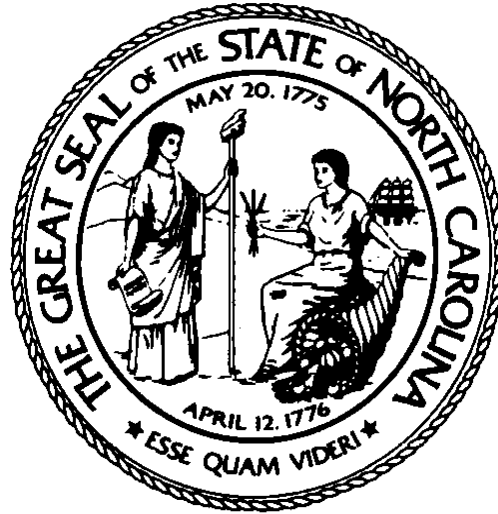


**N.C. Department of Information Technology
Government Data Analytics Center**



**Session Law 2020-47 Report to the
Joint Legislative Oversight Committee on Information
Technology**

and the Joint Legislative Oversight Committee

**James A. Weaver
Secretary and State Chief Information Officer**

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Executive Summary

Pursuant to Session Law 2020-47/HB 511 (2020), the North Carolina Department of Information Technology's Government Data Analytics Center (GDAC) conducted a statewide study to identify gaps in data for use by law enforcement, judicial officials, policymakers and other stakeholders, and to identify solutions for improving availability and accessibility of data available to policymakers to inform public policy.

North Carolina criminal justice agency leaders and other stakeholders shared their experiences with data collection, access and availability. Overwhelmingly, all agreed that the HB 511 study provided an opportunity to inform the legislature, state agencies and other criminal justice stakeholders of the existing criminal justice information and data landscape.

North Carolina's criminal justice information and data landscape is consistent with the state of criminal justice data and information nationally, where a myriad of business operations utilize disparate data systems to collect and maintain criminal justice information. Challenges identified in the study related to availability, quality and accessibility of criminal justice data. Not unlike other states, the difficulties with data related to decentralized data collection and storage coupled with aging systems and infrastructures. Such challenges offer opportunities for improvement.

Addressing the opportunities to improve access and quality of data for the criminal justice community requires a cross agency collaboration to identify, prioritize and effect changes to existing data collection and sharing operations. The study recommends the creation of a Criminal Justice Data Sharing Committee comprised of representatives from those entities supporting law enforcement, judicial, and policy development and assessment. This committee would set a vision and build a roadmap to enable data access, integration and sharing to support both short- and long-term objectives while identifying the funding needed to implement these goals.

Recommended short-term goals include supporting the collection of data in a central system and its transformation for use in reporting and analysis, whereas mid- to longer-term goals require the comprehensive analysis of data needs and an associated roadmap.

Short-term objectives support the statewide collection of data, which is stored and managed independently in local criminal justice systems. To collect data from independent systems would require application development to push data to a new statewide repository that integrates the data and applies data governance to manage access and use.

Stakeholders recommended the central collection of a standard set of jail data found in Sheriff Jail Management systems to improve the data presented in CJLEADS and have comprehensive data available for reporting. Additionally, stakeholders suggested the statewide collection of data found in the law enforcement records management systems (RMS) for enhanced data sharing and collaboration across law enforcement jurisdictions. The central collection of RMS data will be a longer-term objective as careful consideration is needed due to the sensitive nature of the data.

To bridge the need for a comprehensive interoperability between the current independent systems, data currently collected for use in CJLEADS could be transformed to support reporting and analytics for criminal justice stakeholders and policy makers. The development of cross-agency data reporting views would improve longitudinal analysis. Event-based data views and integrations could be made available,

with proper governance, to follow events through the criminal justice continuum. For example, linked events and decisions captured in jail, court, prison, probation and so forth could provide additional insight and performance evaluation to improve policy-driven analysis. The expanded use of CJLEADS data for analysis and sharing would require an infrastructure to be built to share, govern and manage data.

Longer-term recommendations look toward improving the collection of certain data and the ability to share data using standardized formats and data definitions. This effort would expand data collection and transformation into a comprehensive view for data analysis. An initial step before design or development would be to perform an inventory of the data needed to support criminal justice-related decisions and policy development. Aligning the data assessment with the research and policy needs would identify what system the data resides in and where true data collection gaps exist.

While this inventory is underway, a data sharing technical infrastructure could be developed. This data sharing infrastructure would be built upon the backbone of an information sharing platform that is currently being established for the Educational Longitudinal Data System in alignment with N.C.G.S. Chapter 116E, where data sharing among data contributors is standardized and stakeholders can submit requests for access to integrated longitudinal data. This technical infrastructure would support submission of requests, automation of workflow approvals, data governance agreement generation and automated data provisioning. A cross-sectional team of data contributors working together must collaborate to successfully configure and implement this data sharing governance process and infrastructure.

Additional technology challenges exist to improve the collection and access to criminal justice information. Areas for consideration include the replacement of aging technology using modern architecture and national data standards for data definitions and data sharing.

Introduction

Session Law 2020-47/HB 511 (2020) directed the North Carolina Department of Information Technology's Government Data Analytics Center (GDAC) to conduct a statewide study to (1) identify gaps in data for use by law enforcement, judicial officials, policymakers and other stakeholders related to the processing, detention and adjudication of individuals charged with infractions or criminal offenses; and (2) identify solutions for improving availability and accessibility of data for policymakers to inform public policy.

