguns at home” and that “an 80% frame can be finished into a firearm in just minutes.”¹¹⁰ The industry also developed computer operated 3-D printers and CNC milling machines that could be programmed to finish unfinished frames or receivers, and increasingly, to produce these and other ghost gun components.¹¹¹

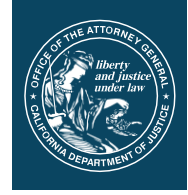
While evading basic gun safety laws, leading ghost gun companies understood themselves to be in the firearm business and described their unfinished frame and receiver products as firearms.¹¹² In 2020, one of the nation’s largest ghost gun companies sued an established firearm manufacturer for alleged trademark infringement based on concern that consumers would confuse their ghost gun products with the licensed manufacturer’s handguns. The ghost gun company described itself as “a world-renowned designer and developer of innovative firearms and after-market accessories” that owned its trademark “for use in connection with firearms and component parts for guns.”¹¹³ Ghost gun companies also argued that they should be immune from some victim lawsuits under the federal firearm industry immunity law¹¹⁴ that Congress adopted based in part on its finding that firearm commerce was “heavily regulated”—by the same firearm laws the ghost gun industry sought to evade.¹¹⁵

The California Legislature was an early leader in efforts to address this emerging public safety threat and in 2016, enacted one of the nation’s first ghost gun bills, AB 857 (Cooper).¹¹⁶

Starting July 1, 2018, that law required unlicensed gun makers to apply to DOJ for a unique serial number prior to manufacturing or assembling any firearm that did not already have a serial number engraved on the frame or receiver. If DOJ approved the application, pursuant to a background check, the gun maker was required to engrave the unique serial number on their weapon within 10 days to convert the weapon from an unserialized ghost gun into a traceable, serialized firearm. That law also required all individuals in possession of unserialized firearms to apply to DOJ for a serial number by January 1, 2019.¹¹⁷ Additionally, the law sought to restrict ghost gun trafficking by prohibiting unlicensed manufacturers from selling or transferring ownership of any firearms they produced without a manufacturer license and prohibiting any person or company from knowingly allowing, facilitating, aiding, or abetting the manufacture of firearms by people who cannot legally possess guns.¹¹⁸

AB 857 was an important first step; it created a process that allowed California residents to serialize thousands of otherwise untraceable, unserialized weapons in our state. But this law did not compel the ghost gun industry itself to conduct background checks or change its dangerous business and distribution practices. Few ghost gun companies appear to have notified California customers that it was a crime to manufacture an unserialized firearm or unsafe handgun with their products. And the number of individuals who applied for serial numbers to convert their unserialized ghost guns into serialized firearms was dwarfed by the much larger number of unserialized ghost guns sold into the state and recovered from crime. From 2018-2023, DOJ received applications for serial numbers for 7,784 unserialized firearms, but over the same period, law enforcement agencies reported recovering over 37,000 unserialized ghost guns in connection with suspected criminal activity in California. Court documents indicated that a single ghost gun company sold more than 200,000 unserialized ghost gun kits into California from 2017 to August 2023,¹¹⁹ including products that one of the company’s executives described as “basically a pistol in a box.”¹²⁰

As discussed in Part 5 below, Governor Newsom signed comprehensive legislation in 2022 and 2023 focused on reforming the ghost gun industry and addressing new threats and challenges, including AB 1621 (Gipson), AB 2156 (Wicks), AB 1594 (Ting), and AB 1089 (Gipson).



PART 4: A SKIP-THE-BACKGROUND-CHECK GUN INDUSTRY IS A DANGEROUS INDUSTRY

DIY gun building is not new. For decades, law-abiding gun enthusiasts have been able to manufacture legal firearms for personal use from frames or receivers sold as “firearms” through regulated channels, with serial numbers, sale and manufacturing records, and background checks.

The difference the ghost gun industry offered by selling these products in nominally unfinished form, was skip-the-background-check access to untraceable deadly weapons.¹²¹ While responsible, licensed gun dealers conducted background checks, age checks, sale records, safety tests, and other protections, ghost gun companies’ marketing included statements like: *“There is no background check or registration involved,” “You’ll have a fully functional firearm without the hurdles of a background check,”* and *“Thanks to our products, you can put together a firearm that is identical to options available straight from the manufacturer... But they don’t require a background check or serial number.”*¹²²

Evading background checks has been essential to the ghost gun industry’s business model. The co-founder of one of the nation’s largest ghost gun companies told interviewers that requiring background checks on unfinished frame or receiver products would be a “critical threat” to his business.¹²³ The company’s other co-founder said in court filings that if unfinished frame and receiver products were regulated as firearms, the ghost gun company’s “revenue would be diminished by more than fifty percent and perhaps by as much as seventy-five percent.”¹²⁴

Predictably, this untraceable, skip-the-background-check option became an attractive source of weaponry for people looking to conceal their involvement in gun trafficking and for people, including minors, who could not pass a background check to legally acquire firearms in our state.

In court filings in 2020, federal prosecutors included statements made by a Chico, California resident who was already legally disqualified from possessing firearms when he was arrested for domestic violence and illegally possessing assault weapons. He told officers that “all his guns were purchased 80% built from different online websites” and said “80% firearms kits were made for people ‘like me’ who needed to get around not being able to buy guns.”¹²⁵ He wasn’t the only one who got that message.

Researchers for Everytown for Gun Safety analyzed federal prosecutions involving ghost guns and reported that “in nearly half of the prosecutions reviewed, the defendants were prohibited from possessing any firearm and would not have passed a background check if one were required.”¹²⁶ These 114 federal cases involved over 1,300 ghost guns connected to criminal activity that were possessed, made, or sold by people who could not legally acquire firearms.¹²⁷

ATF agents documented instances in which ghost gun companies were suspected of selling ghost gun products directly to California residents who were legally prohibited from accessing firearms, including buyers who were underage and buyers with felony records for domestic violence, sexual abuse, and burglary.¹²⁸

Some ghost gun companies also incentivized gun trafficking behavior by offering discounts for bulk purchases, such as ghost gun build kits and unfinished frames and receivers sold in packs of 10.¹²⁹ ATF alleged that over just two months, one ghost gun company sold over \$22,000 in ghost gun products to one individual in California who was charged with selling firearms without a license and unlawfully shipping firearm components to the Middle East.¹³⁰

Without background checks or other controls, the ghost gun market also hampered California's efforts to protect victim-survivors by disarming perpetrators of violence and abuse: In August 2020, police officers in San Jose arrested a man for felony domestic violence and recovered a ghost gun his abuse victim said he had pointed at her to threaten and abuse her. When officers informed him that a court had issued a protection order against him that would prevent him from regaining access to the gun, he replied, "*Then I'll just build another one.*"¹³¹ Individuals prohibited from accessing or acquiring guns under California's protection order laws used ghost guns to perpetrate mass shootings in Tehama County in 2017 and Sacramento in 2022.¹³²

The enormous proliferation of ghost guns during the Covid-19 pandemic also coincided with an 80% increase from 2019 to 2021 in 911 calls and other calls for help from domestic violence survivors threatened or attacked with guns.¹³³ Over the same period, California law enforcement agencies recorded a 1,236% increase in the number of ghost guns recovered from crimes involving violence or abuse against a family member or intimate partner and an 852% increase in ghost guns recovered from crimes involving violations of court orders, parole, or probation.

Without background checks or other controls, the ghost gun market also became a particularly attractive source of weapons for minors, who are generally prohibited from acquiring or manufacturing firearms in California.

- A report by *The Guardian* on "The Deadly Toll of California's 'Ghost Guns'" quoted a violence prevention program manager in Stockton who asked a 16-year-old how young people in the community were getting guns: "He assumed the answer would be Nevada, the neighboring state with looser gun laws," he said. "'Who would waste time going to Nevada when you can just get them in the mail and put it together?' the teen nonchalantly replied."¹³⁴
- In 2020, a father in Santa Clarita set out to determine how easily minors were able to obtain ghost guns. Within minutes, he had purchased a ghost gun build kit online using his credit card but his 15-year-old daughter's name. The kit arrived at his door with his daughter's name on the label even though she was underage, her name did not match the name on the credit card, and she was deceased—she had been killed four months earlier in a mass shooting at her high school by a 16-year-old armed with a ghost gun.¹³⁵

Ghost gun companies advertised that their products made it "ridiculously easy" to build a firearm,¹³⁶ that they were "perfect for beginner gunsmiths,"¹³⁷ and that they sold "easy to use" products "for completing your [gun] builds at any level of expertise."¹³⁸ Ghost gun marketing and product reviews repeatedly referenced the advertising slogan, "so easy a caveman could do it."¹³⁹ And so, apparently, could children:

- In 2021, local authorities revealed that a 13-year-old boy had been manufacturing and selling ghost guns to buyers across multiple counties in Georgia. When two men tried to steal one of

the ghost guns without paying him, the boy fired at them but missed, killing his 14-year-old sister with a ghost gun he assembled years before he could legally drive.¹⁴⁰

- In 2023, in San Diego County, a 15-year-old was arrested “in connection to a suspected ghost gun manufacturing operation” the boy allegedly ran out of his bedroom.¹⁴¹
- In 2024, local authorities in Wisconsin announced arrests to disband a “teenage ‘ghost gun’ manufacturing ring” and said the teens were “going to high school during the day and at night, they have this illegal gun manufacturing operation going on instead of doing their homework.”¹⁴²

This was not new or surprising information to ghost gun companies. As part of a 2023 court settlement, a large ghost gun company filed internal documents and emails describing angry calls the company received from parents whose teenagers had purchased ghost gun products online.¹⁴³ One executive wrote in an email: “I get calls periodically on our pistol sales because some 16-year-old has ordered a pistol using his parents’ address and credit card. Moms get pretty furious and I hate being on the other end of those tail-tucking calls.”¹⁴⁴

In recent years, counterterrorism experts also expressed alarm about the ghost gun industry’s growing appeal to extremists, paramilitary groups, and terrorists.

- In 2020, the director of the Northern California Regional Intelligence Center warned that the “go-to” for “international terrorists, domestic terrorists, or violent extremists,” was to “try to get a hold of a [ghost gun] because of the belief that [law enforcement] will never be able to figure out where this weapon came from.”¹⁴⁵
- A 2021 report by the U.S. Joint Counterterrorism Assessment Team warned that “violent extremists continue to seek ways to acquire firearms through the production of privately made firearms” and that these actors seek out ghost guns to “circumvent security, avoid some state government regulations, and evade detection of and complicate law enforcement and investigative efforts.”¹⁴⁶ That year, the terrorist group, Al-Qaeda, published training materials encouraging would-be terrorists to obtain ghost guns to perpetrate mass shootings in the U.S.¹⁴⁷

Proactive law enforcement efforts have thwarted multiple domestic terror attacks involving ghost guns. For example:

- In 2021, a federal court sentenced three members of a neo-Nazi paramilitary group who had manufactured ghost assault weapons and machine guns and plotted an attack at a rally in Virginia. One of the defendants was recorded bragging about the weapons the men assembled, saying, “We could essentially, like, literally be hunting people.”¹⁴⁸
- In 2022, military police discovered a young soldier was planning an “operation” to commit a hate-motivated mass murder in North Carolina; law enforcement authorities discovered he had multiple 3-D-printed ghost guns along with a “trove” of white supremacist literature and paraphernalia.¹⁴⁹
- In 2023, prosecutors charged a Los Angeles County man associated with a violent extremist group for allegedly using 3-D printers to manufacture ghost gun assault weapons and machine guns and arranging to sell those ghost guns to other members of the extremist group; the man

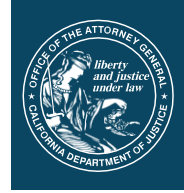
reportedly called for the mass killing of religious minorities and had painted swastikas on the 3-D printer he used to manufacture ghost guns.¹⁵⁰

While many ghost gun domestic terror attacks were successfully thwarted, others were not. In Colorado, in 2022, authorities seized a ghost gun from a 22-year-old who reportedly ran a neo-Nazi website, vowed to become “the next mass killer”, and held their grandparents hostage at gunpoint. But just months later, that same 22-year-old reportedly acquired 3-D printers to produce more ghost guns and perpetrated a horrific hate crime attack, shooting 24 people and killing five at an LGBTQ night club in Colorado Springs.¹⁵¹

Ghost guns sold and manufactured in the United States have also fueled violence abroad:

- In November 2023, a Texas man who was legally prohibited from possessing firearms was sentenced in federal court for manufacturing and trafficking ghost gun machine guns to cartels in Mexico; he bragged to an undercover officer that he had manufactured and trafficked hundreds of guns out of the country.¹⁵²
- In December 2023, two brothers in Indiana were sentenced in federal court for manufacturing and attempting to sell ghost gun machine guns to be shipped abroad to support the foreign terrorist organization, ISIS.¹⁵³

In short, the ghost gun industry has sought to gain a competitive business advantage over responsible and regulated firearm businesses by selling unfettered skip-the-background-check access to untraceable firearms. Its products and marketing quickly reached and armed a predictably dangerous market, with devastating consequences for human life and safety in our state and beyond.



PART 5: CALIFORNIA'S RESPONSE TO THE GHOST GUN CRISIS

In recent years, California has taken strong action to stop the ghost gun industry from selling skip-the-background-check access to untraceable deadly weapons.

California's response has included law enforcement actions, litigation challenging both federal regulators and the ghost gun industry in court, local gun safety ordinances, and in 2022 and 2023, enactment of the nation's most comprehensive legislation to reform the ghost gun industry, strengthen standards for unlicensed firearm manufactures, and address emerging threats. As noted above, early data indicates that these efforts have had a substantial positive impact in curbing the proliferation of ghost guns in crime in our state.

Law Enforcement Recovered Illegal Ghost Guns & Disrupted Ghost Gun Trafficking Operations

Law enforcement efforts have played an important role in recovering illegal ghost guns from our communities and interrupting illegal ghost gun manufacturing and trafficking operations.

The crime gun data published in this report is only available because law enforcement officers across the state recovered tens of thousands of illegally used or possessed ghost guns and properly identified and reported those crime guns to DOJ. From 2013 to 2023, law enforcement agencies in California reported recovering at least 37,626 crime guns identified as ghost guns and 56,803 unserialized crime guns in total.

Some agencies, like the San Diego Police Department and the Santa Clara County District Attorney's Office, have established teams at least partially dedicated to investigating ghost gun-related crimes.¹⁵⁴ In 2023, a three-month ghost gun investigation and enforcement initiative by the San Diego Police Department and ATF resulted in the seizure of 165 firearms, including 82 ghost guns.¹⁵⁵ In one operation, undercover agents reportedly purchased 12 AR-type ghost gun rifles from a suspected gun trafficker and placed an order for 10 more that they said was "for an associate who would be taking the firearms into Mexico."¹⁵⁶ According to court documents, the suspected trafficker replied, "Alright, perfect" and quoted a bulk discount price of \$10,000.¹⁵⁷

Some county sheriff's offices used grant funds from a DOJ Gun Violence Reduction Program to hire detectives to conduct similar investigations. In 2022 and 2023, for example, sheriffs in Lake and Ventura County announced arrests involving large numbers of unlawfully manufactured ghost guns, large-capacity magazines, and firearm manufacturing equipment in cases developed by detectives supported by the Gun Violence Reduction grant.¹⁵⁸

From 2021-2023, agents with the California DOJ Bureau of Firearms also reported recovering at least 181 ghost guns from Armed and Prohibited Persons Systems (APPS) subjects who were legally prohibited from possessing firearms in California.¹⁵⁹ For example:

- In October 2022, DOJ agents identified an individual who was in illegal possession of firearms in Elk Grove. Following investigative leads, DOJ special agents worked with local partners to serve a search warrant on the individual's residence and recovered multiple AR-15 style rifles and

machine guns, ghost gun pistols, suppressors, 15 unfinished receivers or frames, 10 3-D-printed handgun receivers and frames, two 3-D printers and filament for the 3-D printers, 15 large capacity magazines, and approximately 1,200 rounds of ammunition.¹⁶⁰

- In that same month, DOJ agents at a gun show in Ontario, California, observed an individual who was legally prohibited from possessing firearms purchase a rifle stock, bolt barrier, and an upper receiver for an AR-style rifle. Agents conducted additional investigative follow up and obtained a search warrant for the individual’s residence where agents recovered eight ghost gun assault weapons, two machine guns, one short barrel rifle, six rifles, 12 lower receivers, seven handguns (including three ghost guns), two shotguns, 43 large-capacity magazines, approximately 80,000 rounds of ammunition, a 3-D printer, and other firearm manufacturing equipment.¹⁶¹
- In January 2023, the Tulare County Agencies Regional Gun Violence Team (TARGET) Task Force investigated two individuals in Porterville, California suspected of illegal firearm possession and manufacturing. After obtaining a search warrant, task force officers and agents recovered materials and equipment used for manufacturing ghost guns, including a completed ghost gun handgun, seven 3-D-printed ghost gun frames, a 3-D printer, polymer filament, associated computers, several 3-D-printed large-capacity magazines, body armor, ammunition, and a firearm suppressor. Agents also seized three homemade explosive devices, one of which was 3-D-printed, and precursor material used to make explosive devices.¹⁶²

According to DOJ’s analysis of arrest records reported to DOJ through the Automated Criminal History System (ACHS), law enforcement agencies across California have also reported substantially increased enforcement efforts relating to ghost gun possession, trafficking, and manufacturing crimes since 2019. Statewide, California law enforcement agencies reported making 37 arrests in 2019 for unlawfully manufacturing an unserialized ghost gun, but that number rose to 286 in 2021, 382 in 2022, and 369 in 2023. Law enforcement agencies also reported increased enforcement of statutes governing illegal possession or ownership of unserialized firearms, unlawfully trafficking in ghost guns, and unlawfully causing, facilitating, aiding or abetting the manufacture of unserialized ghost guns and the manufacture of any firearms by people who are legally ineligible to possess firearms.

California Sued ATF to Compel the Agency to Stop Enabling the Ghost Gun Crisis

In September 2020, DOJ filed a lawsuit against ATF to stop that federal oversight agency from enabling the ghost gun crisis. Joined by partners including Giffords Law Center to Prevent Gun Violence and the parents of children murdered in a ghost gun school shooting in Santa Clarita, the *California v. ATF* lawsuit sought a court order requiring ATF to correct agency interpretations and/or revise its relevant rules and actions that had erroneously failed to classify unfinished frames and receivers as firearms in accordance with federal law.¹⁶³ Pressure from this and other similar lawsuits, advocacy groups, and a new presidential administration, helped compel ATF to take action to clarify that ghost gun products are firearms under federal law.¹⁶⁴

Shortly after taking office in 2021, President Biden announced that ATF would propose a revised federal rule to clarify and update the definitions of relevant terms used in federal firearm laws.¹⁶⁵ This new ATF rule took effect in August 2022 (“ATF Rule”).¹⁶⁶

The ATF Rule clarified that under federal law, the legal definition of “frame” or “receiver”—and consequently, “firearm”—includes certain unfinished frame and receiver products, including “a

partially complete, disassembled, or nonfunctional frame or receiver, including a frame or receiver parts kit, that is designed to or may readily be completed, assembled, restored, or otherwise converted to function as a frame or receiver.”¹⁶⁷ As a result, more unfinished frames and receivers are now explicitly classified as “firearms” under federal law and subject to federal licensing, recordkeeping, serial number, background check, and other vital safety requirements at the national level. This includes unfinished frames and receivers sold in ghost gun “kits” that bundle unfinished frames and receivers with other components and tools designed for use in completing the frame or receiver.

