

PART I: National Integrated Ballistic Information Network (NIBIN)

Overview

In 1997, ATF initiated the National Integrated Ballistic Information Network (NIBIN) program. Through this program, ATF provided for the first time comprehensive national automated ballistic imaging services to local, state, territorial, tribal, and federal law enforcement agencies across the country. NIBIN technology captures images of ballistic evidence, including cartridge casings¹ recovered in shooting investigations (also referred to as “casings”) and test-fired cartridge casings² from recovered crime guns (also referred to as “test-fires”), and stores those images in the NIBIN national database that conducts automated analysis for further review by expert technicians. Since 1997, law enforcement agencies have been submitting recovered ballistic evidence to ATF for entry into the NIBIN system, building a national and robust network of ballistic data. As of December 2021, approximately 5.2 million pieces of ballistic evidence have been entered into the system.

NIBIN’s imaging technology captures the unique markings that firearms make on ammunition cartridge casings as they are fired; the system then conducts automated comparison analysis of other images in the network to identify potential preliminary matches between imaged casings from different shooting crime scene events and imaged test-fires from recovered crime guns. These potential matches are then reviewed by highly trained NIBIN technicians. Technician-identified NIBIN matches are often referred to by law enforcement as NIBIN “leads”³.

NIBIN leads indicate the recovered casings were likely fired from the same firearm. Through comparison of a test-fired casing from a recovered firearm, NIBIN also allows the matching of an image from a recovered casing, linking the recovered firearm to the shooting. NIBIN matches provide law enforcement with essential investigative information about recovered ballistic evidence for cross-referencing with other evidence. This allows investigators to develop a more complete picture of what happened and who was involved.

As of December 2021, NIBIN has generated approximately 630,000 leads to shooting investigations nationwide, making it an integral component of ATF’s broader Crime Gun Intelligence (CGI) strategy. This strategy combines NIBIN leads with other sources of information about crime guns, such as crime gun trace data, shooting incident and firearm arrest reports, review of digital and social media, and probation and parole records. Combining this data enhances law enforcement effectiveness in the identification, investigation, arrest, and prosecution of criminals who use guns to commit violent crimes. The following investigation demonstrates the value of NIBIN and CGI:

In April of 2017, an unknown individual shot and killed a 78-year-old female at the victim’s home in Idaho. Responding officials recovered multiple fired cartridge casings at the homicide scene, which were submitted to the Washington State Patrol crime lab and entered into NIBIN.

Later the same day -- in a seemingly unrelated incident -- law enforcement in Montana received a road rage complaint of someone attempting to run another vehicle off the road while pointing a firearm. Law enforcement contacted and arrested the sole occupant of the suspect vehicle and seized a pistol, which was later test-fired and entered into NIBIN.

A NIBIN lead was identified through ATF's NIBIN Enforcement Support System (NESS) linking casings from the homicide scene with test-fire from the recovered pistol. ATF provided the NIBIN lead to law enforcement in Idaho and Montana. ATF also traced the pistol and discovered the initial purchaser was the driver in the road rage incident. Law enforcement used this information as part of their follow-up investigation.

Ultimately, law enforcement arrested the Montana road rage suspect for the murder of the 78-year-old female. The suspect plead guilty to Second Degree Murder and was sentenced to 15 years to life in May of 2021.

As this case example illustrates, the NIBIN program is partnership-driven, fostering collaboration across jurisdictions and disciplines involved in the investigative process -- patrol officers, detectives, forensic technicians, lab personnel and prosecutors.

Foundational Aspects of ATF's NIBIN Program

The mission of ATF's NIBIN Program is to reduce firearms violence through effective identification, investigation, and prosecution of shooters and illegal firearm traffickers who supply crime guns. The foundational aspects of the program are described in Figure NIB-01.

Figure NIB-01: Foundational Aspects of ATF's NIBIN Program

<p style="text-align: center;">Crime Evidence</p> <p>NIBIN systems image casings and test fires of firearms illegally possessed, used in a crime, or suspected by law enforcement officials of having been used in a crime. NIBIN is prohibited from being used to capture, share, or store ballistic images acquired at the point of manufacture, importation, or sale of a firearm, or images of law enforcement-issued firearms not associated with crimes.</p>
<p style="text-align: center;">Evidence-Led</p> <p>NIBIN leads are non-biased information for law enforcement personnel to assist in identifying, investigating, and arresting shooters and their source of crime guns. NIBIN technicians rely on their training and technology founded in forensic science to make ballistic connections through NIBIN. In other words, being evidence-led, NIBIN can help law enforcement determine with impartiality that a series of firearm related crimes are connected.</p>
<p style="text-align: center;">National</p> <p>NIBIN is the only nationwide automated ballistic imaging network in the United States. Federal, state, local, territorial, and tribal law enforcement agencies submit casings from shootings and test fires from recovered firearms for NIBIN imaging. NIBIN is a national resource containing more than 25 years of crime gun data.</p>

Cross-Jurisdictional
Criminals may commit crimes spanning more than one law enforcement agency, county, or state. NIBIN’s national interconnected network facilitates cross jurisdictional NIBIN leads between different areas within the United States.
Sustainable Strategy
ATF maintains and operates the NIBIN infrastructure and support programs such as the NIBIN National Correlation and Training Center (NNCTC) and NESS at no charge to its law enforcement partners. ATF, in collaboration with its partners, manages the overall operations of the program, providing leadership and coordination, policy and standards, performance measurement, strategic planning and continuous improvement, and support systems and training. ATF considers continuous improvement, innovation, and support vital to NIBIN’s success.

The Four Critical Steps⁴

ATF has identified four critical steps for a participating law enforcement agency to create and manage a successful NIBIN program. By design, the NIBIN process is a multi-agency, multi-disciplinary endeavor. Hence, because personnel from different agencies and disciplines are constantly interacting during this process, strong partnerships, practices, and coordination are critical (Figure NIB-02).

Figure NIB-02: The Four Critical Steps



Basic Forensics of Firearm Identification and NIBIN

Forensic firearm and tool mark examiners scientifically analyze firearms found at crime scenes to help investigators with criminal cases. Defined by the [Association of Firearm and Tool Mark Examiners \(AFTE\)](#), firearms identification is:

a sub-category of toolmark identification; which has as its primary concern to determine if a bullet, cartridge case, or other ammunition component was fired by a particular firearm.

Firearm and Toolmark Identification is possible because the surfaces of a fabricated item, such as a firing pin or a barrel, will initially, as a result of manufacturing and then augmented by subsequent wear and tear, have tiny imperfections and irregularities at the microscopic level even when manufactured to rigorous specifications. These microscopic dents, burrs and other minute blemishes are transferred to different parts of the ammunition and are what allows the Firearm and Toolmark Examiner to establish a link between the firearm and ammunition.

