



Report Findings: Optimizing Crime Gun Intelligence

August 6, 2024

Agenda

- Introduction and methodology
- Background: gun violence rising, clearance rates falling
- Primer on ATF's crime gun intelligence tools
- Key findings: *Optimizing Crime Gun Intelligence*
- Report recommendations
- Milwaukee case study

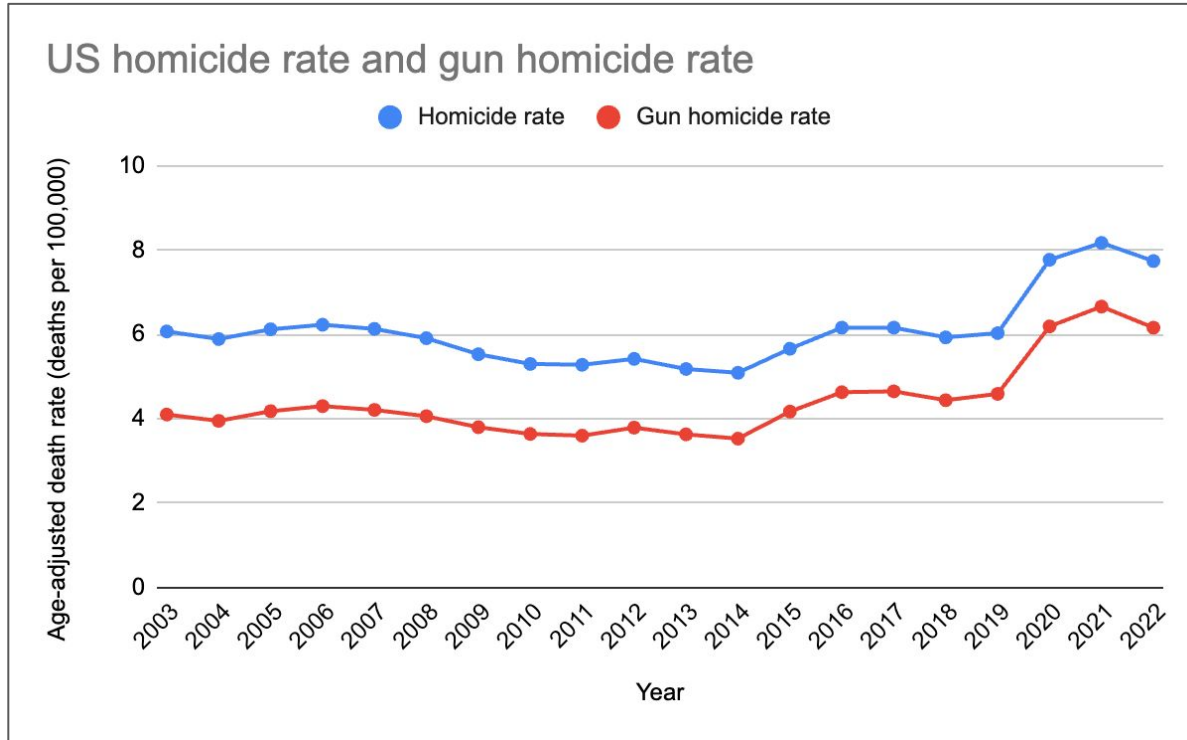
Methodology

- Report researched and written December 2022-May 2024
- Qualitative interviews with over 30 stakeholders representing 20 institutions
 - Federal LE agencies, including ATF and DOJ
 - State and local LE agencies in the Great Lakes region
 - Researchers specializing in crime gun intelligence
 - Gun violence prevention advocacy organizations
- FOIA request to ATF
 - Full list of LE agencies participating in eTrace and Collective Data Sharing as of January 2024
 - Full list of NIBIN sites with the amount of ballistic evidence processed and the average processing time for lead generation
- Wide range of secondary research

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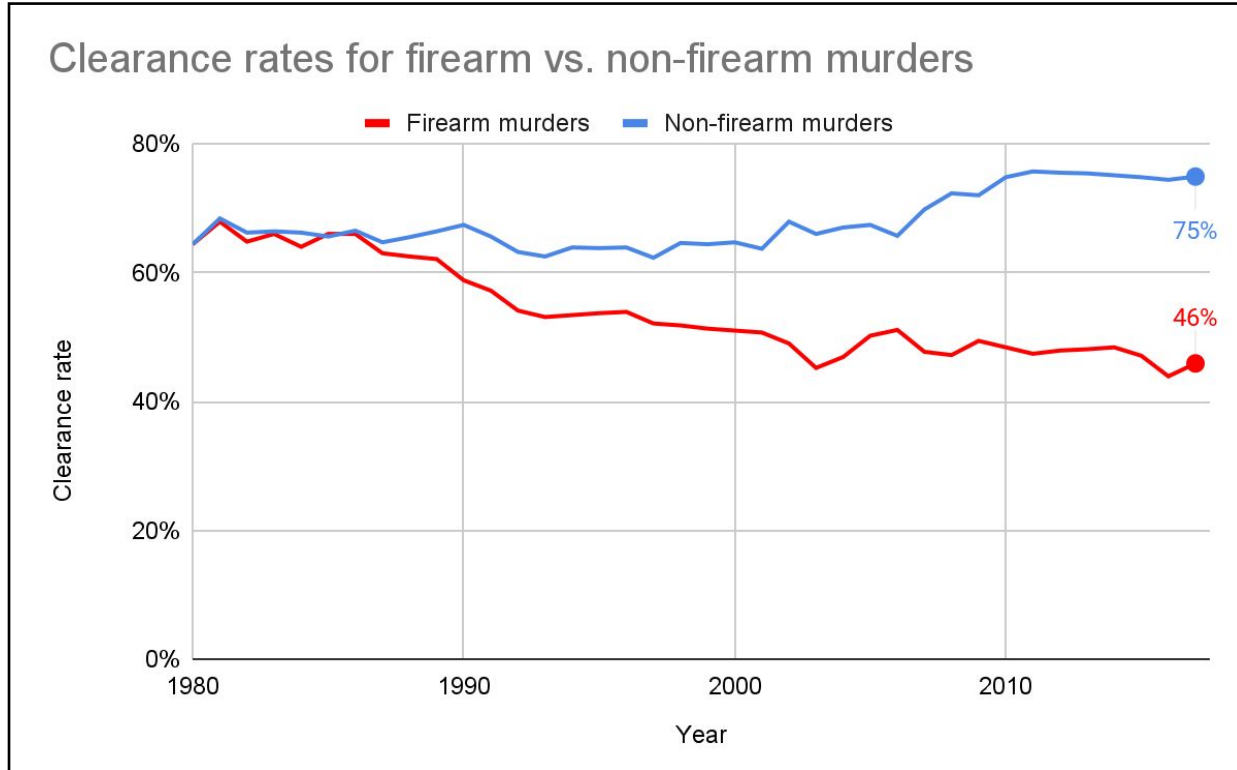
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Homicides remain high, driven by gun homicides



