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10  
11 IN THE UNITED STATES DISTRICT COURT  
12 FOR THE CENTRAL DISTRICT OF CALIFORNIA  
13  
14

15 **LANCE BOLAND, ET AL.,**  
16 Plaintiffs,  
17  
18 **v.**  
19 **ROB BONTA, IN HIS OFFICIAL**  
**CAPACITY AS ATTORNEY GENERAL OF**  
**THE STATE OF CALIFORNIA, ET AL.**  
20 Defendants.  
21

Case No. 8:22-cv-01421-CJC-ADS

**REQUEST FOR JUDICIAL  
NOTICE IN SUPPORT OF  
DEFENDANT'S FIRST CLOSING  
BRIEF FOLLOWING  
EVIDENTIARY HEARING ON  
PLAINTIFFS' MOTION FOR A  
PRELIMINARY INJUNCTION**

Courtroom: 9B  
Judge: Hon. Cormac J. Carney  
Trial Date: None set  
Action Filed: August 1, 2022

1 Under Federal Rule of Evidence 201, Defendant Attorney General Rob Bonta  
2 respectfully requests the Court to take judicial notice of **Defendant's Exhibit 29**,<sup>1</sup>  
3 which is the Introduction to Volume II (Crime Gun Intelligence and Analysis) of  
4 the National Firearms Commerce & Trafficking Assessment ("NFCTA"), and  
5 **Defendant's Exhibit 30**, which is Part III (Crime Guns Recovered and Traced  
6 within the United States and its Territories) of Volume II of the NFCTA. These  
7 documents were published by the U.S. Bureau of Alcohol, Tobacco, Firearms, and  
8 Explosives ("ATF"), and the publication was announced on February 1, 2023.  
9 Press Release, United States Department of Justice, *Justice Department Announces*  
10 *Publication of Second Volume of National Firearms Commerce and Trafficking*  
11 *Assessment* (Feb. 1, 2023), [https://www.justice.gov/opa/pr/justice-department-](https://www.justice.gov/opa/pr/justice-department-announces-publication-second-volume-national-firearms-commerce-and)  
12 [announces-publication-second-volume-national-firearms-commerce-and](https://www.justice.gov/opa/pr/justice-department-announces-publication-second-volume-national-firearms-commerce-and).

13 **Defendant's Exhibit 29** is publicly available at this hyperlink,  
14 <https://www.atf.gov/firearms/docs/report/nfcta-volume-ii-intro/download>.

15 **Defendant's Exhibit 30** is publicly available at this hyperlink,  
16 [https://www.atf.gov/firearms/docs/report/nfcta-volume-ii-part-iii-crime-guns-](https://www.atf.gov/firearms/docs/report/nfcta-volume-ii-part-iii-crime-guns-recovered-and-traced-us/download)  
17 [recovered-and-traced-us/download](https://www.atf.gov/firearms/docs/report/nfcta-volume-ii-part-iii-crime-guns-recovered-and-traced-us/download). The other parts within the NFCTA Volume II  
18 are available at this hyperlink, [https://www.atf.gov/firearms/national-firearms-](https://www.atf.gov/firearms/national-firearms-commerce-and-trafficking-assessment-nfcta-crime-guns-volume-two)  
19 [commerce-and-trafficking-assessment-nfcta-crime-guns-volume-two](https://www.atf.gov/firearms/national-firearms-commerce-and-trafficking-assessment-nfcta-crime-guns-volume-two).

20 The Court may take judicial notice of any fact that is "not subject to  
21 reasonable dispute because it: (1) is generally known within the trial court's  
22 territorial jurisdiction; or (2) can be accurately and readily determined from sources  
23 whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201(b)(1)-(2). A  
24 court shall take judicial notice of such a fact if requested by a party and supplied  
25 with the necessary information. *Id.* 201(c)(2).

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27 <sup>1</sup> This exhibit number follows the 28 Defendant exhibits admitted at the  
28 evidentiary hearing on Plaintiffs' Motion for a Preliminary Injunction. ECF Nos.  
48, 53.

Courts may take judicial notice of “records and reports of administrative bodies,” such as government reports, as well as “information obtained from government websites. *Allergan USA, Inc. v. Prescribers Choice, Inc.*, 364 F. Supp. 3d 1089, 1095 (C.D. Cal. 2019) (citing *United States v. Ritchie*, 342 F.3d 903, 909 (9th Cir. 2003) and taking judicial notice of five federal Food and Drug Administration (“FDA”) documents available on the FDA’s website); *see also Eastman v. Thompson*, 594 F. Supp. 3d 1156, 1167, n.2 (C.D. Cal. 2022) (taking judicial notice of “government reports”); *Garcia v. City of Los Angeles*, 481 F. Supp. 3d 1031, 1036, n.4 (taking judicial notice of “government reports” prepared by the city’s Bureau of Sanitation). **Defendant’s Exhibits 29 and 30** are part of a government report published by a federal bureau and is publicly available on the ATF’s website at the hyperlinks provided above. Accordingly, **Defendant’s Exhibits 29 and 30** are properly subject to judicial notice under Federal Rule of Evidence 201(b).

Dated: February 24, 2023

Respectfully submitted,

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# **DEFENDANT'S EXHIBIT 29**



# **NATIONAL FIREARMS COMMERCE AND TRAFFICKING ASSESSMENT (NFCTA):**

**Crime Gun Intelligence and Analysis  
Volume Two**

# INTRODUCTION

The National Firearms Commerce and Trafficking Assessment (NFCTA) is a comprehensive examination of commerce in firearms in the United States and the diversion of firearms to illegal markets. Produced by a team comprised of ATF subject-matter experts, academics from a variety of disciplines specializing in research relating to firearms, and other law enforcement professionals, the NFCTA is designed to provide the public, researchers, and policymakers with analysis of data lawfully collected by ATF as part of its regulatory and law enforcement missions to inform the dialogue on firearm law and policy. To ensure comprehensive analysis, the NFCTA is being produced in several volumes. In May 2022, ATF published Volume I, *Firearms in Commerce*. Volume I presents data, information, and analysis specific to the manufacture, import, export, and sale of firearms by the regulated firearms industry in the United States. This second volume of the NFCTA, *Crime Gun Intelligence and Analysis*, focuses on data, information, and analysis relating to crime guns recovered by law enforcement during domestic and international investigations. Importantly, ATF accesses this data and information pursuant to specific statutory authorities and within the restrictions set by Congress to protect the privacy of lawful firearms owners.

The information that ATF relies upon to execute its law enforcement mission of protecting the public from firearm-related violence is derived from several sources. Collectively known as “Crime Gun Intelligence” (“CGI”) these sources include crime gun trace results derived from records that federal law requires federal firearms licensees (FFLs) to maintain about firearms they manufacture and distribute; ballistics data and analysis generated by ATF’s National Integrated Ballistic Information Network (NIBIN); and investigative information developed by ATF agents, other federal law enforcement agencies (LEAs), and local, state, territorial, tribal, and international law enforcement partners. Using these information sources, ATF routinely generates bulletins for law enforcement and industry, and issues public safety advisories for all citizens. This Volume of the NFCTA, however, represents the first comprehensive report incorporating crime gun information from the full range of sources used by ATF in more than twenty years. Advancements in ballistic analytical technology and information processing during this period have enhanced ATF’s capacity to support law enforcement efforts to identify, investigate, and prosecute those who use firearms to commit violent offenses and the traffickers who illegally divert those crime guns to criminals. Volume II describes in detail the sources of information that constitute CGI, and how CGI is leveraged to promote effective investigation of firearm-related violence.

Finally, the information and analysis in NFCTA Volumes I and II set the foundation for the subject that will be addressed in Volume III, *Firearms Trafficking*.

## Records Maintained by FFLs

The Gun Control Act of 1968 (GCA) requires any individual or entity engaged in the business of manufacturing firearms or ammunition to obtain an FFL. The nine different types of licenses, which are explained in detail in NFCTA Volume I, are:

- Type 01, Dealer in Firearms Other Than Destructive Devices
- Type 02, Pawnbroker in Firearms Other Than Destructive Devices
- Type 03, Collector of Curios and Relics
- Type 06, Manufacturer of Ammunition for Firearms Other Than Ammunition for Destructive Devices or Armor Piercing Ammunition
- Type 07, Manufacturer of Firearms Other Than Destructive Devices
- Type 08, Importer of Firearms Other Than Destructive Devices or Ammunition for Firearms Other Than Destructive Devices, or Ammunition Other Than Armor Piercing Ammunition
- Type 09, Dealer in Destructive Devices
- Type 10, Manufacturer of Destructive Devices, Ammunition for Destructive Devices or Armor Piercing Ammunition
- Type 11, Importer of Destructive Devices, Ammunition for Destructive Devices or Armor Piercing Ammunition

The GCA requires all licensed importers and manufacturers to identify each firearm imported or manufactured by means of a serial number engraved or cast on the frame or receiver of the weapon, in such manner directed by the Attorney General through the promulgation of regulations. Firearms markings also include the manufacturer or importer name, city and state of manufacturer or country of origin, model designation (if assigned), and caliber or gauge. These unique identifiers are used by FFLs to effectively track their firearm inventories and maintain required records. Specifically, all FFLs are required to maintain an acquisition and disposition (A&D Record) of every firearm acquired and subsequently transferred. The acquisition records must include the manufacturer, model, serial number, type, and caliber of the firearm, as well as the date it was acquired and from whom it was acquired. The disposition information must include the date the FFL physically transferred the firearm and the name and address of the individual, or name and FFL number, to whom the firearm was transferred. FFLs that discontinue business are required under the GCA to submit their firearm transaction records to the ATF Out of Business Records Center.

These GCA provisions enable ATF to trace the transactional history of a crime gun.<sup>1</sup> Crime gun tracing is an investigative tool that provides critical information to LEAs to assist in solving and preventing firearm-related crimes. Tracing is the systematic process of tracking the movement of a firearm from its first sale by the manufacturer or importer through the distribution chain (wholesaler/retailer) to the *first retail purchaser*. In some cases, a firearm may reenter regulated commerce after the original retail sale. To help identify when a firearm is resold by an FFL and determine the identity of the subsequent, more recent purchaser ATF has developed the Firearm Resale Program, which is further described in Part II (National Tracing Center Overview). These subsequent, more recent retail purchasers are referred by ATF and law enforcement as the *last known purchaser*.

ATF is the sole federal agency authorized to contact FFLs and request firearms transaction information during the completion of a crime gun trace. In 1972, ATF established the National Tracing Center (NTC) whose mission is to conduct crime gun tracing accurately and efficiently. Part II of this Volume evaluates the overall workload and performance of the NTC in tracing crime guns and providing investigative leads and strategic information to LEAs. The NTC is

only authorized to trace a crime gun for a LEA involved in a bona fide criminal investigation. When the NTC receives a trace request, the NTC uses the firearm's markings and A&D Records maintained by the FFLs or housed at the Out of Business Records Center to trace the firearm through its chain of custody. FFLs must respond to a trace request from ATF within 24 hours. The chain of custody and purchaser information is then made available to the requesting agency for criminal intelligence purposes.

The crime gun tracing process requires the NTC to interact with federal, state, local, territorial, tribal, and international LEAs, as well as with FFLs. As such, crime gun tracing is inherently dependent upon the completeness and accuracy of FFL records. If requesting LEAs submit inaccurate or incomplete requests, such as an inadequate firearm description, this will result in unsuccessful traces and reduce strategic and actionable intelligence development. ATF continually strives to improve the data quality and accuracy of submitted and processed trace requests through operational and technological enhancements. For example, since 2003, ATF has been promoting and expanding its eTrace system, a 24/7 web-based system that allows domestic and international LEAs to conduct comprehensive crime gun tracing and more quickly develop investigative strategies to reduce violent crime.

The GCA authorizes ATF to analyze crime gun trace data and publish reports with statistical aggregate data. Parts III (Crime Guns Recovered and Traced Within the United States and Its Territories) and IV (Crime Guns Recovered Outside the United States and Traced by Law Enforcement) of this Volume presents data on crime guns recovered within the U.S. and foreign countries. Those recovered and traced within the U.S. are broken down in a variety of ways, including by state and selected city. Cities were divided among four population groups based on 2020 U.S. Census data. From within each population group, the top ten cities with the highest number of crime guns recovered between 2017 and 2021 and traced were selected and used throughout this Volume as reflected in Table INT-01.

*Table INT-01: Top Ten Selected U.S. Cities Within Four Population Groups*

<b>Mega Cities</b>	<b>Large Cities</b>	<b>Medium Cities</b>	<b>Small Cities</b>
<i>(Populations of 1,000,000 residents or greater)</i>	<i>(Populations of 500,000 to 999,999 residents)</i>	<i>(Populations of 250,000 to 499,999 residents)</i>	<i>(Populations of 100,000 to 249,999 residents)</i>
Chicago, IL	Baltimore, MD	Atlanta, GA	Baton Rouge, LA
Dallas, TX	Charlotte, NC	Cincinnati, OH	Chattanooga, TN
Houston, TX	Columbus, OH	Cleveland, OH	Columbia, SC
Los Angeles, CA	Detroit, MI	Miami, FL	Dayton, OH
New York, NY	Indianapolis, IN	New Orleans, LA	Huntsville, AL
Philadelphia, PA	Jacksonville, FL	Orlando, FL	Mobile, AL
Phoenix, AZ	Las Vegas, NV	Saint Louis, MO	Richmond, VA
San Antonio, CA	Louisville, KY	Tampa, FL	San Bernardino, CA
San Diego, CA	Memphis, TN	Tulsa, OK	Shreveport, LA
San Jose, CA	Milwaukee, WI	Wichita, KS	Winston Salem, NC

The data included in Parts III and IV is frequently used by LEAs to detect firearms trafficking. Firearm trace data allows ATF to calculate *time-to-crime* (TTC), the length of time between the date of a firearm's last known purchase to the date of its recovery in a crime. A short TTC suggests that traced crime guns were rapidly diverted from lawful firearms commerce into criminal hands. Through ATF's Firearm Resale Program, *described above*, ATF is able to obtain

information that results in shorter TTC rates. Investigating crime guns with short TTC allows LEAs to identify sources of crime guns and disrupt the flow of illegal firearms trafficking.

Firearm trace data also identifies patterns and trends on the age and gender of the firearm purchaser, as well as the license type of the FFL that transferred the crime gun. This information allows ATF and law enforcement partners to focus investigations and compliance efforts on FFL types most at risk to be wittingly or unwittingly involved in criminal diversion. For example, while Type 01, 02, 07, 08, 09, 10, and 11 FFLs are all authorized to engage in transfer of firearms, between 2017 and 2021, nearly all crime guns traced to an FFL with a known purchaser were transferred by 01, 02, or 07 FFLs. (Type 06 FFLs are only authorized to engage in commerce involving the manufacturing of ammunition and Type 03 FFLs are not authorized to engage in the business of manufacturing, importing, or dealing in firearms. Consequently, Type 03 and 06 FFLs are infrequently referenced in this report.)

The NTC manages numerous programs and sections that provide valuable firearms information in support of firearms tracing. As merely one example discussed throughout this Volume, FFLs are required by law to report any firearm lost or stolen from their inventory within 48 hours of discovery to ATF. The NTC receives these reports and is able to develop investigative leads if any of these firearms are subsequently recovered and traced. This information, as shown in Part V (Firearm Thefts), can help identify patterns in characteristics and firearms involved in FFL thefts. Between 2017 and 2021, the most commonly stolen firearms from an FFL were 9mm caliber and the type of firearms most commonly stolen were pistols. Somewhat unsurprisingly, this follows patterns in lawful firearm commerce that was reported in NFCTA Volume I, which showed consumer preferences for pistols in general and 9mm pistols in particular.

## **Ballistic Data and Information**

ATF also develops, analyzes, and distributes intelligence data through NIBIN. Covered in detail in Parts I (National Integrated Ballistic Information Network) and VI (NIBIN & Ballistic Evidence) of this Volume, since 1997, NIBIN has been imaging and storing information on ballistic evidence from shooting scenes and recovered firearms that can aid in solving and preventing firearm-related crime. NIBIN technology identifies and analyzes the unique markings that a firearm imprints on casings when fired. These unique markings allow NIBIN to analyze ballistic evidence to identify potential matches between casings and firearms. These matches, commonly referred to as “NIBIN leads,” enable LEAs to identify, investigate, and arrest shooters and the traffickers who illegally supply them.

In 2018, ATF began development of the NIBIN Enforcement Support System (NESS), an investigative tool that overlays NIBIN data with local law enforcement shooting and gun recovery case information on one web-based platform. As described in Part VI, NESS provides near real-time information on interrelated violent firearm crime to law enforcement. This includes information that allows the identification of the *time-to-first shooting* (TTFS), which is the number of days between a recovered crime gun’s last known retail purchase and its first shooting event. Like a short TTC, a TTFS is an indicator of illegal firearm trafficking as it suggests a crime gun was discharged in the commission of a crime shortly after it was purchased. Together, TTC and TTFS provide a more comprehensive understanding of a firearm’s criminal

use history and can assist LEAs in investigating the underlying crimes and the methods that criminals use to obtain crime guns.

During the more than twenty-year period since ATF last issued comprehensive reports to the general public on crime gun analysis, advances in information processing and NIBIN technology have undergone significant improvement enhancing ATF's capacity to develop actionable intelligence and leads for law enforcement investigations of shootings and firearm trafficking crimes. ATF has combined this increased capacity with other investigative tools through its CGI strategy. CGI layers trace and NIBIN data with all other available information about crime guns to generate more timely and valuable investigative leads for both ATF investigations and those conducted by law enforcement partners, particularly local agencies that are almost always the first responders to shooting incidents. As described in Part VI, by further incorporating investigative information from law enforcement partners with trace and NIBIN information, ATF's NESS program is further enhancing the strategic effectiveness of CGI. Notwithstanding these substantial and promising developments, Part VII (Recommendations and Future Enhancements) of this Volume identifies opportunities for ATF and law enforcement partners to enhance lawful access, collection, and analysis of crime gun information to improve effective gun violence reduction efforts.

Each part of this Volume includes a conclusion which summarizes the underlying data and incorporates context as to the meaning of the data and information. Academic studies, reports and concepts introduced in these sections are based on how the academic contractors and other law enforcement experts associated with this project interpret the data.

### **ATF Firearms Trace Data Disclaimer**

*Firearm traces are designed to assist law enforcement authorities in conducting investigations by tracking the sale and possession of specific firearms. Law enforcement agencies may request firearms traces for any investigative reason, and those reasons are not necessarily reported to the federal government. Not all firearms used in crime are traced and not all firearms traced are used in crime.*

*Firearms selected for tracing are not chosen for purposes of determining which types, makes or models of firearms are used for illicit purposes. The firearms selected do not constitute a random sample and should not be considered representative of the larger universe of all firearms used by criminals, or any subset of that universe. Firearms are normally traced to the first retail seller, and sources reported for firearms traced do not necessarily represent the sources or methods by which firearms in general are acquired for use in crime.*

### **Data Limitations**

The data analyzed in this report represent crime guns and crime gun evidence recovered by LEAs between 2017 and 2021 that were submitted to ATF for tracing (Firearms Tracing System (FTS)) and/or processed for ballistic evidence (NIBIN). Firearm tracing and ballistic imaging policies and practices vary across LEAs. For those jurisdictions with comprehensive firearm tracing and ballistic imaging policies in place, crime gun trace data and ballistic imaging data can be considered representative samples of the population of guns used by offenders in those jurisdictions. As such, the analytic results presented in this report are limited to this sample of recovered crime guns and crime gun evidence and are not necessarily representative of all crime guns used by offenders in the U.S. or in other countries during the study period.

## ENDNOTES

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<sup>1</sup>A “crime gun” is any firearm used in a crime or identified by law enforcement as suspected of having been used in a crime.

# **DEFENDANT'S EXHIBIT 30**

## PART III:

# Crime Guns Recovered and Traced Within the United States and Its Territories

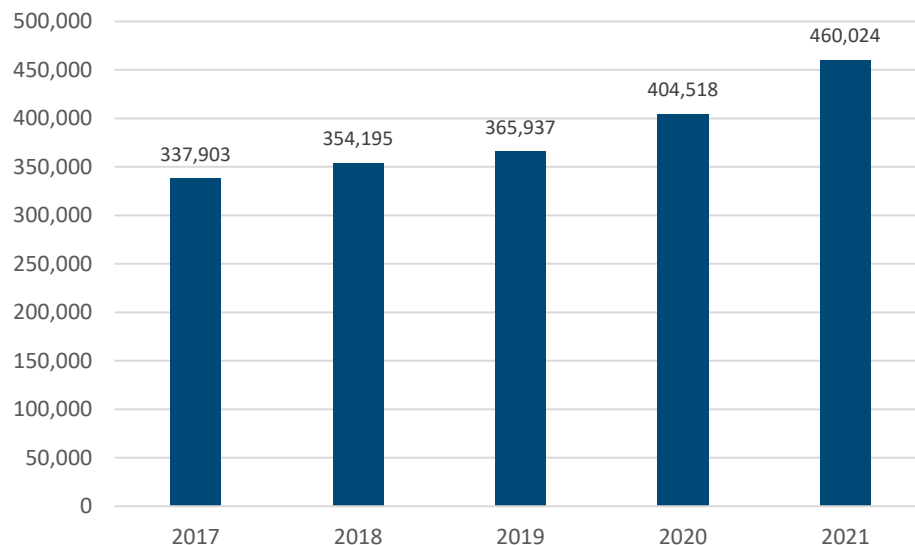
### Overview of Crime Gun Tracing

#### *Total Number of Crime Guns Traced*

Law enforcement agencies submitted a total of 1,922,577<sup>1</sup> crime guns to ATF for tracing between 2017 and 2021. During this period, most of the trace requests made by LEAs were routine priority submissions (99%; 1,895,421 of 1,922,577), while a very small share of trace requests were urgent priority submissions (1%; 27,156 of 1,922,577). An urgent trace is deemed necessary when the criminal violations are significant, and circumstances warrant or require that the firearm be traced without undue delay. Examples of this include mass shootings, homicides, bank robberies, and other immediate threats to officer and public safety.

The total number of annual crime gun trace requests increased by 36% from 2017 (337,903) to 2021 (404,024) (Figure OFT-01). The largest single year increase occurred when the number of crime gun trace requests rose by 14% from 2020 (404,518) to 2021 (460,024).

**Figure OFT-01: Total Number of Crime Gun Trace Requests, 2017 – 2021**



As reflected in Table OFT-01a, California LEAs had the highest number of crime gun traces between 2017 and 2021 (12%; 231,784). Other states with the highest numbers of crime gun traces included Texas, Florida, North Carolina, and Illinois. Hawaii LEAs had the lowest number of crime gun traces

between 2017 and 2021 (<1%; 1,194). Other states with the lowest numbers of crime gun traces included Vermont, Wyoming, Rhode Island, and New Hampshire.

**Table OFT-01a: Most Frequent and Least Frequent Crime Guns Traces by State, 2017 – 2021**

Most Frequent States			Least Frequent States		
State	Number	Percent	State	Number	Percent
California	231,784	12.1%	Hawaii	1,194	0.1%
Texas	177,786	9.3%	Vermont	1,256	0.1%
Florida	134,601	7.0%	Wyoming	1,665	0.1%
North Carolina	90,225	4.7%	Rhode Island	2,570	0.1%
Illinois	90,014	4.7%	New Hampshire	2,629	0.1%

See Table OFT-01 in Appendix OFT – Overview of Firearm Tracing for a full ranking of U.S. states and territories by traced crime guns between 2017 and 2021.

Between 2017 and 2021, among cities with populations of 1,000,000 residents or greater (“mega cities”), Chicago had the largest number of crime gun traces (50,312) followed by Houston, Los Angeles, Philadelphia, and Dallas (Table OFT-02a). Detroit submitted the largest number of crime gun traces (26,065) among cities with populations of 500,000 to 999,999 residents (“large cities”). Atlanta had the largest number of crime gun traces (15,333) among cities with populations of 250,000 to 499,999 residents (“medium cities”). Baton Rouge had the largest number of crime gun traces (8,544) among cities with populations of 100,000 to 249,999 residents (“small cities”).

**Table OFT-02a: Most Crime Gun Traces by City Population Groups, 2017 - 2021**

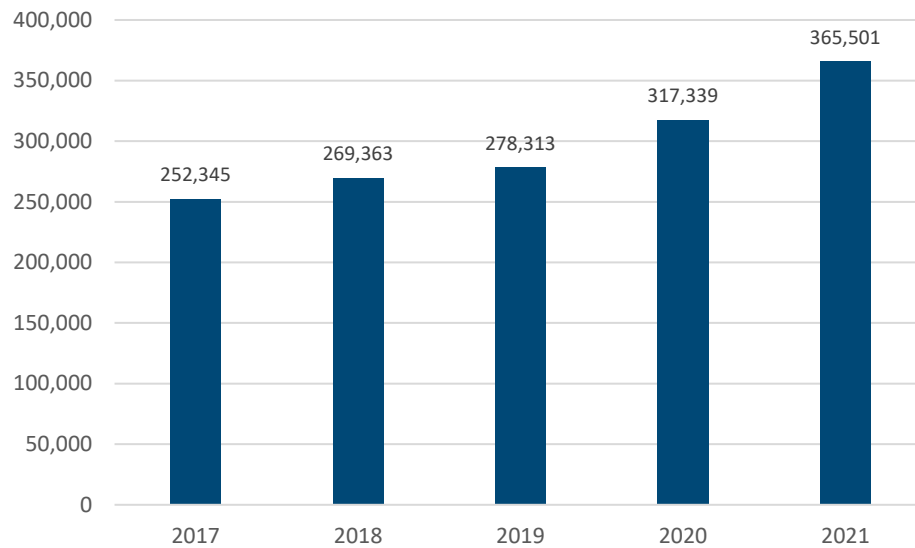
Mega Cities		Large Cities		Medium Cities		Small Cities	
City	Number	City	Number	City	Number	City	Number
Chicago, IL	50,312	Detroit, MI	26,065	Atlanta, GA	15,333	Baton Rouge, LA	8,544
Houston, TX	45,812	Memphis, TN	24,796	Saint Louis, MO	14,672	Richmond, VA	7,056
Los Angeles, CA	30,798	Las Vegas, NV	23,389	Orlando, FL	11,177	Columbia, SC	6,279
Philadelphia, PA	23,460	Indianapolis, IN	20,242	Tampa, FL	10,376	Chattanooga, TN	5,775
Dallas, TX	19,756	Louisville, KY	15,331	Cincinnati, OH	9,982	Huntsville, AL	5,773

See Table OFT-02 in Appendix OFT – Overview of Firearm Tracing for selected U.S. cities by population grouping ranked by the frequency of crime guns traces between 2017 and 2021.

### ***Traced to Purchaser***

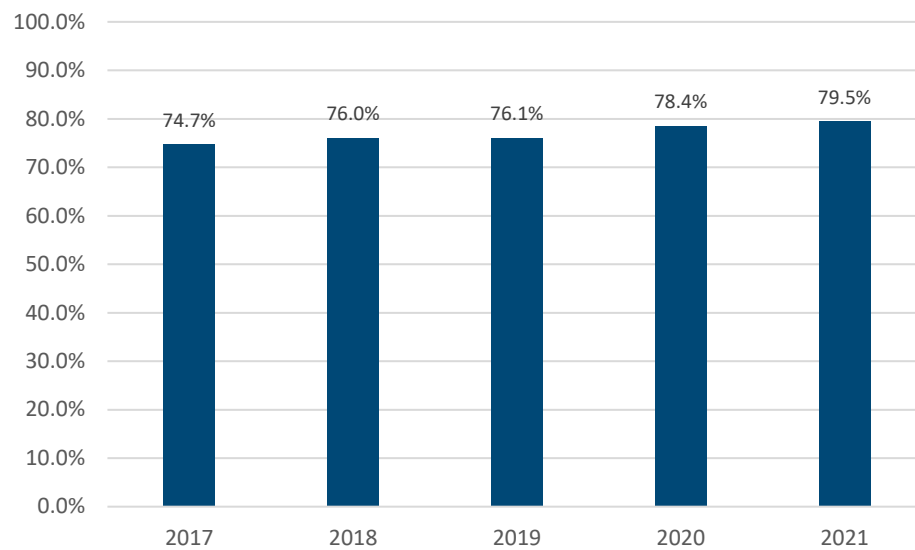
Between 2017 and 2021 there were 1,922,577 requested crime gun traces, of which ATF was able to determine the purchaser in 77% (1,482,861). Similar to the increase in the total number of crime guns submitted for tracing by LEAs, the number of crime guns traced to a purchaser increased by 45% from 2017 (252,345) to 2021 (365,501) (Figure OFT-02).