For example, when semi-automatic pistols are fired, they typically discharge a cartridge case to clear the chamber making way for the next live cartridge to be fed from the magazine, seated, and ready for the next firing. The firearm leaves distinct markings on the cartridge case including the firing pin impression (FP), breech face marks (BF), and the ejector mark (EM) as depicted in Figure NIB-03⁵. Figure NIB-04, depicts a cutout of the breech area of a firearm where various tool marks are imparted to casings when a pistol is discharged.⁶

Figure NIB-03: Image of Cartridge Case

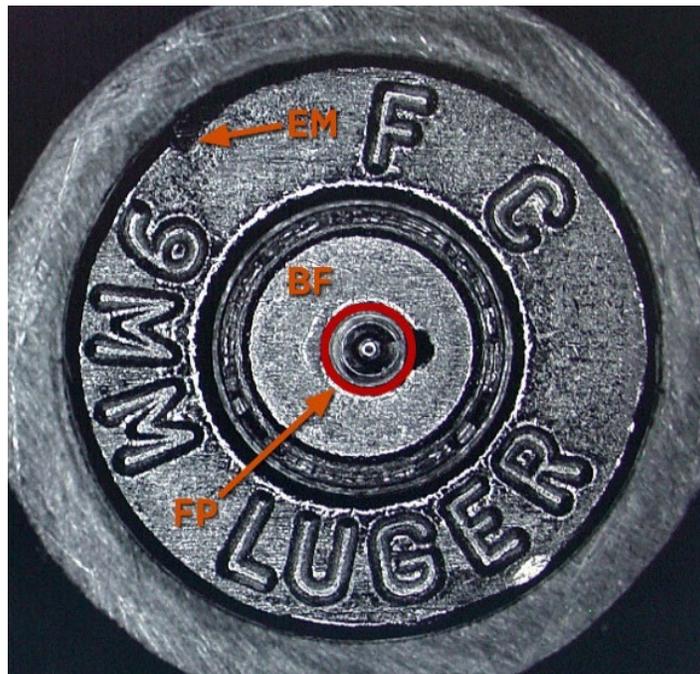
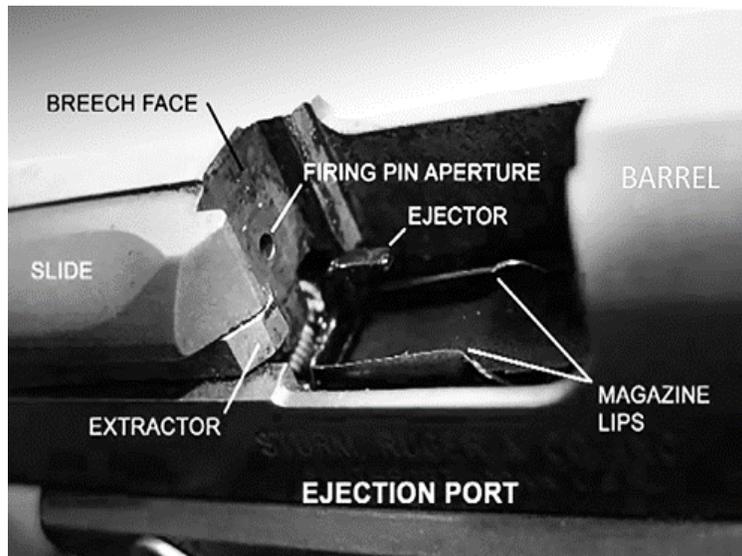


Figure NIB-04: Image of the Breech Cutout of a Firearm



The NIBIN Process

The NIBIN process is founded in forensic science and encompasses four fundamental tasks: 1) Evidence Collection and Submission, 2) NIBIN Acquisition, 3) Data Analysis and 4) NIBIN Lead and Hit Dissemination.

Evidence Collection and Submission

Law enforcement and crime scene personnel collect ballistic evidence from shooting incidents and crime gun recoveries. This evidence is then submitted to a NIBIN site for processing.

NIBIN Acquisition

Upon submission, trained technicians input key data about the case or investigation including the date and type of crime (referred to as a NIBIN case) and associated firearms if recovered (referred to as a NIBIN Firearm) into the NIBIN acquisition station.

Highly automated technology captures two- and three-dimensional high-definition (HD3D) images of the unique markings left on the base of the fired casings during the discharge process of the firearm (referred to as a NIBIN Acquisition).

Once images are captured, they are uploaded to NIBIN. The technology extracts an “electronic signature” from each image, and multiple algorithms compare the submitted exhibit image signatures with the other similar types of exhibits in the NIBIN system. This comparative process is referred to as the correlation process. It scores and ranks the matching potential of the questioned exhibit to other similar ones in the system. Comparison features of the technology allow for rapid elimination of non-matching candidates and in-depth analysis of markings from potentially matching cartridge casings, giving law enforcement a preliminary determination whether that firearm was used previously.⁷

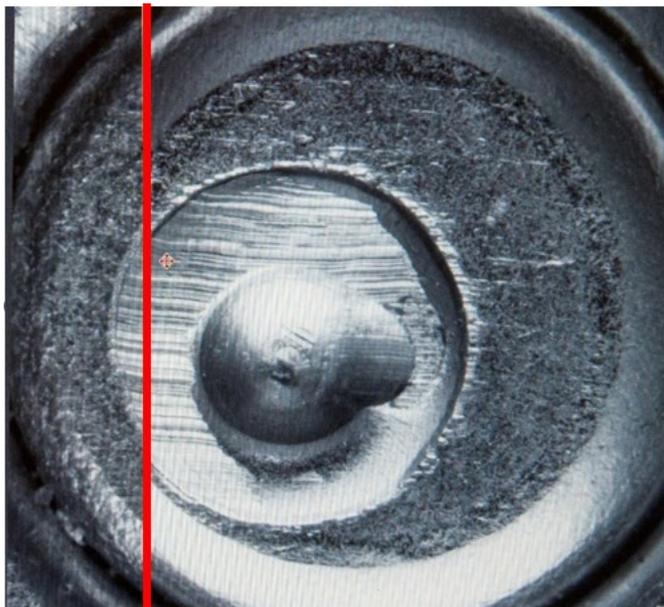
Data Analysis

Firearm examiners and trained NIBIN technicians then conduct a review of the list of correlation results and images on a second piece of equipment called a correlation review station. Technicians compare images of potential matching candidates side-by-side on high-definition monitors. Figure NIB-05 depicts two overlaid NIBIN images, one to the left of the red line and the other to the right. When a qualified firearm examiner or NIBIN technician identifies a match between exhibits, this indicates the casings were discharged from the same firearm. Such matches are referred to as NIBIN leads.