- **715,000 people killed with guns in the US over the past 20 years**
- **70% of homicides are gun homicides**
- **Firearm homicide rate has increased by over 50% (2003-2022)**

Gun homicides are especially difficult to solve, driving a decrease in clearance rates



- Use of gun allows for physical distance between victim and perpetrator
- Less than half of murders committed with firearms are cleared

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What is “crime gun intelligence”?

- Crime gun intelligence has developed over the past 25 years as a **tech-driven, strategic approach to help law enforcement prevent and solve gun crimes.**
- Crime gun intelligence tools allow law enforcement to **trace the origins of crime guns, identify linkages between shootings, and integrate information across agencies.**

ATF's crime gun intelligence tools

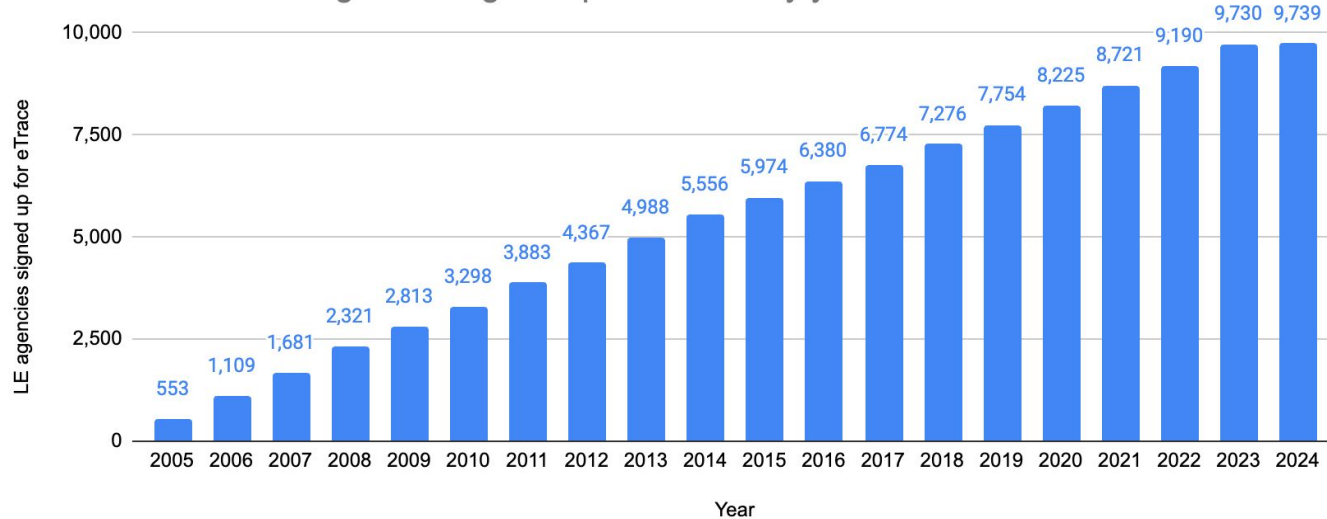
- **eTrace:** Allows law enforcement to trace the origins of crime guns, including which dealer first sold the gun, and what individual first purchased the gun.
- **eTrace's Collective Data Sharing (CDS) function:** Allows law enforcement to share eTrace data across jurisdictions, enabling mapping of crime gun flow patterns that may lead to the identification of straw purchasers or traffickers.
- **The National Integrated Ballistic Information Network (NIBIN):** Allows law enforcement to connect shooting incidents via ballistic evidence, identifying the most active guns within a particular jurisdiction, and developing key investigative leads.
- **The NIBIN Enforcement Support System (NESS):** Synthesizes information from NIBIN, eTrace, and a police department's RMS system into a single, map-based platform

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eTrace usage has grown tremendously since inception, but gaps remain to full participation

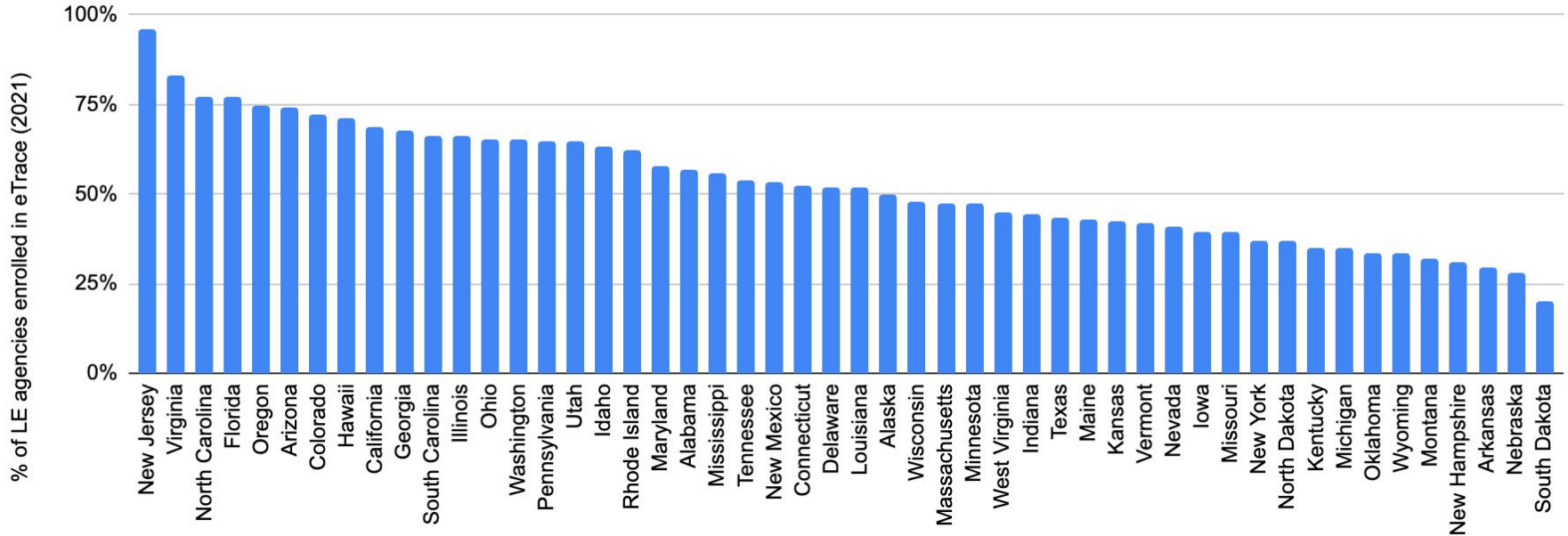
US law enforcement agencies signed up for eTrace by year