**Figure OFT-02: Total Number of Crime Guns Traced to Purchaser, 2017 – 2021**



The percentage of crime gun traces in which a purchaser was identified increased by five percentage points over the course of the study period from 75% (252,345 of 337,903) in 2017 to 80% in 2021 (365,501 of 460,024) (Figure OFT-03).

**Figure OFT-03: Percentage of Crime Guns Traced to Purchaser, 2017 – 2021**



From 2017 to 2021, the percentage of crime guns traced to a purchaser varied across U.S. states (Table OFT-03a). Wisconsin had the highest percentage of crime guns traced to a purchaser (85%) followed by South Carolina, Georgia, Ohio, and Alabama. Hawaii had the lowest percentage of crime guns traced to a purchaser (60%) followed by California, New Jersey, New York, and Connecticut.

**Table OFT-03a: Highest and Lowest Percentage of Crime Guns Traced to Purchaser by State, 2017 – 2021**

Highest Percentages Traced to Purchaser		Lowest Percentages Traced to Purchaser	
State	Percent	State	Percent
Wisconsin	84.8%	Hawaii	60.1%
South Carolina	84.3%	California	61.9%
Georgia	84.1%	New Jersey	65.6%
Ohio	83.5%	New York	66.2%
Alabama	83.1%	Connecticut	66.5%

See Table OFT-03 in Appendix OFT – Overview of Firearm Tracing for a full ranking of U.S. states and territories by the percentage of crime guns traced to a purchaser between 2017 and 2021.

From 2017 to 2021, the percentage of crime guns traced to a purchaser also varied across selected U.S. cities (Table OFT-04a). Milwaukee had the highest percentage of crime guns traced to a purchaser (88%) followed by Orlando, Columbia, Mobile, and Jacksonville. San Diego had the lowest percentage of crime guns traced to a purchaser (58%) followed by Baltimore, Los Angeles, San Jose, and New York.

**Table OFT-04a: Highest and Lowest Percentage of Crime Guns Traced to Purchaser by City, 2017 – 2021**

Highest Percentages Traced to Purchaser		Lowest Percentages Traced to Purchaser	
City	Percent	City	Percent
Milwaukee, WI	88.3%	San Diego, CA	57.9%
Orlando, FL	87.6%	Baltimore, MD	60.4%
Columbia, SC	87.4%	Los Angeles, CA	63.8%
Mobile, AL	87.0%	San Jose, CA	67.1%
Jacksonville, FL	86.2%	New York, NY	67.9%

See Table OFT-04 in Appendix OFT – Overview of Firearm Tracing for a full ranking of selected U.S. cities by population grouping by the percentage of crime guns traced to a purchaser between 2017 and 2021.

### ***Crime Guns Not Traced to a Purchaser***

Table OFT-05 reflects the results of ATF attempts to trace crime guns to a purchaser.<sup>2</sup> The most frequent reasons for a trace not identifying a purchaser included: incomplete or invalid firearm information provided by the law enforcement agency submitting the request (7%; 137,765); the FFL did not have acquisition and disposition (A&D) records (5%; 95,395); the firearm was too old to trace and/or manufactured before the 1968 Gun Control Act required manufacturers to mark firearms with serial numbers (3%; 65,945); the serial numbers on the firearms had been obliterated (3%; 48,601); and the firearm was traced to a government agency, law enforcement agency, or the US Military (1%; 25,904).

**Table OFT-05: Reasons Crime Guns are Not Traced to a Purchaser, 2017 – 2021**

<b>Trace Completion Status</b>	<b>Number</b>	<b>Percent</b>
Incomplete / Invalid Firearm Information Provided	137,765	7.2%
FFL Acquisition and Disposition Record Missing	95,395	5.0%
Pre-1968 Firearm Manufacture / Too Old to Trace	65,945	3.4%
Obliterated Serial Number	48,601	2.5%
Traced to Government Entity, Law Enforcement Agency, or Military	25,904	1.3%
Other	66,106	3.4%
<b>Total</b>	<b>439,716</b>	

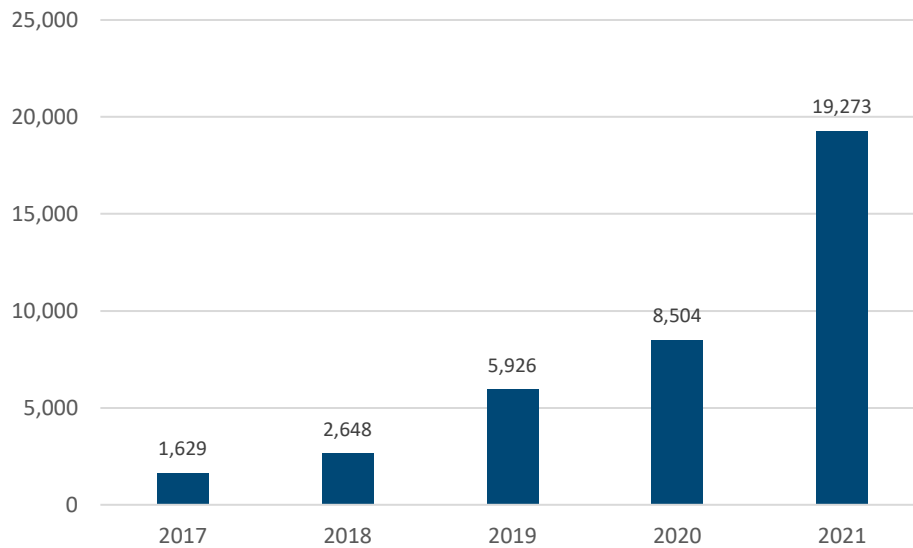
### ***Privately Made Firearms***

Law enforcement agencies recovered and submitted 37,980 suspected privately made firearms<sup>3</sup> (PMFs) to ATF for tracing between 2017 and 2021. It is probable that current trace data significantly underrepresents the number of PMFs recovered in crimes by LEAs due to a variety of challenges presented by PMFs, to include:

- PMFs involvement in crime is an emerging issue and LEAs are just beginning to institute uniform training on the recognition, identification, and reporting of PMFs that can lead to more accurate PMF data being collected.
- PMFs by their nature may have no markings at all, duplicative markings, counterfeit markings, or markings that appear to be serial numbers on parts of the firearm other than the frame or receiver. 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 PMF and/or potentially follow false leads based on these markings.

As Figure OFT-04 reflects, the number of suspected PMFs recovered by law enforcement agencies and submitted to ATF for tracing increased by 1,083% from 2017 (1,629) to 2021 (19,273). The dramatic rise in trace submissions involving PMF's reflects both increased criminal use of these firearms and enhanced awareness among law enforcement that ATF will process trace requests for PMFs. In particular, the substantial increase in PMF trace submissions since 2020 is in part attributable to education, outreach, and training that ATF has provided to LEAs on how to identify PMFs and the importance of submitting them for tracing. In September 2020, ATF issued guidance to all eTrace users explaining how to identify and trace PMFs. This guidance was formalized in the updated ATF Publication 3312.12 – Police Officer's Guide to Recovered Firearms. In 2021, ATF trained more than 1,700 law enforcement personnel in approximately 14 PMF presentations across the country.

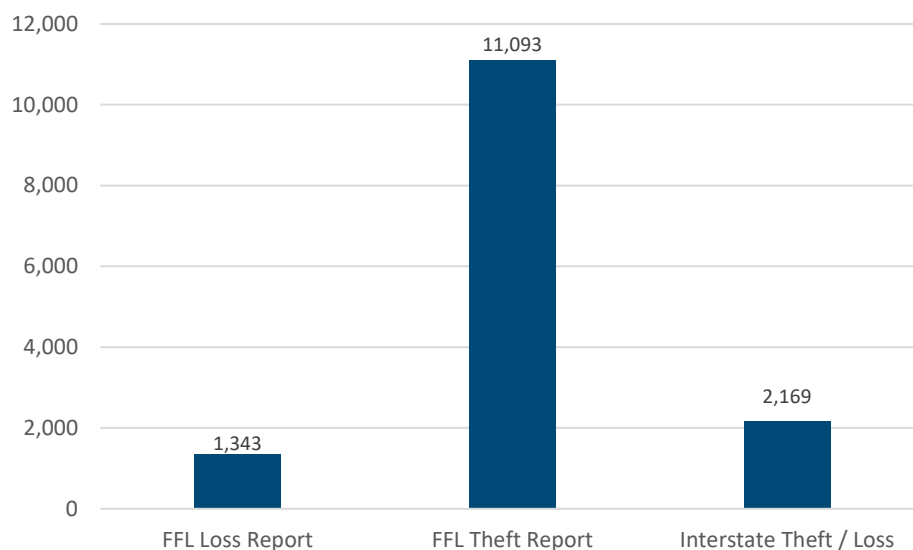
**Figure OFT-04: Suspected PMFs Recovered and Traced, 2017 – 2021**



***Firearms Recovered and Traced Associated with Reported FFL Theft, FFL Loss, and Interstate Shipment Theft / Loss***

Between 2017 and 2021, 14,605 crime guns were recovered and traced by LEAs and determined by ATF to be associated with FFL theft, FFL loss, and interstate shipment theft / loss reports. Some 11,093 crime guns were associated with FFL theft reports<sup>4</sup>, 1,343 were associated with FFL loss reports, and 2,169 were associated with Interstate shipment theft / loss reports<sup>5</sup> (Figure OFT-05). As described in Part V of this report, FFL theft, FFL loss, and Interstate shipment theft / loss reports represent a small fraction of total firearm theft in the U.S.

**Figure OFT-05: Recovered and Traced Crime Guns associated with Reported FFL Theft, FFL Loss, and Interstate Shipment Theft/ Loss, 2017 – 2021**



### ***Crime Gun Traces by FFL Type***

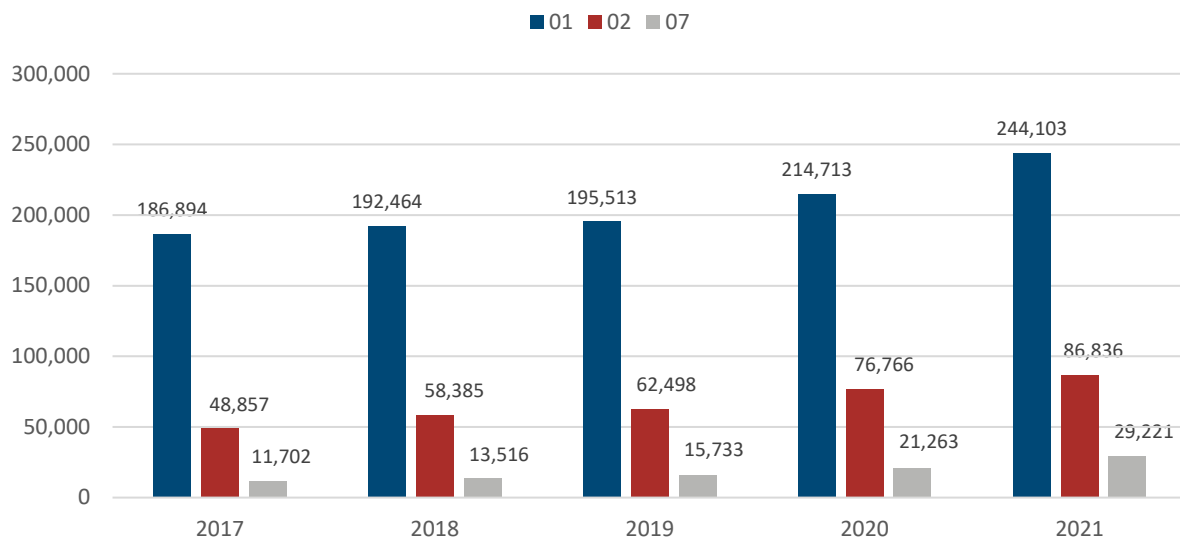
Between 2017 and 2021, 1,473,105 crime guns were traced to a known purchaser and an FFL type was also recorded. About 99% of these firearms were acquired from Type 01 (dealer), Type 02 (pawnbroker), or Type 07 (manufacturer) FFLs (1,458,464 of 1,473,105). As reflected by Table OFT-06, from 2017 to 2021, the majority of crime guns traced to a purchaser were acquired from a Type 01 FFL. Type 01 FFLs transferred 70% (1,033,687) of the crime guns during the study period. Type 02 FFLs transferred 23% (333,342) and Type 07 FFLs transferred 6% (91,435) of the crime guns traced to a purchaser during the study period. Type 08, 10, 11, 09, and 03 FFLs transferred less than 1% (4,421) of crime guns traced to a purchaser between 2017 and 2021.

***Table OFT-06: Number of Crime Gun Traces to Purchaser by FFL Type, 2017 - 2021***

<b>FFL Type</b>	<b>Number of Traces</b>	<b>Percent</b>
01	1,033,687	70.2%
02	333,342	22.6%
07	91,435	6.2%
08	10,220	0.7%
10	2,088	0.1%
11	1,222	0.1%
09	632	0.0%
03	479	0.0%
<b>Total</b>	<b>1,473,105</b>	<b>100%</b>

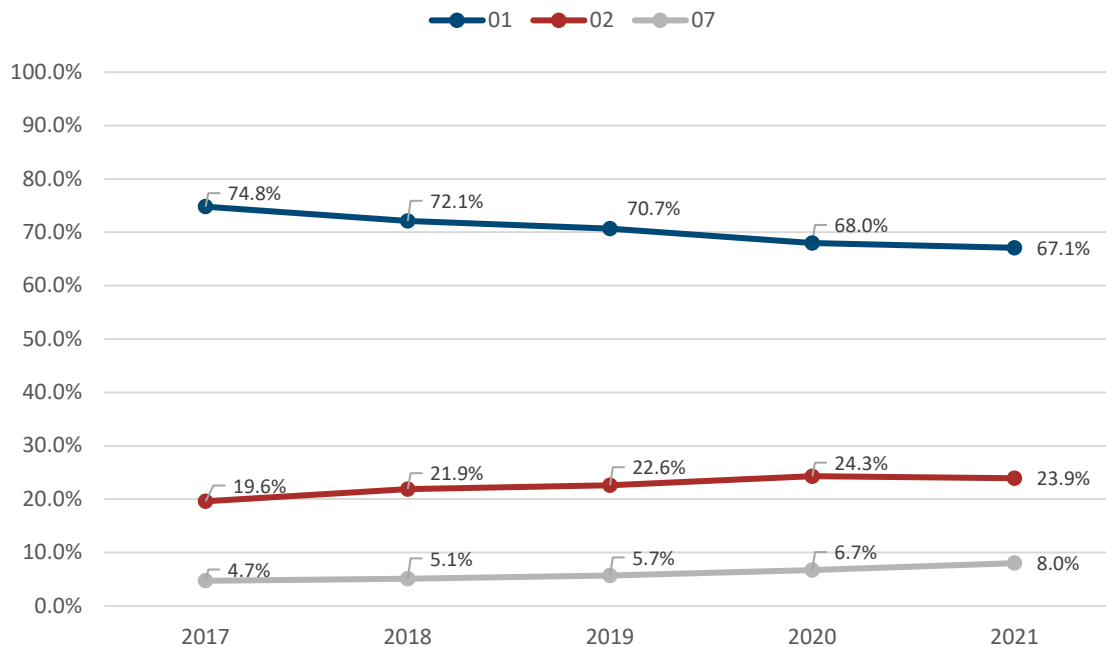
Figure OFT-06 reflects the annual number of crime guns acquired from Type 01, 02, and 07 FFLs and traced to a purchaser between 2017 and 2021. The number of crime guns traced to a purchaser acquired from a Type 01 FFL increased by 31% from 2017 (186,894) to 2021 (244,103). The number of crime guns traced to a purchaser acquired from a Type 02 FFL increased by 78% from 2017 (48,857) to 2021 (86,836). The number of crime guns traced to a purchaser acquired from a Type 07 FFL increased by 150% from 2017 (11,702) to 2021 (29,221).

***Figure OFT-06: Traced Crime Guns Acquired from Type 01, 02, and 07 FFLs, 2017 – 2021***

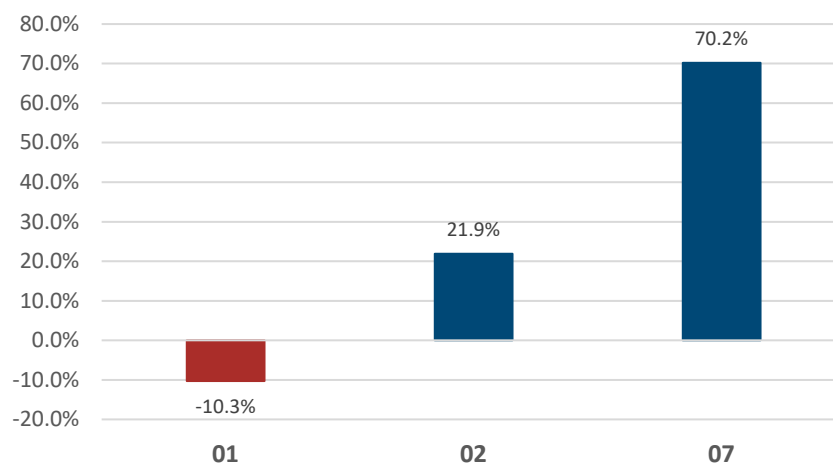


During the study period, nearly all crime gun traces, in which a purchaser was identified, were acquired from Type 01, 02, and 07 FFLs (Figure OFT-07). As shown in Figure OFT-08, the annual percentage of traced crime guns acquired from Type 01 FFLs declined by eight percentage points from 75% in 2017 to 67% in 2021 (reflecting a 10% decrease in share of traced crime guns). The yearly percentage of traced crime guns sold by Type 02 FFLs increased by four percentage points from almost 20% in 2017 to 24% in 2021 (reflecting a 22% increase in share of traced crime guns). The yearly percentage of traced crime guns sold by Type 07 FFLs increased by three percentage points from about 5% in 2017 to 8% in 2021 (reflecting a 70% increase in share of traced crime guns).

**Figure OFT-07: Percentage of Traced Crime Guns Acquired from Type 01, 02, and 07 FFLs, 2017 – 2021**



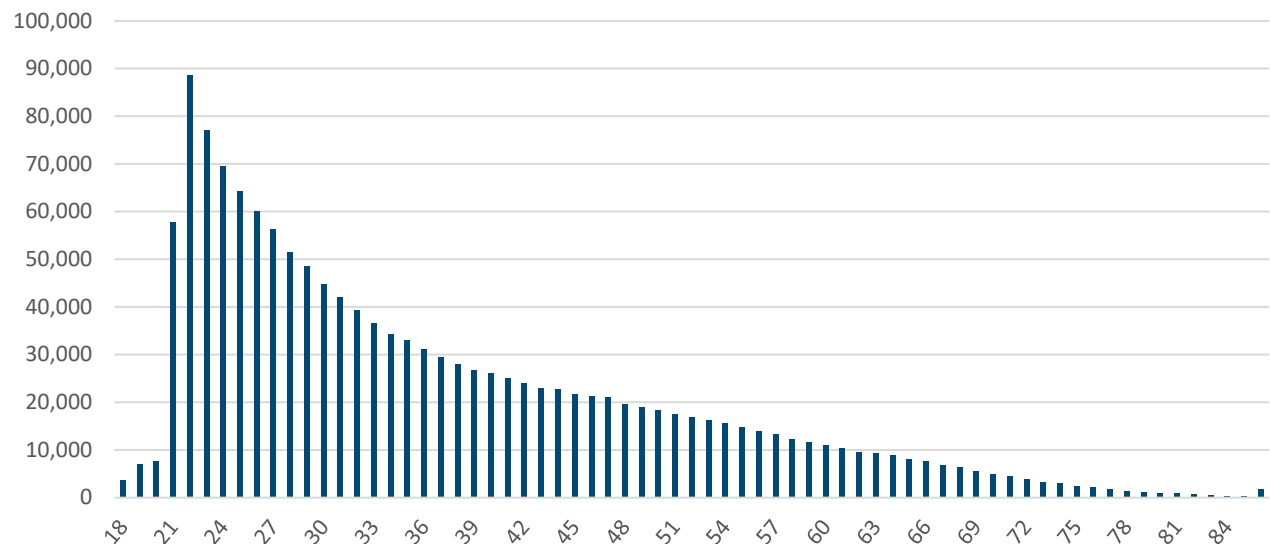
**Figure OFT-08: Total Percent Change in Traced Crime Guns Acquired from Type 01, 02, and 07 FFLs, 2017-2021**



### ***Purchaser Age and Gender***

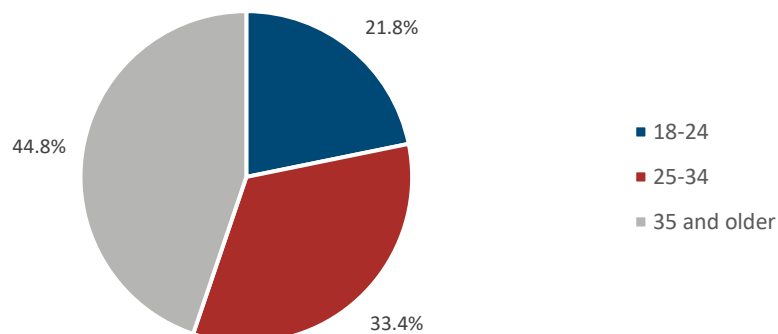
The Gun Control Act, [Title 18 U.S.C. §922\(b\)\(1\)](#) provides that FFLs may only transfer shotguns and rifles to persons over the age of 18 and handguns to persons over the age of 21. The age of the purchaser was determined in almost 97% (1,430,479) of the 1,482,861 recovered crime guns traced to a purchaser. Purchaser ages ranged from 18 through more than 86 years old with individuals in their twenties and early thirties representing the most frequent purchasers of traced crime guns (Figure OFT-09). The most frequent age of a purchaser of a crime gun was 22 years old (88,718) with purchasers between 21 and 25 years-old accounting for almost as many traced crime guns (357,489) as all purchasers ages 45 and older (371,469).

***Figure OFT-09: Purchaser Age for Traced Crime Guns, 2017 – 2021***



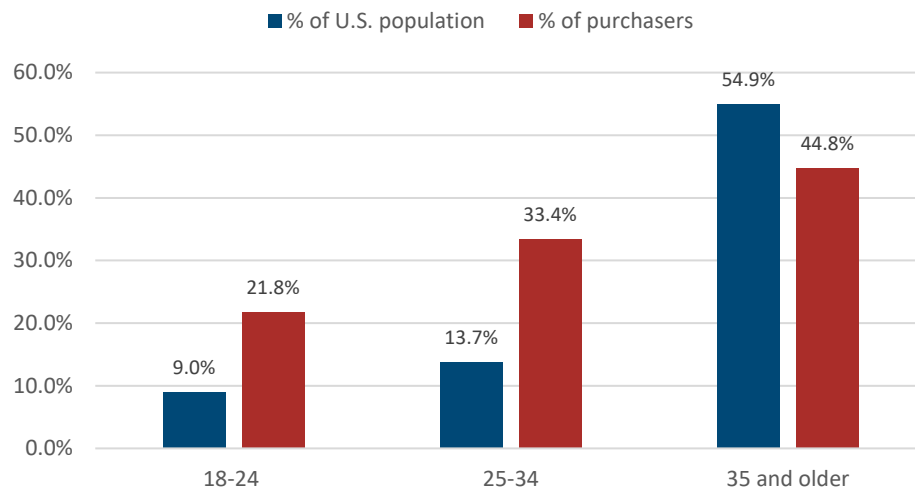
Aggregating this data into three age groupings, youths ages 18 to 24 represented 22% (311,536) of the identified crime gun purchasers, young adults ages 25-34 represented 33% (477,966) of the identified crime gun purchasers, and adults ages 35 and older accounted for the remaining 45% (640,977) of the identified purchasers (Figure OFT-10).

***Figure OFT-10: Purchaser Age Groupings for Traced Crime Guns, 2017 – 2021***



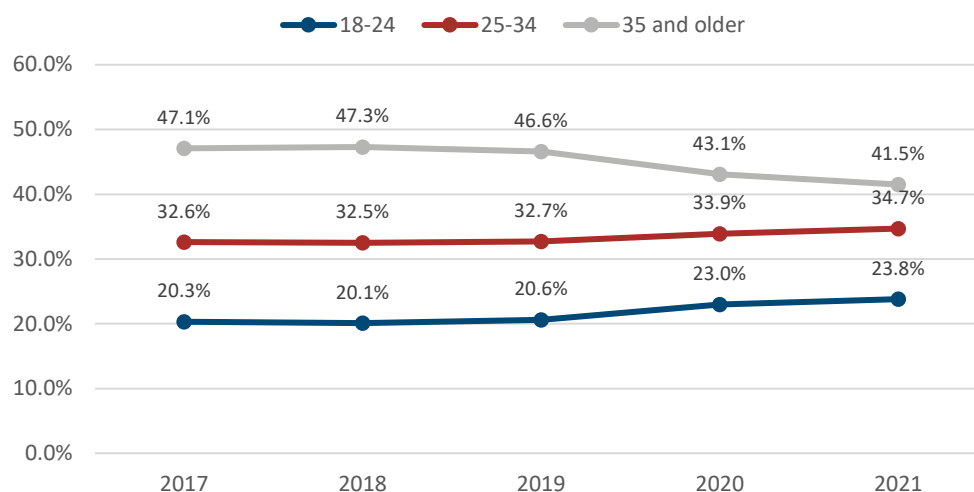
According to the 2020 U.S. Census,<sup>6</sup> residents ages 18 to 24 represented 9%, residents ages 25 to 34 represented 14%, and residents ages 35 and older represented 55% of the U.S. population, respectively. As reflected in Figure OFT-11, the youth and young adult age groupings are over-represented among purchasers of traced crime guns.

**Figure OFT-11: U.S. Population and Purchaser Percentages by Age Groupings, 2017 - 2021**

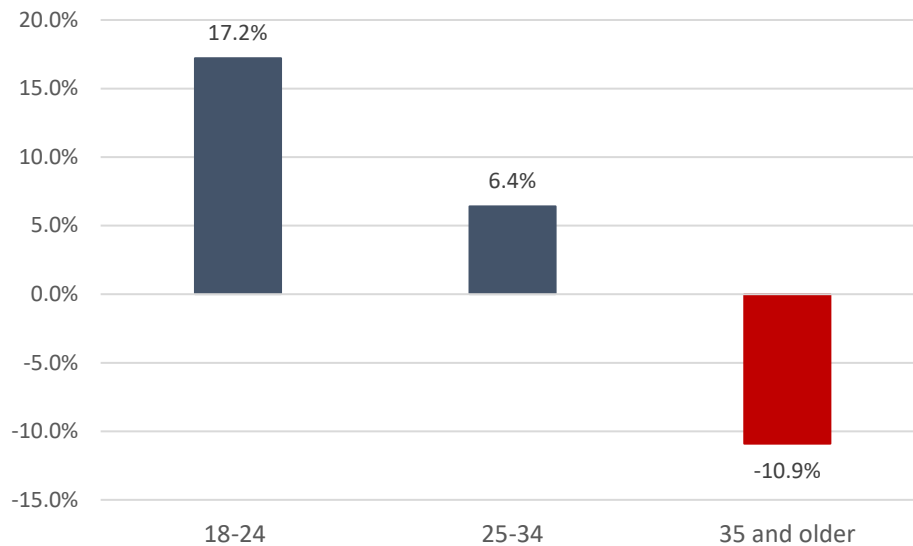


The percentages of traced crime guns purchased by individuals in these three age groupings were generally stable through 2019 (Figure OFT-12). Over the next three years, the percentage of traced crime guns purchased by youths ages 18 to 24 increased by three percentage points from 2019 (21%) to 2021 (24%), reflecting a 17% increase in the share of crime guns purchased by this age group. The percentage of traced crime guns purchased by young adults ages 25 to 34 increased by two percentage points from 2019 (33%) to 2021 (35%), reflecting a 6% increase in the share of guns purchased by this age group, and the percentage of trace guns purchased by older adults ages 35 and older decreased by five percentage points from 2019 (47%) to 2021 (42%), reflecting an 11% decrease in the share of crime guns purchased by this age group (see Figure OFT-13).

