



N.C. Government

Data Analytics Center

2024 Annual Report

Reporting Period: January 1, 2024–December 31, 2024

Report to the Chairs of the House of Representatives Appropriations and
Senate Base Budget/Appropriations Committees
Joint Legislative Oversight Committee on Information Technology Fiscal
Research Division

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Secretary and State Chief Information Officer

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The full text of the N.C. Government Data Analytic Center’s enabling legislation is available at:

https://www.ncleg.net/EnactedLegislation/Statutes/PDF/BySection/Chapter_143B/GS_143B-1385.pdf

Executive Summary

The 2024 Annual Legislative Report of the N.C. Government Data Analytics Center (GDAC) highlights significant accomplishments across various portfolios, showcasing the impact of data integration and analytics on state operations.

Most notably in 2024, the N.C. Department of Information Technology's (NCDIT) Data Division (where GDAC is housed) changed its name to the Enterprise Data Office (EDO) to better reflect the teams that comprise the division and the strategic direction to partner with agencies on maturing data management practices across state government (see page 5).

The purpose of GDAC is to use public-private partnerships as part of a statewide data integration and data-sharing initiative and to identify data integration and business intelligence opportunities that will generate greater efficiencies in, and improved service delivery by, state agencies, departments and institutions.

As one of the foundational business units within EDO, GDAC in its first ten years has become a trusted state partner for enabling the sharing of data assets by implementing a strong data governance model that ensures proper access to and use of data. GDAC collaborates with numerous partners, including but not limited to state agencies, local governments and the health care community. Each year, GDAC continues to deliver new analytic solutions and provide more data-driven intelligence to agencies and partners.

One of GDAC's key achievements is the extensive use of the Criminal Justice Law Enforcement Automated Data Services (CJLEADS), which reported more than 30,000 users and nearly 77 million unique searches in 2024. The system generated over 6.6 million alerts, demonstrating its effectiveness in supporting law enforcement efforts (see page 7).

Through the Financial, Fraud and Compliance portfolio, more than \$1 billion in 2024 alone was either proactively identified as out of compliance, saved, collected or recovered across the N.C. Department of Revenue, N.C. Industrial Commission and the N.C. Department of Commerce's Division of Employment Security (see page 15).

The Health Care portfolio saw significant progress with the NC HealthConnex system, which has connected over 10,000 facilities since inception and connected 44 new Medicaid provider facilities and 13 pharmacies in 2024. Additionally, the NC HIEA continued to strengthen its partnership with Medicaid with the approval of additional federal financial participation funds from the Centers for Medicare and Medicaid Services on three priority use cases, helping to bring the HIE Act's legislative vision to reality (see page 31).

Looking ahead, GDAC is migrating its portfolio of applications within the public-private partnership to cloud technology to enhance data management capabilities. These initiatives aim to continue improving data integration and analytics across state agencies, ensuring that North Carolina remains at the forefront of leveraging data to enhance public safety, compliance and overall state operations.

The following pages provide a summary of calendar year 2024 activities and projected 2025 activities.

Brief History of the Government Data Analytics Center

As first reported in a statewide data integration plan (Session Law 2007-323, HB 1473), there is a need for disparate state information systems to integrate and build analytic reporting capabilities for real-time access to data to be responsive to the state's business needs and the public's desire for information, while maintaining privacy and security of data entrusted to the state by North Carolinians.

In April 2008, the BEACON Strategic Plan for Data Integration was created to promote data warehousing and analytics and standardized tools to allow for secure, reliable information exchange.

The vision for statewide data integration and business intelligence efforts led by a dedicated body was realized under the Office of State Controller's Government Business Intelligence Competency Center. It was later renamed the N.C. Government Data Analytics Center (GDAC) in 2013 and transferred to the N.C. Department of Information Technology in 2014.

Over the last 10 years, GDAC has expanded its portfolio and scope of work from criminal justice and fraud to other areas that include child and family safety, health care and longitudinal performance analysis. GDAC works collaboratively with agencies to understand their business use cases, define their analytic needs, determine access to required data sources and scope the level of effort to support analytic development. GDAC now coordinates with more than 15 agency partners for the development and management of 15 applications and 35 analytic reporting solutions.

Accomplishments

GDAC showcased the impact of data integrations and analytics on state operations through notable initiatives delivered in 2024.

