

# PART V:

## Privately Made Firearms Updates and New Analysis

[Privately Made Firearms](#) (PMFs) were discussed extensively in [NFCTA Volume I, Part II](#) as they related to commerce; [Volume II, Part III](#) as they related to law enforcement recoveries and tracing; and [Volume III, Parts III through VI](#) as they related to ATF firearm trafficking investigations. This section will provide updated data and analysis of previously reported information as well as examples of ATF PMF investigations.

The PMF market is rapidly evolving. The PMFs that were initially identified by law enforcement agencies (LEA) as recovered crime guns typically involved semi-automatic pistols made from firearm kits, such as “buy-build-shoot” kits. Examples of PMF semi-automatic pistols made from "kits" that have been involved in violent crimes include a September 21, 2018, workplace mass shooting in Middleton, Wisconsin, and a September 9, 2018, shooting targeting a border patrol agent at the San Ysidro border crossing in San Diego, California. More recently, PMFs made through the use of 3D-printers have been increasingly encountered by LEAs in crime gun investigations.

PMFs include MCDs. MCDs are devices designed to convert a semi-automatic firearm to fully automatic fire; they are defined as machineguns under the National Firearms Act (NFA), even when not installed. MCDs include traditional drop-in auto sears (DIAS), which are designed for use on AR-type firearms, and more recently developed “switches,” which are designed for use on certain semiautomatic pistols. MCDs are easily integrated with semiautomatic firearms to illegally convert them to fire automatically.<sup>1</sup>

### Case Examples

The following are examples of ATF investigations involving 3D made PMFs.

#### *PMFs and Narcotics*

In October 2021, ATF (Milwaukee) and the Brown County (Wisconsin) Drug Task Force initiated an investigation of a convicted felon that evidence indicated was engaged in the making and selling of PMF firearms. These sales also involved trading the PMFs in exchange for methamphetamine.

After developing evidence that the suspect was manufacturing the PMFs in the basement of his residence using readily available 3D printers, the investigative team obtained a state search for the suspect’s residence. On November 15, 2021, agents and officers executed the search warrant and located a PMF manufacturing operation in the basement. Evidence seized pursuant to the warrant included multiple 3D printers and memory cards with computer-aided design (CAD) plans for PMFs; several 3D-printed firearm frames, receivers, and slides; multiple AR-15 machinegun conversion devices (MCDs); two silencers; ammunition; and a completed polymer, 3D-printed .22 caliber pistol. On examination of the 3D-printed pistol, ATF’s Firearms and Ammunition Technology Division (FATD) determined that it functioned as a firearm. Working with the Transportation Security Administration (TSA), ATF then

screened the pistol through a TSA-certified magnetometer to determine whether it was detectable; it was not. The TSA-certified magnetometer did not alert to the pistol, resulting in the first documented law enforcement seizure of a functional 3D-printed, polymer firearm determined to be undetectable for metal content.

The suspect was charged in federal court with felon in possession of a firearm (18 U.S.C. § 922(g)(1)), and possession of an unregistered NFA firearm (26 U.S.C. § 5861). He pled guilty to both charges in December 2022 and was sentenced in March 2023 to 46 months incarceration.

### ***PMFs and Domestic Terrorism***

In March 2022, ATF and the Columbus (Ohio) Police Department, Counter-Terrorism Unit (CPD/CTU), initiated an investigation of two suspects that evidence indicated were engaged in the unlawful manufacture and sale of PMFs. The CPD/CTU initially identified potential PMF trafficking while investigating racially motivated violent extremism involving current and former members of the Ohio National Guard. That investigation had identified voluminous social media postings involving anti-Semitic, white nationalist, racist, and misogynistic imagery. Postings involving the two suspects indicated they were also engaged in PMF manufacture and distribution.

After developing additional evidence regarding PMF trafficking, the ATF-CPD/CTU investigative team obtained a state search warrant for the residence of one of the suspects (“Suspect One”). On March 31, 2022, during execution of the warrant, investigators located and seized a 3D printer, multiple PMFs, and firearm making materials. In a post-arrest interview, Suspect One stated he had been making PMFs since 2020, had sold at least six firearm receivers through a “mutual acquaintance,” and had sold at least four completed PMFs.

Based in part on evidence developed from the search of Suspect One’s residence, ATF obtained a federal search warrant for a location controlled by a second suspect (“Suspect Two”). On April 4, 2022, investigators executed the warrant, seizing multiple PMFs, including an MCD, a completed Improvised Explosive Device (IED), manuals for the manufacture of IEDs, and numerous firearm parts.

Suspect Two was subsequently charged in federal court with dealing in firearms without a license (18 U.S.C. § 922(a)(1)(A)), possession of a machinegun (18 U.S.C. § 922(o)), and manufacturing and possession of unregistered NFA firearms, (26 U.S.C. § 5861). In September 2022 he pled guilty and, in February 2023, was sentenced to 71 months imprisonment.

## **Laws, Regulations, and Rulings**

### ***ATF Final Rule 2021R-05F: Definition of "Frame or Receiver" and Identification of Firearms***

To address the public safety issues posed by the proliferation of PMFs, the Department of Justice promulgated a GCA regulation, [ATF Final Rule 2021R-05F](#). This rule became effective on August 24, 2022.<sup>2</sup> Among other provisions, the Final Rule set forth marking and recordkeeping requirements for PMFs acquired and disposed of by FFLs<sup>3</sup>. The final rule also modernized the definitions of firearm frame and firearm receiver applicable to handguns and long guns. Finally, the rule clarified when a firearm parts kit is considered a “firearm.” These updated definitions made clear that certain products sold as unregulated firearm kits were in-fact firearms subject to regulation under the GCA.

The term [PMF encompasses several different types of un-serialized firearms](#), including those made using commercially sold parts and kits. It also encompasses MCDs, such as "drop in auto sears" and "switches," even though these devices do not themselves fire projectiles, because these devices fall within the definition of "machinegun" in both the GCA and NFA.

### ***State Laws and Regulations***

As the recoveries of PMFs in crimes by law enforcement have increased, so have the concerns expressed by law enforcement leaders and policy makers at the state and local government levels. The regulation of PMFs at the state and local level is rapidly evolving. Currently, at least 17 states and the District of Columbia (DC) have passed laws<sup>4</sup> that regulate some aspect of PMFs (*e.g.*, requiring serial numbers, reporting, possessing, regulating manufacturing and 3D printing, sales, and transfers).

## **Outreach, Education, Collaboration, and Initiatives**

ATF has undertaken wide-ranging outreach and educational efforts to assist the law enforcement community with the identification of PMFs and to enhance capacity to track recovery and criminal use of these weapons.

### ***ATF Outreach and Education***

Because the proliferation of PMFs has corresponded with increased recovery of these weapons as crime guns, educating law enforcement on identifying them has been a public safety priority. With approximately 700,000 law enforcement officers spread across approximately 18,000 agencies, it is a formidable task to educate and train them on how to identify and track PMFs.