This ATF Rule marked an important step forward, and California DOJ has joined multiple amicus briefs to defend this rule against a wave of lawsuits brought by the ghost gun industry.¹⁶⁸

However, the ATF Rule also contained some significant loopholes. It clarified that an unfinished frame or receiver *would* be classified as a firearm for the purposes of federal gun safety laws if sold with template holes drilled or indexed in the correct location, or as part of a bundled parts kit with a compatible jig or template intended for use in completing the frame or receiver.¹⁶⁹ But under the ATF Rule, other unfinished frame or receiver products *would not* be considered firearms as long as they still required certain finishing steps and were purchased as a standalone product in a separate transaction from a ghost gun jig, template, or parts kit.¹⁷⁰ Those tools and parts are widely and readily available for purchase either from other ghost gun companies or in a separate purchase order from the same company that sold the unfinished frame or receiver.¹⁷¹

California DOJ concluded that this exemption defied the plain language of federal law and left dangerous gaps in place that the ghost gun industry would exploit to continue to sell skip-the-background-check access to deadly weapons.¹⁷² As a result, while DOJ has helped defend ATF’s Rule in court for its vital efforts to regulate some ghost gun products, DOJ has also continued to challenge ATF in court for failing to regulate others.¹⁷³ DOJ’s lawsuit noted that after the ATF Rule took effect, some ghost gun companies continued to sell unfinished frame and receiver products without background checks, serial numbers, or other precautions.¹⁷⁴ Some continued to sell unfinished frame and receivers *and* the accompanying jig, templates, and parts kits for use in completing those products; they simply required the buyer to order them in a separate transaction.¹⁷⁵

In February 2024, DOJ and its partners won an important court victory in *California v. ATF*: the district court issued a ruling ordering ATF to revise its ghost gun Rule and close this loophole. The court ruled that ATF, when determining whether an unfinished frame or receiver is a firearm for the purposes of federal gun safety laws, must take into account all relevant factors related to how readily the product may be converted into an operable firearm, including the amount of time required, and the availability of products such as jigs and tools that make the product easy to complete.¹⁷⁶

This and other litigation pertaining to ATF’s ghost gun rule is ongoing.¹⁷⁷ While the district court in *California v. ATF* agreed with DOJ that *the loopholes* in the ATF Rule were inconsistent with federal law, other federal courts based in Texas held that the ATF Rule exceeded the agency’s statutory authority. California DOJ joined a coalition of 22 states urging the U.S. Supreme Court to overturn a decision from the Fifth Circuit Court of Appeals in *VanDerStok v. Garland* that would strike down major portions of the ATF Rule and threaten to leave the ghost gun industry largely unregulated at the federal level.

In April 2024, the U.S. Supreme Court granted certiorari to review the Fifth Circuit’s decision, to consider specifically whether ATF’s Rule is consistent with existing federal law and agency authority.

The Supreme Court is scheduled to hear arguments in that case, *Garland v. VanDerStok*, on October 8, 2024, and a decision from the Court is expected by summer 2025.¹⁷⁸

Federal legislation has also been introduced in Congress, like the “Ghost Guns and Untraceable Firearms Act,”¹⁷⁹ which would build on ATF’s Rule, and codify a range of broader protections to stop the ghost gun industry from selling skip-the-background-check access to untraceable weapons.

California, Local Partners, and Gun Violence Survivors Sued to Hold Ghost Gun Companies Accountable in Court

Affirmative litigation has played a significant role in California’s efforts to fight the ghost gun crisis and hold the ghost gun industry accountable for its role in fueling gun crime and violence in our state.

In 2021, the California DOJ, San Francisco District Attorney’s Office, Los Angeles City Attorney’s Office, gun violence prevention groups, and victims of ghost gun shootings filed a series of lawsuits in California courts against many of the nation’s largest ghost gun companies for violating state and federal gun safety and consumer protection laws.¹⁸⁰

Some ghost gun companies stopped selling unfinished frame or receivers and other related products in California after these cases were filed,¹⁸¹ and others did so as part of case settlements, or in anticipation of or in response to the legislative reforms California enacted in 2022 and 2023.¹⁸²

In 2023 and 2024, some of the nation’s largest ghost gun companies also agreed to case settlements that, among other things, required payments of millions of dollars in civil penalties, publication of company documents and communications, and permanent prohibitions on manufacturing or selling ghost gun products into California.¹⁸³ California DOJ’s settlements also prohibited ghost gun companies from making statements that falsely suggest that it is legal to purchase, sell, assemble, or own ghost guns or unserialized ghost gun products in California and required these companies to proactively prevent future violations of California’s gun safety laws by providing notices to their customers and regular compliance training and education to their leadership and employees.¹⁸⁴

Local Ghost Gun Ordinances Provided Foundation for Statewide Reforms

Unlike many other states, California law empowers local communities to enact their own local gun safety ordinances.¹⁸⁵ In 2021 and early 2022, multiple cities and counties across the state showed early leadership in enacting ghost gun reform legislation at the local level.

San Diego and San Francisco enacted some of the nation’s first ghost gun ordinances in September 2021, about nine months before California enacted comprehensive state-level ghost gun legislation.¹⁸⁶ Similar ghost gun ordinances were enacted soon after in communities including Berkeley (October 2021), the City of Los Angeles (November 2021), San Diego County (January 2022), Oakland (February 2022), and San Jose (May 2022).¹⁸⁷

These local ordinances were generally more limited than the legislation California subsequently enacted statewide, but they helped provide earlier and expanded legal tools to fight the ghost gun crisis and built statewide momentum for broader reform efforts.

California Enacted Nation-Leading Ghost Gun Legislation

In 2022 and 2023, California enacted a set of laws that, together, represent the most comprehensive state legislation to date to reform the ghost gun industry, strengthen safety requirements for manufacturing firearms, and address the growing threat of downloadable guns produced from ghost gun manufacturing machines.¹⁸⁸

The first and most substantial reforms were adopted as part of AB 1621 (Gipson), which took effect on June 30, 2022, and shortly preceded implementation of ATF's federal ghost gun rule in August of that year. AB 1621 was enacted as an urgency measure by a bipartisan supermajority in the Legislature, so it took effect as soon as Governor Newsom signed the bill into law. Other important California ghost gun legislation, including AB 2156 (Wicks), AB 1594 (Ting), and AB 1089 (Gipson), took effect more recently in 2023 and 2024.¹⁸⁹

While comprehensive and nuanced, these bills shared a simple goal: to stop the ghost gun industry from providing skip-the-background-check access to untraceable deadly weapons.¹⁹⁰

AB 1621 (Gipson): A core reform in AB 1621 was to ensure background check and other gun safety requirements apply to unfinished frame and receiver products by ensuring that California law treated the sale, manufacture, and possession of unfinished frames and receivers the same way the law treated completed frames and receivers and fully assembled guns.

This reform clarified that the legal definition of “firearm” in California’s gun safety laws generally applies to completed frames or receivers and to unfinished products (defined as “firearm precursor parts”) that *either* may be readily completed, assembled, or converted to be used as the frame or receiver of a functional firearm *or* “are marketed or sold to the public to become or be used as the frame or receiver of a functional firearm once completed, assembled or converted.”¹⁹¹ In other words, if the ghost gun industry sells or markets a product as the precursor for a frame or receiver of a gun, that product is subject to laws governing the sale and manufacture of firearms in our state, including background check requirements—regardless of arguments about which specific drilling or filing tasks must still be performed or how easily the product may be finished.¹⁹²

Relatedly, AB 1621 also prohibited the sale of any unfinished firearm precursor parts that are not regulated as firearms under federal law and serialized accordingly.¹⁹³ Under the 2022 ATF Rule, some unfinished frame or receiver products are (like completed frames and receivers) regulated as firearms under federal law, and therefore, may be sold in California pursuant to our state’s firearm laws. However, if court rulings or federal agency rule changes cause these products not to be regulated as firearms under federal law, those products may not be sold in California.

Together, these changes ensure that in California, the sale of a completed or unfinished frame or receiver or other firearm precursor part must be conducted by licensed, regulated firearm dealers. Those dealers are required to verify that these products are engraved with a valid serial number prior to sale or delivery to an unlicensed buyer. Those dealers are required to ensure the purchaser passes a background check and has a valid Firearm Safety Certificate showing they passed a written test on firearm laws and responsibilities. Those dealers are also required to complete and report sale records, and ensure the sale complies with the range of gun violence prevention laws that have helped transform California from a state with some of the nation’s highest rates of gun violence to one of the lowest.¹⁹⁴

AB 1621 (Gipson) also:

- Ensured that people who are legally prohibited from accessing firearms and completed frames or receivers, such as individuals who become subject to court protection orders, are prohibited from keeping, acquiring, or accessing unfinished firearm precursor parts, and would fail a background check if they attempted to purchase these products.¹⁹⁵
- Made it a crime to knowingly cause, allow, facilitate, aid, or abet the manufacture or assembling of an unserialized firearm.¹⁹⁶
- Provided an 18-month grace period authorizing a person in possession of an unserialized firearm, including a completed frame or receiver or firearm precursor part, to ensure their weapon was lawfully serialized by January 1, 2024, by applying for a valid serial number from DOJ or having the firearm serialized by an authorized firearm dealer, gunsmith, or other federal firearms license-holder authorized to imprint serial numbers onto firearms.¹⁹⁷

AB 1621 (Gipson) and AB 2156 (Wicks) also strengthened rules governing firearm manufacturers by requiring individuals to obtain a firearm manufacturer license in order to (1) manufacture more than three firearms per calendar year in California, (2) manufacture any number of firearms for other people, or (3) to manufacture any number of firearms using a 3-D-printer or CNC milling machine.¹⁹⁸ Previously, California law required a firearm manufacturer license to manufacture 50 or more firearms per calendar year in the state.

These changes continue to authorize unlicensed individuals to manufacture legal firearms for personal use, *if* they use regulated serialized frames or receivers sold as “firearms” pursuant to background checks and other safety requirements. Individuals manufacturing more than three firearms per calendar year, manufacturing any number of firearms for other people, or manufacturing any number of firearms using 3-D printers or CNC milling machines must generally now be licensed to manufacture firearms by both ATF and California DOJ, and comply with a range of state and federal safety obligations applicable to licensed firearm manufacturers, including safety and compliance inspections and requirements to conduct firearm manufacturing operations only in designated facilities that meet site security and safety standards.¹⁹⁹

AB 1594 (Ting), California’s Firearm Industry Responsibility Act, was co-sponsored by DOJ, and took effect on July 1, 2023. This legislation codified a standard of responsible business conduct for firearm industry members, including companies selling ghost gun parts and components, and it also expanded gun violence victims’ rights to seek accountability in the courts for harms caused by violations of that standard of conduct.

This Firearm Industry Standard of Conduct applies, among other things, to companies and individuals engaged in the sale, marketing, distribution, or manufacture of “firearm-related products,” including fully assembled guns, completed frames and receivers, unfinished precursor parts, other firearm components, and certain firearm accessories.²⁰⁰ (AB 1089 (Gipson), discussed below, subsequently expanded this definition to also include certain 3-D printers, CNC milling machines, and other firearm manufacturing machines). The standard of conduct requires firearm industry members, among other things, to implement reasonable controls to ensure they do not promote the unlawful use of their products, ensure compliance with applicable laws, and prevent sales to gun traffickers, minors, and other buyers who cannot legally possess firearms; the standard of conduct also incorporates other state consumer

protection, false advertising, and fair business practice requirements and provides broader standing for victims of gun violence to sue for harms caused by violations of these standards.²⁰¹

This law also created a clear new cause of action for victims and public officials, including the Attorney General, city attorneys, and county counsels, to seek civil damages and injunctive relief against firearm industry members who violate the standard of conduct.²⁰²

The Act's purpose is to encourage firearm industry members to better regulate their own conduct to reduce civil liability by taking reasonable steps to prevent irresponsible and harmful business practices, whether or not those practices could separately be charged as a crime.²⁰³ Importantly, this standard of conduct applies to ghost gun companies selling completed or unfinished frames and receivers *and* to those engaged in the otherwise largely unregulated sale, marketing, distribution, and manufacture of other firearm parts and accessories that are designed for use in building, completing, and modifying firearms, including assault weapon features.

Finally, **AB 1089 (Gipson)**, enacted in 2023, focused on addressing growing threats from companies selling ghost gun manufacturing machines and related products and services. In the past decade, the ghost gun market has primarily focused on the sale of nearly completed, so-called 80% frames and receivers. But as multiple states and ATF have acted to regulate unfinished frames and receivers, the ghost gun industry has increasingly turned to other workaround products, including home consumer-level 3-D printers and CNC milling machines that may be digitally programmed to produce firearm frames, receivers, and other components in potentially unlimited quantities.²⁰⁴ Ghost gun companies marketing these machines have emphasized that they are designed to enable individuals to easily produce firearms at home without any background check, serial number, or other interaction with licensed and regulated portions of the firearm industry.²⁰⁵

Some ghost gun companies have sought to profit from sales of firearm build kits and components designed for use with frames and receivers made from 3D-printers or CNC milling machines. Some have also sold access to digital firearm manufacturing files and software used to program these machines to produce firearms and firearm components.²⁰⁶ While these firearm manufacturing files and software are sometimes referred to as digital firearm "blueprints", they are much more than a theoretical informational guide; they may be used to directly control and cause a machine to produce a firearm without any licensed dealer or background check.²⁰⁷ Some companies have also sold subscription access to digital libraries of firearm manufacturing code files or sold individual files transmitted digitally or on physical storage devices.²⁰⁸ Others have profited from hosting crowdsourced libraries of digital firearm manufacturing code files or developed artificial intelligence models trained to facilitate ghost gun manufacturing and, in theory, provide users with AI-generated ghost gun manufacturing codes.²⁰⁹

AB 1089 (Gipson) included some of the nation's first legislative reforms focused on addressing these threats. Effective January 1, 2024, this law:

- Strengthened criminal law restrictions governing unlicensed use and commerce in 3-D printers and CNC milling machines that have the primary function of manufacturing firearms,²¹⁰ and created a parallel civil cause of action against individuals who violate those restrictions.²¹¹

- Created a civil prohibition and cause of action to, among other things, prohibit selling or marketing any 3-D printers or CNC milling machines in a manner that knowingly or recklessly causes, promotes, or facilitates the unlawful use of those machines to manufacture firearms by people who are not licensed to manufacture firearms.²¹²
- Created a civil prohibition and cause of action to, among other things, prevent companies from knowingly distributing or causing the distribution of digital firearm manufacturing code to people who are not licensed to manufacture firearms.²¹³
- Added “firearm manufacturing machines” to California’s Firearm Industry Responsibility Act, ensuring that individuals or companies engaged in the manufacture, distribution, importation, marketing, or wholesale or retail sale of 3-D printers and CNC milling machines that are sold, marketed, designed, or intended for use in manufacturing firearms must comply with the Firearm Industry Standard of Conduct and may be held liable for harmful conduct that violates that standard.²¹⁴ Among other things, this requires companies selling and advertising these machines to implement reasonable controls to ensure they do not promote the unlawful use of their products by unlicensed manufacturers, and to prevent the sale and distribution of these machines and related products to gun traffickers, to people who are legally prohibited from possessing a firearm, and to people who are at substantial risk of possessing or using these products illegally.²¹⁵

Timeline of California's Ghost Gun Laws

2016

- California enacts **AB 857 (Cooper)** governing unlicensed firearm manufacturing and trafficking in privately made firearms.

2018

- **AB 857 (Cooper)** provisions take effect on July 1 requiring unlicensed firearm manufacturers to apply to DOJ for serial numbers, pursuant to background checks, when producing otherwise unserialized firearms.

2019

- **AB 857 (Cooper)** provisions take effect on January 1 prohibiting possession of unserialized firearms.
- California enacts **AB 879 (Gipson)** governing the sale of unfinished frames/receivers. *(This law did not take effect before it was superseded by broader reforms enacted through AB 1621 (Gipson) in 2022).*

2020

- California enacts Budget legislation to expedite implementation of **AB 879** to July 2022. *(That law was superseded by broader reforms enacted through AB 1621 (Gipson) in 2022).*

2021

- California enacts **AB 1057 (Petrie-Norris)**, clarifying that individuals subject to certain court protection and restraining orders were prohibited from possessing firearm precursor parts.

2022

- California enacts comprehensive ghost gun reforms through **AB 1621 (Gipson)**. Most provisions take immediate effect on June 30.
- ATF issues its revised **federal Ghost Gun Rule**, effective August 24.
- California enacts **AB 2156 (Wicks)** governing unlicensed firearm manufacturing and use of 3D printers in manufacturing firearms.
- California enacts **AB 1594 (Ting)** (The Firearm Industry Responsibility Act).

2023

- **AB 2156 (Wicks)** takes effect on January 1.
- **AB 1594 (Ting)** takes effect on July 1.
- California enacts **AB 1089 (Gipson)** to address threats from downloadable guns and ghost gun manufacturing machines.

2024

- **AB 1089 (Gipson)** takes effect on January 1.
- **AB 1621 (Gipson)** provisions take effect on January 1 prohibiting possession of unserialized firearm precursor parts.

Together, California’s codified reforms provide much broader and perhaps more durable protections than the 2022 ATF Rule, which was adopted via executive action. California’s reforms will also apply regardless of whether the 2022 ATF Rule remains in place. A nationwide federal response to the ghost gun crisis is vitally needed to ensure all Americans are safer from gun violence everywhere, and to prevent traffickers from funneling ghost gun products sold in other states into California. But if a court or future presidential administration seek to invalidate or repeal the 2022 ATF rule, California’s law would continue to govern ghost gun industry conduct in our state.