**Figure OFT-12: Percentage of Traced Crime Guns by Purchaser Age Group, 2017 – 2021**

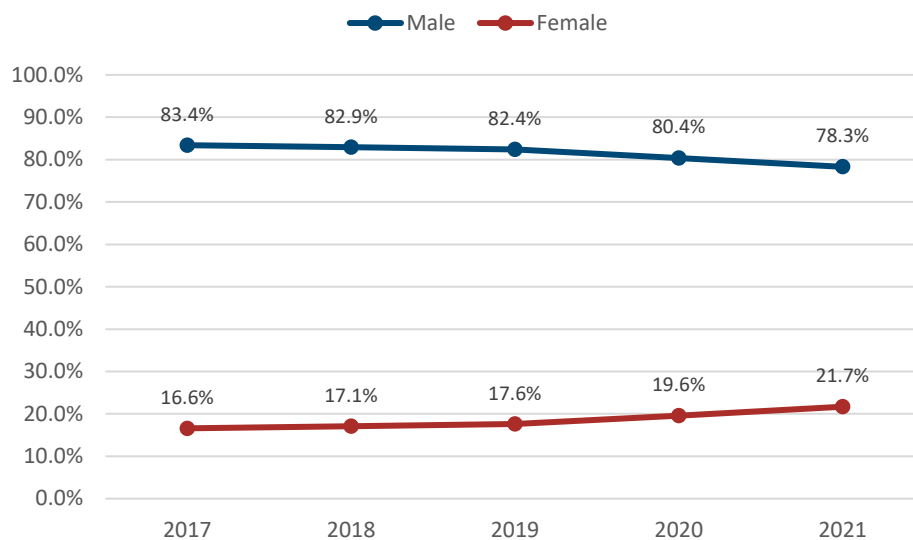


**Figure OFT-13: Total Percent Change in Traced Crime Guns by Purchaser Age Group, 2019 - 2021**



The gender of the purchaser was determined in nearly all (94%; 1,397,812) of the 1,482,861 recovered crime guns traced to a purchaser between 2017 and 2021. Males purchased a larger share of traced crime guns (81%; 1,134,736) while females purchased a smaller share of traced crime guns (19%; 263,060) during the study period<sup>7</sup>. However, as reflected in Figure OFT-14, the percentage of traced crime guns purchased by females increased by five percentage points from 2017 (17%) to 2021 (22%), representing a 31% increase in the share of traced crime guns purchased by females. The percentage of traced crime guns purchased by males decreased by a corresponding five percentage points from 2017 (83%) to 2021 (78%), representing a 6% decrease in the share of traced crime guns purchased by males.

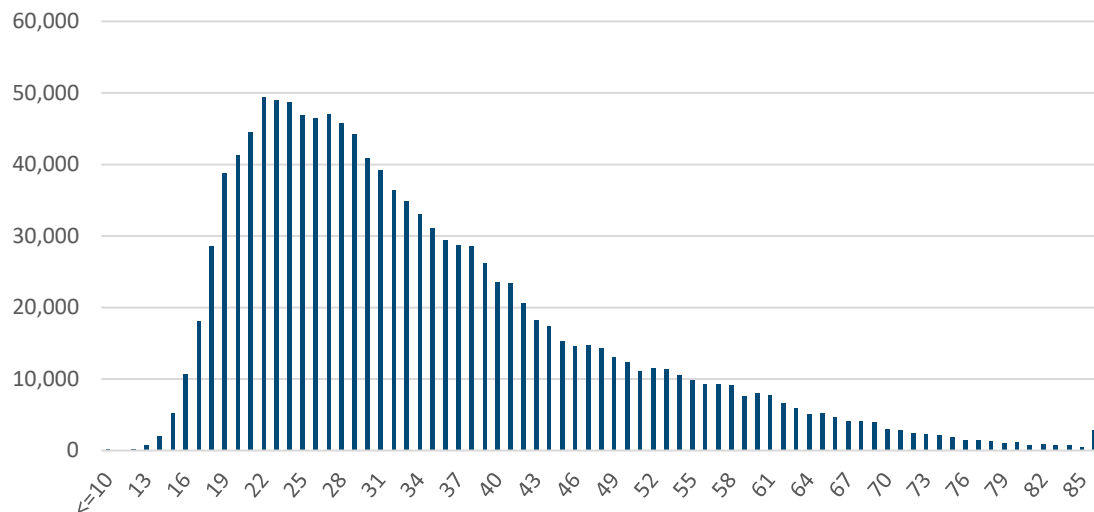
**Figure OFT-14: Percentage of Traced Crime Guns by Purchaser Gender, 2017 – 2021**



### ***Possessor Age and Gender***

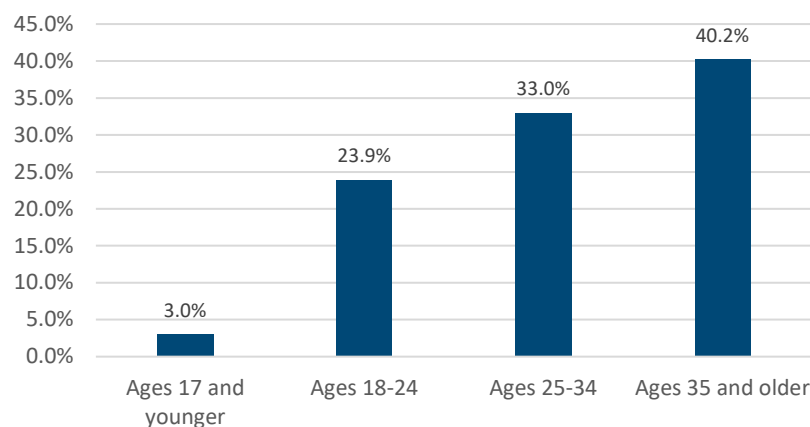
The age of the possessor was determined in 65% (1,258,340) of the 1,922,577 crime guns recovered by law enforcement agencies and submitted for tracing between 2017 and 2021. Possessor ages ranged from 10 and younger through more than 86 years old with the individuals in their late teens, twenties, and early thirties representing the most frequent possessors of traced crime guns (Figure OFT-15).

***Figure OFT-15: Possessor Age for Traced Crime Guns, 2017 - 2021***



As shown in Figure OFT-16, 60% (752,903) of the traced crime gun possessors were 34 years old or younger: 33% (414,996) were ages 25 to 34, 24% (300,501) were ages 18 to 24, and only 3% (37,406) were ages 17 and younger. According to data from the 2020 U.S. Census,<sup>8</sup> residents ages 17 and younger represented 22%, residents ages 18 to 24 represented 9%, residents ages 25 to 34 represented 14%, and residents ages 35 and older represented 55% of the U.S. population.

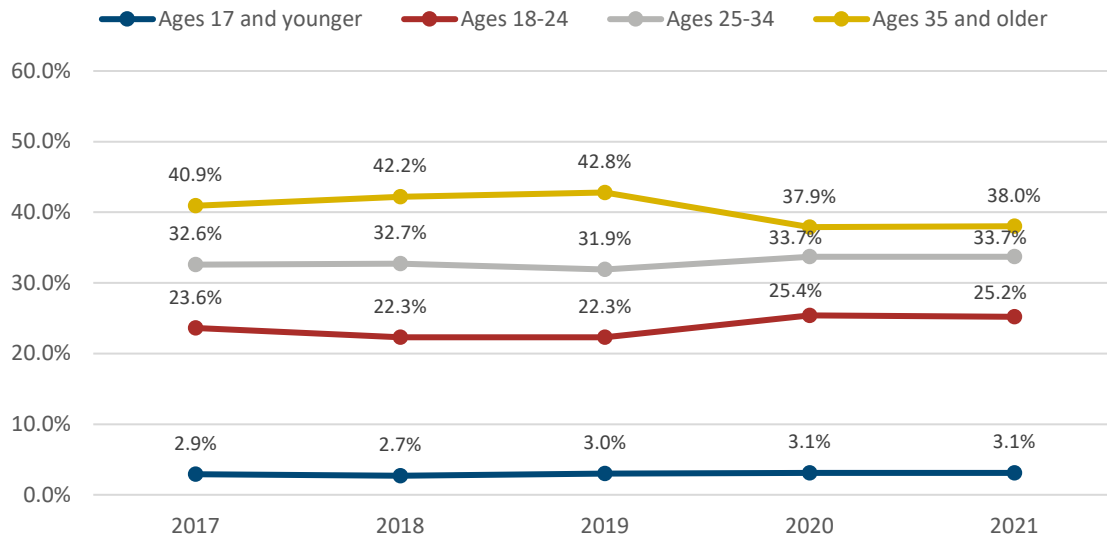
***Figure OFT-16: Possessor Age Categories for Traced Crime Guns, 2017 – 2021***



The percentages of traced crime guns possessed by individuals in these four age groupings were generally stable through 2019 (Figure OFT-17). Over the next three years, the percentage of traced crime guns possessed by juveniles ages 17 and younger and by adults ages 25 to 34 remained relatively flat.

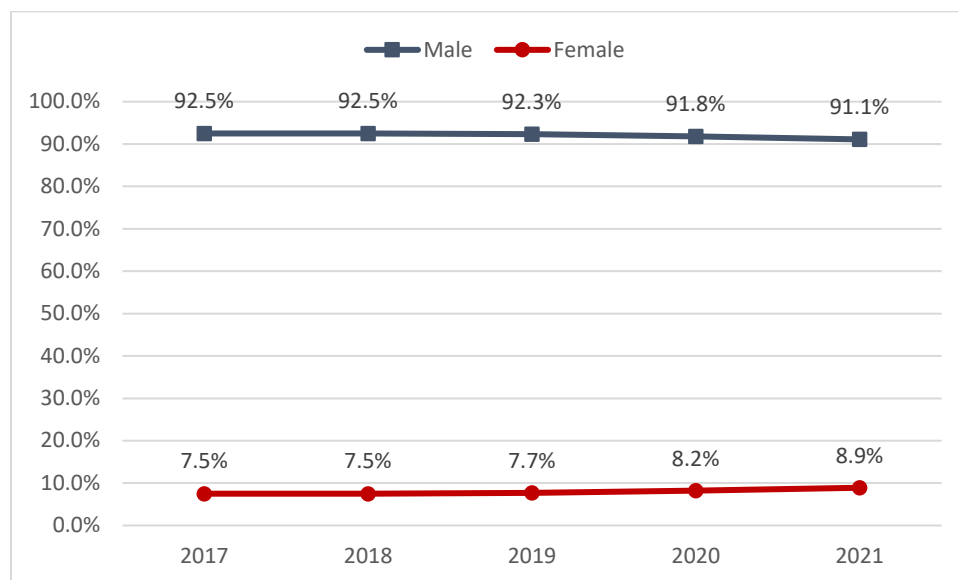
However, the percentage possessed by youths ages 18 to 24 increased by three percentage points from 2019 (22%) to 2021 (25%), reflecting a 14% increase in the share of crime guns possessed in this age group. The percentage possessed by adults ages 35 and older declined by five percentage points from 2019 (43%) to 2021 (38%), reflecting a 11% decrease in the share of crime guns possessed in this age group.

**Figure OFT-17: Percentage of Traced Crime Guns by Possessor Age Group, 2017 – 2021**



The gender of the possessor was recorded in 58% (1,124,275) of the 1,922,577 crime guns recovered by LEAs and submitted for tracing between 2017 and 2021. Males possessed most of the traced crime guns (91%; 1,034,303) while females possessed a very small share of traced crime guns (9%; 89,972) during the study period. As reflected in Figure OFT-18, the overwhelmingly large percentage of traced crime guns possessed by males remained stable between 2017 and 2021.

**Figure OFT-18: Percentage of Traced Crime Guns by Possessor Gender, 2017 – 2021**

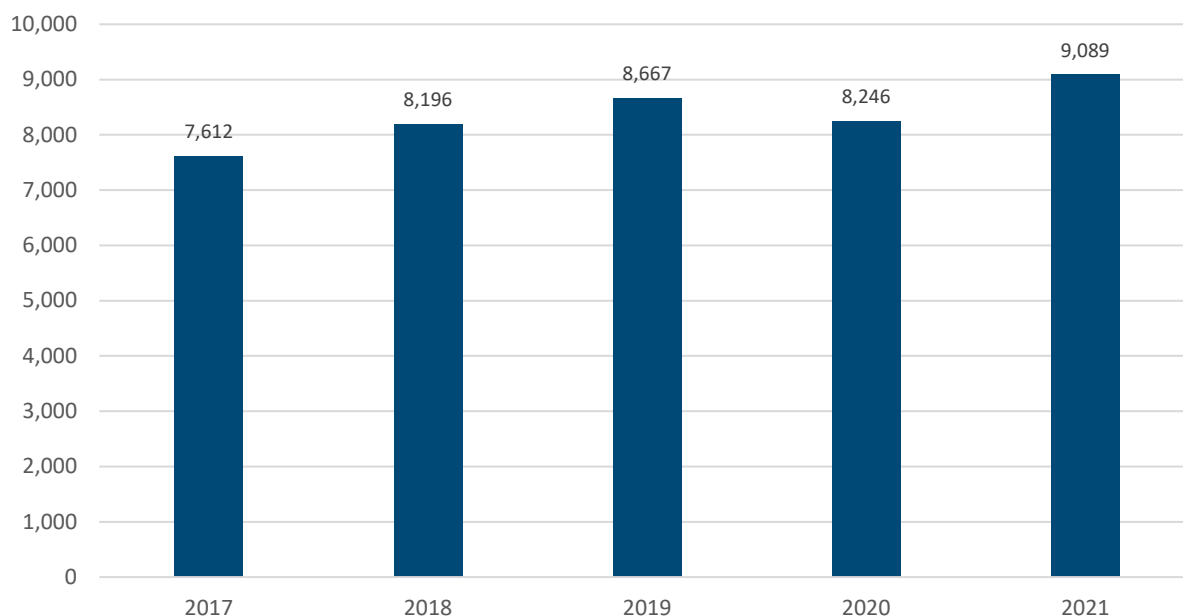


### ***Crime Guns Acquired from an FFL at a Gun Show***

As defined in [27 C.F.R. §478.100\(b\)](#), a gun show or an event is a function sponsored by any national, state, or local organization, devoted to the collection, competitive use, or other sporting use of firearms, or an organization or association that sponsors functions devoted to the collection, competitive use, or other sporting use of firearms in the community. Only FFLs licensed in the state of the gun show are authorized to transfer firearms. Any firearm transfers made by these FFLs at gun shows are documented on the ATF Form 4473. All other FFLs may only display firearms and take orders. All out-of-state FFLs must return to their licensed business premises prior to transferring any firearms. Unless prohibited by state law, unlicensed individuals are allowed to sell firearms at gun shows, provided they are not engaged in the business of selling firearms with the principal objective of livelihood and profit as defined in [27 C.F.R. §478.11](#).<sup>9</sup> Federal law does not require unlicensed persons who are not engaged in the business of dealing firearms to maintain records of firearms sold at gun shows, nor are such unlicensed persons required to complete background checks on a purchaser.

Between 2017 and 2021, only 3% (41,810) of the 1,482,861 crime guns traced to a purchaser were acquired from FFLs at a gun show. It is important to recognize that this figure does not represent the total percentage of recovered crime guns that were sold at a gun show during the study period as private citizens and unlicensed dealers sell firearms at gun show venues. National data, however, are not available on unregulated firearm transfers at gun shows. Figure OFT-19 presents the yearly counts of crime guns traced to a purchaser that were known to be acquired from FFLs at gun shows. The number of traced crime guns acquired from FFLs at gun shows increased by 14% from 2017 (7,612) to 2019 (8,667). The number of traced crime guns acquired from FFLs at gun shows then decreased by 5% in 2020 (8,246), most likely due to local restrictions on gun shows associated with the COVID-19 pandemic. Overall, the number of traced crime guns acquired from FFLs at gun shows increased by 19% from 2017 (7,612) to 2021 (9,089).

***Figure OFT-19: Traced Crime Guns Acquired from FFLs at Gun Shows, 2017 – 2021***

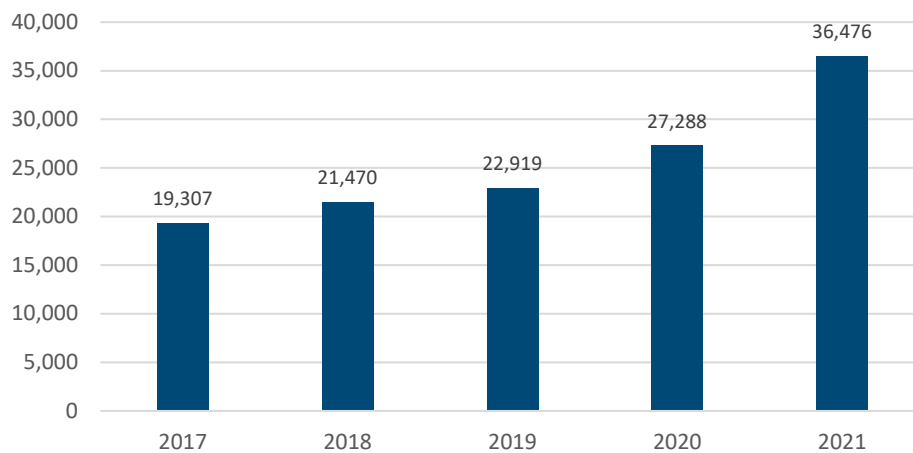


### ***Traces Associated with Multiple Sales Transactions***

FFLs are required to complete and submit a report of multiple sales or other dispositions whenever the licensee sells or otherwise disposes of, at one time or during any five consecutive business days, two or more pistols, or revolvers, or any combination of pistols and revolvers totaling two or more, to an unlicensed person. Additionally, Type 01 and 02 FFLs located in Arizona, California, New Mexico, and Texas are required to complete and submit a multiple sales report when an unlicensed person acquires, at one time or during five consecutive business days, two or more semi-automatic rifles larger than .22 caliber (including .223/5.56 caliber) with the ability to accept a detachable magazine.

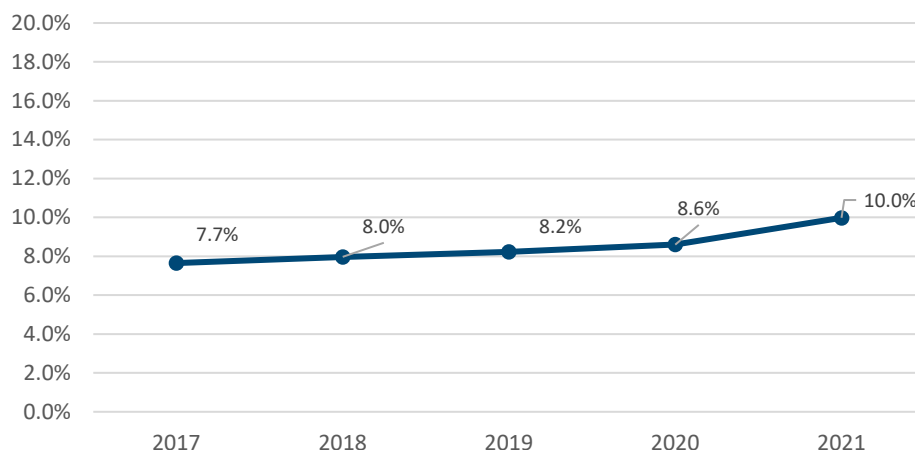
Slightly less than 9% (127,460) of the 1,482,861 crime guns traced to a purchaser were part of a multiple sale transaction. The yearly number of crime guns traced to a purchaser that were part of a multiple sale transaction increased by almost 89% from 2017 (19,307) to 2021 (36,476) (Figure OFT-20).

***Figure OFT-20: Traced Crime Guns Associated with a Multiple Sale, 2017 – 2021***



The yearly share of traced crime guns associated with a multiple sale increased more modestly from almost 8% in 2017 (19,307) to 10.0% (36,476) in 2021, reflecting a 25% increase in the annual percentage (Figure OFT-21).

***Figure OFT-21: Percentage of Traced Crime Guns Associated with a Multiple Sale, 2017 – 2021***



### ***Summary of Crime Gun Tracing***

The annual number of crime gun trace requests made by LEAs increased by more than a third from nearly 340,000 in 2017 to more than 460,000 in 2021. This trend generally follows increases in the numbers of GCA firearms domestically manufactured and imported into the U.S. over the past decade.<sup>10</sup> ATF was able to trace more than three-fourths of recovered crimes to a purchaser during the study period.

Importantly, the percentage of submitted crime guns traced to a purchaser increased from 75% in 2017 to 80% in 2021. The annual number of suspected PMFs recovered by LEAs and submitted for tracing grew very rapidly from about 1,600 in 2017 to more than 19,000 in 2021. ATF also determined that more than 14,600 recovered and traced crime guns were associated with reported FFL theft, FFL loss, and interstate shipment theft or loss reports.

Nearly all crime guns traced to an FFL with a known purchaser were acquired from Type 01, 02, or 07 FFLs with 70% acquired from Type 01 FFLs. FBI National Instant Check System data analyses shows that Type 01, 02, and 07 FFLs account for nearly all firearm transfers with 01 FFLs generating 75% of firearm transfers.<sup>11</sup> Very small proportions of recovered and traced crime guns were acquired from an FFL at a gun show or sold to a purchaser as part of a multiple sale transaction. Males purchased and possessed very large percentages of crime guns. Relative to the share of the U.S. population in the 18 to 24 and 25 to 34 age groups, traced crime guns were disproportionately purchased and possessed by people in these younger age categories.

## **Characteristics of Traced Crime Guns**

### ***Types of Traced Crime Guns***

Between 2017 and 2021, pistols were the most frequently traced crime gun (Table CCG-01). Of the 1,922,577 traced crime guns, pistols accounted for 68% (1,306,804), rifles accounted for 12% (237,532), revolvers accounted for 11% (211,590), and shotguns accounted for 7% (133,024).

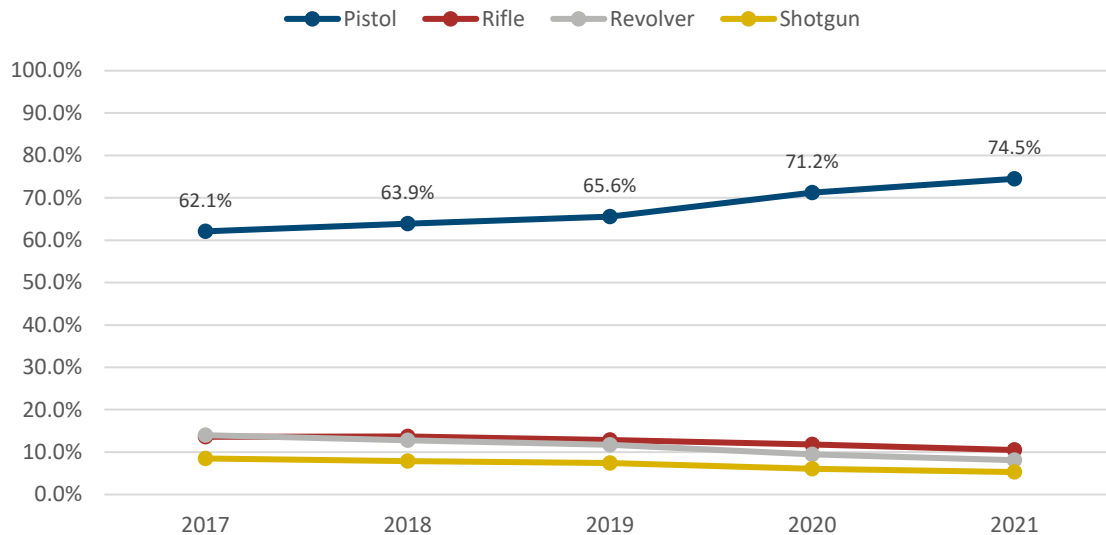
***Table CCG-01: Types of Traced Crime Guns, 2017 – 2021***

<b>Firearm Type</b>	<b>Number</b>	<b>Percent</b>
Pistol	1,306,804	68.0%
Rifle	237,532	12.4%
Revolver	211,590	11.0%
Shotgun	133,024	6.9%
Other / Unknown	33,627	1.7%
<b>Total</b>	<b>1,922,577</b>	<b>100.0%</b>

The percentage of traced pistols increased by 12 percentage points from 2017 (62%) to 2021 (75%), representing a 20% increase in market share for pistols. The percentage of revolvers, rifles, and shotguns among traced crime guns all declined over the study period (Table CCG-02 and Figure CCG-01).

**Table CCG-02: Percentage of Traced Crime Guns by Type, 2017 – 2021**

Firearm Type	2017	2018	2019	2020	2021
Pistol	62.1%	63.9%	65.6%	71.2%	74.5%
Rifle	13.6%	13.7%	12.9%	11.8%	10.5%
Revolver	14.0%	12.8%	11.7%	9.5%	8.1%
Shotgun	8.5%	7.9%	7.4%	6.1%	5.3%

**Figure CCG-01: Percentage of Traced Crime Guns by Type, 2017 – 2021**

Between 2017 and 2021, the percentage of crime gun traces, by major firearm type, varied across the 50 U.S. states and territories. As reflected in Table CCG-03a, Ohio had the highest percentage of pistols (76%) among crime gun traces during the study period among the 50 U.S. states. Moreover, New Jersey had the largest percentage of revolver type crime guns traced (18%) while Montana had the highest percentages of rifle type crime guns traced (32.7%), and Vermont had the highest percentage of shotgun type crime guns traced among the 50 U.S. states (14.4%).

**Table CCG-03a: Most Frequent Percentages by Type of Traced Crime Guns by State, 2017 - 2021**

State	% Pistols	State	% Revolvers	State	% Rifles	State	% Shotguns
Ohio	76.3%	New Jersey	17.6%	Montana	32.7%	Vermont	14.4%
Missouri	75.9%	New York	17.2%	Hawaii	31.7%	Maryland	14.1%
Georgia	75.1%	Connecticut	15.0%	Vermont	27.5%	Maine	12.7%
Wisconsin	75.0%	Rhode Island	13.3%	South Dakota	25.7%	North Dakota	12.7%
Illinois	74.9%	California	13.3%	Wyoming	25.6%	Nebraska	12.4%

See Table CCG-03 in Appendix CCG - Characteristics of Crime Guns for the percentage of traced crime guns by firearm type in all U.S. states and territories during the study period.

The percentage of traced crime guns by type of firearm also varied across selected U.S. cities between 2017 and 2021. As reflected in Table CCG-04a, Atlanta had the highest percentage of pistols (85%), New York had the largest percentage of revolvers (19%), San Diego had the highest percentages of rifles (15%), and Baltimore had the highest percentage of shotguns (10%).

