Document Title:	State Progress in Record Reporting for Firearm-Related Background Checks: Fingerprint Processing Advances Improve Background Checks
Author(s):	Owen Greenspan; Richard Schauffler
Document No.:	250275
Publication Date:	September 2016
Award No.:	2009-NS-BX-K050

This resource is part of a series of BJS grant-funded reports on firearm-related background checks. This report details the importance of fingerprint-supported criminal history records for background check purposes, including: challenges States face in reporting; strategies that have been implemented to overcome those challenges; and progress States are making in improving the timeliness and accuracy of firearm-related background checks.

State Progress in Record Reporting for Firearm-Related Background Checks:
Fingerprint Processing Advances Improve Background Checks

by Owen Greenspan, SEARCH and Richard Schauffler, National Center for State Courts   September, 2016

Introduction

Technology advances in criminal record exchange systems and fingerprint processing continue to produce significant improvements in the quality and availability of information critical to making sound firearm-related background check decisions. The volume and speed with which fingerprints are transmitted from booking stations in local agencies to a state criminal records repository enables rapid updating and availability of criminal record information. The National Instant Criminal Background Check system (NICS) check utilizes records from several Federal databases and of these the Interstate Identification Index (III) houses fingerprint-based records. Improving fingerprint reporting, storage, and processing increases the timeliness and accuracy of background checks for the purpose of determining eligibility for firearms ownership. In 2015, the III was able to effectively and reliably respond to more than 22.2 million firearm-related search requests, an average of more than 63,000 per day.[1]

Number of Records in State Criminal History Repositories, 1995 and 2014
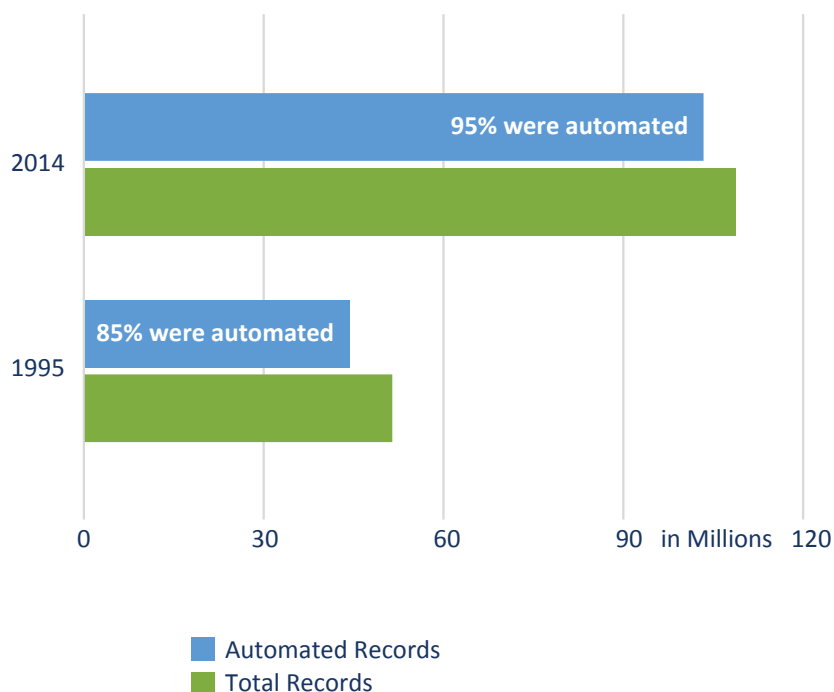
Increasing the availability of automated criminal history records is one way to improve the speed and accuracy of background checks. In 1995, there were over 49 million criminal history records in state criminal history repositories, of which 86% were automated. By the end of 2014, those numbers had risen to almost 106 million with a 95% automation rate. The chart shows the percent of automated records for those two years.

1   Fact Sheet: New Executive Actions to Reduce Gun Violence and Make Our Communities Safer, January 5, 2016. https://www.whitehouse.gov/the-press-office/2016/01/04/fact-sheet-new-executive-actions-reduce-gun-violence-and-make-our

Typically, more than 91% of NICS checks are cleared immediately while the balance is delayed up to 72 hours for clarification of information surfaced during the background check process.

Background

In 1993, Congress passed the Brady Handgun Violence Prevention Act (Brady Act) that, among other things, created the National Instant Criminal Background Check System (NICS). The NICS is the national system that enables Federal Firearms Licensees (FFL) to initiate a background check through the FBI or a State Point of Contact (POC).[2] The FBI or POC will check all available records to identify persons who may be prohibited from receiving or possessing firearms. The records may be included in the following databases.

- National Crime Information Center (NCIC) – An electronic database consisting of 21 files, 10 of which are queried for a NICS-related background check. These files help criminal justice professionals apprehend fugitives from justice, locate missing persons, recover stolen property, identify terrorists, and verify persons subject to domestic violence protection orders.

- Interstate Identification Index (III) – Administered by the FBI, and participated in by all states, the III is a fingerprint-supported automated criminal records exchange system that includes arrest and disposition information for individuals charged with felonies or misdemeanors. Information that may be available via

III includes persons who are fugitives from justice, persons found not guilty by reason of insanity or adjudicated to be incompetent to stand trial, persons found guilty of misdemeanor crimes of domestic violence, and persons under indictment.

- NICS Index – A database, separate from NCIC and III, created specifically for the purpose of conducting a background check for a firearms-related purpose. The NICS Index contains information contributed by local, state, tribal, and federal agencies pertaining to persons prohibited from receiving or possessing a firearm pursuant to state and/or federal law. While any disqualifying record may be entered into the NICS Index, it is not intended to duplicate information entered in NCIC or III. Instead, the database was designed to house disqualifying information not otherwise available at the national level.

- Department of Homeland Security's U.S. Immigration and Customs Enforcement (ICE): Relevant databases of the ICE are routinely queried by the FBI NICS section, and can be queried by POC states, for non-U.S. citizens attempting to receive firearms in the United States.

States acting as a POC also search additional databases containing large volumes of state and local court and law enforcement records. Such records may render prospective gun purchasers disqualified under federal and/or state laws.