It is important to note that acquisition and correlation review stations do not have to be physically located in proximity to one another. NIBIN being a national network, allows trained technicians working across the country to compare images and make links without jurisdictional constraints.

ATF created the NIBIN National Correlation and Training Center (NNCTC) to provide correlation review service without charge to partner NIBIN sites nationwide. The NNCTC is described in detail in subsequent sections of this report.

Figure NIB-05: NIBIN Screenshot



NIBIN Lead and Hit Dissemination

These associations are reported to investigators and intelligence analysts as either NIBIN leads or hits (described below).

NIBIN Leads and Hits⁸

In 2014, ATF shifted the focus of the NIBIN program from use as a forensic tool, which emphasized NIBIN results as courtroom evidence, to use of NIBIN as an investigative tool. When used primarily as a forensic tool, NIBIN analysis focused on generating confirmed matches or “hits”. The process of generating a confirmed “hit” involves a [certified firearm examiner](#) conducting an in-laboratory

microscopic examination of actual physical evidence (*i.e.*, comparing two or more recovered casings or comparing a recovered casing(s) with a test-fire) to confirm those items of ballistic evidence were fired from the same firearm. This type of actual physical examination was necessary to establish a foundation for the admissibility of courtroom testimony that a recovered casing was fired from a known firearm or that casings recovered from separate shooting incidents were fired from the same firearm. NIBIN hits are often crucial courtroom evidence in the prosecution of murders, assaults, and other firearm offenses. As of December 2021, approximately 140,000 NIBIN hits have been confirmed, and these results have been used as evidence in trials or to secure guilty pleas from violent criminal offenders-shooters.

While use of NIBIN as a forensic tool remains an essential element of the program, the process for confirming a NIBIN hit is labor-intensive, requiring the transportation of physical evidence to the lab and the services of certified firearm examiners; expensive, requiring access to laboratory facilities and “bench time” in the lab with specialized equipment; and most significantly, time consuming. Many crime laboratories across the country do not have sufficient staffing of firearm examiners or other crucial personnel and often have considerable backlogs of evidence requiring examination. It often takes weeks or even months for laboratory personnel to complete the physical examination of ballistic evidence necessary to confirm hits.

Given the staggering volume of ballistic evidence recovered from shootings, it was simply not possible for laboratory personnel to complete the physical examination in a manner that generated timely results for investigators to use as leads. The solution was for ATF to shift the emphasis of the NIBIN program to function primarily as an investigative tool that generates *timely* leads for law enforcement. NIBIN imaging technology enabled this shift because it allows either a trained NIBIN technician or a certified firearm examiner to compare images of recovered ballistic evidence outside of a lab setting to quickly identify potential matches. These comparisons can be conducted as soon as the image of a recovered casing is entered into NIBIN, which now often occurs within 48 hours of recovery. These results are then provided to investigators to use as a lead in developing additional evidence.

The definition of a NIBIN lead makes clear it is not intended as a substitute for the physical examination necessary for admission as courtroom evidence: A NIBIN lead is an unconfirmed (presumptive) potential association of firearm evidence based on a correlation review of digital images in the NIBIN database by either a firearm examiner or a trained NIBIN technician. There is a high probability that a subsequent microscopic comparison, by a firearm examiner, will confirm the association between the firearm ballistic evidence.⁹

NIBIN Sites and Law Enforcement Agencies

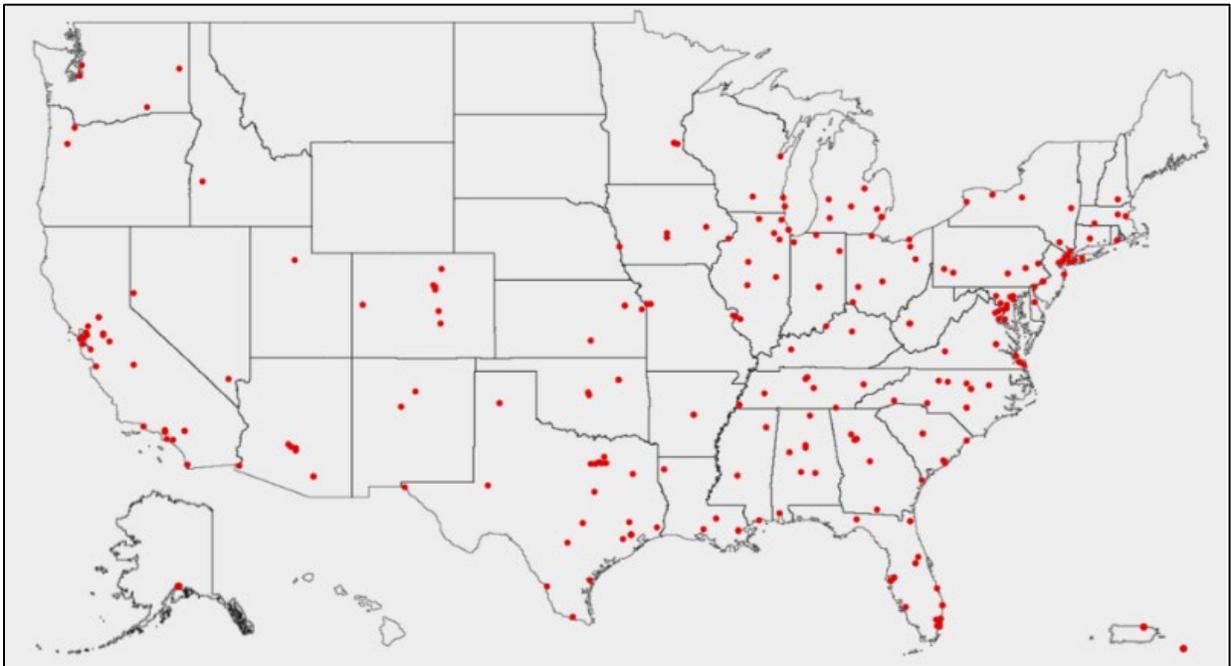
NIBIN acquisition and correlation review stations are equipment located at NIBIN sites and, across these sites, connected to one another via the NIBIN network. Generally, this equipment is permanently located at and operated under the auspices of a federal, state, local, territorial, or tribal law enforcement agency or forensic laboratory. Systems operated on the NIBIN network by agencies other than ATF are authorized through a Memorandum of Understanding (MOU). A NIBIN site may also have multiple stations operating within their span of control. Figures NIB-06 and NIB-07 depict the NIBIN sites with acquisition stations located across the United States in 2007 and 2021, respectively.