Criminal Justice and Public Safety Portfolio

- Implemented an **Audit/Alert process** to the N.C. Justice Data Portal. This new process enhances the N.C. Department of Public Safety's Criminal Justice Analytics Center's (CJAC) ability to monitor and flag irregularities in the data, ensuring that the provided insights are accurate and timely.
- Reported over 30,000 users and nearly 77 million unique searches of the Criminal Justice Law Enforcement Automated Data Services (CJLEADS) in 2024. The system generated over 6.6 million alerts, demonstrating its effectiveness in supporting law enforcement efforts.
- Conducted 99 training classes, training 2,871 individuals on various tools and systems.
- Developed the CJLEADS Audit Automation Tool to assist agencies in completing their annual CJLEADS audit requirement more efficiently, **saving an estimated 80 staff hours per quarter**.
- Partnered with High Point University to advocate for the inclusion of private university campus police in the use of CJLEADS. This initiative led to a legislative update (HB 971), allowing High Point University to become the pilot for this new use case. As a result, **16 additional private universities are now approved to be onboarded to CJLEADS**, enhancing campus safety and security.

Financial, Fraud and Compliance Portfolio

- **Replaced impacted data sources following the replacement of the N.C. Division of Employment Security (DES) tax mainframe in 2023**, ensuring the continued functionality of DES/GDAC services across and implementation of the tax modernization data model across six GDAC supported workstreams.
- Identified 6,346 misclassified workers resulting in the **assessment of nearly \$490,000 in taxes**.
- Alerts **enabled the Legal Case Management System to collect over \$1.5 million in penalties** and brought 567 non-insured employers into compliance.
- Released several valuable enhancements to N.C. Department of Administration's eReporting tool to ensure continuity and provide improved system performance. The Financial, Fraud and Compliance team integrated a one-time data feed containing the final batch of N.C. Accounting System (NCAS) eProcurement data for historical reference in eReporting. This completed the **integration of both NCAS and N.C. Financial System (NCFS) data sources, allowing users to access historical and current financial information in one interface**. Additionally, 11 new NCFS accounting fields were added to the Purchase Order file for greater insights for eReporting users.

Health Care Portfolio

- Onboarded **44 new Medicaid provider facilities and 13 pharmacies** enabling additional **data sharing with the thousands of facilities** already connected.
- Secured additional federal financial participation funds from the Centers for Medicare and Medicaid Services for three priority use cases in partnership with Medicaid.
- **Completed the NC HealthConnex system upgrade in August 2024**, modernizing the infrastructure to current health information exchange standards and improving system performance and user experience.

- Played a critical role in **ensuring continuity of care for displaced patients during Hurricane Helene in September 2024**, enabling health care providers to securely access and exchange patient records.

Longitudinal Portfolio

- Transitioned the **North Carolina Longitudinal Data System's (NCLDS)** flagship Data Request Service to the pre-launch test phase – the final development stage before the service becomes publicly available.
- Finalized public-facing dashboards and administrative reports N.C. for the Department of Health and Human Services' **Early Childhood Integrated Data System (ECIDS)** and began integrating ECIDS with NCLDS.
- Completed workforce outcome analyses for the state's **Career and College Promise Impact Analysis** – a multi-year, longitudinal study that examines the impact of the early college model on students' long-term outcomes (postsecondary success, employment, earnings and participation in the criminal justice system).
- Created new data warehouses for the N.C. Department of Public Instruction (NCDPI), National Student Clearinghouse (NSC) and the N.C. Community College System (NCCCS).

These accomplishments reflect GDAC's commitment to leveraging data to enhance public safety, the health and well-being of North Carolina and overall state operations, ensuring that North Carolina remains at the forefront of data-informed decision-making.

