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.[1] 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

Mega Cities	Large Cities	Medium Cities	Small Cities
(Populations of 1,000,000 residents or greater)	*(Populations of 500,000 to 999,999 residents)*	*(Populations of 250,000 to 499,999 residents)*	*(Populations of 100,000 to 249,999 residents)*
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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[1]A "crime gun" is any firearm used in a crime or identified by law enforcement as suspected of having been used in a crime.