The following report draws from the review of existing criminal justice systems, the data challenges as reported by criminal justice data stakeholders, and the policies and practices associated with criminal justice data collection in other states.

Approach

Leaders and staff from North Carolina criminal justice agencies and other stakeholders shared their experiences with data, its collection, access and availability. Stakeholders included representatives from the following organizations:

- North Carolina law enforcement agencies, including local sheriff offices and police departments, the North Carolina Sheriffs Association, the North Carolina State Bureau of Investigation,
- North Carolina Administrative Office of the Courts,
- North Carolina Department of Public Safety Division of Adult Correction and Juvenile Justice
- North Carolina Conference of District Attorneys,
- North Carolina Office of Indigent Defense Services,
- North Carolina Sentencing and Policy Advisory Commission,
- North Carolina Department of Justice, State Crime Lab,
- University of North Carolina School of Government, and
- Other criminal justice stakeholders.

See Appendix A for the list of persons who participated.

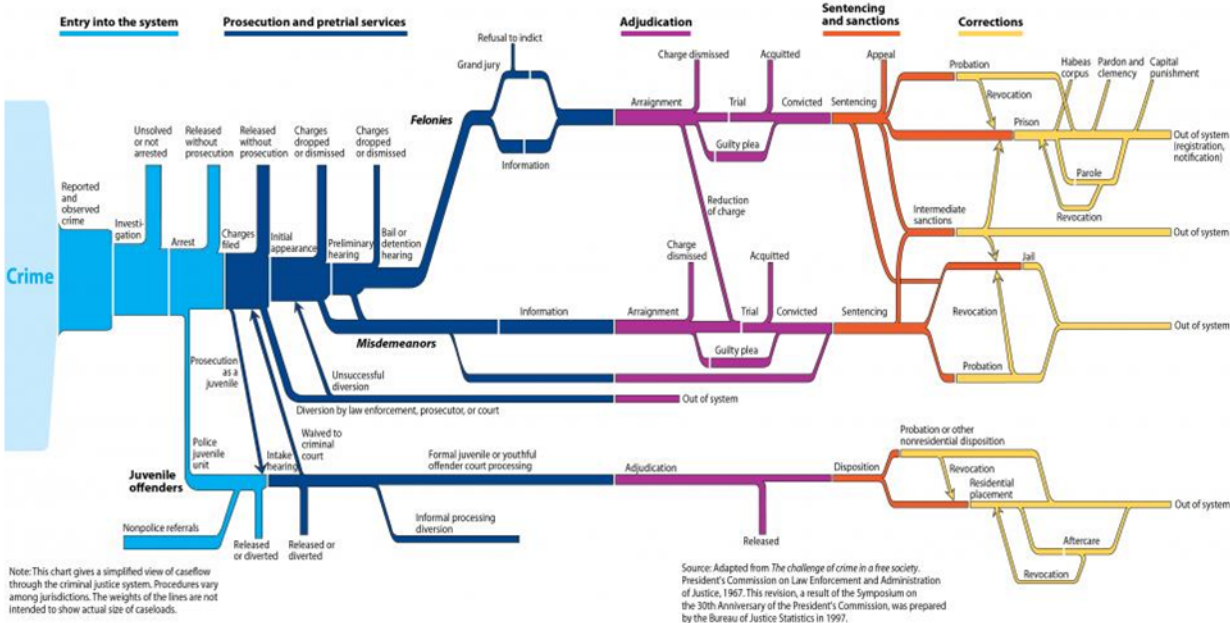
The stakeholders shared information about data systems and perspectives on data challenges that impact stakeholder groups and the criminal justice system overall. Stakeholder interviews also elevated potential solutions for addressing data challenges. In addition, research was conducted on other states' criminal justice data policies and practices.

NC Criminal Justice Data Landscape

North Carolina’s criminal justice information and data landscape is consistent with the state of criminal justice data and information nationally, where a myriad of disparate databases and data systems collect and maintain criminal justice information and data. The following diagram¹ published by the Department of Justice Bureau of Justice Statistics depicts the sequence of events associated with the criminal justice system.

Criminal Justice System Flowchart

What is the sequence of events in the criminal justice system?



The North Carolina criminal justice data landscape follows a similar process flow, where data is collected at each stop, often in a siloed administrative system.

Study Findings

North Carolina criminal justice data is collected in administrative systems to support the agency business operational objectives. Criminal justice application systems are configured and implemented to support the agency's specific operational needs. The extent of the disparity of the data collected is directly related to the system's business purpose and user base. Local or county-based systems are tailored to the operational needs of that locality, thus, data collections vary for each administrative system. In comparison, centralized administrative systems support broader audiences and, therefore, consistently collect the same sets of data.

The following data challenges were highlighted:

1) Limited system interoperability

With a diverse ecosystem of individual criminal justice systems seamless connection, between North Carolina criminal justice applications is limited. Ideally, each system would share data electronically to downstream systems as an individual and associated event is processed through the criminal justice workflow. However, in North Carolina, like many states, the data and information is stored in siloed systems.