**Table CCG-04a: Most Frequent Percentages by Type of Traced Crime Guns by City, 2017 – 2021**

City	% Pistols	City	% Revolvers	City	% Rifles	City	% Shotguns
Atlanta, GA	85.4%	New York, NY	18.7%	San Diego, CA	15.3%	Baltimore, MD	9.8%
Cleveland, OH	84.0%	Baltimore, MD	17.6%	San Bernardino, CA	14.5%	San Bernardino, CA	8.5%
New Orleans, LA	83.0%	Los Angeles, CA	15.2%	Shreveport, LA	12.4%	San Diego, CA	7.8%
Milwaukee, WI	82.1%	San Diego, CA	14.3%	San Jose, CA	11.7%	Winston-Salem, NC	7.6%
Saint Louis, MO	81.7%	Winston-Salem, NC	13.0%	Baltimore, MD	11.5%	San Jose, CA	7.2%

See Table CCG-04, in Appendix CCG – Characteristics of Crime Guns, for a complete list of percentage and count of traced crime guns recovered by firearm type in selected U.S. cities from 2017 through 2021.

### ***Calibers of Traced Crime Guns***

There were 1,306,804 pistol type crime guns traced between 2017 and 2021. As indicated by Table CCG-05, the top 10 calibers of traced pistols accounted for almost 98% (1,276,004) of all traced pistols. Nearly 50% (647,014) of the traced pistols were 9mm, while .40 caliber accounted for 17% (219,112), .380 accounted for 12% (151,105), and .45 caliber accounted for 10% (128,049).

**Table CCG-05: Top 10 Calibers of Traced Pistols, 2017 – 2021**

Caliber	Number	Percent
9mm	647,014	49.5%
.40	219,112	16.8%
.380	151,105	11.6%
.45	128,049	9.8%
.22	62,744	4.8%
.25	31,591	2.4%
.32	11,747	0.9%
7.62mm	10,713	0.8%
10mm	6,989	0.5%
5.56mm	6,940	0.5%

There were 237,532 rifle type crime guns traced between 2017 and 2021. As reflected in Table CCG-06, the top 10 calibers of traced rifles accounted for slightly more than 82% (196,033) of all traced rifles. Specifically, .22 caliber accounted for 30% (70,872), 5.56mm accounted for 13% (31,406), and 7.62mm accounted for 9% (27,930).

**Table CCG-06: Top 10 Calibers of Traced Rifles, 2017 – 2021**

Caliber	Number	Percent
.22	70,872	29.8%
5.56mm	31,406	13.2%
7.62mm	27,930	11.8%
.223	21,180	8.9%
Multiple	10,397	4.4%
.30-06	8,587	3.6%
.308	7,766	3.3%
.30-30	7,243	3.0%
9mm	6,530	2.7%
.270	4,122	1.7%

There were 211,590 revolver type crime guns traced between 2017 and 2021. The top 10 calibers of traced revolvers accounted for almost 98% (206,803) of all traced revolvers. The .38 caliber (41%), .22 caliber (23%), and the .357 (19%) accounted for 83% (173,760) of all revolver type crime guns. Table CCG-07 provides the top 10 revolver calibers of traced crime guns.

***Table CCG-07: Top 10 Calibers of Traced Revolvers, 2017 – 2021***

<u>Caliber</u>	<u>Number</u>	<u>Percent</u>
.38	86,793	41.0%
.22	47,779	22.6%
.357	39,188	18.5%
.32	13,806	6.5%
.44	9,150	4.3%
.45/410 GA	5,203	2.5%
.45	3,209	1.5%
9mm	721	0.3%
.41	620	0.3%
.500	334	0.2%

There were 133,024 shotgun type crime guns traced between 2017 and 2021. The top five gauges of traced shotguns accounted for almost 98% (130,224) of all traced shotguns. The 12 gauge (76%), .20 gauge (13%), and the .410 (6%) accounted for more than 95% (126,651) of all shotgun type crime guns. Table CCG-08 provides the top five shotgun gauges of traced shotguns.

***Table CCG-08: Top Five Gauges of Traced Shotguns, 2017 – 2021***

<u>Gauge</u>	<u>Number</u>	<u>Percent</u>
12 GA	100,688	75.7%
20 GA	17,748	13.3%
410 GA	8,215	6.2%
16 GA	3,125	2.3%
10 GA	448	0.1%

### ***Manufacturers of Traced Crime Guns***

**NOTE:** Data analysis identifying firearm manufacturers whose firearms were most frequently recovered in crimes does not imply any illegal activity by the manufacturer and may be attributable to several factors to include production and sales volume, pricing, and brand reputation.

Of the 1,306,804 pistol type crime guns traced between 2017 and 2021, nearly 20% (255,055) were manufactured by Glock. The top five manufacturers of traced pistols accounted for almost 60% (779,566) of all traced pistols. Other top manufacturers of traced pistols were Smith & Wesson (14%), Taurus (12%), Sturm Ruger (9%), and HS Produkt<sup>12</sup> (5%). Table CCG-09 provides the top five manufacturers of pistol type crime guns traced during the study period.

***Table CCG-09: Top Five Manufacturers of Traced Pistols, 2017 – 2021***

<u>Manufacturer</u>	<u>Number</u>	<u>Percent</u>
Glock	255,055	19.6%
Smith & Wesson	182,728	14.0%
Taurus	159,360	12.2%
Sturm Ruger	113,654	8.7%
HS Produkt	68,769	5.3%

As reflected in Table CCG-10, of the 237,532 rifle type crime guns traced between 2017 and 2021, the top five manufacturers were Marlin (9%), Sturm Ruger (9%), Remington (8%), Savage Arms (6%), and Winchester (5%). The top five manufacturers of traced rifles accounted for almost 37% (87,507) of all traced rifles.

***Table CCG-10: Top Five Manufacturers of Traced Rifles, 2017 – 2021***

<b>Manufacturer</b>	<b>Number</b>	<b>Percent</b>
Marlin	21,435	9.0%
Sturm Ruger	21,378	9.0%
Remington	17,700	7.5%
Savage Arms	14,911	6.3%
Winchester	12,083	5.1%

Of the 211,590 revolver type crime guns traced between 2017 and 2021, nearly 26% (54,377) were manufactured by Smith & Wesson. Other top manufacturers of traced revolvers included Taurus (16%), Sturm Ruger (11%), Colt (5%), and Harrington & Richardson (5%). The top five manufacturers of traced revolvers accounted for 63% (133,311) of all traced revolvers (Table CCG-11).

***Table CCG-11: Top Five Manufacturers of Traced Revolvers, 2017 – 2021***

<b>Manufacturer</b>	<b>Number</b>	<b>Percent</b>
Smith & Wesson	54,377	25.7%
Taurus	33,542	15.9%
Sturm Ruger	23,278	11.0%
Colt	11,449	5.4%
Harrington & Richardson	10,665	5.0%

Of the 133,024 shotgun type crime guns traced between 2017 and 2021, more than 20% (26,964) were manufactured by Mossberg. Other top manufacturers of traced shotguns include Remington (16%), Winchester (8%), Savage Arms (7%), and Maverick Arms (6%). The top five manufacturers of traced shotguns accounted for almost 58% (76,730) of all traced shotguns (Table CCG-12).

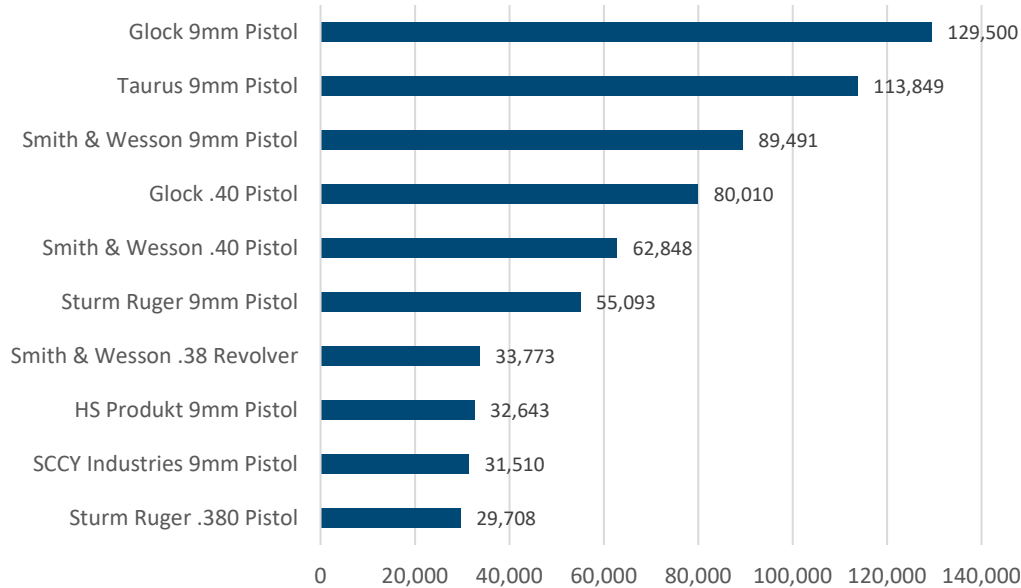
***Table CCG-12: Top Five Manufacturers of Traced Shotguns, 2017 – 2021***

<b>Manufacturer</b>	<b>Number</b>	<b>Percent</b>
Mossberg	26,964	20.3%
Remington	21,748	16.3%
Winchester	10,701	8.0%
Savage Arms	9,174	6.9%
Maverick Arms	8,143	6.1%

### ***Traced Crime Guns by Manufacturer, Type and Caliber***

The top ten most frequently traced crime guns by manufacturer, type, and caliber combinations accounted for 34% (658,425) of the 1,922,577 crime guns traced between 2017 and 2021 (Figure CCG-02). The Glock 9mm pistol was the most frequently traced crime gun by make, type and caliber, accounting for almost 7% of all crime guns (129,500 of 1,922,577) traced during the study period.

**Figure CCG-02: Top Ten Traced Crime Guns by Manufacturer, Type, and Caliber Combination, 2017 – 2021**



### ***Types and Calibers of Traced PMFs***

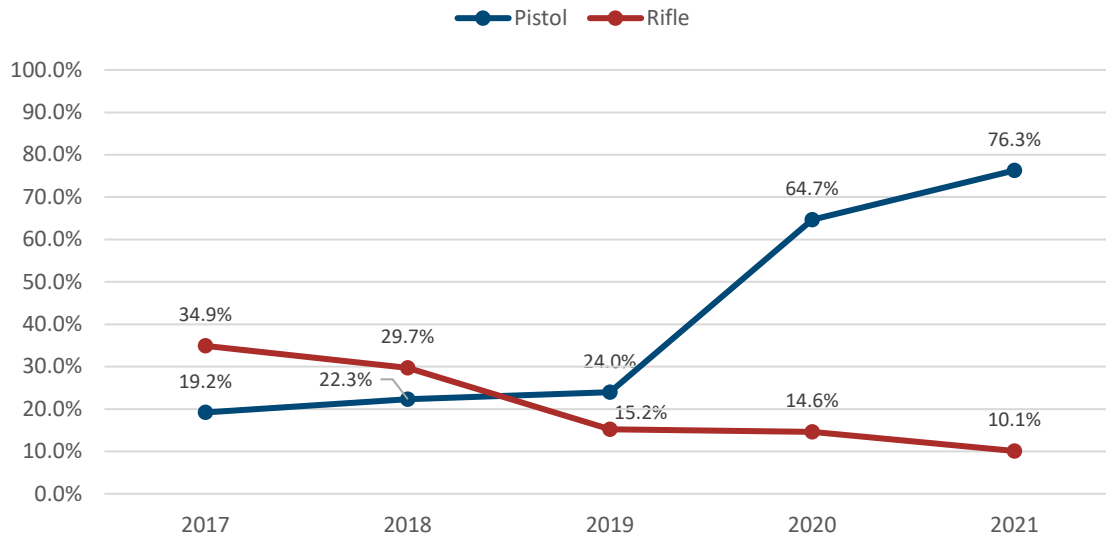
Pistols represented the most frequently recovered suspected PMF submitted to ATF for tracing by LEAs between 2017 and 2021 (Table CCG-13). Of the 37,980 recovered and traced suspected PMFs, pistols accounted for 59% (22,546), rifles accounted for 14% (5,446), machine guns accounted for 12% (4,459), firearm receivers or frames accounted for 4% (1,588), and silencers accounted for 1% (345).

**Table CCG-13: Recovered and Traced Suspected PMFs by Weapon Type, 2017 – 2021**

Firearm Type	Number	Percent
Pistol	22,546	59.4%
Rifle	5,446	14.3%
Machinegun	4,459	11.7%
Receiver / Frame	1,588	4.2%
Silencer	345	0.9%
Other / Unknown	3,596	9.5%
<b>Total</b>	<b>37,980</b>	<b>100.0%</b>

Figure CCG-03 presents the annual percentage of suspected PMFs recovered for the two most frequently recovered firearm types, pistols, and rifles. The percentage of pistols increased by 57 percentage points from 2017 (19%; 312) to 2021 (76%; 14,713), representing a 297% increase in the market share of these suspected PMFs. In contrast, the percentage of rifles declined by 25 percentage points from 2017 (35%; 569) to 2021 (10%; 1,950), representing a 71% decrease in the market share of these PMFs.

**Figure CCG-03: Percentage of Suspected PMF Pistols and Rifles Recovered and Traced, 2017 – 2021**



Due to the lack of required markings, and law enforcement’s unfamiliarity with PMFs, complete tracing information is lacking. Nearly 33% (12,497) of all recovered and traced suspected PMFs did not have a known caliber listed. However, based on the tracing data received between 2017 and 2021, 46% (17,365) of all PMFs recovered and traced were 9mm, 6% (2,327) were .40 caliber, 6% (2,225) were .223 caliber, and 4% (1,412) were 5.56mm.

Since PMFs are not manufactured by FFLs, the firearm is not subject to the same marking requirements. With the enactment of [Final Rule 2021R-05F](#), beginning in August 2022, any PMF that enters regulated commerce must be identified through required markings by an FFL prior to being further transferred. When tracing a PMF, law enforcement is encouraged to provide any identifying information found on the PMF. More than 56% (21,374) of the PMFs recovered and traced during the study period did not list any information regarding the manufacturer of any part of the firearm. However, of the PMFs with a manufacturer name identified, more than 88% (14,675) were identified as Polymer80, Inc.

### ***Summary of Characteristics of Crime Guns***

Pistols were the most dominant type of firearm domestically manufactured, imported into the U.S., and transferred by licensed dealers between 2016 and 2020.<sup>13</sup> Pistols represented nearly 70% of the crime guns traced between 2017 and 2021. The percentage of pistols recovered in crimes and submitted for tracing by LEAs increased from 62% in 2017 to 75% in 2020. 9mm, .40, .380, and .45 caliber pistols were the most frequently traced pistol calibers. The top manufacturers of traced pistols include Glock, Smith & Wesson, Taurus, Sturm Ruger, and HS Produkt. Pistols also represented almost 60% of the PMFs recovered in crimes and submitted to ATF for tracing between 2017 and 2021. Other frequently recovered types of PMFs included rifles (14%), machineguns (12%), and firearm receivers or frames (4%). Polymer 80, Inc. was the most frequently identified manufacturer of PMFs.

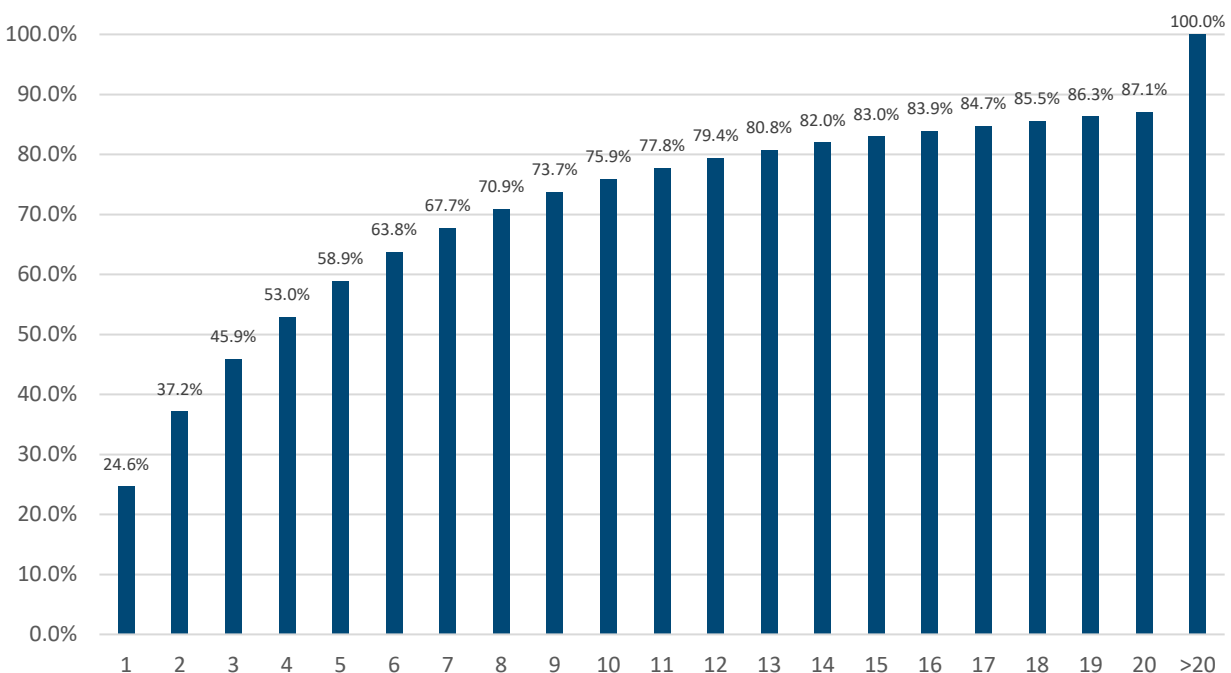
## Indicators of Firearms Trafficking

### *Time-to-Crime of Traced Crime Guns*

As described in Part II of this report, the GCA ensures that a firearm can be traced from an FFL to the first retail purchaser. If, after the first retail purchase, the firearm re-enters regulated commerce, the tracing process may identify additional unlicensed purchasers beyond the first retail purchaser. These unlicensed secondary purchasers are commonly referred to as the last known purchaser. An important consideration in understanding firearms trafficking is the length of time between the date of a firearm's last known purchase (often to the first retail purchaser or, when additional transfer information is available to the last known purchaser) to the date of its recovery by law enforcement as a crime gun. This is referred to as time-to-crime (TTC). A short TTC can be an indicator of illegal firearms trafficking. Focusing on these firearms can produce significant trafficking trends and patterns in recently transferred firearms. Investigating crime guns with a short TTC allows law enforcement to seek out sources of recently transferred crime guns and disrupt the flow of illegal firearms through identified trafficking channels.

TTC was calculated for nearly all (1,479,046) of the 1,482,861 firearms traced to a purchaser between 2017 and 2021. For the entire study period, the median TTC was 1,293 days or slightly more than three years, meaning that half of the traced crime guns were purchased within this time period.<sup>14</sup> Figure IFT-01 displays the cumulative percent of traced crime guns by years since purchase and shows that 54% of traced crime guns were recovered by law enforcement more than three years after their purchase, while nearly 46% were recovered less than three years after their purchase. As shown in Figure IFT-02, about 25% of traced crime guns were recovered within one year of their purchase.

**Figure IFT-01: Cumulative Percentage of Traced Crime Guns by TTC (Years), 2017 – 2021**



**Figure IFT-02: Percentage of Traced Crime Guns by TTC (Years), 2017 – 2021**

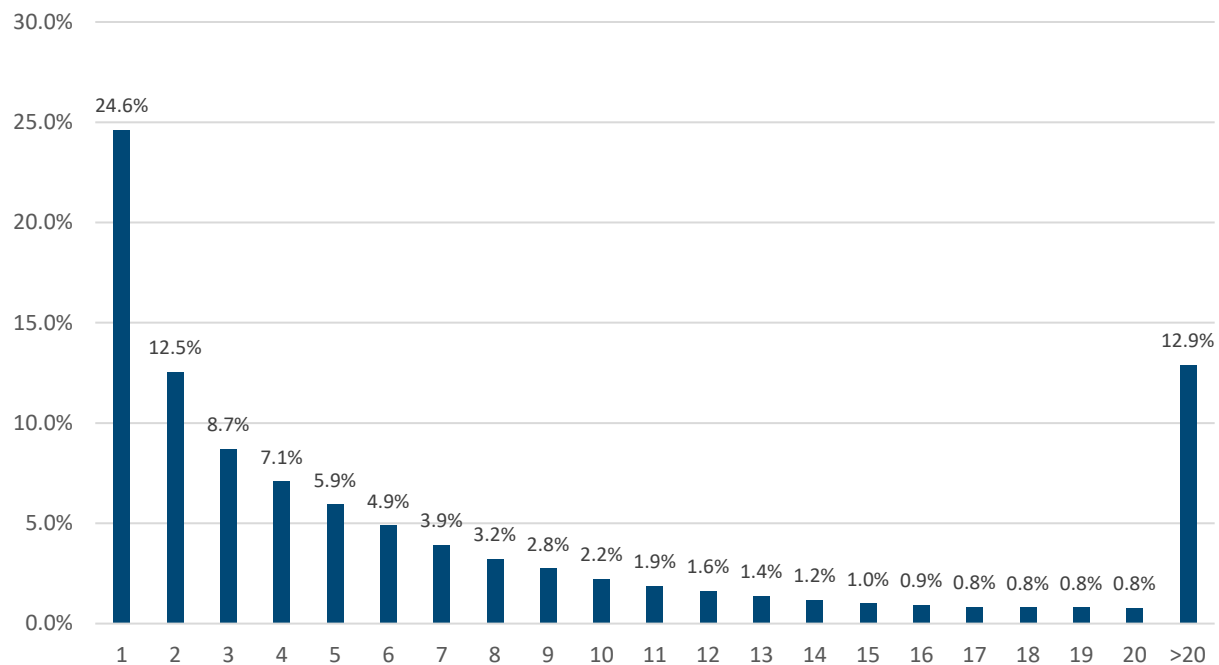


Figure IFT-03 presents the TTC distribution with greater detail in the time categories under three years. During the study period, many crime guns moved very quickly from purchase to recovery in a crime: 9% (137,555) were recovered under three months, 6% (90,642) were recovered between three months and under seven months, 9% (137,957) were recovered between seven months and under one year, 13% (185,281) were recovered between one year and under two years, and 9% (128,788) were recovered between two years and under three years.

**Figure IFT-03: Percentage of Traced Crime Guns by TTC Categories, 2017 – 2021**

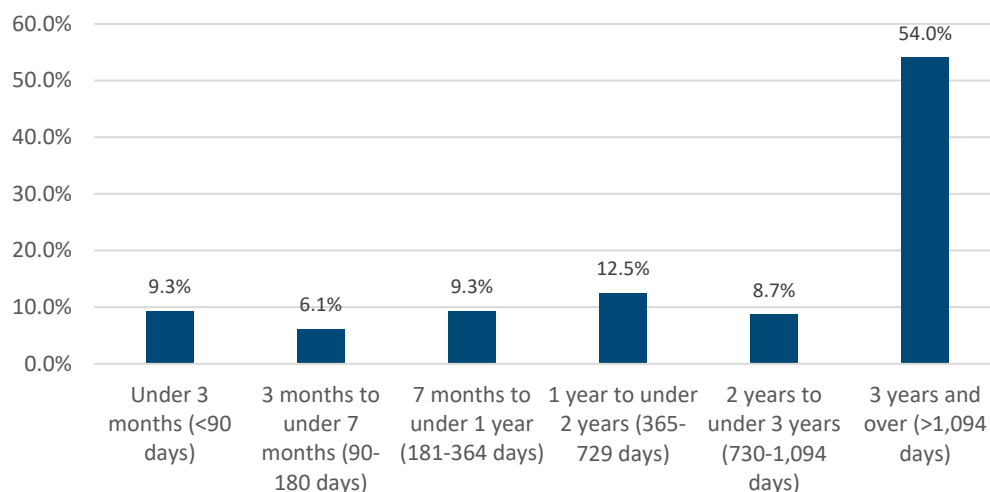
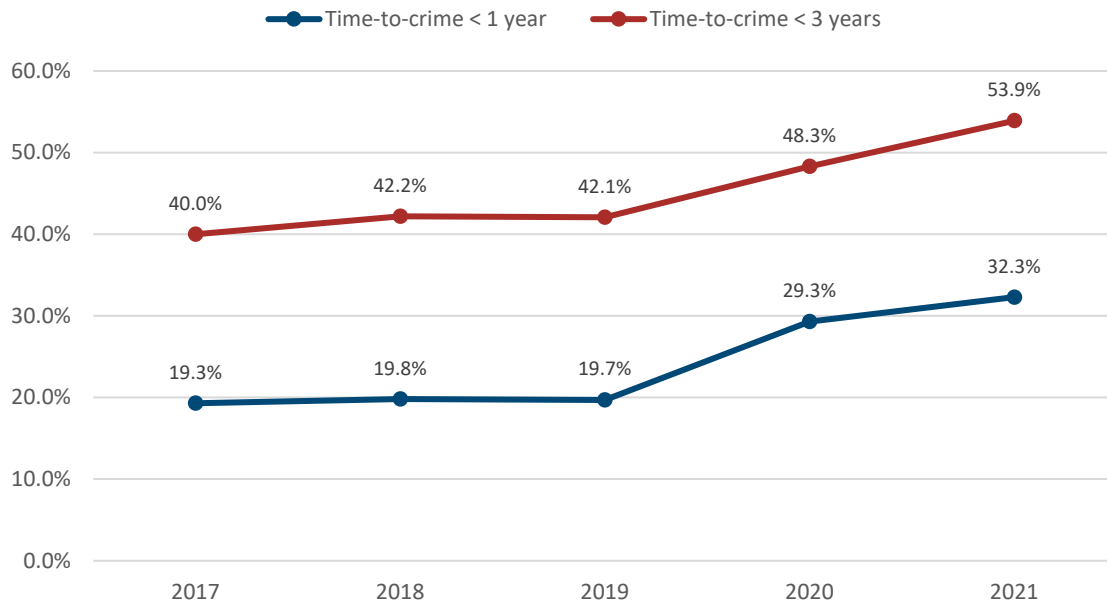


Figure IFT-04 presents the annual percentage of traced crime guns that were recovered within one year of purchase and recovered within three years of purchase between 2017 and 2021. The percentage of traces with a TTC less than one year was relatively stable between 2017 and 2019. However, this percentage

increased by 12 percentage points from 2019 (20%) to 2021 (32%), reflecting a 64% increase in the share of traced guns with TTC less than one year. The percentage of crime guns recovered within three years of purchaser increased by 12 percentage points from 2019 (42%) to 2021 (54%), reflecting a 28% increase in the share of traced guns with TTC less than three years. This was driven almost entirely by an increase in traced guns with TTC of less than one year.

**Figure IFT-04: Less Than One-Year TTC vs Less Than Three-Year TTC, 2017 – 2021**



Median TTC varied considerably across U.S. states from 2017 to 2021 (Table IFT-01a). Virginia had the shortest median TTC (1.6 years) followed by Michigan, Arizona, Missouri, and Mississippi. Hawaii had the longest median TTC at 7.5 years followed by Connecticut, New York, New Jersey, and Maryland.

**Table IFT-01a: U.S. States with Shortest and Longest Median TTC, 2017 – 2021**

Shortest TTC States		Longest TTC States	
State	Median TTC (Years)	State	Median TTC (Years)
Virginia	1.6	Hawaii	7.5
Michigan	2.0	Connecticut	5.9
Arizona	2.1	New York	5.7
Missouri	2.2	New Jersey	5.3
Mississippi	2.2	Maryland	5.0

See Table IFT-01 in Appendix IFT – Indicators of Firearm Trafficking for a list of the median TTC (years) for the 50 U.S. states and territories during the study period.