ATF has designated personnel in each Field Division to serve as the primary points of contact on PMFs for law enforcement agencies within the Division's area-of-operation (hereafter PMF POCs). The ATF FATD has developed a training program to provide these PMF POCs and Department of Justice prosecutors with the expertise necessary to educate federal, state and local law enforcement officers about PMFs and MCDs. FATD also maintains a reference resource that identifies known exemplars of MCDs for LEAs and provides updates as new PMF/MCD threats emerge.

Since October 1, 2023, FATD has provided outreach, training and education to more than 1000 law enforcement officers, prosecutors, Congressional staffers, and additive manufacturing (3D-printing) industry partners on the identification of PMFs and MCDs. This included training for State and local law enforcement in Garland, Texas, Richmond, Va., and Milwaukee, WI; presentations to Federal prosecutors in Southern District of New York and in Washington, D.C.; and hands-on training and tours to the United Kingdom's National Crime Agency.

ATF has also established the Emerging Threats Center (ETC) to address PMF threats, including MCDs, undetectable firearms, and destructive devices used in crimes. The ETC works with other ATF components and external partners to conduct multijurisdictional investigations and other investigative functions related to the unlawful use of changing and emerging technologies that pose a threat to public safety.

## *ATF Partnerships and Collaborative Efforts*

In February 2022, Attorney General (AG) Garland released a Violent Crime Strategy Update that included direction on combatting the use of PMFs in violent crime. Specifically, the AG directed the Deputy AG to work with DOJ components to implement a national "ghost gun" enforcement initiative designed to equip investigators and prosecutors with the tools and expertise they need to help combat the unlawful use of PMFs in violent crime, and to direct U.S. Attorneys' Offices (USAO) to work closely with law enforcement partners to bring cases designed to address the use of these firearms in violent crime. In addition, as part of this initiative, each USAO and ATF field division across the country will designate specialists to work with colleagues at DOJ and its law enforcement partners to advance this work.

In November 2023 the USAO for the Western District of Oklahoma and ATF formed [Project Switch Off](#). This initiative specifically includes (1) specialized training of law enforcement on the illegality of these devices under federal law and how to identify the many different types of conversion devices that exist, (2) public education of danger and illegality of these devices, and (3) the federal prosecution priority for those who illegally possess or sell these devices and the significant penalties they face. ATF and federal prosecutors have trained nearly 500 Oklahoma City police officers to recognize and refer MCD offenses for federal prosecution.

In August 2024, the National Tracing Center Division deployed a series of functional improvements to the eTrace application, which have significantly enhanced ATF's ability to collect information and report on the recovery of PMFs and MCDs to include those that are 3D-printed. This new functionality expands reporting capabilities and simplifies the eTrace submission process for the recovery of PMFs and MCDs. These functional improvements combined with the existing firearm identification criteria will significantly enhance ATF's Crime Gun Intelligence data collection and reporting capabilities.

On September 6, 2024, the Deputy Attorney General issued a [Memorandum](#) to all DOJ LEAs and prosecutors establishing Department priorities on Combatting of Illegal MCDs. DOJ and ATF along with members of the additive manufacturing (3D-printed) industry, academia (including scholars from [Dartmouth College](#) and [Wichita State University](#)), [Oak Ridge National Lab](#), and law enforcement announced the establishment of the [Justice Department's Action Network to Terminate Illegal Machinegun Conversion Devices \(ANTI-MCD\)](#). The ANTI-MCD Committee is co-chaired by ATF and the U.S. Attorney for the Western District of Oklahoma. The ANTI-MCD Committee is developing recommendations and best practices for dealing with MCDs to ensure seamless coordination, spot trends, and gather intelligence. The ANTI-MCD Committee is also working with the Department's law enforcement components to update the tracking of MCD seizures and prosecutions in real time. Finally, the ANTI-MCD initiative includes a national MCD Training Initiative, spearheaded by ATF and designed to equip law enforcement and prosecutors with the tools they need to investigate, prosecute, and deter MCD manufacturing, possession, and use.

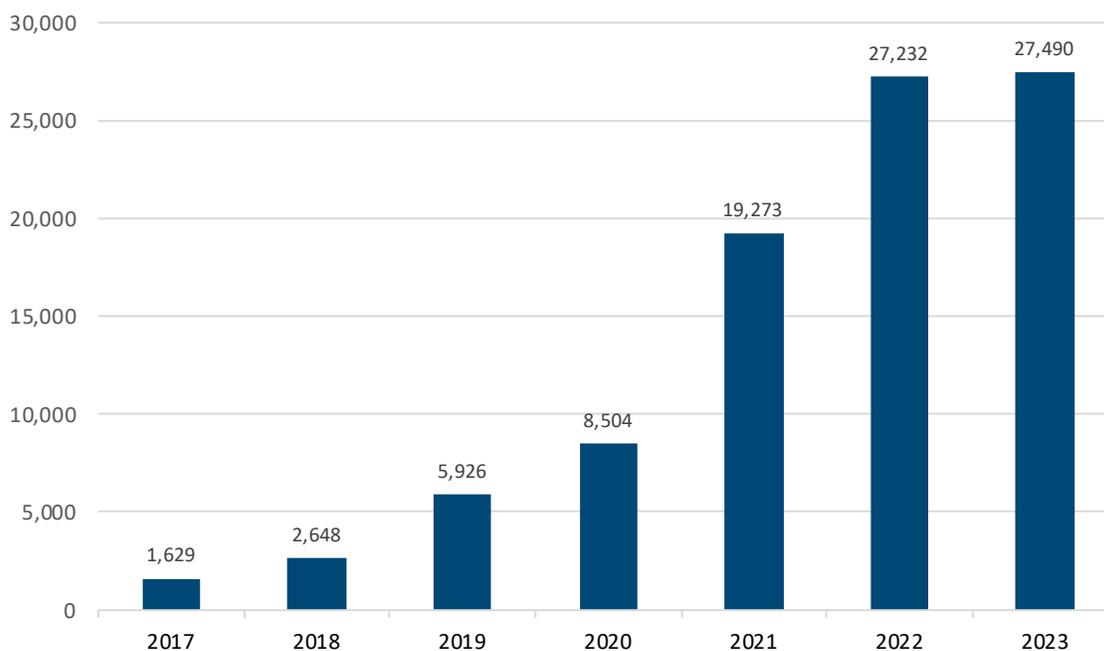
## **PMF Recoveries Within the United States and Its Territories**