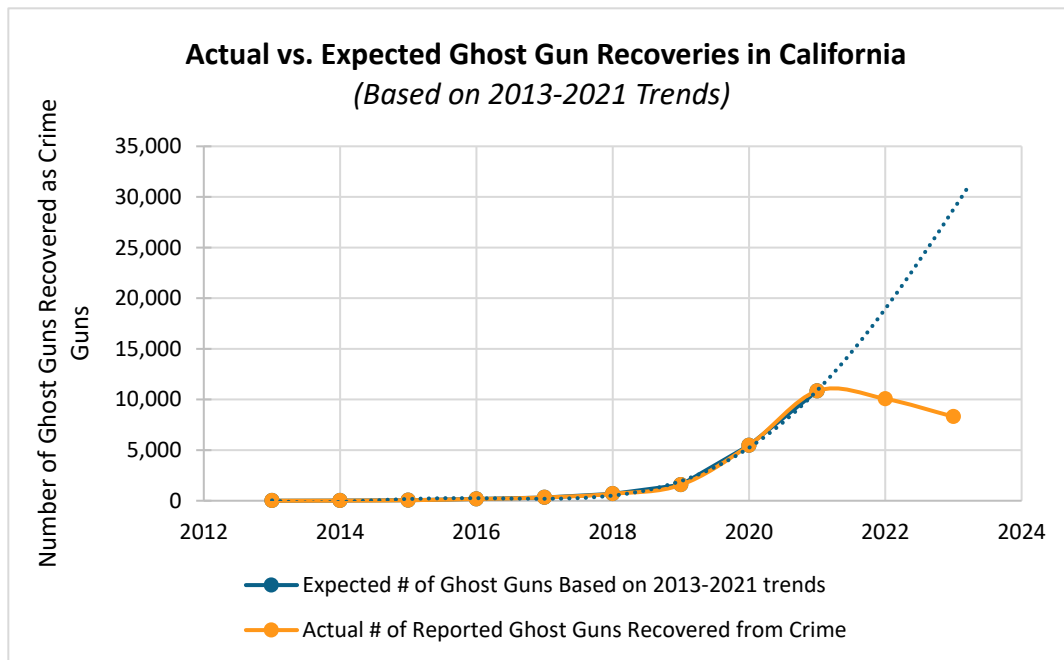
In 2022, DOJ successfully defended California’s laws against a ghost gun company lawsuit. After a federal district court judge denied the company’s motion for a preliminary injunction against enforcement of AB 1621 (Gipson), the ghost gun company ended its lawsuit and agreed to permanently dismiss its Second Amendment claims.²¹⁶

To promote compliance, enforcement, and accountability with these and other ghost gun laws, this report includes a **Ghost Gun Laws Reference Guide** following the Conclusion below.

CONCLUSION

The ghost gun crisis is far from over and will likely continue to evolve and present new safety challenges. But California’s comprehensive litigation, enforcement, and legislative responses have had a vital impact in reversing the proliferation of ghost guns in crime, and present a model for other state and federal policymakers to comprehensively address the ghost gun crisis nationwide.

These efforts have not just decreased the number of ghost guns recovered in crime; they halted and reversed what had been an eight-year pattern of extremely large increases. From 2013 to 2021, the number of ghost guns recovered from crime in California each year nearly quadrupled, then more than quadrupled, more than tripled, nearly doubled, more than doubled, more than doubled, more than tripled, and then nearly doubled again—before that number substantially *decreased* two years in a row. If that previous upward trend continued as it had from 2013-2021, law enforcement agencies in California may have expected to recover over 30,000 illegally used or possessed ghost guns in 2023 alone. Instead, they recovered about 8,300. Efforts to address the ghost gun crisis may have helped prevent tens of thousands of these weapons from being illegally used or possessed in crime in our state in just one year. Again, every one of those weapons was designed to arm someone who did not pass a background check with a weapon designed to end life.



To preserve and build on this progress, efforts to protect the public from the skip-the-background-check ghost gun industry must continue to be a safety priority. DOJ will continue to prioritize compliance with our state’s new ghost gun reforms and to monitor, investigate, sue, and prosecute those who violate these laws.

DOJ also encourages other public safety stakeholders to prioritize efforts to investigate and disrupt ghost gun manufacturing and trafficking operations, and to identify and address the dangerous and illegal ghost gun industry practices that promote and enable them. In particular, stakeholders should

proactively utilize the new civil and criminal accountability tools California has adopted in recent years, including most recently through AB 1089, to prevent the ghost gun industry from promoting and facilitating the illegal manufacture of downloadable ghost guns and from selling related skip-the-background-check products and services that endanger public safety.

The **Ghost Gun Laws Reference Guide** below provides a quick reference summary of California’s civil and criminal statutes governing ghost guns and unlicensed firearm manufacturers. Law enforcement officers, prosecutors, city attorneys, county counsels, advocates for victims and survivors, and other stakeholders, should familiarize themselves with these laws and proactively use and enforce them to protect California’s communities from gun violence



CALIFORNIA GHOST GUN LAWS REFERENCE GUIDE

(Current as of September 24, 2024)

Summary of California's Criminal Ghost Gun Laws:

Subject to relevant exceptions, the California Penal Code makes it unlawful to:

- (1) Sell, transfer, possess, import into the state, or manufacture any frame or receiver, including completed frames or receivers and unfinished "firearm precursor parts,"²¹⁷ without complying with California's laws governing firearms, such as requirements that sales and transfers must be processed through licensed firearm dealers²¹⁸ pursuant to background checks,²¹⁹ age restrictions,²²⁰ Firearm Safety Certificate requirements,²²¹ waiting periods,²²² and sale records.²²³
- (2) Sell, offer to sell, transfer ownership of, or purchase, any firearm precursor part that is not regulated as a firearm under federal law and serialized accordingly: *Penal Code Section 30400*.²²⁴
- (3) Sell or transfer ownership of an unserialized firearm (including a completed frame/receiver or firearm precursor part): *Penal Code Section 27530*.²²⁵
- (4) Knowingly possess an unserialized firearm (including a completed frame/receiver or firearm precursor part): *Penal Code Section 23920*.²²⁶
- (5) Knowingly manufacture or assemble an unserialized firearm (including a completed frame/receiver): *Penal Code Section 29180(f)*.²²⁷
- (6) Knowingly cause, allow, facilitate, aid, or abet the manufacture or assembling of an unserialized firearm (including a completed frame/receiver): *Penal Code Section 29180(f)*.²²⁸
- (7) Knowingly allow, facilitate, aid, or abet the manufacture or assembling of a firearm (including a completed frame/receiver) by a person who is legally prohibited from possessing firearms under California law: *Penal Code Section 29180(e)*.²²⁹
- (8) Acquire a firearm (including a completed frame/receiver or firearm precursor part) for the purpose of selling, loaning, or transferring the firearm with intent to avoid the provisions of California's law requiring a licensed dealer to process firearm sales and transfers pursuant to a background check and other requirements: *Penal Code Section 27520*.²³⁰
- (9) Sell or transfer ownership of a privately made firearm (including a completed frame/receiver) that was manufactured by an individual who is not federally licensed to manufacture firearms by ATF. *Penal Code Section 29180(d)*.²³¹
- (10) Manufacture more than 3 firearms in a calendar year within California (including a completed frame/receiver and firearm precursor parts) without being licensed to manufacture firearms by ATF and California DOJ: *Penal Code Section 29010*.²³²
- (11) Use any 3-D printer or CNC milling machine to manufacture any number of firearms (including a completed frame/receiver and firearm precursor parts) without being licensed to manufacture firearms by ATF and California DOJ: *Penal Code Section 29185(a)*.²³³
- (12) Sell, offer to sell, or transfer *certain* 3-D printers or CNC milling machines (those that have "the sole or primary function of manufacturing firearms") to a person who is not licensed to manufacture firearms by ATF and California DOJ: *Penal Code Section 29185(b)*.²³⁴

(13) Possess, purchase, or receive *certain* 3-D printers or CNC milling machines (those that have “the sole or primary function of manufacturing firearms”) without being licensed to manufacture firearms by ATF and California DOJ: *Penal Code Section 29185(c)*.²³⁵

(14) Manufacture or cause to be manufactured, import into the state, keep for sale, offer or expose for sale, give, lend, or possess a firearm that is undetectable to metal detectors and other common screening devices: *Penal Code Sections 24610 and 29180(b)(2)(B)*.²³⁶

(15) Manufacture, cause to be manufactured, import into the state for sale, keep for sale, offer or expose for sale, give, or lend an “unsafe handgun”, including those that have not been tested and placed on a DOJ roster of certified handgun models that have passed product and consumer safety testing standards.²³⁷

(16) Manufacture, cause to be manufactured, distribute, transport, import into the state, keep for sale, offer or expose for sale, give, lend, or possess an assault weapon or .50 BMG rifle.²³⁸

(17) Knowingly manufacture a machine gun, or intentionally convert a firearm into a machine gun, or sell, offer for sale, possess, or knowingly transport a machine gun.²³⁹

(18) Manufacture, cause to be manufactured, import into the state, keep for sale, offer or expose for sale, give, lend, or possess a firearm that is not immediately recognizable as a firearm.²⁴⁰

(19) Manufacture, cause to be manufactured, import into the state, keep for sale, offer or expose for sale, give, lend, or possess a short-barreled rifle or shotgun.²⁴¹

Nuisance: California law authorizes the Attorney General, district attorneys, and city attorneys to file a legal action to enjoin the sale, transfer, or importation into the state of any firearm precursor part that is unlawfully sold, transferred, or imported within the state.²⁴² Any firearm precursor parts that are unlawfully sold, transferred, possessed, or imported into California are declared to be a nuisance and are subject to confiscation and destruction.²⁴³

Summary of California’s Civil Ghost Gun Laws:

Subject to relevant exceptions, the California Civil Code and the Business and Professions Code provide:

(1) A civil prohibition and cause of action against a person who knowingly commits an act that violates California’s criminal statute (Penal Code Section 29185) governing the use, sale, offer to sell, transfer, purchase, receipt, and possession of CNC milling machines or 3-D printers in connection with unlicensed firearm manufacturers: *Civil Code Section 3273.61(a)(2)*.²⁴⁴

- This statute creates a civil cause of action for the Attorney General, county counsels, and city attorneys, to seek civil penalties and injunctive relief, whether or not a defendant’s violation results in a criminal conviction.
- A person who commits a violation may be held strictly liable to victims for any personal injury or property damage inflicted by use of a firearm that was unlawfully manufactured using a 3-D printer, CNC milling machine, or other similar machine as a result of the violation.²⁴⁵

(2) A civil prohibition and cause of action against a person who sells, offers to sell, transfers, advertises, or markets a CNC milling machine or 3-D printer in a manner that knowingly or recklessly causes *another person* in California to engage in conduct that violates California’s criminal statute governing the use, sale, offer to sell, transfer, purchase, receipt, and possession of those machines in connection with unlicensed firearm manufacturers, or against a person who otherwise knowingly or recklessly aids, abets, promotes, or facilitates conduct in violation of that statute: *Civil Code Section 3273.62*.²⁴⁶

- This law provides a rebuttable presumption that a violation has occurred if a person offers to sell, advertises, or markets a CNC milling machine or 3-D printer in a manner that affirmatively promotes the machine’s utility in manufacturing firearms, regardless of whether the machine or printer is described or classified as having any other capabilities, without verifying that any purchaser or transferee in California is a licensed firearms manufacturer and is not otherwise prohibited from purchasing or using the machine to manufacture firearms.²⁴⁷
- This statute creates a civil cause of action for the Attorney General, county counsels, city attorneys, and any person harmed because of a violation to seek civil penalties, injunctive relief, and other appropriate damages or relief.²⁴⁸

(3) A civil prohibition and cause of action against a person who knowingly distributes or causes distribution of digital firearm manufacturing code by any means to a person who is not licensed to manufacture firearms by ATF. *Civil Code Section 3273.61(a)(1)*.²⁴⁹

- This statute creates a civil cause of action for the Attorney General, county counsels, and city attorneys, to seek civil penalties and injunctive relief, and provides that a person who violates this law may be held strictly liable to victims for personal injury or property damage inflicted using a firearm that was produced using the digital firearm manufacturing code the defendant distributed or caused to be distributed.²⁵⁰

(4) A civil prohibition and private cause of action against a person who does any of the following:²⁵¹

- Purchases, sells, offers to sell, or transfers ownership of any firearm precursor part that is not regulated as a firearm under federal law.

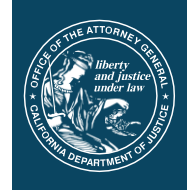
- Manufactures, causes to be manufactured, distributes, transports, imports into the state, keeps for sale, offers or exposes for sale, gives or lends, or causes to be distributed, transported, or imported into the state, any unserialized firearm, assault weapon, or .50 BMG rifle.
- Sells, supplies, delivers, or gives possession or control of a firearm (including a completed frame/receiver or firearm precursor part) to a person under 21 years of age.
- Knowingly engages in conduct that aids or abets a violation of these prohibitions, or knowingly commits an act with intent to engage in such prohibited conduct.²⁵²

(5) A civil prohibition and cause of action against a person who violates the Firearm Industry Responsibility Act’s standard of conduct.²⁵³ This standard of conduct applies to those engaged in the manufacture, distribution, importation, marketing, wholesale sale, or retail sale of fully assembled guns, completed frames and receivers, firearm precursor parts, firearm components, certain firearm accessories, ammunition, and “firearm manufacturing machines” (including certain 3-D printers, CNC milling machines, and similar machines, that are marketed, sold as, or reasonably designed or intended to be used to manufacture firearms).²⁵⁴

The law requires these “firearm industry members”, among other things, to:

- Implement reasonable controls, as defined, to:
 - Ensure they comply with applicable state and federal laws and do not promote the unlawful manufacture, sale, possession, marketing, or use of firearm-related products.
 - Prevent the sale or distribution of firearm-related products to firearm traffickers, straw purchasers, and people who are legally prohibited from possessing a firearm.
 - Prevent the sale or distribution of firearm-related products to a person who the firearm industry member has reasonable cause to believe is at substantial risk of possessing or using a firearm-related product unlawfully.²⁵⁵
- Take reasonable precautions to ensure they do not sell, distribute, or provide a firearm-related product to a downstream distributor or retailer who fails to establish, implement, and enforce reasonable controls.²⁵⁶
- Comply with other incorporated consumer protection, false advertising, and fair business practice standards.²⁵⁷

This statute creates a civil cause of action for people harmed by a firearm industry member’s acts or omissions in violation of the standard of conduct, and for the Attorney General, county counsels, and city attorneys, to seek civil damages, injunctive relief, and other appropriate relief to enforce the law and remedy harms caused by the violation.²⁵⁸



COUNTY-LEVEL DATA APPENDICES

The appendix data tables below present county-level data showing the number of crime guns that were recovered by law enforcement in that county each year that were reported to DOJ with information identifying the firearm as an unserialized crime gun, as well as the subset of those unserialized crime guns identified as ghost guns. (As discussed in the data section on pages 12-13 above, for multiple reasons, this ghost gun data likely substantially undercounts the true number of ghost guns recovered from crime and the percentage of all crime guns that are ghost guns).

Appendix A presents county-level data showing the total number of recovered crime guns that were reported to DOJ as having no legible serial number engraved on the weapon, which includes crime guns identified as unserialized ghost guns as well as other unserialized crime guns.

Appendix B presents county-level data showing the number of recovered crime guns reported to DOJ that were identified by the reporting law enforcement agency as unserialized ghost guns.

Appendix C presents the percentage of all recovered crime guns in the county that were reported as having no legible serial number engraved on the weapon.

Appendix D presents the percentage of all recovered crime guns in the county that were identified by the reporting law enforcement agency as unserialized ghost guns.

Appendix A: Number of Recovered Crime Guns Reported to DOJ Without Serial Numbers, by County

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ALAMEDA	14	10	12	22	27	42	133	204	457	469	360
ALPINE	0	0	0	0	0	0	0	0	0	0	0
AMADOR	0	0	0	0	0	1	0	0	2	1	0
BUTTE	3	2	4	2	6	6	14	26	27	21	25
CALAVERAS	0	0	0	0	2	0	0	0	1	1	3
COLUSA	0	0	0	1	2	0	2	8	3	6	5
CONTRA COSTA	2	7	9	25	10	46	52	216	367	323	288
DEL NORTE	0	0	0	0	0	0	0	0	1	0	1
EL DORADO	1	0	0	0	0	0	0	1	2	5	22
FRESNO	2	4	6	2	3	12	34	78	221	204	142
GLENN	0	0	1	2	0	0	1	3	5	3	2
HUMBOLDT	0	1	1	2	3	9	19	18	22	28	15
IMPERIAL	0	0	1	0	1	1	0	4	6	9	6
INYO	0	0	0	0	0	0	0	0	0	1	1
KERN	6	4	1	15	10	43	59	219	299	326	267
KINGS	0	0	1	1	2	1	7	8	32	61	53
LAKE	0	0	0	0	3	2	1	3	11	8	10
LASSEN	0	0	0	0	1	0	1	4	3	1	9
LOS ANGELES	119	107	102	118	198	292	386	1,900	3,536	2,187	1,550
MADERA	2	5	5	1	10	13	12	21	55	78	70
MARIN	0	0	1	0	4	1	6	14	36	32	20
MARIPOSA	0	0	0	0	0	0	0	0	0	0	0
MENDOCINO	0	0	0	5	0	1	0	25	33	44	31
MERCED	0	0	0	1	0	1	9	16	38	101	106
MODOC	0	0	0	0	0	4	0	0	0	0	0
MONO	0	0	0	0	0	0	1	0	0	0	1
MONTEREY	1	0	0	0	2	3	7	24	76	104	125
NAPA	4	4	4	7	5	8	11	14	25	54	40
NEVADA	0	0	1	0	3	2	0	6	4	7	2

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ORANGE	5	12	8	14	26	24	50	212	513	505	418
PLACER	0	1	3	11	2	10	7	38	81	65	59
PLUMAS	0	0	0	0	0	0	0	0	0	0	1
RIVERSIDE	9	20	22	40	32	36	68	262	491	777	661
SACRAMENTO	18	20	32	40	45	67	87	223	406	614	572
SAN BENITO	3	0	0	1	0	1	8	3	13	35	16
SAN BERNARDINO	141	199	182	186	201	200	168	806	1,547	1,663	1,364
SAN DIEGO	20	22	33	56	84	163	237	508	1,182	900	732
SAN FRANCISCO	7	8	3	8	20	54	74	165	201	223	179
SAN JOAQUIN	2	2	9	5	33	32	103	226	351	313	301
SAN LUIS OBISPO	0	1	0	5	1	0	8	19	31	49	134
SAN MATEO	2	4	9	16	18	11	55	58	104	123	97
SANTA BARBARA	0	1	1	5	8	12	12	29	34	73	64
SANTA CLARA	1	1	4	5	17	16	34	65	87	82	102
SANTA CRUZ	4	1	2	11	16	15	25	65	98	69	45
SHASTA	0	0	1	2	0	4	6	5	14	36	45
SIERRA	0	0	0	3	0	0	0	0	0	0	0
SISKIYOU	0	0	0	3	1	1	2	2	8	13	8
SOLANO	3	0	3	2	14	18	42	103	145	155	135
SONOMA	1	9	5	8	13	12	26	52	94	135	86
STANISLAUS	1	2	3	9	24	35	88	124	243	263	219
SUTTER	0	0	0	0	0	0	1	9	17	28	18
TEHAMA	0	0	0	3	3	3	5	2	0	2	9
TRINITY	0	0	0	0	0	6	0	2	4	10	3
TULARE	4	0	4	3	7	9	12	18	81	110	130
TUOLUMNE	0	0	0	0	0	0	1	1	1	1	9
VENTURA	6	6	8	19	10	19	34	121	196	220	184
YOLO	0	0	0	3	2	2	9	10	26	24	33
YUBA	0	0	0	0	0	0	0	0	22	9	9