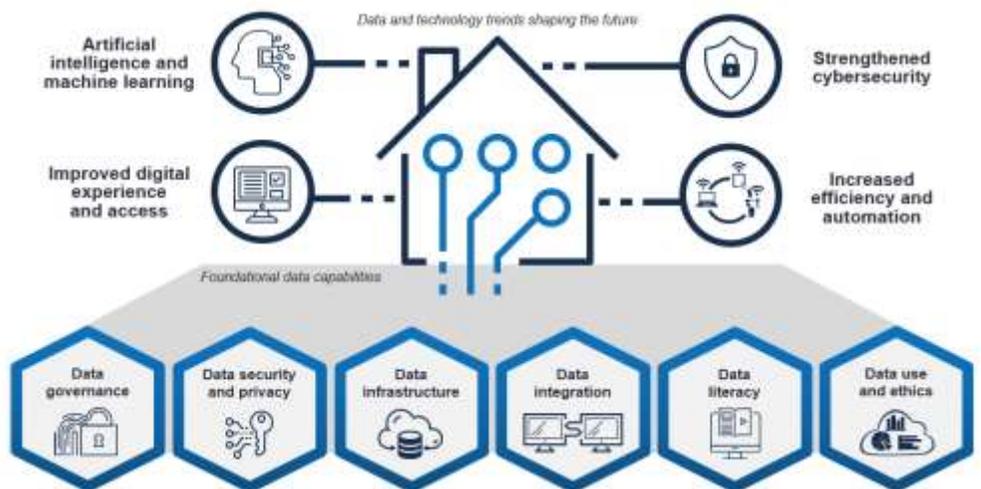
Strategic Direction

Creation of the Enterprise Data Office Sets the Strategic Direction for Cross-Agency Collaboration on Maturing Data Management Practices

In an age of rapid artificial intelligence (AI) advancement, the need for strong data management practices has become critical for government agencies seeking to modernize and deliver responsive public services. AI relies on vast amounts of data to function effectively, and the accuracy, accessibility and integrity of that data directly impact the quality and trustworthiness of AI-driven insights. Without well-governed data, AI systems can perpetuate bias, produce unreliable outputs or make decisions that undermine public confidence. As such, comprehensive data governance is no longer optional – it is foundational to the ethical and effective use of AI.

In 2024, State Chief Data Officer and GDAC Director Christie Burris led strategic planning efforts that included NCDIT leadership and partner state agencies.¹

The results of the strategic planning initiative at the state level recognize that maturing data management capabilities is increasingly essential to supporting cross-agency collaboration and innovation.



While North Carolina has enjoyed considerable success through GDAC – thanks in large part to the continued bipartisan support of the legislature, the Governor’s Office and the public-private partnership with SAS Institute – going forward, it is critical to mature North Carolina’s enterprise data capabilities to evolve with the changing technology landscape. Thus, the Enterprise Data Office (EDO) was established in November 2024 to build out a more coordinated approach across state government.

Input from EDO’s partner agencies and employees highlighted four critical opportunity areas to strengthen North Carolina’s enterprise data capabilities:

1. Enhancing visibility into data governance and security practices across state agencies and partners will build trust and reduce hesitancy to share data.
2. Data systems are siloed within and between agencies, resulting in unknown data possibilities.
3. Agencies want to advance their data governance practices but are limited by technical capabilities and unknown guiding standards. Insufficient support in training, tools and

¹ Eight state agencies participated in interviews. In addition, a survey was distributed via email to 15 state agencies that currently work with two or more business units withing the EDO. The response rate was 30%.

infrastructure, compounded by skill or resource gaps, prevents agencies from fully leveraging data to improve public services.

4. Agencies have limited purchasing power, contract negotiation leverage and grant opportunities on their own.

Through the implementation of data governance frameworks – including clear roles, policies and quality controls – agencies can ensure that data is trusted, secure and interoperable for all of their agency analytic and AI use cases. Additionally, the creation of a coordinating body will foster collaboration, sharing of leading practices through creation of education and training programs and alignment on key data priorities to drive collective impact.

In 2025 the EDO, in collaboration with NCDIT’s Enterprise Security Risk Management Office, Office of Data Privacy and Protection, and Enterprise Architecture, will work to align governance strategies across domains, convene data leaders to prioritize the most pressing needs, and curate data and AI literacy programs to meet agency needs for their workforce.

A coordinated, strategic approach to data management is essential to enabling the future of digital government.

EDO has defined its future purpose and strategic pillars to meet partner agency needs and expectations



The EDO will reach its purpose

To move North Carolina forward through the **power of data**, we drive progress by **fostering collaboration** across public and private sectors statewide. We empower stakeholders to **ask insightful questions** and improve outcomes for North Carolinians.