- More than 50% of LE agencies are signed up for eTrace

eTrace participation rates vary widely by state

eTrace participation rates by state

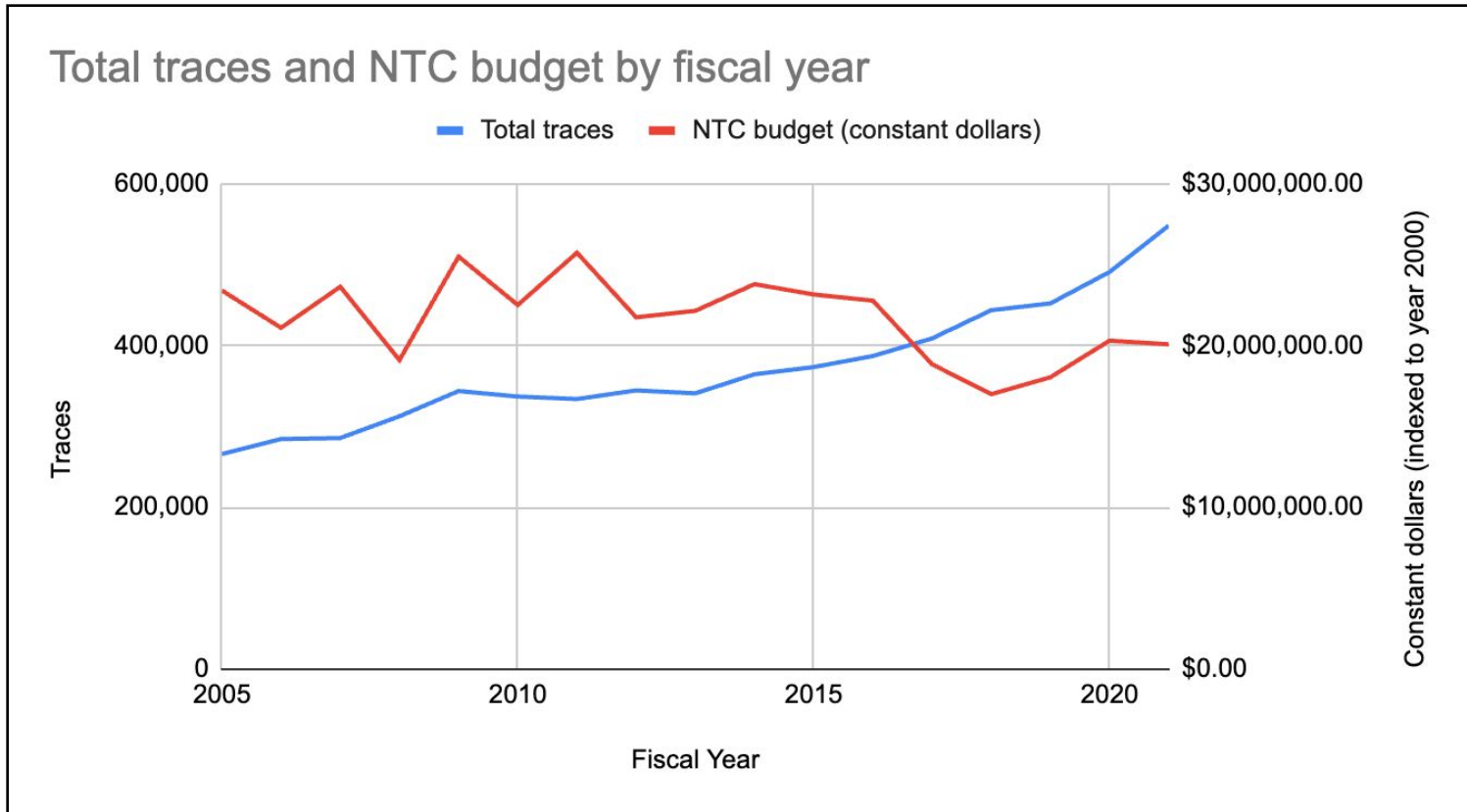


Slow processing times hinder eTrace impact

- **Average trace request now takes approximately 16 days** to complete
 - Stated ATF goal is 7-day completion for standard trace requests and 48-hours for urgent trace requests
- **Antiquated record-keeping system** makes processing slow
- **ATF budget and staffing has not kept pace with increased trace volume**

“There is no rhyme or reason to how long it takes to get an eTrace back. Sometimes it takes hours, sometimes it takes weeks.”
–Local LE officer

NTC budget has not kept up with increases in trace volume



Lack of data beyond first retail purchase is limiting the value of eTrace information