Appendix B: Number of Recovered Crime Guns Identified as Ghost Guns, by County

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ALAMEDA	0	0	3	12	15	30	123	199	446	460	354
ALPINE	0	0	0	0	0	0	0	0	0	0	0
AMADOR	0	0	0	0	0	0	0	0	2	1	0
BUTTE	1	0	0	1	0	2	12	21	21	15	21
CALAVERAS	0	0	0	0	1	0	0	0	1	1	1
COLUSA	0	0	0	0	2	0	2	8	2	6	2
CONTRA COSTA	0	0	4	14	4	24	48	212	363	312	285
DEL NORTE	0	0	0	0	0	0	0	0	1	0	1
EL DORADO	0	0	0	0	0	0	0	1	1	5	22
FRESNO	0	0	0	0	2	6	26	65	216	198	137
GLENN	0	0	0	2	0	0	0	2	5	1	1
HUMBOLDT	0	0	0	0	0	6	15	13	17	22	11
IMPERIAL	0	0	0	0	0	0	0	4	6	7	6
INYO	0	0	0	0	0	0	0	0	0	0	0
KERN	0	0	0	10	4	39	53	199	286	310	252
KINGS	0	0	0	0	2	0	7	6	31	58	52
LAKE	0	0	0	0	1	1	0	2	3	2	1
LASSEN	0	0	0	0	1	0	0	0	2	1	9
LOS ANGELES	1	0	6	22	68	164	292	1,793	3,436	2,082	1,474
MADERA	0	1	1	0	7	8	12	18	54	78	67
MARIN	0	0	0	0	1	1	6	12	34	32	19
MARIPOSA	0	0	0	0	0	0	0	0	0	0	0
MENDOCINO	0	0	0	5	0	1	0	16	32	39	30
MERCED	0	0	0	0	0	1	6	10	34	100	104
MODOC	0	0	0	0	0	0	0	0	0	0	0
MONO	0	0	0	0	0	0	0	0	0	0	1
MONTEREY	0	0	0	0	1	2	7	21	74	101	124
NAPA	0	0	0	1	0	2	9	14	23	54	37
NEVADA	0	0	0	0	1	1	0	6	3	5	2
ORANGE	0	6	1	8	15	12	47	195	506	490	402

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PLACER	0	0	0	5	1	5	4	35	77	64	54
PLUMAS	0	0	0	0	0	0	0	0	0	0	1
RIVERSIDE	0	0	13	4	11	19	50	228	465	726	627
SACRAMENTO	0	0	7	23	24	46	78	206	392	597	551
SAN BENITO	0	0	0	0	0	1	8	2	12	32	14
SAN BERNARDINO	0	0	0	17	23	42	102	740	1,494	1,577	1,299
SAN DIEGO	1	3	8	32	51	115	210	488	1,168	878	718
SAN FRANCISCO	0	0	0	2	16	44	72	161	199	219	176
SAN JOAQUIN	0	0	1	0	17	14	93	213	343	309	289
SAN LUIS OBISPO	0	0	0	1	0	0	8	18	27	48	80
SAN MATEO	0	1	2	3	7	7	50	51	95	112	89
SANTA BARBARA	0	0	0	3	4	5	9	26	31	71	59
SANTA CLARA	0	0	1	0	6	9	29	60	80	80	94
SANTA CRUZ	0	0	0	5	10	13	20	56	92	63	42
SHASTA	0	0	0	0	0	3	5	1	12	33	34
SIERRA	0	0	0	0	0	0	0	0	0	0	0
SISKIYOU	0	0	0	0	0	0	2	1	3	11	7
SOLANO	0	0	1	1	3	16	38	99	138	147	133
SONOMA	0	0	0	1	10	7	25	50	89	132	79
STANISLAUS	0	0	0	4	16	26	69	105	230	250	214
SUTTER	0	0	0	0	0	0	0	8	17	25	18
TEHAMA	0	0	0	0	2	0	0	1	0	2	9
TRINITY	0	0	0	0	0	1	0	2	2	5	3
TULARE	0	0	0	0	1	5	11	15	77	108	128
TUOLUMNE	0	0	0	0	0	0	1	0	0	1	8
VENTURA	0	0	2	0	1	11	25	113	191	214	174
YOLO	0	0	0	0	1	1	8	7	25	24	30
YUBA	0	0	0	0	0	0	0	0	22	9	9

Appendix C: Percentage of All Recovered Crime Guns Reported Without Serial Numbers, by County

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ALAMEDA	0.9%	0.6%	0.8%	1.9%	2.4%	3.6%	9.7%	15.9%	26.0%	27.1%	21.7%
ALPINE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AMADOR	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	3.1%	1.0%	0.0%
BUTTE	0.6%	0.4%	0.8%	0.5%	1.4%	1.2%	4.4%	5.1%	6.1%	5.2%	7.0%
CALAVERAS	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	1.1%	0.7%	3.8%
COLUSA	0.0%	0.0%	0.0%	2.9%	5.0%	0.0%	8.0%	14.0%	7.3%	20.0%	6.9%
CONTRA COSTA	0.2%	0.6%	0.8%	2.3%	0.9%	4.1%	5.0%	18.3%	25.4%	22.1%	21.6%
DEL NORTE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	1.4%
EL DORADO	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.7%	2.9%	7.8%
FRESNO	0.2%	0.3%	0.3%	0.2%	0.2%	0.8%	2.4%	4.8%	12.4%	11.5%	9.1%
GLENN	0.0%	0.0%	3.7%	6.9%	0.0%	0.0%	1.5%	3.5%	4.3%	11.1%	5.7%
HUMBOLDT	0.0%	0.4%	0.4%	0.6%	1.0%	3.1%	5.6%	4.8%	4.1%	6.6%	3.4%
IMPERIAL	0.0%	0.0%	1.7%	0.0%	0.9%	0.9%	0.0%	3.0%	3.7%	6.7%	5.4%
INYO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	5.0%
KERN	0.3%	0.2%	0.1%	0.8%	0.6%	2.8%	3.2%	10.5%	13.9%	14.3%	12.2%
KINGS	0.0%	0.0%	1.2%	0.9%	1.7%	0.7%	3.6%	5.8%	20.1%	33.5%	22.4%
LAKE	0.0%	0.0%	0.0%	0.0%	1.5%	1.2%	0.6%	2.0%	5.7%	4.0%	3.9%
LASSEN	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	2.0%	9.1%	5.9%	1.6%	19.6%
LOS ANGELES	1.1%	1.0%	0.9%	1.1%	1.7%	2.5%	3.2%	14.3%	22.4%	15.0%	11.6%
MADERA	0.8%	1.7%	2.5%	0.4%	2.7%	5.1%	4.7%	8.5%	19.9%	25.3%	24.5%
MARIN	0.0%	0.0%	1.2%	0.0%	3.7%	1.4%	4.7%	12.0%	26.3%	25.8%	20.0%
MARIPOSA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MENDOCINO	0.0%	0.0%	0.0%	1.9%	0.0%	0.4%	0.0%	9.4%	13.8%	16.2%	11.4%
MERCED	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	2.0%	4.1%	8.1%	19.8%	19.9%
MODOC	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%
MONO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	7.1%
MONTEREY	0.2%	0.0%	0.0%	0.0%	0.5%	0.5%	1.4%	3.7%	15.1%	13.2%	28.6%
NAPA	4.1%	2.4%	2.8%	5.5%	2.7%	6.8%	9.0%	9.7%	11.7%	25.0%	24.5%
NEVADA	0.0%	0.0%	0.6%	0.0%	2.0%	1.7%	0.0%	5.9%	2.2%	9.2%	2.1%

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ORANGE	0.4%	1.0%	0.5%	0.7%	1.3%	1.6%	3.1%	11.8%	23.2%	22.3%	20.5%
PLACER	0.0%	0.3%	1.1%	3.1%	0.7%	3.0%	1.8%	8.1%	12.9%	16.7%	17.6%
PLUMAS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%
RIVERSIDE	0.4%	0.7%	0.8%	1.5%	1.4%	1.5%	2.7%	8.8%	14.8%	20.2%	17.6%
SACRAMENTO	0.8%	0.9%	1.2%	1.8%	1.7%	2.7%	3.8%	8.6%	13.7%	20.4%	19.5%
SAN BENITO	7.3%	0.0%	0.0%	1.4%	0.0%	2.7%	13.1%	5.9%	11.0%	34.7%	15.8%
SAN BERNARDINO	4.5%	5.2%	5.2%	5.2%	5.3%	5.7%	4.8%	17.0%	25.9%	27.2%	22.3%
SAN DIEGO	1.1%	1.2%	1.8%	2.4%	3.4%	5.7%	9.4%	20.0%	32.4%	28.2%	22.2%
SAN FRANCISCO	1.2%	1.2%	0.5%	1.2%	3.4%	6.7%	14.3%	29.6%	29.3%	31.5%	26.5%
SAN JOAQUIN	0.2%	0.2%	0.8%	0.4%	2.4%	2.3%	7.0%	15.2%	19.5%	20.7%	19.8%
SAN LUIS OBISPO	0.0%	0.5%	0.0%	1.7%	0.4%	0.0%	3.2%	8.8%	13.4%	15.9%	15.5%
SAN MATEO	0.5%	0.8%	2.4%	3.4%	4.4%	3.2%	12.1%	13.3%	17.5%	21.7%	20.0%
SANTA BARBARA	0.0%	0.3%	0.3%	1.2%	1.7%	2.4%	2.8%	6.5%	6.2%	20.3%	13.9%
SANTA CLARA	0.1%	0.1%	0.5%	0.5%	2.0%	1.7%	3.7%	5.9%	8.4%	7.8%	10.0%
SANTA CRUZ	1.4%	0.4%	0.6%	3.3%	4.5%	5.3%	7.3%	14.9%	25.7%	24.7%	12.4%
SHASTA	0.0%	0.0%	0.3%	0.4%	0.0%	1.0%	1.8%	1.4%	3.7%	7.8%	9.0%
SIERRA	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SISKIYOU	0.0%	0.0%	0.0%	2.5%	0.7%	0.6%	1.6%	1.4%	5.0%	9.5%	5.4%
SOLANO	0.5%	0.0%	0.5%	0.2%	2.2%	3.3%	6.7%	14.1%	16.2%	21.1%	22.4%
SONOMA	0.2%	1.7%	1.0%	2.3%	3.0%	3.2%	6.4%	13.0%	21.2%	24.1%	15.0%
STANISLAUS	0.1%	0.3%	0.4%	1.1%	2.7%	4.1%	7.9%	12.6%	22.9%	21.0%	19.8%
SUTTER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	6.9%	8.8%	14.7%	15.9%
TEHAMA	0.0%	0.0%	0.0%	1.4%	1.8%	2.3%	1.8%	1.5%	0.0%	2.1%	6.0%
TRINITY	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	0.0%	2.8%	4.7%	7.5%	3.5%
TULARE	0.4%	0.0%	0.4%	0.3%	0.8%	1.2%	1.6%	2.5%	10.1%	12.4%	16.1%
TUOLUMNE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	1.8%	1.5%	2.4%	10.2%
VENTURA	0.7%	0.7%	0.9%	1.7%	1.2%	2.2%	3.9%	12.3%	21.2%	22.8%	17.9%
YOLO	0.0%	0.0%	0.0%	1.0%	0.3%	0.6%	6.4%	6.7%	16.9%	14.2%	18.5%
YUBA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.2%	6.0%	4.5%

Appendix D: Percentage of All Recovered Crime Guns Identified as Ghost Guns, by County

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ALAMEDA	0.0%	0.0%	0.2%	1.0%	1.3%	2.6%	8.9%	15.5%	25.4%	26.6%	21.4%
ALPINE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AMADOR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	1.0%	0.0%
BUTTE	0.2%	0.0%	0.0%	0.2%	0.0%	0.4%	3.8%	4.1%	4.8%	3.7%	5.9%
CALAVERAS	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	1.1%	0.7%	1.3%
COLUSA	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	8.0%	14.0%	4.9%	20.0%	2.7%
CONTRA COSTA	0.0%	0.0%	0.4%	1.3%	0.4%	2.1%	4.6%	18.0%	25.1%	21.4%	21.3%
DEL NORTE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	1.4%
EL DORADO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	2.9%	7.8%
FRESNO	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	1.8%	4.0%	12.2%	11.1%	8.8%
GLENN	0.0%	0.0%	0.0%	6.9%	0.0%	0.0%	0.0%	2.3%	4.3%	3.7%	2.9%
HUMBOLDT	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	4.4%	3.5%	3.2%	5.2%	2.5%
IMPERIAL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	3.7%	5.2%	5.4%
INYO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
KERN	0.0%	0.0%	0.0%	0.5%	0.2%	2.5%	2.8%	9.5%	13.3%	13.6%	11.5%
KINGS	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	3.6%	4.4%	19.5%	31.9%	21.9%
LAKE	0.0%	0.0%	0.0%	0.0%	0.5%	0.6%	0.0%	1.3%	1.6%	1.0%	0.4%
LASSEN	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	3.9%	1.6%	19.6%
LOS ANGELES	0.0%	0.0%	0.1%	0.2%	0.6%	1.4%	2.4%	13.5%	21.7%	14.3%	11.0%
MADERA	0.0%	0.3%	0.5%	0.0%	1.9%	3.1%	4.7%	7.3%	19.6%	25.3%	23.4%
MARIN	0.0%	0.0%	0.0%	0.0%	0.9%	1.4%	4.7%	10.3%	24.8%	25.8%	19.0%
MARIPOSA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MENDOCINO	0.0%	0.0%	0.0%	1.9%	0.0%	0.4%	0.0%	6.0%	13.4%	14.4%	11.0%
MERCED	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	1.3%	2.6%	7.3%	19.6%	19.6%
MODOC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MONO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%
MONTEREY	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	1.4%	3.2%	14.7%	12.8%	28.4%
NAPA	0.0%	0.0%	0.0%	0.8%	0.0%	1.7%	7.4%	9.7%	10.8%	25.0%	22.7%
NEVADA	0.0%	0.0%	0.0%	0.0%	0.7%	0.8%	0.0%	5.9%	1.6%	6.6%	2.1%

COUNTY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ORANGE	0.0%	0.5%	0.1%	0.4%	0.8%	0.8%	2.9%	10.9%	22.9%	21.6%	19.7%
PLACER	0.0%	0.0%	0.0%	1.4%	0.4%	1.5%	1.0%	7.5%	12.3%	16.4%	16.1%
PLUMAS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%
RIVERSIDE	0.0%	0.0%	0.5%	0.2%	0.5%	0.8%	2.0%	7.6%	14.0%	18.9%	16.7%
SACRAMENTO	0.0%	0.0%	0.3%	1.0%	0.9%	1.8%	3.4%	8.0%	13.2%	19.8%	18.8%
SAN BENITO	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	13.1%	3.9%	10.2%	31.7%	13.9%
SAN BERNARDINO	0.0%	0.0%	0.0%	0.5%	0.6%	1.2%	2.9%	15.6%	25.0%	25.8%	21.2%
SAN DIEGO	0.1%	0.2%	0.4%	1.4%	2.1%	4.0%	8.4%	19.2%	32.0%	27.6%	21.8%
SAN FRANCISCO	0.0%	0.0%	0.0%	0.3%	2.7%	5.4%	13.9%	28.9%	29.1%	30.9%	26.0%
SAN JOAQUIN	0.0%	0.0%	0.1%	0.0%	1.2%	1.0%	6.3%	14.3%	19.1%	20.4%	19.0%
SAN LUIS OBISPO	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	3.2%	8.3%	11.6%	15.6%	9.2%
SAN MATEO	0.0%	0.2%	0.5%	0.6%	1.7%	2.0%	11.0%	11.7%	16.0%	19.8%	18.4%
SANTA BARBARA	0.0%	0.0%	0.0%	0.7%	0.9%	1.0%	2.1%	5.8%	5.7%	19.7%	12.9%
SANTA CLARA	0.0%	0.0%	0.1%	0.0%	0.7%	1.0%	3.1%	5.4%	7.7%	7.6%	9.3%
SANTA CRUZ	0.0%	0.0%	0.0%	1.5%	2.8%	4.6%	5.9%	12.9%	24.1%	22.6%	11.6%
SHASTA	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	1.5%	0.3%	3.2%	7.2%	6.8%
SIERRA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SISKIYOU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.7%	1.9%	8.0%	4.7%
SOLANO	0.0%	0.0%	0.2%	0.1%	0.5%	3.0%	6.1%	13.5%	15.4%	20.0%	22.1%
SONOMA	0.0%	0.0%	0.0%	0.3%	2.3%	1.9%	6.1%	12.5%	20.1%	23.6%	13.7%
STANISLAUS	0.0%	0.0%	0.0%	0.5%	1.8%	3.1%	6.2%	10.7%	21.6%	20.0%	19.3%
SUTTER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	8.8%	13.2%	15.9%
TEHAMA	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.7%	0.0%	2.1%	6.0%
TRINITY	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	2.8%	2.4%	3.7%	3.5%
TULARE	0.0%	0.0%	0.0%	0.0%	0.1%	0.7%	1.5%	2.1%	9.6%	12.2%	15.8%
TUOLUMNE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	2.4%	9.1%
VENTURA	0.0%	0.0%	0.2%	0.0%	0.1%	1.3%	2.9%	11.4%	20.7%	22.2%	16.9%
YOLO	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	5.7%	4.7%	16.2%	14.2%	16.9%
YUBA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.2%	6.0%	4.5%