...by continuously evolving to Engage, Enable, and Empower

Engage stakeholders through formal and informal mechanisms to drive cross-agency collaboration, partnership, and ultimately collective impact

Enable stakeholders through direct services across the data lifecycle (e.g., preparation, sharing, analysis, and management)



Empower stakeholders to better self-serve and leverage data by providing guidance, education, training, tools and resources

Criminal Justice and Public Safety Portfolio

GDAC supports the criminal justice community by integrating and transforming data to improve public safety. A summary of the criminal justice portfolio follows.

Criminal Justice Portfolio

Total Projects in Production: 14

Total Projects in Development: 9

Agency Data Contributors: 9

Contents

- Criminal Justice Law Enforcement Automated Data Services (CJLEADS)
- Criminal Investigative Case Management (IntelShare)
- Crime Lab Analytics
- State Bureau of Investigation – N.C. Sex Offender Registry Compliance
- N.C. Gun Purchasing Disqualifying Analytics
- Governor’s Crime Commission – Criminal Justice Reporting Warehouse
- Investigation Case Management Utility

Criminal Justice Law Enforcement Automated Data Services (CJLEADS)

The **Criminal Justice Law Enforcement Automated Data Services (CJLEADS)** is a secure, centralized database of comprehensive, up-to-date information about offenders for use by federal, state and local government criminal justice professionals.² This critical data helps remove blind spots in law enforcement response, reducing risks and increasing safety for officers and communities. With a user base exceeding 30,000, the CJLEADS application provides:

- A comprehensive view of an offender’s records
- Alerting capability notifying a user of an offender’s change in status
- A case management tool to aid offenders’ transitions from prison to the community
- Access to real-time warrant information through the N.C. Administrative Office of the Courts’ (AOC) new eWarrants system
- Access to real-time license and registration information associated with drivers, motor vehicles, hunting, fishing and vessels
- Access to real-time pretrial release order information
- Access to federal sex offender registry data

CJLEADS Metrics 2024

Total Users: 30,000 +
Unique Searches: 76M +
Unique Records: 71M +
Alerts Generated: 6.6 M

Administrative Office of the Courts eCourts Migration

The AOC is transitioning from a more than 30-year-old mainframe application, ACIS, to the integrated case management system, Enterprise Justice (Odyssey). The Criminal Justice Portfolio team and GDAC’s

² CJLEADS follows State Bureau of Investigation rules, which incorporate by reference the Criminal Justice Information Services Security Policy. Access is generally limited to federal, state and local “criminal justice agencies (CJAs),” which are defined as “a court, a governmental agency, or any subunit thereof which performs the administration of criminal justice pursuant to a statute or executive order and which allocates more than 50% of its annual budget to the administration of criminal justice. State and federal Inspectors General Offices are included.” See 14B NCAC 18A .0102.

technical partner, SAS Institute, have been working for the past two years on a scheduled rollout to migrate select data feeds to the new systems. In 2024, CJLEADS went live with 44 counties, which make up tracks 3, 4, 5 and 6 of AOC's planned eCourts migration.

AOC is targeting implementation of eCourts in all 100 counties by the fourth quarter of 2025. To date, the new system Enterprise Justice is available in nearly half of the counties in the state (49). AOC, GDAC, SAS and the N.C. Department of Adult Correction continue to work in a close and dedicated partnership.

“In the fall of 2020, the Administrative Office of the Courts launched a collaborative partnership with GDAC for our transition to eCourts. The two agencies worked together to develop data requirements for the criminal and infraction extracts created from our new integrated case management system (ICMS) used to populate CJLEADS.

“In addition, GDAC has also worked alongside AOC in our data conversion process to help validate the data conversion of millions of criminal and infraction records migrated into our new ICMS. GDAC has been a valuable partner in our implementation of eCourts.”

- AOC Management

Planned Activities for CJLEADS for 2025 and Beyond

- Develop a roadmap to modernize CJLEADS application software
- Implement configuration and interface changes supporting the rollout of the new AOC eCourts integrated case management system with impacts to the following GDAC applications:
 - Develop a web-based portal that will employ next-generation case-management solutions to provide a triage workflow system, as well as reporting and analytics for the purpose of managing State Crime Lab activities with state prosecutors and law enforcement agencies, focusing on four areas: DNA CODIS Hits follow-up, DNA sample expungement, destruction of DWI blood samples and the identification of "stop work" cases

GDAC Production Services

As GDAC's internal operations team for the Criminal Justice and the Fraud, Financial and Compliance portfolios, the GDAC Production Services (GPS) team is responsible for providing support for users, including technical support, resources and training, and ensuring the security of data and maintenance of the systems.