Median TTC also varied considerably across selected U.S. cities from 2017 to 2021 (Table IFT-02a). Richmond had the shortest median TTC (1.5 years) followed by Detroit, Columbia, and Phoenix. Memphis and Saint Louis both had a median TTC of 1.9 years. New York had the longest median TTC at 6.3 years, followed by Baltimore and San Jose. San Bernardino, San Diego, and Los Angeles all had a median TTC of 4.2 years.

**Table IFT-02a: U.S. Cities with Shortest and Longest Median TTC, 2017 – 2021**

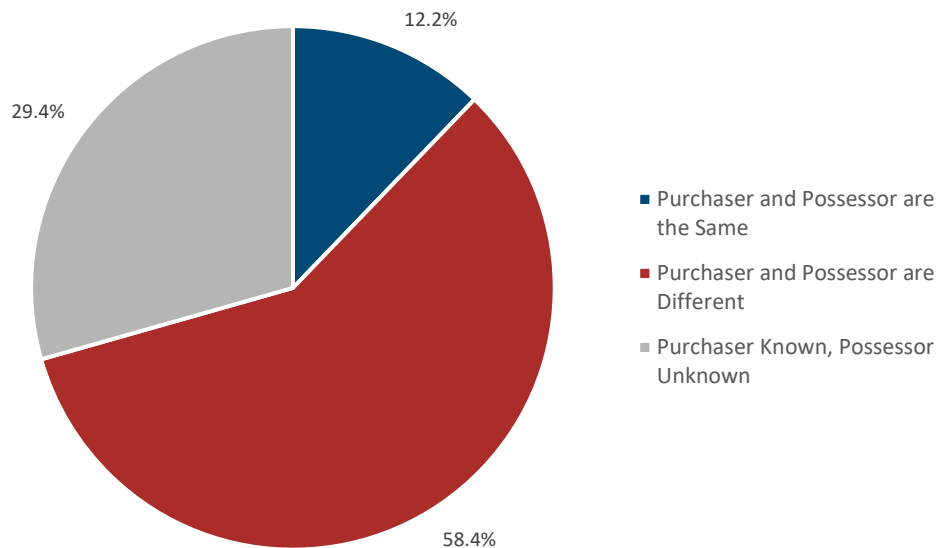
Shortest TTC Cities		Longest TTC Cities	
City	Median TTC (Years)	City	Median TTC (Years)
Richmond, VA	1.5	New York, NY	6.3
Detroit, MI	1.6	Baltimore, MD	5.3
Columbia, SC	1.7	San Jose, CA	4.6
Phoenix, AZ	1.8	San Bernardino, CA	4.2
Memphis, TN	1.9	San Diego, CA	4.2
Saint Louis, MO	1.9	Los Angeles, CA	4.2

See Table IFT – 02 in Appendix IFT – Indicators of Firearm Trafficking for a complete list of median TTC (years) for selected U.S. cities from 2017 through 2021.

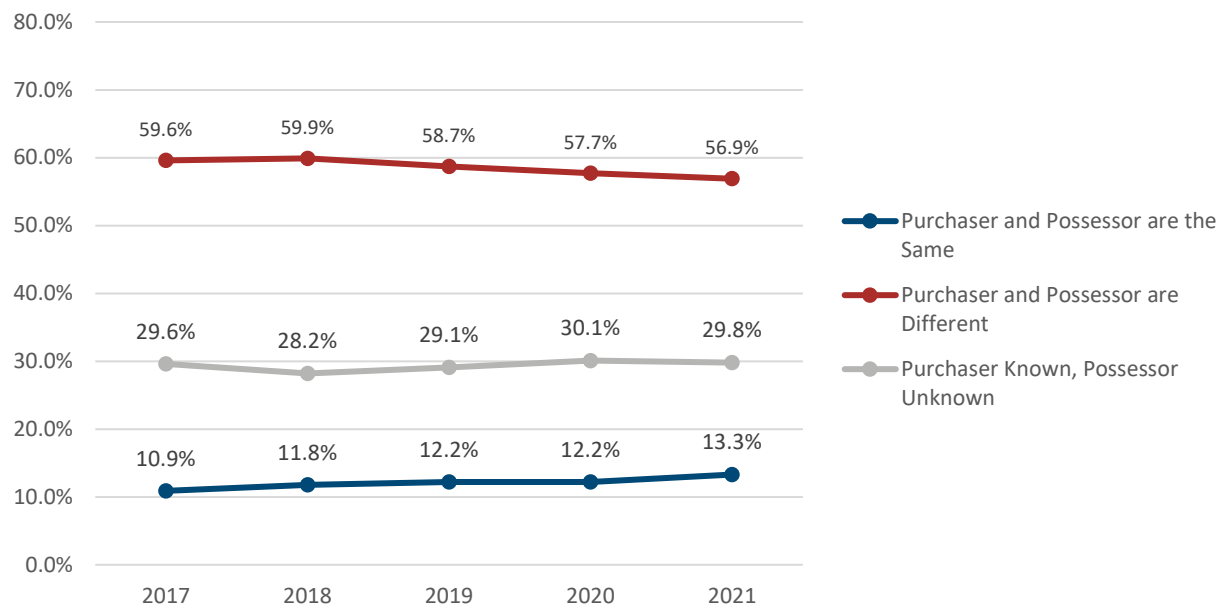
### ***Purchasers and Possessors of Traced Crime Guns***

Between 2017 and 2021, nearly all (1,482,702) of the 1,482,861 traces contained purchaser and/or possessor information. Of these crime guns, 58% (866,120 of 1,482,702) had a different purchaser than possessor, another 29% (435,833) were recovered without a known possessor associated with the crime gun, and only 12% (180,749 of 1,482,702) had the same purchaser and possessor (Figure IFT-05).

**Figure IFT-05: Percentage of Traced Crime Guns by Purchaser and Possessor Relationships, 2017 – 2021**



As reflected in Figure IFT-06, the yearly percentage of traced crime guns that had a different purchaser than possessor, the same purchaser and possessor, and no known possessor remained relatively stable between 2017 and 2021.

**Figure IFT-06: Percentage of Traced Crime Guns by Purchaser and Possessor Relationships, 2017 – 2021**

U.S. states varied in the percentages of recovered crime guns that were traced to a purchaser who was not the identified possessor (Table IFT-03a). Arkansas had the highest percentage of traced crime guns where the purchasers and identified possessor were different individuals (70%) followed by Kentucky, West Virginia, Oklahoma, and New York. Texas had the lowest percentage of recovered crime guns where the purchaser and identified possessor were different individuals (48%) followed by Nevada, Massachusetts, Florida, and South Dakota.

**Table IFT-03a: U.S. States with Highest and Lowest Percentages of Traced Crime Guns with Different Purchaser than Possessor, 2017 – 2021**

Highest Percentage of Different Purchaser than Possessor		Lowest Percentage of Different Purchasers than Possessor	
Recovery State	Percent	Recovery State	Percent
Arkansas	70.2%	Texas	47.7%
Kentucky	69.9%	Nevada	50.7%
West Virginia	69.7%	Massachusetts	51.7%
Oklahoma	69.5%	Florida	51.8%
New York	68.1%	South Dakota	52.2%

See Table IFT-03 in Appendix IFT – Indicators of Firearm Trafficking for a complete list of the purchaser and possessor relationships for recovered crime guns in the 50 U.S. states and territories from 2017 through 2021.

Selected U.S. cities also varied in the percentages of recovered crime guns that were traced to a purchaser who was not the identified possessor (Table IFT-04a). Wichita had the highest percentage of traced crime guns where the purchaser and the identified possessor were different people (79%) followed by San Bernardino, Cincinnati, New York, and Louisville. Winston-Salem had the lowest percentage of traced crime guns where the purchaser and possessor were different people (4%) followed by Houston, Chattanooga, Richmond, and Phoenix.

**Table IFT-04a: U.S. Cities with Highest and Lowest Percentages of Traced Guns with Different Purchaser than Possessor, 2017 – 2021**

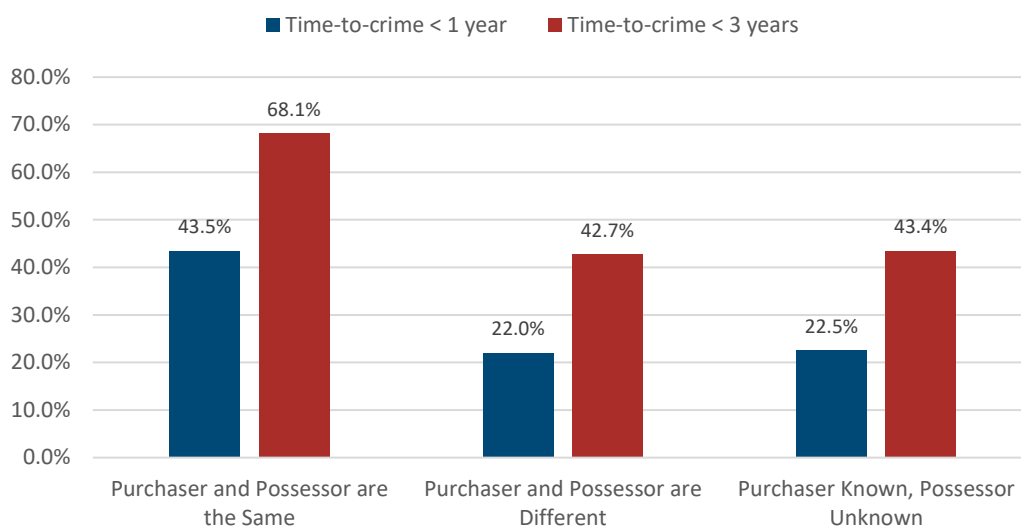
Highest Percentage of Different Purchaser than Possessor		Lowest Percentage of Different Purchaser than Possessor	
Recovery City	Percent	Recovery City	Percent
Wichita, KS	79.3%	Winston-Salem, NC	4.1%
San Bernardino, CA	75.8%	Houston, TX	18.0%
Cincinnati, OH	73.7%	Chattanooga, TN	28.9%
New York, NY	72.0%	Richmond, VA	41.0%
Louisville, KY	71.8%	Phoenix, AZ	45.5%

See Table IFT-04 in Appendix IFT – Indicators of Firearm Trafficking for a complete list of the purchaser and possessor relationships for recovered crime guns in selected U.S. cities from 2017 through 2021.

### ***TTC by Purchaser and Possessor Relationship***

Between 2017 and 2021, the median TTC for traced crime guns recovered in the possession of the purchaser (411 days or 1.1 years) was notably shorter than the median TTC for traced crime guns recovered without a known possessor (1,188 days or 3.3 years) and traced crime guns recovered from a possessor who was not the purchaser (1,237 days or 3.4 years). As reflected in Figure IFT-07, 44% (78,547) of traced crime guns with the same purchaser and possessor were recovered within one year of purchase, while 22% (190,295) of traced crime guns with a different purchaser than possessor were recovered within one year of purchase. In contrast, 68% (122,842) of traced crime guns with the same purchaser and possessor were recovered within three years of purchase, while 43% (368,972) of the traced crime guns with a different purchaser than possessor were recovered within three years of purchase. Some 23% (97,999) of traced crime guns with a known purchaser but without a known possessor were recovered within one year of purchase, and 43% (188,668) were recovered within three years of purchase.

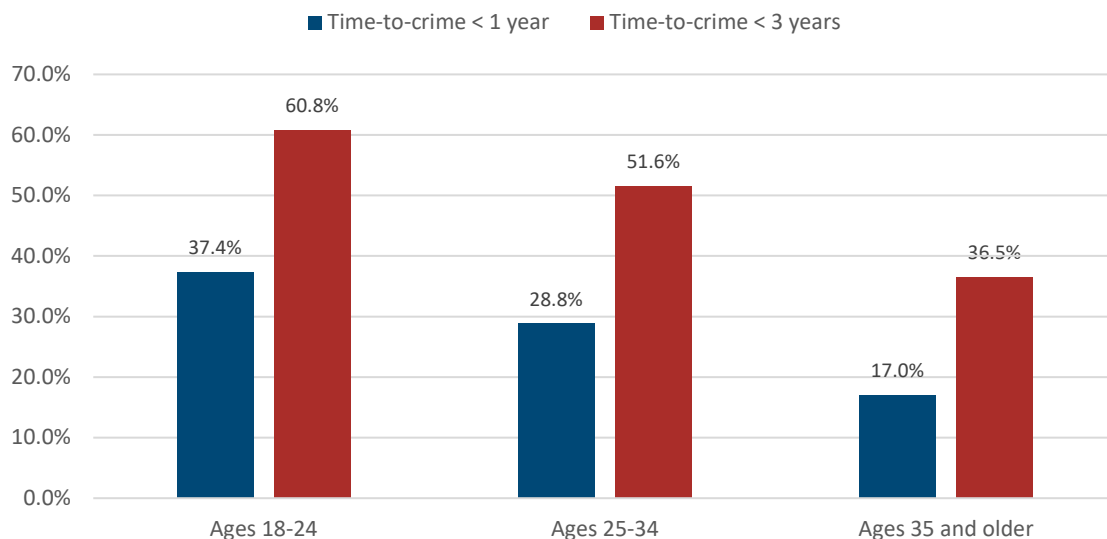
**Figure IFT-07: TTC Category by Purchaser and Possessor Relationship, 2017 – 2021**



### ***TTC by Purchaser Age and Possessor Age***

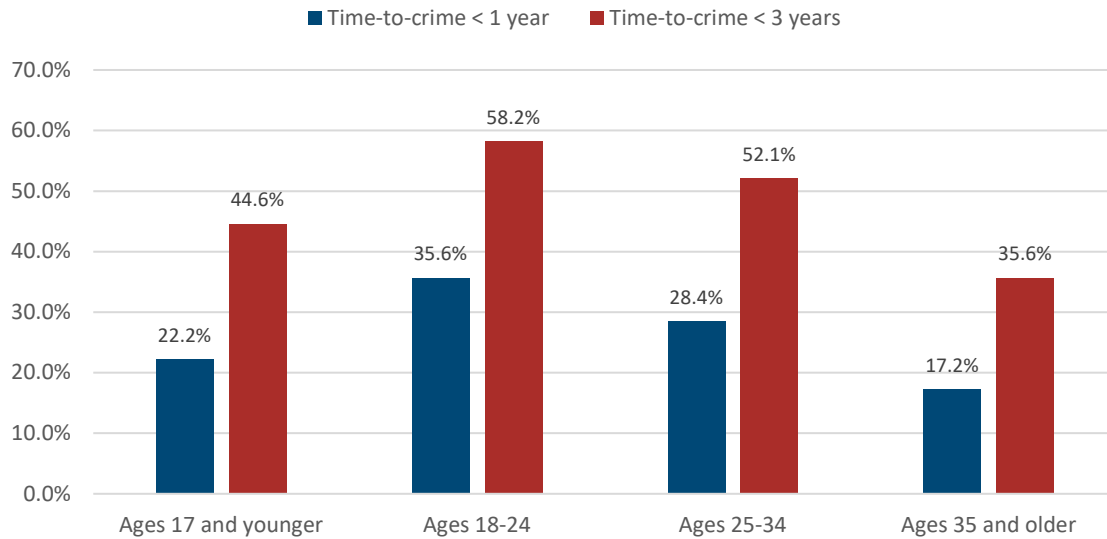
Between 2017 and 2021, the median TTC for traced crime guns purchased by youths ages 18 to 24 (510 days or 1.4 years) was shorter than the TTC for crime guns purchased by young adults ages 25 to 34 (924 days or 2.5 years) and much shorter than the TTC for crime guns purchased by adults ages 35 and older (1,619 days or 4.4 years). As reflected in Figure IFT-08, 37% (116,523) of the traced crime guns purchased by youths ages 18 to 24, 29% (137,521) purchased by young adults ages 25 to 34, and 17% (109,027) purchased by adults ages 35 and older were recovered within one year of purchase, respectively. Similarly, 61% (189,511) of the traced crime guns purchased by youths ages 18 to 24, 52% (246,329) purchased by young adults ages 25 to 34, and 37% (234,054) purchased by adults ages 35 and older were recovered within three years of purchase.

***Figure IFT-08: TTC by Purchaser Age Group, 2017 – 2021***



Between 2017 and 2021, the median TTC for traced crime guns possessed by youths ages 18 to 24 (720 days or 2 years) was shorter than the TTC for those possessed by young adults ages 25 to 34 (910 days or 2.5 years), possessed by juveniles ages 17 and younger (1,266 days or 3.5 years), and possessed by adults ages 35 and older (1,669 days or 4.6 years). As reflected in Figure IFT-09, 36% (87,673) of the traced crime guns possessed by youths ages 18 to 24, 28% (95,811) possessed by young adults ages 25 to 34, 22% (6,539) possessed by juveniles ages 17 and younger, and 17% (62,730) possessed by adults ages 35 and older were recovered within one year of purchase. Similarly, 58% (143,291) of the traced crime guns possessed by youths ages 18 to 24, 52% possessed by young adults ages 25 to 34, 45% (13,130) possessed by juveniles ages 17 and younger, and 36% (129,362) possessed by adults ages 35 and older were recovered within three years of purchase.

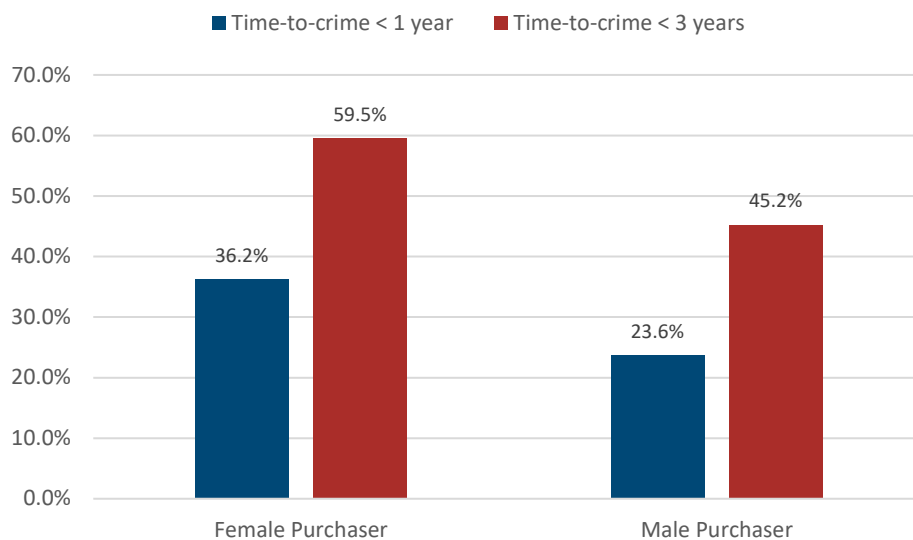
**Figure IFT-09: TTC by Possessor Age Group, 2017 – 2021**



### ***TTC by Purchaser Gender and Possessor Gender***

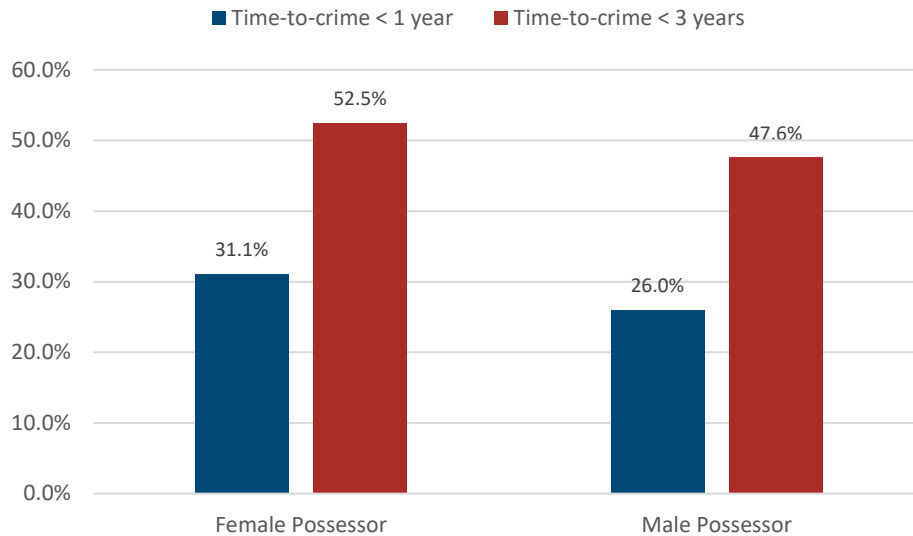
Between 2017 and 2021, the median TTC for traced crime guns that were purchased by a female (620 days or 1.7 years) was notably shorter than the TTC for traced crime guns purchased by a male (1,137 days or 3.1 years). As reflected in Figure IFT-10, 36% (95,180) of the traced crime guns purchased by a female were recovered within one year of purchase, while 24% (26,198) purchased by a male were recovered within one year of purchase. Similarly, 60% (156,319) of the traced crime guns purchased by a female were recovered within three years of purchase, while 45% (511,237) purchased by a male were recovered within three years of purchase.

**Figure IFT-10: TTC by Purchaser Gender, 2017 – 2021**



Traced crime guns recovered from female possessors had a moderately shorter median TTC (831 days or 2.3 years) relative to traced crime guns recovered from male possessors (1,021 days or 2.8 years). As reflected in Figure IFT-11, 31% (22,830) of the traced crime guns possessed by a female were recovered within one year of purchase and 26% (211,114) possessed by a male were recovered within one year of purchase. Similarly, 53% (38,549) of the traced crime guns possessed by a female were recovered within one year of purchase and 48% (386,874) possessed by a male were recovered within three years of purchase.

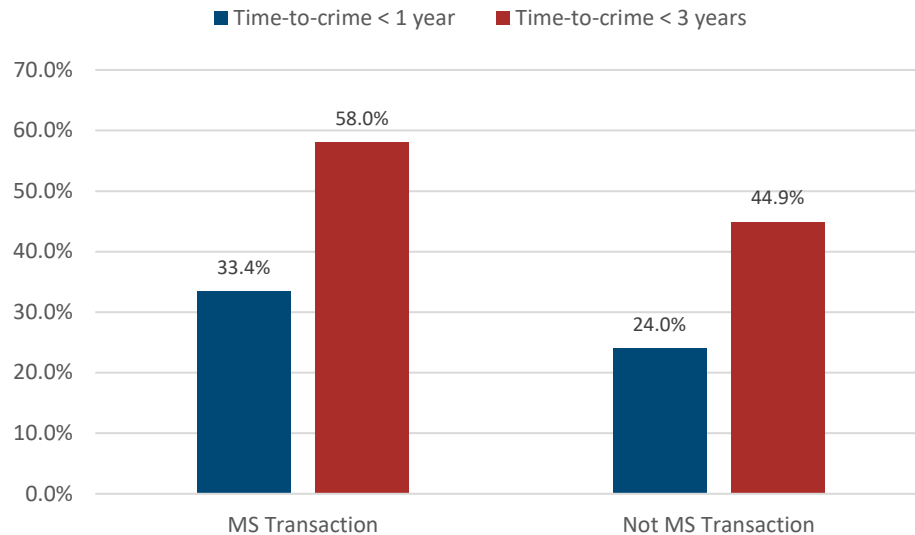
**Figure IFT-11: Possessor Gender by Selected TTC Categories, 2017 – 2021**



### ***TTC and Multiple Sales Transactions***

Slightly less than 9% (127,315) of the 1,479,046 crime guns traced to a purchaser, and with a TTC calculated, were part of a multiple sale. Traced crime guns that were part of a multiple sale had a considerably shorter median TTC (782 days or 2.1 years) relative to traced crime guns that were not part of a multiple sale (1,115 days or 3.1 years). As reflected in Figure IFT-12, 33% (42,565) of the traced crime guns that were part of a multiple sale were recovered within one year of purchase while only 24% (324,298) of traced crime guns that were not part of a multiple sale transaction were recovered within one year of purchase. Similarly, 58% (73,790) of the traced crime guns that were part of a multiple sale transaction were recovered within three years of purchase while less than 45% (606,742) that were not part of a multiple sale transaction were recovered within three years of purchase.

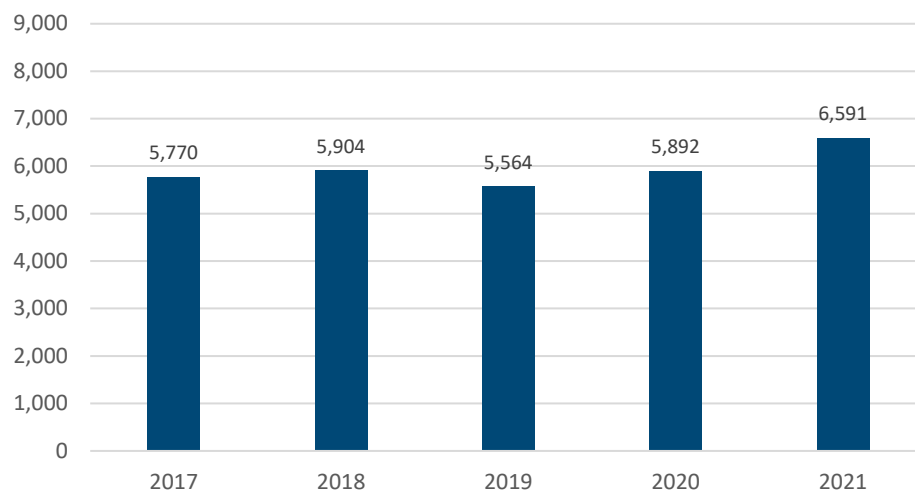
**Figure IFT-12: Multiple Sales Transactions and TTC, 2017 – 2021**



### ***Obliterated Serial Numbers and TTC***

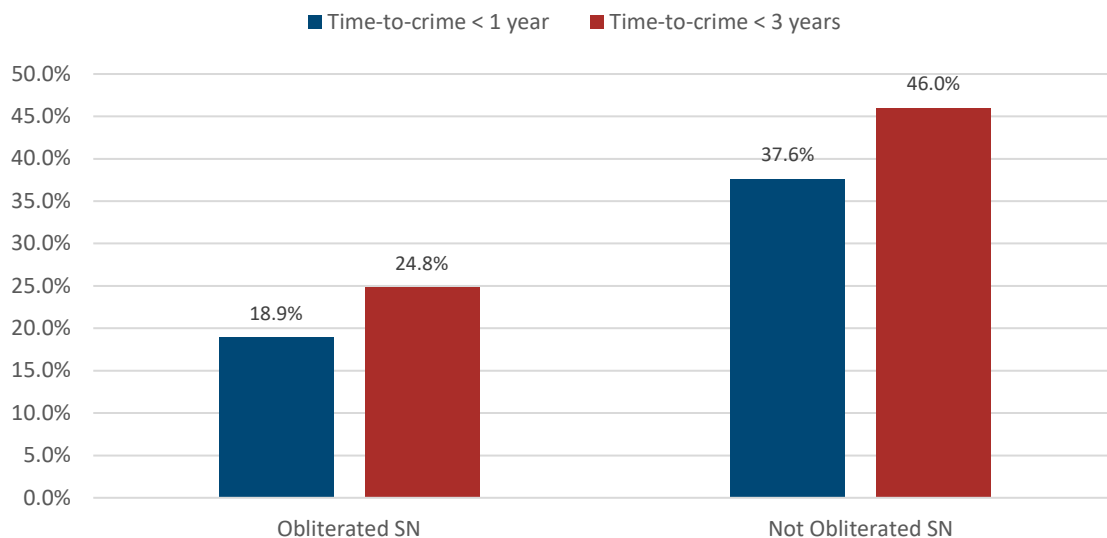
Pursuant to [18 U.S.C. §922\(k\)](#), it is unlawful for any person to possess or receive any firearm which has had the importer's or manufacturer's serial number removed, obliterated, or altered. When crime guns are recovered and determined to have had their serial number obliterated, specially trained forensic technicians at [ATF's National Laboratory](#) or state and local counterparts will attempt to restore the serial number. Altering or obliterated the firearm serial number is often utilized by persons attempting to evade detection and disrupt ATF's ability to trace firearms. LEAs recovered and submitted 29,721 crime guns with obliterated serial numbers to ATF for tracing (2% of 1,922,577) between 2017 and 2021. Over the past three years, the number of recovered and traced crime guns with an obliterated serial has increased by 18% from 2019 (5,564) to 2021 (6,591) (Figure IFT-13).

