

## #2: New Findings from the 2018 Survey of State Criminal History Records Repository Administrators

By Becki Goggins

This is the second in a series of blogs that explore findings from the *Survey of State Criminal History Information Systems, 2018*, published by the U.S. Department of Justice Bureau of Justice Statistics (BJS). This biennial national survey represents the most current and detailed snapshot of the data, trends, policies, practices, and operations of criminal history records repositories nationwide. SEARCH, with support of BJS, has conducted these surveys since 1989. This second blog provides an overview of several topics that were enhanced or newly added as part of the 2018 survey.

In the 2018 survey, SEARCH and BJS expanded the number of questions related to replacement plans for critical criminal justice information system technologies, including **computerized criminal history (CCH)** systems, **automated fingerprint identification systems (AFIS)**, and state **message switches**.

The Bureau of Justice Statistics routinely provides funding to state and tribal governments for technological improvements designed to enhance the timeliness, accuracy, and completeness of CCH records. This funding is provided through National Criminal History Improvement Program (**NCHIP**) and NICS Act Records Improvement Program (**NARIP**) grant awards. As such, it is helpful for BJS to know the age of and plans to replace CCH system components to better anticipate the number of funding requests they can expect to receive for these types of projects. Additionally, it is helpful to CCH repository managers to have situational awareness of other states that are in the process of procuring and/or implementing new systems so they can conduct outreach to their counterparts to obtain information regarding ongoing projects to help inform their planning, procurement, and implementation efforts.

For the first time since first conducting this survey, SEARCH requested information regarding operation budgets and staffing levels for criminal history repositories to better understand the variety in the scope and breadth of CCH repository operations. While each state repository is unique, this information may be useful to help states gauge how they compare with their counterparts in other states in terms of levels of funding and personnel.

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3. State Cite and Release Practices and Statewide Citation Files
4. Arrest/Interim Disposition Reporting
5. Disposition Reporting: Courts/Prosecutors
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7. III/Compact Council/NFF Participation
8. CCH Data Quality Audits
9. Rap Back Services

### Editor's Note:

Learn more about the [biennial national survey](#) of state criminal history information systems, conducted by SEARCH and published by BJS

See our [blog](#) announcing the release of the 2018 survey

Access the 2018 [survey](#)

See other blogs in this series, which highlight critical trends and metrics

## CCH Repositories, AFIS, and State Message Switches

Three core technologies—CCH repositories, AFIS systems, and state message switches—enable repositories to capture arrest and disposition information, positively identify individuals, and support intra- and interstate communication with law enforcement and other criminal justice agencies. These systems also enable repositories to respond to requests for background checks for employment, licensing, volunteer positions, and firearms purchases.

Like all information technology infrastructure, eventually each of these components reaches an end-of-lifecycle point at which the hardware and software is due for replacement or significant upgrade to remain functional.

### — Age of Critical Systems

For the first time in 2018, SEARCH and BJS asked repository managers when each of these critical systems was last replaced or significantly upgraded.<sup>1</sup> Based on the survey responses, it appears that AFIS upgrades and replacements occur more frequently than those for CCH systems and message switches. The average age of each component was:

- CCH system – 7.23 years
- AFIS – 2.96 years
- Message switch – 6.07 years

When examined a bit closer (Table 1), the ages of state CCH systems vary widely—and the average is driven down, as there have been so many recent replacements (including those that are still in progress).<sup>2</sup> According to the survey, a number of states use systems that are aged a decade or older.

Age	CCH System (n=44)	AFIS (n=49)	Message Switch (n=45)
< 1 year	11 states	12 states	9 states
1–2 years	6 states	16 states	9 states
3–5 years	6 states	14 states	8 states
6–10 years	9 states	4 states	12 states
> 10 years	12 states	3 states	7 states

**Table 1.**

As these vital technology components age, they become increasingly more difficult and often more expensive to manage and maintain. Several states have systems in operation that are two or three decades old. For these states, there is a high likelihood that many of the developers who understand how the applications and interfaces were designed have retired or otherwise separated from the

<sup>1</sup> Since the responses to the survey were received in 2019, some state reported on upgrades/replacements that occurred after December 31, 2018.

<sup>2</sup> Becki R. Goggins and Dennis DeBacco, *Survey of State Criminal History Information Systems, 2018*, (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2020), Tables 13 and 13a.

repository—and it can prove challenging (if not impossible) to make any modifications or “fixes” to the systems if problems arise. Additionally, processing times may be slower and available storage for high resolution biometric images may be very limited when relying on antiquated technology.

— **Benefits of Keeping Core Technologies Current**

Modern CCH systems, AFIS, and message switches are designed to be much more agile, configurable and scalable when compared to legacy technologies. Repositories often find that migrating to newer technologies can eliminate many manual processes. These new technologies can also more readily support automated data exchanges with contributing agencies, thus freeing up personnel to work on criminal history record research and improvement efforts rather than focusing on redundant data entry activities.

Newer systems, which often offer features such as cloud hosting, may also be less expensive to maintain because there is less need for on-site application and storage servers that are costly and require ongoing maintenance. Additionally, as the numbers highlighted in the [first Survey Insights blog](#) demonstrate, there are persistent and growing demands on repository systems; growing requirements for linkage to courts and prosecutors; growing demand to provide sex offender registration and many other systems; and growing demand for rap-back services—all of which means that repository systems may need updates, refreshes, and complete replacement.

— **Upgrade/Replacement Plans**

Because of the benefits of keeping core technologies current, SEARCH also asked states about planned replacements of their CCH, AFIS, and message switch systems. In analyzing the response to this question, SEARCH found that many states are in various stages of replacing these systems. (Table 2 and Figure 1).<sup>3</sup>

REPLACEMENT STATUSES			
Stage	CCH	AFIS	MESSAGE SWITCH
<b>Planning</b> to replace	12 states	12 states	11 states
<b>Reviewing bids/proposals</b> for replacement	2 states (Arizona, Maryland)	5 states/territories (Colorado, Guam, Mississippi, North Dakota, South Dakota)	2 states (Maryland, North Dakota)
<b>Implementing and testing</b> new system	7 states	10 states	7 states

**Table 2.**

<sup>3</sup> *Ibid.*, Table 13a.

State plans to replace CCH-related systems that are at or nearing the end of their respective lifespans, 2018



Figure 1.



### About the Author

Ms. Becki Goggins is Director of Law and Policy at SEARCH. She oversees our work in the areas of criminal history records, development of laws and policies concerning the use of justice information and protection of privacy, implementation of evidence-based practices, and the use of technology to improve justice information sharing. As an organization, SEARCH was originally founded to facilitate the exchange of criminal history record information (CHRI) between the states. Learn more about SEARCH's work with [criminal history records](#) and the [surveys we conduct](#) on CHRI issues.

*SEARCH staff continue to analyze the results of the 2018 Survey with the intention of making the data more accessible by drafting blogs to explain and provide context for the survey findings. If you have suggestions for topics you would like to see highlighted, or if you have specific questions about survey findings, please contact Becki Goggins ([becki@search.org](mailto:becki@search.org)) or Dennis DeBacco ([dennis@search.org](mailto:dennis@search.org)).*