The vast majority of PMFs lack a serial number or other markings that can be traced to a Federal Firearms Licensee (FFL) for identification of the purchaser. Nevertheless, the reporting of PMF recoveries made by law enforcement is extremely valuable in quantifying the prevalence of PMFs. Consequently, ATF has provided guidance to LEAs on submission of PMF recovery information through the National Tracing System. ATF uses the system to track aggregate data regarding the recovery of PMFs in

crimes. For purposes of this section and throughout this report, use of the term “trace” in association with PMFs refers to the tracking of PMF recovery information. Based on available firearm recovery data, it is evident that criminals are actively making, using, and distributing PMFs.<sup>5</sup> While awareness of PMFs is increasing due to policies educating and informing law enforcement officials, this is still an on-going process. The following data only includes those PMFs that have been recovered and traced through ATF. Based on available information there are likely much higher numbers of recovered PMFs at law enforcement agencies that have not been submitted for tracing.<sup>6</sup>

As shown in Figure PMF-01, between 2017 and 2023, 92,702 suspected PMFs were recovered by law enforcement and subsequently traced. During this time period, the number of suspected PMFs recovered in crimes and submitted for tracing has increased by 1,588%. The total number of PMF recovered between 2022 and 2023 was 44% (54,722) greater than the total number of PMFs recovered over the five prior years (37,980). This significant rise is likely attributable to both an increase in the number of PMFs being made and subsequently recovered by law enforcement as well as developing law enforcement awareness for identifying and tracing recovered PMFs.

**Figure PMF-01: Total PMF Crime Guns Recovered and Traced**



These traces were associated with approximately 1,692 homicide-related<sup>7</sup> offenses and 4,106 other violent crime offenses.<sup>8</sup> See Table PMF-01 in Appendix PMF – Privately Made Firearms for a detailed listing of all recovered PMFs by crime type for 2017 through 2021 and 2022 through 2023.

### ***PMF Recovery States and Territories***

California leads the nation in PMF recoveries. Between 2017 and 2021, California averaged 5,218 PMF recoveries per year. Between 2022 and 2023, California averaged 10,562 PMF recoveries per year, reflecting a 102% increase over the prior period. Since 2021, however, California’s market share of PMF recoveries has decreased 16 percentage points (Table PMF-02a). This market share decline reflects increasing recoveries across the U.S. Excluding California, all other states and territories in total averaged

3,421 PMF recoveries per year between 2017 to 2021. Between 2022 and 2023, all other states and territories in total averaged 16,799 PMF recoveries per year, reflecting a 391% increase over the prior period.

**Table PMF-02a: PMF Traces by Top Ten Recovery States**

State	2017 – 2021		State	2022 – 2023	
	Total	% Total		Total	% Total
California	20,875	55.0%	California	21,123	38.6%
Maryland	1,936	5.1%	Illinois	3,159	5.8%
Illinois	1,759	4.6%	Maryland	3,006	5.5%
Pennsylvania	1,452	3.8%	Texas	2,650	4.8%
Florida	1,424	3.7%	Florida	2,588	4.7%
Texas	1,248	3.3%	Pennsylvania	2,542	4.6%
New York	952	2.5%	New York	2,092	3.8%
Arizona	844	2.2%	North Carolina	2,010	3.7%
District of Columbia	720	1.9%	North Dakota	998	1.8%
North Carolina	617	1.6%	District of Columbia	946	1.7%
All Others	6,153	16.2%	All Others	13,608	24.9%
<b>Total</b>	<b>37,980</b>	<b>100.0%</b>	<b>Total</b>	<b>54,722</b>	<b>100.0%</b>

See Table PMF-02 in Appendix PMF – Privately Made Firearms for a full list of PMF traces by recovery state and territory for 2017 through 2021 and 2022 through 2023.

***PMF Types***

As reflected in Table PMF-03, pistols are the most commonly recovered type of PMF. Between 2017 and 2021, on average 4,509 PMF pistols were recovered per year. Between 2022 and 2023, on average 18,197 PMF pistols were recovered per year, reflecting a 304% increase over the prior period. Excluding PMF pistols, all other PMF types in total averaged 3,086 PMF recoveries per year between 2017 to 2021. Between 2022 and 2023, all other PMF types in total averaged 9,164 PMF recoveries per year, reflecting a 197% increase over the prior period.

**Table PMF-03: Recovered and Traced PMFs by Top Five PMF Types**

PMF Type	2017 – 2021		2022 – 2023	
	Total	% of Total	Total	% of Total
Pistol	22,546	59.4%	36,393	66.5%
Machinegun / Machinegun parts / Conversion devices	4,459	11.7%	6,296	11.5%
Rifle	5,446	14.3%	5,399	9.9%
Receiver / Frame	1,588	4.2%	1,489	2.7%
Silencer	345	0.9%	224	0.4%
Unknown	3,255	8.6%	4,716	8.6%
All Others	341	0.9%	205	0.4%
<b>Total</b>	<b>37,980</b>	<b>100.0%</b>	<b>54,722</b>	<b>100.0%</b>

***PMF Possessors by Age Grouping***

Between 2017 and 2023 the possessor’s age was known for nearly 75% (69,342 of 92,702) of PMFs recovered and traced by law enforcement. Table PMF-04 indicates there was an increase in the relative number of PMF possessors under the age of 25. Between the 2017-2021 and 2022-2023 time periods

there was an increase of six percentage points (33% to 39%) in the percentage of possessors under the age of 25, representing a slightly more than 18% increase in market share.

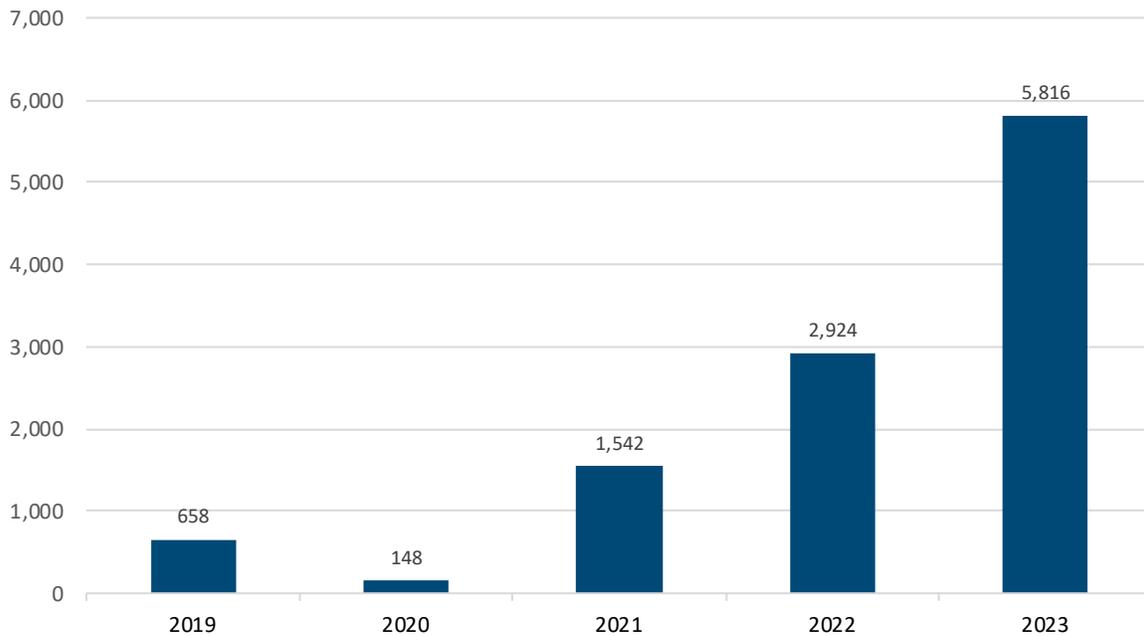
**Table PMF-04: PMFs Recovered and Traced by Possessor Age Grouping, 2017 – 2021 and 2022 – 2023**

