# PART VI:
# NIBIN & Ballistic Evidence

## Overview

The NIBIN program is designed to support law enforcement agencies' (LEAs) efforts to investigate crimes involving the use of firearms, providing leads and information that helps identify and arrest perpetrators of firearm-related offenses before they can do more harm. NIBIN connects crime scenes through the collection and analysis of ballistic evidence that may not have otherwise been linked through traditional means alone. The integration of NIBIN, Firearms Tracing System (FTS), and other crime gun data, through the NIBIN Enforcement Support System (NESS) enhances LEA capacity to hold gun offenders accountable. By integrating these data systems, NESS provides LEAs a more comprehensive understanding of a crime gun's history, enhancing the capacity of LEAs to identify how the perpetrator obtained the gun. NESS also integrates other investigative information about crime guns from ATF and LEA partners. The combined NESS information supports comprehensive investigation of shooting incidents and enhances the identification and disruption of firearm trafficking sources. This section expands upon Part I - NIBIN, with a focus on key NIBIN metrics between 2017 and 2021.

## NIBIN Cases

The input of key data concerning shooting or crime gun recovery incidents, including the date and type of crime, results in the creation of a NIBIN case. Generally, a NIBIN case includes at least one recovered casing or test-fire, and tracking data for the submitting LEA. This data includes the name of agency, investigation reference number, date of occurrence, and type of event.

A total of 1,506,971 NIBIN cases were created between 2017 and 2021. Figure NIB-01 displays the trend in NIBIN cases over this period. The number of NIBIN cases grew steadily over time, increasing overall by 103% from 2017 (206,069) to 2021 (418,076). Table NIB-01 shows the year-to-year percentage change in NIBIN cases over this period. The largest year-to-year percentage increase in NIBIN cases occurred from 2019 (282,404) to 2020 (361,706), increasing by 28%.

*Figure NIB-01: Total NIBIN Cases, 2017 – 2021*

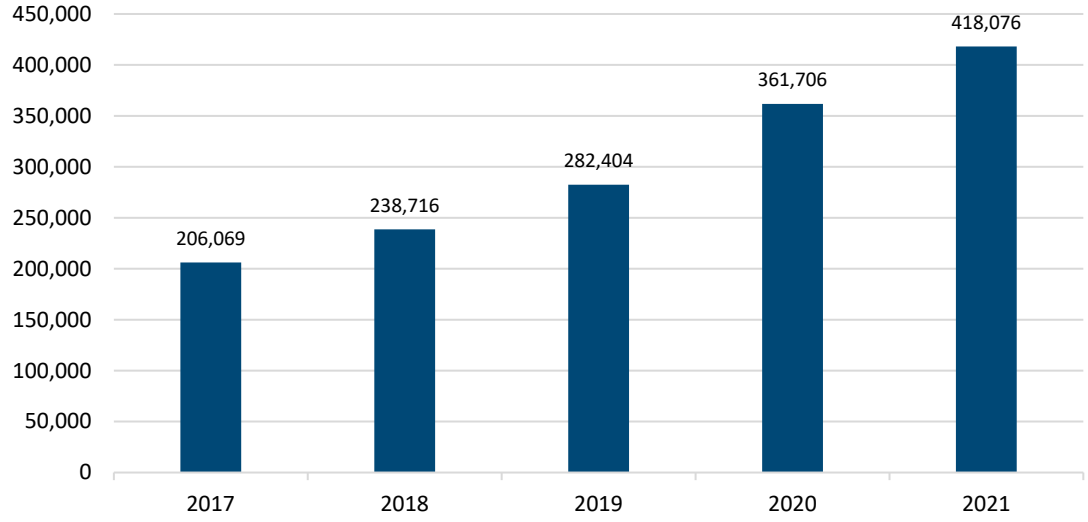



*Table NIB-01: Total and YOY Percentage Change in NIBIN Cases, 2017 – 2021*

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 206,069 | 15.8% | 238,716 | 18.3% | 282,404 | 28.1% | 361,706 | 15.6% | 418,076 | 102.9% |

As shown in Table NIB-02, between 2017 and 2021 the top ten submitting LEAs account for 19% (286,602 of 1,506,971) of all NIBIN cases. Of these LEAs, Chicago Police Department (PD) is the top submitting LEA, accounting for 4% (62,448 of 1,506,971) of all NIBIN cases. Following Chicago PD, Milwaukee PD (31,968 of 1,506,971) and Houston PD (31,088 of 1,506,971) each account for roughly 2% of all NIBIN cases.[1]

*Table NIB-02: Top Ten LEAs Submitting NIBIN Cases, 2017 – 2021*

| Agency | Total | Percent |
|---|---|---|
| Chicago PD | 62,448 | 4.1% |
| Milwaukee PD | 31,968 | 2.1% |
| Houston PD | 31,088 | 2.1% |
| Detroit PD | 27,443 | 1.8% |
| Memphis PD | 24,473 | 1.6% |
| Los Angeles PD | 23,866 | 1.6% |
| Phoenix PD | 22,571 | 1.5% |
| Philadelphia PD | 22,477 | 1.5% |
| Dallas PD | 21,382 | 1.4% |
| Las Vegas Metro PD | 18,886 | 1.3% |
| Top Ten | 286,602 | 19.0% |
| All Others (9,532) | 1,220,369 | 81.0% |
| **Total** | **1,506,971** | **100.0%** |

As shown in Table NIB-03a, between 2017 and 2021 the top ten states of submitting LEAs accounted for almost 54% (811,159 of 1,506,971) of all NIBIN cases. Texas is the lead state of submitting LEAs, accounting for over 9% (138,058 of 1,506,971) of all NIBIN cases. Following Texas, California accounts

for nearly 8% (116,250 of 1,506,971) of all NIBIN cases. While not reflected at the agency level, Florida, Ohio, North Carolina, and Louisiana are among the top ten states of submitting LEAs.

***Table NIB-03a: Top Ten States of LEAs Submitting NIBIN Cases, 2017 – 2021***

| State | Total | Percent |
|---|---|---|
| Texas | 138,058 | 9.2% |
| California | 116,250 | 7.7% |
| Florida | 102,948 | 6.8% |
| Illinois | 99,033 | 6.6% |
| Ohio | 81,463 | 5.4% |
| North Carolina | 62,185 | 4.1% |
| Michigan | 55,109 | 3.7% |
| Tennessee | 54,652 | 3.6% |
| Louisiana | 50,794 | 3.4% |
| Arizona | 50,667 | 3.4% |
| Top Ten | 811,159 | 53.8% |
| All Others (45) | 695,812 | 46.2% |
| **Total** | **1,506,971** | **100.0%** |

Table NIB-03 in Appendix NIB-NIBIN & Ballistic Evidence lists all the states and territories of LEAs submitting NIBIN cases between 2017 and 2021.

## NIBIN Acquisitions

NIBIN acquisitions refer to individual pieces of ballistic evidence (casings and test-fires) that are entered into NIBIN acquisition stations as part of a NIBIN case. A total of 2,104,607 NIBIN acquisitions were entered into NIBIN acquisition stations between 2017 and 2021. Over this period, there were approximately 1.4 NIBIN acquisitions per NIBIN case (2,104,607:1,506,971). As shown in Figure NIB-02, the number of NIBIN acquisitions grew steadily alongside NIBIN cases, increasing overall by 99% from 2017 (290,507) to 2021 (576,930). Table NIB-04 shows the year-to-year percentage change in NIBIN acquisitions over this period. Like NIBIN cases, the largest year-to-year percentage increase in NIBIN acquisitions occurred from 2019 (398,010) to 2020 (505,154), an increase of nearly 27%.

***Figure NIB-02: Total NIBIN Acquisitions, 2017 – 2021***

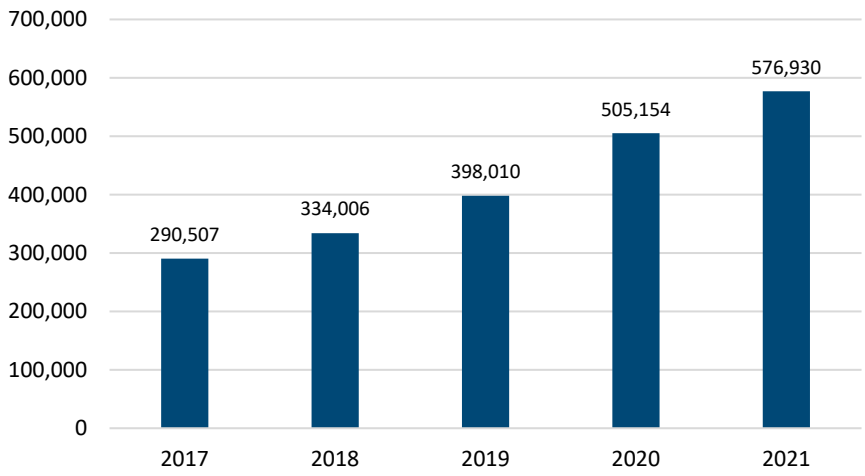


***Table NIB-04: Total and YOY Percentage Change in NIBIN Acquisitions, 2017 – 2021***

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 290,507 | 15.0% | 334,006 | 19.2% | 398,010 | 26.9% | 505,154 | 14.2% | 576,930 | 98.6% |

The top ten submitting LEAs accounted for just under 17% (354,654 of 2,104,607) of all NIBIN acquisitions between 2017 and 2021 (Table NIB-05). Of these LEAs, Chicago PD accounted for over 3% (67,120 of 2,104,607) of all NIBIN acquisitions. Following Chicago PD, Houston PD (40,375 of 2,104,607), Milwaukee PD (36,747 of 2,104,595), Detroit PD (35,529 of 2,104,607), Memphis PD (32,642 of 2,104,607), and Philadelphia PD (32,108 of 2,104,607) each accounted for roughly 2% of all NIBIN acquisitions.

***Table NIB-05: Top Ten LEAs Submitting NIBIN Acquisitions, 2017 – 2021***

| Agency | Total Acquisitions | Percent |
|---|---|---|
| Chicago PD | 67,120 | 3.2% |
| Houston PD | 40,375 | 1.9% |
| Milwaukee PD | 36,747 | 1.7% |
| Detroit PD | 35,529 | 1.7% |
| Memphis PD | 32,642 | 1.6% |
| Philadelphia PD | 32,108 | 1.5% |
| Phoenix PD | 29,957 | 1.4% |
| Los Angeles PD | 28,022 | 1.3% |
| Dallas PD | 27,163 | 1.3% |
| Indianapolis Metro PD | 24,994 | 1.2% |
| Top Ten | 354,654 | 16.9% |
| All Others (9,532) | 1,749,953 | 83.1% |
| **Total** | **2,104,607** | **100.0%** |

As reflected in Table NIB-06a the top ten states of submitting LEAs accounted for over 52% (1,101,080 of 2,104,607) of all NIBIN acquisitions between 2017 and 2021. Texas was the lead state of submitting LEAs, accounting for almost 9% (179,424 of 1,506,971) of all NIBIN acquisitions. Following Texas, California accounted for around 7% (153,843 1,506,971) of all NIBIN acquisitions. While not reflected at the agency level, Florida, Ohio, Louisiana, North Carolina, and New York were also included in the top ten states of submitting LEAs.

*Table NIB-06a: Top Ten States of LEAs Submitting NIBIN Acquisitions, 2017 – 2021*

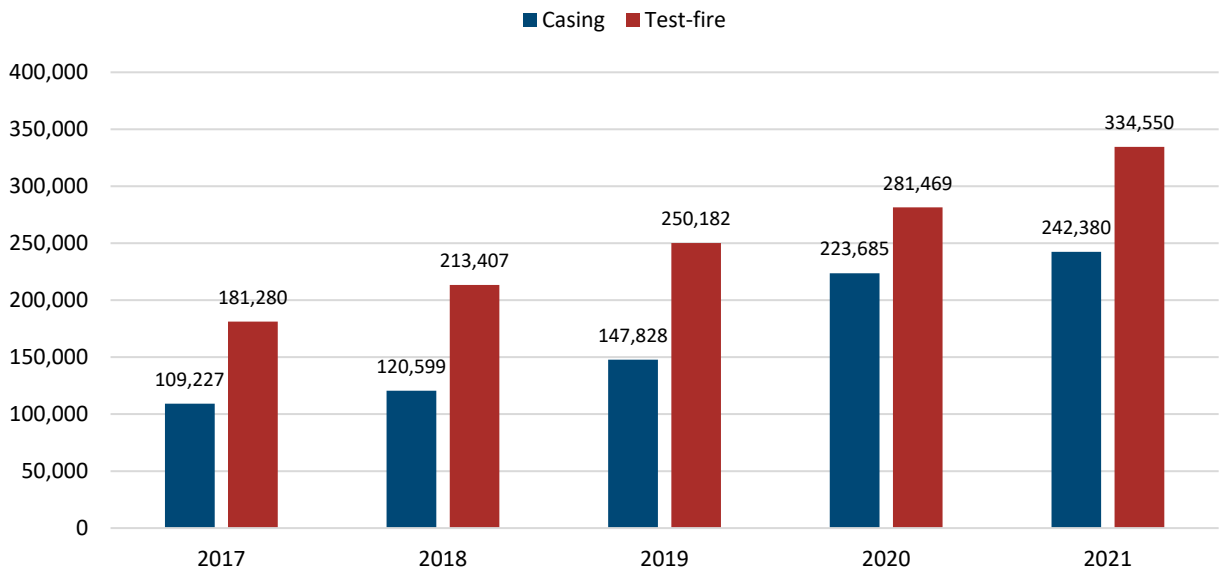
| State | Total Acquisitions | Percent |
|---|---|---|
| Texas | 179,424 | 8.5% |
| California | 153,843 | 7.3% |
| Florida | 140,378 | 6.7% |
| Illinois | 117,190 | 5.6% |
| Ohio | 109,247 | 5.2% |
| Louisiana | 90,570 | 4.3% |
| North Carolina | 86,077 | 4.1% |
| Pennsylvania | 77,247 | 3.7% |
| Tennessee | 73,854 | 3.5% |
| New York | 73,250 | 3.5% |
| Top Ten | 1,101,080 | 52.3% |
| All Others (45) | 1,003,527 | 47.7% |
| **Total** | **2,104,607** | **100.0%** |

Table NIB-06 in Appendix NIB-NIBIN & Ballistic Evidence lists all the states and territories of LEAs submitting NIBIN acquisitions from 2017 and 2021.

## NIBIN Casings and Test-fires

NIBIN acquisitions include recovered crime scene casings and test-fires of recovered crime guns. A total of 843,719 casings and 1,260,888 test-fires were acquired in NIBIN between 2017 and 2021. Figure NIB-03 displays the trend in NIBIN acquisitions for casings and test-fires over this period. Overall, test-fires accounted for 60% (1,260,888 of 2,104,607) of all NIBIN acquisitions, with casings accounted for 40% (843,719 of 2,104,607). While test-fires accounted for a larger percentage of all NIBIN acquisitions, the number of NIBIN acquisitions for casings grew at a greater rate, increasing overall by 122% from 2017 (109,227) to 2021 (242,380). In comparison, the number of NIBIN acquisitions for test-fires increased by 85% from 2017 (181,280) to 2021 (334,550).

*Figure NIB-03: Total NIBIN Acquisitions by Evidence Type, 2017 – 2021*



Tables NIB-07 and NIB-08 capture the year-to-year percentage change between 2017 and 2021 in NIBIN acquisitions for casings and test-fires, respectively. The largest year-to-year percentage increase in casings occurred from 2019 (147,828) to 2020 (223,685), increasing by over 51%. The largest year-to-year percentage increase in test-fires occurred from 2020 (281,469) to 2021 (334,550), increasing by almost 19%.

***Table NIB-07: Total and YOY Percentage Change in NIBIN Acquisitions for Casings, 2017 – 2021***

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 109,227 | 10.4% | 120,599 | 22.6% | 147,828 | 51.3% | 223,685 | 8.4% | 242,380 | 121.9% |

***Table NIB-08: Total and YOY Percentage Change in NIBIN Acquisitions for Test-fires, 2017 – 2021***

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 181,280 | 17.7% | 213,407 | 17.2% | 250,182 | 12.5% | 281,469 | 18.9% | 334,550 | 84.5% |

## *NIBIN Casings*

As shown in Table NIB-09, the top ten LEAs submitting casings between 2017 and 2021 accounted for almost 19% (159,238 of 843,719) of all casings. Of these LEAs, Chicago PD (26,698 of 843,719) and Milwaukee PD (22,623 of 843,719) were the top submitting LEAs, each accounted for approximately 3% of all casings. Following Chicago PD and Milwaukee PD, Houston PD (17,063 of 843,719), Philadelphia PD (16,811 of 843,719), Phoenix PD (14,157 of 843,719), Detroit PD (13,677 of 843,719), and Memphis PD (13,380 of 843,719) each accounted for nearly 2% of all casings.

***Table NIB-09: Top Ten LEAs Submitting Casings, 2017 – 2021***

| Agency | Total | Percent |
|---|---|---|
| Chicago PD | 26,698 | 3.2% |
| Milwaukee PD | 22,623 | 2.7% |
| Houston PD | 17,063 | 2.0% |
| Philadelphia PD | 16,811 | 2.0% |
| Phoenix PD | 14,157 | 1.7% |
| Detroit PD | 13,677 | 1.6% |
| Memphis PD | 13,380 | 1.6% |
| DC Metro PD | 11,917 | 1.4% |
| Dallas PD | 11,643 | 1.4% |
| Columbus PD | 11,269 | 1.3% |
| Top Ten | 159,238 | 18.9% |
| All Others (5,573) | 684,481 | 81.1% |
| **Total** | **843,719** | **100.0%** |

Between 2017 and 2021, the top ten states of submitting LEAs accounted for almost 52% (436,685 of 843,719) of all casings (Table NIB-10a). Texas was the lead state of submitting LEAs, accounting for 8% (67,569 of 843,719) of all casings. Following Texas, California accounted for just under 7% (55,837 of 843,719) of all casings. In addition to California, Florida, North Carolina, Louisiana, Georgia, and New York were not reflected at the agency level but were included in the top ten states of submitting LEAs.