ENDNOTES

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- ¹ See DOJ Office of Gun Violence Prevention (OGVP), “Data Report: The Impact of Gun Violence in California,” pp. 8-13 (Aug. 2023), www.oag.ca.gov/system/files/media/OGVP-Data-Report-2022.pdf, and “Data Report: Domestic Violence Involving Firearms in California,” pp. 11-14 (Nov. 2023), <http://www.oag.ca.gov/system/files/attachments/press-docs/OGVP-Report-Domestic-Violence-26-Firearms-in-CA.pdf>
 - ² See DOJ Office of Gun Violence Prevention, “Data Report: The Impact of Gun Violence in California,” p. 13 (Aug. 2023), www.oag.ca.gov/system/files/media/OGVP-Data-Report-2022.pdf
 - ³ OGVP analysis of data from CDC WONDER Online data portal, Multiple Cause of Death Data, at <https://wonder.cdc.gov/mcd.html> (last accessed September 24, 2024). 2022 is the most recent year of final data available from CDC at the time of writing. In 2022, the per capita firearm-related mortality rate for minors under the age of 18 was 1.53 per 100,000 in California and 3.77 per 100,000 for the other 49 states and D.C. combined. The CDC WONDER database includes provisional mortality data for 2023, which shows that the per capita firearm-related mortality rate for minors under 18 was 1.85 per 100,000 in California and 3.79 in the rest of the U.S.
 - ⁴ See Complaint for Injunctive Relief, *People of the State of New York v. Arm or Ally LLC, et al.*, ¶ 289 (N.Y. Sup. Ct. Jun. 29, 2022), available at https://ag.ny.gov/sites/default/files/not_assigned_the_people_of_the_stat_v_the_people_of_the_stat_summons_complaint_11.pdf.
 - ⁵ See, e.g., ATF, National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, Part II: Privately Made Firearms, p. 34-35 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>.
 - ⁶ See Amicus Brief of 16 Major Cities and Prosecutors Against Gun Violence in Support of Defendants-Appellees, *Morehouse Enterprises, LLC, v. ATF, et al.*, 8, (8th Cir., No: 22-2812) (filed Dec. 7, 2022); *City of Syracuse, NY, et al., v. ATF, et al.*, 1:20-cv-06885-GHW (S.D.N.Y. 2020), Complaint at ¶ 131, https://assets.nationbuilder.com/firearmspolicycoalition/pages/5834/attachments/original/1648681797/Syracuse_v_ATF_Complaint.pdf?1648681797.
 - ⁷ See Nell Redmond, “The 15 Most Dangerous People in the World,” *Wired* (Dec. 19, 2012), Number 14, <https://www.wired.com/2012/12/most-dangerous-people>.
 - ⁸ See “Untraceable: The Rising Specter of Ghost Guns,” Everytown for Gun Safety, p. 9 (May 14, 2020), <https://everytown-research.org/wp-content/uploads/sites/4/2020/05/Ghost-Guns-Report-071420A.pdf>; ATF, National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, Part II: Privately Made Firearms, p. 32-39 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>.
 - ⁹ Bryan Schatz, “I Built This AK-47. It’s Legal and Totally Untraceable,” *Mother Jones* (May 23, 2013), www.motherjones.com/politics/2013/05/ak-47-semi-automatic-rifle-building-party.
 - ¹⁰ Id.
 - ¹¹ Id.
 - ¹² See Andy Greenberg, “Meet The ‘Liberator’: Test-Firing The World’s First Fully 3-D-Printed Gun,” *Forbes* (May 5, 2013), <https://www.forbes.com/sites/andygreenberg/2013/05/05/meet-the-liberator-test-firing-the-worlds-first-fully-3d-printed-gun>; Michael del Castillo, “Open Source Terror: How The World’s Most Dangerous Crypto Anarchist Intends To Neutralize Biden’s Proposed Gun Control Regulations,” *Forbes* (Jan. 12, 2022), <https://www.forbes.com/sites/michaeldelcastillo/2022/01/12/open-source-terror-how-the-worlds-most-dangerous-crypto-anarchist-intends-to-neutralize-bidens-proposed-gun-control-regulations/?sh=1275f5223-Dd6>; Plaintiff’s Third Amended Complaint, *Defense Distributed, et al., v. Platkin*, ¶ 41 (D. N.J., Case No.: 3:21-cv-09867-MAS-TJB) (filed (May 5, 2023)).
 - ¹³ Michael del Castillo, “Open Source Terror: How The World’s Most Dangerous Crypto Anarchist Intends To Neutralize Biden’s Proposed Gun Control Regulations,” *Forbes* (Jan. 12, 2022), <https://www.forbes.com/sites/michaeldelcastillo/2022/01/12/open-source-terror-how-the-worlds-most-dangerous-crypto-anarchist-intends-to-neutralize-bidens-proposed-gun-control-regulations/?sh=1275f5223-Dd6>.
 - ¹⁴ See Andy Greenberg, “‘Wiki Weapon Project’ Aims To Create A Gun Anyone Can 3-D-Print At Home,” *Forbes* (Aug. 23, 2012), <https://www.forbes.com/sites/andygreenberg/2012/08/23/wiki-weapon-project-aims-to-create-a-gun-anyone-can-3d-print-at-home>.
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- ¹⁹ See ATF, National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, Part II: Privately Made Firearms, p. 32-39 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>.
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- ²⁶ See, e.g., U.S. Attorney’s Office, Central District of California, Press Release: “Federal Indictments Target San Gabriel Valley Gang Linked to Murder, Witness Intimidation, Illegal Gambling and Drug Trafficking” (Jul. 26, 2023), <https://www.justice.gov/usao-cdca/pr/federal-indictments-target-san-gabriel-valley-gang-linked-murder-witness-intimidation>; Press Release, Office of the District Attorney, County of San Diego, “Second Man Charged with the Murders of Innocent Victims Caught up in Gang Rivalry: Gang-Related Crimes Up Significantly, Proliferation of ‘Ghost Guns’”, (Jun. 30, 2021), https://www.sdcca.org/content/office/newsroom/tempDownloads/c7bc4731-9746-4bee-825b-900772fea92c_Gang%20Arraignment%20and%20Stats%20News%20Release%206-30-2021.pdf (reporting that most of

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- ³⁵ In 2019, law enforcement agencies in California reported to DOJ 41,971 crime guns with serial numbers and 3,331 crime guns without serial numbers, including 1,572 unserialized crime guns reported as ghost guns. In 2021, law enforcement agencies in California reported to DOJ 45,706 crime guns with serial numbers and 13,130 crime guns without serial numbers, including 10,877 unserialized crime guns reported as ghost guns.
- ³⁶ From 2019 to 2021, the number of recovered crime guns reported to DOJ increased by 13,534 (from 45,302 to 58,836). The number of unserialized crime guns reported to DOJ over this period increased by 9,799, representing 72.4% of the total increase in crime guns reported in California over this period. The number of unserialized crime guns identified as ghost guns from 2019 to 2021 increased by 9,305, representing 68.8% of the total increase in crime guns reported in California over this period.
- ³⁷ See California Penal Code § 11108.3 (enacted by 1997 CA AB 2011 (Hertzberg); the requirement to report crime gun data to DOJ within seven days of obtaining relevant information was added by 2018 CA AB 2222 (Quirk).
- ³⁸ California DOJ data systems identify ghost guns as unserialized “firearms manufactured by an unidentified subject” or “FMBUS” firearms.
- ³⁹ In some cases, law enforcement agencies enter free-form text in the serial number data entry field (such as writing “missing” or “no serial”) that indicates a recovered firearm does not have a serial number; in these cases, DOJ does not have enough information to determine whether the unserialized firearm is an unserialized ghost gun, a firearm with an obliterated serial number, or an antique. See DOJ AB 1191 Crime Guns Legislative Report, p. 9 (Jun. 30, 2023), <https://oag.ca.gov/system/files/attachments/press-docs/AB%201191%20Crime%20Gun%20Report.pdf>. Additionally, when agencies report the recovery of “FMBUS” ghost gun firearms to the DOJ (see note 38), they are issued a unique FMBUS serial number that is used to track the firearm. The agency then reports the gun using this unique identifier into the DOJ Automated Firearms System. Agencies may fail to record an FMBUS firearm once an identifier has been issued, record this under an alternative identifier such as “NonSerialized” in the serial number field, or record the gun incorrectly as a report other than a crime gun or evidence gun report. This may result in discrepancies between the total number of FMBUS firearms that agencies report as recovered crime guns to DOJ and the number of FMBUS firearms that DOJ is able to subsequently identify in the Automated Firearms System.
- ⁴⁰ For further discussion, see ATF’s National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, “PMF Recoveries” p. 38-41 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>.
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30, 2020), <https://abc7.com/ghost-guns-california-gun-laws-kits/5893043> (quoting statement by Special Agent in charge of the ATF Los Angeles Field Division that “Forty-one percent, so almost half our cases we’re coming across are these ‘ghost guns’”); Alain Stephens, “Ghost Guns are Everywhere in California,” *The Trace* (May 17, 2019) (reporting that federal law enforcement officials said “nearly a third of firearms recovered in the state are homemade, unserialized, and untraceable”); .

- ⁴² The number of ghost guns recovered from crime in California reported to ATF from 2017-2021 (20,875) was 11% larger than the number reported to DOJ over this period (18,952). See OGVP analysis of Bureau of Alcohol, Tobacco, Firearms, and Explosives, National Firearms Commerce and Trafficking Assessment (NFCTA): Crime Guns – Volume Two, Supplementary Data Factsheet for California, at <https://www.atf.gov/firearms/docs/report/california-state-report/download>; see also, Hannah S. Laquer, et al, “Trends and Sources of Crime Guns in California: 2010–2021,” *Journal of Urban Health* 100, 889 (2023), <https://doi.org/10.1007/s11524-023-00741-y> (similarly finding that the number of crime gun records reported to DOJ represents about 90% of the number of crime gun records reported by ATF for guns recovered in California).
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- ⁴⁵ The number of unserialized crime guns reported to DOJ that were identified as (largely commercially made) firearms with an obliterated serial number increased from 784 in 2013 to 1500 in 2021 and then fell to 1,191 in 2023.
- ⁴⁶ See id.
- ⁴⁷ ATF, National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, Volume I, p. 40 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>.
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- ⁵⁰ Based on OGVP analysis of age-adjusted firearm homicide data from CDC WONDER data portal. From 2019 to 2021, California’s age-adjusted firearm homicide rate per 100,000 residents increased from 3.18 to 4.82.
- ⁵¹ From 2019 to 2021, the number of recovered crime guns reported to DOJ increased 30% (from 45,302 to 58,836). The number of crime guns recovered *with* serial numbers increased by 8.9%. The total number recovered *without* serial numbers (including ghost guns and other unserialized guns) increased by 294% and the number identified as unserialized ghost guns increased by 592%.
- ⁵² From 2019 to 2021, the number of unserialized crime guns reported to DOJ increased by 9,799, representing 72% of the total 13,534 increase in crime guns reported in California over this period. The number of unserialized crime guns identified as ghost guns from 2019 to 2021 increased by 9,305, representing 69% of the total increase in crime guns reported in California over this period.
- ⁵³ Provisional mortality data available from the CDC WONDER data portal (last accessed on September 24, 2024) shows that California’s age-adjusted firearm homicide rate per 100,000 decreased from 4.82 in 2021 to 3.70 in 2023.
- ⁵⁴ From 2021 to 2023, the total number of recovered crime guns reported to DOJ decreased by 5.9% (from 58,836 to 55,359).
- ⁵⁵ From 2021 to 2023, the number of serialized crime guns reported to DOJ decreased by 1.7% (from 45,706 to 33,932). The total number of unserialized crime guns reported to DOJ decreased by 21% (from 13,130 to 10,427) and the number identified as ghost guns decreased by 23% (from 10,877 to 8,340).
- ⁵⁶ From 2021 to 2023, the number of unserialized crime guns reported to DOJ decreased by 2,703, representing 77.8% of the total 3,477 decrease in crime guns reported over this period. The number of unserialized crime guns identified as ghost guns from 2021 to 2023 decreased by 2,537, representing 73.0% of the total decrease in crime guns reported in

California over this period.

- ⁵⁷ From 2019 to 2021, the number of crime guns reported to DOJ as being recovered from violent crimes increased by 1,019 (from 3,561 to 4,580). The number of unserialized crime guns reported to DOJ increased by 612 (from 203 to 815), representing 60% of the total increase in crime guns recovered from these crimes over this period. The number of ghost guns recovered from these crimes increased by 580, representing 56.9% of the total increase in crime guns recovered from violent gun crimes in California over this period.
- ⁵⁸ From 2021 to 2023, the number of crime guns reported to DOJ in connection with violent crimes decreased by 242 (from 4,580 to 4,338). The number of unserialized crime guns reported from violent crimes decreased by 157, representing 64.9% of the total decrease in crime guns from violent crimes over this period. The number of crime guns identified as ghost guns reported from violent crimes decreased by 154 from 2021 to 2023, representing 63.6% of the total decrease in crime guns from violent crimes over this period.
- ⁵⁹ From 2019 to 2021, the number of crime guns reported to DOJ as being recovered from violent gun crimes increased by 581 (from 1,273 to 1,854). The number of unserialized crime guns reported to DOJ increased by 325, representing 55.9% of the total increase in crime guns recovered from these crimes over this period. The number of ghost guns recovered from these crimes increased by 311, representing 53.5% of the total increase in crime guns recovered from violent gun crimes in California over this period.
- ⁶⁰ From 2021 to 2023, the number of crime guns reported to DOJ in connection with violent gun crimes decreased by 112 (from 1,854 to 1,742). The number of crime guns identified as ghost guns reported from violent gun crimes decreased by 137; without this decrease the number would have increased.
- ⁶¹ From 2019 to 2021, the number of crime guns reported to DOJ as being recovered from homicides increased by 374 (from 876 to 1,250). The number of unserialized crime guns recovered from homicides increased by 206, representing 55.1% of the total increase in crime guns recovered from homicides over this period. The number of ghost guns recovered from homicides increased by 200, representing 53.5% of the total increase in crime guns recovered from homicides in California over this period.
- ⁶² From 2021 to 2023, the number of crime guns reported to DOJ in connection with homicides decreased by 80 (from 1,250 to 1,170). The number of unserialized crime guns identified as ghost guns recovered from homicides decreased by 73, representing 91% of the total decrease in crime guns from homicides over this period.
- ⁶³ From 2019 to 2021, the number of crime guns reported to DOJ as being recovered from individuals suspected of killing a police officer in a firearm homicide in California increased by 73 (from 72 to 145). The number of unserialized crime guns recovered from these offenses increased by 48, representing 65.7% of the total increase in crime guns recovered from these offenses over this period. The number of ghost guns recovered from these offenses increased by 46, representing 63% of the total increase in crime guns recovered from these offenses in California over this period.
- ⁶⁴ From 2021 to 2023, the number of crime guns reported to DOJ in connection with gun homicides against a police officer decreased by 45 (from 145 to 100). The number of crime guns identified as ghost guns reported from these homicides decreased by 46; without this decrease in ghost guns the number would have increased.
- ⁶⁵ From 2019 to 2021, the number of crime guns reported to DOJ as being recovered from these offenses increase by 377 (from 745 to 1,122). The number of unserialized crime guns recovered from these offenses increased by 143, representing 38% of the total increase in crime guns recovered from these offenses over this period. The number of ghost guns recovered from these offenses increased by 136, representing 36% of the total increase in crime guns recovered from these offenses in California over this period.
- ⁶⁶ From 2021 to 2023, the total number of crime guns reported to DOJ in connection with these domestic violence and abuse-related crimes decreased by 5 (from 1,122 to 1,117). The number of crime guns identified as ghost guns reported from these offenses decreased by 50; without this decrease in ghost guns the total number would have increased.
- ⁶⁷ From 2019 to 2021, the number of crime guns reported to DOJ as being recovered from individuals suspected of offenses involving violations of court orders, parole, or probation in California increased by 341 (from 717 to 1,058). The number of unserialized ghost guns recovered from these offenses increased by 213, representing 62.5% of the total increase in crime guns recovered from these offenses over this period.
- ⁶⁸ From 2022 to 2023, the total number of crime guns reported to DOJ in connection with these offenses decreased by 390 (from 1,310 to 920). The number of crime guns identified as ghost guns reported from these offenses decreased by 186, representing 47.8% of the total decrease.
- ⁶⁹ From 2019 to 2021, the number of crime guns reported to DOJ as being recovered from individuals suspected of unlawful weapon possession offenses in California increased by 3,903 (from 15,619 to 19,522). The number of unserialized

crime guns recovered from these offenses increased by 3,904, representing more than 100% of the total increase in crime guns recovered from unlawful weapon possession offenses over this period; without this increase in unserialized crime guns, the total number would have decreased. The number of ghost guns recovered from these offenses increased by 3,802, representing 97.4% of the total increase in crime guns recovered from these offenses in California over this period.

- ⁷⁰ From 2021 to 2023, the total number of crime guns reported to DOJ in connection with unlawful weapon possession crimes decreased by 226 (from 19,522 to 19,296). The number of crime guns identified as ghost guns reported from these offenses decreased by 1,212; without this decrease in ghost guns, the total number would have increased.
- ⁷¹ See ATF National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, “PMF Recoveries”, p. 35 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>; Teri Figueroa, “Rebranded ‘ghost gun’ machine is being sold illegally in California, says county lawsuit,” *San Diego Union-Tribune* (May 4, 2024), <https://www.sandiegouniontribune.com/2024/05/03/re-branded-ghost-gun-machine-is-being-sold-illegally-in-california-says-county-lawsuit>.
- ⁷² See 2016 CA AB 857 (Cooper), SEC 4 (enacting these requirements through Sections 29180 and 29181 of the Penal Code); those sections were subsequently amended and, in part, repealed and replaced by 2022 CA AB 1621 (Gipson).
- ⁷³ See also, Cal. Pen. Code § 23920(b) (subdivision added by 2022 AB 1621, SEC 12) (making it unlawful after January 1, 2024, to knowingly possess any firearm that does not have a valid state or federal serial number or mark of identification, including a completed frame or receiver or a firearm precursor part, except as provided in Section 23925).
- ⁷⁴ California enacted SB 746 (Portantino) in 2017, which amended California Penal Code Section 29180 to require new residents to the state to apply to DOJ for a unique serial number or other mark of identification within 60 days of arrival for any firearm that did not have a valid serial number. As amended by 2022 AB 1621 (Gipson), this requirement is codified at California Penal Code Section 29180(c); see also, Penal Code Section 23920(b) and 23925(b)(6) (prohibiting possession of unserialized firearms and exempting from that prohibition new residents who comply with Section 29180).
- ⁷⁵ This Figure analyzes data reported for “arrest cycles” under California Penal Code Section 29180, indicating the total number of unique arrest cycles recorded in the Automated Criminal History System (ACHS) per year under this statute. An arrest cycle refers to an arrest event from the point of arrest through any subsequent actions that may occur including custody, prosecution and court related events. A unique arrest cycle identifies an arrest, which may consist of multiple counts or offenses. Because an arrest cycle may consist of multiple separate charges, an arrest cycle may contain more than one relevant charge. This data reflects the ACHS system as of February 26, 2024. Changes may occur in ACHS due to backdated additions, edits or corrections to records, as well as record sealing.
- ⁷⁶ See 2016 AB 857 (Cooper) (creating Penal Code Section 29180) and 2017 SB 746 (Portantino) and 2022 CA AB 1621 (Gipson) (subsequently amending Penal Code Section 29180).
- ⁷⁷ ATF reported the number of “Suspected PMFs [privately made firearms]” recovered in each state and territory. ATF defines a suspected PMF as an “unserialized firearm that has been recovered in a criminal investigation, submitted to ATF for tracing, and determined to likely have been privately made” by an unlicensed manufacturer.
- ⁷⁸ See ATF National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, “PMF Recoveries” p. 32-33 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>.
- ⁷⁹ ATF, National Firearms Commerce and Trafficking Assessment, Volume II, Part III: Crime Guns Recovered and Traced Within the United States and Its Territories, p. 1 (Mar. 27, 2024), at <https://www.atf.gov/firearms/docs/report/nfcta-volume-ii-part-iii-crime-guns-recovered-and-traced-us/download>.
- ⁸⁰ Id. at p. 2 and p. 42 (Appendix OFT – Overview of Firearm Tracing) (showing that 231,784 out of 1,922,577 (12.1%) total crime guns recovered and submitted for tracing by ATF were recovered in California).
- ⁸¹ According to U.C. Census Bureau data obtained through data.census.gov, California’s 2020 census population was 39,538,223, representing 11.9% of the total U.S. population of 331,449,281.
- ⁸² OGVF analysis of ATF National Firearms Commerce and Trafficking Assessment (NFCTA): Crime Guns – Volume Two, Supplementary Data Factsheets for California and other states and territories, at <https://www.atf.gov/firearms/national-firearms-commerce-and-trafficking-assessment-nfcta-crime-guns-volume-two> and <https://www.atf.gov/firearms/docs/report/california-state-report/download> (showing that California was the recovery state for 20,875 of the 37,980 suspected privately made firearms recovered by law enforcement and submitted through tracing requests to ATF from 2017-2021). ATF defines a suspected PMF as an “unserialized firearm that has been recovered in a criminal investigation, submitted to ATF for tracing, and determined to likely have been privately made.” See also, Alaina De Biasi, et al.,

“Ghost guns and crime: a tale of two California cities,” *Journal of Injury Epidemiology*, 11, 17 (May 2024), <https://doi.org/10.1186/s40621-024-00500-w> (“Among all states, the highest number of suspected PMFs [privately made firearms] were recovered in California, which accounted for 54.9% (20,875 of 37,980) of all suspected PMFs over the study period.”)