ATF provides acquisition and correlation review services for NIBIN sites and law enforcement agencies across the country. In addition to these permanent NIBIN sites located throughout the country, ATF also has mobile and transportable NIBIN acquisitions stations, discussed in subsequent sections of this part.

Figure NIB-06: Map of NIBIN Sites by City in 2007 (Located in 183 cities nationwide)



Figure NIB-07: Map of NIBIN Sites by City in 2021 (Located in 259 cities nationwide)



Federal, state, local, territorial, and tribal law enforcement agencies submit their ballistic evidence (recovered crime scene casings and firearm test-fires) to these NIBIN sites. Many agencies have NIBIN equipment located within the police department, while others submit their evidence to NIBIN sites in partnering law enforcement agencies or forensic laboratories. Regardless of agency size or location, law enforcement agencies nationwide have access to NIBIN resources. As of September 2022, seven states did not have permanent NIBIN sites: Hawaii, Maine, Montana, North Dakota, South Dakota, Vermont, and Wyoming. While not having local access to permanent stations, law enforcement agencies from these states can utilize acquisition and correlation reviews services provided by ATF or may request mobile or transportable machines, described in a subsequent section.

NIBIN Growth 2005 – 2021

As reflected Figure NIB-08 and Table NIB-01 in Appendix NIB - NIBIN, NIBIN acquisitions increased 257% from 2005 (161,553) to 2021 (576,930). For the study period, the number of total acquisitions grew by almost 100% from 2017 (290,507) to 2021 (576,930). This data represents NIBIN acquisitions from all sites, with ballistic evidence submitted by federal, state, local, territorial, and tribal law enforcement agencies nationwide.

Figure NIB-08: NIBIN Acquisitions by Year, 2005 – 2021

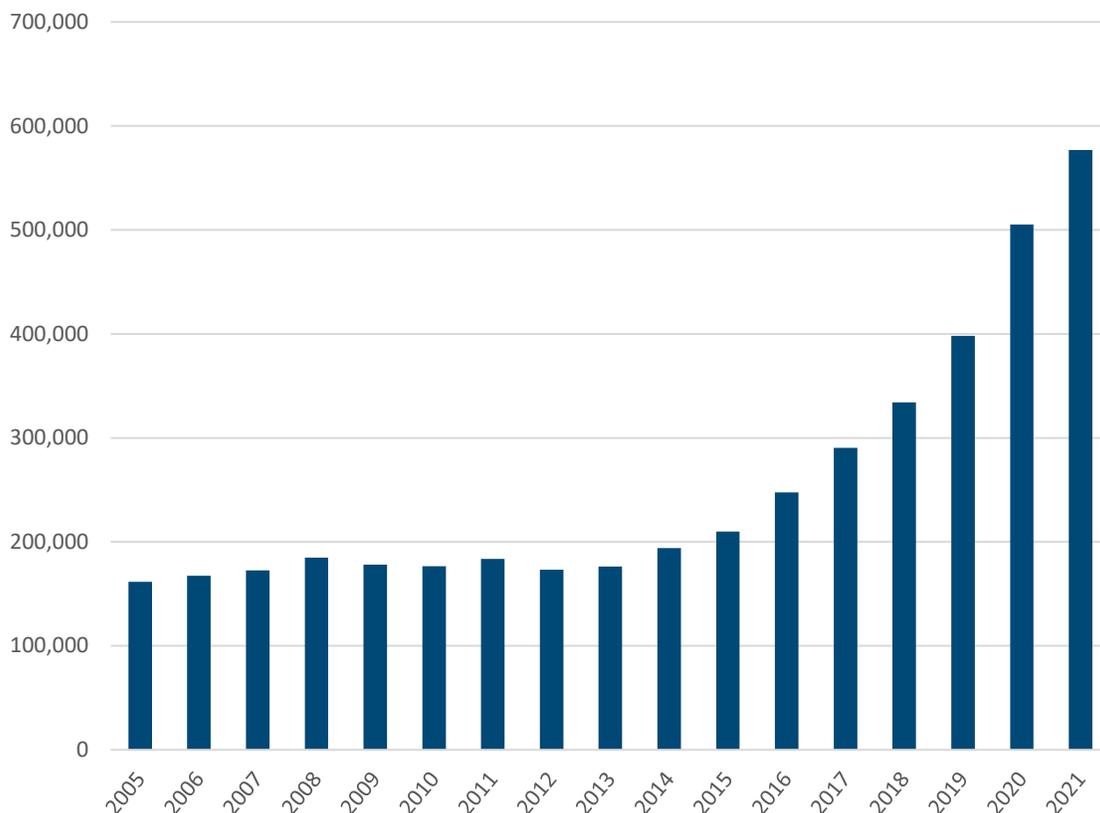


Table NIB-01a shows the ten states with the greatest increase in NIBIN acquisitions from 2005 to 2021. The top ten states, saw a combined growth of 960% from 2005 (9,014) to 2021 (95,511). Nevada had the largest increase of 1,627% from 2005 (497) to 2021 (8,584).¹⁰

Table NIB-01a: Top Ten States with the Highest Percentage Change in NIBIN Acquisitions between 2005 and 2021

State	2005	2021	% Change
Nevada	497	8,584	1,627.2%
Oklahoma	439	6,794	1,447.6%
Wisconsin	859	11,897	1,285.0%
Kansas	563	6,327	1,023.8%
Mississippi	428	4,762	1,012.6%
Missouri	1,623	16,199	898.1%
South Carolina	1,583	14,961	845.1%
Colorado	1,100	10,318	838.0%
Alabama	1,522	12,574	726.1%
Iowa	400	3,095	673.8%
Total	9,014	95,511	959.6%

See Table NIB-01 in Appendix NIB – NIBIN for annual totals and complete listing of NIBIN acquisitions by U.S. state or territory between 2005 and 2021.

NIBIN National Correlation and Training Center (NNCTC)¹¹

As part of the NIBIN mission, ATF operates the NNCTC, located in Huntsville, Alabama. ATF created the NNCTC to provide correlation review services as well as NIBIN training for federal, state, local, territorial, and tribal law enforcement agencies, and NIBIN sites.

Correlation review is the most labor-intensive aspect of identifying NIBIN leads. To mitigate the resource and proficiency requirements required to accurately conduct NIBIN correlation review, ATF created the NNCTC. The NNCTC leverages ATF’s ballistics expertise by co-locating highly trained and experienced correlation specialists and certified firearm examiners in a facility with state-of-the-art connectivity to ATF’s Crime Gun Intelligence Centers (CGICs) and partner agencies. This allows for seamless processing of correlations and prompt dissemination of actionable leads.