NICS Participation Map
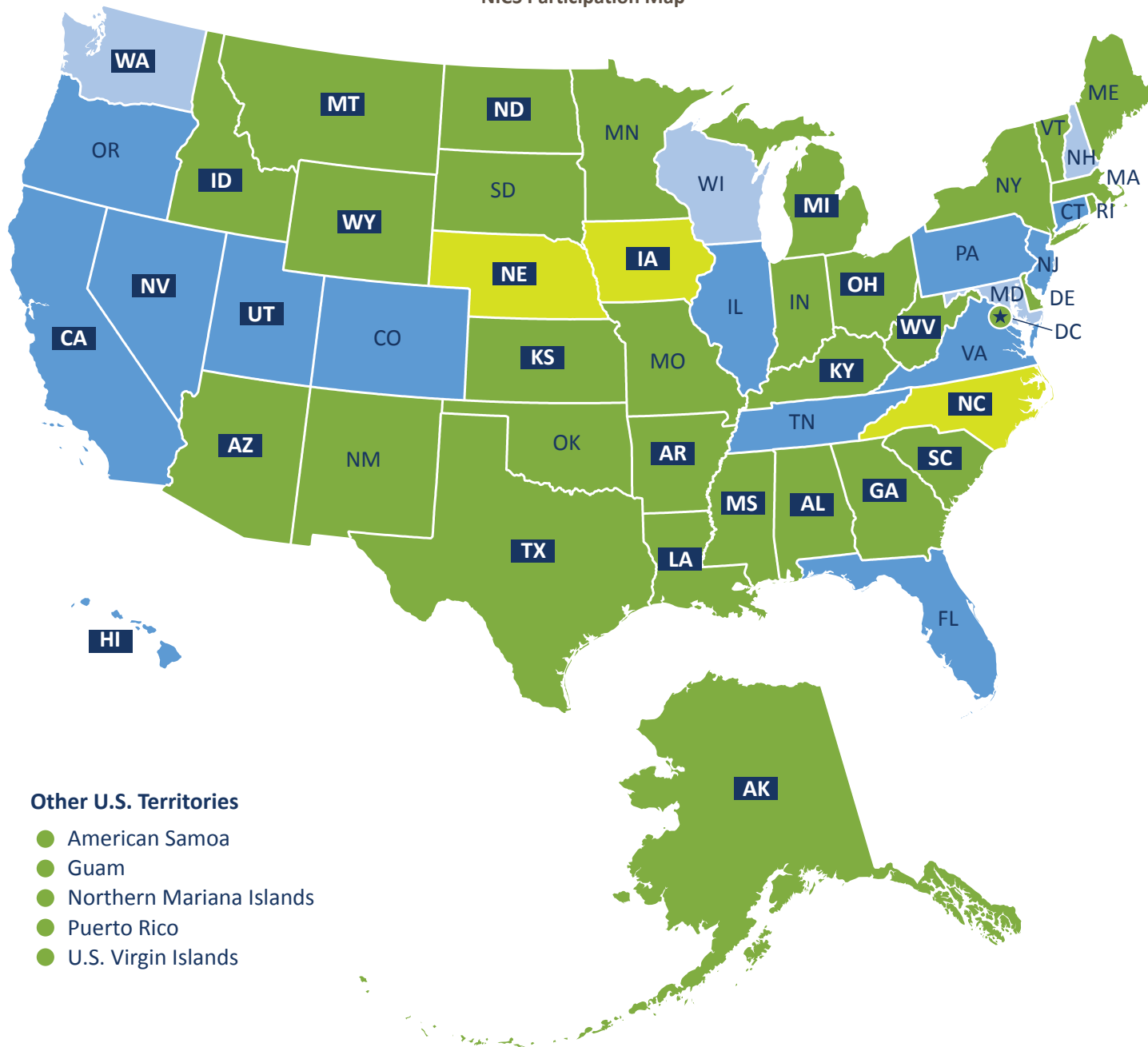
Other U.S. Territories

- American Samoa
- Guam
- Northern Mariana Islands
- Puerto Rico
- U.S. Virgin Islands

Point of Contact (POC)

26 **At Least One ATF-Qualified Alternate Permit —** The permits are issued by local or state agencies.

13 Full POC State — Contact state/territory for all firearm background checks including permits

4 Partial POC — Contact state for handgun and FBI for long gun background checks

3 Partial POC — Contact state for handgun permit and FBI for long gun background checks

36 Non-POC — Contact FBI for all firearm background checks

Please refer to the latest Permanent Brady Permit Chart for specific permit details at

www.atf.gov/rules-and-regulations/permanent-brady-permit-chart

SEARCH   NCSC   BJS
National Center for State Courts

Where are NICS Prohibiting Records Reported?