Age Grouping	2017 – 2021		Age Grouping	2022 – 2023	
	Total	% of Total		Total	% of Total
Juvenile (17 and under)	1,118	3.8%	Juvenile (17 and under)	2,397	6.0%
Youth (18 to 24)	8,471	28.8%	Youth (18 to 24)	13,043	32.6%
Young Adult (25 to 34)	9,479	32.3%	Young Adult (25 to 34)	11,266	28.2%
Adult (35 and over)	10,305	35.1%	Adult (35 and over)	13,263	33.2%
<b>Total</b>	<b>29,373</b>	<b>100.0%</b>	<b>Total</b>	<b>39,969</b>	<b>100.0%</b>

### **MCDs**

As shown in Figure PMF-02, the number of suspected MCDs recovered in crimes by law enforcement and subsequently traced by ATF has increased rapidly with more than a 784% increase in recoveries and traces between 2019 (658) and 2023 (5,816). This exponential rise is likely attributable to both an increase in the number of MCDs being made and subsequently recovered by law enforcement as well as developing law enforcement awareness for identifying and tracing recovered MCDs. MCDs account for nearly 13% (11,088) of all PMFs (88,425) recovered and traced between 2019 and 2023.

**Figure PMF-02: Total MCDs Recovered in Crimes and Traced**



### **MCD Recovery States and Territories**

As shown in Table PMF-05a, the top ten MCD recovery states accounted for more than 70% of all MCDs from 2019 (7,757) to 2023 (11,088). Florida accounted for the largest percentage of recovered and traced MCDs with more than 17% (1,942) of all MCD (11,088) recoveries.

**Table PMF-05a: MCD Traces by Top Ten Recovery States, 2019 – 2023**

<b>State</b>	<b>Total</b>	<b>% Total</b>
Florida	1,942	17.5%
Illinois	1,198	10.8%
Texas	985	8.9%
North Dakota	980	8.8%
Arizona	640	5.8%
Missouri	471	4.2%
Michigan	351	3.2%
Pennsylvania	308	2.8%
California	305	2.8%
South Carolina	300	2.7%
All Others	3,608	32.5%
<b>Total</b>	<b>11,088</b>	<b>100.0%</b>

See Table PMF-05 in Appendix PMF – Privately Made Firearms for a complete list of MCD traced by all recovery states and territories between 2019 and 2023.

### ***MCD Possessors by Age Grouping***

Between 2019 and 2023, the age of the possessor was known in more than 75% (8,358 of 11,088) of MCDs recovered and traced by law enforcement. Table PMF-06 indicates individuals under the age of 25 possessed about 32% (2,670) of all MCDs (8,358) recovered.

**Table PMF-06: MCDs Recovered and Traced by Possessor Age Grouping, 2019 – 2023**

<b>Age Grouping</b>	<b>Total</b>	<b>% Total</b>
Juvenile (17 and under)	215	2.6%
Youth (18 to 24)	2,455	29.4%
Young Adult (25 to 34)	1,743	20.9%
Adult (35 and over)	3,945	47.2%
<b>Total</b>	<b>8,358</b>	<b>100.0%</b>

## **ATF Firearm Trafficking Cases Involving PMFs**

There were 316 (3.3% of 9,708) ATF trafficking investigations involving privately made firearms (PMFs) initiated between 2017-2021, and subsequently closed by March 10, 2023.<sup>9</sup> Of these investigations, nearly 33% (104 of 316) only involved PMFs.

### ***Firearm Trafficking Channels and Methods Used***

Nearly 95% (299 of 316) of PMF trafficking investigations identified known firearm trafficking channels. As reflected in Table PMF-07, the most frequent types of trafficking channels were unlicensed firearm dealing by private persons (63.9%) and trafficking through unlicensed making (62.5%). Nearly 71% (117 of 165) of investigations involving more than one trafficking channel involved both unlicensed dealing and unlicensed making.

The third most frequent type of trafficking channel was through online marketplaces (12.4%). This was followed by trafficking on social media platforms (11.7%) and trafficking by a straw purchaser or straw

purchasing ring (11.0%). The predominant trafficking channels were similar across all PMF investigations regardless of whether cases also involved other types of firearms.

**Table PMF-07: Number and Percentage of Cases by Top Five Firearm Trafficking Channel Types, 2017 – 2021**

<b>Trafficking Channel</b>	<b>Number of Cases</b>	<b>% Total Cases</b>	<b>Number of Total Trafficking Cases</b>	<b>% Total Trafficking Cases</b>
Trafficking in firearms by an unlicensed dealer (private person)	191	63.9%	3,404	40.7%
Trafficking in firearms through unlicensed making (PMFs, etc.)	187	62.5%	253	3.0%
Trafficking in firearms through online marketplaces	37	12.4%	298	3.6%
Trafficking in firearms through social media platforms	35	11.7%	227	2.7%
Trafficking in firearms by a straw purchaser or straw purchasing ring	33	11.0%	3,305	39.5%

*Note: Categories are not mutually exclusive*

### **Source-to-Market Type**

ATF SAs identified the source-to-market type in more than 79% (250 of 316) of the PMF trafficking cases in the study period. Of these cases, most involved only one source-to-market type (83.2%; 208 of 250). As shown in Table PMF-08, 68% (170 of 250) of cases involved intrastate trafficking and 29% (73 of 250) involved interstate trafficking.

**Table PMF-08: Source-to-Market Type, 2017 – 2021**

<b>Source-to-Market Type</b>	<b>Number of Cases</b>	<b>% Total Cases</b>	<b>Number of Total Trafficking Cases</b>	<b>% Total Trafficking Cases</b>
Intrastate	170	68.0%	4,108	55.9%
Interstate	73	29.2%	2,358	32.1%
U.S. to Foreign	32	12.8%	1,411	19.2%
Foreign to U.S.	19	7.6%	100	1.4%

*Note: Categories are not mutually exclusive*

### **NFA Weapons Trafficked**

SAs identified 142 (44.9%) PMF trafficking investigations that involved the trafficking of NFA weapons that were privately made. In contrast, only 5% (432 of 8,055) of all trafficking cases in Volume III involved NFA weapons.<sup>10</sup> As reflected in Table PMF-09, 62% (88 of 142) of these investigations involved trafficking in machinegun parts and/or MCDs. Nearly 30% (43 of 142) involved short-barreled rifles.