The Correlation Center offers consistent, timely ballistics analysis services by performing correlation review of NIBIN acquisitions submitted by the serviced agency and NIBIN sites. The Correlation Center performs this analysis and disseminates NIBIN leads within 24-48 hours. The Correlation Center also provides urgent correlation reviews with results within hours and offers national searches of the NIBIN network.

ATF provides correlation review service without charge to partner NIBIN sites nationwide (see Part VI – Ballistic Evidence for additional information). Since the creation of the NNCTC in 2016, through September 2022, the NNCTC has conducted 954,435 correlation reviews resulting in over 276,271 leads to partner sites.

The Training Center provides expert-level training in NIBIN acquisition and NIBIN correlation review virtually and in-person. Between opening the Training Center in April 2016 and September 2022, 1,866 personnel from various federal, state, and local agencies have received specialized NIBIN training at ATF’s NNCTC.

Due to the demand for correlation services from federal, state, local, territorial, and tribal law enforcement agencies, ATF is establishing a second NNCTC which will work in tandem with the initial NNCTC by offering the same services (see Center of Excellence section below).

NIBIN Mobile Units

ATF has NIBIN Mobile Units (NMU) consisting of three van-based platforms and one Mobile Command Center (MCC). NMUs are designed to expedite the processing of firearm related evidence from current crime scenes and introduce NIBIN to areas that do not currently have access or are considering purchase of a NIBIN acquisition and correlation review stations. Law enforcement agencies and ATF personnel can test-fire recovered firearms on site and qualified NIBIN staff can immediately acquire digital images of the evidence. NMU acquisitions are typically reviewed by ATF's NNCTC; however, another local site can be configured to see the correlations returned for this temporary site.

Van based NMUs (Figure NIB-09) travel with a trailer that contains equipment for test firing recovered crime guns. Each of these three NMUs are linked to the NNCTC and have a NIBIN acquisition station.

Figure NIB-09: ATF Van Based NMU



The NIBIN MCC (Figure NIB-10) is equipped with the same components as the van based NMU along with a table and microscope for the triage of firearm related evidence and an additional acquisition and correlation review stations for qualified NIBIN users.

Federal, state, local, territorial, and tribal partner agencies work in tandem with the local ATF Field Division to determine if a NMU deployment is both beneficial and possible.

Figure NIB-10: ATF Mobile Command Center



NIBIN Transportable Units

ATF also provides transportable NIBIN acquisition stations that can be shipped to locations nationwide. These transportable units supplement the stationary NIBIN sites to assist with filling any ballistic imaging needs that may exist. These units may also be deployed when an acquisition station is undergoing maintenance. This enables a site to stay operational when maintenance is being performed.

The transportable unit provides the same NIBIN services as a permanent acquisition station. The correlations for transportable units are typically reviewed by the NNCTC; however, another local site can be configured to see the correlations returned for this temporary site. Deployments are typically for a 90-day period through an agreement between the site or agency and ATF.

NIBIN Enforcement Support System (NESS)

In 2018, ATF began developing NESS, an investigative tool that overlays NIBIN data with local law enforcement shooting and gun recovery case information on a single web-based platform. NESS provides near real-time information on interrelated violent firearm crime to investigators and intelligence specialists in the field. It facilitates information sharing and collaboration between ATF and law enforcement partners by providing a standardized approach to NIBIN.

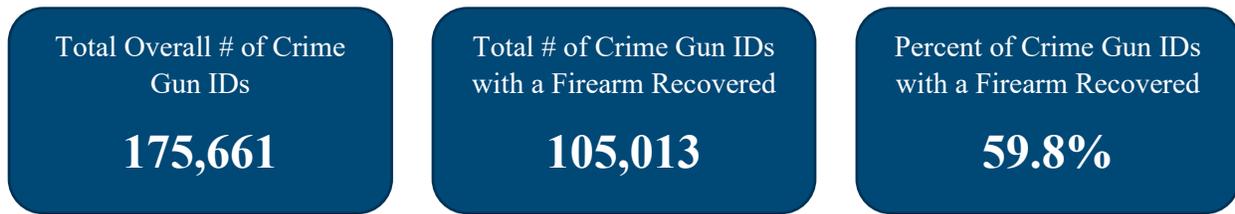
NESS automatically receives and organizes NIBIN data on a nightly basis. The system creates a NESS Crime Gun ID, which is a unique identifier, when a NIBIN lead connects casings (including crime scene casings and test-fired casings) fired from the same firearm. Crime Gun IDs require a minimum of two pieces of ballistic evidence. Once established, the Crime Gun ID persists throughout the lifecycle of the crime gun. This allows investigators to continually track the use of the crime gun as additional ballistic evidence is recovered. The tracking mechanism provided by Crime Gun IDs is an innovative and powerful tool used by law enforcement agencies and ATF to identify and disrupt the [shooting cycle](#).

Another important aspect of NESS is the ability to allow for collaboration among law enforcement. Participating law enforcement agencies can overlay Record Management System (RMS)¹² event data, including case narratives, people (suspects, victims, witnesses) and locations. This is an important aspect of NESS, allowing users to not only identify linked crime scenes through NIBIN data, but also identify patterns in the people and locations of each incident based on RMS data.

NESS is available at no charge to federal, state, local, territorial, and tribal law enforcement agencies that submit evidence to NIBIN. NESS is currently being used by ATF personnel nationwide. As of September 2022, ATF has signed MOUs with 149 state and local law enforcement agencies to provide their personnel direct access.

Figure NIB-11 reflects all Crime Gun IDs in which the first NIBIN lead was identified between 2017 and 2021. Nearly 60% (105,013) of the 175,661 Crime Gun IDs included the recovery of a firearm.

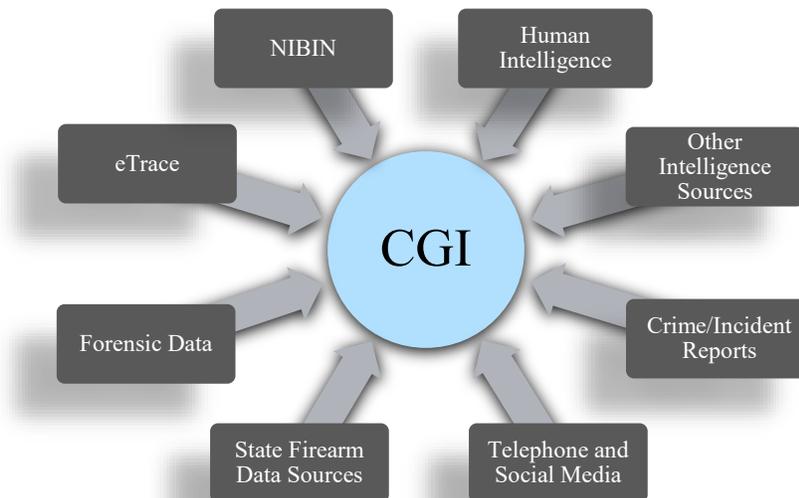
Figure NIB-11: Statistics on NESS Crime Gun IDs, 2017 – 2021



National Crime Gun Intelligence Governing Board (Governing Board)

Crime gun intelligence (CGI) represents all available information related to a crime gun including its transfer(s), discharge(s), and recovery or destruction, the analysis of which is designed to provide relevant leads, identify shooters, and determine sources of crime guns in support of investigations and prosecutions (Figure NIB-12).