The following lists the firearm purchase-prohibiting categories identified in the Brady Act and shows the federal database in which those records are appropriately stored.
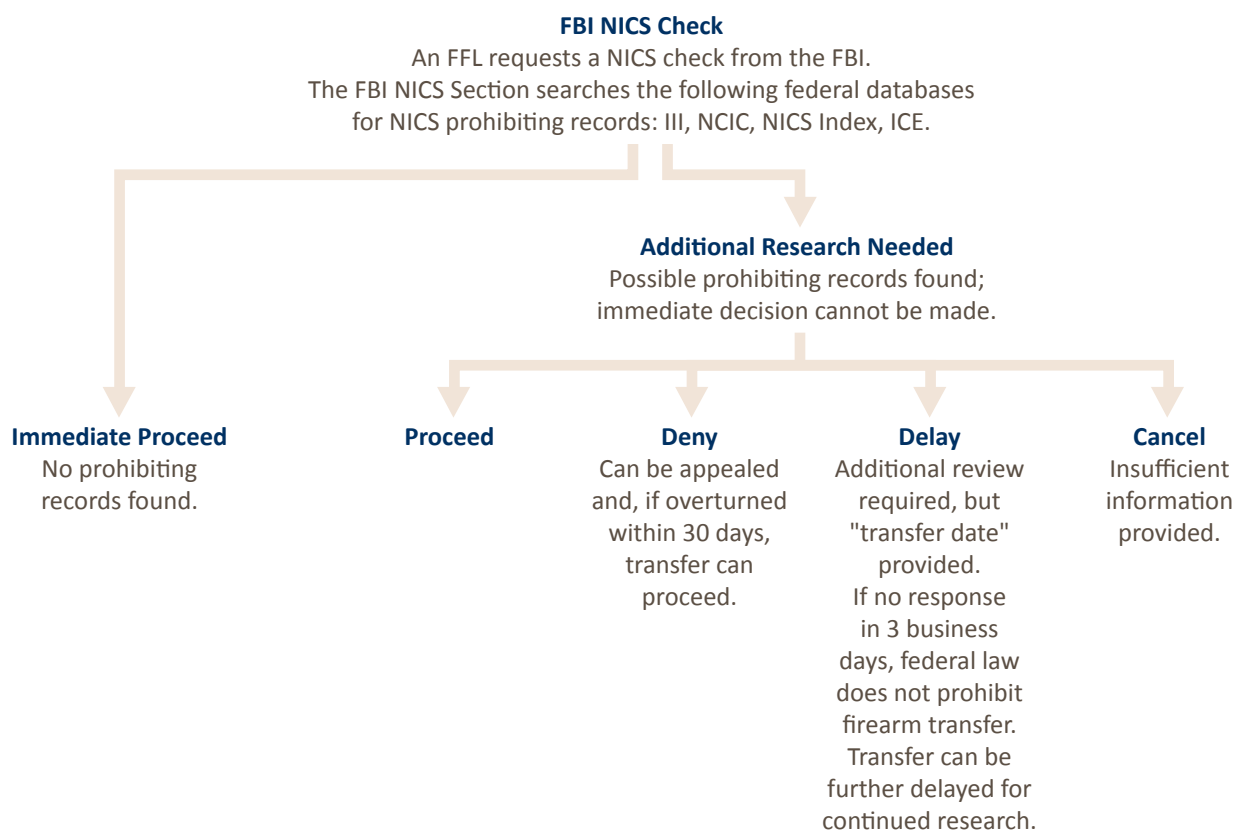
Prohibiting Record Type	Federal Database(s)	
Felony/Serious Misdemeanor Convictions	**III:** Should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Should be placed here if not available in III.
Fugitives from Justice	**NCIC:** Should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Should be placed here if not available in NCIC.
Unlawful Drug Use	**III:** Arrests and convictions for drug offenses should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Information such as admission of use and failed drug tests should be placed here.
Mental Health	**III:** Persons found not guilty by reason of insanity or adjudicated to be incompetent to stand trial should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Involuntary commitments to mental institutions for the purpose of treatment should be placed here as they would be otherwise unavailable for firearms background check searches. Persons found not guilty by reason of insanity or adjudicated to be mentally defective should most appropriately be placed here if they are otherwise unavailable through III.
Subjects of Domestic Violence Protection Orders	**NCIC:** Should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Should be placed here if qualified for, but not available in, NCIC or if not qualified for NCIC, but still prohibited by state law.
Misdemeanor Crimes of Domestic Violence Convictions	**III:** Should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Should be placed here if not available in III or, if conviction is available in III, should also be placed here if qualifying relationship and/or force element is not available in III.
Indictments	**III:** Should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Should be placed here if not available in III.
Dishonorable Discharges	**III:** Should most appropriately be placed here so they are available for other criminal justice purposes.	**NICS Index:** Should be placed here if not available in III.
Illegal or Unlawful Aliens	**NICS Index:** Should be placed here as they would otherwise be unavailable for firearms background check searches.	
Renounced United States Citizenship	**NICS Index:** Should be placed here as they would otherwise be unavailable for firearms background check searches.	

NICS Background Checks and Criminal History Records

A national background check of a prospective firearms purchaser is based on the submission of the purchaser's name, sex, race and date of birth to the NICS. As a part of the screening process, a search for disqualifying information is always made against III, NCIC, and the NICS Index. Of the three databases, only III is supported by fingerprints, taken at the time of arrest, conviction, or incarceration. Similar to inquiries made by NICS personnel, firearms-related background checks at the state level may also be name based; however, in many instances the applicant for a license or Carry Concealed Weapon (CCW) permit will be fingerprinted and those fingerprints searched against state and federal criminal record databases.

The criminal history record[3], often called a Rap Sheet, chronicles criminal justice events linked to a biometric identifier.[4] This unique identifier, most commonly fingerprints, serves to positively associate an individual with arrests, prosecutions, judicial actions and other criminal justice events. States, territories, and the District of Columbia all have a central records repository which maintains fingerprint files, associated with criminal record information, on state offenders. It provides rap sheet information to in-state users for criminal justice and other authorized purposes. In many instances the state central repository also responds to requests from the FBI in connection with firearm-related background checks or requests sent on behalf of others.

FBI NICS Background Check Process

FBI NICS Check
An FFL requests a NICS check from the FBI.
The FBI NICS Section searches the following federal databases
for NICS prohibiting records: III, NCIC, NICS Index, ICE.

Additional Research Needed
Possible prohibiting records found;
immediate decision cannot be made.

Immediate Proceed
No prohibiting records found.

Proceed

Deny
Can be appealed and, if overturned within 30 days, transfer can proceed.

Delay
Additional review required, but "transfer date" provided.
If no response in 3 business days, federal law does not prohibit firearm transfer. Transfer can be further delayed for continued research.

Cancel
Insufficient information provided.