**Figure IFT-13: Crime Guns Submitted with Obliterated Serial Numbers, 2017 – 2021**



A purchaser was identified in 18% (5,398 of 29,721) of these traces, and TTC was calculated for nearly all of them (5,388 of 5,398). Traced crime guns with obliterated serial numbers had a much longer median TTC (1,633 days or 4.5 years) relative to traced crime guns that did not have obliterated serial numbers (1,092 days or 3.0 years based on 1,473,658 traced crime guns without obliterated serial numbers and with TTC calculated). As reflected in Figure IFT-14, 19% (1,021) of the traced crime guns with obliterated serial numbers were recovered within one year of purchase, while 38% (2,027) of traced crime guns that did not have obliterated serial numbers were recovered within one year of purchase. Similarly, 25% (365,842) of the traced crime guns with obliterated serial numbers were recovered within three years of purchase, and 46% (678,506) that did not have obliterated serial numbers were recovered within three years of purchase.

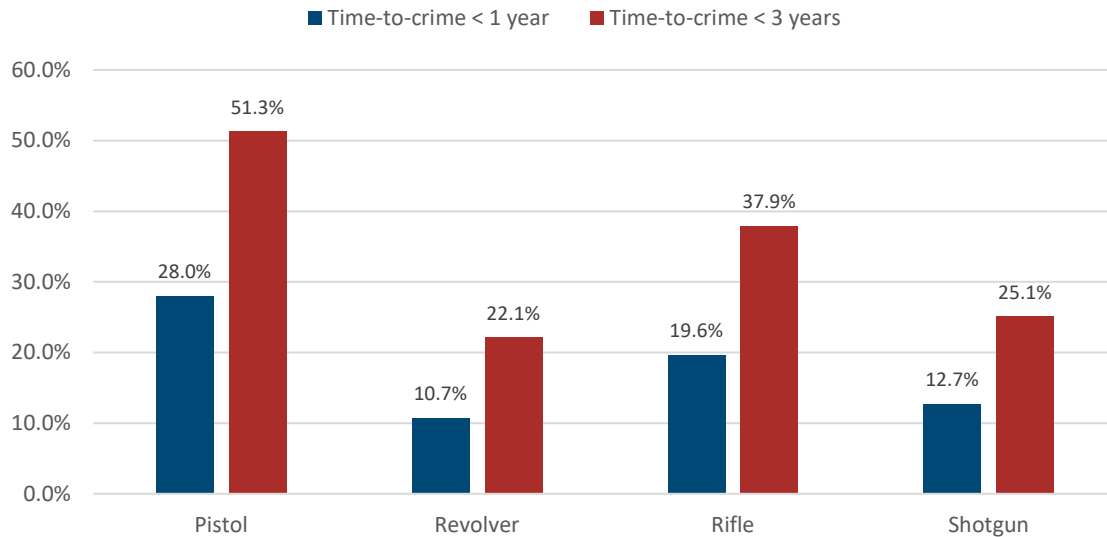
**Figure IFT-14: Obliterated Serial Numbers and TTC, 2017 - 2021**



### ***Type of Crime Gun and TTC***

From 2017 to 2021, there were 1,117,008 pistols, 152,367 rifles, 78,667 shotguns, and 121,541 revolvers traced to a purchaser with a TTC calculated. Pistols had a much shorter median TTC (912 days or 2.5 years) relative to rifles (1,513 days or 4.1 years), shotguns (2,713 days or 7.4 years), and revolvers (3,280 days or 9.0 years). As reflected in Figure IFT-15, 28% (312,263 of 1,117,008) of pistols were recovered within one year of purchase, as were 20% (29,886) of rifles, 13% (9,952) of shotguns, and 11% (13,042) of revolvers. Similarly, 51% (573,155) of pistols were recovered within three years of purchase, as were 38% (57,724) of rifles, 25% (19,739) of shotguns, and 22% (26,890) of revolvers.

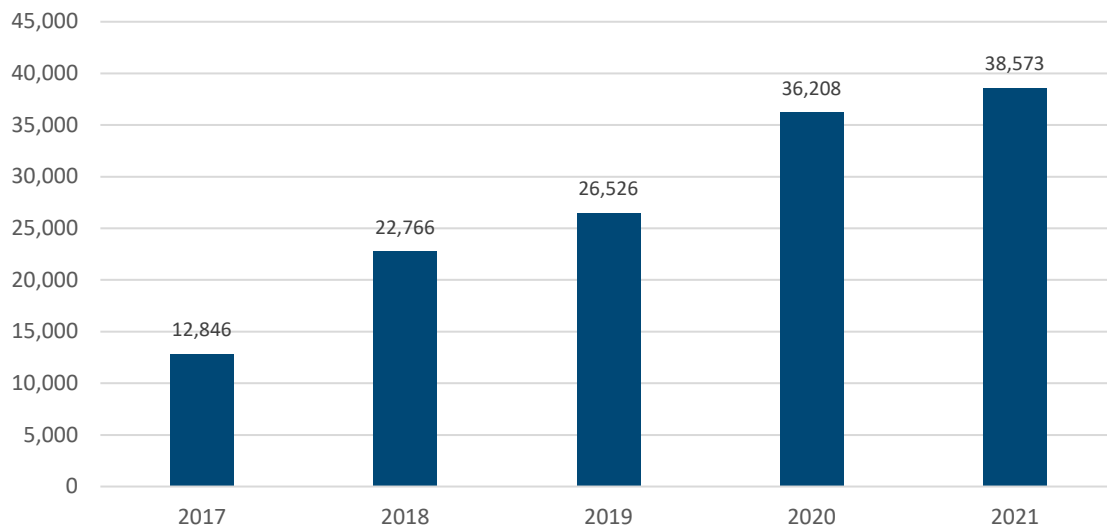
**Figure IFT-15: Firearm Type and TTC, 2017 – 2021**



### ***FFL Resale Program***

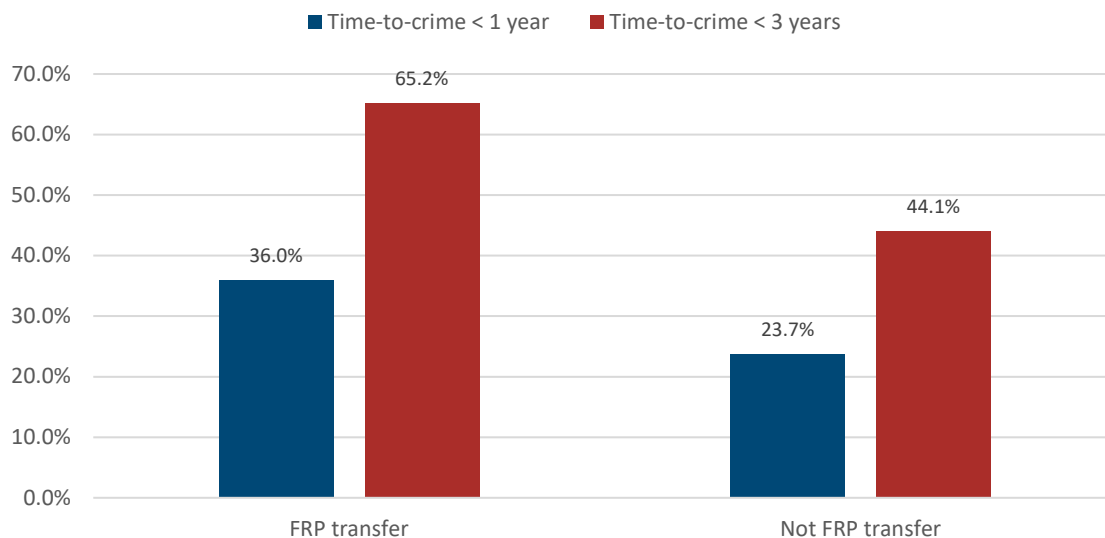
As described in Part II, the FFL Resale Program (FRP) identifies used firearms that FFLs have acquired from unlicensed individuals to enhance the efficiency of the crime gun tracing process. When a used firearm, that has been acquired by an FFL after an original retail sale is identified through the FRP, the NTC can directly contact the specific FFL (after an original retail sale) to identify the last known purchaser. A small number of firearms recovered by law enforcement agencies were traced to the last known purchaser via the FRP between 2017 and 2021. Only 9% (136,919) of the 1,482,861 recovered firearms traced to a purchaser were sold via a FRP transaction during the study period. The yearly number of firearms traced to a last known purchaser that were associated with FRP transactions increased by 200% from 12,846 in 2017 to 38,573 in 2021 (see Figure IFT-16).

**Figure IFT-16: Crime Guns Traced via FRP, 2017 – 2021**



There were 136,570 firearms traced to a last known purchaser via FRP transfers where TTC could be calculated, and 1,342,476 firearms traced to a purchaser and not acquired via FRP transfers where TTC could be calculated. Traced crime guns that were identified through FRP transfers had a nearly two-year shorter median TTC (541 days or 1.5 years) than traced guns that were not identified through FRP transfers (1,220 days or 3.3 years). As reflected in Figure IFT-17, 36% (49,220) of FRP traced crime guns were recovered within one year of purchase, while only 24% (317,643) of traced crime guns that were not identified through FRP transactions were recovered within one year of purchase. Similarly, 65% (89,070) of FRP traced crime guns were recovered within three years of purchase, while 44% (591,463) of traced crime guns that were not identified through FRP transactions were recovered within three years of purchase.

**Figure IFT-17: FRP Transactions and TTC, 2017 – 2021**



### ***Summary of Indicators of Firearm Trafficking***

Short TTC suggests that traced crime guns were rapidly diverted from lawful firearms commerce into criminal hands and represents a key indicator of firearm trafficking. Between 2017 and 2021, half of traced crime guns were purchased and recovered within three years of the last known sale. The percentage of crime guns recovered within one year of purchase increased from 20% in 2019 to 32% in 2021. As a result, the percentage of crime guns recovered within three years of purchase increased from 42% in 2019 to 54% in 2021. The prominence of recently transferred firearms amongst recovered crime guns is consistent with recent increases in the number of firearms manufactured domestically and imported into the U.S. over the past three years. The number of Gun Control Act firearms manufactured domestically increased by 22% from approximately nine million in 2018 to 11 million in 2020 and the number of Gun Control Act firearms imported into the U.S. increased by 50% from approximately four million in 2018 to 6 million in 2020.<sup>15</sup>

Traced recovered pistols had much shorter median TTC relative to other recovered and traced firearm types. Shorter TTC for recovered crime guns was also associated with a number of patterns such as when recovered in the possession of the identified purchaser, purchase and possession by younger people,

purchased by a female, acquired through a multiple sale transaction, and when transferred through a FRP transaction.

## Geographical Patterns

### *Distances Between FFLs, Purchasers, and Possessors<sup>16</sup>*

When purchasing a firearm from an FFL, the purchaser is required to complete portions of an ATF Form 4473. This includes recording their current residence address. The ATF Form 4473 is retained by the FFL and provided to ATF for tracing purposes and upon discontinuance of business. The distances in miles between the purchaser's address, and the addresses of the FFL where the transfer occurred, were calculated for 93% (1,373,160) of the 1,482,861 crime guns traced to a purchaser between 2017 and 2021. Distances in miles between the purchaser's address and the known possessor's address were calculated for 53% (778,887 of 1,482,861) of traced crime guns. Distances in miles between the address of the FFL where the crime gun was acquired and the address where a LEA recovered a crime gun was calculated for 80% (1,189,916 of 1,482,861) of traced crime guns.

A majority of traced crime gun purchasers lived very close to FFLs that sold the recovered gun (Table GP-01). Some 61% of recovered crime guns were purchased by individuals who lived within 10 miles of the FFLs where they acquired the crime gun. Purchasers also tended to live near identified possessors of traced crime guns, with 46% of purchaser and possessor home addresses located 10 miles or less apart in distance. However, 32% of the traced crime guns recovered at these short distances were found in possession of the identified purchaser (115,829 of 358,157). Only 35% of traced crime guns were recovered within 10 miles or less of the FFLs where these firearms were acquired. The median distances grow for traced crime guns between the distance from purchaser to FFL (8 miles), to the distance between purchaser and possessor (13 miles), and the distance between FFL and recovery location (23 miles).

**Table GP-01: Distances from Purchaser to FFL, Purchaser to Possessor, and FFL to Recovery Location, 2017 – 2021**

Distance	Purchaser to FFL		Purchaser to Possessor		FFL to Recovery	
	Number	Percent	Number	Percent	Number	Percent
<=10 miles	832,142	60.60%	358,157	46.00%	414,131	34.80%
11 - 25 miles	317,436	23.10%	113,764	14.60%	222,767	18.70%
26 - 50 miles	109,461	8.00%	60,157	7.70%	111,830	9.40%
51 - 100 miles	54,402	4.00%	47,613	6.10%	92,648	7.80%
101 - 200 miles	35,699	2.60%	47,775	6.10%	90,826	7.60%
201 - 300 miles	12,200	0.90%	27,069	3.50%	50,410	4.20%
>300 miles	11,820	0.90%	124,352	16.00%	207,304	17.40%
<b>Total</b>	<b>1,373,160</b>		<b>778,887</b>		<b>1,189,916</b>	
<b>Median miles</b>	<b>8</b>		<b>13</b>		<b>23</b>	

When the dataset excludes traced crime guns where the purchaser and possessor are the same person, the pattern observed in Table GP-01 remains generally the same. As reflected in Table GP-02, traced crime gun purchasers generally lived near the FFLs where they acquired the crime gun (60% <=10 miles), many purchasers lived near the traced crime gun possessors (38% <=10 miles), and crime guns were often recovered near the FFL where they were acquired (32% <=10 miles). Similarly, in this sample, the

median distances grow for traced crime guns between the distance from purchaser to FFL (8 miles), the distance between purchaser and possessor (18 miles), and the distance between FFL and recovery location (28 miles).

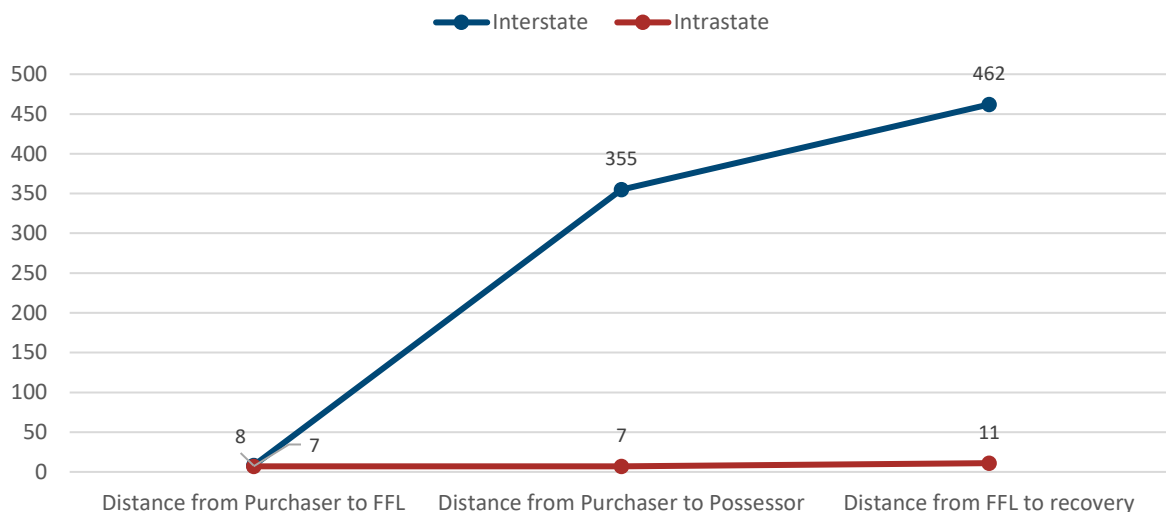
**Table GP-02 Distances from Purchaser to FFL, Purchaser to Possessor, and FFL to Recovery for Traced Crime Guns with Different Purchasers than Possessors, 2017 – 2021**

Distance	Purchaser to FFL		Purchaser to Possessor		FFL to Recovery	
	Number	Percent	Number	Percent	Number	Percent
<=10 miles	723,248	60.1%	242,328	38.1%	331,062	32.0%
11 - 25 miles	279,362	23.2%	103,987	16.3%	188,859	18.3%
26 - 50 miles	97,598	8.1%	57,008	9.0%	99,889	9.7%
51 - 100 miles	48,962	4.1%	45,434	7.1%	86,002	8.3%
101 - 200 miles	32,141	2.7%	45,430	7.1%	85,162	8.2%
201 - 300 miles	10,911	0.9%	25,775	4.0%	47,713	4.6%
>300 miles	10,654	0.9%	116,802	18.3%	195,962	18.9%
<b>Total</b>	<b>1,202,876</b>		<b>636,764</b>		<b>1,034,649</b>	
<b>Median miles</b>	<b>8</b>		<b>18</b>		<b>28</b>	

### ***Distances for Intrastate and Interstate Recovered Crime Guns***

Traced crime guns travel very different distances depending on whether the traced crime gun is recovered in the same state or a different state than the FFL it was acquired from. As reflected in Figure GP-01, guns recovered intrastate do not travel very far. The median distance between the purchaser and the FFL is only seven miles; the median distance between the purchasers and identified possessors is only seven miles (due to the large share of purchasers who are also identified possessors as documented above), and the median distance between the FFL and the recovery location is 11 miles. Interstate crime guns have similar patterns between the purchaser and FFL, with a median distance of eight miles. However, these interstate crime gun recoveries then show a median distance of 355 miles between the purchasers and the identified possessors and a median distance of 463 miles between FFL and the recovery location.

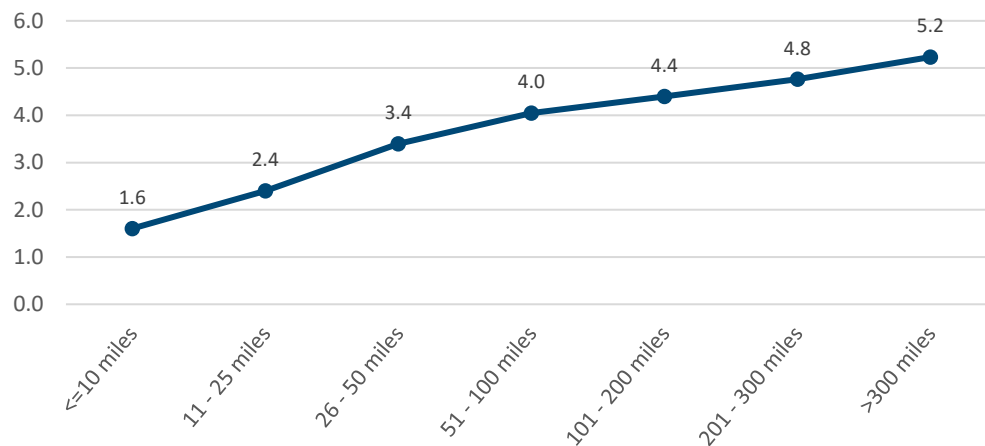
**Figure GP-01: Distances (Miles) for Intrastate and Interstate Recovered Crime Guns, 2017 – 2021**



### ***TTC by Distances from FFL to Recovery Location***

For purposes of this section, a U.S. “source state” is the state where the last known purchaser acquired the crime gun from an FFL. As the distance increases between source and recovery locations of traced crime guns, the median TTC also increases. As reflected in Figure GP-02, median TTC increased by 225% from 1.6 years when traced crime guns were recovered within 10 miles from the FFL it was acquired from to 5.2 years when traced crime guns are recovered 300 miles or more from the FFL it was acquired from.

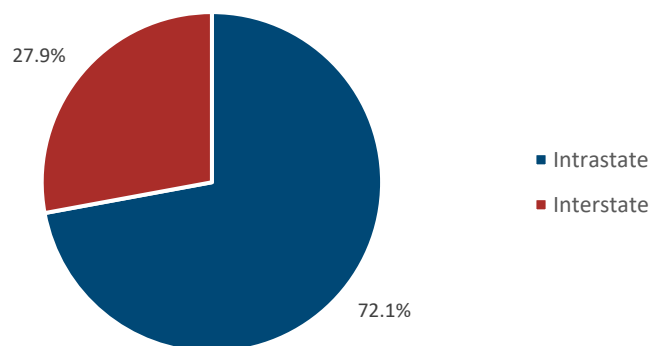
***Figure GP-02: Median TTC in Years by Selected Distances Between FFL and Law Enforcement Recovery Location, 2017 - 2021***



### ***Source Location and Recovery Location***

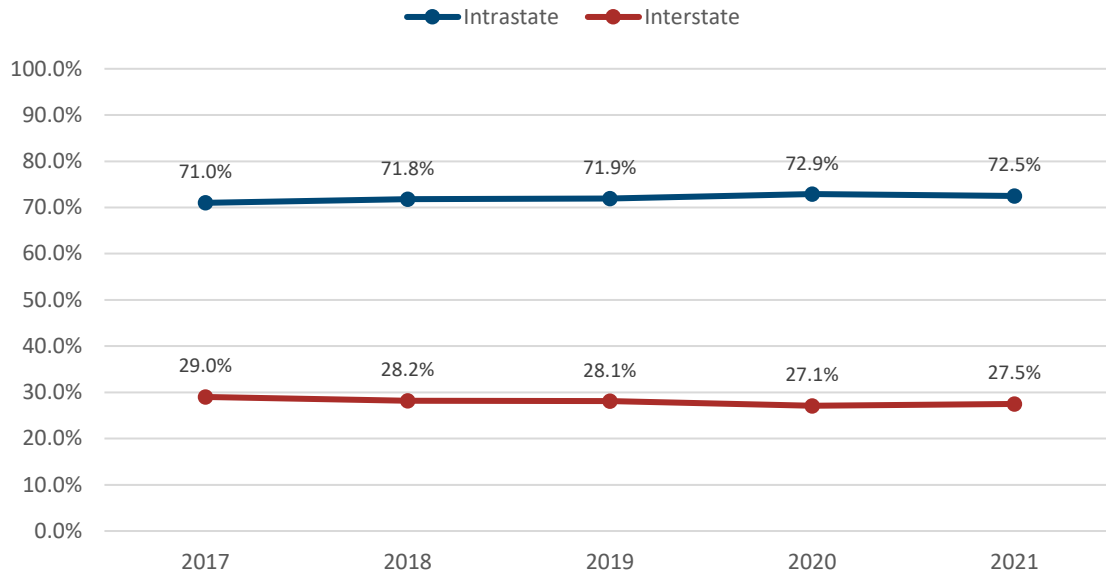
The location of the FFL (source) that transferred the firearm to the final known purchaser and the state of the recovery location of crime guns was determined in 1,480,675 traces (>99% of 1,482,861 crime guns traced to a purchaser). Between 2017 and 2021, 72% of the traced crime guns were recovered in the same state where they were sourced from (1,067,401) and 28% of the traced crime guns were recovered in a different state (413,274) (Figure GP-03).

***Figure GP-03: Intrastate vs Interstate Recovery Location as Compared to FFL Location, 2017 – 2021***



As reflected in Figure GP-04, the percentages of intrastate recoveries and interstate recoveries were very stable between 2017 and 2021.

**Figure GP-04: Intrastate vs. Interstate Recovery Location, 2017 – 2021**



U.S. states varied in the percentage of crime guns recovered that were purchased from interstate and intrastate sources of firearms (Table GP-03a). New Jersey had the highest percentage of recovered crime guns acquired at FFLs in other states (82%) followed by New York, Massachusetts, Hawaii, and Maryland. Texas had the highest percentage of recovered crime guns acquired at FFLs in the same state (86%) followed by Wisconsin, Ohio, Virginia, and Indiana.

**Table GP-03a: U.S. States with Highest Percentages of Interstate and Intrastate Sourced Crime Guns Recovered and Traced, 2017 – 2021**

Highest Percentage Interstate		Highest Percentage Intrastate	
State	Percent	State	Percent
New Jersey	81.8%	Texas	85.5%
New York	79.7%	Wisconsin	84.3%
Massachusetts	67.1%	Ohio	83.4%
Hawaii	54.1%	Virginia	83.2%
Maryland	53.4%	Indiana	82.9%

See Table GP-03 in Appendix GP- Geographic Patterns for a complete list of the percentages of interstate and intrastate sources of recovered crime guns for the 50 U.S. states and territories during the study period.

Selected U.S. cities also varied in the percentage of crime guns recovered that were acquired from interstate and intrastate sources of firearms (Table GP-04a). New York had the highest percentage of recovered crime guns acquired at FFLs in other states (93%) followed by Baltimore, Chicago, Los Angeles, and San Jose. Richmond had the highest percentage of recovered crime guns acquired at FFLs in the same state (90%) followed by San Antonio, Cleveland, Houston, and Indianapolis.

**Table GP-04a: Selected U.S. Cities with Highest Percentages of Interstate and Intrastate Sourced Crime Guns Recovered and Traced, 2017 – 2021**

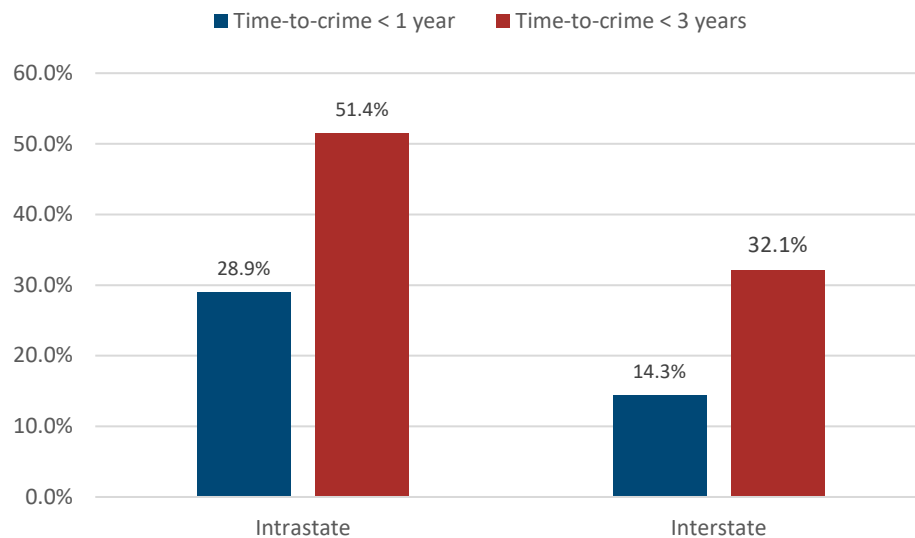
Highest Percentage Interstate		Highest Percentage Intrastate	
City	Percent	City	Percent
New York, NY	92.7%	Richmond, VA	90.1%
Baltimore, MD	60.9%	San Antonio, TX	88.8%
Chicago, IL	56.2%	Cleveland, OH	88.8%
Los Angeles, CA	51.1%	Houston, TX	87.5%
San Jose, CA	45.5%	Indianapolis, IN	87.5%

See Table GP-04 in Appendix GP – Geographic Patterns for a complete list of percentages of interstate and intrastate sources of recovered crime guns for selected U.S. cities from 2017 through 2021.

### ***TTC by Source and Recovery Locations***

The median TTC for intrastate recoveries (879 days or 2.4 years) was notably shorter than the TTC for interstate recoveries (1,801 days or 4.9 years) between 2017 and 2021. As reflected in Figure GP-05, 29% of the traced crime guns recovered intrastate had a TTC of one year or less, while only 14% of traced crime guns recovered interstate had a TTC of one year or less. Similarly, 51% of the traced crime guns recovered intrastate were recovered within three years of purchase and only 32% of traced crime guns recovered interstate were recovered within three years of purchase.