Accessibility is further complicated when users of one system do not have access to another system that has needed information. This limitation results in administrative inefficiencies and duplicative manual entry across multiple systems, which contributes to data inconsistencies across systems and data quality issues.

These system interoperability restraints are often impeded by aging systems, data governance rules, budgetary constraints and/or resource needs. Nationally, states are addressing systems integrations by building interoperability between key systems and/or developing data warehouses to enable reporting. Colorado² and Florida³ have focused on state-level integrations while other states have taken measures to connect criminal justice agencies at the local level.

A few states have implemented statewide records management systems to support local law enforcement, whereas others have focused on regional systems across the state (Michigan State Police). Similarly, the New York State Division of Criminal Justice Services (DCJS) offers the Spectrum Justice Software application, which features an interface with NYDEX, a data exchange system using the National Information Exchange Model (NIEM) that allows law enforcement agencies to share investigative data to the state's local law enforcement agencies free of charge.⁴ Pennsylvania and Washington have implemented cross-agency data systems at the local level to facilitate case management and data sharing among criminal justice stakeholders. In Pennsylvania, the County Commissioners Association of Pennsylvania (CCAP) provides a Unified Case Management System that links criminal justice databases and agencies—including adult probation, district attorney's office, jail and correctional facilities, public defender's office—with the objectives of improving data management and creating other efficiencies at reduced costs.⁵ In Pierre County in Washington, the use of a web-based vendor system connecting multiple criminal justice agencies to facilitate data sharing for court, case, document and jail management purposes.⁶

2) Integrated data warehouses enhance information reporting

The development of integrated data warehouses has enhanced data sharing capabilities among the stakeholders. These tailored warehouses have been built to support North Carolina's criminal justice informational needs.

The NC CJLEADS application was developed in 2009 to provide criminal justice professionals with access to an integrated person view, which links their various touchpoints across the criminal justice continuum. CJLEADS collects data in a central environment and matches selected data about offenders across systems related to warrants, jail records, court records, prison records, probation and parole status, and sex offender registration. CJLEADS continues to be a critical tool for 26,000 North Carolina criminal justice professionals by supporting them with up-to-date information for decision making.

North Carolina's State Bureau of Investigation (SBI) also has centralized collections of data to support federal reporting and criminal justice reporting needs in North Carolina. Two systems highlighted included the Computerized Criminal History File and Uniform Crime Reporting program, both of which serve as the statewide collections of data for federal reporting.

Additionally, public and private policy and research organizations within North Carolina—including but not limited to the N.C. Department of Public Safety, Criminal Justice Analytics Center, the North Carolina Sentencing and Policy Advisory Commission, the University of North Carolina School of Government, the Duke University Wilson Center for Science and Justice, and RTI International— have developed their own reporting environments to support the transformation of criminal justice data points into information that can be used for action. Each entity follows strict data governance practices and are limited to the data available for specific purposes.

During this study, stakeholders suggested the creation of new centralized data warehouses that integrate data across independent systems.

a) Integrated jail data

Ninety-Six North Carolina County jails⁷ capture data using individual jail management systems. Though North Carolina has some statewide reporting requirements for jails⁸ and some research organizations⁹ collect jail data to produce statistical reports related to jail use, a comprehensive integrated statewide jail reporting warehouse would standardize the information available and provide access to comprehensive information support performance and policy assessments.¹⁰

National research suggests some states have implemented statewide jail booking systems or other record systems that populate a statewide jail database.¹¹ Other states have a centralized jail warehouse that compiles data submitted from local law enforcement offices. For example, the California Board of State and Community Corrections administers the California Jail Profile Survey to provide counties a means to track changes in jail populations and assess and project program and facility needs.¹² Colorado requires jails to maintain certain information about jails and inmates via an electronic survey that is submitted to the Department of Public Safety's Division of Criminal Justice and then published in a searchable and sortable format.¹³

b) Integrated longitudinal criminal justice records

With an ecosystem of siloed, disparate systems, stakeholders agreed that it is very difficult to link a person or series of events over time across systems. Stakeholders suggested the capability to view comprehensive information that is initiated with the report of a crime and tracks all criminal process events, including arrest, charging, indictments, pretrial hearings, pretrial detention and release, disposition, post-conviction confinement, probation, parole and post-release events, such as expungement and restoration of rights. This longitudinal picture of an offender's interaction with the criminal justice system would provide a mechanism to derive actionable insights and improve safe and equitable decisions.

In recent years, some states have undertaken efforts to integrate state-level criminal justice data systems or empower state-level bodies to coordinate criminal justice data collection among criminal justice agencies to facilitate access to this type of longitudinal data. Florida legislation enacted in 2018, mandated the creation of a database capturing certain pieces of information that various criminal justice agencies and stakeholders were mandated to collect.¹⁴ A 2018 Massachusetts bill similarly mandated the establishment of a "cross-tracking system for data collection and reporting standards" for all criminal justice agencies.¹⁵ The court system also required the use of a unique state identification number assigned to each person who enters the criminal justice system.

3) Limited data accessibility

Stakeholders often used the term "unavailable" as a catch-all to describe information or data which cannot be easily obtained. Data accessibility can be constrained by many facets, including data governance, system limitations and not knowing what information is available or where it is located.