**Table PMF-09: Total Number and Percentage of PMF Cases by Types of NFA Weapons Trafficked, 2017–2021**

NFA Weapon Type	Number of Cases	% Total Cases
Machinegun / Machinegun parts / Conversion devices	88	62.0%
Short-barreled rifles	43	29.6%
Silencers / Silencer parts	31	21.8%
Silencer parts sold as other items	29	20.4%
Short-barreled shotguns	6	4.2%
Other NFA weapons	6	4.2%
Destructive devices / Explosives	4	2.8%

*Note: Categories are not mutually exclusive*

### **Characteristics of Firearm Traffickers, End Users, and Defendants**

Table PMF-10 identifies, by suspect age, the number and percentage of firearm traffickers involved in PMF trafficking cases. Among the 286 cases with at least one identified trafficker, the age of the trafficker was known for 421 (80.3%) of 524 firearm traffickers. Traffickers identified as adults (35 and over) accounted for nearly 39% (163 of 421) of the total firearm traffickers. Relative to the age distribution of traffickers involved in all types of firearm trafficking cases during the study period, traffickers associated with PMF cases were slightly older.<sup>11</sup>

**Table PMF-10: Firearm Traffickers by Age Category, 2017 – 2021**

Age Category	Number of Firearm Traffickers	% Firearm Traffickers
Juvenile (17 and under)	3	0.7%
Youth (18 to 24)	101	24.0%
Young Adult (25 to 34)	154	36.6%
Adult (35 and over)	163	38.7%

Among the 286 cases in which at least one firearm trafficker was identified, background characteristics were reported for 383 (73.1%) of 524 total firearm traffickers. Table PMF-11 identifies the top five background characteristics. More than 32% (124 of 383) of firearm traffickers involved in PMF trafficking cases were convicted felons. Firearm traffickers with no known criminal activity accounted for more than 29% (112 of 383) of these traffickers.

**Table PMF-11: Firearm Traffickers by Top Five Background Characteristics, 2017 – 2021**

Background Characteristic	Number of Firearm Traffickers	% Firearm Traffickers
Convicted felon	124	32.4%
No known criminal activity	112	29.2%
Prior arrest history, no prohibiting convictions	72	18.8%
Known gang member or a associate of gang member	71	18.5%
Drug trafficker	71	18.5%
Drug user	70	18.3%

*Note: Categories are not mutually exclusive*

ATF SAs identified the trafficker’s role for 74% (390 of 524) of the known traffickers in PMF cases. Table PMF-12 identifies the number and percentage of firearm traffickers by the top five roles. The

identified role “PMF maker” accounted for nearly 47% (183 of 390) of these traffickers, and the identified role “PMF trafficker” accounted for more than 27% (107 of 390) of traffickers.

**Table PMF-12: Firearm Traffickers by Top Five Trafficker Roles, 2017 – 2021**

<b>Trafficker Role</b>	<b>Number of Firearm Traffickers</b>	<b>% Firearm Traffickers</b>
PMF maker	183	46.9%
PMF trafficker	107	27.4%
Middle person	110	28.2%
Straw purchaser	55	14.1%
Utilized straw purchaser	35	9.0%

*Note: Categories are not mutually exclusive*

## Summary

The proliferation of PMFs has corresponded to an increase in their use in crimes. From January 1, 2017, through December 31, 2023, U.S. LEAs recovered and submitted for tracing 92,702 suspected PMFs. The number of suspected PMFs recovered in crimes has increased rapidly with an almost 1,600% increase in recoveries and traces between 2017 (1,629) and 2023 (27,490). Significantly, in this period, PMFs recovered and submitted for tracing were associated with 1,692 homicide-related offenses and 4,106 other violent crime offenses.

California leads the nation in PMF recoveries reported to ATF. Between 2017 and 2021, California averaged 5,218 PMF recoveries per year. Between 2022 and 2023, California averaged 10,562 PMF recoveries per year, reflecting a 102% increase over the prior period. Excluding California, all other states and territories in total averaged 3,421 PMF recoveries per year between 2017 to 2021. Between 2022 and 2023, all other states and territories in total averaged 16,799 PMF recoveries per year, reflecting a 391% increase over the prior period.

The most frequent types of trafficking channels identified in ATF’s PMF trafficking investigations were unlicensed firearm dealing by private persons (63.9%) and trafficking through unlicensed making (62.5%). Trafficking cases involving PMFs were more likely to involve intrastate trafficking (68.0%) as compared to all other trafficking cases (55.9%). More than 32% of firearm traffickers involved in PMF trafficking cases were convicted felons.

The reported recovery of MCDs increased 784% between 2019 and 2023. This exponential rise in national recoveries of MCDs is likely attributable to an increase in the criminal use of MCDs and improved training of LEA officers to identify and report the recovery of these devices. In total, U.S. LEAs reported recovering 11,088 MCDs between 2019 and 2023, which represented nearly 13% of all recovered PMFs (88,425). Florida accounted for the largest percentage of MCDs recovered and submitted for tracing during the time period with nearly 18% of all recoveries, followed by Illinois which accounted for nearly 11% of MCDs.