GPS offers two tiers of 24/7/365 support – one for application users and another for data stewards and vendor partners. The customer-facing arm provides support for end users of GDAC products such as CJLEADS, writes and publishes user guides and training courses, and assists users with technical support and auditing activities.

GPS also maintains web pages for CJLEADS, multi-factor authentication systems and other services. Staff monitor data loads, correct missing data, manage changes to data flows, schedule planned

outages and conduct user acceptance testing. Additionally, GPS provides support at multiple annual conferences for criminal justice professional groups and performs outreach to these groups throughout the year.

CJLEADS Support and Training

CJLEADS Audit Automation Tool

In April 2024, an audit automation reporting tool was built to assist agencies in completing their annual CJLEADS audit requirement more efficiently. To remain in compliance, the annual audit report should be acknowledged at a minimum of once per calendar year by each of the nearly 600 organizations using CJLEADS. By automating this process, GPS reduced the time spent running manual reports by approximately 10 hours a week, saving an estimated 80 staff hours per month and minimizing the risk of configuration errors.

CJLEADS administrators can also generate ad-hoc/investigative audit reports without submitting the manual forms to the CJLEADS Audit Team, saving time for users and the GPS audit team.

Franklinton Police Department Officer Assesses CJLEADS' Value to the Criminal Justice Community:

"CJLEADS combines, in a way never before, multiple pieces of information that at one time could have taken days to find. This can never be translated into dollars, but it can certainly translate into a safer state."

Campus Police Allowed Access to CJLEADS

GDAC Production Services partnered with High Point University to raise awareness about the benefits of campus police having access to CJLEADS. Previously, the law only allowed CJLEADS use by state, federal, city and county law enforcement officers, including state campus police, but not private schools. Due to concerning activity at the private High Point University, its chief of police requested access to the tool. High Point University reached out to the legislature, the law was updated in HB 971 in July 2024 to permit access, and High Point University became the pilot organization for the new use case.

Sixteen additional private universities are now approved to be onboarded to CJLEADS due to this updated legislation. Private police who are unaffiliated with a college campus were not included in the update.

CJLEADS Training Metrics 2024
Training Classes Conducted: **99**
Individuals Trained: **2,871**

The GPS team produces multiple user guides and trainings. An automated, self-guided training for CJLEADS was completed in 2024 using Rise Articulate 360.

Criminal Investigative Case Management (IntelShare)

Working with the State Bureau of Investigation's N.C. Information Sharing and Analysis Center (ISAAC), GDAC developed an integrated suite of law enforcement modules allowing agents to develop

actionable intelligence on terrorist threats. (See Session Law 2015-241 §7A.2) This intelligence is shared with first responders, the private sector, emergency management, critical infrastructure and federal, state, local, tribal and territorial partners in a timely manner.

In 2024, the GDAC Criminal Justice team completed the data migration from the legacy Memex system, implemented in 2015, to the current IntelShare system. IntelShare was released in August 2023 to enhance the user experience and support current and future business needs.

This system provides:

- Scalable and enhanced case management and investigative capabilities including dashboards and reports
- Ability to incorporate and integrate data from existing investigations and sources
- Ability to manage investigators and investigation documentation, such as interviews, property and evidence, offenses, charges and court dispositions
- Integrated workflow to assist in guiding the user through the entire case management life cycle
- Additional integrations to external systems for enhancing searches and reducing additional logins

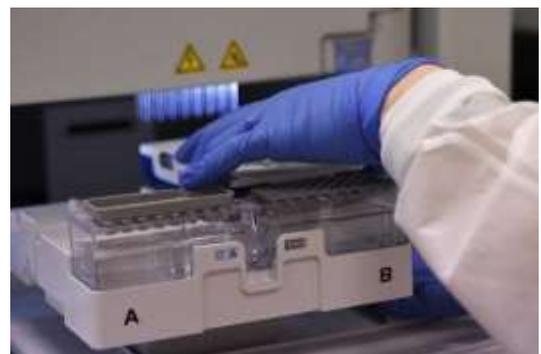
As part of the migration, an interface was built to the Regional Information Sharing Systems (RISSIntel) to allow for an inbound search within the IntelShare application. The RISSIntel user interface provides a real-time, API-driven aggregation of more than 60 intelligence state and federal databases without requiring users to use separate accounts for each system.