Figure NIB-12: CGI Data Sources



Established in 2016, the Governing Board leverages the collective experience of federal, state, and local experts working in forensics, law enforcement, and criminal law to ensure that ATF receives valuable input on national programs relating to CGI. Currently, the Governing Board is comprised of experienced police chiefs, laboratory directors, prosecutors, and ATF executives that are subject matter experts in CGI. As part of the overall mission, the Governing Board creates best practices, standards, and policy to assist law enforcement in successfully using a CGI model to reduce violent crime.

In 2017, the Minimum Required Operating Standards (MROS), created by ATF, was adopted by the Governing Board. The MROS was created to establish national level best practices and metrics for NIBIN Sites. MROS includes but is not limited to timely submissions of ballistic evidence, timely dissemination of all NIBIN leads, the designation of a NIBIN Program Administrator, and the accessibility of the system to only qualified NIBIN users. These standards are required for access to the

network, thereby ensuring NIBIN is being utilized to its full potential through the generation of actionable criminal intelligence. ATF conducts MROS assessments of NIBIN sites annually and provides guidance and training with identified deficiencies in the standards practices.

ATF’s CGI Center of Excellence

In 2022, ATF announced the establishment of the National CGI Center of Excellence (CoE), to be located on Wichita State University’s Innovation Campus. The CoE will serve several functions, including as the location of ATF’s NNCTC-II. This will expand ATF’s correlation review services and promote next generation opportunities in working with NIBIN. The CoE will also provide comprehensive NIBIN and CGI training for all practitioners involved in crime gun investigations to include but not limited to all levels of law enforcement from first responders to executives as well as lab personnel and prosecutors.

Another key element of the CoE is to provide the structure for engaging in research partnerships with academia. Through this partnership, ATF will conduct specific research projects using ATF’s proprietary crime gun data aimed at gaining critical insight into the shooting cycle and other CGI themes. A unique perspective of the CoE is the celebration of innovation. ATF is committed to focusing on continuing the evolution of CGI, exploring new applications that can assist in investigating gun crime, and emphasizing the value in multi-disciplinary approaches to combatting gun crime throughout the U.S.

As shown in Figure NIB-13, the CoE will be structured by using five guiding principles. These will centralize resources and streamline CGI contributions across a wide range of areas, along with identifying and reducing duplication of effort across initiatives.

Figure NIB-13: CoE Guiding Principles



Policies and Legislation Supporting CGI Programs

The federal government has long recognized the importance of CGI as a tool to combat firearm violence. In 2001, the Attorney General issued a policy memorandum, coordinated with the Secretary of Treasury,

requiring Treasury and Justice law enforcement agencies to trace all crime guns taken into their custody through ATF's National Tracing Center and enter into NIBIN all casings and projectiles taken into their custody.¹³ In 2013, President Obama issued an Executive Memorandum directing all federal law enforcement agencies to trace recovered crime guns taken into their custody.¹⁴

Several states have also enacted legislative mandates: Delaware¹⁵, Illinois¹⁶, Nevada¹⁷, New Jersey¹⁸, and New York¹⁹ have made the use of NCIC, eTrace, and NIBIN statewide policy by enacting laws requiring law enforcement agencies to utilize these systems when crime guns and other specified items of shooting-related evidence are taken into custody.

In addition to federal policies and state-laws, the value of CGI has also been recognized by federal commissions, law enforcement associations, and academic research. For example, the 2020 Presidential Commission on Law Enforcement and the Administration of Justice issued a report with several recommendations promoting the use of NIBIN, including the following:²⁰

- Law enforcement agencies should collect and quickly process ballistics evidence in all shootings and gun recoveries, regardless of whether there is an immediately identifiable offender or victim.
- Congress should provide additional funding to the Department of Justice to increase the number of NIBIN sites, and the Department of Justice should provide additional grant funding to the Local Law Enforcement CGIC Integration Initiative.
- Congress should continue to fund the NNCTC.

NIBIN has also received strong support from the law enforcement community in general, including the International Association of Chiefs of Police (IACP), the world's largest professional association for police leaders. Among the show of support were formal resolutions that the IACP Membership adopted.²¹ The IACP adopted the following six resolutions in support of NIBIN between 2003 and 2018:

- October 2003 – [“Support for ATF's NIBIN Program”](#)
- October 2006 – [“Support for the Department of Justice National Integrated Ballistics Information Network Program”](#)
- November 2007 – [“Support for Training Disabled Veterans as NIBIN Technicians and Firearm Examiners”](#)
- October 2012 – [“Support for Additional NIBIN Funding at ATF”](#) and [“Regional Crime Gun Processing Protocols”](#)
- November 2016 – [“Support of Resources for Tactical and Strategic Usage of National Integrated Ballistic Information Network \(NIBIN\)”](#)
- November 2018 – [“Support for Development of Comprehensive Crime Gun Intelligence Strategies”](#)

Moreover, the Major Cities Chiefs Association provided information on federal law enforcement agency, programs, and tools that have assisted them in dealing with violent crime.²² They identified ATF's NIBIN and National Tracing Center to be the most useful tools in preventing firearm related violence through the expedited identification and arrest of criminal shooters and gun traffickers.

Most recently, on December 12, 2022, Deputy Attorney General Lisa O. Monaco issued a [memorandum](#) requiring all firearms and fired cartridge casings recovered in connection with every criminal investigation by a DOJ Agency or DOJ funded task force to be analyzed and entered into NIBIN within 14 days of recovery.