In most cases, criminal justice data is often captured either up or down-stream in the criminal justice process flow. However, accessing data from multiple sources is complicated by not having the tools available to integrate and share records in a standardized platform.

The data accessibility is further complicated with aging systems. Technology limitations found in aging systems built to support administrative needs, often do not capture the level of detail on past events needed to access the current plan of action.

States with similar data availability challenges determined what standard data is needed by stakeholders and have enacted legislation specifying data elements that criminal justice agencies should be collecting centrally. In 2018, a Florida bill prescribed specific data that clerks of court, prosecutors, public defenders and county detention facilities should collect on a biweekly basis and report to the Department of Law Enforcement.¹⁶ Massachusetts legislation enacted in the same year directed the Secretary of Public Safety to promulgate regulations regarding the categories, types and formats of data to be submitted centrally.¹⁷

4) Data standardization across systems

North Carolina criminal justice systems are built on different frameworks for organizing data. As a result, there is often no common identifier or link, which associates an individual or event across various systems.¹⁸ This lack of a common key makes it difficult for systems to be interoperable.

To further complicate data integration, common data fields often have differing meanings and definitions across systems. A few examples where data definitions can impede interoperability and seamless data integration include the definition of an offense, where system limitations require a crosswalk of more detailed offense codes retained in the court record to the less detailed offense code found in the adult corrections data system. Another example is data associated with person demographics. One system may define a limited set of race or ethnicity (e.g., Black/White/Other) while another uses a more expansive set (e.g., Black/White/Asian/Hispanic/Native American). These differences complicate the merging or comparing of datasets.

Similarly, criminal justice data is often captured according to local practices or based upon system limitations. When this occurs, data contained in criminal justice databases reflect different standards or user habits county to county, district to district, or person to person for entering in data and describing events.

Other states have implemented various strategies to address standardization issues. Colorado's Integrated Criminal Justice Information System (CICJIS), an enterprise program, uses the NIEM¹⁹ to link five state-level criminal justice agencies—the Colorado Bureau of Investigation, the Colorado Department of Public Safety, the Colorado Department of Corrections, the Colorado Department of Human Services, Division of Youth Corrections and the Colorado Judicial Branch—to facilitate real-time transfer of and access to data at key decision points in the criminal justice process.²⁰ An effort is underway in Florida to standardize terms and practices for capturing certain criminal justice data elements that recent state legislation mandates criminal justice agencies to collect.²¹

5) Access to non-criminal justice data

Criminal justice stakeholders highlighted that under certain circumstances, it would be helpful to understand if an individual has additional needs and requires more specialized services. Currently, the driver's license has an indicator where an individual can self-report, they are hearing impaired. This simple notification assists officers in understanding the person's individual need.

Criminal justice professionals have suggested that a health-related indicator would improve the individual receives the proper care. Recognizing the protection of health-related information, the stakeholders agreed that explicit details were not needed, but rather a tightly controlled flag that alerts a user to reach out for support from a health care professional would provide enough information to ensure the appropriate professionals and services are made available to support of the individual.

Law enforcement with Jacksonville and Onslow County use Health IM,²² a web-based program that provides limited but sufficient information from local health providers to help support and guide first responders in responding to individuals who may suffer from mental or behavioral health issues.²³ This effort is consistent with locally led initiatives that are connecting health-based data sets to mental health, substance abuse and housing needs. These platforms must implement security and privacy protocols to ensure that only authorized users have access to the data for permitted purposes, though aggregate deidentified data can be made more widely available.²⁴ However, criminal justice stakeholders interviewed for this study suggest that these types of tools are not widely available or used in North Carolina.

6) *Technology challenges*

Stakeholders shared overarching technology challenges that prohibit access to or render data inaccessible because of aging infrastructure and technology. Aging systems present certain accessibility challenges, such as the inability to access information in real-time or to exchange information with other systems. In addition to interoperability limitations, more specific technology challenges mentioned by stakeholders included the lack of digitized or electronic records, which creates labor intensive, manual work for agencies and slows down the processing of offenders at various points in the criminal justice system. Older data systems are also not able to translate open text fields (e.g., case notes, offense text) into analyzable data. To overcome such challenges, new modern technology is required, which will require appropriate funding.

Some state agencies are making strides to modernize their data architecture to information to be seamlessly exchanged across systems. For example, as part of the eCourts initiative, the Administrative Office of the Courts (AOC) is currently transitioning from the Automated Criminal/Infractions System (ACIS), a mainframe system in use since 1982, to Odyssey, a cloud-based solution integrating more than 40 existing applications to one Integrated Case Management System.²⁵ According to court officials, Odyssey will also increase the use of digitized record-keeping for court documents.²⁶

Currently, certain parts of the state experience internet connectivity issues that impede access to web-based criminal justice systems. As agencies move to cloud-based technology, Broadband and Wi-Fi expansion becomes more critical to be able to access such systems remotely.

Recommendations

Perspectives that criminal justice stakeholders shared, coupled with review of policies and practices from other states, suggest opportunities for North Carolina to enhance the availability, quality and accessibility of data to support decision-making, policy development and program evaluation.

North Carolina stakeholders agree that improved data access and system interoperability is needed. Most importantly, access to integrated data across the criminal justice continuum would improve decisions associated with administration, investigation, due process, policy, and program evaluation. While some stakeholders have developed reporting repositories, all agreed that the access to the data can often take time and be limited based upon data governance, budget and resources.