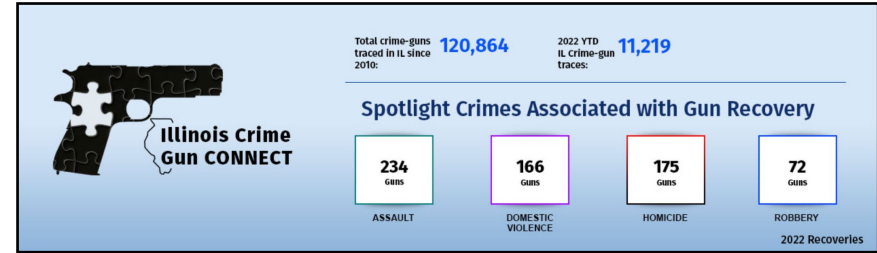
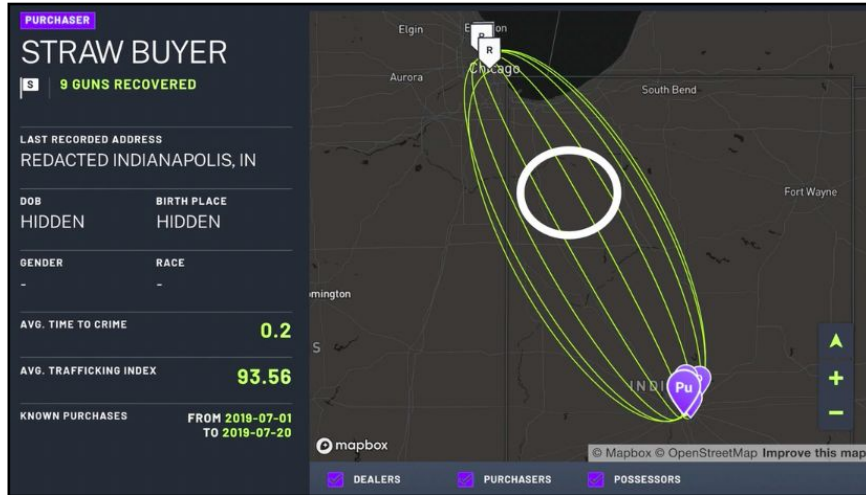
- **54% of crime guns were recovered more than three years after the first retail purchase (2017-2021)**
- **Federal law does not require background checks or maintenance of records for private sales and transfers**

“For the majority of guns we trace...the time-to-crime is over 1,000 days...When you don’t track every firearm transaction after the first legal purchase, it limits the usefulness of the information.”

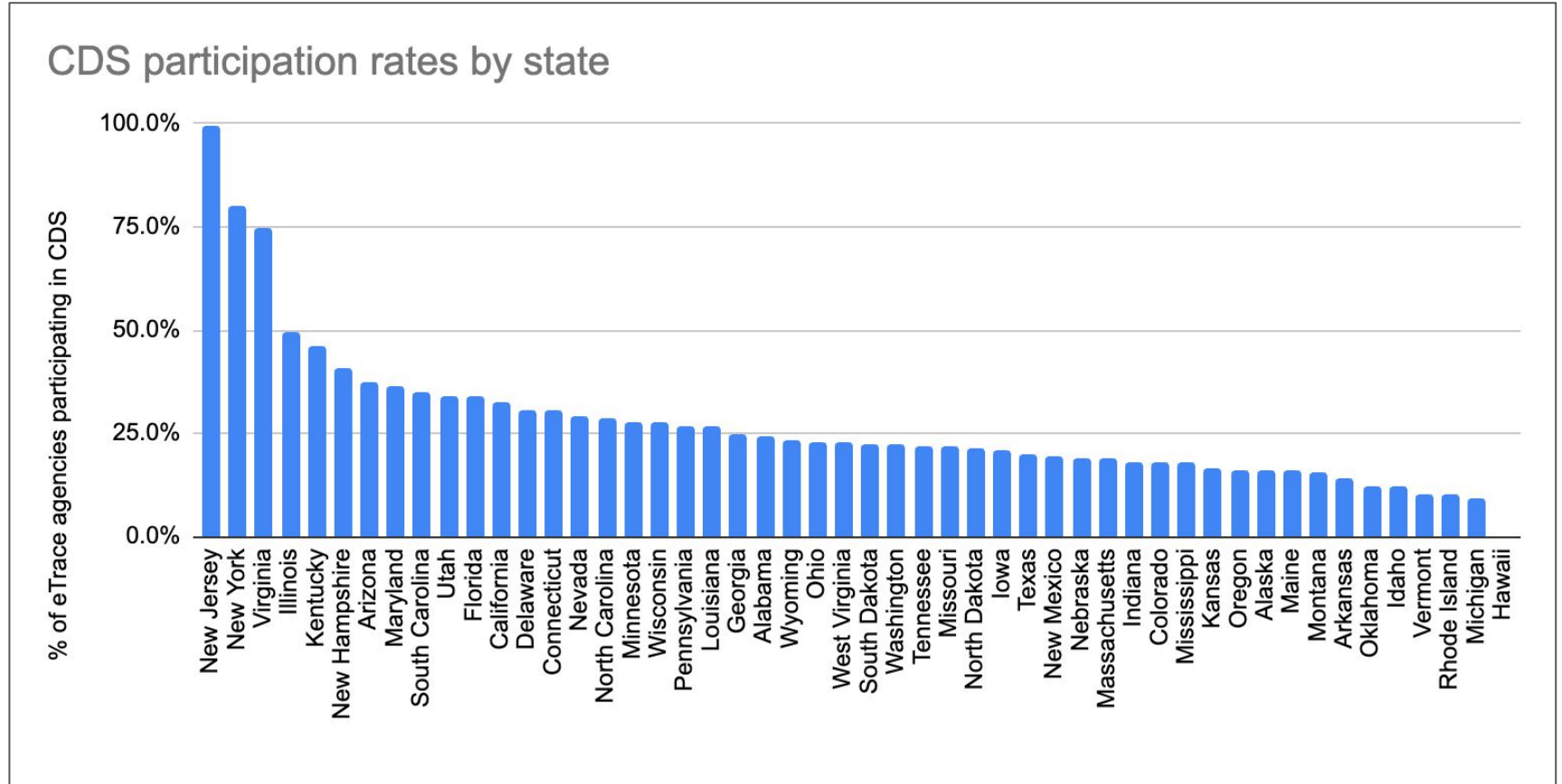
–State police investigator

eTrace's CDS function has been used to create state-level crime gun analytics platforms