*Table NIB-10a: Top Ten States of LEAs Submitting Casings, 2017 – 2021*

| State | Total | Percent |
|---|---|---|
| Texas | 67,569 | 8.0% |
| California | 55,837 | 6.6% |
| Illinois | 49,817 | 5.9% |
| Florida | 47,983 | 5.7% |
| Ohio | 46,045 | 5.5% |
| North Carolina | 39,418 | 4.7% |
| Louisiana | 38,586 | 4.6% |
| Georgia | 32,559 | 3.9% |
| Tennessee | 29,564 | 3.5% |
| New York | 29,307 | 3.5% |
| Top Ten | 436,685 | 51.8% |
| All Others (44) | 407,034 | 48.2% |
| **Total** | **843,719** | **100.0%** |

Table NIB-10 in Appendix NIB-NIBIN & Ballistic Evidence lists all the states and territories of LEAs submitting casings between 2017 and 2021.

## *NIBIN Test-fires*

Between 2017 and 2021, the top ten submitting LEAs accounted for 16% (201,677 of 1,260,888) of all test-fires (Table NIB-11). Of these LEAs, Chicago PD was the top submitting LEA, accounting for over 3% (40,422 of 1,260,888) of all test-fires. Following Chicago PD, Houston PD (23,312 of 1,260,888), Detroit PD (21,852 of 1,260,888), Los Angeles PD (20,162 of 1,260,888), and Memphis PD (19,262 of 1,260,888) each accounted for nearly 2% of all test-fires.

*Table NIB-11: Top Ten LEAs Submitting Test-fires, 2017 – 2021*

| Agency | Total | Percent |
|---|---|---|
| Chicago PD | 40,422 | 3.2% |
| Houston PD | 23,312 | 1.8% |
| Detroit PD | 21,852 | 1.7% |
| Los Angeles PD | 20,162 | 1.6% |
| Memphis PD | 19,262 | 1.5% |
| Phoenix PD | 15,800 | 1.3% |
| Dallas PD | 15,520 | 1.2% |
| Philadelphia PD | 15,297 | 1.2% |
| Indianapolis Metro PD | 15,192 | 1.2% |
| New Orleans PD | 14,858 | 1.2% |
| Top Ten | 201,677 | 16.0% |
| All Others (9,041) | 1,059,211 | 84.0% |
| **Total** | **1,260,888** | **100.0%** |

Between 2017 and 2021, the top ten states of submitting LEAs accounted for 53% (671,803 of 1,260,888) of all test-fires (Table NIB-12a). Texas was the lead state of submitting LEAs, accounting for just under 9% (111,855 of 1,260,888) of all test-fires. Following Texas, California accounted for nearly 8% (98,006 of 1,260,888) of all test-fires. While not reflected at the agency level, Florida, Ohio, and North Carolina were included in the top ten states of submitting LEAs.

***Table NIB-12a: Top Ten States of LEAs Submitting Test-fires, 2017 – 2021***

| State | Total | Percent |
|---|---|---|
| Texas | 111,855 | 8.9% |
| California | 98,006 | 7.8% |
| Florida | 92,395 | 7.3% |
| Illinois | 67,373 | 5.3% |
| Ohio | 63,202 | 5.0% |
| Louisiana | 51,984 | 4.1% |
| Pennsylvania | 48,556 | 3.9% |
| Michigan | 47,483 | 3.8% |
| North Carolina | 46,659 | 3.7% |
| Tennessee | 44,290 | 3.5% |
| Top Ten | 671,803 | 53.3% |
| All Others (45) | 589,085 | 46.7% |
| **Total** | **1,260,888** | **100.0%** |

Table NIB-12 in Appendix NIB-NIBIN & Ballistic Evidence lists all the states and territories of LEAs submitting test-fires between 2017 and 2021.

## *NIBIN Casing Characteristics*

NIBIN acquisition records contain descriptive information on casings, including caliber. These acquisition records also reflect the incident offense type from the associated NIBIN case. The following review considers these characteristics. A review of records relating to test-fires follows in a later section.

### *Caliber*

Between 2017 and 2021, the top five caliber casings were 9 mm, .40, .45, .380, and .223, accounting for 90% (759,477 of 843,719) of all casings (Table NIB-13).[2] Of these calibers, 9 mm casings accounted for slightly more than half (423,273 of 843,719) of all casings. Between 2017 and 2021, .223 caliber and 9 mm casings experienced incredible growth, increasing by 251% (from 2,336 to 8,189) and 189% (from 46,422 to 137,099), respectively.

***Table NIB-13: Top Five Casing Calibers, 2017 – 2021***

| Caliber | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Percent |
|---|---|---|---|---|---|---|---|
| 9 mm | 46,422 | 54,833 | 70,440 | 114,479 | 137,099 | 423,273 | 50.2% |
| .40 Cal | 27,557 | 28,682 | 33,531 | 45,505 | 42,166 | 177,441 | 21.0% |
| .45 Cal | 12,447 | 12,246 | 14,170 | 19,363 | 18,007 | 76,233 | 9.0% |
| .380 Cal | 9,698 | 10,300 | 11,324 | 14,272 | 11,775 | 57,369 | 6.8% |
| .223 Cal | 2,336 | 3,062 | 4,351 | 7,223 | 8,189 | 25,161 | 3.0% |
| Top Five | 98,460 | 109,123 | 133,816 | 200,842 | 217,236 | 759,477 | 90.0% |
| All Others (72) | 10,767 | 11,476 | 14,012 | 22,843 | 25,144 | 84,242 | 10.0% |
| **Total** | **109,227** | **120,599** | **147,828** | **223,685** | **242,380** | **843,719** | **100.0%** |

### *Offense Category*

The criminal discharge of a firearm is considered an act of violence. When ballistic evidence is entered into NIBIN, the entering technician may choose from more than 50 offense types to characterize the criminal event associated with that submitted evidence. For purposes of this report, however those offense types have been consolidated into seven categories (See Table NIB-14 in Appendix NIB – NIBIN and

Ballistic Evidence). The Violent offense category in this table represents offense types indicating criminal gun use most likely to have involved serious physical injury or death, such as aggravated assault and homicide.

Table NIB-15 lists the percentage of casings in the seven offense categories entered between 2017 and 2021. In descending order, these offense categories include Violent, Shots Detected, Other, Weapons Violations, Property, Drug and Disorder, and Unknown. Over this period, casings were most likely to be collected from incidents in the Violent offense category, accounting for almost 44% (366,607 of 843,719**)** of all casings. Following Violent offenses, over 19% (161,555 of 843,719) of casings were collected from Shots Detected incidents. By far, the yearly number of casings collected from Shots Detected incidents had the largest growth over the study period, increasing by 897% from 2017 (6,767) to 2021 (67,436).

***Table NIB-15: Total Casings by Offense Category, 2017 – 2021***

| Offense Type | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Percent |
|---|---|---|---|---|---|---|---|
| Violent | 54,906 | 55,012 | 64,831 | 94,023 | 97,835 | 366,607 | 43.5% |
| Shots Detected | 6,767 | 11,994 | 24,226 | 51,132 | 67,436 | 161,555 | 19.1% |
| Other | 26,015 | 28,882 | 29,085 | 32,304 | 31,243 | 147,529 | 17.5% |
| Weapons Violations | 12,091 | 14,604 | 17,164 | 27,902 | 29,674 | 101,435 | 12.0% |
| Property | 5,461 | 5,489 | 7,162 | 10,250 | 9,482 | 37,844 | 4.5% |
| Drug & Disorder | 1,799 | 2,240 | 2,987 | 3,523 | 3,960 | 14,509 | 1.7% |
| Unknown | 2,188 | 2,378 | 2,373 | 4,551 | 2,750 | 14,240 | 1.7% |
| **Total** | **109,227** | **120,599** | **147,828** | **223,685** | **242,380** | **843,719** | **100.0%** |

## NIBIN Leads

NIBIN's imaging technology captures the unique markings[3] 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."

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. These NIBIN leads 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.

### *Leads from NIBIN Acquisitions*

Between 2017 and 2021, NIBIN leads were identified for 23% of NIBIN acquisitions (482,565 of 2,104,607). In contrast, 77% of NIBIN acquisitions did not identify a NIBIN lead (1,622,042 of 2,104,607; Figure NIB-04), representing the strong majority of all NIBIN acquisitions. However, the number of NIBIN acquisitions with a lead grew at a greater rate, increasing overall by 170% from 2017 (56,751) to 2021 (153,409). In comparison, the number of NIBIN acquisitions without a lead experienced less than half of this growth, only increasing by 81% from 2017 (233,756) to 2021 (423,521).

*Figure NIB-04: Total NIBIN Acquisitions with a NIBIN Lead and Those Without a NIBIN Lead, 2017 – 2021*

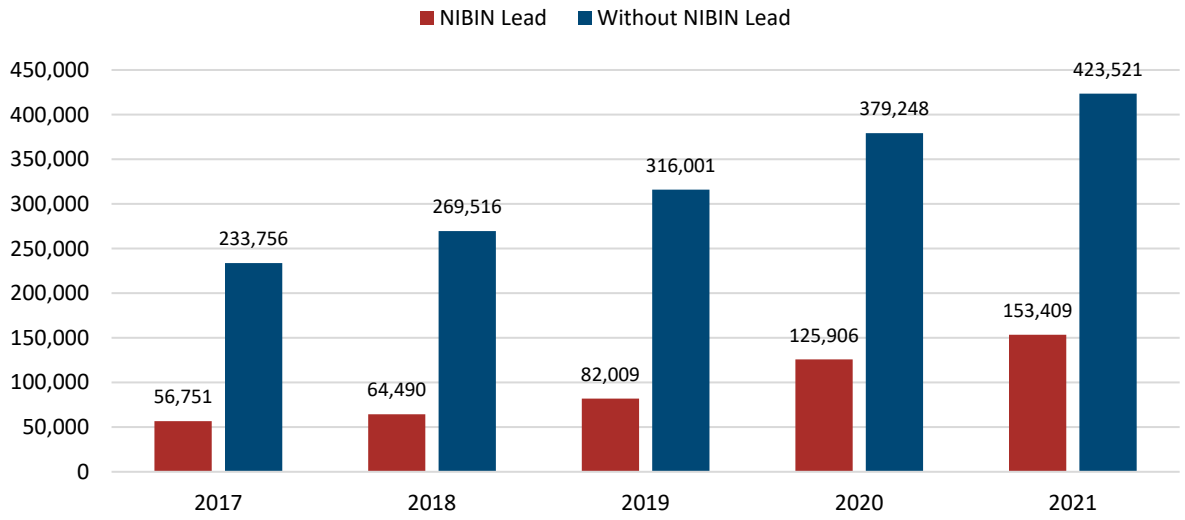



Table NIB-16 shows the year-to-year percentage change between 2017 and 2021 in NIBIN acquisitions with NIBIN leads. The largest year-to-year percentage increase occurred from 2019 to 2020, increasing by almost 54% (from 82,009 to 125,906).

*Table NIB-16: Total and YOY Percentage Change in NIBIN Acquisitions with a NIBIN Lead, 2017 – 2021*

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| **56,751** | 13.6% | 64,490 | 27.2% | 82,009 | 53.5% | 125,906 | 21.8% | 153,409 | 170.3% |

As shown in Table NIB-17, between 2017 and 2021 the top ten submitting LEAs accounted for 22% (105,002 of 482,565) of all NIBIN acquisitions with NIBIN leads. Of these LEAs, Chicago PD was the top submitting LEA, accounting for almost 5% (22,997 of 482,565) of all NIBIN acquisitions with NIBIN leads. Following Chicago PD, Milwaukee PD accounted for roughly 4% (18,795 of 482,565) of all NIBIN acquisitions with NIBIN leads.

*Table NIB-17: Top Ten LEAs Submitting NIBIN Acquisitions with a NIBIN Lead, 2017 – 2021*

| Agency | Total | Percent |
|---|---|---|
| Chicago PD | 22,997 | 4.8% |
| Milwaukee PD | 18,795 | 3.9% |
| Philadelphia PD | 10,527 | 2.2% |
| DC Metro PD | 10,123 | 2.1% |
| Memphis PD | 8,048 | 1.7% |
| Detroit PD | 7,733 | 1.6% |
| Phoenix PD | 7,553 | 1.6% |
| Dallas PD | 6,552 | 1.4% |
| Houston PD | 6,446 | 1.3% |
| Louisville PD | 6,228 | 1.3% |
| Top Ten | 105,002 | 21.8% |
| All Others (4,541) | 377,563 | 78.2% |
| **Total** | **482,565** | **100.0%** |

Between 2017 and 2021, the top ten states of submitting LEAs accounted for 52% (248,930 of 482,565**)** of all NIBIN acquisitions with NIBIN leads (Table NIB-18a). Illinois was the lead state of submitting LEAs, accounting for 8% (39,480 of 482,565) of all NIBIN acquisitions with a lead. Following Illinois, California accounted for 7% (34,480 of 482,565) of all NIBIN acquisitions with a lead. While not reflected at the agency level, California, Ohio, Florida, and North Carolina were included in the top ten states of submitting LEAs.

***Table NIB-18a: Top Ten States of LEAs Submitting NIBIN Acquisitions with a NIBIN Lead, 2017 – 2021***

| State | Total | Percent |
|---|---|---|
| Illinois | 39,480 | 8.2% |
| California | 34,480 | 7.1% |
| Texas | 29,880 | 6.2% |
| Ohio | 27,817 | 5.8% |
| Florida | 26,384 | 5.5% |
| North Carolina | 21,525 | 4.5% |
| Wisconsin | 19,539 | 4.0% |
| Tennessee | 17,644 | 3.7% |
| Pennsylvania | 16,812 | 3.5% |
| Michigan | 15,369 | 3.2% |
| Top Ten | 248,930 | 51.6% |
| All Others (43) | 233,635 | 48.4% |
| **Total** | **482,565** | **100.0%** |

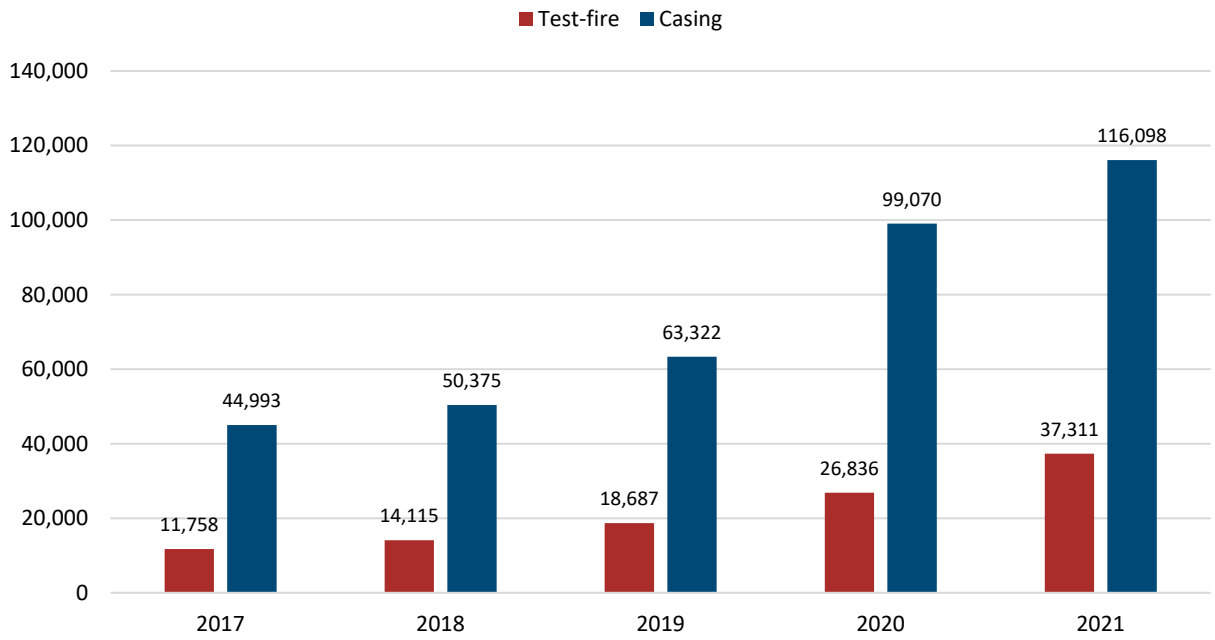
Table NIB-18 in Appendix NIB-NIBIN & Ballistic Evidence lists all the states and territories of LEAs submitting NIBIN acquisitions with a NIBIN lead between 2017 and 2021.

## *Casings and Test-fires*

NIBIN leads were identified for a total of 373,858 casings and 108,707 test-fires between 2017 and 2021. Despite accounting for the majority of all NIBIN acquisitions, test-fires only accounted for 23% (108,707 of 482,565) of all NIBIN acquisitions with NIBIN leads. Only 9% (108,707 of 1,260,888) of all test-fires had NIBIN leads, while 44% (373,858 of 843,719) of all casings had a NIBIN lead.

Figure NIB-05 displays the trend in casings and test-fires with a NIBIN lead between 2017 and 2021. Over this period, the number of casings and test-fires with NIBIN leads increased notably. The number of test fires with a lead increased by 217% from 2017 (11,758) to 2021 (37,311). The number of casings with a lead increased by 158% from 2017 (44,993) to 2021 (116,098).

*Figure NIB-05: Total Casings and Test-fires with a NIBIN Lead, 2017 – 2021*




Tables NIB-19 and NIB-20 reflect the year-to-year percentage change between 2017 and 2021 in casings and test-fires with a NIBIN lead, respectively. The largest year-to-year percentage increase in casings with a lead occurred from 2019 (63,322) to 2020 (99,070), increasing by 57%. This period also captured the largest year-to-year increase in test-fires with a lead, increasing by 44% (from 18,687 to 26,836).