A. Establish a Criminal Justice Data Sharing Committee

North Carolina has a standing history in the criminal justice space that demonstrates data sharing is possible when the community works together. In the early days of the Criminal Justice Information Network (CJIN), this cross-sectional team implemented a network to allow the sharing of criminal justice applications using the Viper network. Additionally, from 2008 to 2010, the CJLEADS steering committee²⁷ worked together to build a strategy for the integration and sharing of criminal justice data. Today, the North Carolina Task Force for Racial Equity in Criminal Justice evaluates program, policies and data needs to support racial equity.

To improve data sharing in North Carolina, collaboration within the criminal justice community is needed. The study participants suggested the development of a Criminal Justice Data Sharing Committee comprised of representatives from state criminal justice entities, local criminal justice agencies which reflect the geographic diversity of the state and state agencies with information relevant to criminal justice. The purpose of the committee should be to set the vision of criminal justice collaboration and to build a roadmap to enable data integration and sharing.

With a vision and mission to enable access to data, the Committee and its working groups can support and prioritize the following short- and long-term recommendations:

B. Short-Term Recommendations

a. Develop Statewide Data Repositories

Interoperability challenges due to aging systems, strict data governance rules, budgetary constraint, and the lack of standard data elements, definitions, and collection presented a compelling need to improve access to integrated data in support of decision making, policy development and assessment.

Statewide repositories of data that has been standardized and with common identifiers would provide the comprehensive sets of data needed to support reporting and analysis. To be successful, in the development of these repositories, a team of cross-agency stakeholders who can identify the data needed, prioritize collection and quality efforts, and assess the cost benefit of the approach. Consideration should also be given to the identification of the data elements needed along with the definition of associated data privacy and accessibility rules.

i. [Statewide jail data repository](#)

Each jail management system maintains their own system configurations and data definitions, which present challenges when linking jail data to court records or even across jail management systems (JMS). The creation of a centralized statewide jail data warehouse would provide standardized, integrated data for use in reporting and analysis.

Since much of the data collected in the local JMS is relevant to the larger statewide audience, stakeholders from across the criminal justice continuum should provide input on a central system. The Criminal Justice Data Sharing Committee should guide the identification of the data to be collected centrally and define the necessary data sharing governance practices.

The creation of a statewide jail management reporting warehouse would require each of the 96 jails systems to submit specified data on an agreed upon frequency. This development effort would impact each JMS by requiring them to build connection and enable the transfer of data from their JMS to a secure state-managed system. In addition, the state would need to develop and implement a secure central repository that collects and catalogs the data from the jails and structures the files appropriately for reporting and retrieval.

ii. [Build event-based data views for reporting](#)

The Study found that it was very difficult to link an event for a person across the various disparate systems. As an example, jails often do not capture the court record number(s) associated with the incarceration; therefore, it is difficult to link the jail record to the charges found in the court records system. This inconsistency makes it difficult to leverage data associated with the same offender or criminal justice events for evaluation and policy assessments.

CJLEADS matches person records across many systems, and its current technical structure positions it to link the events associated with an individual across the continuum. In the short term, new reporting tables could be developed using the existing CJLEADS data to join data by event and person. Funding will be needed to develop and transform the data into longitudinal reports and displays.

iii. [Statewide local records management system data repository](#)

Each law enforcement agency maintains their own system configurations and data definitions in their Records Management System (RMS) that are customized to their needs. While some agencies have interfaces that allow local law enforcement to communicate with each other, this is not standard across the state. The development of a statewide repository for use by local law enforcement would facilitate information sharing for investigative purposes and would create a common set of data for reporting and analysis.

The creation of a records management reporting warehouse would require each of the law enforcement systems to submit specified data on an agreed upon frequency. This would impact each RMS by requiring them to build connections and enable the transfer of data from their RMS to a secure state-managed system. In addition, the state would need to

develop a secure reporting repository that collects and catalogs the data from the RMS and structure it for reporting and retrieval.

Recognizing the sensitivity of the RMS data as it relates to investigations, careful consideration must be given regarding what data can be shared and to whom. Should this recommendation go forward, it is suggested to start with a pilot project that involves collection of a limited data set from selected RMS systems to allow for cost benefit analysis and expansion.

C. Mid- to Long-Term Goals

The establishment of the Criminal Justice Data Sharing Committee or a team of criminal justice professionals are critical to the implementation of the following mid- to long-term recommendations.

a. Data needs assessment

An initial step before designing or developing technology-based strategies would be to create an inventory of criminal justice stakeholders' and policy makers' information needs. These informational needs would identify currently available data along with data not currently available but necessary for the stakeholders' performance of their duties and for future programs and initiatives.

b. Implement an enterprise longitudinal data request process

Study participants shared their experiences with their ability, or lack thereof, to access data for use in analytical reporting and evaluation. A common theme noted was the gap in data collection. Though this is true in certain circumstances, oftentimes data was collected in a different system operated by a different criminal justice entity that others did not have access to.

Entities with a need to evaluate data across the continuum and over time must have access to data stored in various criminal justice systems. Access to this information is further complicated by delays associated with data sharing agreements. The development of a longitudinal data platform and governance model for criminal justice would provide a single stop for data access for authorized users and recipients. Requests for data could be centrally collected in a system that automates approval workflows to data contributors and requestors for review, approval and access or disclosure.