- ⁸³ OGVP analysis of ATF National Firearms Commerce and Trafficking Assessment (NFCTA): Crime Guns – Volume Two, Supplementary Data Factsheets for Maryland and other states and territories, at <https://www.atf.gov/firearms/national-firearms-commerce-and-trafficking-assessment-nfcta-crime-guns-volume-two>.
- ⁸⁴ OGVP analysis of ATF National Firearms Commerce and Trafficking Assessment (NFCTA): Crime Guns – Volume Two, Supplementary Data Factsheets for California and other states and territories, at <https://www.atf.gov/firearms/national-firearms-commerce-and-trafficking-assessment-nfcta-crime-guns-volume-two> (showing that the City of Los Angeles was the recovery city for 2,602 of the 37,980 suspected privately made firearms recovered by law enforcement and submitted through tracing requests to ATF from 2017-2021).
- ⁸⁵ See Complaint for Declaratory and Injunctive Relief, *City of Syracuse, et al., v. ATF, et al.*, ¶159-60 (S.D.N.Y. Case No.: 1:20cv-06885-GHW) (filed Oct. 27, 2020); Olivia B. Waxman, “How the Gun Control Act of 1968 Changed America’s Approach to Firearms—And What People Get Wrong About That History,” *Time* (Oct. 30, 2018), <https://time.com/5429002/gun-control-act-history-1968>.
- ⁸⁶ 18 U.S.C. § 923(a), (i); 27 CFR § 478.92, 478.102.
- ⁸⁷ 18 U.S.C. § 923(i); 27 CFR § 478.92, 478.102.
- ⁸⁸ 26 U.S.C. § 5843; 27 C.F.R. §§ 478.123, 478.124, 478.125(e).
- ⁸⁹ See 18 U.S.C. § 922(b), (d), (x).
- ⁹⁰ See Brief of *Amici Curiae* Gun Violence Prevention Groups in Support of Applicants, *Garland v. VanDerStok, et al.*, 7-8 (quoting Senate Report No. 90-1501, at 22 (1968)). See also, *Abramski v. United States*, 573 U.S. 169, 180-81 (2014); *Hudleston v. United States*, 415 U.S. 814, 824 (1974)).
- ⁹¹ See Brief of *Amici Curiae* Gun Violence Prevention Groups in Support of Applicants, *Garland v. VanDerStok, et al.*, 7-8 (quoting Senate Report No. 90-1501, at 22 (1968)).
- ⁹² See Brief of the District of Columbia and the States of New Jersey, Pennsylvania, California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New York, North Carolina, Oregon, Rhode Island, and Washington As *Amici Curiae* In Support of Defendants-Appellants, *VanDerStok, et al. v. Garland, et al.*, 86 F.4th 179 (5th Cir.) (filed Dec. 27, 2022), <https://oag.ca.gov/system/files/attachments/press-docs/Vanderstok%20as-filed.pdf> (citing H.R. Rep. No. 90-1577, at 8, 19 (1968)); Franklin E. Zimring, *Firearms and Federal Law: The Gun Control Act of 1968*, 4 *J. Legal Stud.* 133, 145, 147-48 (1975)).
- ⁹³ 18 U.S.C. § 922(t).
- ⁹⁴ Cal. Penal Code §§ 26900, 26905, 28100, 28160, 29125, 29130, 29180.
- ⁹⁵ Cal. Penal Code §§ 26840, 27540.
- ⁹⁶ See 18 USC § 921(a)(3) (defining the term “firearm” to mean: “(A) any weapon (including a starter gun) which will or is designed to or may readily be converted to expel a projectile by the action of an explosive; (B) the frame or receiver of any such weapon; (C) any firearm muffler or firearm silencer; or (D) any destructive device. Such term does not include an antique firearm.”).
- ⁹⁷ *Id.*
- ⁹⁸ See Cal. Penal Code § 16520(b), (g) (continuing former Penal Code §§ 12001(c) and 12085(e)). California legislation enacted in 1998 also defined “firearm” for the purposes of California’s firearm manufacturing laws to include “the unfinished frame or receiver of a weapon that can be readily converted to the functional condition of a finished frame or receiver.” 1998 CA AB 2188 (enacting Cal. Penal Code § 12085(e)(2), subsequently re-codified at Cal. Penal Code § 16520).
- ⁹⁹ See 18 USC § 921(a)(3).
- ¹⁰⁰ See Supplemental First Amended Complaint for Declaratory and Injunctive Relief, *State of California v. ATF*, ¶¶ 62-63 (N.D. Cal., Case No.: 3:20-CV-06761-EMC) (filed Sep. 7, 2023) (citing, e.g.: “Letter from Edward M. Owen, Jr., Chief, Firearms Technology Branch, ATF, to Henry A. Roehrich, SGW Incorporated” (May 3, 1983) (classifying as a firearm a partially completed receiver that could be completed with additional milling that took roughly “75 minutes”); “Letter from Curtis H.A. Bartlett, Chief, Firearms Technology Branch, ATF, to Lane Browne, Mega Machine Shop, Inc.” (Dec. 27, 2002) (classifying as a firearm each of the four “AR-15 type lower receiver samples” submitted for examination despite the fact that

one of the samples had a ‘solid interior’ because it could be finished in “approximately 75 minutes”); “Letter from Sterling Nixon, Chief, Firearms Technology Branch, ATF, to Robert Serva, Dan Wesson Firearms” (Aug. 19, 2004) (classifying as a firearm a “1911-type semiautomatic pistol frame” because the frame “can be completed in a minimal amount of time by a competent individual having the necessary equipment”).

- ¹⁰¹ *Id.* at ¶ 65-69. See also, “Untraceable: The Rising Specter of Ghost Guns,” Everytown for Gun Safety, p. 17, <https://everytownresearch.org/wp-content/uploads/sites/4/2020/05/Ghost-Guns-Report-071420A.pdf>.
- ¹⁰² *Id.* at ¶ 65-69.
- ¹⁰³ See Garen J. Wintemute, “Ghost guns: spookier than you think they are,” *Injury Epidemiology* commentary, (8)13 (Apr. 5, 2021), <https://injepijournal.biomedcentral.com/articles/10.1186/s40621-021-00306-0>.
- ¹⁰⁴ See Complaint for Injunctive Relief, *People of the State of New York v. Arm or Ally LLC, et al.*, ¶ 289 (N.Y. Sup. Ct. Jun. 29, 2022), available at https://ag.ny.gov/sites/default/files/not_assigned_the_people_of_the_stat_v_the_people_of_the_stat_summons_complaint_11.pdf.
- ¹⁰⁵ See ATF National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, “PMF Recoveries” p. 32-33 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>.
- ¹⁰⁶ *Id.* at p. 33.
- ¹⁰⁷ See “Untraceable: The Rising Specter of Ghost Guns,” Everytown for Gun Safety, p. 13-14, <https://everytownresearch.org/wp-content/uploads/sites/4/2020/05/Ghost-Guns-Report-071420A.pdf>.
- ¹⁰⁸ For national search trends data, see ATF’s 2022 National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, p. 35-38 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>. ATF noted that “Google Trends data captures the popularity of search terms normalized by time range and geography. The data are then indexed to create a measure of relative popularity for each term, which ranges from 0 to 100. Index values are provided for each unit of time (either monthly or weekly), with a value of 100 signifying peak popularity.”
- ¹⁰⁹ See Motion of Gun Violence Prevention Groups for Leave to File Brief as Amici Curiae, *Morehouse Enterprises, et al. v. ATF, et al.*, 27, Case No. 22-2812 (8th Cir.) (filed Dec. 5, 2022), <https://s3.amazonaws.com/brady-static/GVP-Motion-for-Leave-and-Proposed-Amicus-Brief-As-Filed.pdf> (quoting GST-9: 80% Pistol Build Kit, 80% Arms, <https://bit.ly/3x6n0T7>).
- ¹¹⁰ See Complaint for Injunctive Relief, *People of the State of New York v. Arm or Ally LLC, et al.*, ¶ 210 (N.Y. Sup. Ct. Jun. 29, 2022) (quoting Press Release, “Brownells Announces Exclusive Polymer80 Frames” (Oct. 11, 2017), available at <https://www.theoutdoorwire.com/story/1507676814jseq2774930>).
- ¹¹¹ See, e.g., Complaint for Declaratory and Injunctive Relief, *State of California v. ATF*, ¶ 121 fn. 114 (N.D. Cal., Case No. 20-cv-6761) (filed Sep. 29, 2020) (quoting one leading ghost gun seller’s website touting that “the 80% lower bypasses the need for an FFL [federal firearms license] and that “there is no background check or registration involved.”); see also, *id.* (quoting a leading ghost gun seller’s website stating that “Finishing an 80% lower can be easy and anyone with DIY skills can complete an 80% lower. To some, the thought of building your own AR 15 starting with an 80% lower may seem intimidating, but it shouldn’t. Thousands of people have finished their own 80% lowers without an issue - experts and novices, alike.”); Garen J. Wintemute, “Ghost guns: spookier than you think they are,” *Injury Epidemiology* commentary, (8)13 (Apr. 5, 2021), <https://injepijournal.biomedcentral.com/articles/10.1186/s40621-021-00306-0>.
- ¹¹² See, e.g., Plaintiffs’ First Amended Complaint, *People of the State of California v. Blackhawk Manufacturing Group, Inc., et al.*, ¶ 127, Case No. CGC-21-594577 (San Francisco Superior Court) (filed Oct. 13, 2021) (quoting ghost gun company’s website statements repeatedly describing unfinished receivers as “firearms”); *Id.* at ¶ 91 (quoting ghost gun company’s website statements describing the company as a premier manufacturer of “the firearms industry”); Tom Jackman, “Largest ‘ghost guns’ parts maker agrees to stop selling in California,” *The Washington Post* (Oct. 6, 2023), <https://www.washingtonpost.com/dc-md-va/2023/10/06/polymer80-ghost-guns-calif> (quoting emails in which ghost gun company executive referred to ghost gun kit products as “basically a pistol in a box,” described sales of the company’s ghost gun kits as “pistol sales,” and described instances in which parents called the ghost gun company angrily “because some 16-year old has ordered a pistol using his parents’ address and credit card.”); Motion of Gun Violence Prevention Groups for Leave to File Brief as Amici Curiae, *Morehouse Enterprises, et al. v. ATF, et al.*, 27, Case No. 22-2812 (8th Cir.) (filed Dec. 5, 2022), <https://s3.amazonaws.com/brady-static/GVP-Motion-for-Leave-and-Proposed-Amicus-Brief-As-Filed.pdf> (“On appeal, even Plaintiffs let slip that they are concerned not about the [ATF ghost gun] Rule’s effect on innocent non-firearm tools and parts, but about its effect on a “budding ... firearms market.” (citations omitted)).
- ¹¹³ See Complaint for Injunctive Relief and Damages, *Polymer80, Inc., v. Glock, Inc., et al.*, Exhibit 4 (D. Nev., Case No. 3:20-

cv-617) (filed Nov. 3, 2020).

- ¹¹⁴ See, e.g., Defendants’ Reply Memorandum of Points and Authorities of Defendant Polymer80, Inc. In Further Support of Its Demurrer Or, Alternatively, Its Motion To Strike Scandalous Material, *Apolinar et al. v. Polymer80, Inc., et al.* Case No. 21STCV29196 (Los Angeles Superior Court) (filed Feb. 2, 2022).
- ¹¹⁵ See 15 U.S.C. § 7901(a)(4) (codifying Congress’s findings in adopting the Protection of Lawful Commerce in Arms Act that “The manufacture, importation, possession, sale, and use of firearms and ammunition in the United States are heavily regulated by Federal, State, and local laws. Such Federal laws include the Gun Control Act of 1968, the National Firearms Act [26 USCS §§ 5801 et seq.], and the Arms Export Control Act [22 USCS §§ 2751, et seq.]).
- ¹¹⁶ See 2016 CA AB 857 (Cooper). In 2016, the California Legislature also passed another much broader ghost gun reform bill (AB 1673 (Gipson)) focused on regulating ghost gun companies and the sale, transfer, and possession of ghost gun products. AB 1673 (Gipson) would have clarified that the definition of “firearm” applicable to most California gun safety laws included at least some unfinished frames or receivers. Then-Governor Brown signed only AB 857 (Cooper) into law.
- ¹¹⁷ See 2016 CA AB 857 (Cooper).
- ¹¹⁸ See *id.*
- ¹¹⁹ See Tom Jackman, “Largest ‘ghost guns’ parts maker agrees to stop selling in California,” *The Washington Post* (Oct. 6, 2023), <https://www.washingtonpost.com/dc-md-va/2023/10/06/polymer80-ghost-guns-calif>.
- ¹²⁰ *Id.*
- ¹²¹ See *id.*; Memorandum of Law in Support of New York’s Motion For A Preliminary Injunction Against Ghost Gun Component Sales, *People of the State of New York v. Arm or Ally LLC, et al.*, 22-cv-06124, pp. 17, 22-23 (N.Y. Sup. Ct. Jan. 12, 2023) (quoting multiple defendant ghost gun companies’ statements that “Because they are not complete firearms, [80% frames] can be shipped straight to a customer’s home without an FFL”, “80% lowers are shipped right to your door,” and “this [80% frame] item can ship straight to your door, with no Federal Firearms License required.”).
- ¹²² See, e.g., JSDSupply, *FNS – Lower Parts Kit, Complete Kits for a Complete Build*, <https://bit.ly/3anxK8N> (last visited Feb. 1, 2024) (describing kits as enabling individuals to build “fully functional firearm[s] without the hurdles of a background check or government fees”); JSD Supply, “Polymer 80 Parts and Kits,” <https://jsdsupply.com/brand/polymer-80> (last visited Feb. 7, 2024); Complaint for Declaratory and Injunctive Relief, *State of California v. ATF*, ¶ 121 fn. 114 (N.D. Cal., Case No. 20-cv-6761) (filed Sep. 29, 2020) (quoting one leading ghost gun seller’s website touting that “the 80% lower bypasses the need for an FFL” and that “there is no background check or registration involved.”). See also, Defense Distributed, *AR-00: 9% Receiver*, <https://ghostgunner.net/zero-percent> (last accessed Feb. 7, 2024) (“Why make an AR-00? No FFL or background check required”); “JSD Supply,” (Oct. 9, 2022), <https://3-Dgunbuilder.com/reviews/jsd-supply> (stating that ghost gun company sold “guns [that] do not require serialization, background check, or government fees.”); Sari Horwitz, “‘Unfinished receivers,’ a gun part that is sold separately, lets some get around the law,” *The Washington Post* (May 13, 2014), https://www.washingtonpost.com/world/national-security/unfinished-receivers-that-can-be-used-to-build-guns-pose-problems-for-law-enforcement/2014/05/13/8ec39e9e-da51-11e3-bda1-9b46b2066796_story.html; Brief of *Amici Curiae* Gun Violence Prevention Groups in Support of Applicants, *Garland v. VanDerStok, et al.*, 144 S. Ct. 44, 12, fn.7 (citing, e.g., Polymer80 Blog, “Are Felons Restricted from Owning a Firearm that Was Built from an 80% Receiver?” (Oct. 21, 2020), formerly at <https://bit.ly/3-DDzXGo> (“Convicted felons are not restricted from purchasing and owning 80% frames...”); 80% Arms Blog, “The History of Legally Buying Firearms Without an FFL” (Dec. 3, 2019), <https://bit.ly/3HCikFU> (stating no background check or serialization required); JSD 80% Lower Receivers, Jigs, and Gun Parts Kits, JSD Supply (last visited July 30, 2023), <https://bit.ly/3rKrgqj> (same); *Ghost Gunner, Ghost Guns* (last visited July 30, 2023), <https://bit.ly/3pUjDvj> (same); *Lower Receiver, SS-Arms* (last visited July 30, 2023), <https://bit.ly/3GAVvVo> (same); *About, R&B Tactical Tooling* (last visited July 30, 2023), <https://bit.ly/3oNkmZU> (same)).
- ¹²³ See Anjeanette Damon, “Why Outlawing Ghost Guns Didn’t Stop America’s Largest Maker of Ghost Gun Parts,” *ProPublica* (Aug. 24, 2022), <https://www.propublica.org/article/nevada-ghost-guns-polymer80-firearms-laws>.
- ¹²⁴ See Complaint for Injunctive Relief, *City of New York v. Arm or Ally LLC, et al.*, 1:22-cv-05525, ¶ (S.D.N.Y., Jun. 29, 2022) (quoting Declaration of David L. Borges in Support of Motion of Polymer80 Inc. to Intervene in this Action, dated Dec. 30, 2020, *City of Syracuse, NY v. Bureau of Alcohol, Tobacco, Firearms and Explosives*, 20-cv-6885 (S.D.N.Y.)).
- ¹²⁵ See Brief of Amicus Curiae Everytown For Gun Safety Support Fund In Support Of Plaintiffs’ Cross-Motion For Summary Judgment and In Opposition To Defendants’ Motion for Summary Judgment, *State of California v. ATF*, 5 (N.D. Cal., Case No. 3:20-cv-06761-EMC) (filed Dec. 1, 2023); Complaint at ¶ 18, *United States v. Villasenor*, No. 2-20-cr-00050 (E.D. Cal. Jan. 30, 2020).
- ¹²⁶ See “Untraceable: The Rising Specter of Ghost Guns,” Everytown for Gun Safety, p. 17,

<https://everytownresearch.org/wp-content/uploads/sites/4/2020/05/Ghost-Guns-Report-071420A.pdf>.

¹²⁷ Id.

¹²⁸ See ATF Search Warrant Affidavit for Polymer80, at ¶ 87 (Dec. 9, 2020), available at <https://s.wsj.net/public/resources/documents/ghostraid-121420-warrant.pdf>; Amicus Brief of 16 Major Cities and Prosecutors Against Gun Violence in Support of Defendants-Appellees, *Morehouse Enterprises, LLC, v. ATF, et al.*, 22-2812 (8th Cir.) (filed Dec. 7, 2022), <https://www.perkinscoie.com/images/content/2/6/265469/Amicus-Brief-filed-by-16-Major-Cities-and-Prosecutors-Against-Gu.pdf>.

¹²⁹ See Giffords Law Center to Prevent Gun Violence, “Ghost Guns: How Untraceable Firearms Threaten Public Safety,” 7, fn. 29-30 (Aug. 2020), <https://files.giffords.org/wp-content/uploads/2020/08/Giffords-Law-Center-Ghost-Guns-Report.pdf>. See also, e.g., Tactical Machining, “80% Lowers,” <https://tacticalmachining.com/80-lowers.html>; American Made Tactical, “AR-15 80 Lower Receivers,” <https://americanmadetactical.com/product-category/80-lower/80-ar-15-lower-receivers>; 80Lowers.com, “80% Lower Bulk Packs,” <https://80lowers.com/80-percent-lower-bulk-3-5-10-pack>.