*Table NIB-19: Total and YOY Percentage Change in Casings with a NIBIN Lead, 2017 – 2021*

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 44,993 | 12.0% | 50,375 | 25.7% | 63,322 | 56.5% | 99,070 | 17.2% | 116,098 | 158.0% |

*Table NIB-20: Total and YOY Percentage Change in Test-fires with a NIBIN Lead, 2017 – 2021*

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 11,758 | 20.0% | 14,115 | 32.4% | 18,687 | 43.6% | 26,836 | 39.0% | 37,311 | 217.3% |

## NIBIN Firearms

Recovered crime guns are test-fired and the resulting fired casings (called “test-fires”) are acquired in NIBIN. As part of this process, NIBIN technicians generally create a record that contains descriptive information on the recovered crime gun, known as a firearm record.[4] Between 2017 and 2021, a total of 1,135,860 firearm records (hereafter “NIBIN firearms”) were created in NIBIN. As shown in Figure NIB-06, the number of NIBIN firearms has experienced steady growth, increasing overall by 107% from 2017 (151,795) to 2021 (314,736). The largest year-to-year percentage increase in NIBIN firearms occurred from 2019 (215,867) to 2020 (271,788), increasing by 26% (Table NIB-21).

*Figure NIB-06: Total NIBIN Firearms, 2017 – 2021*

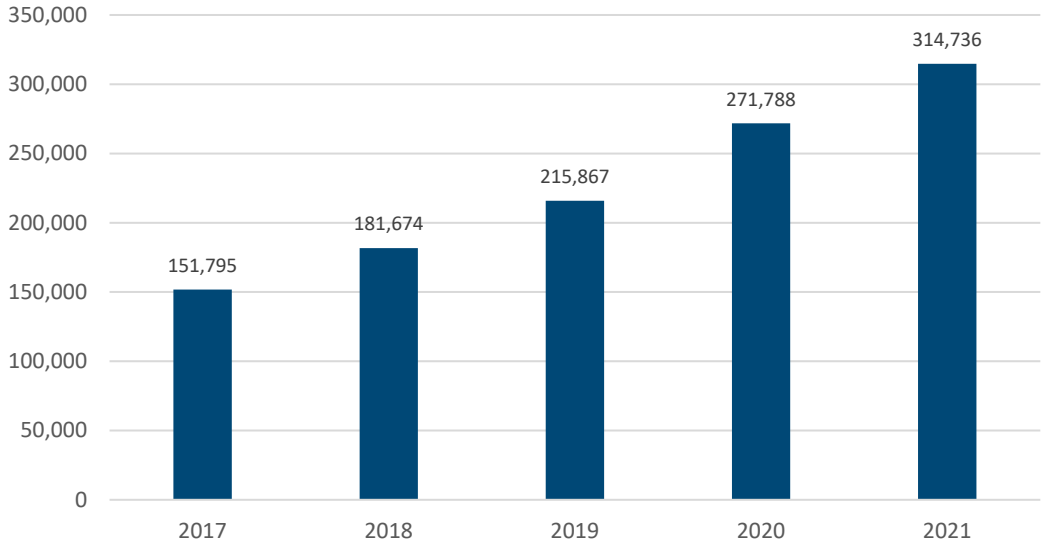



*Table NIB-21: Total and YOY Percentage Change in NIBIN Firearms, 2017 – 2021*

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 151,795 | 19.7% | 181,674 | 18.8% | 215,867 | 25.9% | 271,788 | 15.8% | 314,736 | 107.3% |

## *NIBIN Firearms with a Trace Record*

Multiple sources of information, such as a NIBIN lead, FTS trace data, and LEA intelligence, need to be combined to create enhanced crime gun intelligence. NESS leverages crime gun intelligence derived from NIBIN and these other information resources to produce actionable information and assist in ongoing investigations. NESS compares select fields of information on NIBIN firearms (e.g., firearm manufacturer, caliber, type, and serial number) contained within the NIBIN system to corresponding fields of trace records stored within FTS. When a match is identified, a connection is formed between the two systems. This connection allows the trace records of recovered crime guns to be accessed within NESS alongside the associated NIBIN records. Due to data entry and system limitations, there are likely some recovered crime guns that have been traced but cannot be linked to records in the NIBIN system.

Between 2017 and 2021, NIBIN firearms with trace records accounted for 63% (715,200 of 1,135,860) of all NIBIN firearms (Figure NIB-07). While the yearly percentage of NIBIN firearms with trace records remained largely unchanged during the study period, the number of NIBIN firearms with trace records increased by 109% from 2017 (94,249) to 2021 (196,688). Similarly, the number of NIBIN firearms without trace records increased by 105% from 2017 (57,546) to 2021 (118,103). Of all the NIBIN firearms with trace records, 11% (76,854 of 715,200) had a NIBIN lead.

*Figure NIB-07: Total NIBIN Firearms with a Trace Record and Those Without a Trace Record, 2017 - 2021*

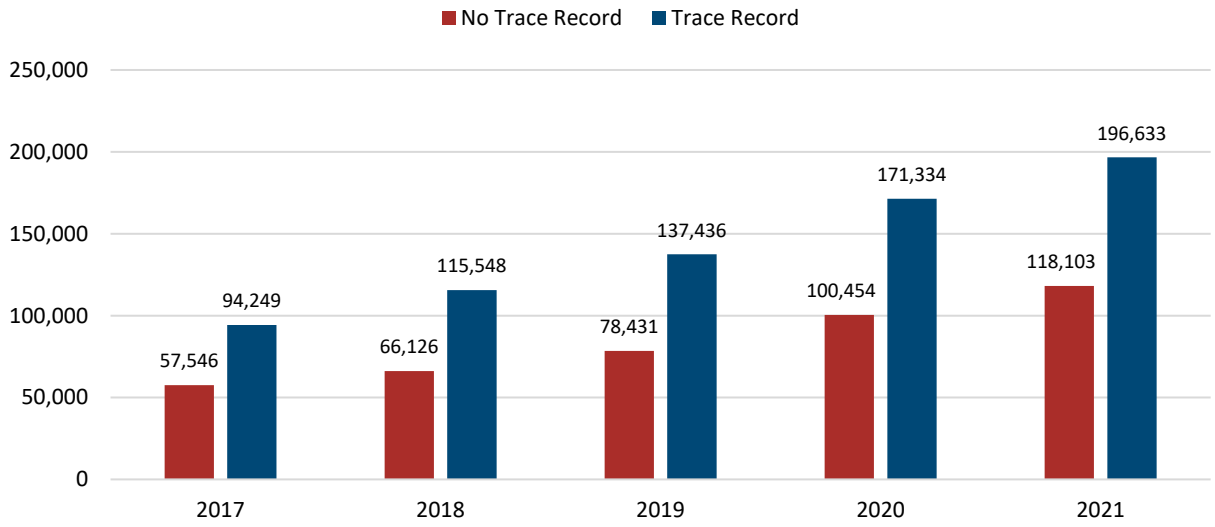



Table NIB-22a lists the top ten states of LEAs submitting NIBIN firearms that were also traced. The top ten states accounted for 55% (394,763 of 715,200) of all NIBIN firearms that were also traced. Texas was the lead state of submitting LEAs, accounting for 10% (73,895 of 715,200) of all NIBIN firearms with trace records. Following Texas, Florida (48,581 of 715,200), Illinois (46,766 of 715,200), and California (46,674 of 715,200) each accounted for roughly 7% of all NIBIN firearms with trace records.

*Table NIB-22a: Top Ten States of LEAs Submitting NIBIN Firearms with a Trace Record, 2017 – 2021*

| State | Total | Percent |
|---|---|---|
| Texas | 73,895 | 10.3% |
| Florida | 48,581 | 6.8% |
| Illinois | 46,766 | 6.5% |
| California | 46,674 | 6.5% |
| Ohio | 41,236 | 5.8% |
| Tennessee | 30,815 | 4.3% |
| North Carolina | 29,083 | 4.1% |
| Louisiana | 27,566 | 3.9% |
| Michigan | 25,690 | 3.6% |
| Virginia | 24,457 | 3.4% |
| Top Ten | 394,763 | 55.2% |
| All Others (45) | 320,437 | 44.8% |
| **Total** | **715,200** | **100.0%** |

Table NIB-22 in Appendix NIB-NIBIN & Ballistic Evidence lists all the states and territories of LEAs submitting NIBIN firearms with trace records between 2017 and 2021.

Table NIB-23a lists the percentage of NIBIN firearms with trace records between 2017 and 2021 for the top ten states of NIBIN firearms with trace records. Leading the top ten states, approximately 72% of NIBIN firearms submitted by LEAs in Virginia (24,457 of 33,873) and Tennessee (30,815 of 42,889) had trace records. At 51% (46,674 of 91927), NIBIN firearms submitted by LEAs in California were the least likely to have trace records.

***Table NIB-23a: Top Ten States for NIBIN Firearms with a Trace Record, 2017 – 2021***

| State | # NIBIN Firearms w/ a Trace Record | Total NIBIN Firearms | % NIBIN Firearms w/ a Trace Record |
|---|---|---|---|
| VA | 24,457 | 33,873 | 72.2% |
| TN | 30,815 | 42,889 | 71.8% |
| IL | 46,766 | 67,002 | 69.8% |
| OH | 41,236 | 61,021 | 67.6% |
| TX | 73,895 | 111,108 | 66.5% |
| NC | 29,083 | 43,795 | 66.4% |
| FL | 48,581 | 80,051 | 60.7% |
| LA | 27,566 | 45,540 | 60.5% |
| MI | 25,690 | 45,649 | 56.3% |
| CA | 46,674 | 91,927 | 50.8% |

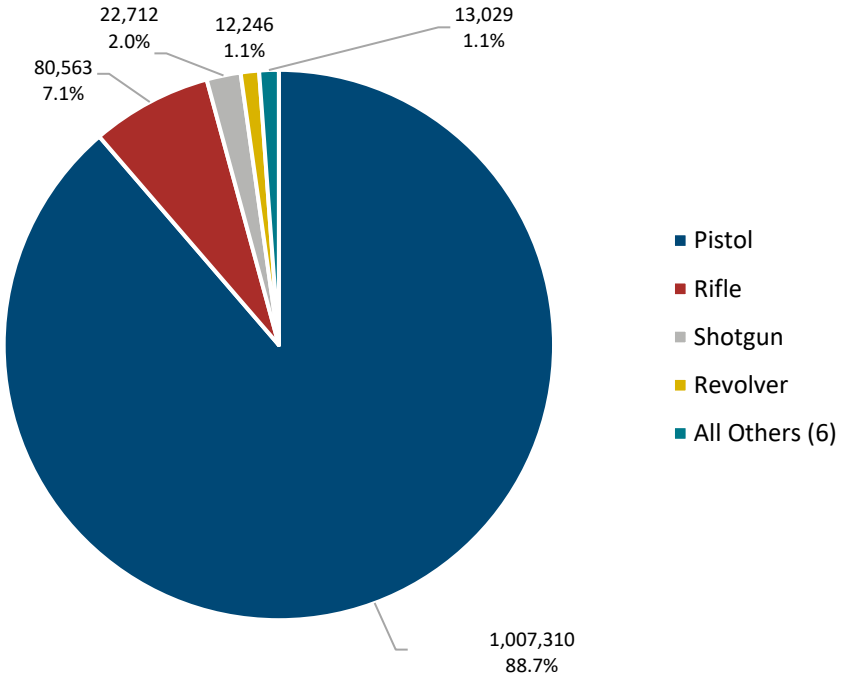
Table NIB-23 in Appendix NIB-NIBIN & Ballistic Evidence lists the percentage of NIBIN firearms with trace records between 2017 and 2021 for all states and territories.

## *NIBIN Firearm Characteristics*

### *Weapon Type*

Between 2017 and 2021, the top four weapon types were pistols, rifles, shotguns, and revolvers, accounting for 99% (1,122,831 of 1,135,860) of all NIBIN firearms over this period (Figure NIB-08).[5] Of these weapon types, pistols were the most dominant and represented 89% of all NIBIN firearms (1,007,310 of 1,135,860).[6]

***Figure NIB-08: Total and Percentage of NIBIN Firearms by Weapon Type, 2017 – 2021***



As shown in Figure NIB-09, pistols experienced the greatest growth, increasing by 115% from 2017 (132,765) to 2021 (284,803).

***Figure NIB-09: Total NIBIN Firearms (Pistols Only), 2017 – 2021***

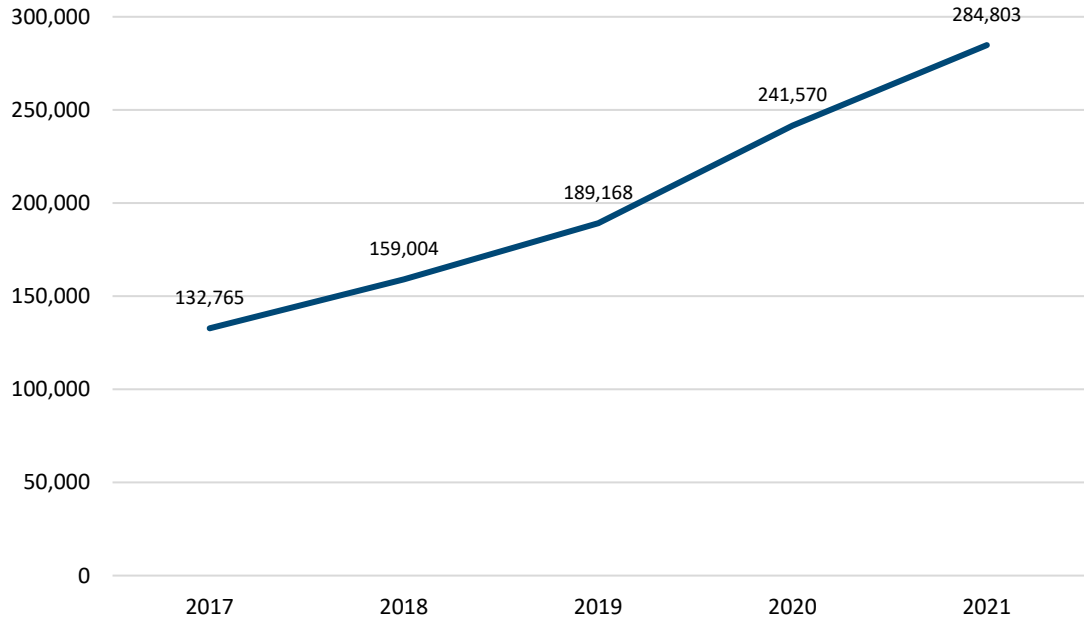



Table NIB-24 lists the percentage of test-fires associated with NIBIN firearms that have NIBIN leads for the top four weapon types. Pistols had the largest percentage of test-fires with NIBIN leads (10%; 103,667 of 1,011,296).

***Table NIB-24: Top Four NIBIN Firearms by Weapon Type, 2017 – 2021***

| Weapon Type | % Test-fires w/ NIBIN Leads | # Test-fires w/ NIBIN Leads | % Test-fires w/o NIBIN Leads | # Test-fires w/o NIBIN Leads | Total Test-fires |
|---|---|---|---|---|---|
| Pistol | 10.3% | 103,667 | 89.7% | 907,629 | 1,011,296 |
| Rifle | 3.1% | 2,527 | 96.9% | 78,086 | 80,613 |
| Revolver | 2.6% | 315 | 97.4% | 11,934 | 12,249 |
| Shotgun | 1.0% | 225 | 99.0% | 22,497 | 22,722 |

***Note**. Multiple test-fires can be associated with a NIBIN firearm. For this reason, the total number of test-fires shown in this table exceeds the number of NIBIN firearms.*

### *Caliber*

Table NIB-25 lists the top five calibers of NIBIN firearms between 2017 and 2021. Apart from .22 caliber, this list closely follows that of the top five calibers for casings. In descending order, the top five calibers include 9 mm, .40, .380, .45, and .22, accounting for 87% (982,329 of 1,135,860) of all NIBIN firearms over this period. Of these calibers, 9 mm NIBIN firearms account for almost half (47%; 532,253 of 1,135,860) of all NIBIN firearms. The growth in 9 mm NIBIN firearms also outpaced all other calibers, increasing by 192% from 2017 (58,978) to 2021 (172,130).

*Table NIB-25: Top Five NIBIN Firearms by Caliber, 2017 – 2021*

| Caliber | 2017 | 2018 | 2019 | 2020 | 2021 | Total | % Total |
|---|---|---|---|---|---|---|---|
| 9 mm | 58,978 | 74,829 | 94,069 | 132,247 | 172,130 | 532,253 | 46.9% |
| .40 Cal | 28,409 | 32,079 | 36,192 | 42,669 | 42,672 | 182,021 | 16.0% |
| .380 Cal | 18,113 | 21,352 | 23,383 | 25,128 | 24,270 | 112,246 | 9.9% |
| .45 Cal | 15,545 | 17,495 | 19,745 | 22,502 | 22,689 | 97,976 | 8.6% |
| .22 Cal | 8,833 | 10,208 | 11,912 | 13,429 | 13,451 | 57,833 | 5.1% |
| Top Five | 129,878 | 155,963 | 185,301 | 235,975 | 275,212 | 982,329 | 86.5% |
| All Others (113) | 21,917 | 25,711 | 30,566 | 35,813 | 39,524 | 153,531 | 13.5% |
| **Total** | **151,795** | **181,674** | **215,867** | **271,788** | **314,736** | **1,135,860** | **100.0%** |

Table NIB-26 lists the percentage of test-fires associated with NIBIN firearms that have NIBIN leads for the top five calibers. At almost 14% (24,864 of 182,996), test-fires associated with .40 caliber NIBIN firearms are the most likely to have NIBIN leads despite not being the most prevalent caliber.