This longitudinal data vision would align with the platform and infrastructure being developed to support the Educational Longitudinal Data System in accordance with N.C. G.S. Chapter 116E, where data contributors are working together to support education and workforce data sharing.

A Criminal Justice Longitudinal Data Service (CJLDS) would grow over time as new data points from various siloed systems are added to the platform. Data would be cataloged, classified and governed through a technology backbone that enables integration and data access. Initially, the CJLDS could be utilized to improve access to data among the data contributors. Expansion could later follow to enable access to de-identified or aggregated data for research and policy development.

Paramount to the success of a CJLDS will be the data contributors' ability to agree upon the following:

- a. The identification of the data to be shared;
- b. A data governance agreement that addresses processes and procedures, access, use, privacy and confidentiality; and
- c. The adoption of standard terms for common data elements.

c. [Develop a technology roadmap](#)

Data system functionality and design can be enhanced by leveraging modern technologies. New or replacement systems should be designed to (1) be scalable to future needs and demands, (i2) increase efficiency of data collection through interoperability between systems, (3) improve data quality and (5) facilitate immediate access to real-time information. Areas for consideration in the development of the roadmap include:

- a. Identifying aging systems and prioritizing their replacements;
- b. Use of the NIEM data standards for information sharing;
- c. Moving towards the use of application programming interfaces, or APIs, to facilitate information sharing and
- d. Following Master Data Management Principles.²⁸

Conclusion

Stakeholders largely agree that the HB 511 directive provides a great opportunity to inform the legislature, state agencies and other criminal justice stakeholders of the existing criminal justice information and data systems landscape and opportunities to enhance it. This report recommends uniform collection, reporting and storage of criminal justice data action to address current challenges. It also elevates some key considerations that may inform North Carolina's next steps to enhance availability and accessibility of information. These recommendations will improve decision-making by law enforcement, correctional institutions and other criminal justice professionals across the state.

Appendices

Appendix 1: North Carolina Criminal Justice System Stakeholder Interviewees

Law enforcement

Police departments

- Chief Eddie Buffaloe, Elizabeth City Police Department
- Chief Henry King, Edenton Police Department
- Chief Blair Myhand, Hendersonville Police Department
- Lt. Eric Goodwin, Raleigh Police Department
- Jason Schiess, Analytics Services Division, Durham Police Department
- Ashley Weaver, Deputy Chief, Jacksonville Police Department

Sheriff offices

- Charles Blackwood, Sheriff, Orange County
- Asa Buck, Sheriff, Carteret County
- Darren Campbell, Sheriff, Iredell County
- Alan Cloninger, Sheriff, Gaston County
- Kevin Frye, Sheriff, Avery County
- John Ingram, Sheriff, Brunswick County
- Lt. Colonel Kevin Jones, Orange County Sheriff's Office
- David Mahoney, Sheriff, Transylvania County
- Ed McMahon, Sheriff, Sheriff, New Hanover County
- Dr. Hubert Peterkin, Sheriff, Hoke County
- Mike Roberson, Sheriff, Chatham County
- Harold Sykes, IT analyst, Orange County Sheriff's Office

North Carolina Administrative Office of the Courts

- Emily Mehta, Senior Research and Policy Planning Associate
- Kim Rutledge, Manager, Business Analysis and Process Management

North Carolina Conference of District Attorneys

- Avery Crump, District Attorney, Prosecutorial District 24
- Seth Banks, District Attorney, Prosecutorial District 35; Vice President, North Carolina Conference of District Attorneys
- Kanter Morris, Senior Assistant District Attorney, Prosecutorial District 7
- Kimberley Spahos, Executive Director, North Carolina Conference of District Attorneys

North Carolina Department of Public Safety

- Maxine Evans Armwood, Director of Court Services, Division of Adult Correction and Juvenile Justice
- Kim Banko, North Carolina SAVAN Administrator

- Michelle Beck, Director, Criminal Justice Analytics Center
- Maggie Brewer, Deputy Director, Division of Adult Correction and Juvenile Justice
- Sarah R. Cobb, Director of Rehabilitative Services, Prisons, Division of Adult Correction and Juvenile Justice
- Pam Jenkins, Deputy Director for Application Development
- Linda Mitterling, Reentry, Programs, and Services, Division of Adult Correction and Juvenile Justice
- Tim Parker, Former Director, Criminal Justice Analytics Center
- Megan Perrault, Social Research Manager, Division of Adult Correction and Juvenile Justice
- Kim Quintus, Director of Juvenile Justice Reinvestment, Division of Adult Correction and Juvenile Justice
- Jennifer Short, Business Systems Management and Planning, Division of Adult Correction and Juvenile Justice
- Angela Smith, Director of Juvenile Facilities, Division of Adult Correction and Juvenile Justice
- Pam Walker, Reentry, Programs, and Services, Division of Adult Correction and Juvenile Justice
- John Woodlock, Application Development Director, Information Technology

North Carolina Sentencing and Policy Advisory Commission

- Ginny Hevener, Associate Director for Research
- John Madler, Associate Director for Policy, Staff Attorney
- Michelle Hall, Executive Director