Source: www.fbi.gov/services/cjis/nics/nics-process-for-ffls

3   The term "criminal history record information" is defined by Federal regulations to mean "information collected by criminal justice agencies on individuals consisting of identifiable descriptions and notations of arrests, detentions, indictments, information or other formal criminal charges, and any disposition arising therefrom, including acquittal, sentencing, correctional supervision, and release." 28 CFR 20. www.it.ojp.gov/documents/28CFR_Part_20.PDF

4   Defined as the measurement and analysis of unique physical or behavioral characteristics (as fingerprint or voice patterns) especially as a means of verifying personal identity. www.merriam-webster.com/dictionary/biometrics

SEARCH   NCSC National Center for State Courts   BJS

Between 1995 and 2014, the number of individual offenders in state files grew by 112 percent while the number of person records available through the FBI administered III grew 473 percent.[5,6]
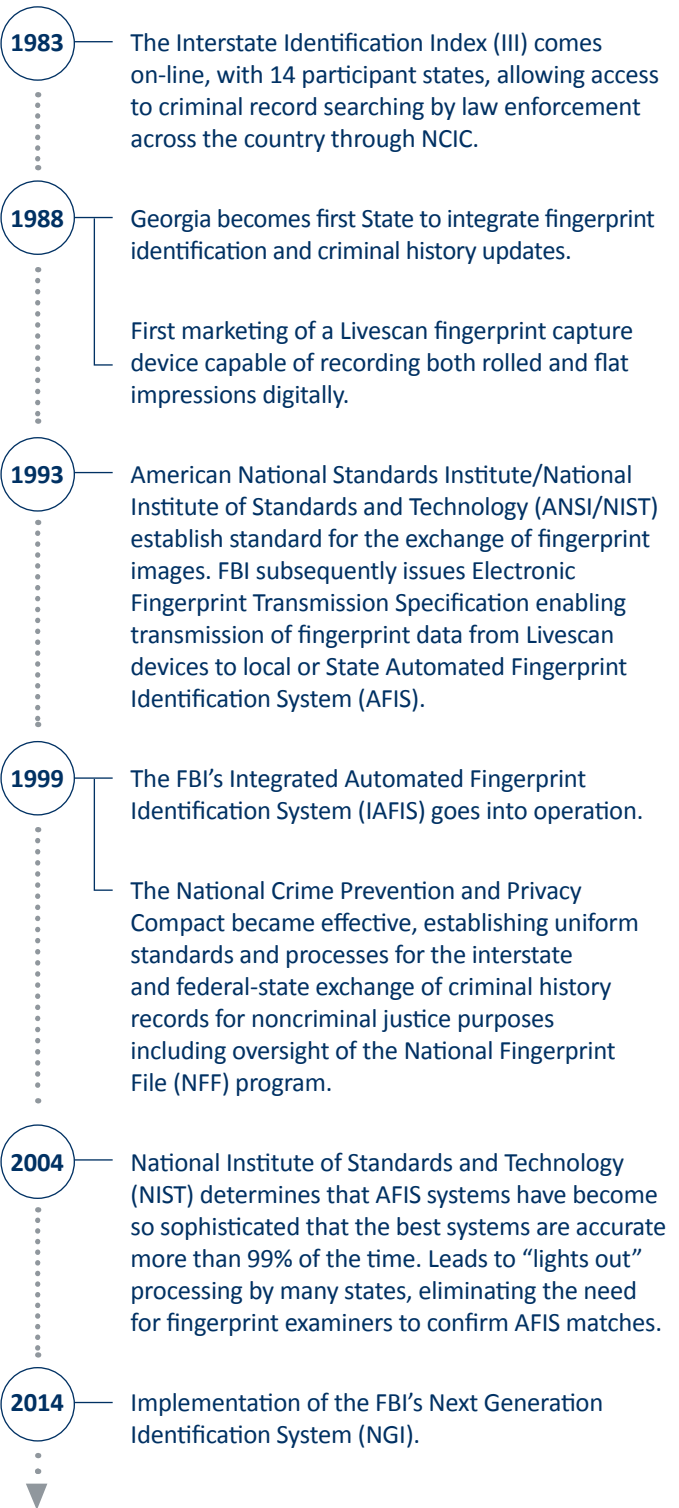
Offenders in State Criminal History Files and III (in Millions)

- ■ Individual Offenders in State Criminal History Files
- ■ Person Records Available in III
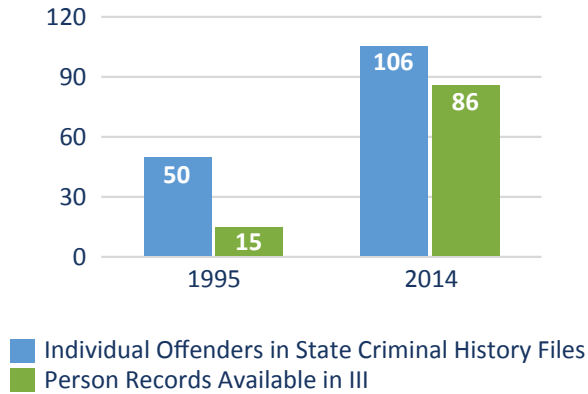
Automating Fingerprint Identification and Criminal Record Information

Early automation of fingerprint identification focused on names, biographic, and fingerprint classification information found on booking documents. Law enforcement agencies bought computers to record and sort arrest and fingerprint data, producing what became known as the Computerized Criminal History file, or CCH. On the federal level, the FBI introduced NCIC in 1967 with the goal of assisting law enforcement in apprehending fugitives and locating stolen property. When the III came on-line in 1983, with 14 states participating[7], access to criminal record searching by law enforcement across the country was through NCIC.[8]

Fingerprinting and the Criminal History Record Timeline

1983 — The Interstate Identification Index (III) comes on-line, with 14 participant states, allowing access to criminal record searching by law enforcement across the country through NCIC.

1988 — Georgia becomes first State to integrate fingerprint identification and criminal history updates.

First marketing of a Livescan fingerprint capture device capable of recording both rolled and flat impressions digitally.

1993 — American National Standards Institute/National Institute of Standards and Technology (ANSI/NIST) establish standard for the exchange of fingerprint images. FBI subsequently issues Electronic Fingerprint Transmission Specification enabling transmission of fingerprint data from Livescan devices to local or State Automated Fingerprint Identification System (AFIS).

1999 — The FBI's Integrated Automated Fingerprint Identification System (IAFIS) goes into operation.