# APPENDIX PMF – PRIVATELY MADE FIREARMS

*Table PMF-01: PMF Traces by All Crime Types, 2017 - 2021 and 2022 – 2023*

2017 - 2021		2022 - 2023	
Crime Type	Count	Crime Type	Count
Possession of Weapon	11,694	Firearm Under Investigation	13,009
Firearm Under Investigation	6,364	Possession of Weapon	12,555
Weapon Offense	5,455	Weapon Offense	9,325
Felon in Possession of Firearm	4,006	Felon in Possession of Firearm	5,517
Carrying Concealed Weapon	1,326	Carrying Concealed Weapon	2,130
Found Firearm	1,271	Found Firearm	2,088
Weapons Trafficking	876	Weapons Trafficking	918
Dangerous Drugs	738	Dangerous Drugs	779
Selling Weapon	437	Carrying Prohibited Weapon	746
Carrying Prohibited Weapon	371	Probation Violation	607
Probation Violation	332	Aggravated Assault - Gun	514
Firing Weapon	315	Homicide	475
Aggravated Assault - Gun	310	Firing Weapon	349
Homicide	305	Assault	324
Assault	302	Traffic Offense	309
Traffic Offense	283	Robbery	279
Health - Safety	200	Selling Weapon	266
Aggravated Assault - Family-Gun	171	Health - Safety	250
Homicide - Attempted	162	Domestic Violence	239
Domestic Violence	147	Homicide - Attempted	181
Robbery	142	Aggravated Assault - Nonfamily-Gun	178
Homicide - Willful Kill-Gun	133	Licensing - Registration Weapon	162
Driving Under Influence Liquor	106	Carjacking - Armed	156
Parole Violation	89	Homicide - Willful Kill-Gun	138
Suicide	85	Robbery - Street-Gun	127
Aggravated Assault - Nonfamily-Gun	83	Driving Under Influence Liquor	123
Marijuana - Possessing	83	Suicide	118
Marijuana - Sell	81	Aggravated Assault - Family-Gun	116
Licensing - Registration Weapon	79	Marijuana - Possessing	115
Crimes Against Person	70	Stolen Vehicle	114
Homicide - Willful Kill-Police Officer-Gun	70	Cocaine - Sell	111
Burglary	68	Robbery - Business-Gun	102
Robbery - Street-Gun	67	Vehicle Theft	99
Carjacking - Armed	65	Marijuana - Sell	90
Marijuana - Producing	65	Burglary	75
Stolen Vehicle	64	Homicide - Willful Kill-Nonfamily-Gun	72
Threat-Terroristic - State Offenses	62	Drugs - Health or Safety	71
Robbery - Business-Gun	59	Aggravated Assault-Weapon	57
Cocaine - Sell	58	Threat-Terroristic - State Offenses	56
Amphetamine - Sell	53	Crimes Against Person	52
Stolen Property	47	Domestic Disturbance	51
Altering Identification on Weapon	45	Marijuana - Producing	49
Homicide - Willful Kill-Nonfamily-Gun	40	Amphetamine - Possessing	47
Vehicle Theft	40	Altering Identification on Weapon	45
Cocaine	39	Possession Stolen Vehicle	44
Aggravated Assault - Police Officer-Weapon	37	Parole Violation	42
Heroin - Sell	35	Stolen Property	40
Drugs - Health or Safety	34	Driving Under Influence Drugs	40
Marijuana	30	Homicide - Willful Kill-Family-Gun	40
Public Order Crimes	29	Synth Narcotic - Sell	39
Amphetamine - Possessing	27	Amphetamine - Sell	38
Driving Under Influence Drugs	27	Heroin - Sell	36
Obstruct Police	25	Public Peace	35
Cocaine - Possessing	24	Marijuana	33
Hallucinogen - Manufacturing (Not to Include Marijuana)	24	Violation of a Court Order	33
Aggravated Assault-Weapon	23	Possession Stolen Prop	33

Domestic Disturbance	23	Kidnaping	29
Kidnaping	23	Robbery - Residential-Gun	29
Fraud	22	Hit and Ron	28
Hit and Run	22	Cocaine	27
Family Offense	21	Cruelty Toward Wife	27
Larceny - From Shipment	20	Aggravated Assault - Police Officer-Weapon	27
Robbery - Residential-Gun	20	Smuggling	26
Cruelty Toward Wife	19	Obstruct Police	25
Public Peace	19	Intimidation (Includes Stalking)	24
Resisting Officer	19	Receive Stolen Prop	23
Suicide - Attempted	19	Burglary - Forced Entry-Residential	23
Aggravated Assault Police Officer-Gun	18	Flight to Avoid (Prosecution, Confinement, etc.)	22
Heroin	18	Simple Assault	21
Possession Stolen Prop	18	Homicide - Willful Kill-Police Officer-Gun	21
Larceny	16	Cocaine - Possessing	20
Simple Assault	15	Aggravated Assault Police Officer-Gun	20
Flight To Avoid (Prosecution, Confinement)	14	Public Order Crimes	19
Burglary - Forced Entry-Residential	13	Resisting Officer	19
Synth Narcotic - Sell	13	Suicide - Attempted	19
Cruelty Toward Child	12	Fraud	18
Aggravated Assault - Nonfamily-Weapon	11	Narcotic Equip - Possessing	17
Opium or Derivative - Sell	11	Disorderly Conduct	16
Possession Stolen Vehicle	11	Threat to Bomb	16
Property Crimes	11	Property Crimes	16
Flight - Escape	10	Aggravated Assault - Nonfamily-Weapon	15
Intimidation (Includes Stalking)	10	Embezzle	15
Narcotic Equip - Possessing	10	Larceny	15
Synth Narcotic - Possessing	10	Family Offense	15
False Citizenship	9	Robbery - Street-Weapon	13
Hallucinogen - Possessing	9	Amphetamine - Manufacturing	13
Burglary - Forced Entry-Nonresidential	8	Amphetamine	13
Homicide - Willful Kill-Family-Gun	8	Synth Narcotic - Possessing	13
Rape- Gun	8	Cruelty Toward Child	12
Counterfeiting	7	Obscene Material - Possessing	11
Disorderly Conduct (Specify Conduct)	7	Rape- Gun	11
Explosives - Possessing (Specify in Mis Field)	7	Obstruct (Judicial, Congressional, Legislative, Commission)	10
Fraud - Illeg Use Credit Cards	7	Explosives - Teaching Use	10
Heroin - Possessing	7	Trespassing	10
Homicide - Negligible Mansi-Weapon	7	Sex Assault	9
Kidnap Adult	7	Sex Offense	9
Receive Stolen Prop	7	Kidnap Adult	9
Sex Assault	7	Aggravated Assault - Public Official-Gun	9
Sex Offense	7	Homicide - Willful Kill-Family-Weapon	9
Smuggling	7	Flight-Escape	9
Violation of a Court Order	7	Liquor - Sell	9
Amphetamine	6	Larceny - from Auto	8
Explosives - Transporting (Specify in Miscellaneous Field)	6	Heroin	8
Forgery of Checks	6	Damage Property	8
Marijuana - Smuggle	6	Explosives - Possessing	8
Shoplifting	6	Escape From Custody	7
Threat To Bomb (Specify in Miscellaneous Field)	6	Shoplifting	7
Unauthorized Use of Vehicle (Includes Joy Riding)	6	Hallucinogen - Sell (Not to Include Marijuana)	7
Aggravated Assault - Public Official-Gun	5	Burglary - Forced Entry-Nonresidential	7
Arson	5	Immigration	6
Conservation - Animals	5	Homicide - Willful Kill-Weapon	6
Gambling	5	Homicide - Negligible Mansi-Weapon	6
Hallucinogen - Sell	5	Heroin - Possessing	6
Homicide - Willful Kill-Nonfamily-Weapon	5	Synth Narcotic	6
Obstruct (Specify Judicial, Congressional, Legislative)	5	Gambling	6
Burglary - No Forced Entry-Residential	4	Failure to Appear	6
Commercial Sex	4	Opium or Derivative - Sell	5
Counterfeiting of (Identify Object in Miscellaneous Field)	4	Tax Revenue	5
Damage Property	4	Robbery - Business-Weapon	5
Drugs - Adulterated	4	Hallucinogen - Distributing (Not to Include Marijuana)	5
Immigration	4	Homicide - Negligible Manslaughter-Vehicle	5
Larceny - From Auto	4	Cocaine - Smuggle	5
Military	4	Drugs - Adulterated	5
Neglect Family	4	Robbery - Residential-Weapon	4
Obstructing Justice	4	Receive Stolen Vehicle	4
Theft Of Us Govt Prop	4	Conflict Of Interest	4