- Illinois' Crime Gun Connect and Pennsylvania's Track and Trace are examples of state-level platforms built using CDS data
- Nationwide, only 32% of eTrace participants are also opted-into CDS, limiting the amount of data that makes it into the system



CDS participation rates vary widely by state



Source: ATF

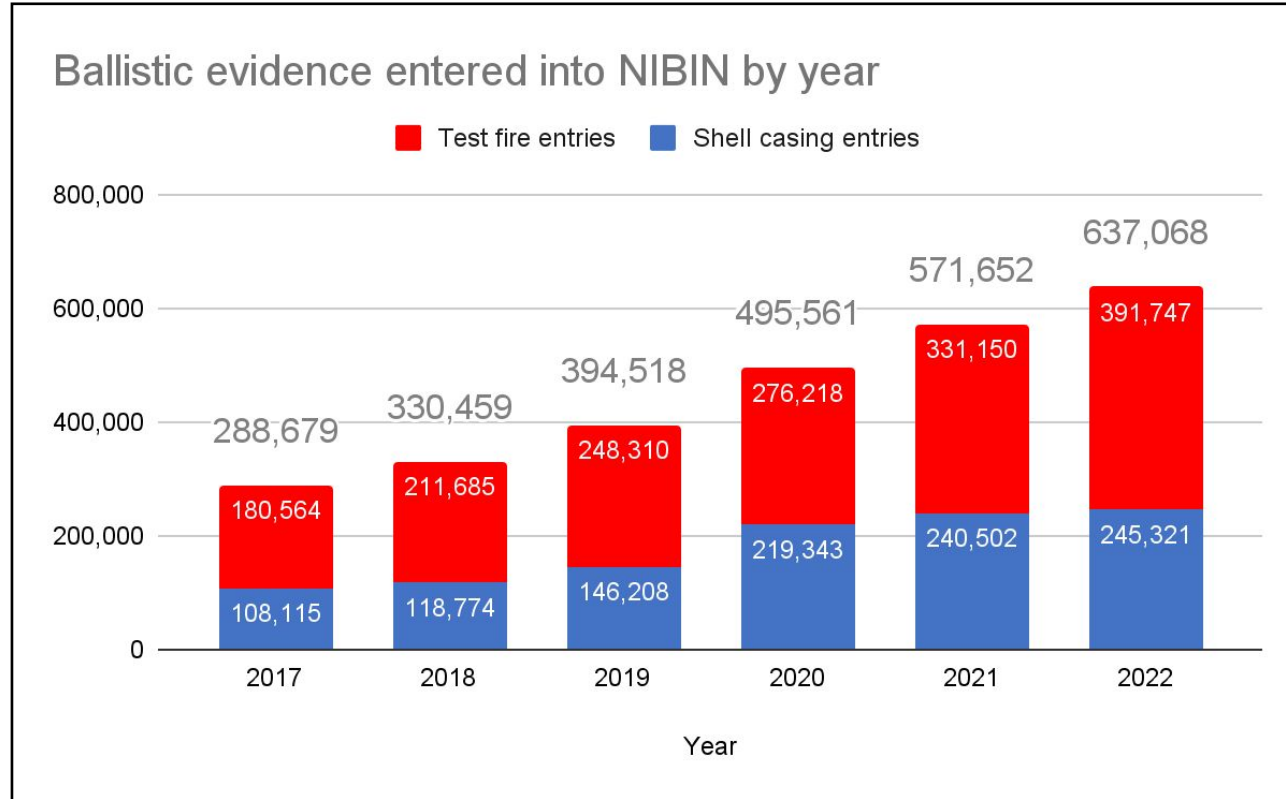
Awareness, state policy have roles to play in driving CDS participation

- **Lack of awareness** is one driver of lagging participation
- **State policy has a role to play**
 - 12 states with policies mandating the tracing of all recovered crime guns
 - NJ AG issued a directive in 2018 mandating that all law enforcement agencies trace guns using eTrace and opt into CDS

“When you see [police] departments not signed up [for CDS], sometimes you just need to call them and explain the system and tell them how easy it is [to opt-in to CDS]...once they understand that, we have not run into much resistance.”

–State AG staffer

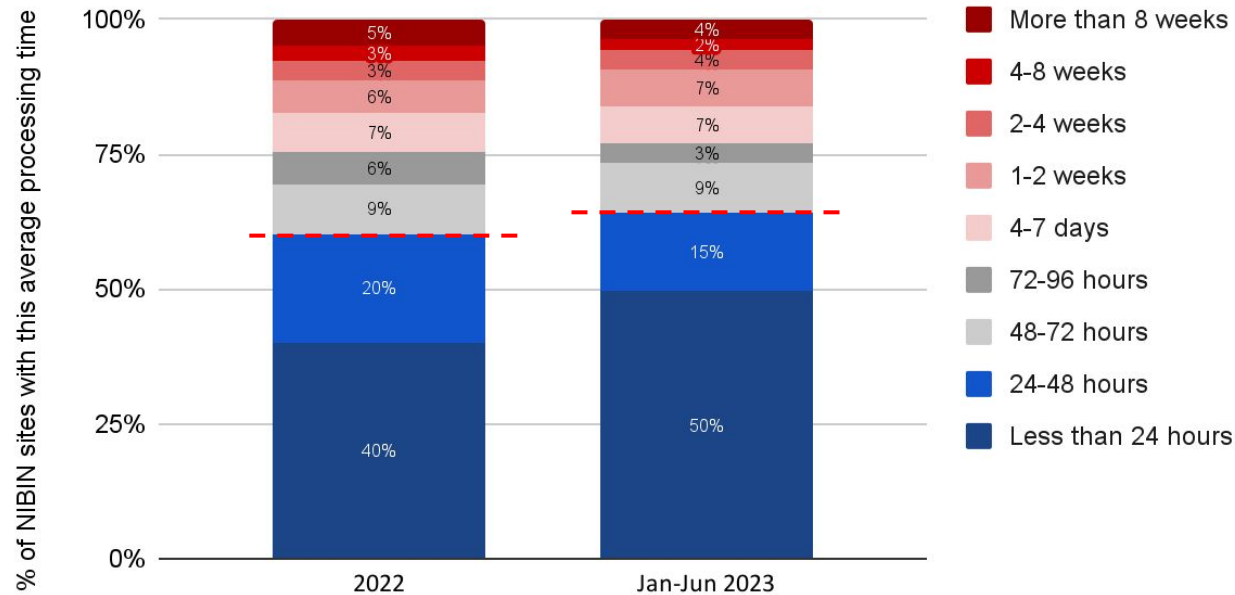
NIBIN usage has grown significantly, but there remain gaps to comprehensive usage