**APPENDIX NIB - NATIONAL
INTEGRATED BALLISTIC
INFORMATION NETWORK
(NIBIN)**

Table NIB-01: NIBIN Acquisitions by State/Territory, 2005 – 2021²³

State & Territory	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	% Chg. 2005-2021
AK	408	287	476	612	4	207			39	3	11	61	601	1,479	1,315	1,416	1,019	7,938	149.8%
AL	1,522	1,773	2,047	1,748	1,313	1,343	1,934	1,203	1,323	1,127	1,881	2,339	3,522	6,150	8,277	12,477	12,574	62,553	726.1%
AR	1,486	959	808	1,002	1,157	1,146	1,409	839	1,258	999	1,142	1,187	1,930	3,198	3,638	5,776	6,298	34,232	323.8%
AZ	3,561	5,638	6,035	6,057	6,360	7,867	10,153	7,919	9,102	9,259	10,237	8,026	9,245	11,811	13,432	17,060	17,314	159,076	386.2%
CA	18,558	17,844	17,585	17,552	14,820	14,777	14,263	14,335	13,819	15,410	15,949	20,072	20,901	24,048	30,034	33,905	44,955	348,827	142.2%
CO	1,100	1,581	1,744	1,341	1,791	883	1,072	1,145	1,586	1,900	3,004	3,697	4,834	6,051	7,249	9,309	10,318	58,605	838.0%
CT	1,669	1,798	2,073	1,689	1,402	962	891	1,229	1,617	1,749	1,887	1,935	2,304	1,779	3,183	2,760	4,494	33,421	169.3%
DC	2,897	5,180	6,240	7,424	6,213	5,350	4,695	4,475	1,760	2,159	2,845	4,012	4,283	3,829	4,563	5,606	4,566	76,097	57.6%
DE	405	653	804	945	910	855	1,152	1,321	1,207	1,238	1,371	1,191	1,276	1,095	1,387	2,264	2,224	20,298	449.1%
FL	6,196	8,793	10,282	10,615	13,884	12,575	13,286	13,522	13,486	13,855	16,237	17,684	21,027	24,577	27,136	32,598	35,040	290,793	465.5%
GA	10,801	4,586	1,908	5,964	6,239	7,353	4,660	8,672	5,810	7,384	6,634	8,333	6,932	8,590	13,240	16,643	17,504	141,253	62.1%
GM*		1	17							2	1	1		3			3	28	*
HI	129	123	115	116	95	139	124	2	14	3		38	19	15	190	76	188	1,386	45.7%
IA	400	384	507	484	496	525	787	588	800	950	1,304	1,122	1,016	1,891	2,303	2,749	3,095	19,401	673.8%
ID	100	110	122	117	133	23				4	12	12	33	80	232	348	662	1,988	562.0%
IL	6,673	8,973	7,086	6,459	8,674	7,785	8,393	6,575	10,200	10,359	11,858	15,739	18,518	20,363	20,968	29,034	28,307	225,964	324.2%
IN	8,153	8,483	7,766	8,297	8,339	7,853	7,551	5,727	6,207	7,169	6,687	7,265	9,383	9,714	10,512	12,314	15,709	147,129	92.7%
KS	563	866	471	548	648	974	939	515	523	643	357	1,819	2,518	4,065	3,792	6,614	6,327	32,182	1,023.8%
KY*		2	3	1	151	27	492	295	801	853	1,391	3,746	5,075	5,184	6,355	7,936	9,316	41,628	*
LA	5,916	5,877	6,810	9,072	8,367	11,506	13,573	10,754	11,413	11,346	11,879	11,300	14,601	14,954	17,169	21,062	22,784	208,383	285.1%
MA	2,261	2,545	1,910	2,178	1,354	1,578	1,230	1,273	1,114	1,287	2,008	2,351	2,767	2,068	2,919	3,781	4,151	36,775	83.6%
MD	4,511	4,139	4,199	4,670	4,817	4,212	3,770	3,357	3,000	2,904	4,440	5,060	5,372	6,729	8,102	8,672	10,315	88,269	128.7%
ME	620	301	34	1								47	69	73	146	106	167	1,564	-73.1%
MI	7,608	9,135	9,485	8,397	4,269	7,656	6,260	5,528	3,996	6,614	6,632	7,077	10,263	9,386	10,714	19,279	23,385	155,684	207.4%
MN	1,812	1,767	1,666	1,529	1,798	1,630	1,424	1,767	1,961	2,093	1,880	2,270	2,883	2,840	3,393	5,072	5,581	41,366	208.0%
MO	1,623	2,064	2,555	3,254	2,967	2,658	2,543	1,978	2,535	3,456	3,656	5,790	7,691	10,034	14,430	16,419	16,199	99,852	898.1%
MS	428	625	1,314	1,407	1,363	1,101	1,692	1,929	1,749	1,744	2,324	1,705	1,986	4,442	2,950	3,329	4,762	34,850	1,012.6%
MT	62	309	347	269	253	308	115		1	4	64	3	4	29	64	263	216	2,311	248.4%
NC	4,654	3,867	4,196	4,019	6,979	5,292	6,212	7,456	7,441	8,740	9,922	7,504	9,516	11,429	15,960	23,198	25,974	162,359	458.1%
ND	30	111	112	68	9	52	24	131	77	51	19	49	54	34	82	20	162	1,085	440.0%
NE	1,109	892	818	686	857	683	1,169	1,059	1,253	1,510	938	973	1,117	1,196	1,910	2,288	2,357	20,815	112.5%
NH	68	193	130	72	110	37	50	25	73	113	2	59	41	91	102	329	312	1,807	358.8%
NJ	5,104	5,836	5,696	5,170	5,140	5,440	5,947	5,849	5,938	6,068	6,738	7,775	8,189	7,565	7,861	9,005	10,639	113,960	108.4%
NM	868	1,733	1,436	1,473	1,256	1,266	1,239	1,112	876	887	988	1,870	1,966	3,033	3,784	4,266	5,302	33,355	510.8%
NV	497	528	721	763	1,095	1,083	1,273	1,340	1,096	914	973	1,802	3,849	4,665	5,983	8,621	8,584	43,787	1,627.2%
NY	8,606	8,575	7,694	8,851	9,117	8,159	10,736	9,684	9,428	10,805	9,934	11,188	13,036	12,942	13,048	16,649	17,575	186,027	104.2%
OH	6,817	5,227	10,140	8,791	7,742	7,662	7,899	7,892	7,589	10,021	9,075	13,167	15,899	15,552	19,063	28,645	30,088	211,269	341.4%
OK	439	1,007	1,129	1,019	836	874	1,386	1,276	2,002	2,532	2,791	2,849	2,668	3,094	2,809	6,195	6,794	39,700	1,447.6%
OR	1,289	1,203	979	939	1,154	1,384	1,518	1,221	1,053	2,254	1,354	2,119	2,150	2,027	2,214	3,084	3,701	29,643	187.1%
PA	8,526	7,902	7,249	10,515	9,789	8,314	7,036	7,503	7,515	7,034	7,088	11,867	12,283	13,066	16,918	17,411	17,569	177,585	106.1%
PR	3,919	1,078	2,986	5,397	3,772	3,156	1,948	1,105	1,684	1,120	824	1,381	1,643	3,240	5,254	2,567	2,558	43,632	-34.7%
RI	398	278	282	125	75	252	311	287	271	531	544	603	493	547	517	501	799	6,814	100.8%
SC	1,583	3,006	2,241	2,442	2,067	1,742	2,146	1,904	1,867	1,983	3,558	3,189	4,481	6,433	9,246	13,609	14,961	76,458	845.1%
SD	38	190	131	115	2		7		13	134	119	289	118	139	216	67	276	1,854	626.3%
TN	3,214	4,586	4,220	1,659	1,519	2,686	3,708	3,461	2,699	3,963	5,546	7,568	9,512	12,654	13,613	17,815	20,260	118,683	530.4%
TX	11,614	13,242	13,759	16,686	15,639	12,783	13,122	12,478	12,607	12,615	13,076	16,838	19,712	24,988	32,380	42,698	59,646	343,883	413.6%