*Table NIB-26: Top Five NIBIN Firearms by Caliber and NIBIN Lead, 2017 – 2021*

| Caliber | % Test-fires w/ NIBIN Leads | # Test-fires w/ NIBIN Leads | % Test-fires w/o NIBIN Leads | # Test-fires w/o NIBIN Leads | Total Test-fires |
|---|---|---|---|---|---|
| .40 Cal | 13.6% | 24,864 | 86.4% | 158,132 | 182,996 |
| 9 mm | 11.1% | 59,245 | 88.9% | 475,129 | 534,374 |
| .45 Cal | 10.1% | 9,922 | 89.9% | 88,470 | 98,392 |
| .380 Cal | 4.7% | 5,235 | 95.3% | 107,329 | 112,564 |
| .22 Cal | 2.8% | 1,649 | 97.2% | 56,240 | 57,889 |

***Note**. Multiple test-fires can be associated with a NIBIN firearm. For this reason, the total number of test-fires shown in this table exceeds the number of NIBIN firearms.*

## Crime Gun IDs

A Crime Gun ID is a unique identifier that is created by NESS when a NIBIN lead connects casings and test-fires discharged from the same firearm. For example, a Crime Gun ID could consist of a casing from a shooting event and a casing from a test-fire of a recovered crime gun. Alternatively, a Crime Gun ID could consist of casings collected from two separate shooting events. Crime Gun IDs require a minimum of two pieces of ballistic evidence and persist throughout the lifecycle of the crime gun. The use of Crime Gun IDs to organize and track pieces of ballistic evidence connected through a NIBIN lead is an innovative and powerful tool used by LEAs and ATF to identify and disrupt the shooting cycle.

Between 2017 and 2021, 175,661 Crime Gun IDs were created by NESS, 60% (105,013 of 175,661) of which involved a NIBIN firearm. As shown in Figure NIB-10, the number of Crime Gun IDs grew each year, increasing overall by 186% from 2017 (20,378) to 2021 (58,235). Table NIB-27 shows the year-to-year percentage change over this period. The largest year-to-year percentage increase occurred from 2019 to 2020, with the number of Crime Gun IDs increasing by 50% (from 29,824 to 44,718).

*Figure NIB-10: Total Crime Gun IDs, 2017 – 2021*

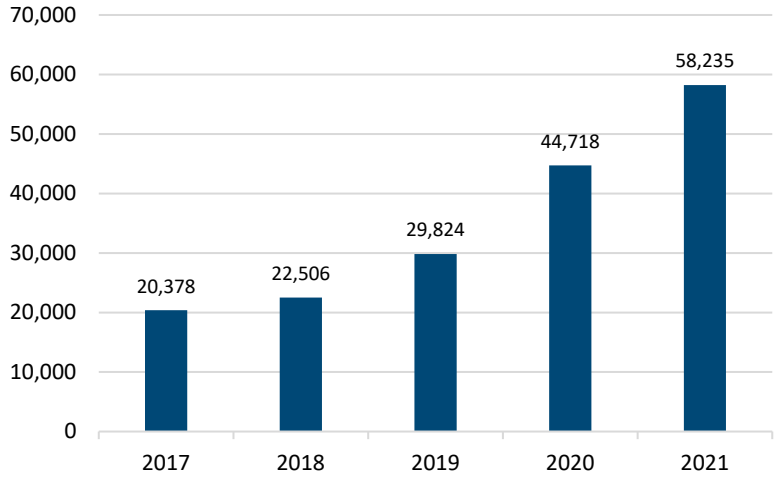



*Table NIB-27: Total and YOY Percentage Change in Crime Gun IDs, 2017 – 2021*

| 2017 | % Change 2017 - 2018 | 2018 | % Change 2018 - 2019 | 2019 | % Change 2019 - 2020 | 2020 | % Change 2020 - 2021 | 2021 | % Change 2017 - 2021 |
|---|---|---|---|---|---|---|---|---|---|
| 20,378 | 10.4% | 22,506 | 32.5% | 29,824 | 49.9% | 44,718 | 30.2% | 58,235 | 185.8% |

## *Geography*

Crime Gun IDs may involve NIBIN acquisitions that were all submitted by the same LEA and in the same state. These Crime Gun IDs are classified as intra-agency and intra-state. Conversely, Crime Gun IDs may involve NIBIN acquisitions that were not all submitted by the same LEA and in the same state. These Crime Gun IDs are classified as inter-agency and inter-state. A mixture of these classifications is also possible. For example, a Crime Gun ID could contain two casings, one with the submitting LEA being the Detroit Police Department and another with the submitting LEA being the Dearborn Police Department. This Crime Gun ID would be identified as inter-agency because two separate LEAs submitted casings into NIBIN. As these LEAs are in the same state, the Crime Gun ID would also be classified as intra-state.

Figures NIB-11 and NIB-12 show the percentage of Crime Gun IDs created by NESS between 2017 and 2021 that were classified as intra- or inter-agency and intra- or inter-state, respectively. The overwhelming majority of Crime Gun IDs involved NIBIN acquisitions that were all submitted by the same LEA and in the same state. Specifically, 69% (121,402 of 175,661) of Crime Gun IDs were classified as intra-agency and 97% (169,523 of 175,661) intra-state. Of those Crime Gun IDs that were classified as inter-state, nearly all (99%; 6,049 of 6,138) involved only two states.

*Figure NIB-11: Total and Percentage of Crime Gun IDs by Intra or Inter-agency Classification, 2017 – 2021*

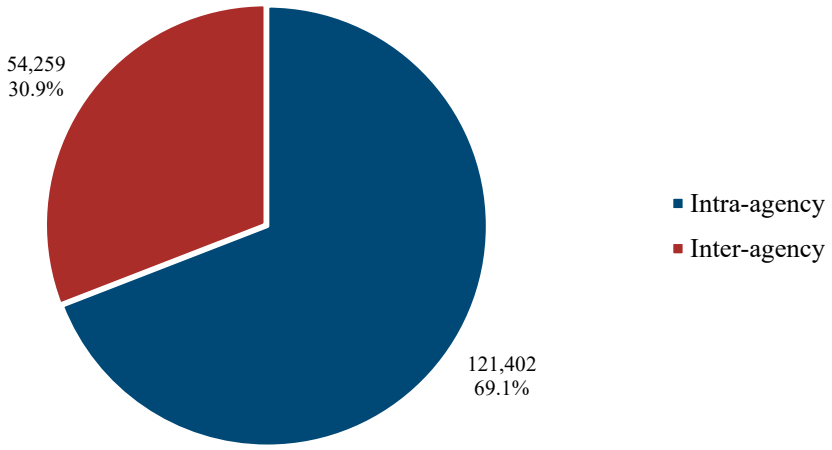
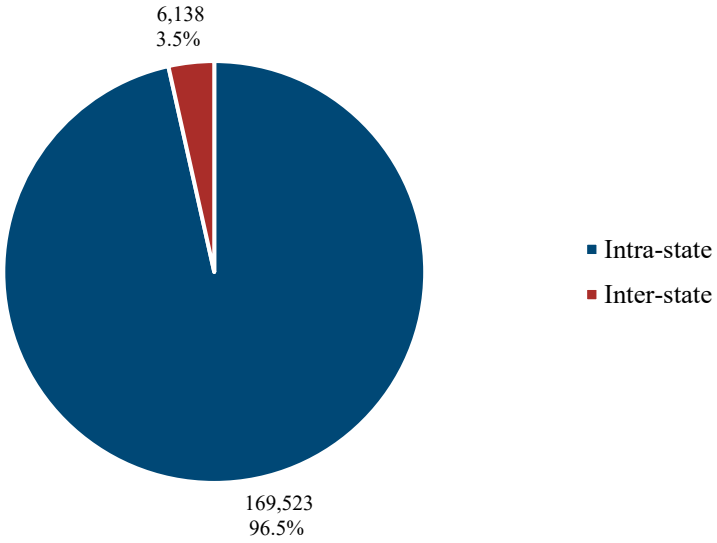



*Figure NIB-12: Total and Percentage of Crime Gun IDs by Intra or Inter-state Classification, 2017 – 2021*




### *Shooting Events*

As discussed above, Crime Gun IDs connect two or more pieces of ballistic evidence through one or more NIBIN leads. A Crime Gun ID that consists of a casing from a shooting event and a casing from a test-fire of a recovered crime gun means the recovered firearm involved has been used in one shooting. Alternatively, a Crime Gun ID that consists of casings collected from two separate shooting events, means the same firearm was used in both shootings. In this second example, the firearm has not been recovered and thus additional shootings could become connected to this Crime Gun ID. Further, because the firearm has not been recovered, aside from the caliber, no other characteristics of the firearm are yet

known. These simple examples illustrate how shooting events are connected to recovered crime guns and to one another.

Table NIB-28 shows the number of shooting events for those Crime Gun IDs created by NESS between 2017 and 2021 and for which a crime gun was recovered. Of these Crime Gun IDs, 65% (68,658 of 105,013) involved one shooting event. Almost all Crime Gun IDs associated with a recovered crime gun involved fewer than six shooting events (98%; 102,713 of 105,013).

***Table NIB-28: Total and Percentage of Crime Gun IDs with Recovered Crime Guns by the Number of Associated Shooting Events, 2017 – 2021***

| # of Shooting Events | Total # of Crime Gun IDs | % Total |
|---|---|---|
| 1 | 68,658 | 65.4% |
| 2 | 20,310 | 19.3% |
| 3 | 8,220 | 7.8% |
| 4 | 3,667 | 3.5% |
| 5 | 1,858 | 1.8% |
| 5 or less | 102,713 | 97.8% |
| More than 5 | 2,300 | 2.2% |
| **Total** | **105,013** | **100.0%** |

Table NIB-29 shows the number of shooting events for those Crime Gun IDs created by NESS between 2017 and 2021 and for which a crime gun was not recovered. Of these Crime Gun IDs, nearly 62% (43,514 of 70,648) involved two shooting events. Almost all Crime Gun IDs without an associated, recovered crime gun involved fewer than six shooting events (96%; 67,463 of 70,648).

***Table NIB-29: Total and Percentage of Crime Gun IDs without Recovered Crime Guns by the Number of Associated Shooting Events, 2017 – 2021***

| # of Shooting Events | Total # of Crime Gun IDs | % Total |
|---|---|---|
| 1[7] | 1,818 | 2.6% |
| 2 | 43,514 | 61.6% |
| 3 | 13,848 | 19.6% |
| 4 | 5,670 | 8.0% |
| 5 | 2,613 | 3.7% |
| 5 or less | 67,463 | 95.5% |
| More than 5 | 3,185 | 4.5% |
| **Total** | **70,648** | **100.0%** |

## Time-To-First Shooting

NESS provides LEA investigators with the time-to-first shooting (TTFS) calculation that provides the number of days between a recovered crime gun's last known purchase and its first shooting event. A short TTFS indicates that the crime gun was discharged in the commission of a crime shortly after it was acquired from an FFL. Similar to the time-to-crime (TTC) thresholds presented in Part III, a fast TTFS is less than three years between the last known sale and first known use in a shooting event, while a very fast TTFS is less than one year between the last known sale and first known use in a shooting event. Both

thresholds are used as indicators of illegal firearm trafficking. Together, TTC and TTFS provide a more comprehensive understanding of a firearm's criminal use history. LEAs can use this intelligence to prioritize a rapid response involving the investigation of the underlying crimes and the methods that criminals use to obtain their crime guns.

There are several criteria needed to support the TTFS calculation. NIBIN firearms discussed in this section meet these criteria, which are outlined below.

- The recovered crime gun must be of a weapon type and caliber that is supported by the NIBIN program.
- The recovered crime gun must be acquired in NIBIN and a firearm record created with sufficient detail to support the NESS connection. For ease of reference, recall that recovered crime guns with firearm records have been referred to as NIBIN firearms.
- The NIBIN firearm must be traced. Its trace record must include its last known purchase date.
- The firearm record of the NIBIN firearm must be successfully connected in NESS to its trace record in FTS.
- The NIBIN firearm must be associated with a Crime Gun ID. In other words, the NIBIN firearm must be linked to at least one shooting event by virtue of a NIBIN lead.

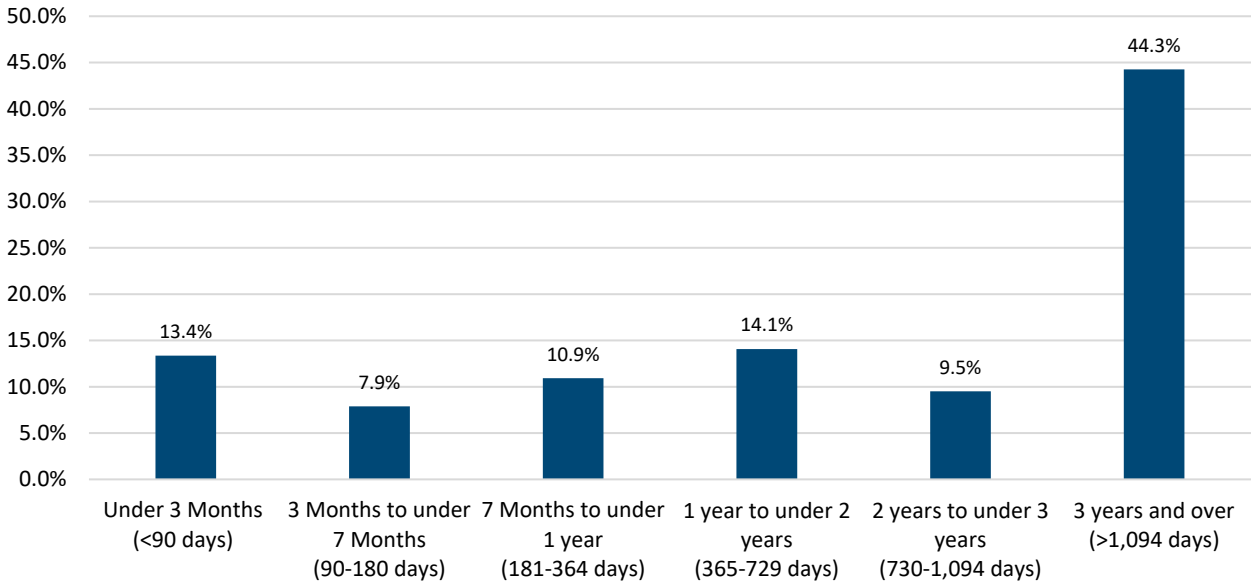
The following analyses consider TTFS for 65,970 NIBIN firearms that were recovered between 2017 and 2021, are associated with a single NIBIN firearm, and have a positive TTFS. This sample only represents a small percentage of all NIBIN firearms. For this reason, the following results are exploratory. Table NIB-30 provides metrics that highlight the criminal use histories of these NIBIN firearms. Of particular interest, their median TTFS was 865 days (or 2.4 years).

***Table NIB-30: Characteristics of NIBIN Firearms Recovered between 2017 through 2021***

| | |
|---|---|
| **All Crime Gun IDs** | |
| Median Time to First Shooting Event | 865 days (or 2.4 years) |
| Median Number of Shootings Per Crime Gun ID | 1 Shooting Event |
| Median Time Between the First Shooting Event and Recovery | 70 Days |
| Median Time Between the Last Shooting Event and Recovery | 32 Days |
| **Crime Gun IDs with Two or More Shooting Events** | |
| Median Time Between Shooting Events | 50 Days |
| Median Time Between the First and Last Shooting Event | 85 Days |

Figure NIB-13 shows the TTFS for NIBIN firearms that were recovered between 2017 and 2021. Of these NIBIN firearms, 55% (36,769 of 65,970) had a TTFS under three years. Furthermore, many of these NIBIN firearms had their first shooting event relatively soon after they were acquired. For example, 13% (8,815 of 65,970) had a TTFS under three months, 8% (5,202 of 65,970) had a TTFS between three months and seven months, 11% (7,204 of 65,970) had a TTFS between seven months and one year, 14% (9,279 of 65,970) had a TTFS between one year and two years, and 10% (6,269 of 65,970) had a TTFS between two years and three years.

*Figure NIB-13: Percentage of Recovered NIBIN Firearms by TTFS Grouping, 2017 - 2021*




## *NIBIN Firearm Characteristics and TTFS*

### *Weapon Type*

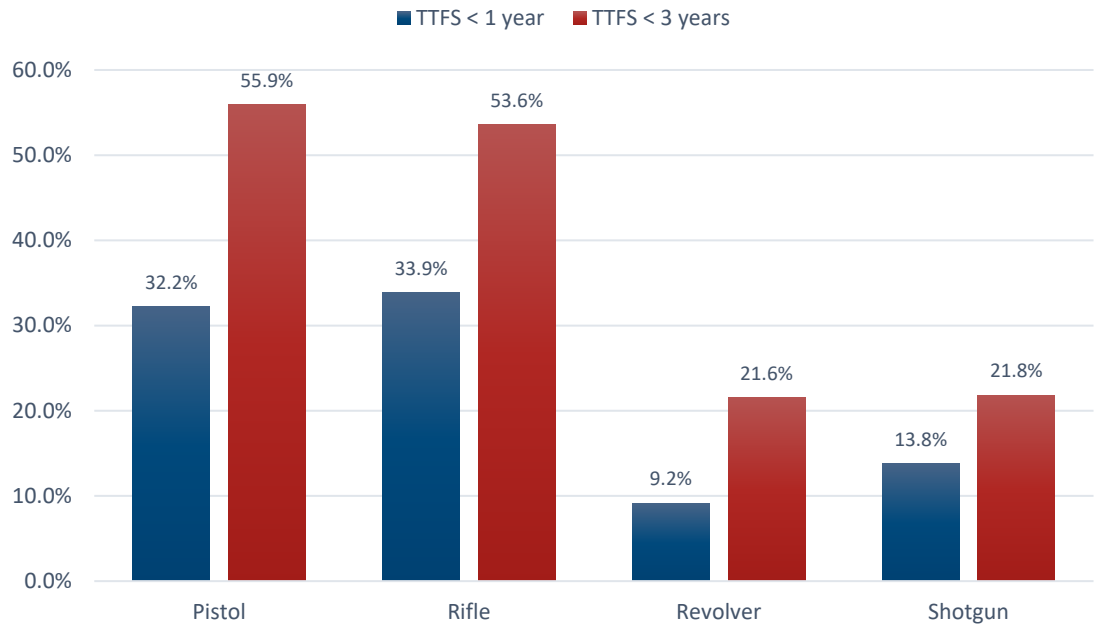
Table NIB-31 shows the median TTFS for the top four weapon types of NIBIN firearms. Pistols had a median TTFS of 2.4 years (or 860 days), which is the shortest median TTFS. Closely following pistols, rifles had a median TTFS of 2.5 years (or 917 days). Far exceeding these medians, shotguns had a median TTFS of 10.9 years (or 3,981 days), and revolvers had the longest median TTFS at 19 years (or 6,948 days).