- Despite growth, reporting from 2018 found that **only 25% of collected shell casings** were entered into NIBIN

NIBIN processing times can be slow and unpredictable

Average processing times (from acquisition to lead generation) for test-fires by year



- **35% of NIBIN sites** had an average lead generation time of **greater than 48 hours** (failing to meet ATF's minimum standards)

Expanded NIBIN capacity needed

- **298 NIBIN sites in the US**, compared to over 18,000 police departments
 - 6 states (Hawaii, Maine, Montana, North Dakota, South Dakota, Wyoming) with no NIBIN machines at all as of June 2023
- **More NIBIN machines and technicians** would allow for more evidence entry and faster processing
- **NIBIN equipment costs roughly \$200K per machine**
 - High cost driven in part by a single source contract (no vendor competition)

NESS brings together data from eTrace, NIBIN, and a police department's RMS system

- **eTrace and NIBIN systems are siloed**
- **NESS has the potential to solve this problem**, integrating crime gun intelligence data in a map-based platform

“The end game is to have a combined NIBIN and eTrace tracking system, so that all the important information comes up for us [in one place].”

–State AG staffer

Gaining access to NESS is time and resource intensive, limiting current participation

- **Getting access to NESS takes time and resources**
 - According to ATF, the process of connecting a police department's RMS to NESS "requires an experienced IT point of contact [from the department]...the amount of time required varies but is typically about 8 hours/week for 3 months to create and automate data transfer."
- As of March 2024, **only about 300 law enforcement agencies are signed up for NESS**

Crime Gun Intelligence Centers integrate and apply these tools

- **CGICs are location-based collaborations between ATF, local PDs, prosecutors, crime analysts, etc**
 - Focused on “the immediate collection, management, and analysis of crime gun evidence in real time...to identify shooters, disrupt criminal activity, and prevent future violence”
- There are **54 CGIC sites nationwide**
 - Initial BJA grants to support CGICs in Milwaukee and LA were \$1M each
 - Implementation is not always consistent



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Crime gun intelligence tools must be integrated, national in scope, efficient, and user-friendly

- ATF should **integrate all eTrace and NIBIN data nationwide** (potentially via NESS), visualizing this data in a map-based format
 - Allow all law enforcement agencies who participate in eTrace/CDS and NIBIN to access this platform
 - Allow all law enforcement to search this data by individual characteristics
- To improve timeliness and investigative value of eTrace and NIBIN data:
 - ATF should **reduce turnaround times** for eTrace such that all results are delivered within **7 days** (and 48 hours for urgent requests); reduce turnaround times for NIBIN such that **all leads are generated within 48 hours**
 - Federal policymakers should remove barriers and **mandate that ATF compile and digitize searchable gun sale and transfer records**
 - State and federal policymakers should **mandate the recording of firearm transfers beyond the first retail purchase**

State and local law enforcement agencies must participate in and use tools comprehensively

- ATF should **create a liaison office** and a **technical support function to increase awareness of and facilitate participation** across all CGI tools: eTrace, CDS, NIBIN, and NESS
- State and local law enforcement **agencies should sign up to participate in eTrace, CDS, NIBIN, and NESS**; and should **create departmental policies that mandate all recovered crime guns be traced via eTrace and all recovered ballistic evidence be submitted into NIBIN**
- State law enforcement should **support training for local LE on how to use ATF's crime gun intelligence tools**
- State policymakers should **mandate that all in-state law enforcement agencies enroll in and comprehensively use eTrace, CDS, and NIBIN**

Additional research is required to understand impact, and identify necessary improvements

- **US DOJ (through NIJ) should fund the following evaluations:**
 - A comprehensive national evaluation of eTrace and CDS
 - An updated national evaluation of NIBIN
 - An evaluation of NESS impact-to-date
 - Updated evaluations of CGICs with consistent research methodologies
- **ATF should conduct needs assessments to answer the following questions:**
 - How much additional NTC staff is required to achieve timely eTrace processing?
 - How many additional NIBIN machines and technicians are required to achieve timely NIBIN processing?
- **State policymakers should conduct a needs assessment answering:**
 - How many additional NIBIN machines and technicians are required to achieve timely NIBIN processing, and where should these resources be allocated?

Expanding and optimizing CGI tools will require a significant investment of resources

- ATF should **allocate discretionary funds and/or request additional budget** required to improve processing times; create an integrated national platform for CGI data; provide NESS access to more agencies, eliminating the current waitlist
- Federal policymakers should **increase ATF's budget to support the recommended improvements; earmark federal LE grants** to go towards state and local agencies' use of CGI tools; and **expand the CGIC initiative** to new cities
- State and local policymakers should **provide funding for the creation of state-level crime gun analytics platforms; outreach and awareness campaigns** that would drive increased usage of CGI tools; **new NIBIN terminals** in strategic locations; and the **creation and ongoing operation of CGICs**