**Figure GP-05: Intrastate versus Interstate TTC, 2017 – 2021**



### ***Summary of Geographic Patterns***

More than half of traced crime guns were recovered less than 25 miles away from the FFLs where those crime guns were acquired. However, most crime gun purchasers and possessors lived close to the FFL where the crime gun was acquired. More than 60% of traced and recovered crime guns were purchased by individuals who lived within 10 miles of the FFL where the transaction occurred. Nearly half of crime gun possessors lived within 10 miles of the person who purchased the crime gun in part due to a third of these recovered crime guns being used in crimes by the same person that acquired them.

Some 72% of traced crime guns were recovered in the same state in which they were acquired from an FFL, while the remaining 28% of crime guns were recovered in a different state than where these guns were acquired at an FFL. The median distance between crime gun recovery location and the FFL where the crime guns were acquired was 11 miles for those that were recovered in the same state where they were acquired. In contrast, median distance between crime gun recovery location and the FFL where the crime gun was purchased was 463 miles for crime guns recovered in a different state than where they were acquired. Crime guns with intrastate recovery locations had shorter TTC when compared to crime guns with interstate recovery locations. Traced crime guns that traveled longer distances tended to have longer TTC. For instance, the median TTC was only 1.6 years for traced crime guns recovered within 10 miles of the FFL from which they were acquired, but was 5.2 years for traced crime guns recovered 300 miles or more from the FFL from which they were acquired.

### **Domestic Tracing Conclusion**

The results presented in this section are consistent with the findings of prior ATF reports and academic research on the illicit acquisition of firearms by prohibited persons.<sup>17</sup> Traced crime guns typically originate from the legal supply chain of manufacture (or import), distribution, and retail sale. Crime guns may change hands a number of times after that first retail sale, and some of those transactions may be a theft or violate one or more regulations on firearm commerce.<sup>18</sup> Individuals who are prohibited due to their criminal records or other conditions are unlikely to purchase directly from a licensed federal firearms dealer.<sup>19</sup> Instead, prohibited persons determined to get crime guns acquire them through underground crime gun markets that involve unregulated transactions with acquaintances and illicit “street” sources.<sup>20</sup> Many ATF crime gun trafficking investigations involve close-to-retail diversions of crime guns from legal firearms commerce including straw purchasing from FFLs, trafficking by FFLs, and illegal transfers by unlicensed sellers.<sup>21</sup> A variety of illegally transferred crime guns sources sustain underground crime gun markets that supply prohibited persons and other dangerous individuals.<sup>22</sup>

The analysis of state and city crime gun trace data presented here suggests the pathways through which criminals acquire crime guns can vary significantly across jurisdictions depending on the stringency of state firearm laws and the prevalence of firearm ownership.<sup>23</sup> Underground crime gun markets evolve over time as demonstrated by the surge in recovered PMFs and the increasing percentage of recovered short TTC traced crime guns between 2017 and 2021.<sup>24</sup> Ongoing comprehensive data collection and analysis of recovered traced crime guns are necessary to understand both persistent and emergent flows of crime guns into local underground crime gun markets. Strong collaborations among federal, state, and local law enforcement agencies and timely intelligence on local diversion patterns and interregional movements of traced crime guns are critical to the development of strategies to shutdown illegal supply lines of crime guns to criminals.

# APPENDIX OFT – OVERVIEW OF FIREARM TRACING

*Table OFT-01: Crime Guns Recovered and Traced for U.S. States and Territories, 2017-2021*

Recovery State or Territory	Total	% Total
AE <sup>25</sup>	2	0.0%
AK	5,412	0.3%
AL	37,855	2.0%
AM <sup>26</sup>	3	0.0%
AR	13,458	0.7%
AZ	49,292	2.6%
CA	231,784	12.1%
CO	31,145	1.6%
CT	7,416	0.4%
DC	11,045	0.6%
DE	6,626	0.3%
FL	134,601	7.0%
GA	88,069	4.6%
GU <sup>27</sup>	168	0.0%
HI	1,194	0.1%
IA	12,688	0.7%
ID	6,872	0.4%
IL	90,014	4.7%
IN	45,535	2.4%
KS	18,024	0.9%
KY	32,844	1.7%
LA	56,601	2.9%
MA	13,733	0.7%
MD	48,600	2.5%
ME	2,728	0.1%
MI	43,599	2.3%
MN	20,728	1.1%
MO	44,793	2.3%
MP <sup>28</sup>	7	0.0%
MS	22,522	1.2%
MT	5,063	0.3%
NC	90,225	4.7%
ND	3,554	0.2%
NE	9,991	0.5%
NH	2,629	0.1%
NJ	21,453	1.1%
NM	15,923	0.8%
NV	30,160	1.6%
NY	43,298	2.3%
OH	79,035	4.1%
OK	18,210	1.0%
OR	26,046	1.4%
PA	64,782	3.4%
PR	4,796	0.3%
RI	2,570	0.1%
SC	42,532	2.2%
SD	3,340	0.2%
TN	64,598	3.4%
TX	177,786	9.3%
UT	13,257	0.7%
VA	56,797	3.0%
VI	745	0.0%
VT	1,256	0.1%
WA	27,715	1.4%
WI	28,122	1.5%

WV	9,509	0.5%
WY	1,665	0.1%
Unknown <sup>29</sup>	162	0.0%
<b>Total</b>	<b>1,922,577</b>	<b>100.0%</b>

*Table OFT-02: Number of Crime Guns Recovered and Traced for Selected U.S. Cities, 2017-2021*

<b>Recovery City</b>	<b>Total Traces</b>	<b>% Total</b>
<b>Mega Cities</b>	<b>230,334</b>	<b>40.2%</b>
Chicago, IL	50,312	8.8%
Dallas, TX	19,756	3.4%
Houston, TX	45,812	8.0%
Los Angeles, CA	30,798	5.4%
New York, NY	19,013	3.3%
Philadelphia, PA	23,460	4.1%
Phoenix, AZ	15,799	2.8%
San Antonio, CA	17,392	3.0%
San Diego, CA	5,702	1.0%
San Jose, CA	2,290	0.4%
<b>Large Cities</b>	<b>180,598</b>	<b>31.5%</b>
Baltimore, MD	13,336	2.3%
Charlotte, NC	14,357	2.5%
Columbus, OH	14,651	2.6%
Detroit, MI	26,065	4.5%
Indianapolis, IN	20,242	3.5%
Jacksonville, FL	13,619	2.4%
Las Vegas, NV	23,389	4.1%
Louisville, KY	15,331	2.7%
Memphis, TN	24,796	4.3%
Milwaukee, WI	14,812	2.6%
<b>Medium Cities</b>	<b>103,490</b>	<b>18.0%</b>
Atlanta, GA	15,333	2.7%
Cincinnati, OH	9,982	1.7%
Cleveland, OH	9,642	1.7%
Miami, FL	8,760	1.5%
New Orleans, LA	9,020	1.6%
Orlando, FL	11,177	1.9%
Saint Louis, MO	14,672	2.6%
Tampa, FL	10,376	1.8%
Tulsa, OK	7,707	1.3%
Wichita, KS	6,821	1.2%
<b>Small Cities</b>	<b>59,211</b>	<b>10.3%</b>
Baton Rouge, LA	8,544	1.5%
Chattanooga, TN	5,775	1.0%
Columbia, SC	6,279	1.1%
Dayton, OH	5,101	0.9%
Huntsville, AL	5,773	1.0%
Mobile, AL	5,465	1.0%
Richmond, VA	7,056	1.2%
San Bernardino, CA	4,724	0.8%
Shreveport, LA	5,312	0.9%
Winston Salem, NC	5,182	0.9%
<b>Total</b>	<b>573,633</b>	<b>100.0%</b>

**Table OFT-03: Percent Recovered Crime Guns Traced to Purchaser for U.S. States and Territories, 2017-2021**

Recovery State or Territory	Traced to Purchaser	Total Trace Requests	% Traced to Purchaser
AE	2	2	100.0%
AK	4,305	5,412	79.5%
AL	31,461	37,855	83.1%
AM	1	3	33.3%
AR	11,006	13,458	81.8%
AZ	39,771	49,292	80.7%
CA	143,466	231,784	61.9%
CO	24,908	31,145	80.0%
CT	4,930	7,416	66.5%
DC	7,700	11,045	69.7%
DE	5,212	6,626	78.7%
FL	110,072	134,601	81.8%
GA	74,065	88,069	84.1%
GU	88	168	52.4%
HI	718	1,194	60.1%
IA	9,922	12,688	78.2%
ID	5,297	6,872	77.1%
IL	67,648	90,014	75.2%
IN	37,168	45,535	81.6%
KS	14,522	18,024	80.6%
KY	25,064	32,844	76.3%
LA	46,426	56,601	82.0%
MA	9,322	13,733	67.9%
MD	32,903	48,600	67.7%
ME	2,023	2,728	74.2%
MI	35,443	43,599	81.3%
MN	16,258	20,728	78.4%
MO	36,796	44,793	82.1%
MP	3	7	42.9%
MS	18,668	22,522	82.9%
MT	3,698	5,063	73.0%
NC	72,559	90,225	80.4%
ND	2,842	3,554	80.0%
NE	7,672	9,991	76.8%
NH	2,003	2,629	76.2%
NJ	14,080	21,453	65.6%
NM	12,480	15,923	78.4%
NV	24,170	30,160	80.1%
NY	28,645	43,298	66.2%
OH	66,021	79,035	83.5%
OK	13,638	18,210	74.9%
OR	19,501	26,046	74.9%
PA	48,087	64,782	74.2%
PR	3,485	4,796	72.7%
RI	1,875	2,570	73.0%
SC	35,843	42,532	84.3%
SD	2,485	3,340	74.4%
TN	49,988	64,598	77.4%
TX	147,443	177,786	82.9%
UT	10,433	13,257	78.7%
VA	46,118	56,797	81.2%
VI	466	745	62.6%
VT	867	1,256	69.0%
WA	20,885	27,715	75.4%
WI	23,842	28,122	84.8%
WV	7,264	9,509	76.4%
WY	1,233	1,665	74.1%
Unknown	70	162	43.2%

*Table OFT-04: Percent Recovered Crime Guns Traced to Purchaser for Selected U.S. Cities, 2017-2021*

<b>Recovery City</b>	<b>Traced to Purchaser</b>	<b>Total Traces</b>	<b>% Traced to Purchaser</b>
<b>Mega Cities</b>	<b>175,425</b>	<b>230,334</b>	<b>76.2%</b>
Chicago, IL	37,680	50,312	74.9%
Dallas, TX	16,722	19,756	84.6%
Houston, TX	38,839	45,812	84.8%
Los Angeles, CA	19,649	30,798	63.8%
New York, NY	12,910	19,013	67.9%
Philadelphia, PA	16,626	23,460	70.9%
Phoenix, AZ	13,294	15,799	84.1%
San Antonio, TX	14,868	17,392	85.5%
San Diego, CA	3,301	5,702	57.9%
San Jose, CA	1,536	2,290	67.1%
<b>Large Cities</b>	<b>145,384</b>	<b>180,598</b>	<b>80.5%</b>
Baltimore, MD	8,057	13,336	60.4%
Charlotte, NC	11,882	14,357	82.8%
Columbus, OH	12,147	14,651	82.9%
Detroit, MI	21,881	26,065	83.9%
Indianapolis, IN	16,589	20,242	82.0%
Jacksonville, FL	11,735	13,619	86.2%
Las Vegas, NV	18,867	23,389	80.7%
Louisville, KY	11,785	15,331	76.9%
Memphis, TN	19,369	24,796	78.1%
Milwaukee, WI	13,072	14,812	88.3%
<b>Medium Cities</b>	<b>86,777</b>	<b>103,490</b>	<b>83.9%</b>
Atlanta, GA	13,035	15,333	85.0%
Cincinnati, OH	8,484	9,982	85.0%
Cleveland, OH	7,851	9,642	81.4%
Miami, FL	7,133	8,760	81.4%
New Orleans, LA	7,497	9,020	83.1%
Orlando, FL	9,789	11,177	87.6%
Saint Louis, MO	12,289	14,672	83.8%
Tampa, FL	8,595	10,376	82.8%
Tulsa, OK	6,570	7,707	85.2%
Wichita, KS	5,534	6,821	81.1%
<b>Small Cities</b>	<b>48,658</b>	<b>59,211</b>	<b>82.2%</b>
Baton Rouge, LA	7,339	8,544	85.9%
Chattanooga, TN	4,434	5,775	76.8%
Columbia, SC	5,489	6,279	87.4%
Dayton, OH	4,089	5,101	80.2%
Huntsville, AL	4,929	5,773	85.4%
Mobile, AL	4,757	5,465	87.0%
Richmond, VA	5,764	7,056	81.7%
San Bernardino, CA	3,299	4,724	69.8%
Shreveport, LA	4,550	5,312	85.7%
Winston Salem, NC	4,008	5,182	77.3%

# APPENDIX CCG – CHARACTERISTICS OF CRIME GUNS

*Table CCG-03: Percentage of Major Firearm Types Recovered and Traced for U.S. States and Territories, 2017-2021*

Recovery State / Territory	# Pistols	% Pistols	# Revolvers	% Revolvers	# Rifles	% Rifles	# Shotguns	% Shotguns	# Other	% Other	Total Traces
AE	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2
AK	3,147	58.1%	624	11.5%	1,069	19.8%	484	8.9%	88	1.6%	5,412
AL	26,997	71.3%	4,239	11.2%	3,895	10.3%	2,216	5.9%	508	1.3%	37,855
AM	0	0.0%	1	33.3%	1	33.3%	1	33.3%	0	0.0%	3
AR	9,414	70.0%	1,390	10.3%	1,658	12.3%	806	6.0%	190	1.4%	13,458
AZ	33,462	67.9%	4,015	8.1%	7,212	14.6%	3,055	6.2%	1,548	3.1%	49,292
CA	135,640	58.5%	30,732	13.3%	39,897	17.2%	20,251	8.7%	5,264	2.3%	231,784
CO	20,392	65.5%	3,454	11.1%	4,467	14.3%	2,415	7.8%	417	1.4%	31,145
CT	4,694	63.3%	1,113	15.0%	893	12.0%	550	7.4%	166	2.2%	7,416
DC	8,918	80.7%	1,025	9.3%	519	4.7%	319	2.9%	264	2.4%	11,045
DE	4,442	67.0%	732	11.0%	716	10.8%	657	9.9%	79	1.2%	6,626
FL	95,903	71.2%	15,225	11.3%	13,676	10.2%	7,284	5.4%	2,513	1.9%	134,601
GA	66,162	75.1%	8,712	9.9%	8,037	9.1%	4,244	4.8%	914	1.1%	88,069
GU	70	41.7%	24	14.3%	44	26.2%	23	13.7%	7	4.2%	168
HI	468	39.2%	129	10.8%	378	31.7%	134	11.2%	85	7.1%	1,194
IA	7,752	61.1%	1,277	10.1%	2,017	15.9%	1,496	11.8%	146	1.2%	12,688
ID	3,878	56.4%	894	13.0%	1,341	19.5%	636	9.3%	123	1.8%	6,872
IL	67,405	74.9%	10,281	11.4%	6,251	6.9%	4,396	4.9%	1,681	1.9%	90,014
IN	32,908	72.3%	4,593	10.1%	4,436	9.7%	2,871	6.3%	727	1.6%	45,535
KS	12,728	70.6%	1,660	9.2%	2,105	11.7%	1,227	6.8%	304	1.7%	18,024
KY	21,918	66.7%	3,667	11.2%	4,209	12.8%	2,173	6.6%	877	2.7%	32,844
LA	39,817	70.3%	6,134	10.8%	6,577	11.6%	3,542	6.3%	531	0.9%	56,601
MA	9,515	69.3%	1,807	13.2%	1,412	10.3%	822	6.0%	177	1.3%	13,733
MD	24,984	51.4%	6,058	12.5%	9,725	20.0%	6,876	14.1%	957	2.0%	48,600
ME	1,415	51.9%	278	10.2%	630	23.1%	346	12.7%	59	2.2%	2,728
MI	32,022	73.4%	3,822	8.8%	4,519	10.4%	2,467	5.7%	769	1.8%	43,599
MN	13,177	63.6%	1,941	9.4%	3,111	15.0%	2,262	10.9%	237	1.1%	20,728
MO	33,979	75.9%	3,630	8.1%	4,122	9.2%	2,103	4.7%	959	2.1%	44,793
MP	0	0.0%	1	14.3%	5	71.4%	1	14.3%	0	0.0%	7
MS	15,664	69.5%	2,429	10.8%	2,770	12.3%	1,421	6.3%	238	1.1%	22,522
MT	2,185	43.2%	551	10.9%	1,658	32.7%	544	10.7%	125	2.5%	5,063
NC	59,489	65.9%	10,309	11.4%	11,718	13.0%	7,598	8.4%	1,111	1.2%	90,225
ND	1,889	53.2%	371	10.4%	795	22.4%	450	12.7%	49	1.4%	3,554
NE	5,699	57.0%	1,035	10.4%	1,814	18.2%	1,235	12.4%	208	2.1%	9,991
NH	1,501	57.1%	255	9.7%	477	18.1%	276	10.5%	120	4.6%	2,629
NJ	13,873	64.7%	3,766	17.6%	2,169	10.1%	1,409	6.6%	236	1.1%	21,453
NM	10,152	63.8%	1,729	10.9%	2,398	15.1%	1,245	7.8%	399	2.5%	15,923
NV	21,477	71.2%	3,043	10.1%	3,138	10.4%	2,070	6.9%	432	1.4%	30,160
NY	26,965	62.3%	7,447	17.2%	4,896	11.3%	3,181	7.3%	809	1.9%	43,298
OH	60,298	76.3%	7,753	9.8%	6,236	7.9%	3,838	4.9%	910	1.1%	79,035
OK	11,642	63.9%	1,409	7.7%	2,340	12.9%	1,160	6.4%	1,659	9.1%	18,210
OR	13,938	53.5%	3,294	12.6%	5,919	22.7%	2,524	9.7%	371	1.4%	26,046
PA	42,614	65.8%	8,188	12.6%	8,254	12.7%	4,725	7.3%	1,001	1.6%	64,782
PR	3,875	80.8%	276	5.8%	497	10.4%	48	1.0%	100	2.1%	4,796
RI	1,709	66.5%	343	13.3%	303	11.8%	180	7.0%	35	1.4%	2,570
SC	30,879	72.6%	4,759	11.2%	3,935	9.3%	2,572	6.1%	387	0.9%	42,532
SD	1,716	51.4%	331	9.9%	857	25.7%	376	11.3%	60	1.8%	3,340
TN	46,563	72.1%	7,182	11.1%	6,236	9.7%	3,480	5.4%	1,137	1.8%	64,598
TX	129,384	72.8%	15,709	8.8%	19,506	11.0%	10,594	6.0%	2,593	1.5%	177,786
UT	8,414	63.5%	1,205	9.1%	2,191	16.5%	1,092	8.2%	355	2.7%	13,257
VA	40,886	72.0%	5,620	9.9%	6,131	10.8%	3,577	6.3%	583	1.0%	56,797
VI	609	81.7%	65	8.7%	43	5.8%	16	2.1%	12	1.6%	745
VT	562	44.7%	132	10.5%	346	27.5%	181	14.4%	35	2.8%	1,256
WA	16,319	58.9%	3,326	12.0%	4,874	17.6%	2,694	9.7%	502	1.8%	27,715
WI	21,098	75.0%	2,229	7.9%	2,867	10.2%	1,673	5.9%	255	0.9%	28,122
WV	5,260	55.3%	1,165	12.3%	1,798	18.9%	1,027	10.8%	259	2.7%	9,509
WY	817	49.1%	198	11.9%	426	25.6%	170	10.2%	54	3.2%	1,665
Unknown	118	72.8%	13	8.0%	18	11.1%	11	6.8%	2	1.2%	162
Total	1,306,804	68.0%	211,590	11.0%	237,532	12.4%	133,024	6.9%	33,627	1.7%	1,922,577

**Table CCG-04: Percentage of Major Firearm Types Recovered and Traced for Selected U.S. Cities, 2017-2021**

Recovery City	# Pistols	% Pistols	# Revolvers	% Revolvers	# Rifles	% Rifles	# Shotguns	% Shotguns	# Other	% Other	Total Traces
<b>Mega Cities</b>	<b>174,731</b>	<b>75.9%</b>	<b>25,165</b>	<b>10.9%</b>	<b>16,853</b>	<b>7.3%</b>	<b>10,098</b>	<b>4.4%</b>	<b>3,487</b>	<b>1.5%</b>	<b>230,334</b>
Chicago, IL	39,824	79.2%	5,523	11.0%	2,243	4.5%	1,704	3.4%	1,018	2.0%	50,312
Dallas, TX	15,394	77.9%	1,740	8.8%	1,497	7.6%	940	4.8%	185	0.9%	19,756
Houston, TX	37,067	80.9%	3,502	7.6%	3,099	6.8%	1,852	4.0%	292	0.6%	45,812
Los Angeles, CA	21,248	69.0%	4,677	15.2%	2,887	9.4%	1,582	5.1%	404	1.3%	30,798
New York, NY	13,387	70.4%	3,548	18.7%	1,060	5.6%	669	3.5%	349	1.8%	19,013
Philadelphia, PA	18,060	77.0%	2,893	12.3%	1,273	5.4%	913	3.9%	321	1.4%	23,460
Phoenix, AZ	12,044	76.2%	730	4.6%	1,778	11.3%	757	4.8%	490	3.1%	15,799
San Antonio, TX	12,828	73.8%	1,451	8.3%	1,876	10.8%	1,071	6.2%	166	1.0%	17,392
San Diego, CA	3,417	59.9%	813	14.3%	873	15.3%	445	7.8%	154	2.7%	5,702
San Jose, CA	1,462	63.8%	288	12.6%	267	11.7%	165	7.2%	108	4.7%	2,290
<b>Large Cities</b>	<b>135,489</b>	<b>75.0%</b>	<b>18,547</b>	<b>10.3%</b>	<b>15,222</b>	<b>8.4%</b>	<b>9,465</b>	<b>5.2%</b>	<b>1,875</b>	<b>1.0%</b>	<b>180,598</b>
Baltimore, MD	7,943	59.6%	2,353	17.6%	1,535	11.5%	1,311	9.8%	194	1.5%	13,336
Charlotte, NC	10,794	75.2%	1,482	10.3%	1,208	8.4%	754	5.3%	119	0.8%	14,357
Columbus, OH	11,285	77.0%	1,545	10.5%	972	6.6%	726	5.0%	123	0.8%	14,651
Detroit, MI	20,535	78.8%	2,181	8.4%	2,033	7.8%	1,128	4.3%	188	0.7%	26,065
Indianapolis, IN	15,007	74.1%	2,070	10.2%	1,732	8.6%	1,234	6.1%	199	1.0%	20,242
Jacksonville, FL	10,287	75.5%	1,545	11.3%	1,097	8.1%	564	4.1%	126	0.9%	13,619
Las Vegas, NV	17,083	73.0%	2,168	9.3%	2,243	9.6%	1,614	6.9%	281	1.2%	23,389
Louisville, KY	11,236	73.3%	1,703	11.1%	1,354	8.8%	651	4.2%	387	2.5%	15,331
Memphis, TN	19,161	77.3%	2,489	10.0%	2,022	8.2%	952	3.8%	172	0.7%	24,796
Milwaukee, WI	12,158	82.1%	1,011	6.8%	1,026	6.9%	531	3.6%	86	0.6%	14,812
<b>Medium Cities</b>	<b>83,079</b>	<b>80.3%</b>	<b>8,827</b>	<b>8.5%</b>	<b>7,263</b>	<b>7.0%</b>	<b>3,506</b>	<b>3.4%</b>	<b>815</b>	<b>0.8%</b>	<b>103,490</b>
Atlanta, GA	13,087	85.4%	1,137	7.4%	698	4.6%	287	1.9%	124	0.8%	15,333
Cincinnati, OH	8,068	80.8%	931	9.3%	646	6.5%	268	2.7%	69	0.7%	9,982
Cleveland, OH	8,104	84.0%	809	8.4%	441	4.6%	231	2.4%	57	0.6%	9,642
Miami, FL	7,070	80.7%	614	7.0%	756	8.6%	256	2.9%	64	0.7%	8,760
New Orleans, LA	7,485	83.0%	780	8.6%	506	5.6%	212	2.4%	37	0.4%	9,020
Orlando, FL	8,878	79.4%	996	8.9%	822	7.4%	385	3.4%	96	0.9%	11,177
Saint Louis, MO	11,991	81.7%	1,137	7.7%	965	6.6%	457	3.1%	122	0.8%	14,672
Tampa, FL	7,512	72.4%	1,190	11.5%	976	9.4%	619	6.0%	79	0.8%	10,376
Tulsa, OK	5,951	77.2%	525	6.8%	806	10.5%	351	4.6%	74	1.0%	7,707
Wichita, KS	4,933	72.3%	708	10.4%	647	9.5%	440	6.5%	93	1.4%	6,821
<b>Small Cities</b>	<b>44,506</b>	<b>75.2%</b>	<b>6,226</b>	<b>10.5%</b>	<b>5,033</b>	<b>8.5%</b>	<b>2,748</b>	<b>4.6%</b>	<b>698</b>	<b>1.2%</b>	<b>59,211</b>
Baton Rouge, LA	6,522	76.3%	900	10.5%	742	8.7%	315	3.7%	65	0.8%	8,544
Chattanooga, TN	4,312	74.7%	596	10.3%	415	7.2%	239	4.1%	213	3.7%	5,775
Columbia, SC	5,128	81.7%	519	8.3%	368	5.9%	228	3.6%	36	0.6%	6,279
Dayton, OH	3,922	76.9%	523	10.3%	358	7.0%	259	5.1%	39	0.8%	5,101
Huntsville, AL	4,488	77.7%	618	10.7%	397	6.9%	219	3.8%	51	0.9%	5,773
Mobile, AL	4,161	76.1%	610	11.2%	355	6.5%	221	4.0%	118	2.2%	5,465
Richmond, VA	5,639	79.9%	657	9.3%	472	6.7%	244	3.5%	44	0.6%	7,056
San Bernardino, CA	3,027	64.1%	568	12.0%	687	14.5%	402	8.5%	40	0.8%	4,724
Shreveport, LA	3,824	72.0%	561	10.6%	657	12.4%	228	4.3%	42	0.8%	5,312
Winston Salem, NC	3,483	67.2%	674	13.0%	582	11.2%	393	7.6%	50	1.0%	5,182

# APPENDIX IFT – INDICATORS OF FIREARMS TRAFFICKING

*Table IFT-01: Median TTC for U.S. States and Territories, 2017-2021*

Recovery State / Territory	Total Traced to Purchaser with TTC Calculated	Median Time-To- Crime (Years)
AE	2	8.4
AK	4,288	4.3
AL	31,396	2.3
AM	1	19.4
AR	10,971	2.6
AZ	39,665	2.1
CA	143,025	4.6
CO	24,863	3.0
CT	4,915	5.9
DC	7,673	3.6
DE	5,199	2.6
FL	109,787	3.3
GA	73,884	2.3
GU	86	10.5
HI	712	7.5
IA	9,892	3.2
ID	5,283	3.8
IL	67,499	3.0
IN	37,081	2.5
KS	14,476	3.0
KY	24,993	2.6
LA	46,319	2.9
MA	9,274	4.4
MD	32,789	5.0
ME	2,018	3.5
MI	35,366	2.0
MN	16,191	3.4
MO	36,711	2.2
MP	3	31.7
MS	18,624	2.2
MT	3,683	4.2
NC	72,364	2.8
ND	2,835	3.5
NE	7,652	3.5
NH	1,996	3.2
NJ	14,030	5.3
NM	12,441	2.6
NV	24,109	2.4
NY	28,552	5.7
OH	65,872	2.5
OK	13,600	3.2
OR	19,443	4.0
PA	47,977	3.2
PR	3,470	4.6
RI	1,871	3.7
SC	35,761	2.3
SD	2,480	3.1
TN	49,896	2.7
TX	147,125	2.5
UT	10,411	3.7
VA	46,016	1.9
VI	464	4.6
VT	866	4.2
WA	20,801	4.3