North Carolina State Bureau of Investigation

- David Prince, SBI IT Applications Portfolio
- Jeff Collins, Criminal History Information Program Manager
- Patrick Blalock, SBI IT Director
- Shannon Hanes, Business and Technology Application Analyst

North Carolina State Crime Lab

- Zach Kallenbach, Forensic Scientist Manager
- Tonya Bowlding, Forensic Scientist Supervisor

Office of Indigent Defense Services

- Mary Pollard, Executive Director
- Susan Brooks, Defender Administrator
- Margaret Gressens, Research Director
- Eric Zogry, Juvenile Defender, Office of the Juvenile Defender

RTI International

- Debbie Dawes, Director, Court Systems Research Program

UNC School of Government

- Emily Coward, Project Attorney, NC Racial Equity Network

- Jessica Smith, Professor and Director, Criminal Justice Innovation Lab
- Christopher Tyner, Legal Research Associate

Wilson Center for Science and Justice, Duke Law School

- Brandon Garrett, Professor and Director
- Ben Finholt, Director, Just Sentencing Project
- Adele Quigley-McBride, post-doctoral fellow, Sanford School of Public Policy
- Jennifer Teitcher, post-doctoral fellow, Sanford School of Public Policy
- Catherine Grodensky, doctoral student, Sanford School of Public Policy
- Ruth Wygle, PhD student, Department of Sociology

Other

- Caitlin Fenhagen, Director, Orange County Criminal Justice Resource Department

Appendix 2. Notes

¹ Adapted from *The challenge of crime in a free society*. President’s Commission on Law Enforcement and Administration of Justice, 1967. This revision, a result of the Symposium on the 30th Anniversary of the President’s Commission, was prepared by the Bureau of Justice Statistics in 1997.

² National Information Exchange Model NIEM. (n.d). “Colorado Integrated Criminal Justice Information System.” Retrieved from <https://www.niem.gov/about-niem/success-stories/colorado-integrated-criminal-justice-information-system-cicjis>; Colorado Integrated Criminal Justice System. (n.d.). “How did CICJIS get started?” Retrieved from <https://cicjis.colorado.gov/about-cicjis/how-did-cicjis-get-started>

³ Florida SB 1392 (2018). Retrieved from <https://www.flsenate.gov/Session/Bill/2018/1392/BillText/er/PDF>

⁴ Over 220 law enforcement agencies use SJS. New York State Division of Criminal Justice Services. (n.d.). “SJS-Spectrum Justice System.” Retrieved from [Office of Justice Information Systems - SJS Information \(ny.gov\)](https://www.ojis.ny.gov/ojis/niem_nydex.htm). In 2008, New York had 391 local police departments and 57 sheriffs’ offices. Reaves, B. (2011). *Census of State and Local Law Enforcement Agencies, 2008*. U.S. Department of Justice: Bureau of Justice Statistics; New York State Division of Criminal Justice Services. (n.d.). “New York Data Exchange (NYDEX).” Retrieved from https://stage.criminaljustice.ny.gov/ojis/niem_nydex.htm.

⁵ County Commissioners Association of Pennsylvania. (n.d.). “Unified Case Management System.” Retrieved from <https://www.pacounties.org/technology/ucm-program>

⁶ Pierce County, Washington. “About LINX.” Retrieved from <https://www.piercecountywa.gov/5798/About-LINX>

⁷ All but three counties in North Carolina have a jail facility. North Carolina Sentencing Commission. (2019). *Statewide Misdemeanant Confinement Program Capacity Projection, FY 2019-FY 2023*. Retrieved from <https://www.nccourts.gov/assets/documents/publications/SMCP-Capacity-Projection-FY2019-FY2023.pdf?1Y1YT6Y1bR2CJeBOPLI2i658HkCGEk4H>

⁸ The Criminal Justice Analytics Center within the Department of Public Safety collects quarterly reports on all deaths occurring in state prisons, local jails, and in the process of arrest pursuant to federal mandate, See United States Congress. (n.d.) “Death in Custody Reporting Act of 2013.” Retrieved from <https://www.congress.gov/bill/113th-congress/house-bill/1447>; see also Bureau of Justice Assistance. (n.d.). “Death in Custody Reporting Act Fact Sheet.” Retrieved from <https://bj.a.ojp.gov/sites/g/files/xyckuh186/files/media/document/DCRA-Factsheet.pdf>. In addition, the Division of Health Service Regulations within the Department of Health and Human Services collects a monthly report on average daily population and total inmate counts for each day to the Jail and Detention Section of DHHS’ Division of Health Service Regulation.

⁹ For example, The North Carolina Sentencing and Policy Advisory Commission has analyzed jail data to project available bed space for the Statewide Misdemeanant Confinement Program (see North Carolina Judicial Branch. (n.d.) “SMCP Capacity Projections.” Retrieved from <https://www.nccourts.gov/documents/publications/s MCP-capacity-projections>; the Criminal Innovation Lab at the UNC School of Government has analyzed jail data to examine jail populations and occupancy rates (see UNC School of Government, (n.d.) “Jail Occupancy Reports.” Retrieved from <https://cijil.sog.unc.edu/areas-of-work/bail-reform-2-0/jail-occupancy-reports/>.

¹⁰ See also Grodensky, C. et al. (2021). *Report on the Utility of a North Carolina Jail Database*. Duke University.