***Table NIB-31: Median TTFS (Years) of Recovered NIBIN Firearms by Weapon Type, 2017 – 2021***

| Weapon Type | Median TTFS (Years) |
|---|---|
| Pistol | 2.4 |
| Rifle | 2.5 |
| Shotgun | 10.9 |
| Revolver | 19.0 |

Figure NIB-14 displays the percentage of NIBIN firearms with a TTFS under one year and under three years for the top four weapon types. 34% (295 of 871) of rifles had a TTFS under one year, followed by 32% (20,888 of 64,825) of pistols, 14% (12 of 87) of shotguns, and 9% (14 of 153) of revolvers. Furthermore, 56% (36,233 of 64,825) of pistols had a TTFS under three years, followed by 54% (467 of 871) of rifles and 22% of shotguns (19 of 87) and revolvers (33 of 153).

***Figure NIB-14: Percentage of Recovered NIBIN Firearms by TTFS Grouping and Weapon Type, 2017 – 2021***




## *Caliber*

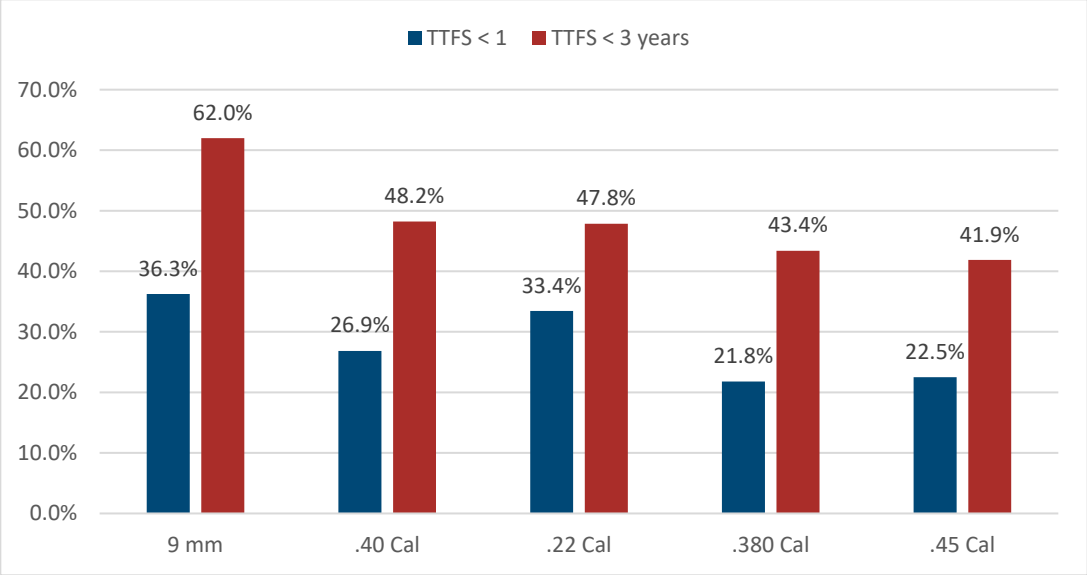
Table NIB-32 shows the median TTFS for the top five calibers of NIBIN firearms. At 1.9 years (or 677 days), 9 mm NIBIN firearms had the shortest median TTFS. Over a year longer, .40 caliber NIBIN firearms had a median TTFS of 3.2 years (or 1,170 days), followed by a median TTFS of 3.6 years (or 1,300 days) for .22 caliber NIBIN firearms, 3.8 years (or 1,386 days) for .380 caliber NIBIN firearms, and 4.1 years (or 1,510 days) for .45 caliber NIBIN firearms.

***Table NIB-32: Median TTFS (Years) for Recovered NIBIN Firearms for the Top Five Calibers, 2017 – 2021***

| Caliber | Median TTFS (Years) |
|---|---|
| 9 mm | 1.9 |
| .40 Cal | 3.2 |
| .22 Cal | 3.6 |
| .380 Cal | 3.8 |
| .45 Cal | 4.1 |

Figure NIB-15 displays the percentage NIBIN firearms with a TTFS under one year and under three years for the top five calibers. 36% (13,972 of 38,537) of 9 mm NIBIN firearms had a TTFS under one year, followed by 33% (295 of 882) of .22 caliber NIBIN firearms, 27% (4,051 of 15,086) of .40 caliber NIBIN firearms, 23% (1,169 of 5,195) of .45 caliber NIBIN firearms, and 22% (786 of 3,608) of .380 caliber NIBIN firearms. At 62% (23,887 of 38,537), the majority of 9 mm NIBIN firearms had a TTFS under three years. The remaining calibers faired similarly. 48% of .40 caliber NIBIN firearms (7,273 of 15,086) and .22 caliber NIBIN firearms (422 of 882) had a TTFS under three years, as compared to 43% (1,565 of 3,608) of .380 NIBIN firearms and 42% (2,175 of 5,195) of .45 caliber NIBIN firearms.

***Figure NIB-15: Percentage of Recovered NIBIN Firearms by TTFS Grouping and the Top Five Calibers, 2017 – 2021***




## *A Comparison of TTFS and TTC*

By bridging the NIBIN and FTS data, NESS can access the information needed to support both the TTFS and TTC calculations for recovered NIBIN eligible crime guns. TTFS and TTC is compared for pistols, the most common weapon type used in crime.[8] To support this comparison, these calculations were performed for pistols recovered between 2017 and 2021 that had Crime Gun *and* FTS IDs in NESS. At the national level, the median TTFS for pistols was 851 days (or 2.3 years), which is 238 days shorter than the median TTC of 1,089 days (or 2.9 years). While both the median TTFS and median TTC are under three years, the median TTC falls *just* under this threshold. In the following sections, the median TTFS and median TTC for this subset of recovered crime guns are compared at the state- and city-level. The number of recovered pistols and recovered pistols with NIBIN leads are also reported, along with the percentage of all recovered pistols with NIBIN leads and the difference between the median TTC and median TTFS.

### *State-level*

Table NIB-33a compares the median TTFS and median TTC for the top ten states with the most pistols recovered between 2017 and 2021. While the most pistols were recovered in Texas, the largest percentage of pistols with NIBIN leads were recovered in Illinois. Furthermore, median TTFS ranged from 1.7 years (or 609 days) for Indiana to 3.8 years (or 1,383 days) for California. In comparison, median TTC ranged from 2.2 years (or 786 days) for Indiana to 4.5 years (or 1,656 days) for California. Both the median TTFS and median TTC for California exceed three years, while only the median TTC for Florida, Illinois, and Louisiana exceed three years. In addition, the greatest difference between the median TTC and median TTFS was observed for Illinois and Michigan. For these states, the median TTC was 293 days greater than the median TTFS. The smallest difference was observed for Texas and Indiana, with the median TTC only 177 days greater than the median TTFS.

***Table NIB-33a: Comparison of Median TTFS and Median TTC for the Top Ten States with the Most Recovered Pistols, 2017 – 2021***

| State | Recovered Pistols | Recovered Pistols w/ NIBIN Leads | % Recovered Pistols w/ NIBIN Leads | Median TTC (Years) | Median TTFS (Years) | Difference (Days) |
|---|---|---|---|---|---|---|
| Texas | 99,325 | 7,326 | 7.4% | 2.6 | 2.1 | 177 |
| California | 78,668 | 8,080 | 10.3% | 4.5 | 3.8 | 273 |
| Florida | 71,354 | 5,557 | 7.8% | 3.4 | 2.9 | 205 |
| Illinois | 60,038 | 8,950 | 14.9% | 3.5 | 2.7 | 293 |
| Ohio | 55,778 | 6,210 | 11.1% | 2.8 | 2.1 | 272 |
| Michigan | 41,987 | 3,331 | 7.9% | 2.8 | 2.0 | 293 |
| Louisiana | 39,599 | 2,956 | 7.5% | 3.2 | 2.5 | 246 |
| Tennessee | 39,174 | 3,584 | 9.1% | 2.9 | 2.3 | 218 |
| North Carolina | 37,474 | 4,151 | 11.1% | 2.7 | 2.1 | 223 |
| Indiana | 31,558 | 2,567 | 8.1% | 2.2 | 1.7 | 177 |

Table NIB-33 in Appendix NIB-NIBIN & Ballistic Evidence provides the metrics presented in Table NIB-33a for all states and territories.

### *City-level*

Table NIB-34a compares the median TTFS and median TTC for the top ten cities with the most pistols recovered between 2017 and 2021 (see the Introduction for the list of cities analyzed).[9] Median TTFS ranged from 1.6 years (or 572 days) for Indianapolis to 4.4 years (or 1,608 days) for New York City. In comparison, median TTC ranged from 1.9 years (or 710 days) for Indianapolis to 5.1 years (or 1,860 days) for New York City. Both the median TTFS and median TTC for Los Angeles and New York City exceed three years. Only the median TTC for Chicago, Houston, and Philadelphia exceed three years. In addition, the greatest difference between the median TTC and median TTFS was observed for Philadelphia, with the median TTC almost a year longer than the median TTFS. The smallest difference was observed for Las Vegas, with the median TTC only 117 days greater than the median TTFS.

***Table NIB-34a: Comparison of Median TTFS and Median TTC for the Top Ten Cities with the Most Recovered Pistols, 2017 – 2021***

| City | Recovered Pistol | Recovered Pistols w/ NIBIN Leads | % Recovered Pistols w/ NIBIN Leads | Median TTC (Years) | Median TTFS (Years) | Difference (Days) |
|---|---|---|---|---|---|---|
| Chicago, IL | 36,642 | 5,716 | 15.6% | 3.6 | 2.9 | 287 |
| Houston, TX | 20,270 | 1,412 | 7.0% | 3.1 | 2.5 | 235 |
| Los Angeles, CA | 19,393 | 1,941 | 10.0% | 4.6 | 4.1 | 254 |
| Detroit, MI | 19,096 | 1,651 | 8.6% | 2.7 | 2.1 | 267 |
| Memphis, TN | 17,551 | 1,545 | 8.8% | 2.7 | 2.0 | 254 |
| Dallas, TX | 15,848 | 1,910 | 12.1% | 2.5 | 2.2 | 161 |
| Philadelphia, PA | 15,350 | 2,290 | 14.9% | 3.8 | 3.0 | 352 |
| Indianapolis, IN | 13,936 | 1,166 | 8.4% | 1.9 | 1.6 | 138 |
| New York, NY | 13,083 | 1,084 | 8.3% | 5.0 | 4.4 | 252 |
| Las Vegas, NV | 11,767 | 1,732 | 14.7% | 2.1 | 1.8 | 117 |

Table NIB-34 in Appendix NIB-NIBIN & Ballistic Evidence provides the metrics presented in Table NIB-34a for all forty cities.

## Summary

Academic studies have confirmed the importance of ballistic imaging technology in improving crime gun enforcement operations by increasing investigative leads on violent gun crimes, enhancing strategic intelligence on violent gangs and other criminally active groups, and improving the apprehension and prosecution of violent gun criminals.[10] NIBIN-suggested leads also guide violence prevention efforts by establishing patterns of violence in particular areas and among specific individuals. When NIBIN leads are organized as a network analysis, investigators can identify and target the key nodes in a violent criminal network.[11] NIBIN is an important crime fighting tool that generates considerable gun violence reduction value for partnering federal, states, and local LEAs.

This section presents key NIBIN metrics between 2017 and 2021 that support law enforcement efforts to investigate crimes involving the use of firearms and apprehend gun offenders before they can do more harm. Data presented in this section documented the remarkable growth in the use of NIBIN and performance by ATF and partnering NIBIN sites. During the study period, both the number of NIBIN cases and acquisitions increased steadily. Test-fires accounted for a larger percentage of all acquisitions. The number of acquisitions for casings, however, grew at a faster rate. In total, more than 840,000 casings and 1.2 million test-fires were acquired in NIBIN between 2017 and 2021.

Data presented in this section also showed the potential of NIBIN to reduce firearm violence through its capacity to identify crime guns with investigative potential. NIBIN leads have the potential to connect crime scenes that may not have otherwise been connected through traditional means alone. During the study period, the NIBIN process identified 482,565 NIBIN acquisitions with NIBIN leads for partnering LEAs. Importantly, the number of NIBIN acquisitions with NIBIN leads increased by 170% from 2017 (56,751) to 2021 (153,409).

Several innovations have been developed as the NIBIN and NESS systems have evolved. For instance, Crime Gun IDs are an innovative means through which to track and connect crime scenes through NIBIN leads. By leveraging NIBIN records of acquisitions, Crime Gun IDs can also help build a more comprehensive understanding of multiple use crime guns. This knowledge can be applied to identify new and innovative methods to disrupt illicit firearm markets and reduce firearm violence. The integration of the NIBIN system with the FTS system has provided the opportunity to calculate the time between the first known violent use of a recovered gun and its last known acquisition from an FFL. The resulting TTFS metric provides a more accurate estimate of the time between shootings and illegal diversions from firearms commerce. The continued expansion and refinement of the NIBIN and NESS will enhance the capacity of LEAs by providing vital information to solve violent gun crimes and reduce gun deaths and injuries.

# APPENDIX NIB – NIBIN & BALLISTIC EVIDENCE

***Table NIB-03: All States and Territories of LEAs Submitting NIBIN Cases, 2017 – 2021***

| State / Territory | 2017 | 2018 | 2019 | 2020 | 2021 | Total | % Total |
|---|---|---|---|---|---|---|---|
| TX | 15,001 | 18,675 | 25,062 | 33,224 | 46,096 | 138,058 | 9.2% |
| CA | 15,487 | 17,772 | 22,192 | 26,017 | 34,782 | 116,250 | 7.7% |
| FL | 15,634 | 18,264 | 20,166 | 23,600 | 25,284 | 102,948 | 6.8% |
| IL | 16,039 | 17,779 | 17,950 | 24,645 | 22,620 | 99,033 | 6.6% |
| OH | 12,115 | 11,558 | 13,850 | 21,224 | 22,716 | 81,463 | 5.4% |
| NC | 6,843 | 8,494 | 11,549 | 16,529 | 18,770 | 62,185 | 4.1% |
| MI | 8,053 | 7,167 | 8,300 | 14,273 | 17,316 | 55,109 | 3.7% |
| TN | 7,171 | 9,611 | 10,389 | 12,857 | 14,624 | 54,652 | 3.6% |
| LA | 7,404 | 8,032 | 9,431 | 12,180 | 13,747 | 50,794 | 3.4% |
| AZ | 6,795 | 8,716 | 9,856 | 12,477 | 12,823 | 50,667 | 3.4% |
| NY | 7,435 | 7,184 | 7,533 | 10,083 | 13,497 | 45,732 | 3.0% |
| MO | 5,494 | 7,139 | 10,159 | 10,950 | 10,998 | 44,740 | 3.0% |
| PA | 6,977 | 7,250 | 9,240 | 9,506 | 9,513 | 42,486 | 2.8% |
| VA | 5,957 | 7,646 | 8,178 | 8,088 | 10,655 | 40,524 | 2.7% |
| IN | 6,376 | 6,933 | 7,454 | 8,742 | 10,999 | 40,504 | 2.7% |
| GA | 4,446 | 5,874 | 8,740 | 10,117 | 10,961 | 40,138 | 2.7% |
| WI | 5,509 | 6,511 | 6,172 | 6,578 | 9,764 | 34,534 | 2.3% |
| SC | 3,114 | 4,239 | 5,901 | 9,623 | 10,813 | 33,690 | 2.2% |
| AL | 2,460 | 4,402 | 5,837 | 9,490 | 9,503 | 31,692 | 2.1% |
| MD | 4,191 | 5,213 | 6,164 | 6,542 | 7,794 | 29,904 | 2.0% |
| CO | 3,920 | 4,741 | 5,754 | 7,067 | 7,810 | 29,292 | 1.9% |
| NV | 2,885 | 3,489 | 4,651 | 7,003 | 6,892 | 24,920 | 1.7% |
| KY | 3,613 | 3,672 | 4,248 | 5,517 | 6,757 | 23,807 | 1.6% |
| NJ | 4,459 | 3,966 | 4,169 | 4,987 | 5,667 | 23,248 | 1.5% |
| WA | 3,804 | 3,515 | 4,303 | 5,217 | 5,545 | 22,384 | 1.5% |
| KS | 1,678 | 3,023 | 2,810 | 4,710 | 4,596 | 16,817 | 1.1% |
| OK | 2,115 | 2,430 | 2,281 | 4,681 | 5,081 | 16,588 | 1.1% |
| DC | 3,018 | 2,705 | 3,079 | 3,703 | 3,308 | 15,813 | 1.0% |
| AR | 1,371 | 2,351 | 2,692 | 4,085 | 4,330 | 14,829 | 1.0% |
| MN | 2,133 | 2,132 | 2,561 | 3,655 | 3,818 | 14,299 | 0.9% |
| NM | 1,544 | 2,176 | 2,513 | 3,089 | 3,811 | 13,133 | 0.9% |
| MS | 1,531 | 3,376 | 2,028 | 2,408 | 3,267 | 12,610 | 0.8% |
| MA | 2,252 | 1,707 | 2,251 | 2,757 | 3,270 | 12,237 | 0.8% |
| CT | 2,031 | 1,447 | 2,739 | 2,030 | 3,417 | 11,664 | 0.8% |
| IA | 777 | 1,500 | 1,791 | 2,124 | 2,540 | 8,732 | 0.6% |
| OR | 844 | 1,159 | 1,629 | 2,250 | 2,795 | 8,677 | 0.6% |
| DE | 999 | 848 | 1,035 | 1,734 | 1,728 | 6,344 | 0.4% |
| PR | 623 | 1,173 | 1,753 | 1,128 | 1,562 | 6,239 | 0.4% |
| NE | 807 | 805 | 1,258 | 1,456 | 1,652 | 5,978 | 0.4% |
| UT | 203 | 1,069 | 1,149 | 1,366 | 1,743 | 5,530 | 0.4% |
| AK | 367 | 950 | 872 | 959 | 687 | 3,835 | 0.3% |
| WV | 113 | 98 | 348 | 542 | 1,098 | 2,199 | 0.1% |
| RI | 370 | 398 | 376 | 387 | 583 | 2,114 | 0.1% |
| VI | 154 | 285 | 188 | 216 | 334 | 1,177 | 0.1% |
| ID | 24 | 26 | 167 | 263 | 486 | 966 | 0.1% |
| NH | 34 | 66 | 87 | 232 | 232 | 651 | 0.0% |
| SD | 83 | 100 | 147 | 53 | 201 | 584 | 0.0% |
| HI | 15 | 12 | 157 | 64 | 167 | 415 | 0.0% |
| ME | 54 | 48 | 63 | 99 | 120 | 384 | 0.0% |
| MT | 4 | 23 | 35 | 128 | 115 | 305 | 0.0% |
| WY | 43 | 60 | 27 | 25 | 27 | 182 | 0.0% |
| ND | 25 | 24 | 57 | 17 | 49 | 172 | 0.0% |
| VT | 17 | 24 | 30 | 11 | 29 | 111 | 0.0% |
| GM | . | 3 | . | . | 2 | 5 | 0.0% |
| (blank)[12] | 1,658 | 856 | 1,033 | 998 | 1,082 | 5,627 | 0.4% |
| **Total** | **206,069** | **238,716** | **282,404** | **361,706** | **418,076** | **1,506,971** | **100.0%** |