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¹³² See, e.g., CBS News, “U.S. Shooting rampage in California highlights ‘ghost guns’ and their dangers” (Nov. 16, 2017), <https://www.cbsnews.com/news/ghost-guns-shooting-rancho-tehama-california>; Abené Clayton, “A father used a ghost gun to kill his three daughters. It’s a sign of a growing crisis,” *The Guardian* (Mar. 8, 2022), <https://www.theguardian.com/us-news/2022/mar/08/a-father-used-a-ghost-gun-to-kill-his-three-daughters-its-a-sign-of-a-growing-crisis>.

¹³³ DOJ OGVP Data Report, Domestic Violence Involving Firearms in California, pp. 15-19 (Nov. 2023), <https://oag.ca.gov/system/files/attachments/press-docs/OGVP%20Report%20-%20Domestic%20Violence%20%26%20Firearms%20in%20CA.pdf>.

¹³⁴ Abené Clayton, “Ordered online, assembled at home: the deadly toll of California’s ‘ghost guns’,” *The Guardian* (May 18, 2021), <https://www.theguardian.com/us-news/2021/may/18/california-ghost-guns-deadly-toll>.

¹³⁵ See Complaint for Declaratory and Injunctive Relief, *State of California v. ATF*, ¶ 82 (N.D. Cal., Case No. 20-cv-6761) (filed Sep. 29, 2020); Glenn Thrush, “‘Ghost Guns’: Firearm Kits Bought Online Fuel Epidemic of Violence,” *The New York Times* (Nov. 14, 2021), <https://www.nytimes.com/2021/11/14/us/ghost-guns-homemade-firearms.html>.

¹³⁶ See, e.g., 80percentarms, (“RIDICULOUSLY EASY: We also offer our patented AR-15 and .308 [jig products] ...that make[] it ridiculously easy for a non-machinist to finish their 80% lower in under 1 hour with no drill press required.”).

¹³⁷ See, e.g., 80percentarms.com/80-jigs.

¹³⁸ See <https://ghostguns.com/about-us-ghost-guns>.

¹³⁹ See, e.g., ., 80% AR-15 Easy Jig Gen 1, 80% ARMS, <https://www.80percentarms.com/products/80-ar-15-easy-jig-gen-1> (last visited Feb. 16, 2024) (marketing product that “allows you to complete an 80% lower in about 1/3 the time it takes to complete a lower on an old style drill press jig. [This product] is easy enough for a caveman to use”); <https://www.5dtactical.com/products/premium-router-jig-pro-multiplatform-80-lower-jig-ar-15-ar-9-ar-45-308-ar-10> (posted Dec. 13, 2021) (Review from verified buyer stating “So easy, a caveman can do it! ...If you’re concerned about whether or not you can mill an 80% lower, fear not. If you can handle a cordless drill or kitchen mixer, this isn’t any more difficult.”); AR15.com Forums, Archived general discussion thread “Polymer80. So easy a caveman could do it” (posted Jan. 28, 2018), <https://www.ar15.com/forums/general/Polymer80-So-easy-a-caveman-could-do-it-/5-2075494>; <https://www.arizonashooting.org/forum/viewtopic.php?t=7769> (“I’ve build [sic] several different 80% receivers. I’ve done the ... the (so easy a caveman could do it) Polymer80 Spectre . . .”) (posted May 16, 2020); <https://www.northwestfirearms.com/threads/80-lower-finished.240690> (posted Mar. 22, 2017) (“So easy a Caveman can do it!!!”); <https://www.practicalmachinist.com/forum/threads/0t-inside-kalashnikov.382577> (posted Oct. 1, 2020) (“Literally, so easy a caveman can do it.”); <https://www.glocktalk.com/threads/romeo5-red-dot-sight-on-an-ar-pistol.1804032/page-3> (posted Jan. 8, 2020) (“My first build (lower) so easy a caveman could do it!”);

- https://www.reddit.com/r/polymer80/comments/bm469i/what_is_the_best_build_video_to_watch_while (comment posted 2019) (“It is literally so easy a caveman could do it. -Source, I am a caveman.”); <https://www.brownells.com/tools-cleaning/gun-tools/rifle-tools/1022~receiver-drilling-jig> (posted Jan. 11, 2016) (“So easy a caveman can do it!”).
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- ¹⁴⁵ See *Amicus Brief of 16 Major Cities and Prosecutors Against Gun Violence in Support of Defendants-Appellees, Morehouse Enterprises, LLC, v. ATF, et al.*, 20, (8th Cir., No: 22-2812) (filed Dec. 7, 2022), <https://www.perkinscoie.com/images/content/2/6/265469/Amicus-Brief-filed-by-16-Major-Cities-and-Prosecutors-Against-Gu.pdf> (quoting Alain Stephens, “The Feds are Increasingly Worried About Extremists Acquiring Ghost Guns, Leaked Report Shows,” *The Trace* (Aug. 6, 2020), <https://www.thetrace.org/2021/08/ghost-gun-government-report-3d-print-extremism-terrorism>).
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- ¹⁶¹ Id. at p. 55.
- ¹⁶² California DOJ, “Armed and Prohibited Persons System Report 2023,” p. 13, <https://oag.ca.gov/system/files/media/2023-apps-report.pdf>.
- ¹⁶³ See Complaint for Declaratory and Injunctive Relief, *State of California, et al. v. ATF* (N.D. Cal., Case No. 3:20-cv-06761-EMC) (Sept. 29, 2020).
- ¹⁶⁴ In August 2020, San Jose, California joined three other cities and Everytown for Gun Safety in a lawsuit filed against ATF in a federal district court in New York challenging ATF’s failure to classify unfinished frames and receivers as firearms; in December 2022, the parties stipulated to dismiss that case after ATF issued its revised federal ghost gun rule. See *City of Syracuse, et al., v. ATF* (S.D. NY, Case No: 1:20-cv-06885).
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Ghost Guns” (Aug. 16, 2022), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-defends-atf-rule-protect-public-untraceable-ghost-guns>; DOJ Press Release: “Attorney General Bonta Joins Brief in Support of Federal Rule to Regulate Ghost Guns” (Jul. 11, 2022), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-joins-brief-support-federal-rule-regulate-ghost-guns>; DOJ Press Release: “Attorney General Bonta Continues Defense of ATF Rule to Protect the Public from Ghost Guns” (Aug. 31, 2022), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-continues-defense-atf-rule-protect-public-ghost-guns>; Press Release: “Attorney General Bonta: Ghost Guns are Firearms and Need to Be Regulated Under Federal Law” (Mar. 11, 2024), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-ghost-guns-are-firearms-and-need-be-regulated-under>.

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- ¹⁷⁰ See 27 C.F.R. § 478.12(c), Example 3 (also exempting a “complete frame or receiver of a weapon that has been disassembled, damaged, split, or cut into pieces, but not destroyed” as specified).
- ¹⁷¹ In responding to ghost gun company lawsuits, ATF even took the position that ghost gun manufacturers would suffer no harm as a result of the Final Rule because they could still sell unfinished frames and receivers without serialization, background check, and reporting requirements so long as they sold their 80% products in separate transactions from their jigs and tool kits. In one case, ATF’s court brief stated that it “remains true that a ‘partially complete frame or receiver alone is not a frame or receiver if it still requires performance of certain machining operations’” and that the “only relevant policy change” made by the Final Rule “concerns ATF’s consideration of jigs, templates, instructions, equipment, or tools that are sold alongside a partially-complete frame or receiver to determine whether that clearly-identifiable component has reached the ‘critical stage of manufacture.’” See Supplemental First Amended Complaint for Declaratory and Injunctive Relief, *State of California, et al. v. ATF*, p. 47-48 (N.D. Cal., Case No. 3:20-cv-06761-EMC) (Sep. 7, 2023) (quoting Defendants’ Brief in Opposition to Plaintiffs’ Motion for Preliminary Injunction, *VanDerStok, et al. v. Garland, et al.*, No. 4:22-cv-00691-O (N.D. Tex. Aug. 29, 2022), ECF No. 41.)).
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- ¹⁷⁶ *State of California, et al. v. ATF*, (N.D. Cal., Case No. 3:20-cv-06761-EMC) (Feb. 26, 2024).
- ¹⁷⁷ On April 22, 2024, the U.S. Supreme Court granted the federal government’s petition for a writ of certiorari seeking review of a Fifth Circuit Court of Appeals decision in *Garland v. VanDerStok* that held that ATF’s ghost gun rule had exceeded the agency’s statutory authority. A decision in the case is expected to be published in 2025.
- ¹⁷⁸ See US Supreme Court Argument Calendar “October Term 2024: Session Beginning October 07, 2024,” https://www.supremecourt.gov/oral_arguments/calendarsandlists.aspx.
- ¹⁷⁹ See The Ghost Guns and Untraceable Firearms Act of 2023 (S. 2652 (Blumenthal), H.R. 4679 (Espaillat), H.R. 4992 (Espaillat)).
- ¹⁸⁰ See *People v. Blackhawk Manufacturing Group, Inc., et al.*, Case No. CGC-21-594577 (San Francisco Superior Court); *People v. Polymer80, inc.*, Case No. 21STCV06257 (Los Angeles Superior Court); *Tretta, et al. v. Osman, et al.*, Case No. 20STCV48910 (Los Angeles Superior Court); *Apolinar, et al., v. Polymer80, inc.*, Case No. 21STCV29196 (Los Angeles Superior Court); *O’Sullivan v. Ghost Gunner, Inc.*, Case No. 34-2021-00302934 (Sacramento Superior Court).
- ¹⁸¹ See Memorandum of Points and Authorities in Support of the People’s Application for a Preliminary Injunction, p. 18, *People v. Blackhawk Manufacturing Group, Inc., et al.*, Case No. CGC-21-594577 (San Francisco Superior Court) (May 20, 2022).
- ¹⁸² See e.g., Stipulation and Order Re Monthly Declarations, Notice and Hearing Schedule, *People v. Blackhawk Manufacturing Group, Inc., et al.*, Case No. CGC-21-594577 (San Francisco Superior Court) (Sep., 26, 2022) (ordering ghost gun

company defendants to file monthly declarations with the court to verify, among other things, whether the company was offering for sale, shipping, or delivering to anyone in California any unfinished frame or receiver product or any jig designed or marketed by that company for use in milling or otherwise converting unfinished frame or receivers into completed frames or receivers).

¹⁸³ See Office of the Los Angeles City Attorney, “Press Release: City Attorney Hydee Feldstein Soto Announces \$5 Million Settlement Blocking Ghost Gun Sales in California” (May 30, 2023), <https://cityattorney.lacity.gov/updates/city-attorney-hydee-feldstein-soto-announces-5-million-settlement-blocking-ghost-gun-sales>. See also, Everytown for Gun Safety, Press Release: “Everytown Law Announces Settlement Between Los Angeles Sheriff’s Deputies and Polymer80” (Dec. 5, 2023) (noting a settlement reached in victim lawsuit against ghost gun companies with confidential settlement terms), <https://www.everytown.org/press/everytown-law-announces-settlement-between-los-angeles-sheriffs-deputies-and-polymer80>; Department of Justice, “Press Release: Attorney General Bonta, District Attorney Jenkins Announce Final Judgments Barring Manufacturers and Retailers from Selling Ghost Guns in California” (Jun. 4, 2024), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-district-attorney-jenkins-announce-final-judgments>.

¹⁸⁴ See Department of Justice, “Press Release: Attorney General Bonta, District Attorney Jenkins Announce Final Judgments Barring Manufacturers and Retailers from Selling Ghost Guns in California” (Jun. 4, 2024), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-district-attorney-jenkins-announce-final-judgments>.

¹⁸⁵ See 2022 CA SB 1327, SEC. 3(b) (effective January 1, 2023) (“A statute shall not be construed to restrict a political subdivision from regulating or prohibiting firearms in a manner that is at least as stringent as the laws of this state, unless the statute explicitly states that political subdivisions are prohibited from regulating or prohibiting firearms in the manner described by the statute.”)

¹⁸⁶ See KPBS Public Media, “San Diego’s ‘Ghost Gun’ Ordinance Takes Effect Oct. 23” (Sept. 23, 2021), <https://www.kpbs.org/news/politics/2021/09/23/mayor-todd-glorias-ghost-gun-ordinance-goes-effect>; S.F. Ord. 145-21, File No. 210540, app. 9/24/2021, effective 10/25/2021;

¹⁸⁷ See Berkeley Municipal Code, Chapter 13.73 (added by Ord. No. 7,789-N.S.); City of Los Angeles Municipal Code, Chapter V, Article 5, Section 55.22 (added by Ord. No. 187,310, effective Jan. 17, 2022); San Diego County Code of Regulatory Ordinances, Sec. 33.301 (added by Ord. No. 10765 (N.S.), effective Feb. 24, 2022); Oakland Municipal Code, Chapter V, Article VII (added by Ord. No. 13679, effective Feb. 1, 2022); San Jose Municipal Code, Title 10, Chapter 10.32, Part 7 (added by Ord. No. 30769).

¹⁸⁸ Among other important bills, California enacted four major ghost gun-related bills in 2022 and 2023, with the following effective dates:

- 2022 AB 1621 (Gipson) (most, though not all, provisions took effect June 30, 2022; a few provisions provided a delayed implementation period for compliance and took effect in 2023 or 2024).
- 2022 AB 2156 (Wicks) (provisions took effect January 1, 2023, and some were amended in part by 2023 AB 1089, which took effect January 1, 2024).
- 2022 AB 1594 (Ting) (provisions took effect July 1, 2023, and were added to by 2023 AB 1089, which took effect January 1, 2024).
- 2023 AB 1089 (Gipson) (provisions took effect January 1, 2024).

Other legislation enacted in California governing ghost gun-related conduct included: 2017 SB 847 (Portantino) (this bill required new residents to the state to apply for a unique serial number within 60 days of arrival for any unserialized firearm the resident wishes to possess or own in the state and clarified that state law did not authorize unlicensed individuals to manufacture or assemble an unsafe handgun); 2019 AB 879 (Gipson) (this bill was amended by 2020 SB 118 and then superseded before it took effect by 2022 AB 1621 (Gipson); it would have established a licensing requirement for firearm precursor part sellers and provided for background check and other requirements for firearm precursor part sales); 2021 AB 1057 (Petrie-Norris) (clarifying that in specified statutes governing Domestic Violence and Gun Violence Restraining Orders, the definition of “firearm” applies to both completed frames and receivers and unfinished firearm precursor parts; this statute was generally superseded by 2022 AB 1621 (Gipson) before it took effect); 2022 AB 2552 (McCarty) (strengthening requirements governing gun shows, including by requiring gun show vendors to certify in writing to the producer that they will not display, possess, or offer for sale any unserialized frame or receiver, including a completed or unfinished frame or receiver); 2022 SB 1327 (Hertzberg) (creating a private right of action against a person who, among other things, engages in unlawful conduct related to the purchase, sale, or transfer of ownership of firearm precursor parts or unlawful conduct related to the manufacture, distribution, transportation, importation, sale, or transfer of unserialized firearms); 2023 AB 725 (Lowenthal) (applying requirement to report the loss or theft of firearms to

completed frames and receivers and firearm precursor parts, starting July 1, 2026); and 2023 AB 97 (Rodriguez) (requiring DOJ to report data regarding arrests made for violations of specified ghost gun laws).

¹⁸⁹ Id.

¹⁹⁰ See, e.g., 2022 CA AB 1621 (Gipson), SEC. 1, subd. (a)(9) (Findings and Declarations stating that the Legislature enacted AB 1621 “to protect public health and safety by halting the sale and possession of unserialized firearms and firearm precursor parts in California, ensuring that firearm precursor parts may only be sold if they are regulated under federal law to the same extent as completed frames and receivers, and aligning California law’s regulation of firearm precursor parts with its regulation of completed frames and receivers.”).

¹⁹¹ See Cal. Pen. Code § 16520(b), as amended by 2022 AB 1621, SEC. 6 (defining “firearm” for the purposes of most California firearm laws to include the frame or receiver, including a completed frame or receiver or a firearm precursor part). See also, Cal. Pen. Code § 16531, as amended by 2022 AB 1621, SEC. 5 (broadening definition of “Firearm precursor part”).

¹⁹² Some other states, like Colorado, Illinois, and Massachusetts have recently enacted ghost gun reform legislation that uses definitions similar to California’s to ensure background check and other requirements apply to products that are marketed as unfinished frames or receivers, regardless of their stage of manufacture, how readily convertible they may be, or whether they are sold, distributed, or marketed with or for associated templates, jigs, molds, equipment, tools, instructions, or guides. However, some states have enacted ghost gun laws that use other, narrower definitions for the products subject to background check and other requirements; as a result, those states may not provide as effective protection to ensure background check requirements apply to all products sold or marketed as the precursor part for a frame or receiver. California DOJ’s Office of Gun Violence Prevention encourages legislators in other states and at the federal level to ensure that ghost gun reforms apply broadly and explicitly to all products sold or marketed to become or be used as the frame or receiver of a functional firearm once completed, assembled, or converted. This broader definition, contained in California law, has also been incorporated in legislation introduced in Congress, such as The Ghost Guns and Untraceable Firearms Act of 2023 (S. 2652 (Blumenthal), H.R. 4679 (Espaillat), H.R. 4992 (Espaillat)).

¹⁹³ Cal. Pen. Code § 30400 (added by 2022 AB 1621, SEC. 28). See also, Cal. Pen. Code §§ 16519 (defining “Federally regulated firearm precursor part”), 16531 (defining “Firearm precursor part”), and 17312 (defining “Valid state or federal serial number or mark of identification”).

¹⁹⁴ See DOJ Office of Gun Violence Prevention, “Data Report: The Impact of Gun Violence in California,” pp. 8-13 (Aug. 2023), www.oag.ca.gov/system/files/media/OGVP-Data-Report-2022.pdf, and “Data Report: Domestic Violence Involving Firearms in California,” pp. 11-14 (Nov. 2023), www.oag.ca.gov/system/files/media/OGVP-Data-Report-2022.pdf.

¹⁹⁵ California enacted AB 1057 (Petrie-Norris) in 2021, a narrower bill focused on protecting survivors who obtain certain court protection orders from ghost guns. AB 1057 (Petrie-Norris) included provisions clarifying that in specific statutes governing Domestic Violence and Gun Violence Restraining Orders, the definition of “firearm” applies to both completed and unfinished frames and receivers and other precursor parts to ensure that people subject to those protection orders were prohibited from accessing, and required to relinquish, core ghost gun components. However, AB 1057 delayed implementation until July 1, 2022, so did not take effect before AB 1621 enacted broader ghost gun reforms and protections.

¹⁹⁶ See Cal. Pen. Code § 29180(d) and (f), as amended by 2022 AB 1621, SEC. 22.

¹⁹⁷ Cal. Pen. Code § 23920(b) (subdivision added by 2022 AB 1621, SEC 12) (making it unlawful after January 1, 2024, to knowingly possess any firearm that does not have a valid state or federal serial number or mark of identification, except as provided in Section 23925. See also Cal. Pen. Code § 16515 (added by 2022 AB 1621, SEC 3) (defining “Federal licensee authorized to serialize firearms”) and § 17312 (added by 2022 AB 1621, SEC 9) (defining “Valid state or federal serial number or mark of identification”).