UT	163	81	17		83	1		5	9	15	12	102	330	1,659	1,756	2,045	2,890	9,168	1,673.0%
VA	3,919	4,202	5,118	5,270	5,259	4,486	4,332	4,220	4,189	5,286	5,673	5,666	8,065	10,340	11,099	10,886	15,370	113,380	292.2%
VI	33	584	1,119	668	578	724	625	744	653	626	641	580	407	529	355	388	497	9,751	1,406.1%
VT	106	74										27	26	45	66	28	82	454	-22.6%
WA	4,365	4,352	3,909	3,830	4,048	4,857	4,353	2,869	4,818	5,057	6,594	6,972	5,647	5,199	6,456	7,239	7,898	88,463	80.9%
WI	859	886	724	445	651	583	945	812	986	2,760	3,833	5,080	6,398	7,318	6,915	7,698	11,897	58,790	1,285.0%
WV	225	268	218	66	38	24	87	68	74	146	45	126	239	253	1,034	1,466	1,499	5,876	566.2%
WY	108	108	116	108	59	70	32		3	33	28	31	95	88	43	41	41	1,004	-62.0%
(blank)	3,540	2,718	3,169	3,755	2,495	3,567	4,992	5,597	6,858	4,252	3,844	3,895	3,520	1,403	1,633	1,527	1,726	58,491	-51.2%
Total	161,553	167,523	172,718	184,680	178,186	176,470	183,505	173,046	176,393	193,964	209,850	247,451	290,507	334,006	398,010	505,154	576,930	4,329,946	257.1%

* Insufficient data for calculation

ENDNOTES

¹ Although commonly referred to as “casings,” the technical term for an ammunition casing is “Cartridge Case.” The definition of cartridge case is: The container for all the other components which comprise a cartridge. Serves as a gas seal during the firing of a cartridge. Association of Firearm & Tool Mark Examiners, Glossary, 6th Edition, Version 6.091922

² The technical term for an “imaged test-fired casing” is “Test Cartridge Case.” The definition of a test cartridge case is: A cartridge case obtained while test firing a firearm in a laboratory to be used for comparison or analysis. Association of Firearm & Tool Mark Examiners, Glossary, 6th Edition, Version 6.091922

³ A NIBIN lead is an unconfirmed, potential association between pieces of firearm ballistic evidence that is based on a correlation review of the digital images in the NIBIN database by a trained NIBIN technician. A NIBIN lead is distinct from a NIBIN “hit.” As is further explained in the section entitled “NIBIN HITS and LEADS”. A NIBIN “hit” occurs when a certified firearms examiner conducts a microscope examination of the actual physical ballistic evidence (*i.e.*, comparing two or more recovered casings or comparing a recovered casing(s) with a test-fire) to confirm those items of ballistic evidence had been fired from the same firearm and were a “match”. See, ATF NIBIN Fact sheet. September 2021. <https://www.atf.gov/resource-center/fact-sheet/fact-sheet-national-integrated-ballistic-information-network>

⁴ ATF NIBIN Fact sheet. September 2021. <https://www.atf.gov/resource-center/fact-sheet/fact-sheet-national-integrated-ballistic-information-network>

⁵ NIST Image. <https://www.nist.gov/image/cartridgecasejpg>

⁶ NIST Image. <https://www.nist.gov/news-events/news/2015/10/new-ballistics-control-chart-forensic-imaging>

⁷ ATF NIBIN Fact sheet. September 2021 <https://www.atf.gov/resource-center/fact-sheet/fact-sheet-national-integrated-ballistic-information-network>

⁸ ATF NIBIN Fact sheet. September 2021. <https://www.atf.gov/resource-center/fact-sheet/fact-sheet-national-integrated-ballistic-information-network>

⁹ See, ATF NIBIN Fact sheet. September 2021. <https://www.atf.gov/resource-center/fact-sheet/fact-sheet-national-integrated-ballistic-information-network>

¹⁰ Only states with at least one acquisition between 2005 – 2021 were considered for the Top 10 list

¹¹ NIBIN National Correlation and Training Center <https://www.atf.gov/firearms/nibin-national-correlation-and-training-center>

¹² RMS refers to records management system: Typically, an RMS allows for the storage, retrieval, viewing and production of the records, files, documents, and information that is generated across the police agency in connection to its day-to-day operations.

¹³ [OIG Audit Report 05-30 \(justice.gov\)](https://www.justice.gov/oig/audit/05-30)

¹⁴ [Presidential Memorandum - Tracing of Firearms in Connection with Criminal Investigations, January 16, 2013](#)

¹⁵ [80 Del. Laws, c. 426, § 1](#)

¹⁶ [720 ILCS 5/24-8 \(ilga.gov\)](#)

¹⁷ [NRS 202.253](#)

¹⁸ [N.J. Stat. § 52:17B-9.18](#) and [N.J. Stat. § 52:17B-9.19](#)

¹⁹ [Legislation | NY State Senate \(nysenate.gov\)](#)

²⁰ Executive Office of the President of the United States, Report of the President’s Commission on Law Enforcement and the Administration of Justice (Washington, DC: Executive Office of the President of the United States, 2020). Secs. 8.2.2 – 8.2.4. [President’s Commission on Law Enforcement and the Administration of Justice: Final Report](#)

²¹ [Resolutions of the IACP](#)

²² [Reducing Violent Crime in American Cities: An Opportunity to Lead – Full Report - National Policing Institute](#)

²³ These stats are as of September 2022.