Joyce created a database of eTrace participants and released raw ATF data

- <https://www.joycefdn.org/gvp-database>

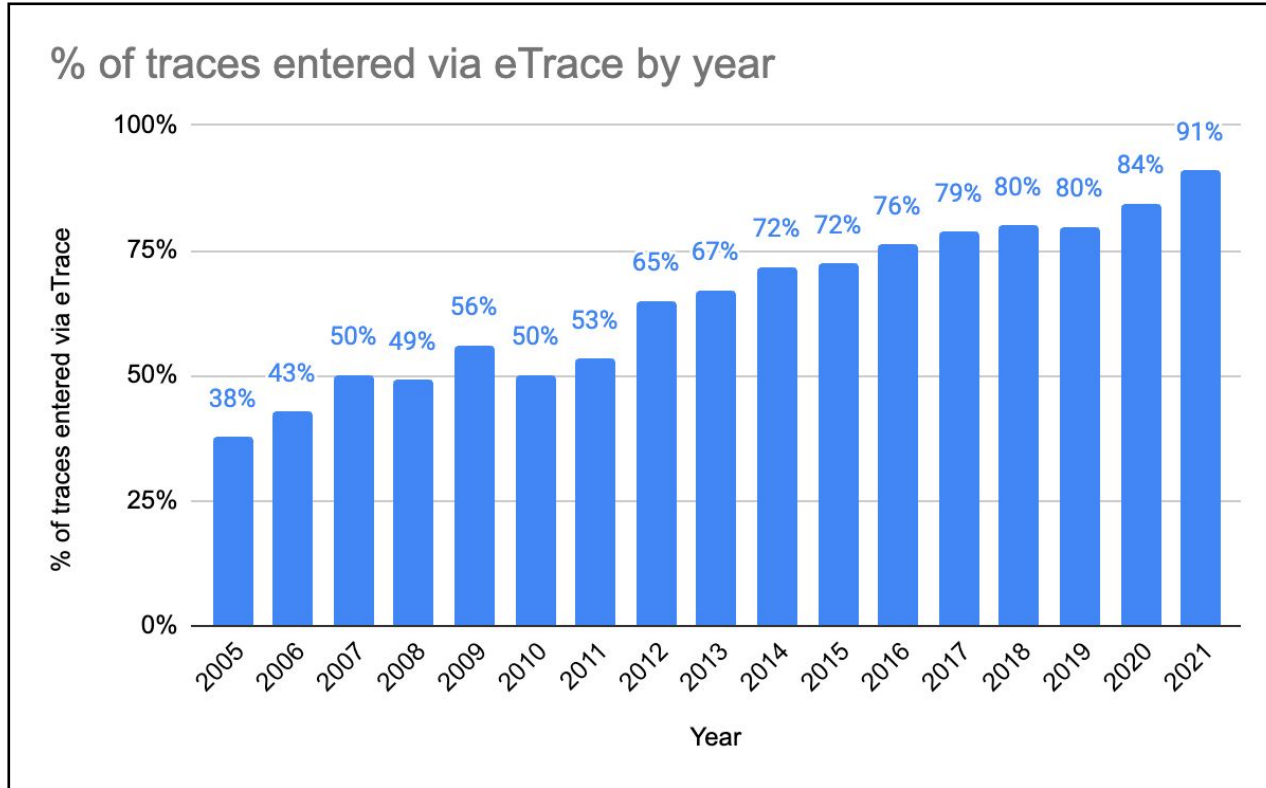
<input type="text" value="Search by keyword"/>	<p>15Th Circuit Drug Enforcement Unit</p>	<p>17Th Judicial Circuit Drug Task Force</p>
<p>eTraceParticipant</p> <ul style="list-style-type: none"> • Any Yes No 	<p>1854 Treaty Authority Enforcement Division</p>	<p>22Nd Judicial Circuit Drug Task Force</p>
<p>Collective Data Sharing Participant</p> <ul style="list-style-type: none"> • Any Yes No 	<p>24Th Judicial Circuit Drug And Violent Crime Task Force</p>	<p>5Th Judicial Circuit Narcotics Unit</p>
<p>Location</p> <ul style="list-style-type: none"> • All Locations Alabama Alaska 	<p>7Th Judicial District Crime Task Force</p>	<p>Abbeville County Sheriff's Office</p>

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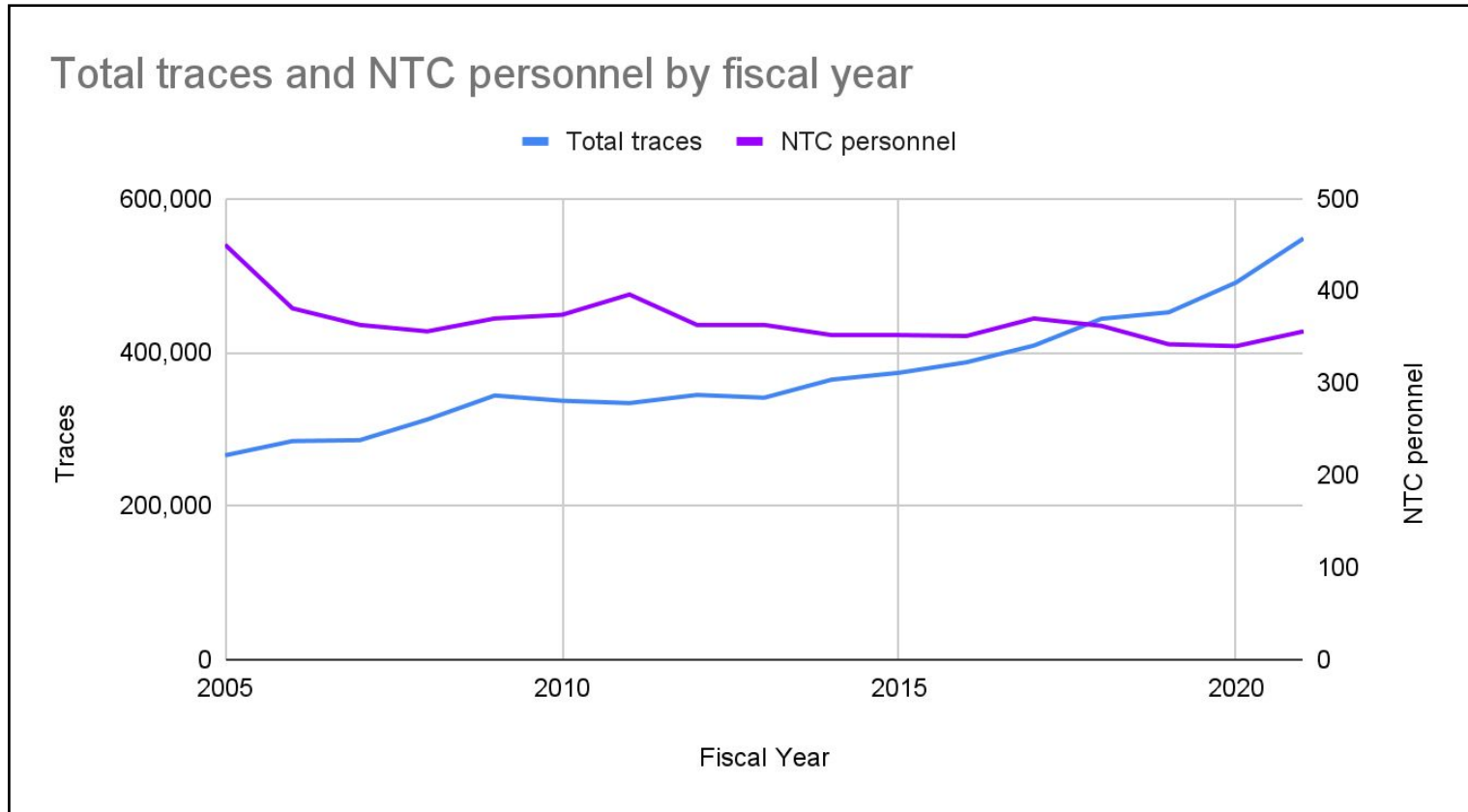
APPENDIX