WI	23,798	2.4
WV	7,247	3.4
WY	1,230	4.1
Unknown	3	6.3

*Table IFT-02: Median TTC for Selected U.S. Cities, 2017-2021*

<b>Recovery City</b>	<b>Traced to Purchaser with TTC Calculated</b>	<b>Median Time to Crime (Years)</b>
<b>Mega Cities</b>	<b>175,003</b>	<b>2.9</b>
Chicago, IL	37,592	2.8
Dallas, TX	16,682	2.4
Houston, TX	38,764	2.3
Los Angeles, CA	19,593	4.2
New York, NY	12,865	6.3
Philadelphia, PA	16,588	2.3
Phoenix, AZ	13,260	1.8
San Antonio, TX	14,842	2.4
San Diego, CA	3,293	4.2
San Jose, CA	1,524	4.6
<b>Large Cities</b>	<b>145,078</b>	<b>2.4</b>
Baltimore, MD	8,041	5.3
Charlotte, NC	11,865	2.5
Columbus, OH	12,116	2.4
Detroit, MI	21,839	1.6
Indianapolis, IN	16,541	2.5
Jacksonville, FL	11,716	3.4
Las Vegas, NV	18,823	2.4
Louisville, KY	11,752	2.4
Memphis, TN	19,332	1.9
Milwaukee, WI	13,053	2.2
<b>Medium Cities</b>	<b>86,582</b>	<b>2.5</b>
Atlanta, GA	13,003	2.1
Cincinnati, OH	8,470	2.7
Cleveland, OH	7,839	2.2
Miami, FL	7,111	2.5
New Orleans, LA	7,482	2.9
Orlando, FL	9,768	2.9
Saint Louis, MO	12,265	1.9
Tampa, FL	8,584	3.2
Tulsa, OK	6,550	3.1
Wichita, KS	5,510	3.1
<b>Small Cities</b>	<b>48,529</b>	<b>2.4</b>
Baton Rouge, LA	7,313	2.5
Chattanooga, TN	4,428	3.1
Columbia, SC	5,477	1.7
Dayton, OH	4,076	2.8
Huntsville, AL	4,917	2.2
Mobile, AL	4,745	2.2
Richmond, VA	5,754	1.5
San Bernardino, CA	3,286	4.2
Shreveport, LA	4,537	2.0
Winston Salem, NC	3,996	3.0

**Table IFT-03: Purchaser and Possessor Relationships for Recovered Crime Guns in the 50 U.S. States and Territories, 2017 – 2021**

Recovery State / Territory	Purchaser and Possessor are Different		Purchaser and Possessor are Same		Purchaser Known, Possessor Unknown		Total traces
	Number	Percent	Number	Percent	Number	Percent	
AE	0	0.0%	1	50.0%	1	50.0%	2
AK	2,808	65.2%	386	9.0%	1,111	25.8%	4,305
AL	19,967	63.5%	3,170	10.1%	8,321	26.5%	31,458
AM	1	100.0%	0	0.0%	0	0.0%	1
AR	7,722	70.2%	1,116	10.1%	2,168	19.7%	11,006
AZ	21,689	54.5%	5,564	14.0%	12,513	31.5%	39,766
CA	86,505	60.3%	21,410	14.9%	35,521	24.8%	143,436
CO	13,282	53.3%	3,339	13.4%	8,285	33.3%	24,906
CT	3,157	64.0%	680	13.8%	1,092	22.2%	4,929
DC	4,964	64.5%	400	5.2%	2,334	30.3%	7,698
DE	3,327	63.9%	1,081	20.7%	802	15.4%	5,210
FL	56,965	51.8%	14,117	12.8%	38,978	35.4%	110,060
GA	41,287	55.7%	8,348	11.3%	24,427	33.0%	74,062
GU	74	84.1%	8	9.1%	6	6.8%	88
HI	480	66.9%	36	5.0%	202	28.1%	718
IA	5,879	59.3%	1,285	13.0%	2,758	27.8%	9,922
ID	3,455	65.3%	807	15.2%	1,033	19.5%	5,295
IL	44,301	65.5%	7,121	10.5%	16,221	24.0%	67,643
IN	21,229	57.1%	3,807	10.2%	12,128	32.6%	37,164
KS	9,684	66.7%	1,279	8.8%	3,558	24.5%	14,521
KY	17,520	69.9%	2,734	10.9%	4,810	19.2%	25,064
LA	29,843	64.3%	4,548	9.8%	12,032	25.9%	46,423
MA	4,811	51.7%	775	8.3%	3,727	40.0%	9,313
MD	19,607	59.6%	6,365	19.3%	6,926	21.1%	32,898
ME	1,243	61.5%	311	15.4%	468	23.1%	2,022
MI	21,009	59.3%	7,422	20.9%	7,010	19.8%	35,441
MN	8,755	53.9%	1,878	11.6%	5,622	34.6%	16,255
MO	22,067	60.0%	4,257	11.6%	10,466	28.4%	36,790
MP	1	33.3%	0	0.0%	2	66.7%	3
MS	11,711	62.7%	1,693	9.1%	5,263	28.2%	18,667
MT	2,266	61.3%	297	8.0%	1,135	30.7%	3,698
NC	44,235	61.0%	8,424	11.6%	19,894	27.4%	72,553
ND	1,647	58.0%	435	15.3%	760	26.7%	2,842
NE	4,559	59.4%	1,395	18.2%	1,716	22.4%	7,670
NH	1,273	63.7%	328	16.4%	398	19.9%	1,999
NJ	8,883	63.1%	1,145	8.1%	4,052	28.8%	14,080
NM	7,985	64.0%	1,402	11.2%	3,089	24.8%	12,476
NV	12,241	50.6%	3,459	14.3%	8,468	35.0%	24,168
NY	19,510	68.1%	1,887	6.6%	7,246	25.3%	28,643
OH	40,883	61.9%	8,290	12.6%	16,844	25.5%	66,017
OK	9,485	69.5%	680	5.0%	3,473	25.5%	13,638
OR	11,903	61.0%	3,120	16.0%	4,475	23.0%	19,498
PA	28,863	60.0%	6,665	13.9%	12,556	26.1%	48,084
PR	2,218	63.6%	87	2.5%	1,180	33.9%	3,485
RI	1,235	65.9%	350	18.7%	290	15.5%	1,875
SC	20,185	56.3%	3,141	8.8%	12,512	34.9%	35,838
SD	1,297	52.2%	416	16.7%	772	31.1%	2,485
TN	27,815	55.6%	4,078	8.2%	18,093	36.2%	49,986
TX	70,392	47.7%	15,000	10.2%	62,042	42.1%	147,434
UT	6,269	60.1%	1,414	13.6%	2,749	26.4%	10,432
VA	27,492	59.6%	7,476	16.2%	11,149	24.2%	46,117
VI	242	51.9%	7	1.5%	217	46.6%	466
VT	582	67.2%	128	14.8%	156	18.0%	866
WA	11,365	54.4%	2,708	13.0%	6,807	32.6%	20,880
WI	14,097	59.1%	3,849	16.1%	5,893	24.7%	23,839
WV	5,062	69.7%	535	7.4%	1,667	22.9%	7,264
WY	772	62.6%	95	7.7%	366	29.7%	1,233
Unknown	21	30.0%	0	0.0%	49	70.0%	70
<b>Total</b>	<b>866,120</b>	<b>58.4%</b>	<b>180,749</b>	<b>12.2%</b>	<b>435,833</b>	<b>29.4%</b>	<b>1,482,702</b>

*Table IFT-04: Purchaser and Possessor Relationships for Recovered Crime Guns in selected U.S. Cities, 2017 – 2021*

Recovery City	Purchaser and Possessor are Different		Purchaser and Possessor are Same		Purchaser Known, Possessor Unknown		Trace Count
	Number	Percent	Number	Percent	Number	Percent	
<b>Mega Cities</b>	<b>92,996</b>	<b>53.0%</b>	<b>13,530</b>	<b>7.7%</b>	<b>68,883</b>	<b>39.3%</b>	<b>175,409</b>
Chicago, IL	25,276	67.1%	2,498	6.6%	9,905	26.3%	37,679
Dallas, TX	10,492	62.7%	1,722	10.3%	4,507	27.0%	16,721
Houston, TX	7,005	18.0%	1,987	5.1%	29,845	76.8%	38,837
Los Angeles, CA	13,515	68.8%	2,435	12.4%	3,697	18.8%	19,647
New York, NY	9,293	72.0%	405	3.1%	3,211	24.9%	12,909
Philadelphia, PA	9,799	58.9%	1,076	6.5%	5,750	34.6%	16,625
Phoenix, AZ	6,051	45.5%	1,040	7.8%	6,201	46.7%	13,292
San Antonio, TX	8,446	56.8%	1,315	8.8%	5,106	34.3%	14,867
San Diego, CA	2,032	61.7%	843	25.6%	421	12.8%	3,296
San Jose, CA	1,087	70.8%	209	13.6%	240	15.6%	1,536
<b>Large Cities</b>	<b>86,260</b>	<b>59.3%</b>	<b>18,786</b>	<b>12.9%</b>	<b>40,326</b>	<b>27.7%</b>	<b>143,372</b>
Baltimore, MD	4,706	58.4%	420	5.2%	2,929	36.4%	8,055
Charlotte, NC	7,290	61.4%	1,279	10.8%	3,312	27.9%	11,881
Columbus, OH	7,730	63.6%	1,321	10.9%	3,096	25.5%	12,147
Detroit, MI	13,351	61.0%	5,314	24.3%	3,215	14.7%	21,880
Indianapolis, IN	9,407	56.7%	1,570	9.5%	5,611	33.8%	16,588
Jacksonville, FL	7,146	60.9%	1,689	14.4%	2,898	24.7%	11,733
Las Vegas, NV	9,137	48.4%	2,471	13.1%	7,258	38.5%	18,866
Louisville, KY	8,465	71.8%	1,148	9.7%	2,172	18.4%	11,785
Memphis, TN	11,093	57.3%	1,789	9.2%	6,486	33.5%	19,368
Milwaukee, WI	7,935	60.7%	1,785	13.7%	3,349	25.6%	13,069
<b>Medium Cities</b>	<b>52,275</b>	<b>60.2%</b>	<b>8,508</b>	<b>9.8%</b>	<b>25,987</b>	<b>29.9%</b>	<b>86,770</b>
Atlanta, GA	8,105	62.2%	1,430	11.0%	3,498	26.8%	13,033
Cincinnati, OH	6,248	73.7%	956	11.3%	1,277	15.1%	8,481
Cleveland, OH	4,326	55.1%	709	9.0%	2,816	35.9%	7,851
Miami, FL	4,012	56.2%	1,071	15.0%	2,050	28.7%	7,133
New Orleans, LA	4,407	58.8%	643	8.6%	2,447	32.6%	7,497
Orlando, FL	4,880	49.9%	1,130	11.5%	3,779	38.6%	9,789
Saint Louis, MO	7,119	57.9%	1,209	9.8%	3,960	32.2%	12,288
Tampa, FL	4,159	48.4%	856	10.0%	3,579	41.6%	8,594
Tulsa, OK	4,629	70.5%	45	0.7%	1,896	28.9%	6,570
Wichita, KS	4,390	79.3%	459	8.3%	685	12.4%	5,534
<b>Small Cities</b>	<b>25,315</b>	<b>52.0%</b>	<b>4,143</b>	<b>8.5%</b>	<b>19,199</b>	<b>39.5%</b>	<b>48,657</b>
Baton Rouge, LA	4,401	60.0%	589	8.0%	2,349	32.0%	7,339
Chattanooga, TN	1,281	28.9%	161	3.6%	2,992	67.5%	4,434
Columbia, SC	3,184	58.0%	581	10.6%	1,724	31.4%	5,489
Dayton, OH	2,718	66.5%	352	8.6%	1,019	24.9%	4,089
Huntsville, AL	2,419	49.1%	375	7.6%	2,134	43.3%	4,928
Mobile, AL	3,167	66.6%	648	13.6%	942	19.8%	4,757
Richmond, VA	2,365	41.0%	529	9.2%	2,870	49.8%	5,764
San Bernardino, CA	2,499	75.8%	391	11.9%	409	12.4%	3,299
Shreveport, LA	3,116	68.5%	509	11.2%	925	20.3%	4,550
Winston Salem, NC	165	4.1%	8	0.2%	3,835	95.7%	4,008

## APPENDIX GP – GEOGRAPHIC PATTERNS

*Table GP-03: Percentages of Interstate and Intrastate Sourced Recovered Crime Guns for U.S. States and Territories, 2017-2021*

Recovery State / Territory	Interstate		Intrastate		Total Traces
	Number	Percent	Number	Percent	
AE	2	100.0%	0	0.0%	2
AK	752	17.5%	3,553	82.5%	4,305
AL	5,427	17.3%	26,021	82.7%	31,448
AM	1	100.0%	0	0.0%	1
AR	2,475	22.5%	8,525	77.5%	11,000
AZ	6,984	17.6%	32,771	82.4%	39,755
CA	59,624	41.6%	83,778	58.4%	143,402
CO	7,368	29.6%	17,526	70.4%	24,894
CT	2,483	50.8%	2,407	49.2%	4,890
DC	7,387	96.1%	300	3.9%	7,687
DE	1,728	33.2%	3,481	66.8%	5,209
FL	22,754	20.7%	87,218	79.3%	109,972
GA	14,877	20.1%	59,121	79.9%	73,998
GU	26	29.5%	62	70.5%	88
HI	388	54.1%	329	45.9%	717
IA	2,708	27.3%	7,212	72.7%	9,920
ID	1,759	33.2%	3,534	66.8%	5,293
IL	34,616	51.2%	32,981	48.8%	67,597
IN	6,361	17.1%	30,786	82.9%	37,147
KS	4,430	30.5%	10,080	69.5%	14,510
KY	5,555	22.4%	19,214	77.6%	24,769
LA	9,237	19.9%	37,163	80.1%	46,400
MA	6,245	67.1%	3,067	32.9%	9,312
MD	17,559	53.4%	15,303	46.6%	32,862
ME	410	20.3%	1,611	79.7%	2,021
MI	7,647	21.6%	27,780	78.4%	35,427
MN	4,658	28.7%	11,590	71.3%	16,248
MO	7,677	20.9%	29,087	79.1%	36,764
MP	3	100.0%	0	0.0%	3
MS	4,091	21.9%	14,568	78.1%	18,659
MT	1,086	29.4%	2,610	70.6%	3,696
NC	18,326	25.3%	54,204	74.7%	72,530
ND	1,002	35.3%	1,837	64.7%	2,839
NE	2,651	34.6%	5,010	65.4%	7,661
NH	482	24.1%	1,521	75.9%	2,003
NJ	11,499	81.8%	2,567	18.2%	14,066
NM	2,734	21.9%	9,743	78.1%	12,477
NV	7,365	30.5%	16,797	69.5%	24,162
NY	22,806	79.7%	5,802	20.3%	28,608
OH	10,955	16.6%	54,932	83.4%	65,887
OK	2,922	21.4%	10,708	78.6%	13,630
OR	4,994	25.6%	14,502	74.4%	19,496
PA	10,319	21.5%	37,709	78.5%	48,028
PR	2,591	74.5%	885	25.5%	3,476
RI	824	44.0%	1,049	56.0%	1,873
SC	7,872	22.0%	27,886	78.0%	35,758
SD	861	34.7%	1,623	65.3%	2,484
TN	15,060	30.2%	34,859	69.8%	49,919
TX	21,343	14.5%	125,420	85.5%	146,763
UT	2,323	22.3%	8,104	77.7%	10,427
VA	7,739	16.8%	38,349	83.2%	46,088
VI	366	78.5%	100	21.5%	466
VT	236	27.3%	630	72.7%	866
WA	5,594	26.8%	15,253	73.2%	20,847
WI	3,733	15.7%	20,096	84.3%	23,829
WV	1,826	25.1%	5,435	74.9%	7,261
WY	530	43.0%	702	57.0%	1,232

Unknown	3	100.0%	0	0.0%	3
<b>Total</b>	<b>413,274</b>	<b>27.9%</b>	<b>1,067,401</b>	<b>72.1%</b>	<b>1,480,675</b>

**Table GP-04: Percentages of Interstate and Intrastate Sourced Recovered Crime Guns for selected U.S. Cities, 2017-2021**

Recovery City	Interstate		Intrastate		Total Traces
	Number	Percent	Number	Percent	
<b>Mega Cities</b>	<b>60,614</b>	<b>34.6%</b>	<b>114,704</b>	<b>65.4%</b>	<b>175,318</b>
Chicago, IL	21,158	56.2%	16,499	43.8%	37,657
Dallas, TX	2,544	15.2%	14,171	84.8%	16,715
Houston, TX	4,837	12.5%	33,986	87.5%	38,823
Los Angeles, CA	10,045	51.1%	9,594	48.9%	19,639
New York, NY	11,949	92.7%	942	7.3%	12,891
Philadelphia, PA	4,386	26.4%	12,226	73.6%	16,612
Phoenix, AZ	1,873	14.1%	11,416	85.9%	13,289
San Antonio, TX	1,664	11.2%	13,192	88.8%	14,856
San Diego, CA	1,459	44.2%	1,841	55.8%	3,300
San Jose, CA	699	45.5%	837	54.5%	1,536
<b>Large Cities</b>	<b>35,318</b>	<b>24.4%</b>	<b>109,691</b>	<b>75.6%</b>	<b>145,009</b>
Baltimore, MD	4,898	60.9%	3,140	39.1%	8,038
Charlotte, NC	4,015	33.8%	7,864	66.2%	11,879
Columbus, OH	1,707	14.1%	10,417	85.9%	12,124
Detroit, MI	4,683	21.4%	17,191	78.6%	21,874
Indianapolis, IN	2,070	12.5%	14,509	87.5%	16,579
Jacksonville, FL	2,330	19.9%	9,401	80.1%	11,731
Las Vegas, NV	5,735	30.4%	13,127	69.6%	18,862
Louisville, KY	2,312	20.1%	9,219	79.9%	11,531
Memphis, TN	5,920	30.6%	13,407	69.4%	19,327
Milwaukee, WI	1,648	12.6%	11,416	87.4%	13,064
<b>Medium Cities</b>	<b>16,616</b>	<b>19.2%</b>	<b>70,060</b>	<b>80.8%</b>	<b>86,676</b>
Atlanta, GA	2,907	22.3%	10,123	77.7%	13,030
Cincinnati, OH	2,256	26.6%	6,226	73.4%	8,482
Cleveland, OH	880	11.2%	6,951	88.8%	7,831
Miami, FL	1,009	14.3%	6,069	85.7%	7,078
New Orleans, OH	1,963	26.2%	5,529	73.8%	7,492
Orlando, FL	1,592	16.3%	8,196	83.7%	9,788
Saint Louis, MO	1,864	15.2%	10,418	84.8%	12,282
Tampa, FL	1,727	20.1%	6,867	79.9%	8,594
Tulsa, OK	1,288	19.6%	5,278	80.4%	6,566
Wichita, KS	1,130	20.4%	4,403	79.6%	5,533
<b>Small Cities</b>	<b>9,710</b>	<b>20.0%</b>	<b>38,853</b>	<b>80.0%</b>	<b>48,563</b>
Baton Rouge, LA	984	13.4%	6,353	86.6%	7,337
Chattanooga, TN	1,653	37.3%	2,774	62.7%	4,427
Columbia, SC	914	16.9%	4,502	83.1%	5,416
Dayton, OH	655	16.0%	3,431	84.0%	4,086
Huntsville, AL	840	17.0%	4,087	83.0%	4,927
Mobile, AL	829	17.4%	3,926	82.6%	4,755
Richmond, VA	570	9.9%	5,194	90.1%	5,764
San Bernardino, CA	1,484	45.0%	1,812	55.0%	3,296
Shreveport, LA	785	17.3%	3,762	82.7%	4,547
Winston Salem, NC	996	24.9%	3,012	75.1%	4,008

## ENDNOTES

<sup>1</sup> Trace count excludes duplicate traces, gun buy backs, and firearms turned into law enforcement. This number includes only those firearms with a recovery country location identified as the United States, with a recovery date between 1/1/2017 and 12/31/2021, and entered into the tracing system between 1/1/2017 and 9/6/2022. Traces without a recovery date are excluded.

<sup>2</sup> Purchaser identified includes all completion codes that trace to a purchaser as well as when the role played is identified as purchaser (1,482,861). When limited to only the purchaser identified completion codes, the number of crime guns traced to purchaser is 1,482,553.

<sup>3</sup> "Suspected Privately Made Firearm" is a designation used by ATF for an unserialized firearm that has been recovered in a criminal investigation, submitted to ATF for tracing, and determined to likely have been privately made. An unserialized firearm cannot be traced by ATF. However, ATF and the NTC conduct additional research using descriptive information provided by the requestor to determine if the unserialized firearm is a PMF. When this additional research indicates that the unserialized firearm is privately made, ATF identifies that firearm as a "Suspected PMF" for purposes of monitoring use of PMFs as crime guns and for dissemination as investigative leads and intelligence to LEAs.

<sup>4</sup> Firearms recovered following an FFL theft are at times not traced because the source of the firearms is already known to the recovering LEA. This accounts for the difference between the number of firearms recovered (17,048) versus the number of firearms traced (11,093) that were associated with an FFL theft.

<sup>5</sup> Firearms recovered following a theft or loss from an Interstate shipment are at times not traced because the source of the firearms is already known to the recovering LEA. This accounts for the difference between the number of firearms recovered (3,072) versus the number of firearms traced (2,169) that were associated with a theft or loss from an Interstate shipment.

<sup>6</sup> <https://www.census.gov/data/tables/2020/demo/popest/2020-demographic-analysis-tables.html> (accessed September 20, 2022).

<sup>7</sup> There were 16 crime guns traced to a purchaser identified as non-binary.

<sup>8</sup> <https://www.census.gov/data/tables/2020/demo/popest/2020-demographic-analysis-tables.html> (accessed September 20, 2022).

<sup>9</sup> Effective June 25, 2022, the Bipartisan Safer Communities Act, Public Law 117-159, amended the GCA's definition of "engaged in the business" with respect to retail firearm dealers (Type 1 FFLs). Specifically, Section 12002 of the Act removed the phrase "principal objective of livelihood and profit" from the definition of a dealer in firearms in section 921(a)(11)(A) of the GCA and replaced it with the phrase "predominately to earn a profit." As revised, Section 921(a)(11)(A) defines dealers in firearms as: "a person who devotes time, attention, and labor to dealing in firearms as a regular course of trade or business to predominantly earn a profit through the repetitive purchase and resale of firearms, but such term shall not include a person who makes occasional sales, exchanges, or purchases of firearms for the enhancement of a personal collection or for a hobby, or who sells all or part of his personal collection of firearms."

<sup>10</sup> <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download> (accessed October 2, 2022).

<sup>11</sup> <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download> (accessed October 2, 2022).

<sup>12</sup> HS Produkt XD series and Hellcat pistols are imported by Springfield Armory.

<sup>13</sup> <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>

<sup>14</sup> The median is the middle number in a sorted, ascending or descending list of numbers and can be more descriptive of that data set than the average due to the presence of outliers (extreme values that skew the distribution). It is the point above and below which half (50%) the observed data falls, and so represents the midpoint of the data. The median year was calculated by taking the number of days and dividing by 365.25 and rounding up.

<sup>15</sup> <https://www.atf.gov/firearms/docs/report/national-firearms-commerce-and-trafficking-assessment-firearms-commerce-volume/download>

<sup>16</sup> Distances are calculated using precise street addresses of FFL, purchaser, possessor, or recovery locations were geocoded to XY coordinates. The distance measurement is straight line between the points.

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- <sup>17</sup> For e.g., Bureau of Alcohol, Tobacco and Firearms. 2002. *Crime Gun Trace Analysis (2000): National Report*. Washington, DC: Bureau of Alcohol, Tobacco and Firearms; Anthony A. Braga, Philip J. Cook, David M. Kennedy, and Mark H. Moore. 2002. "The Illegal Supply of Firearms." *Crime and Justice: A Review of Research*, 29: 319 – 352; Glenn L. Pierce, Anthony A. Braga, Raymond R. Hyatt, and Christopher S. Koper. 2004. "The Characteristics and Dynamics of Illegal Firearms Markets: Implications for a Supply-Side Enforcement Strategy." *Justice Quarterly*, 21 (2): 391 – 422; Philip J. Cook, Richard J. Harris, Jens Ludwig, and Harold A. Pollack. 2015. "Some Sources of Crime Guns in Chicago: Dirty Dealers, Straw Purchasers, and Traffickers," *Journal of Criminal Law and Criminology*, 104 (4): 717–759.
- <sup>18</sup> Philip J. Cook. 2018. "Gun Markets," *Annual Review of Criminology*, 1: 359–377.
- <sup>19</sup> Philip J. Cook, Harold A. Pollack, and Kailey White. 2019. "The Last Link: From Gun Acquisition to Criminal Use," *Journal of Urban Health*, 96 (5): 784–791.
- <sup>20</sup> Philip J. Cook, Jens Ludwig, Sudhir Venkatesh, and Anthony A. Braga. 2007. "Underground Gun Markets." *The Economic Journal*, 117 (11): 558 – 588.
- <sup>21</sup> Bureau of Alcohol, Tobacco and Firearms. 2000. *Following the Gun: Enforcing Federal Laws Against Firearms Traffickers*. Washington, DC: Bureau of Alcohol, Tobacco and Firearms.; Anthony A. Braga, Garen J. Wintemute, Glenn L. Pierce, Philip J. Cook, and Greg Ridgeway. 2012. "Interpreting the Empirical Evidence on Illegal Gun Market Dynamics." *Journal of Urban Health*, 89 (5): 779 – 793; Anthony A. Braga and Glenn L. Pierce. 2005. "Disrupting Illegal Firearms Markets in Boston: The Effects of Operation Ceasefire on the Supply of New Handguns to Criminals." *Criminology & Public Policy*, 4 (4): 717 – 748.
- <sup>22</sup> David M. Hureau and Anthony A. Braga. 2018. "The Trade in Tools: The Market for Illicit Guns in High-Risk Networks." *Criminology*, 56 (3): 510 – 545; Anthony A. Braga, Rod K. Brunson, Philip J. Cook, Brandon S. Turchan, and Brian Wade. 2021. "Underground Gun Markets and the Flow of Illegal Guns into the Bronx and Brooklyn: A Mixed Methods Analysis." *Journal of Urban Health*, 98 (5): 596 – 608.
- <sup>23</sup> See also, Philip J. Cook and Anthony A. Braga. 2001. "Comprehensive Firearms Tracing: Strategic and Investigative Uses of New Data on Firearms Markets." *Arizona Law Review*, 43 (2): 277 – 309; Brian Knight. 2013. "State Gun Policy and Cross-State Externalities: Evidence from Crime Gun Tracing," *American Economic Journal: Economic Policy*, 5 (4): 200–229.
- <sup>24</sup> See also Anthony A. Braga, Lisa M. Barao, Garen J. Wintemute, Steven Valle, and Jaimie Valente. 2022. "Privately Manufactured Firearms, Newly Purchased Firearms, and the Rise of Urban Gun Violence." *Preventive Medicine*, <https://doi.org/10.1016/j.ypmed.2022.107231> (in press).
- <sup>25</sup> AE is the abbreviation for Armed Forces Europe
- <sup>26</sup> AM is the abbreviation for American Samoa. Abbreviation AS can also be used.
- <sup>27</sup> GU is the abbreviation for Guam
- <sup>28</sup> MP is the abbreviation for the Northern Mariana Islands
- <sup>29</sup> Unknown includes all recovered crime guns in which the recovery country was indicated to be "US"; however, the State was either blank or entered incorrectly by the entering law enforcement agency.