Threat-Federal Protectees (Pres, Vice Pres)	4	Homicide - John or Jane Doe - No Warrant	4
Treason	4	Explosives - Transporting	4
Aggravated Assault - Family-Weapon	3	Homicide - Willful Kill-Nonfamily-Weapon	4
Amphetamine - Manufacturing	3	Hallucinogen - Manufacturing (Not to Include Marijuana)	4
Burglary - Tools - Possessing	3	Unauthorized Use of Vehicle (Includes Joy Riding)	4
Divulge Eavesdrop Order	3	Conservation - Animals	4
Evidence - Destroying	3	Money Laundering	4
Harassing Communication	3	Contempt of Court	4
Obstructing Court Order	3	Obstructing Court Order	3
Trespassing	3	Hallucinogen - Possession (Not to Include Marijuana)	3
Food - Health or Safety	2	Forgery of	3
Homicide - Willful Kill-Public Official-Weapon	2	Procure For Prostitute (Pimping)	3
Indecent Exposure	2	Robbery - Banking-Type Inst	3
Invade Privacy	2	Robbery - Business-Strongarm	3
Kickback - Receiving	2	Treason	3
Liquor - Sell	2	Military	3
Misconduct - Judic Officer	2	Counterfeiting	3
Money Laundering	2	Larceny - From Building	3
Obscene Material - Possessing	2	Riot - Interfere Officer	3
Opium Or Derivative - Possessing	2	Damage Prop - Private	3
Receive Stolen Vehicle	2	Theft And Use Vehicle Other Crime	3
Robbery - Banking-Type Inst	2	Obstruct Criminal Invest	3
Robbery - Business-Weapon	2	Assembly - Unlawful	2
Robbery - Residential-Weapon	2	Transporting Dangerous Material	2
Robbery - Street-Strongarm	2	Aggravated Assault - Police Officer-Strongarm	2
Robbery - Street-Weapon	2	Arson	2
Smuggling Aliens	2	Mail Fraud	2
Stat Rape - No Force	2	Hallucinogen - (Not to Include Marijuana)	2
Threat To Burn (Specify in Miscellaneous Field)	2	Civil Rights	2
Transporting Female Interstate for Immoral Purpose	2	Prostitution	2
Arson - Residential-Defraud Insurer	1	Homicide - Willful Kill-Police Officer-Weapon	2
Abortifacient (Selling, Manufacturing, Delivering, etc.)	1	Aggravated Assault - Family-Strongarm	2
Assembly - Unlawful	1	Opium Or Derivative	2
Barbiturate - Possessing	1	Burglary - No Forced Entry-Residential	2
Barbiturate - Sell	1	Condit Release Violation	2
Bookmaking	1	Larceny - From Shipment	2
Civil Rights	1	Opium Or Derivative - Possessing	2
Cocaine - Smuggle	1	Larceny - Parts from Vehicle	2
Compounding Crime	1	Strip Stolen Vehicle	2
Condit Release Violation	1	Arson - Residence	2
Contempt Of Court	1	Theft And Strip Vehicle	2
Contributing Delinquency Minor	1	Larceny - Postal	2
Damage Prop - Private	1	Extort - Threat Injure Person	2
Damage Prop - Public	1	Bookmaking	2
Escape From Custody	1	Homicide - Willful Kill-Public Official-Gun	2
Establish Gambling Place	1	Liquor	2
Extortion	1	Harassing Communication	2
Forgery	1	Aggravated Assault - Family-Weapon	2
Fraud - Confidence Game	1	Rape - Strongarm	1
Fraud - Imperson	1	Obscene Material	1
Hallucinogen - (Not to Include Marijuana)	1	Misconduct - Judic Officer	1
Homicide - John or Jane Doe - No Warrant	1	Robbery - Street-Strongarm	1
Homicide - Willful Kill-Weapon	1	Theft of Us Govt Prop	1
Illegal Entry	1	Possession Counterfeited	1
Incendiary Device - Teaching Use	1	Evidence - Destroying	1
Kidnap Hostage for Escape	1	Sedition	1
Kidnap Minor for Ransom	1	Abscond While on Parole	1
Liquor	1	Burning of	1
Liquor - Possessing	1	Kidnap Adult for Ransom	1
Morals - Decency Crimes	1	Riot	1
Neglect Child (Includes Nonsupport of Child)	1	Escape	1
Obscene Material	1	Contributing Delinquency Minor	1
Obstruct Criminal Invest	1	Food - Health or Safety	1
Rape - Strongarm	1	Riot - Interfere Firearm	1
Robbery - Residential-Strongarm	1	Forcible Purse Snatching	1
Smuggle Contraband into Prison	1	Conservation - Fish	1
Strip Stolen Vehicle	1	Fraud - Illegal Use Credit Cards	1
Synth Narcotic - Smuggle 1	1	Barbiturate - Possessing	1
Synth Narcotic	1	Synth Narcotic - Smuggle	1
Theft And Use Vehicle Other Crime	1	Smuggle Contraband	1

		Obscene Material - Distributing	1
		Marijuana - Smuggle	1
		Burglary - No Forced Entry-Nonresidential	1
		Smuggling Aliens	1
		Kidnap Hostage for Escape	1
		Sovereignty	1
		Establish Gambling Place	1
		State/Local - Material Witness	1
		Arson - Residential-Endangered Life	1
		Barbiturate - Sell	1
		Illegal Entry	1
		Election Laws	1
		Incendiary Device - Using	1
		Incendiary Device - Possessing	1
		Anarchism	1
		Burglary Tools - Possessing	1
		Sex Assault - Sodomy-Woman-Weapon	1
<b>Total</b>	<b>37,980</b>	<b>Total</b>	<b>54,722</b>