eTrace has become the dominant method for submitting and receiving trace requests



- **Over 90%** of all trace requests are now submitted via eTrace
 - Remainder are submitted via phone, fax, or mail

NTC staffing has not kept up with increases in trace volume

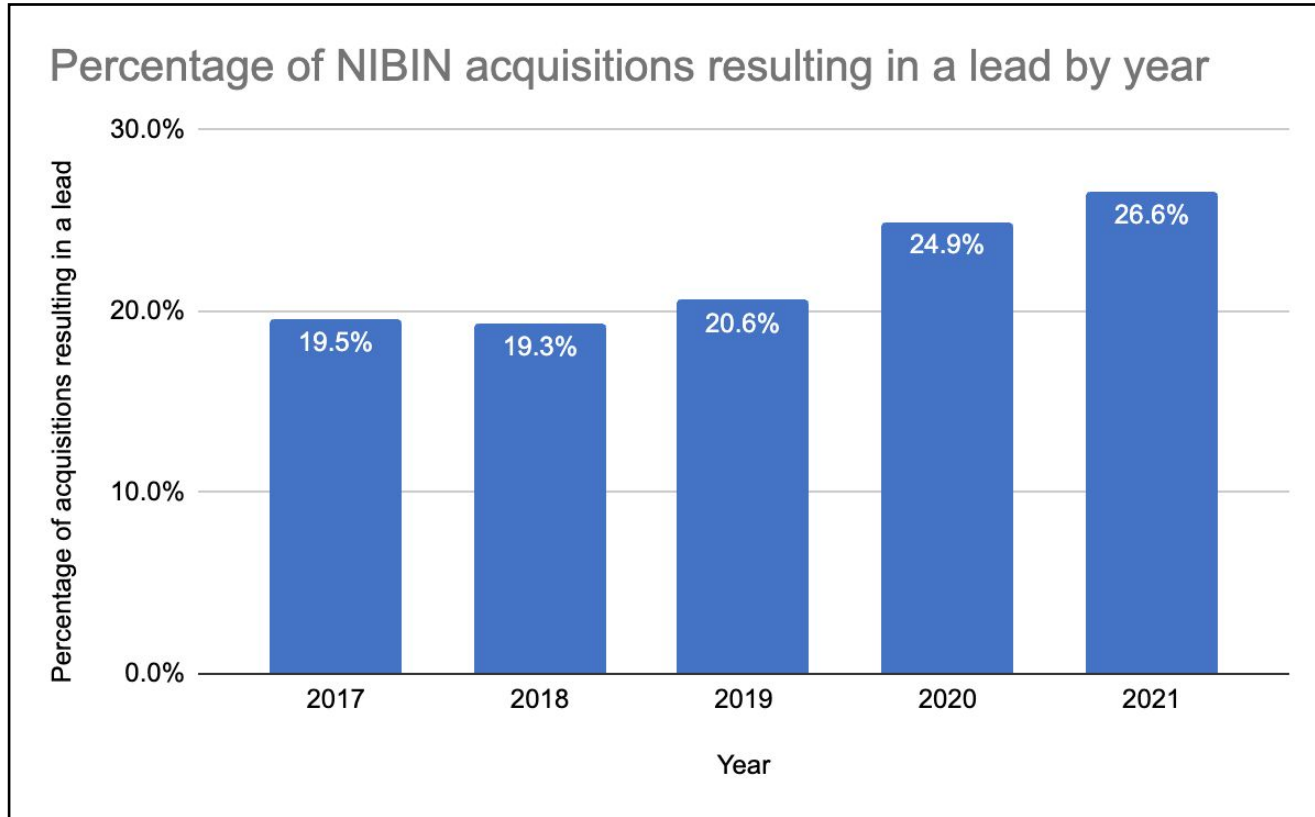


Source: ATF

NIBIN is the only ATF CGI tool to be formally evaluated; with some promising results

- **2019 evaluation of Milwaukee’s CGIC found NIBIN to be “particularly helpful” in investigating non-fatal shootings**
 - Clearance rate for non-fatal shootings with a NIBIN lead went up from 23% in 2014 to 36% in 2017, significantly higher than the clearance rate for non-fatal shootings without a NIBIN lead (24%)
- **2021 evaluation of Phoenix’s CGIC found that the implementation of the CGIC increased clearance rates for NIBIN-related cases by:**
 - 36% for murder, 15% for aggravated assault, 14% for weapons possession, and 8% for discharging a firearm
 - Over the same period of time, clearance rates for non-NIBIN related cases remained steady

Increased NIBIN usage has driven higher rates of lead generation



- Several notable examples of how NIBIN has helped law enforcement connect the dots between and solve shootings