The National Crime Prevention and Privacy Compact became effective, establishing uniform standards and processes for the interstate and federal-state exchange of criminal history records for noncriminal justice purposes including oversight of the National Fingerprint File (NFF) program.

2004 — National Institute of Standards and Technology (NIST) determines that AFIS systems have become so sophisticated that the best systems are accurate more than 99% of the time. Leads to "lights out" processing by many states, eliminating the need for fingerprint examiners to confirm AFIS matches.

2014 — Implementation of the FBI's Next Generation Identification System (NGI).

5   Survey of State Criminal History Information Systems, 1995, Criminal Justice Information Policy Series, May 1997, NCJ 163918. http://www.bjs.gov/content/pub/pdf/Sschis95.pdf
6   Survey of State Criminal History Information Systems, 2014, Criminal Justice Information Policy series, U.S Department of Justice, Bureau of Justice Statistics. www.ncjrs.gov/pdffiles1/bjs/grants/249799.pdf
7   California, Colorado, Florida, Georgia, Michigan, Minnesota, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Texas, Virginia, Wyoming
8   Use and Management of Criminal History Record Information: A comprehensive Report, A Criminal Justice Information Policy Report, November, 1993, U.S. Department of Justice, Bureau of Justice Statistics. P. 53. www.bjs.gov/content/pub/pdf/CCHUSE.PDF

SEARCH   NCSC National Center for State Courts   BJS

Livescan Technology

AFIS provided a means of rapidly searching and matching fingerprints, with a high degree of accuracy, against large databases. However, the process relied on the delivery, scanning, and classification of inked images manually recorded on physical fingerprint cards. As early as 1970 experimentation with ways to collect fingerprints without using ink was underway. The practice of taking three sets of arrest fingerprints (for local, state, and FBI use) was time consuming, messy, and often resulted in inconsistent quality between the sets. The primary obstacle was the difficulty in engineering a device that could capture nail-to-nail rolled finger impressions. That changed in 1988 with the marketing of a Livescan fingerprint capture device capable of recording both rolled and flat impressions.[9]

Livescan technology allows multiple sets of fingerprint cards to be generated from a single placement of fingers on a platen. A keyboard is used to enter arrest and biographic data. The fingerprint taker views a screen as images are being recorded enabling poor images to be recognized, immediately dismissed, and replaced. By comparing fingerprint features, the Livescan device detects if a finger image has been captured more than once, if hands have been transposed, or if the presentation of fingers is inconsistent with the required format sequence. The introduction of Livescan technology significantly improved the quality of fingerprint capture and, at the same time, reduced rejection rates. However, these devices initially were electronically capturing fingerprint images but printing fingerprints in hard copy for storage and submission. The capability to electronically transmit digitized fingerprint data to an AFIS system would await the development of several data submission standards.

Standards

Livescan-generated fingerprint cards delivered to the FBI were projected to reach 20,000 per day in 1997. Driven by a projected growth of twentyfold in just a few years the FBI moved toward accepting electronic submission of virtual fingerprint cards. These were defined as computer-generated data records containing the digital representation of the information found on an inked fingerprint card. A virtual fingerprint card contains both text and fingerprint image data.[10]

The FBI worked with the National Institute of Standards and Technology (NIST) to develop a standard for the exchange of fingerprint images. The standard, when first approved in 1993, supported 9 record types.[11] Today, the standard undergoes periodic review by communities of interest. When last updated in December 2015, the *Data Format for the Interchange of Fingerprint, Facial and Other Biometric Information*, spanned 21 record types.[12]

Building upon the fingerprint image standard, the FBI issued the Electronic Fingerprint Transmission Specification (EFTS), now known in its expanded form as the Electronic Biometric Transmission Specification (EBTS). This specification provides the technical requirements for acceptance of virtual fingerprints by the FBI. Along with other standards that were soon to follow, this standard was also useful for transmitting data from Livescan to local or State AFIS. The FBI and NIST also developed standards for certification of fingerprint scanning equipment. Major standards efforts focused on content, meaning, and representation of fingerprint data interchange formats.[13]

Collectively, these standards enabled fingerprint data to be captured, transmitted, searched and stored electronically.

9   Woodward Jr., John D., et.al. Biometrics. McGraw Hill., 2003. p. 57
10 Ibid.
11 Woodward Jr., John D., et al. p. 58
12 American National Standards Institute/National Institute of Standards and Technology,
     ANSI/NIST-ITL-2011
13 See www.fbibiospecs.cjis.gov/ for a list of relevant active and archived specifications.

Bringing Uniformity to the Criminal History Record

SEARCH, the National Consortium for Justice Information and Statistics, with sponsorship by the U.S. Department of Justice and the Bureau of Justice Statistics (BJS), empaneled the National Task Force on Increasing the Utility of the Criminal History Record (1993-1995).[14] The Task Force focused on the interstate utility of the rap sheet. It found that despite a criminal history record that was complete, accurate, and timely it was of diminished value if it could not be easily understood. Rap sheets created by state repositories frequently differed in content and format from other states. In addition, states vary in their definitions of common terms used on rap sheets. Among the Task Force's recommendations were a proposed model rap sheet, designed in an easy-to-read and interpret format, and the inclusion of a minimum set of data elements.[15]

The issuance of the National Task Force Report led to the creation of the Joint Task Force on Rap Sheet Standardization (JTF), an informal collaboration between several key entities.[16] While the National Task Force proposed uniformity of content and layout for the criminal history record, the JTF would need to overcome both technology and policy challenges on the path to implementing a standardized criminal history record. Among the challenges were:

- states and the FBI employed different formats and codes, which made the interstate exchange and interpretation of criminal history information difficult;
- criminal records are used for many purposes, and the inability to extract only the information that is needed created problems for both data providers and the end user of this information; and
- there was no method of combining or electronically collating criminal records from multiple sources (i.e., states and the FBI/III).