*Table NIB-06: All States and Territories of LEAs Submitting NIBIN Acquisitions, 2017 – 2021*

| State / Territory | 2017 | 2018 | 2019 | 2020 | 2021 | Total | % Total |
|---|---|---|---|---|---|---|---|
| TX | 19,712 | 24,988 | 32,380 | 42,698 | 59,646 | 179,424 | 8.5% |
| CA | 20,901 | 24,048 | 30,034 | 33,905 | 44,955 | 153,843 | 7.3% |
| FL | 21,027 | 24,577 | 27,136 | 32,598 | 35,040 | 140,378 | 6.7% |
| IL | 18,518 | 20,363 | 20,968 | 29,034 | 28,307 | 117,190 | 5.6% |
| OH | 15,899 | 15,552 | 19,063 | 28,645 | 30,088 | 109,247 | 5.2% |
| LA | 14,601 | 14,954 | 17,169 | 21,062 | 22,784 | 90,570 | 4.3% |
| NC | 9,516 | 11,429 | 15,960 | 23,198 | 25,974 | 86,077 | 4.1% |
| PA | 12,283 | 13,066 | 16,918 | 17,411 | 17,569 | 77,247 | 3.7% |
| TN | 9,512 | 12,654 | 13,613 | 17,815 | 20,260 | 73,854 | 3.5% |
| NY | 13,036 | 12,942 | 13,048 | 16,649 | 17,575 | 73,250 | 3.5% |
| MI | 10,263 | 9,386 | 10,714 | 19,279 | 23,385 | 73,027 | 3.5% |
| AZ | 9,245 | 11,811 | 13,432 | 17,060 | 17,314 | 68,862 | 3.3% |
| MO | 7,691 | 10,034 | 14,430 | 16,419 | 16,199 | 64,773 | 3.1% |
| GA | 6,932 | 8,590 | 13,240 | 16,643 | 17,504 | 62,909 | 3.0% |
| IN | 9,383 | 9,714 | 10,512 | 12,314 | 15,709 | 57,632 | 2.7% |
| VA | 8,065 | 10,340 | 11,099 | 10,886 | 15,370 | 55,760 | 2.6% |
| SC | 4,481 | 6,433 | 9,246 | 13,609 | 14,961 | 48,730 | 2.3% |
| NJ | 8,189 | 7,565 | 7,861 | 9,005 | 10,639 | 43,259 | 2.1% |
| AL | 3,522 | 6,150 | 8,277 | 12,477 | 12,574 | 43,000 | 2.0% |
| WI | 6,398 | 7,318 | 6,915 | 7,698 | 11,897 | 40,226 | 1.9% |
| MD | 5,372 | 6,729 | 8,102 | 8,672 | 10,315 | 39,190 | 1.9% |
| CO | 4,834 | 6,051 | 7,249 | 9,309 | 10,318 | 37,761 | 1.8% |
| KY | 5,075 | 5,184 | 6,355 | 7,936 | 9,316 | 33,866 | 1.6% |
| WA | 5,647 | 5,199 | 6,456 | 7,239 | 7,898 | 32,439 | 1.5% |
| NV | 3,849 | 4,665 | 5,983 | 8,621 | 8,584 | 31,702 | 1.5% |
| KS | 2,518 | 4,065 | 3,792 | 6,614 | 6,327 | 23,316 | 1.1% |
| DC | 4,283 | 3,829 | 4,563 | 5,606 | 4,566 | 22,847 | 1.1% |
| OK | 2,668 | 3,094 | 2,809 | 6,195 | 6,794 | 21,560 | 1.0% |
| AR | 1,930 | 3,198 | 3,638 | 5,776 | 6,298 | 20,840 | 1.0% |
| MN | 2,883 | 2,840 | 3,393 | 5,072 | 5,581 | 19,769 | 0.9% |
| NM | 1,966 | 3,033 | 3,784 | 4,266 | 5,302 | 18,351 | 0.9% |
| MS | 1,986 | 4,442 | 2,950 | 3,329 | 4,762 | 17,469 | 0.8% |
| MA | 2,767 | 2,068 | 2,919 | 3,781 | 4,151 | 15,686 | 0.7% |
| PR | 1,643 | 3,240 | 5,254 | 2,567 | 2,558 | 15,262 | 0.7% |
| CT | 2,304 | 1,779 | 3,183 | 2,760 | 4,494 | 14,520 | 0.7% |
| OR | 2,150 | 2,027 | 2,214 | 3,084 | 3,701 | 13,176 | 0.6% |
| IA | 1,016 | 1,891 | 2,303 | 2,749 | 3,095 | 11,054 | 0.5% |
| NE | 1,117 | 1,196 | 1,910 | 2,288 | 2,357 | 8,868 | 0.4% |
| UT | 330 | 1,659 | 1,756 | 2,045 | 2,890 | 8,680 | 0.4% |
| DE | 1,276 | 1,095 | 1,387 | 2,264 | 2,224 | 8,246 | 0.4% |
| AK | 601 | 1,479 | 1,315 | 1,416 | 1,019 | 5,830 | 0.3% |
| WV | 239 | 253 | 1,034 | 1,466 | 1,499 | 4,491 | 0.2% |
| RI | 493 | 547 | 517 | 501 | 799 | 2,857 | 0.1% |
| VI | 407 | 529 | 355 | 388 | 497 | 2,176 | 0.1% |
| ID | 33 | 80 | 232 | 348 | 662 | 1,355 | 0.1% |
| NH | 41 | 91 | 102 | 329 | 312 | 875 | 0.0% |
| SD | 118 | 139 | 216 | 67 | 276 | 816 | 0.0% |
| MT | 4 | 29 | 64 | 263 | 216 | 576 | 0.0% |
| ME | 69 | 73 | 146 | 106 | 167 | 561 | 0.0% |
| HI | 19 | 15 | 190 | 76 | 188 | 488 | 0.0% |
| ND | 54 | 34 | 82 | 20 | 162 | 352 | 0.0% |
| WY | 95 | 88 | 43 | 41 | 41 | 308 | 0.0% |
| VT | 26 | 45 | 66 | 28 | 82 | 247 | 0.0% |
| GM | . | 3 | . | . | 3 | 6 | 0.0% |
| (blank) | 3,520 | 1,403 | 1,633 | 1,527 | 1,726 | 9,809 | 0.5% |
| **Total** | **290,507** | **334,006** | **398,010** | **505,154** | **576,930** | **2,104,607** | **100.0%** |

*Table NIB-10: All States and Territories of LEAs Submitting Casings, 2017 – 2021*

| State / Territory | 2017 | 2018 | 2019 | 2020 | 2021 | Total | % Total |
|---|---|---|---|---|---|---|---|
| TX | 6,586 | 8,746 | 11,535 | 17,963 | 22,739 | 67,569 | 8.0% |
| CA | 7,574 | 7,726 | 9,411 | 13,987 | 17,139 | 55,837 | 6.6% |
| IL | 8,060 | 8,049 | 8,377 | 13,691 | 11,640 | 49,817 | 5.9% |
| FL | 7,125 | 7,514 | 8,926 | 12,616 | 11,802 | 47,983 | 5.7% |
| OH | 5,578 | 5,214 | 7,510 | 14,415 | 13,328 | 46,045 | 5.5% |
| NC | 4,693 | 4,786 | 7,518 | 11,145 | 11,276 | 39,418 | 4.7% |
| LA | 5,678 | 5,737 | 6,876 | 10,224 | 10,071 | 38,586 | 4.6% |
| GA | 2,933 | 4,354 | 6,633 | 9,373 | 9,266 | 32,559 | 3.9% |
| TN | 3,881 | 4,383 | 5,018 | 7,962 | 8,320 | 29,564 | 3.5% |
| NY | 3,796 | 3,940 | 4,201 | 8,103 | 9,267 | 29,307 | 3.5% |
| PA | 3,805 | 3,712 | 5,722 | 7,303 | 8,149 | 28,691 | 3.4% |
| MO | 3,400 | 4,010 | 5,444 | 7,836 | 6,999 | 27,689 | 3.3% |
| MI | 3,048 | 3,111 | 3,629 | 7,131 | 8,625 | 25,544 | 3.0% |
| AZ | 3089 | 4165 | 4273 | 6781 | 6454 | 24762 | 2.9% |
| WI | 3601 | 4172 | 3332 | 4594 | 8291 | 23990 | 2.8% |
| IN | 3062 | 3540 | 3938 | 5404 | 6822 | 22766 | 2.7% |
| SC | 1797 | 2844 | 4163 | 5903 | 5489 | 20196 | 2.4% |
| VA | 2669 | 3243 | 3804 | 4113 | 6219 | 20048 | 2.4% |
| CO | 2149 | 2821 | 3105 | 4673 | 5661 | 18409 | 2.2% |
| AL | 1593 | 2427 | 3307 | 3666 | 4408 | 15401 | 1.8% |
| MD | 1956 | 2104 | 2997 | 3761 | 4234 | 15052 | 1.8% |
| NJ | 2955 | 2284 | 2378 | 3064 | 3744 | 14425 | 1.7% |
| WA | 2582 | 2154 | 2405 | 3242 | 3974 | 14357 | 1.7% |
| KY | 1702 | 1440 | 2017 | 3942 | 4184 | 13285 | 1.6% |
| NV | 1810 | 2156 | 2020 | 3464 | 3293 | 12743 | 1.5% |
| DC | 2207 | 1835 | 2275 | 3409 | 2272 | 11998 | 1.4% |
| KS | 1401 | 1831 | 1791 | 3232 | 2712 | 10967 | 1.3% |
| MN | 1599 | 1164 | 1291 | 2769 | 3339 | 10162 | 1.2% |
| NM | 778 | 1168 | 1438 | 2204 | 2695 | 8283 | 1.0% |
| AR | 669 | 1195 | 1356 | 2389 | 2631 | 8240 | 1.0% |
| MA | 1424 | 1142 | 1395 | 2132 | 1919 | 8012 | 0.9% |
| CT | 817 | 874 | 1100 | 1673 | 3267 | 7731 | 0.9% |
| MS | 711 | 1368 | 1143 | 1262 | 1871 | 6355 | 0.8% |
| OK | 630 | 602 | 680 | 2284 | 2036 | 6232 | 0.7% |
| OR | 545 | 596 | 630 | 1372 | 1886 | 5029 | 0.6% |
| PR | 446 | 742 | 2128 | 721 | 561 | 4598 | 0.5% |
| IA | 491 | 733 | 824 | 1208 | 1301 | 4557 | 0.5% |
| DE | 533 | 436 | 639 | 1174 | 952 | 3734 | 0.4% |
| NE | 530 | 493 | 705 | 1072 | 923 | 3723 | 0.4% |
| UT | 156 | 535 | 537 | 711 | 853 | 2792 | 0.3% |
| AK | 340 | 440 | 440 | 488 | 320 | 2028 | 0.2% |
| VI | 291 | 368 | 269 | 270 | 387 | 1585 | 0.2% |
| RI | 151 | 155 | 150 | 171 | 218 | 845 | 0.1% |
| WV | 13 | 10 | 150 | 379 | 271 | 823 | 0.1% |
| NH | 15 | 43 | 46 | 150 | 130 | 384 | 0.0% |
| SD | 14 | 14 | 29 | 16 | 86 | 159 | 0.0% |
| ID | 2 | 2 | 5 | 53 | 90 | 152 | 0.0% |
| ME | 11 | 6 | 14 | 14 | 29 | 74 | 0.0% |
| ND | 2 | 4 | 9 | 2 | 24 | 41 | 0.0% |
| VT | . | 1 | . | 2 | 10 | 13 | 0.0% |
| HI | 1 | 1 | 2 | 4 | 3 | 11 | 0.0% |
| MT | 2 | 1 | 3 | 2 | 1 | 9 | 0.0% |
| WY | 1 | 1 | 1 | 1 | 2 | 6 | 0.0% |
| (blank) | 325 | 207 | 239 | 165 | 197 | 1133 | 0.1% |
| **Total** | **109,227** | **120,599** | **147,828** | **223,685** | **242,380** | **843,719** | **100.0%** |

*Table NIB-12: All States and Territories of LEAs Submitting Test-Fires, 2017-2021*

| State / Territory | 2017 | 2018 | 2019 | 2020 | 2021 | Total | % Total |
|---|---|---|---|---|---|---|---|
| TX | 13,126 | 16,242 | 20,845 | 24,735 | 36,907 | 111,855 | 8.9% |
| CA | 13,327 | 16,322 | 20,623 | 19,918 | 27,816 | 98,006 | 7.8% |
| FL | 13,902 | 17,063 | 18,210 | 19,982 | 23,238 | 92,395 | 7.3% |
| IL | 10,458 | 12,314 | 12,591 | 15,343 | 16,667 | 67,373 | 5.3% |
| OH | 10,321 | 10,338 | 11,553 | 14,230 | 16,760 | 63,202 | 5.0% |
| LA | 8,923 | 9,217 | 10,293 | 10,838 | 12,713 | 51,984 | 4.1% |
| PA | 8,478 | 9,354 | 11,196 | 10,108 | 9,420 | 48,556 | 3.9% |
| MI | 7,215 | 6,275 | 7,085 | 12,148 | 14,760 | 47,483 | 3.8% |
| NC | 4,823 | 6,643 | 8,442 | 12,053 | 14,698 | 46,659 | 3.7% |
| TN | 5,631 | 8,271 | 8,595 | 9,853 | 11,940 | 44,290 | 3.5% |
| AZ | 6,156 | 7,646 | 9,159 | 10,279 | 10,860 | 44,100 | 3.5% |
| NY | 9,240 | 9,002 | 8,847 | 8,546 | 8,308 | 43,943 | 3.5% |
| MO | 4,291 | 6,024 | 8,986 | 8,583 | 9,200 | 37,084 | 2.9% |
| VA | 5,396 | 7,097 | 7,295 | 6,773 | 9,151 | 35,712 | 2.8% |
| IN | 6,321 | 6,174 | 6,574 | 6,910 | 8,887 | 34,866 | 2.8% |
| GA | 3,999 | 4,236 | 6,607 | 7,270 | 8,238 | 30,350 | 2.4% |
| NJ | 5,234 | 5,281 | 5,483 | 5,941 | 6,895 | 28,834 | 2.3% |
| SC | 2,684 | 3,589 | 5,083 | 7,706 | 9,472 | 28,534 | 2.3% |
| AL | 1,929 | 3,723 | 4,970 | 8,811 | 8,166 | 27,599 | 2.2% |
| MD | 3,416 | 4,625 | 5,105 | 4,911 | 6,081 | 24,138 | 1.9% |
| KY | 3,373 | 3,744 | 4,338 | 3,994 | 5,132 | 20,581 | 1.6% |
| CO | 2,685 | 3,230 | 4,144 | 4,636 | 4,657 | 19,352 | 1.5% |
| NV | 2,039 | 2,509 | 3,963 | 5,157 | 5,291 | 18,959 | 1.5% |
| WA | 3,065 | 3,045 | 4,051 | 3,997 | 3,924 | 18,082 | 1.4% |
| WI | 2,797 | 3,146 | 3,583 | 3,104 | 3,606 | 16,236 | 1.3% |
| OK | 2,038 | 2,492 | 2,129 | 3,911 | 4,758 | 15,328 | 1.2% |
| AR | 1,261 | 2,003 | 2,282 | 3,387 | 3,667 | 12,600 | 1.0% |
| KS | 1,117 | 2,234 | 2,001 | 3,382 | 3,615 | 12,349 | 1.0% |
| MS | 1,275 | 3,074 | 1,807 | 2,067 | 2,891 | 11,114 | 0.9% |
| DC | 2,076 | 1,994 | 2,288 | 2,197 | 2,294 | 10,849 | 0.9% |
| PR | 1,197 | 2,498 | 3,126 | 1,846 | 1,997 | 10,664 | 0.8% |
| NM | 1,188 | 1,865 | 2,346 | 2,062 | 2,607 | 10,068 | 0.8% |
| MN | 1,284 | 1,676 | 2,102 | 2,303 | 2,242 | 9,607 | 0.8% |
| OR | 1,605 | 1,431 | 1,584 | 1,712 | 1,815 | 8,147 | 0.6% |
| MA | 1,343 | 926 | 1,524 | 1,649 | 2,232 | 7,674 | 0.6% |
| CT | 1,487 | 905 | 2,083 | 1,087 | 1,227 | 6,789 | 0.5% |
| IA | 525 | 1,158 | 1,479 | 1,541 | 1,794 | 6,497 | 0.5% |
| UT | 174 | 1,124 | 1,219 | 1,334 | 2,037 | 5,888 | 0.5% |
| NE | 587 | 703 | 1,205 | 1,216 | 1,434 | 5,145 | 0.4% |
| DE | 743 | 659 | 748 | 1,090 | 1,272 | 4,512 | 0.4% |
| AK | 261 | 1,039 | 875 | 928 | 699 | 3,802 | 0.3% |
| WV | 226 | 243 | 884 | 1,087 | 1,228 | 3,668 | 0.3% |
| RI | 342 | 392 | 367 | 330 | 581 | 2,012 | 0.2% |
| ID | 31 | 78 | 227 | 295 | 572 | 1,203 | 0.1% |
| SD | 104 | 125 | 187 | 51 | 190 | 657 | 0.1% |
| VI | 116 | 161 | 86 | 118 | 110 | 591 | 0.0% |
| MT | 2 | 28 | 61 | 261 | 215 | 567 | 0.0% |
| NH | 26 | 48 | 56 | 179 | 182 | 491 | 0.0% |
| ME | 58 | 67 | 132 | 92 | 138 | 487 | 0.0% |
| HI | 18 | 14 | 188 | 72 | 185 | 477 | 0.0% |
| ND | 52 | 30 | 73 | 18 | 138 | 311 | 0.0% |
| WY | 94 | 87 | 42 | 40 | 39 | 302 | 0.0% |
| VT | 26 | 44 | 66 | 26 | 72 | 234 | 0.0% |
| GM | . | 3 | . | . | 3 | 6 | 0.0% |
| (blank) | 3195 | 1196 | 1394 | 1362 | 1529 | 8676 | 0.7% |
| **Total** | **181,280** | **213,407** | **250,182** | **281,469** | **334,550** | **1260,888** | **100.0%** |