**Table PMF-02: PMF Traces by All Recovery States, 2017 – 2021 and 2022 – 2023**

2017 – 2021		2022 - 2023	
State	# PMF Traces	State	# PMF Traces
CA	20,875	CA	21,123
MD	1,936	IL	3,159
IL	1,750	MD	3,006
PA	1,452	TX	2,650
FL	1,424	FL	2,588
TX	1,248	PA	2,542
NY	952	NY	2,092
AZ	844	NC	2,010
DC	720	ND	998
NC	617	DC	946
NJ	407	AZ	898
NV	348	MA	813
KY	346	MO	760
OH	319	NJ	739
VA	294	WI	647
WA	294	MN	631
MA	282	MI	608
MI	281	VA	551
TN	269	TN	532
CO	258	GA	515
GA	250	WA	510
IN	227	NV	504
MO	221	LA	489
MN	187	CO	488
PR	162	OH	452
UT	159	IN	440
CT	138	KY	405
KS	131	OR	395
WI	130	CT	350
HI	128	SC	286
LA	128	AL	276
OR	122	NM	265
DE	119	PR	230
AL	101	DE	174
SC	97	KS	154
OK	80	OK	148
WV	75	WV	145
NE	64	UT	145
NM	60	NE	140
NH	54	IA	130
IA	51	HI	119
ID	51	RI	115
RI	45	AR	100
MS	43	MS	84
VI	43	MT	77
AR	35	ID	67
MT	34	AK	46
WY	27	ME	41
ME	25	NH	39
AK	23	VI	28
SD	22	WY	24
ND	17	SD	20
VT	8	GU	14
GU	4	VT	11
MP	1	PW	2
PL	1	MP	1
US	1		
<b>Total</b>	<b>37,980</b>	<b>Total</b>	<b>54,722</b>

*Table PMF-05: MCD Traces by All Recovery States, 2019 – 2023*

<b>State</b>	<b># MCD Traces</b>
FL	1,942
IL	1,198
TX	985
ND	980
AZ	640
MO	471
MI	351
PA	308
CA	305
SC	300
GA	277
TN	273
KY	254
NC	206
OH	193
DC	159
WI	140
LA	139
AL	130
KS	126
VA	120
NV	109
IN	107
MD	99
CO	96
MN	94
NY	84
NE	80
WA	75
UT	74
AR	71
OK	60
MS	58
MA	57
CT	52
NM	51
NJ	45
IA	41
WV	39
PR	36
Other/Blank	36
ID	35
WY	25
OR	23
HI	22
ME	22
NH	20
MT	20
GU	13
RI	12
SD	12
DE	10
VT	8
AK	5
<b>Total</b>	<b>11,088</b>

# ENDNOTES

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<sup>1</sup> [atf fact sheet 0.pdf](#)

<sup>2</sup> ATF Final Rule 2021R-05F: Definition of "Frame or Receiver" and the Identification of Firearms remains in effect until the United States Supreme Court issues its decision. Oral argument was held before the Supreme Court on October 8, 2024, and a decision is expected in early-2025. See *VanDerStok v. Garland*, 86 F.4th 179 (5th Cir. 2023), cert. granted, 144 S. Ct. 1390 (Apr. 22, 2024) (No. 23-852).

<sup>3</sup> See *NFCTA Volume I Part II*.

<sup>4</sup> PMF state law citations: CA - Cal. Penal Code §§ 24160 and 29180; CO - Senate Bill 23-279; CT - Conn Gen Stat 29-36a, 29-36b; DC - D.C. Code § 7-2502.02; DE - Del. Code Ann. tit. 11. §§ 1459 A, 1462 and 1463; HI - Haw. Rev. Stat. § 134-10.2; IL - 720 ILCS 5/24-5.1; MA - MGL ch 269, secs 11B, 11C; MGL ch 140, sections 121C, 121D; MD - Md. Code Pub. Safety §§ 5-701 - 5-706; MN - Minn. 609.667; NV - Nev. Rev. Stats. §§ 202.253(9), 202.3625, 202.363; NJ - SB 2846 Amending N.J.S.2C:39-9(k); NY - Penal Law 265.01 (9); OR - Or. Rev. Stat 166.210(17); RI - RI Gen L § 11-47-8(e); VT - 13 VSA 4083, 4084; WA - RCW 9.41.326; WY - WSA 6-8-404

<sup>5</sup> U.S. Department of Justice, National Firearms Commerce and Trafficking Assessment, Part II: Firearm Trafficking Channels and Methods Used, April 2024, Retrieved From: <https://www.atf.gov/firearms/docs/report/nfcta-volume-iii-part-iii/download>

<sup>6</sup> California Department of Justice, Office of Gun Violence Prevention, *California's Fight Against the Ghost Gun Crisis: Progress and New Challenges*, October 2024, Retrieved from: <https://oag.ca.gov/system/files/media/ogvp-report-ghost-guns.pdf>.

<sup>7</sup> For purposes of this section the term "Homicide" includes the following NCIC crimes that have been listed on trace request forms: Homicide, Homicide-Attempted; Homicide Willful Kill Gun; Homicide Willful Kill Non-Family; Homicide Willful Kill-Weapon; Homicide Willful Kill-Police Officer; Homicide Willful Kill Family; Homicide Negligent Manslaughter Weapon; Homicide John or Jane Doe No Warrant.

<sup>8</sup> For purposes of this section the term "Other Violence Crime Offenses" includes the following NCIC crimes that have been listed on trace request forms: Aggravated Assault – Family – Strongarm; Aggravated Assault – Nonfamily Gun; Aggravated Assault – Police Officer Strongarm; Aggravated Assault – Police Officer Weapon; Aggravated Assault – Family Gun; Aggravated Assault – Family Weapon; Aggravated Assault – Gun; Aggravated Assault – Nonfamily Weapon; Aggravated Assault – Public Official Gun; Aggravated Assault – Police Official Gun; Aggravated Assault – Weapon; Arson; Arson – Residential Defraud Insurer; Arson – Residential Endanger Life; Arson – Residence; Assault; Burning; Burglary; Burglary – Non-forced Residence; Burglary – Forced Entry Residence; Burglary – Forced Non-Residence; Carjacking – Armed; Domestic Disturbance; Domestic Violence; Escape; Escape from Custody; Explosives – Possession; Explosives – Teaching Use; Explosives – Transporting; Extortion; Forcible Purse Snatching; Incendiary Device – Possession; Hit and Run; Incendiary Device – Teaching Use; Incendiary Device – Transporting; Intimidation (includes stalking); Kidnap Hostage for Escape; Kidnap Adult; Kidnap Adult for Ransom; Kidnap Minor for Ransom; Kidnapping; Rape – Strongarm; Rape – Gun; Riot; Resist Officer; Riot – Interfere Firearm; Riot – Interfere Officer; Robbery; Robbery Business Strongarm; Robbery – Banking Type Institution; Robbery – Business Gun; Robbery - Business Weapon; Robbery – Residence Gun; Robbery – Residence Strongarm; Robbery – Residence Weapon; Robbery – Street Gun; Robbery – Street Strongarm; Robbery – Street Weapon; Sedition; Sex Assault; Sex Assault – Sodomy Woman Weapon; Simple Assault; Statutory Rape No Force; Terroristic Threats; Threat to Bomb; Threat to Burn; Treason.

<sup>9</sup> See *NFCTA Volume III, Part I - Methodology*

<sup>10</sup> See *NFCTA Volume III, Part V, Table TVF-03*

<sup>11</sup> See *NFCTA Volume III, Part VI, Table CFT-04*