The JTF developed a Concept of Operations, which called for each state and the FBI to transmit records to the International Justice and Public Safety Network (Nlets) where they would be consolidated and delivered to the requestor in a standardized format.[17] The JTF issued an Interstate Criminal History Transmission Specification that defined a new criminal history exchange mechanism, and testing began. It was not until several years later, with the emergence of eXtensible Markup Language (XML) that the proposed exchange mechanism was truly able to move forward.

The JTF continues to oversee the evolution of the rap sheet transmission specification. It has expanded its content while bringing it into conformance with the widely adopted Global Justice XML Data Model (GJXDM – http://it.ojp.gov/initiatives/gjxdm) and the National Information Exchange Model (NIEM – www.niem.gov). It has worked with the FBI NICS Section to facilitate interpretation of rap sheet information by using the specification to standardize disparate state terminology.

Although crafted for interstate purposes, the specification was advantageous for in-state use as well. Now state repositories and requestors had the capability to tailor where information was sent (e.g., a specific printer) and how it was displayed on a screen or printer. For example, a style sheet could now be developed to display information customized to the needs of a state agency conducting background checks.

There is no national statutory mandate for a uniform criminal history record. Similarly, there is no legal prescription for record content. Adoption of the standardized rap sheet is voluntary. Among its benefits are better data for making criminal justice decisions, streamlining of background checks, and more accurate and timely information on persons prohibited from firearms purchases.

---

14 The Task Force was convened under a cooperative agreement between the Bureau of Justice Statistics, U.S. Department of Justice, and SEARCH. The purpose of the Task Force was to develop recommendations concerning the content of criminal history records among the states and to recommend a standard format for such records.

15 Increasing the Utility of the Criminal History Record: Report of the National Task Force, Criminal Justice Information Policy Series, December 1995, NCJ-156922, www.bjs.gov/content/pub/pdf/IUCHR.PDF

16 JTF initially was comprised of representatives from the FBI Criminal Justice Information Services (CJIS), the CJIS Advisory Policy Board, the International Justice and Public Safety Network (Nlets), SEARCH and state and local justice agencies. Representation from the National Center for State Courts and the National Crime Prevention and Privacy Compact Council were subsequently added.

17 Nlets is a private, nonprofit corporation owned by the states. It provides a secure international justice telecommunications capability and information services. www.nlets.org

With funding from BJS, Nlets has assisted states in adopting the standardized rap sheet through the Criminal History Information Exchange Format (CHIEF) Project. The Interstate Criminal History Transmission Specification has been adopted by at least 29 States, the District of Columbia and the FBI.[18]

The Integrated Automated Fingerprint Identification System (IAFIS)

In July 1999 the FBI's Integrated Automated Fingerprint Identification System (IAFIS)[19] went into operation. The system's specified performance requirements were rigorous but in actual operation were exceeded. For example, the plan was to respond to urgent criminal submissions within 2 hours but the actual experience showed that the system could process all criminal fingerprints within 2 hours. The intention was to respond to criminal record requests received through III in 2.7 seconds. This requirement was consistently exceeded with responses within 1 second.[20]

IAFIS brought the capability to fulfill the vision of a paperless end-to-end process connecting a booking station's Livescan to a state repository and a state repository to the FBI. When replaced by Next Generation Identification (NGI) (discussed in more detail below) in the summer of 2014, IAFIS was the largest criminal fingerprint database in the world. IAFIS included not only fingerprints, but corresponding criminal histories; mug shots, scars and tattoo photos; physical characteristics like height, weight, and hair and eye color; and aliases.

Improvements in the Quality and Availability of Criminal Records

Significant advances in fingerprint processing and identification technology created the opportunity for dramatic improvements in the quality and availability of criminal records, but the acquisition and implementation of these scientific developments needed a serious commitment of resources. If the promise of a rapid throughput, highly accurate, ever-growing national criminal records exchange system was to be realized, it would take more than technology; sustained funding assistance would be required.

The Brady Act provided the initial funding support for the BJS-administered National Criminal History Improvement Program (NCHIP), introduced in 1995. NCHIP provided the major impetus for automation of fingerprint processing and the exchange of fingerprint/criminal record data at both the state and federal levels. Within the first two years of operation, every state received funds to upgrade criminal record systems, including establishing and upgrading AFIS and supporting participation in III.

Between 1995 and 2015 every state, five territories, and the District of Columbia received grants under NCHIP totaling $633 million. In the early years of NCHIP the program was closely coordinated with the U.S. Department of Justice, Bureau of Justice Assistance (BJA) Byrne Memorial Grant Program. Since 2000 NCHIP has been funded under the Crime Identification Technology Act of 1998 (Pub L. 105-251) and the Victims of Trafficking and Violence Prevention Act of 2000 (Pub. L. 106-386).

Since the establishment of NCHIP the number of states participating in III has grown from 26 to all 50 states and the District of Columbia. The combined investment of federal dollars with state and local funds has made it possible for every state to benefit from automated fingerprint identification technology. At the local level criminal and civil applicant fingerprints are captured electronically, transmitted for searching against a state-level data base with the capability, as appropriate, to electronically forward these fingerprints to the FBI. Significant improvements in the accuracy, completeness, and availability of criminal record information have been achieved.

18 Source – www.nlets.org.
19 IAFIS was subsequently replaced with the Next Generation Identification system.
20 Integrated Automated Fingerprint Identification System Final Report by James J. Jasinki to the FBI CJIS Advisory Policy Board, June 13, 2000.

SEARCH NCSC BJS
National Center for State Courts

For instance:

- Over 49 million criminal history records were in the criminal history files of the State criminal history repositories on December 31, 1995 of which 86% of the records were automated. By the end of 2014, those numbers had risen to 106 million with a 95% automation rate. (An individual offender may have records in several States).[21,22]

- At the end of 1995, there were 25.5 million records available through III from either the 30 participant states or the FBI. By the end of 2014, there were 86 million records available through III with every state, the District of Columbia, and the FBI participating.[23,24]

- During 1995, over 6.9 million arrest fingerprint cards were submitted to the State criminal history repositories. In 2014, nearly 12 million fingerprints were submitted to the state criminal history repositories for criminal justice purposes. Of these at least 89% were submitted by either Livescan fingerprint capture or card scan devices.[25,26]

- In 1995, the state criminal record repositories reported that the average number of days between receipt of fingerprints and entry of arrest data into the criminal history databases was 24 days. By the end of 2006, many states were measuring processing times in hours rather than days with 23 states, the District of Columbia and American Samoa reporting processing times of 1 day or less.[27,28,29]

States have continuously used NCHIP funding in ways that have improved criminal records systems and benefitted firearm-related background check determinations. Illustrative of the awards made to 36 States, the District of Columbia and Guam in 2015 are the following projects:

- Enhancing records management software provided to local law enforcement agencies to improve the reporting of misdemeanor convictions for domestic violence to support NICS.