¹¹ For example, Michigan and New York have implemented records management systems available to all local law enforcement (see “Access to criminal justice data systems and databases” in the text herein, pp. 8-9.). The Michigan Department of Corrections (MDOC) Office of Community Corrections also manages a Jail Population Information System (JPIS) that uses monthly reporting to gather standardized information on jail utilization and demographics from county jails. However, for various reasons—including funding and local vendor problems—some jails do not submit reports to JPIS. See Michigan Department of Corrections. (n.d.) “Jail Population Information System (JPIS).” Retrieved from https://www.michigan.gov/corrections/0,4551,7-119-33218_49414-207773--,00.html

¹² California Board of State and Community Corrections. (n.d.). Jail Profile Survey. Retrieved from https://bscc.ca.gov/s_fsojailprofilesurvey/

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- ¹³ Colorado HB 19-1297 (2019). Retrieved from https://leg.colorado.gov/sites/default/files/2019a_1297_signed.pdf.
- ¹⁴ Florida SB 1392 (2018). Retrieved from <https://www.flsenate.gov/Session/Bill/2018/1392/BillText/er/PDF>
- ¹⁵ Massachusetts SB 2371 (2018). Retrieved from <https://legiscan.com/MA/text/S2371/2017>
- ¹⁶ Florida SB 1392 (2018). Retrieved from <https://www.flsenate.gov/Session/Bill/2018/1392/BillText/er/PDF>
- ¹⁷ Massachusetts SB 2371 (2018). Retrieved from <https://legiscan.com/MA/text/S2371/2017>
- ¹⁸ North Carolina State law does not require universal fingerprinting for every individual arrested and/or charged with an infraction or criminal offense which would provide a method for definitively resolving multiple offender identities across all criminal justice databases.
- ¹⁹ The National Information Exchange Model (NIEM) is a common vocabulary that connects different terms that mean the same thing to enable efficient information exchange across diverse organizations. NIEM. (n.d.). "About Niem." Retrieved from <https://www.niem.gov/about-niem>
- ²⁰ NIEM. (n.d.). "Colorado Integrated Criminal Justice Information System." Retrieved from <https://www.niem.gov/about-niem/success-stories/colorado-integrated-criminal-justice-information-system-cicjis>; Colorado Integrated Criminal Justice System. (n.d.). "How did CICJIS get started?" Retrieved from <https://cicjis.colorado.gov/about-cicjis/how-did-cicjis-get-started>
- ²¹ See Measures for Justice. (2021). Florida Criminal Justice Data Transparency: Standard Operating Procedures. Retrieved from https://measuresforjustice.org/about/docs/Florida_Criminal_Justice_Data_Transparency_Standard_Operating_Procedure.pdf reporting on implementation of new criminal justice data reporting requirements pursuant to Florida SB 1392 (2018).
- ²² See Health IM. (n.d.) "Health IM." Retrieved from <https://healthim.com/>
- ²³ Dunnell, T. (20 May 2021). "Local law enforcement deploys safety system in case of mental health crisis." The Daily News. Retrieved from <https://www.jdnews.com/story/news/2021/05/20/onslow-law-enforcement-deploy-healthim-addressing-mental-crisis/5161562001/>.
- ²⁴ See e.g., Allegheny County Department of Human Services. (n.d.). "Allegheny County Analytics." Retrieved from <https://www.alleghenycountyanalytics.us/index.php/analytic-tools-2/>
- ²⁵ North Carolina Administrative Office of the Courts. (n.d.) "eCourts." Retrieved from <https://www.nccourts.gov/ecourts#ewarrants-amp-odyssey-for-magistrates-ncaware-replacement-9373>
- ²⁶ North Carolina Administrative Office of the Courts. (n.d.) "eCourts." Retrieved from <https://www.nccourts.gov/ecourts>
- ²⁷ CJLEADS exemplifies a collaborative effort to enable a cross-system strategy for quickly and easily accessing multiple criminal justice and other state databases for offender information. Pursuant to Session Law 2008-107 directing the Office of the State Controller, in cooperation with the State Chief Information Officer to develop a Criminal Justice Data Integration Pilot Program in Wake County, an Advisory Committee and various state and local criminal justice agencies were directed to provide support, including identifying informational needs, developing a plan of action, providing access to data, and implementing secure integrated applications for information sharing of criminal justice and corrections data. (See North Carolina General Assembly. (n.d.) Session Law 2008-107, House Bill 2436, Section 6.15. Retrieved from <https://www.ncdot.gov/divisions/turnpike/Documents/H2436v9.pdf>.) In 2010, the North Carolina Department of Information Technology, in collaboration with the Department of Justice, the Administrative Office of the Courts; the former Department of Juvenile Justice and Delinquency Prevention, the former Department of Correction, the former Department of Crime Control and Public Safety, which comprise the current Department of Public Safety; the Department of Transportation, and local law enforcement agencies, launched CJLEADS.
- ²⁸ A Master Data Management (MDM) plan includes processes/methods to ensure data quality across multiple databases/data systems (rules for linking records, etc.). When data is consolidated from various data sources, it requires data governance policies along with quality management strategies. Business owners are responsible for making data governance decisions (e.g., who is allowed to do the following: create, change, view, delete data). MDM policies also address discrepancies across data systems.