¹⁹⁸ Cal. Pen. Code § 29010(a) (amended by 2022 AB 2156 and by 2023 AB 1089) and § 29185(a). Legislation enacted in 2023 changed the statutory citation, effective January 1, 2024, by moving language prohibiting the unlicensed use of any 3-D printer to manufacture firearms from Penal Code Section 29010(b) to Section 29185(a). See 2022 CA AB 2156 and 2023 AB 1089. These changes did not result in substantive change regarding use of 3-D printers; it has been unlawful since January 1, 2023, to manufacture any number of firearms using a 3-D printer in California without being a state-licensed firearm manufacturer in California.

¹⁹⁹ See Cal. Pen. Code §§ 29010-29150.

²⁰⁰ See Cal. Civ. Code § 3273.50.

²⁰¹ See Cal. Civ. Code § 3273.51.

- ²⁰² Cal. Civ. Code §§ 3273.51(g); 3273.52.
- ²⁰³ See also, 2022 CA AB 1594 (Ting), SEC 2, subd. (d), (e) (Legislative finding and declarations stating that “California has adopted critical laws regulating aspects of the firearm industry. However, some members of the firearm industry have continued to develop dangerous business practices and to manufacture, sell, distribute, and market increasingly dangerous new products designed to circumvent and undermine these laws. That purpose has often been explicit in advertisements for products ranging from unserialized ghost gun build kits to bump stocks to bullet button assault weapons, and many more...Accordingly, the Legislature finds that it is necessary to proactively establish an affirmative obligation that firearm industry members meet a reasonable standard of conduct, and face civil liability for harms caused by knowing violations of that standard, including when those violations do not constitute criminal conduct.”)
- ²⁰⁴ See, e.g., ATF, National Firearms Commerce and Trafficking Assessment: Firearms in Commerce, Part II: Privately Made Firearms, p. 34-35 (May 5, 2022), <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>; New York City Police Department Intelligence Division, Major Case Field Intelligence Team, “Ghost Guns: Past, Present, and Future, p. (Sep. 2023), <https://bjatta.bja.ojp.gov/media/event/ghost-guns-past-present-and-future> and www.ammoland.com/wp-content/uploads/2023/10/NYPD-Ghostguns.pdf.
- ²⁰⁵ See, e.g., Garen J. Wintemute, “Ghost guns: spookier than you think they are,” *Injury Epidemiology* commentary, (8)13 (Apr. 5, 2021), <https://injejournal.biomedcentral.com/articles/10.1186/s40621-021-00306-0>.
- ²⁰⁶ See, e.g., Yannick Veilleux-LePage, “Printing Terror: An Empirical Overview of the Use of 3D-Printed Firearms by Right-Wing Extremists,” *Combating Terrorism center at West Point, CTC Sentinel*, 17(6) (June 2024), <https://ctc.westpoint.edu/printing-terror-an-empirical-overview-of-the-use-of-3d-printed-firearms-by-right-wing-extremists>.
- ²⁰⁷ See id.; John Hornick, “3D Printing New Kinds of Crime,” *Police Chief Magazine*, Kyle Dent, et al., “Risks and Challenges in Online Communities for 3D-Printed Firearms Among Extremists and Terrorists,” *Global Internet Forum to Counter Terrorism (GIFCT) Red Team Working Group* (Sep. 20, 2023), <https://gifct.org/wp-content/uploads/2023/09/GIFCT-23WG-0823-3DPrinting-1.1.pdf>.
- ²⁰⁸ See Yannick Veilleux-LePage, “Printing Terror: An Empirical Overview of the Use of 3D-Printed Firearms by Right-Wing Extremists,” *Combating Terrorism center at West Point, CTC Sentinel*, 17(6) (June 2024), <https://ctc.westpoint.edu/printing-terror-an-empirical-overview-of-the-use-of-3d-printed-firearms-by-right-wing-extremists>; Plaintiff’s First Amended Complaint, *Def. Distributed v. Bonta*, 2022 U.S. Dist. LEXIS 195839, FAC ¶¶ 1, 14, 16-17 (ghost gun company stating in court filings, months after AB 1621 took effect, that the company continued to sell a ghost gun-branded CNC milling machine in California, that “unfinished frames and receivers, and the code to complete them, are sold together with the CNC machine,” and that “[b]ecause the materials provided [by the company] often do not have serial numbers and are not licensed with the federal government, they may be used to make what are popularly known by the moniker ‘ghost guns.’”).
- ²⁰⁹ See, e.g., Yannick Veilleux-LePage, “Printing Terror: An Empirical Overview of the Use of 3D-Printed Firearms by Right-Wing Extremists,” *Combating Terrorism center at West Point, CTC Sentinel*, 17(6) (June 2024), <https://ctc.westpoint.edu/printing-terror-an-empirical-overview-of-the-use-of-3d-printed-firearms-by-right-wing-extremists>; Stephen Gutowski, “GatGPT: ‘Ghost Gun’ Pioneer Launches AI,” *The Reload* (Sep. 18, 2023), <https://thereload.com/gatgpt-ghost-gun-pioneer-launches-ai>.
- ²¹⁰ See 2023 CA AB 1089 (Gipson), SEC 4. (amending Cal. Penal Code § 29185).
- ²¹¹ 2023 CA AB 1089 (Gipson), SEC 2. (adding Cal. Civ. Code § 3273.61(a)(2), (b)-(e)).
- ²¹² 2023 CA AB 1089 (Gipson), SEC 2. (adding Cal. Civ. Code § 3273.62). This law creates a rebuttable presumption that a violation has occurred if both of the following are true:
- (1) The person offers to sell, advertises, or markets a CNC milling machine or three-dimensional printer in a manner that, under the totality of the circumstances, is targeted at purchasers seeking to manufacture firearms or that otherwise affirmatively promotes the machine or printer’s utility in manufacturing firearms, regardless of whether the machine or printer is otherwise described or classified as having any other capabilities.
 - (2) The person sells or transfers the CNC milling machine or three-dimensional printer described in paragraph (1) without verifying that a purchaser or transferee in this state is a federally licensed firearms manufacturer or not otherwise prohibited from purchasing or using the machine or printer to manufacture firearms under Section 29185 of the Penal Code.
- ²¹³ 2023 CA AB 1089 (Gipson), SEC 2. (adding Cal. Civ. Code §§ 3273.60, 3273.61). This statute also makes someone who violates this law strictly liable to pay for personal injury or property damages inflicted with any firearms produced

using the code they unlawfully distributed.

²¹⁴ See 2023 CA AB 1089 (Gipson), SEC 1. (amending Cal. Civ. Code § 3273.50 to add “firearm manufacturing machine” to the definition of “firearm-related products” subject to the Firearm Industry Responsibility Act and defining “firearm manufacturing machine” to mean “a three-dimensional printer, as defined in Section 29185 of the Penal Code, or CNC milling machine that, as described in that section, is marketed or sold as, or reasonably designed or intended to be used to manufacture or produce a firearm.”).

²¹⁵ Cal. Civ. Code §§ 3273.50(g), 3273.51.

²¹⁶ See *Def. Distributed v. Bonta*, 2022 U.S. Dist. LEXIS 195839 (C.D. Cal., Oct. 21, 2022); Stipulation re: Dismissal of Action with Prejudice and Waiver and Release of Claims, Case No. 2:22-cv-06200-GW-AGR (Nov. 18, 2022).

²¹⁷ See Cal. Pen. Code § 16520(b) (defining “firearm” for the purposes of most California firearm laws to “include the frame or receiver of the weapon, including both a completed frame or receiver or a firearm precursor part.”). The term “Firearm precursor part” is defined in Cal. Pen. Code § 16531(a) to mean “any forging, casting, printing, extrusion, machined body or similar article that has reached a stage in manufacture where it may readily be completed, assembled or converted to be used as the frame or receiver of a functional firearm, *or* that is marketed or sold to the public to become or be used as the frame or receiver of a functional firearm once completed, assembled or converted.” (Emphasis added). Note that Penal Section 16520(b) provides the applicable definition of “firearm” for most relevant laws governing the sale, transfer, manufacture, and possession of firearms, but that some other subdivisions in Section 16520 provide a more expansive or narrower definition of “firearm” for certain contexts, such as in Penal Code Section 29180, in which the applicable definition of “firearm” is provided in Section 16520(g) and includes a completed frame or receiver but not a firearm precursor part.

Pursuant to Section 16531(b), DOJ has published a Firearm Precursor Part Identification Guidebook that provides written guidance and images to help properly identify a firearm precursor part and a federally regulated firearm precursor part. See California DOJ, Division of Law Enforcement, Bureau of Firearms, “Firearm Precursor Part Identification Guidebook” (Rev. Aug. 2022), available at <https://oag.ca.gov/system/files/media/bof-reg-rev-fpp-id-guidebook.pdf>.

²¹⁸ See Cal. Pen. Code §§ 27545, 27585, and 28050 (generally requiring a licensed dealer to complete the sale, loan, or transfer of a firearm between unlicensed parties or if the firearm was purchased or obtained outside of California). See also, Cal. Pen. Code 16520(b) (defining “firearm” for these purposes to include completed frames or receivers and firearm precursor parts).

²¹⁹ See Cal. Pen. Code §§ 26815(d); 27540(c), (d); 27545; 28050. See also, Cal. Pen. Code § 16520(b) (defining “firearm” for these purposes to include completed frames or receivers and firearm precursor parts).

²²⁰ See Cal. Pen. Code §§ 26815(c), 27505, 27510; 16520(b).

²²¹ See Cal. Pen. Code §§ 27540(e); 31615; 16520(b).

²²² See Cal. Pen. Code §§ 26815(a); 27540(a); 16520(b).

²²³ See Cal. Pen. Code §§ 28215; 28255; 16520(b).

²²⁴ Subject to certain exceptions, this statute makes it unlawful for a person to purchase, sell, offer to sell, or transfer ownership of any firearm precursor part in California that is not a federally regulated firearm precursor part. The term “Federally regulated firearm precursor part” is defined in Section 16519 of the Penal Code to mean “any firearm precursor part deemed to be a firearm pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and regulations issued pursuant thereto, and, if required, has been imprinted with a serial number by a federal licensee authorized to serialize firearms in compliance with all applicable federal laws and regulations.” See also, California DOJ, Division of Law Enforcement, Bureau of Firearms, “Firearm Precursor Part Identification Guidebook” (Rev. Aug. 2022), available at <https://oag.ca.gov/system/files/media/bof-reg-rev-fpp-id-guidebook.pdf>.

²²⁵ Under Section 16520(b), the applicable definition of “firearm” in this statute includes “the frame or receiver of the weapon, including both a completed frame or receiver, or a firearm precursor part”, as defined in Section 16531.

²²⁶ Under Section 16520(b), the applicable definition of “firearm” includes “the frame or receiver of the weapon, including both a completed frame or receiver, or a firearm precursor part”, as defined in Section 16531. The term “valid state or federal serial number or mark of identification” is defined in Section 17312.

²²⁷ Under Section 16520(g), the applicable definition of “firearm” in Section 29180 includes the completed frame or receiver but not a firearm precursor part. The term “valid state or federal serial number or mark of identification” is defined in Section 17312. Prior to enactment of AB 1621, Penal Code Section 29180(b) generally prohibited the manufacture of unserialized firearms by requiring a person manufacturing or assembling any firearm that did not already have a valid state or federal serial number or mark of identification imprinted on the frame or receiver to apply to DOJ for a serial

number prior to manufacturing or assembling the firearm, and to engrave that unique serial number on the frame or receiver within 10 days and notify DOJ with information identifying the firearm owner, the serial number, and the firearm, as specified. After enactment of AB 1621, this process remains in place for certain individuals, including for circumstances in which a new resident moves into California with an unserialized firearm and needs to obtain a serial number to lawfully possess that weapon in our state. However, under AB 1621, it is now generally unlawful to sell, transfer ownership of, purchase, or possess any completed frame or receiver or unfinished firearm precursor part that is not already serialized, or to use 3-D printers or CNC milling machines to produce firearms, including completed or unfinished frames or receivers or other precursor parts, without a manufacturer’s license. As a result, unlicensed individuals must generally produce firearms using frames, receivers, or precursor parts that were already serialized and regulated as firearms prior to sale or transfer to an unlicensed individual.

²²⁸ Under Section 16520(g), the applicable definition of “firearm” in Section 29180 includes the completed frame or receiver but not a firearm precursor part.

²²⁹ *Id.*

²³⁰ See Cal. Pen. Code §§ 27520; 16520(b). See also, Cal. Pen. Code § 27515 (making it unlawful to sell, loan, or transfer a firearm (including a completed frame/receiver or firearm precursor part) to a person the seller or transferor knows or has cause to believe is not the person actually purchasing or receiving the firearm [a straw purchaser], if the seller or transferor has knowledge that the firearm is to be subsequently sold, loaned, or transferred to avoid specified requirements, including California’s law requiring a licensed dealer to process firearm sales and transfers).

²³¹ Except by operation of law, Section 29180(d) generally prohibits a person, corporation, or firm that is not a federally licensed firearms manufacturer from selling or transferring ownership of a firearm, including a completed frame or receiver, if that person, corporation or firm manufactured or assembled the firearm; knowingly caused the firearm to be manufactured or assembled by a person, corporation, or firm that is not a federally licensed firearms manufacturer; or is aware that the firearm was manufactured or assembled by a person, corporation, or firm that is not a federally licensed firearms manufacturer. See also, Cal. Penal Code § 16520(g) (defining “firearm” for this purpose of this statute to include a completed frame or receiver).

²³² Under Section 16520(b), the applicable definition of “firearm” in this statute includes “the frame or receiver of the weapon, including both a completed frame or receiver, or a firearm precursor part”, as defined in Section 16531.

²³³ *Id.*

²³⁴ *Id.*

²³⁵ *Id.*

²³⁶ Section 17280 defines “undetectable firearm” for the purposes of Section 24610. Section 29180(b)(2)(B) separately requires any person manufacturing or assembling a firearm that is manufactured or assembled from polymer plastic and that does not already have a valid state or federal serial number or mark of identification imprinted on the frame or receiver to embed 3.7 ounces of material type 17-4 PH stainless steel within the plastic upon fabrication or construction with the unique serial number engraved or otherwise permanently affixed in a manner that meets or exceeds the requirements imposed on licensed importers and licensed manufacturers of firearms pursuant to subsection (i) of Section 923 of Title 18 of the United States Code and regulations issued pursuant thereto.

²³⁷ Cal. Penal Code §§ 31910 (defining “unsafe handgun”); 32000 (prohibition); 32100 (exceptions to the prohibition). See also, Cal. Penal Code §§ 31900-32110.

²³⁸ Cal. Penal Code §§ 30510 and 30515 (defining “assault weapon”); 30530 (defining “.50 BMG rifle”); 30600 (prohibitions on manufacture, distribution, sale, transport, etc.); 30605 (possession of assault weapon); 30610 (possession of .50 BMG rifle). See also, Cal. Penal Code §§ 30500-30685..

²³⁹ Cal. Penal Code §§ 16880, 32625. See also, Cal. Penal Code §§ 32610-32750.

²⁴⁰ Cal. Penal Code §§ 24510, 24590.

²⁴¹ See Cal. Penal Code § 17170; 17190; 33215.

²⁴² Cal. Penal Code § 18010(d)(1). See also Penal Code § 18010(a) and (b) authorizing the Attorney General, a district attorney, or a city attorney to bring an action to enjoin the manufacture of, importation of, keeping for sale of, offering or exposing for sale, giving, lending, or possession of, other weapons constituting nuisances, including undetectable firearms, firearms not immediately recognizable as firearms, and zip guns.

²⁴³ Cal. Penal Code § 18010(d)(2). See also Penal Code § 18005 governing confiscation and destruction of these weapons.

²⁴⁴ Cal. Civ. Code § 3273.61(a)(2).

- ²⁴⁵ Cal. Civ. Code § 3273.61(a)(2), (b)-(e).
- ²⁴⁶ This statute could, for example, provide a cause of action against an entity that sells or advertises a CNC milling machine or 3-D printer in a manner that recklessly promotes or facilitates the unlawful use of that machine to manufacture firearms by individuals who are not licensed to manufacture firearms by ATF and California DOJ.
- ²⁴⁷ Cal. Civ. Code § 3273.62(b) states that there “shall be a rebuttable presumption that a person is engaged in conduct in violation of subdivision (a) if both of the following are true:
- (1) The person offers to sell, advertises, or markets a CNC milling machine or three-dimensional printer in a manner that, under the totality of the circumstances, is targeted at purchasers seeking to manufacture firearms or that otherwise affirmatively promotes the machine or printer’s utility in manufacturing firearms, regardless of whether the machine or printer is otherwise described or classified as having any other capabilities; and
 - (2) The person sells or transfers the CNC milling machine or three-dimensional printer described in paragraph (1) without verifying that a purchaser or transferee in this state is a federally licensed firearms manufacturer or not otherwise prohibited from purchasing or using the machine or printer to manufacture firearms under Section 29185 of the Penal Code.”
- ²⁴⁸ Cal. Civ. Code § 3273.61(c), (d).
- ²⁴⁹ Cal. Civ. Code §§ 3273.60, 3273.61(a)(1), (b)-(e). The term “Digital firearm manufacturing code” is defined by Cal. Civ. Code § 3273.60 to mean “any digital instructions in the form of computer-aided design files or other code or instructions stored and displayed in electronic format as a digital model that may be used to program a CNC milling machine, a three-dimensional printer, or a similar machine, to manufacture or produce a firearm, including a completed frame or receiver or a firearm precursor part.”
- ²⁵⁰ Cal. Civ. Code § 3273.61(a)(1), (b)-(e).
- ²⁵¹ See Cal. Business and Professions Code §§ 22949.60-22949.70. Section 22949.65 provides: “Any person, other than an officer or employee of a state or local governmental entity in this state, may bring a civil action against any person who does any of the following:
- (1) Knowingly violates Section 22949.62.
 - (2) Knowingly engages in conduct that aids or abets a violation of Section 22949.62, regardless of whether the person knew or should have known that the person aided or abetted would be violating Section 22949.62.
 - (3) Knowingly commits an act with the intent to engage in the conduct described by paragraph (1) or (2).”
- ²⁵² See *id.*
- ²⁵³ The firearm industry standard of conduct is codified at Cal. Civ. Code § 3273.51 and relevant terms are defined in Section 3273.50, including “firearm industry member,” “firearm-related product,” and “reasonable controls.” The cause of action for violations of the standard of conduct is codified at Section 3273.52.
- ²⁵⁴ The term “Firearm-related product” is defined in Cal. Civ. Code § 3273.50(d) and includes “firearm manufacturing machines”, which are defined in Section 3273.50(g). This definition encompasses 3-D printers, CNC milling machines, and other similar machines, that are marketed or sold as a machine that manufactures or produces firearms, or are reasonably designed or intended to be used for that purpose, independent of whether the machine has the “sole or primary function of manufacturing firearms.”
- ²⁵⁵ Cal. Civ. Code §§ 3273.51(a), (b)(1); 3273.50(h).
- ²⁵⁶ Cal. Civ. Code §§ 3273.51(a), (b)(2); 3273.50(h).
- ²⁵⁷ Cal. Civ. Code § 3273.51(a), (d). By incorporating these standards into the firearm industry standard of conduct, the Firearm Industry Responsibility Act expanded gun violence victims’ and other injured plaintiffs’ standing to bring civil actions against firearm industry members for harmful conduct that violates those standards.
- ²⁵⁸ Cal. Civ. Code § 3273.52.