- Reducing the backlog in reporting of dispositions to the state criminal history repository by the court system to close gaps in criminal history records that impede the ability of NICS to accurately confirm a prohibited prospective buyer of a firearm.

- Increasing the disposition/arrest matching rate on criminal history records and correct and update incomplete criminal history information.

- Building interfaces between case management systems and the FBI's NGI System.

- Improving the accuracy, completeness, and timeliness of court conviction and disposition data sent to the criminal history repository.

- Researching and resolving initially non-approved transactions for the purchase of firearms.

21 Survey of State Criminal History Information Systems, 1995, Criminal Justice Information Policy series, U.S. Department of Justice, Bureau of Justice Statistics. www.bjs.gov/content/pub/pdf/Sschis95.pdf
22 Survey of State Criminal History Information Systems, 2014, Criminal Justice Information Policy series, U.S Department of Justice, Bureau of Justice Statistics. www.ncjrs.gov/pdffiles1/bjs/grants/249799.pdf
23 Survey 1995, *supra* note 21
24 Survey 2014, *supra* note 22
25 Survey 1995, *supra* note 21
26 Survey 2014, *supra* note 22
27 Survey 1995, *supra* note 21
28 Survey 2014, *supra* note 22
29 2006 was the last year the Survey of State Criminal History Information Systems collected backlog information.

SEARCH   NCSC   BJS
National Center for State Courts

Fingerprints and Firearm-related Background Checks

The NICS began operation on November 30, 1998. From its inception through May 31, 2015, State POCs processed 114.6 million firearm-related background checks (54% of all background checks) and the FBI NICS Section handled 96.9 million. State-level firearm-related background checks are conducted by many states as part of a licensing process to possess, receive, or carry a firearm.

Historically the denial rate for checks conducted by state and local agencies is 1.8% while the FBI NICS Section rate is approximately 1.2%.[30] The difference is in part due to the application of state level statutory prohibitors, which may include criminal offenses and convictions beyond those that are disqualifying under federal law. Between 1999 and 2014 nearly 1.34 million denial decisions were made by state and local agencies while nearly 1.17 million denial decisions were made by the FBI NICS Section. The most common basis for denial of a firearm transfer by the POC states is based on a state law prohibition. The most common reason for denial of a firearm transfer by the NICS Section is a conviction for a crime punishable by more than one year or a misdemeanor punishable by more than two years (i.e., felony/serious misdemeanor convictions).[31,32]

Federal Prohibitor Categories that May Rely on Criminal Record Information

Prohibiting Record Type	Total # of Denials By NICS Section (excludes state checks)*	% of All Denials
Felony/Serious Misdemeanor Convictions	728,182	54.4
Indictments	38,271	2.9
Fugitive from Justice	160,401	12.0
Unlawful Drug User/Addicted to a Controlled Substance	116,615	8.7
Mental Health	24,277	1.8
Misdemeanor Crime of Domestic Violence Convictions	125,616	9.4
Dishonorable Discharges	1,012	0.1

*NICS Section denials November 30, 1998 through July 31, 2016

30 Background Checks for Firearm Transfers, 2013-14-Statistical Tables, U.S. Department of Justice, Bureau of Justice Statistics, June 2016. Table2. www.bjs.gov/content/pub/pdf/bcft1314st.pdf
31 FBI, Criminal Justice Information Services Advisory Policy Board, Fall 2015 Working Group Meeting Information Topics, Staff Paper Topic U, National Instant Criminal Background Check System (NICS) Update.
32 Background Checks for Firearm Transfers, *supra* note 30, table 5.

Challenges and Solutions

The accuracy, completeness, and timely availability of criminal records information and the ability to respond to ever growing volumes of requests remain challenging. Efforts at both the state and federal levels continue to yield improvements in information exchange capabilities, and thus to improve firearm-related background checks. Extensive collaboration within states and between the FBI and the states addressing policy, standards, and technology is the foundation for progress while maintaining all that has been achieved.

Next Generation Identification (NGI)

The FBI's Criminal Justice Information Services Advisory Policy Board (APB) – which consists of state, local and national criminal justice officials – is a driving force behind ongoing advancements in fingerprint identification technology and criminal record exchange systems including the recently implemented NGI, which was rolled out incrementally over several years beginning in February 2011.[33] NGI brings an improvement in matching accuracy from approximately 92% to over 99.6%.[34]

In December 2015, approximately 22,885 local, state, tribal, federal, and international partners submitted fingerprints electronically to NGI. Total requests exceeded 6.3 million, including 2.8 million fingerprint cards submitted for employment or other civil screening purposes such as concealed weapon or carry permits; the average response time is 21 seconds.[35]

A component of NGI is the introduction of a national rap back service. This is a perpetual background check formerly provided on a limited basis by a few states, for certain events occurring within the state. Now a criminal justice practitioner can "enroll" a set of fingerprints and receive notification of any subsequent arrest or other notification triggering event such as a court disposition. The state police, having conducted a fingerprint-based background check

before issuing a firearm carry permit, can learn if the permit holder is subsequently convicted of an offense that would cause the permit to be revoked. At least seven states provide rap back services in connection with firearm permits.[36]

The National Fingerprint File (NFF)

III established the concept for a decentralized interstate exchange of state criminal history records known as a "National Fingerprint File." NFF is the ultimate decentralization of the nation's criminal records exchange system. Participant states assume the primary responsibility for responding to the interstate needs of users of criminal history records. Reliance on state record databases takes advantage of the long established fact that the states typically have more arrests and more dispositions associated with those arrests than have either been reported, or due to rejection of fingerprints, maintained by the FBI. Under NFF, when the FBI identifies a search fingerprint, a comprehensive criminal record is retrieved from the NFF state, consolidated with information from other states and the FBI, and transmitted to the state that submitted the search print. The impact of NFF on firearm-related background checks is that more comprehensive state criminal record information is available for NICS checks. As of April 2016 there were 20 NFF state participants.