***Table NIB-14: Offense Types by Category***

| Offense Category | Offense Types |
|---|---|
| Violent | Aggravated Assault |
| | Aggravated Menacing |
| | Aggravated Robbery |
| | Armed Robbery |
| | Assault |
| | Attempted Homicide |
| | Battery |
| | Complex Attack |
| | Death Investigation |
| | Domestic Violence |
| | Felonious Assault |
| | Gender Violence |
| | Home Invasion |
| | Homicide/Murder |
| | Injuries |
| | Injury on Duty |
| | Kidnapping |
| | Robbery |
| | Sexual Assault |
| | Sniper |
| | Terrorism |
| Property | Burglary |
| | Criminal Mischief |
| | Property Damage |
| | Theft |
| Drug & Disorder | Disorderly conduct |
| | Drug Offense |
| | Drugs and Firearms |
| | Illegal Possession/Sale |
| Weapons Violations | Arms Trafficking |
| | Prohibited Person in Possession of a Firearm |
| | Recovered or Stolen Firearm |
| | Weapons Violation |
| Shots Detected | Gunshot Detection |
| | Shooting |
| | Shooting at Occupied Building/Vehicle |
| | Shots Fired |
| Other | Attempted Suicide |
| | Cache |
| | Driving Under the Influence |
| | Found Firearm-Related Items |
| | Offense related to flora/fauna |
| | Officer Involved Shooting |
| | Other |
| | Poaching |
| | Political Incident |
| | Reckless Endangerment |
| | Search Warrant |
| | Suicide |
| | Traffic Stop |
| Unknown | Unknown |
| | Blank |

***Table NIB-18: All States and Territories of LEAs Submitting NIBIN Acquisitions with a NIBIN Lead, 2017 - 2021***

| State / Territory | 2017 | 2018 | 2019 | 2020 | 2021 | Total | % Total |
|---|---|---|---|---|---|---|---|
| IL | 6,640 | 6,932 | 6,730 | 10,472 | 8,706 | 39,480 | 8.2% |
| CA | 4,270 | 4,626 | 5,670 | 8,479 | 11,435 | 34,480 | 7.1% |
| TX | 2,275 | 3,223 | 4,945 | 7,789 | 11,648 | 29,880 | 6.2% |
| OH | 3,031 | 2,830 | 4,246 | 8,547 | 9,163 | 27,817 | 5.8% |
| FL | 3,621 | 3,902 | 4,688 | 7,002 | 7,171 | 26,384 | 5.5% |
| NC | 1,839 | 2,166 | 3,796 | 6,399 | 7,325 | 21,525 | 4.5% |
| WI | 3,008 | 3,361 | 2,788 | 3,708 | 6,674 | 19,539 | 4.0% |
| TN | 2,231 | 2,642 | 2,745 | 4,509 | 5,517 | 17,644 | 3.7% |
| PA | 1,898 | 2,092 | 3,365 | 4,419 | 5,038 | 16,812 | 3.5% |
| MI | 1,607 | 1,765 | 2,125 | 4,276 | 5,596 | 15,369 | 3.2% |
| MO | 1,720 | 2,168 | 3,228 | 4,221 | 4,007 | 15,344 | 3.2% |
| LA | 1,830 | 2,003 | 2,594 | 3,949 | 4,635 | 15,011 | 3.1% |
| VA | 1,941 | 2,317 | 2,673 | 2,927 | 4,904 | 14,762 | 3.1% |
| NY | 1,832 | 2,040 | 2,127 | 3,127 | 5,557 | 14,683 | 3.0% |
| IN | 1,116 | 1,716 | 2,344 | 3,100 | 4,332 | 12,608 | 2.6% |
| AZ | 961 | 1,690 | 2,229 | 3,673 | 4,052 | 12,605 | 2.6% |
| GA | 1,028 | 1,405 | 2,513 | 3,183 | 3,993 | 12,122 | 2.5% |
| CO | 1,283 | 1,889 | 2,160 | 2,918 | 3,832 | 12,082 | 2.5% |
| NJ | 2,016 | 1,606 | 1,756 | 2,133 | 2,786 | 10,297 | 2.1% |
| DC | 1,814 | 1,498 | 1,944 | 2,892 | 2,064 | 10,212 | 2.1% |
| MD | 1,041 | 1,177 | 2,014 | 2,581 | 3,194 | 10,007 | 2.1% |
| SC | 645 | 1,069 | 1,603 | 2,709 | 3,386 | 9,412 | 2.0% |
| KY | 1,018 | 882 | 1,309 | 2,610 | 3,116 | 8,935 | 1.9% |
| MN | 1,094 | 938 | 976 | 2,079 | 2,573 | 7,660 | 1.6% |
| NV | 671 | 777 | 1,241 | 2,495 | 2,350 | 7,534 | 1.6% |
| KS | 746 | 1,021 | 1,093 | 1,971 | 1,951 | 6,782 | 1.4% |
| WA | 1,162 | 887 | 1,019 | 1,518 | 2,097 | 6,683 | 1.4% |
| AL | 379 | 777 | 1,201 | 1,563 | 2,579 | 6,499 | 1.3% |
| CT | 617 | 582 | 762 | 1,185 | 2,391 | 5,537 | 1.1% |
| NM | 284 | 530 | 759 | 1,260 | 1,769 | 4,602 | 1.0% |
| AR | 323 | 609 | 695 | 1,372 | 1,582 | 4,581 | 0.9% |
| MA | 625 | 456 | 671 | 1,236 | 1,281 | 4,269 | 0.9% |
| IA | 291 | 451 | 563 | 775 | 1,081 | 3,161 | 0.7% |
| OR | 255 | 230 | 358 | 834 | 1,408 | 3,085 | 0.6% |
| DE | 372 | 337 | 551 | 985 | 820 | 3,065 | 0.6% |
| OK | 227 | 252 | 271 | 885 | 1,053 | 2,688 | 0.6% |
| NE | 332 | 309 | 403 | 615 | 667 | 2,326 | 0.5% |
| MS | 112 | 400 | 278 | 375 | 532 | 1,697 | 0.4% |
| PR | 61 | 182 | 816 | 194 | 138 | 1,391 | 0.3% |
| UT | 68 | 212 | 251 | 287 | 325 | 1,143 | 0.2% |
| AK | 169 | 264 | 191 | 246 | 134 | 1,004 | 0.2% |
| RI | 102 | 109 | 80 | 94 | 133 | 518 | 0.1% |
| WV | 4 | 2 | 50 | 119 | 134 | 309 | 0.1% |
| VI | 74 | 72 | 40 | 27 | 17 | 230 | 0.0% |
| NH | 4 | 6 | 14 | 64 | 95 | 183 | 0.0% |
| SD | 3 | 2 | 12 | 4 | 28 | 49 | 0.0% |
| ID | 1 | . | . | 6 | 18 | 25 | 0.0% |
| ME | 3 | . | . | 6 | 6 | 15 | 0.0% |
| ND | . | . | 1 | . | 9 | 10 | 0.0% |
| MT | . | 3 | . | 2 | . | 5 | 0.0% |
| VT | . | . | 1 | . | 2 | 3 | 0.0% |
| WY | . | 1 | 1 | . | . | 2 | 0.0% |
| (blank) | 107 | 82 | 119 | 86 | 105 | 499 | 0.1% |
| **Total** | **56,751** | **64,490** | **82,009** | **125,906** | **153,409** | **482,565** | **100.0%** |

*Table NIB-22: All States and Territories of LEAs Submitting NIBIN Firearms with a Trace Record, 2017 – 2021*

| State / Territory | 2017 | 2018 | 2019 | 2020 | 2021 | Total | % Total |
|---|---|---|---|---|---|---|---|
| TX | 9,633 | 10,660 | 12,293 | 17,174 | 24,135 | 73,895 | 10.3% |
| FL | 5,747 | 7,199 | 9,088 | 11,999 | 14,548 | 48,581 | 6.8% |
| IL | 7,086 | 8,129 | 8,986 | 11,527 | 11,038 | 46,766 | 6.5% |
| CA | 6,550 | 8,314 | 10,023 | 10,071 | 11,716 | 46,674 | 6.5% |
| OH | 5,737 | 6,546 | 7,607 | 9,663 | 11,683 | 41,236 | 5.8% |
| TN | 4,448 | 5,256 | 5,746 | 7,004 | 8,361 | 30,815 | 4.3% |
| NC | 3,084 | 4,096 | 5,274 | 7,185 | 9,444 | 29,083 | 4.1% |
| LA | 4,233 | 4,498 | 5,476 | 6,117 | 7,242 | 27,566 | 3.9% |
| MI | 2,981 | 3,407 | 3,870 | 7,173 | 8,259 | 25,690 | 3.6% |
| VA | 4,039 | 4,217 | 4,748 | 5,683 | 5,770 | 24,457 | 3.4% |
| AZ | 2,885 | 4,040 | 4,651 | 6,316 | 6,546 | 24,438 | 3.4% |
| IN | 3,632 | 4,089 | 4,635 | 4,854 | 5,525 | 22,735 | 3.2% |
| MO | 1,875 | 3,272 | 5,249 | 5,486 | 5,831 | 21,713 | 3.0% |
| PA | 3,421 | 3,491 | 4,277 | 4,814 | 4,952 | 20,955 | 2.9% |
| GA | 2,664 | 3,158 | 3,971 | 5,121 | 5,005 | 19,919 | 2.8% |
| SC | 1,705 | 2,295 | 2,576 | 4,153 | 5,100 | 15,829 | 2.2% |
| NY | 1,056 | 2,785 | 3,004 | 3,754 | 4,469 | 15,068 | 2.1% |
| AL | 1,216 | 2,189 | 3,089 | 3,910 | 4,291 | 14,695 | 2.1% |
| KY | 2,157 | 2,686 | 2,807 | 2,781 | 3,314 | 13,745 | 1.9% |
| MD | 1,275 | 2,877 | 2,805 | 3,052 | 3,387 | 13,396 | 1.9% |
| NV | 1,348 | 1,309 | 1,956 | 3,365 | 3,843 | 11,821 | 1.7% |
| CO | 1,819 | 2,154 | 2,177 | 2,411 | 2,587 | 11,148 | 1.6% |
| WI | 1,697 | 1,790 | 1,847 | 2,311 | 2,658 | 10,303 | 1.4% |
| WA | 1,781 | 1,893 | 2,206 | 1,978 | 1,932 | 9,790 | 1.4% |
| NJ | 1,649 | 1,747 | 1,922 | 2,007 | 2,229 | 9,554 | 1.3% |
| OK | 867 | 1,138 | 1,191 | 2,175 | 2,851 | 8,222 | 1.1% |
| KS | 691 | 1,379 | 1,275 | 1,956 | 2,170 | 7,471 | 1.0% |
| DC | 1,427 | 1,320 | 1,390 | 1,295 | 1,319 | 6,751 | 0.9% |
| AR | 528 | 1,063 | 1,226 | 1,838 | 2,093 | 6,748 | 0.9% |
| MN | 985 | 1,010 | 1,342 | 1,576 | 1,765 | 6,678 | 0.9% |
| NM | 540 | 918 | 1,596 | 1,568 | 1,628 | 6,250 | 0.9% |
| MA | 648 | 720 | 1,011 | 1,453 | 1,271 | 5,103 | 0.7% |
| OR | 545 | 727 | 913 | 1,096 | 1,011 | 4,292 | 0.6% |
| MS | 416 | 702 | 935 | 1,171 | 1,054 | 4,278 | 0.6% |
| UT | 254 | 606 | 898 | 1,169 | 1,207 | 4,134 | 0.6% |
| IA | 465 | 572 | 782 | 929 | 1,108 | 3,856 | 0.5% |
| DE | 511 | 474 | 538 | 795 | 882 | 3,200 | 0.4% |
| NE | 431 | 473 | 570 | 825 | 770 | 3,069 | 0.4% |
| CT | 477 | 454 | 807 | 709 | 614 | 3,061 | 0.4% |
| PR | 239 | 492 | 737 | 349 | 436 | 2,253 | 0.3% |
| WV | 285 | 282 | 374 | 527 | 478 | 1,946 | 0.3% |
| AK | 22 | 41 | 355 | 318 | 292 | 1,028 | 0.1% |
| RI | 59 | 69 | 133 | 226 | 330 | 817 | 0.1% |
| ID | 90 | 45 | 55 | 191 | 169 | 550 | 0.1% |
| MT | 18 | 41 | 89 | 194 | 104 | 446 | 0.1% |
| SD | 71 | 122 | 52 | 62 | 107 | 414 | 0.1% |
| ME | 47 | 58 | 102 | 59 | 73 | 339 | 0.0% |
| NH | 31 | 34 | 25 | 95 | 122 | 307 | 0.0% |
| VI | 60 | 59 | 56 | 71 | 32 | 278 | 0.0% |
| ND | 24 | 39 | 24 | 34 | 131 | 252 | 0.0% |
| VT | 25 | 38 | 40 | 53 | 42 | 198 | 0.0% |
| WY | 58 | 31 | 31 | 18 | 14 | 152 | 0.0% |
| HI | 17 | 16 | 32 | 9 | 14 | 88 | 0.0% |
| GM | 1 | . | 2 | 1 | . | 4 | 0.0% |
| (blank) | 699 | 528 | 572 | 663 | 681 | 3,143 | 0.4% |
| **Total** | **94,249** | **115,548** | **137,436** | **171,334** | **196,633** | **715,200** | **100.0%** |