The National Crime Prevention and Privacy Compact Council

The National Crime Prevention and Privacy Compact became effective the same year that IAFIS went into operation (1999). The Compact establishes uniform standards and processes for the interstate and federal-state exchange of criminal history records for noncriminal justice purposes; including state-submitted fingerprints and receipt of criminal record information for concealed weapon and firearm carry permits. The Compact Council, in partnerships with the FBI and the APB is in the forefront of efforts to improve fingerprint quality and reduce rejections. The Compact Council also oversees the participation of compact signatory states in the NFF Program. It continues to aggressively encourage states to join the Compact and become NFF participants, thereby increasing the records available for NICS checks. As of January 2015 there were 30 compact states.

33 www.fbi.gov/services/cjis/fingerprints-and-other-biometrics/ngi
34 Ibid.
35 https://www.fbi.gov/file-repository/december-2015-ngi-fact-sheet.pdf/view
36 Survey of State Criminal History Information Systems, 2014, Criminal Justice Information Policy series, U.S Department of Justice, Bureau of Justice Statistics www.ncjrs.gov/pdffiles1/bjs/grants/249799.pdf, Table 23.
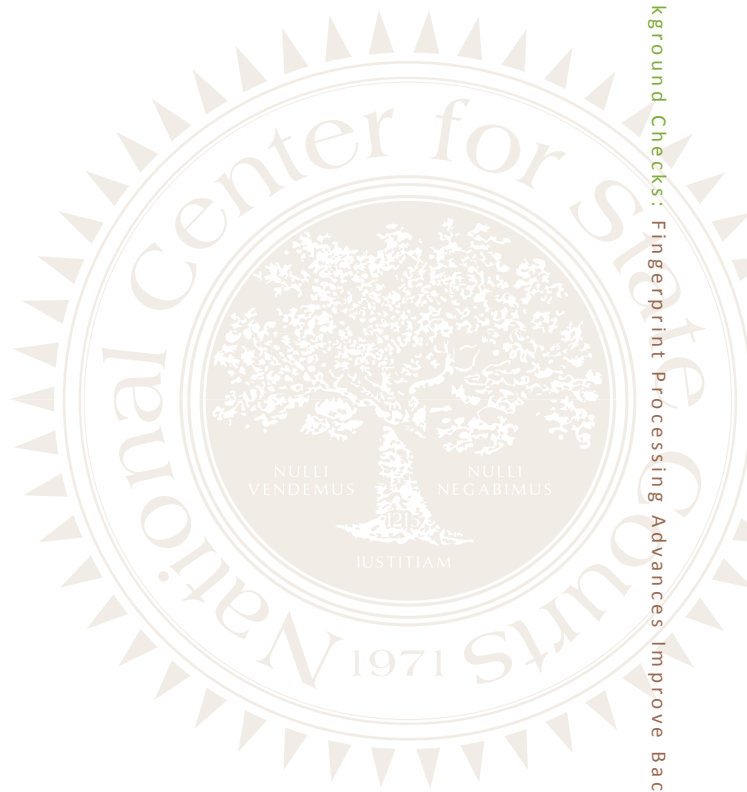
State Level Partnerships

Fingerprint capture and the searching of massive fingerprint databases is highly dependent on Livescan and AFIS technology. To remain effective, periodic updating or replacement is essential. AFIS technology is expensive; in order to mitigate costs, several multi-state partnerships were formed to purchase and operate AFIS technology. MAFIN, the Midwest Automated Fingerprint Identification Network includes all the fingerprint cards in Minnesota, North Dakota and South Dakota. A tri-state owned AFIS serves Maine, New Hampshire and Vermont. Rhode Island relies on the Connecticut AFIS. The concept of a shared system was pioneered by the Western Identification Network (WIN). WIN represents a collaboration of governors, attorneys general, legislators, and law enforcement agencies. A not-for-profit corporation was developed using pooled monetary and technical resources across eight states to form WIN. WIN also extended membership to several federal agencies who saw benefit in having searchable access to the fingerprint files of member states.

AFIS Accuracy Leads to Lights Out Processing

When AFIS was first introduced the common practice was for a fingerprint examiner to visually compare the top few candidates in a search result list against the questioned fingerprint. This has been replaced in many states with "lights out" processing, in which a match that exceeds a threshold score no longer requires examiner verification. This has reduced the time needed to either create or update a criminal history record, while improving the accuracy of match determinations and minimizing match miss rates that were formerly attributable to examiner error. At the end of 2014 there were at least 37 states, the District of Columbia and Guam repositories employing "lights out" in their work flow.[37]

Conclusion

AFIS technology, together with Livescan electronic fingerprint capture devices, standards, and strong cooperative information exchange partnerships on the state and local level that span courts and other justice entities revolutionized the timely consolidation of criminal record information. Similarly, technical and policy partnerships between the states and the FBI, driven by advances in technology at the FBI enable the processing of volumes of fingerprints and accessing of criminal record information at speeds that were once unimaginable. Consequently, criminal record information is made more accurate and readily available to support criminal justice, to make suitability determinations for those who would work with our most vulnerable, for other employment decisions, national security purposes and firearm-related background check screening.

---

37   Survey of State Criminal History Information Systems, 2014, Criminal Justice Information Policy series, U.S Department of Justice, Bureau of Justice Statistics www.ncjrs.gov/pdffiles1/bjs/grants/249799.pdf, Table 18.

SEARCH   NCSC National Center for State Courts   BJS