*Table NIB-23: Percentage of NIBIN Firearms with a Trace Record by State or Territory, 2017 – 2021*

| State / Territory | Total NIBIN Firearms w/ a Trace Record | Total NIBIN Firearms | % NIBIN Firearms w/ a Trace Record |
|---|---|---|---|
| GM | 4 | 5 | 80.0% |
| UT | 4,134 | 5,373 | 76.9% |
| VT | 198 | 269 | 73.6% |
| DE | 3,200 | 4,413 | 72.5% |
| VA | 24,457 | 33,873 | 72.2% |
| MT | 446 | 619 | 72.1% |
| TN | 30,815 | 42,889 | 71.8% |
| WI | 10,303 | 14,554 | 70.8% |
| NH | 307 | 438 | 70.1% |
| IL | 46,766 | 67,002 | 69.8% |
| ME | 339 | 488 | 69.5% |
| GA | 19,919 | 28,910 | 68.9% |
| KY | 13,745 | 19,988 | 68.8% |
| MN | 6,678 | 9,759 | 68.4% |
| MA | 5,103 | 7,507 | 68.0% |
| NM | 6,250 | 9,200 | 67.9% |
| ND | 252 | 371 | 67.9% |
| OH | 41,236 | 61,021 | 67.6% |
| MO | 21,713 | 32,137 | 67.6% |
| OR | 4,292 | 6,408 | 67.0% |
| TX | 73,895 | 111,108 | 66.5% |
| NC | 29,083 | 43,795 | 66.4% |
| IN | 22,735 | 34,253 | 66.4% |
| NV | 11,821 | 17,915 | 66.0% |
| WV | 1,946 | 2,953 | 65.9% |
| NE | 3,069 | 4,682 | 65.5% |
| IA | 3,856 | 5,970 | 64.6% |
| SD | 414 | 648 | 63.9% |
| KS | 7,471 | 11,699 | 63.9% |
| DC | 6,751 | 10,590 | 63.7% |
| PA | 20,955 | 32,892 | 63.7% |
| AZ | 24,438 | 38,897 | 62.8% |
| MD | 13,396 | 21,573 | 62.1% |
| FL | 48,581 | 80,051 | 60.7% |
| CO | 11,148 | 18,396 | 60.6% |
| LA | 27,566 | 45,540 | 60.5% |
| WY | 152 | 254 | 59.8% |
| NJ | 9,554 | 16,024 | 59.6% |
| WA | 9,790 | 16,429 | 59.6% |
| NY | 15,068 | 25,454 | 59.2% |
| OK | 8,222 | 14,440 | 56.9% |
| SC | 15,829 | 27,989 | 56.6% |
| MI | 25,690 | 45,649 | 56.3% |
| VI | 278 | 498 | 55.8% |
| AL | 14,695 | 26,487 | 55.5% |
| RI | 817 | 1,490 | 54.8% |
| AR | 6,748 | 12,584 | 53.6% |
| CA | 46,674 | 91,927 | 50.8% |
| MS | 4,278 | 8,567 | 49.9% |
| AK | 1,028 | 2,126 | 48.4% |
| CT | 3,061 | 6,768 | 45.2% |
| ID | 550 | 1,276 | 43.1% |
| PR | 2,253 | 5,406 | 41.7% |
| HI | 88 | 361 | 24.4% |
| (blank) | 3,143 | 5,945 | 52.9% |
| **Total** | **715,200** | **1,135,860** | **63.0%** |

***Table 33-NIB: Comparison of Median TTFS and Median TTC of Recovered Pistols by State or Territory, 2017 – 2021***

| State / Territory | Recovered Pistols | Recovered Pistols w/ NIBIN Leads | % Recovered Pistols w/ NIBIN Leads | Median TTC (Years) | Median TTFS (Years) | Difference (Days)[13] |
|---|---|---|---|---|---|---|
| TX | 99,325 | 7,326 | 7.4% | 2.6 | 2.1 | 177 |
| CA | 78,668 | 8,080 | 10.3% | 4.5 | 3.8 | 273 |
| FL | 71,354 | 5,557 | 7.8% | 3.4 | 2.9 | 205 |
| IL | 60,038 | 8,950 | 14.9% | 3.5 | 2.7 | 293 |
| OH | 55,778 | 6,210 | 11.1% | 2.8 | 2.1 | 272 |
| MI | 41,987 | 3,331 | 7.9% | 2.8 | 2.0 | 293 |
| LA | 39,599 | 2,956 | 7.5% | 3.2 | 2.5 | 246 |
| TN | 39,174 | 3,584 | 9.1% | 2.9 | 2.3 | 218 |
| NC | 37,474 | 4,151 | 11.1% | 2.7 | 2.1 | 223 |
| IN | 31,558 | 2,567 | 8.1% | 2.2 | 1.7 | 177 |
| VA | 31,155 | 3,487 | 11.2% | 1.8 | 1.2 | 231 |
| AZ | 31,138 | 3,254 | 10.5% | 1.6 | 1.3 | 106 |
| PA | 30,715 | 3,880 | 12.6% | 3.9 | 2.8 | 384 |
| MO | 29,050 | 3,031 | 10.4% | 2.4 | 1.8 | 210 |
| GA | 26,105 | 2,485 | 9.5% | 2.1 | 1.8 | 122 |
| SC | 25,925 | 2,204 | 8.5% | 1.9 | 1.5 | 154 |
| AL | 23,288 | 1,569 | 6.7% | 2.2 | 1.8 | 143 |
| NY | 22,081 | 2,524 | 11.4% | 4.7 | 3.9 | 294 |
| MD | 18,914 | 2,269 | 12.0% | 4.8 | 3.7 | 409 |
| KY | 17,448 | 2,269 | 13.0% | 2.6 | 2.1 | 179 |
| CO | 16,539 | 2,175 | 13.2% | 2.7 | 2.1 | 188 |
| NV | 16,082 | 2,144 | 13.3% | 2.1 | 1.7 | 139 |
| WA | 14,129 | 1,232 | 8.7% | 3.4 | 3.0 | 161 |
| NJ | 13,475 | 2,002 | 14.9% | 5.3 | 4.5 | 305 |
| OK | 13,176 | 764 | 5.8% | 3.2 | 2.8 | 124 |
| WI | 12,638 | 3,703 | 29.3% | 2.2 | 1.4 | 274 |
| AR | 11,355 | 854 | 7.5% | 2.5 | 2.2 | 96 |
| KS | 9,977 | 1,419 | 14.2% | 2.7 | 2.2 | 167 |
| DC | 9,016 | 2,051 | 22.7% | 4.3 | 3.2 | 381 |
| MN | 8,964 | 1,616 | 18.0% | 3.5 | 2.7 | 300 |
| MS | 7,811 | 313 | 4.0% | 2.1 | 1.5 | 221 |
| NM | 7,390 | 703 | 9.5% | 2.1 | 1.5 | 239 |
| MA | 7,080 | 753 | 10.6% | 4.7 | 3.8 | 328 |
| CT | 6,427 | 747 | 11.6% | 5.3 | 4.5 | 298 |
| OR | 5,550 | 561 | 10.1% | 2.8 | 2.4 | 129 |
| IA | 5,399 | 711 | 13.2% | 2.2 | 1.7 | 210 |
| PR | 4,780 | 222 | 4.6% | 7.0 | 6.1 | 325 |
| UT | 4,570 | 236 | 5.2% | 4.3 | 4.1 | 76 |
| DE | 4,117 | 610 | 14.8% | 3.0 | 2.1 | 311 |
| NE | 3,845 | 466 | 12.1% | 3.6 | 2.6 | 354 |
| WV | 2,406 | 107 | 4.4% | 2.0 | 1.9 | 20 |
| AK | 1,687 | 129 | 7.6% | 3.2 | 2.6 | 216 |
| RI | 1,040 | 95 | 9.1% | 4.4 | 3.7 | 275 |
| ID | 1,015 | 8 | 0.8% | 2.4 | 2.4 | 0 |
| SD | 482 | 13 | 2.7% | 1.0 | 0.6 | 115 |
| VI | 434 | 31 | 7.1% | 4.8 | 3.7 | 386 |
| MT | 431 | 4 | 0.9% | 11.0 | 11.0 | 6 |
| ME | 414 | 3 | 0.7% | 0.3 | 0.2 | 41 |
| NH | 390 | 53 | 13.6% | 2.7 | 2.7 | -18 [14] |
| ND | 323 | 8 | 2.5% | 0.9 | 0.5 | 151 |
| HI | 302 | 1 | 0.3% | . | . | . |
| WY | 201 | 1 | 0.5% | . | . | . |
| VT | 171 | 2 | 1.2% | 2.5 | 2.0 | 184 |
| GM | 4 | 0 | 0.0% | . | . | . |
| (blank) | 4,916 | 246 | 5.0% | . | . | . |

***Table 34-NIB: Comparison of Median TTFS and Median TTC of Recovered Pistols for Selected U.S. Cities, 2017 – 2021***

| City | Size | Recovered Pistols | Recovered Pistols w/ NIBIN Leads | % Recovered Pistols w/ NIBIN Leads | Median TTC (Years) | Median TTFS (Years) | Difference (Days)[15] |
|---|---|---|---|---|---|---|---|
| Phoenix, Arizona | Mega | 11,275 | 1,820 | 16.1% | 1.6 | 1.3 | 110 |
| San Antonio, Texas | Mega | 4,137 | 711 | 17.2% | 1.7 | 1.5 | 62 |
| Dallas, Texas | Mega | 15,848 | 1,910 | 12.1% | 2.6 | 2.2 | 161 |
| Houston, Texas | Mega | 20,270 | 1,412 | 7.0% | 3.2 | 2.5 | 235 |
| Chicago, Illinois | Mega | 36,642 | 5,716 | 15.6% | 3.7 | 2.9 | 287 |
| Philadelphia, Pennsylvania | Mega | 15,350 | 2,290 | 14.9% | 3.9 | 3.0 | 352 |
| San Diego, California | Mega | 1,018 | 42 | 4.1% | 4.3 | 3.2 | 419 |
| San Jose, California | Mega | 2,035 | 186 | 9.1% | 4.6 | 3.7 | 355 |
| Los Angeles, California | Mega | 19,393 | 1,941 | 10.0% | 4.8 | 4.1 | 254 |
| New York, New York | Mega | 13,083 | 1,084 | 8.3% | 5.1 | 4.4 | 252 |
| Milwaukee, Wisconsin | Large | 11,190 | 3,530 | 31.5% | 2.2 | 1.4 | 271 |
| Indianapolis, Indiana | Large | 13,936 | 1,166 | 8.4% | 1.9 | 1.6 | 138 |
| Las Vegas, Nevada | Large | 11,767 | 1,732 | 14.7% | 2.1 | 1.8 | 117 |
| Charlotte, North Carolina | Large | 7,502 | 605 | 8.1% | 2.7 | 1.9 | 282 |
| Memphis, Tennessee | Large | 17,551 | 1,545 | 8.8% | 2.7 | 2.0 | 254 |
| Detroit, Michigan | Large | 19,096 | 1,651 | 8.6% | 2.8 | 2.1 | 267 |
| Louisville, Kentucky | Large | 10,605 | 1,538 | 14.5% | 2.5 | 2.1 | 163 |
| Columbus, Ohio | Large | 9,784 | 1,159 | 11.8% | 3.0 | 2.2 | 274 |
| Jacksonville, Florida | Large | 6,362 | 1,027 | 16.1% | 3.2 | 2.8 | 140 |
| Baltimore, Maryland | Large | 6,501 | 1,166 | 17.9% | 4.8 | 4.0 | 292 |
| Cleveland, Ohio | Medium | 5,678 | 665 | 11.7% | 1.9 | 1.4 | 185 |
| Saint Louis, Missouri | Medium | 9,580 | 994 | 10.4% | 2.3 | 1.6 | 234 |
| Atlanta, Georgia | Medium | 7,862 | 251 | 3.2% | 2.5 | 2.0 | 189 |
| Miami, Florida | Medium | 2,663 | 403 | 15.1% | 2.9 | 2.3 | 234 |
| Cincinnati, Ohio | Medium | 4,107 | 908 | 22.1% | 3.1 | 2.4 | 244 |
| Wichita, Kansas | Medium | 3,835 | 638 | 16.6% | 2.8 | 2.4 | 149 |
| Orlando, Florida | Medium | 3,276 | 228 | 7.0% | 4.1 | 2.9 | 424 |
| Tampa, Florida | Medium | 2,988 | 518 | 17.3% | 3.5 | 3.2 | 93 |
| Tulsa, Oklahoma | Medium | 5,023 | 327 | 6.5% | 3.6 | 3.3 | 122 |
| New Orleans, Louisiana | Medium | 7,784 | 499 | 6.4% | 3.9 | 3.4 | 150 |
| Shreveport, Louisiana | Small | 2,608 | 272 | 10.4% | 1.3 | 1.1 | 90 |
| Columbia, South Carolina | Small | 2,387 | 302 | 12.7% | 1.5 | 1.2 | 112 |
| Richmond, Virginia | Small | 3,913 | 604 | 15.4% | 1.7 | 1.2 | 162 |
| Mobile, Alabama | Small | 4,451 | 411 | 9.2% | 2.5 | 2.1 | 142 |
| Dayton, Ohio | Small | 2,967 | 273 | 9.2% | 3.4 | 2.5 | 339 |
| Chattanooga, Tennessee | Small | 3,532 | 558 | 15.8% | 3.0 | 2.5 | 154 |
| Baton Rouge, Louisiana | Small | 4,769 | 519 | 10.9% | 3.3 | 2.6 | 257 |
| Winston-Salem, North Carolina | Small | 2,244 | 433 | 19.3% | 3.1 | 2.8 | 115 |
| San Bernardino, California | Small | 1,547 | 222 | 14.4% | 4.4 | 4.0 | 142 |
| Huntsville, Alabama | Small | 58 | 6 | 10.3% | 6.4 | 6.3 | 16 |

# ENDNOTES

[1] Some LEAs are represented more than once in NIBIN. For example, New York City PD is represented in NIBIN by precinct name (e.g., NY-001 PCT and NY-005 PCT). This and all other top ten lists of LEAs were constructed based upon the individual agency dropdown fields available in the NIBIN equipment. These fields were not consolidated for LEAs represented across multiple fields.

[2] Within NIBIN, there were 311 individual caliber naming conventions associated with NIBIN acquisitions between 2017 and 2021. These caliber naming conventions were grouped into 77 caliber families or base calibers.

[3]In 2009, the National Academy of Sciences reported that there were insufficient studies on firearm toolmark methods to understand their reliability and reproducibility. Seven years later, this finding was reaffirmed by the President's Council of Advisors on Science and Technology. Since then, the development of 3D virtual microscopy has revolutionized the field of firearm toolmark examination, revealing microscopic patterns that were previously undetectable. As compared to traditional (2D) firearm toolmark examinations, proficiency tests and validation studies on 3D virtual microscopy suggest that it is a superior method of distinguishing firearm toolmarks. *See*, Duez, Pierre, Todd Weller, Marcus Brubaker, II, Richard E. Hockensmith, and Ryan Lilien. 2018. "Development and Validation of a Virtual Examination Tool for Firearm Forensics." *Journal of Forensic Sciences* 63 (4): 1069–84. doi:10.1111/1556-4029.13668.). Lilien, Ryan. 2020. *Evaluation of 3D Virtual Comparison Microscopy for Firearm Forensics within the Crime Lab*. Washington, D.C.: U.S. Department of Justice. Evaluation of 3D Virtual Comparison Microscopy for Firearm Forensics within the Crime Lab (ojp.gov) Chapnick, Chad, Todd J. Weller, Pierre Duez, Eric Meschke, John Marshall, and Ryan Lilien. 2021. "Results of the 3D Virtual Comparison Microscopy Error Rate (VCMER) Study for Firearm Forensics." *Journal of Forensic Sciences* 66 (2): 557–70. doi:10.1111/1556-4029.14602.

[4] A firearm record may not be created in some instances when a test-fire is submitted to a NIBIN acquisition station without complete information about the firearm from which it was discharged. Furthermore, sometimes a firearm record is created without a test-fire because the firearm was incomplete, inoperable, or deemed unsafe to fire. Between 2017 and 2021, there were 1,260,888 test-fires and 1,135,860 NIBIN firearms.

[5] Detailed in Figure NIB-08, the firearm category "All Others (6)" consists of combinations, machine guns, pistol revolvers, pistol derringers, unspecified firearms, and submachine guns.

[6] The distribution of each firearm category is influenced by policy and practice. To this point, the NIBIN Minimum Required Operating Standards (MROS) only require NIBIN test-firing "for all semi-automatic pistols including .22 caliber, .223 and 7.62 semi-automatic rifles, 12 gauge shotguns and long guns that use handgun ammunition under the aforementioned guidelines." Crime guns that are not commonly test-fired include "revolvers, single shot or bolt-action rifles, shotguns in other gauges," as they typical do not expel cartridge casings that are suitable for NIBIN submission.

[7] For Crime Gun IDs without an associated, recovered crime gun, the minimum number of shooting events should be two. As shown in this table, the minimum number of shooting events is one, accounting for less than 3% of Crime Gun IDs. This is a data error that most likely occurred during the data acquisition process when a test fire was not linked to a firearm record.

[8] TTFS and TTC were calculated for those recovered crime guns in NESS that generated a positive TTFS value *and* had an FTS ID.

[9] For each NIBIN case, the law enforcement agency (LEA) is entered into NIBIN from a dropdown field available in the NIBIN equipment. Only dropdown fields associated with the primary LEA within a city were used to generate the city-level dataset. For example, all NIBIN cases submitted by LEAs other than the New York Police Department (NY-001 PCT, NY-005 PCT, etc.) were excluded from the New York, New York, dataset.

[10] Anthony A. Braga and Glenn L. Pierce. 2004. "Linking Gun Crimes: The Impact of Ballistics Imaging Technology on the Productivity of the Boston Police Department's Ballistics Unit," *Journal of Forensic Sciences,* 49 (4): 701–706; Anthony A. Braga. 2008. "Gun Enforcement and Ballistics Imaging Technology in Boston," in *Ballistics Imaging*, eds. Daniel L. Cork, John E. Rolph, Eugene S. Meieran, and Carol V. Petrie, National Research Council and National Academy of Engineering. Washington, DC: National Academies Press; Anthony A. Braga and Glenn L. Pierce. 2011. "Reconsidering the Ballistic Imaging of Crime Bullets in Gun Law Enforcement Operations," *Forensic Science Policy and Management* 2, (3): 105–117.

[11] William King, William Wells, Charles Katz, Edward Maguire, and James Frank. 2013. *Opening the Black Box of NIBIN: A Descriptive Process and Outcome Evaluation of the Use of NIBIN and Its Effects on Criminal*

*Investigations, Final Report*. Washington, DC: U.S. Department of Justice, National Institute of Justice. https://www.ojp.gov/pdffiles1/nij/grants/243875.pdf

[12] An acquisition record may be created on a NIBIN acquisition station when the submitting law enforcement agency (LEA) is unknown. When the LEA is unknown, no state is reported. These records are compiled and represent the category "(blank)". This category is present in Tables NIB-06, NIB-10, NIB-12, NIB-18, NIB-22, NIB-23, and NIB-33.

[13] For each state/territory, the median TTFS was subtracted from the median TTC.

[14] There are limited instances in which TTFS may exceed TTC. These Crime Gun IDs are excluded from the TTFS and TTC calculations.

[15] For each city, the median TTFS was subtracted from the median TTC.