Crime Lab Analytics

GDAC is supporting the N.C. Department of Justice’s State Crime Laboratory (SCL) to expand access to information for investigators, DNA scientists, prosecutors and other criminal justice professionals to improve operational effectiveness and reduce costs.

Blood Destruction and Stop Work Reports

Missed DNA samples are a national issue, and many states struggle with how to identify missing samples that are lawfully owed and thus require collection. For the past four years, North Carolina sheriffs have utilized the Lawfully Owed Sample Report within CJLEADS to help eliminate the difficult and time-consuming manual process of identifying samples, leading to millions of dollars in savings due to the identification of thousands of unnecessary samples.



The report goes back to 1994, when the DNA database was started in North Carolina, offering the chance to solve decades-old crimes if older missed samples are added. It can also help prevent samples from being missed going forward. This electronic reporting process has enabled North Carolina to begin working on collecting lawfully owed samples before many other states.

Sheriffs can query their county to identify individuals who owe a DNA sample. Each sample collected offers the chance to solve a previously unsolved crime through a “hit” in the Combined DNA Index

System (CODIS) database. To date, the State Crime Lab has received 1,600 samples from utilizing the report.

Under state law, the State Crime Lab should expunge DNA and blood samples when they are no longer needed. Storing samples unnecessarily carries costs for the maintenance and power associated with constant, uninterrupted refrigeration. Staff also spend time and money monitoring the temperatures of refrigerators and inventory of samples.

Prosecutors collaborate with the State Crime Lab to receive and evaluate various actions to be taken on DNA samples, pending examinations and DWI blood evidence stored at the lab. In the past, information was shared by phone or email, leading to missing documentation and ineffective tracking for follow-up action. Utilizing the reports that GDAC provides, the State Crime Lab has started providing each district attorney's office with a list of DNA expungements to aid in their decisions whether to submit a DNA expungement. This is an interim step until a future phase is in place (see the Future Phase section below).

In fiscal year 2023-2024, the State Crime Lab was able to destroy **5,975 blood samples** (usually with two vials of blood per sample). This reduces time spent on inventory and will eventually reduce the number of refrigerators needed to store these items, eliminating maintenance and power usage costs. As the project continues, when a refrigerator breaks, there will not be a need to replace it.

Also in fiscal year 2023-24, the State Crime Lab was able to stop work on **3,672 evidence examinations** that were found to be unneeded. Using the cost of each exam type at the State Crime Lab as determined by the 23/24 project FORESIGHT report, the cost savings from not conducting these exams was **~\$1.5 million**.

Future Phase – State Crime Lab Portal Implementation

The State Crime Lab is partnering with GDAC to design a streamlined case management system to develop automated workflows.

Approximately 1,500 hours are spent annually by State Crime Lab criminal justice specialists to process and research DNA expungements. These are tasks that could be automated by the new proposed portal. Given an average annual salary of \$47,700, that equates to approximately \$34,400 per year in salary spent processing DNA expungements. This is separate from the time and salary spent by staff from 100 district attorney offices throughout the state.

State Bureau of Investigation N.C. Sex Offender Registry Compliance

The N.C. Sex Offender Registry monitors individuals convicted of sex crimes in North Carolina to aid in public safety efforts. To ensure offenders remain in compliance with sex offender reporting, the State Bureau of Investigation (SBI) partnered with the GDAC Criminal Justice team to develop the Sex Offender Registry–Compliance (SOR-C) program in 2020. The application alerts users with the SBI and local sheriffs' offices when offenders are out of compliance.

Non-compliant offenders are identified from data received from state agencies, such as the N.C. Administrative Office of the Courts, N.C. Department of Adult Correction, N.C. Sex Offender Registry, National Sex Offender Registry and N.C. Division of Motor Vehicles.

The automated processes that generate these alerts bring non-compliant offenders to the forefront of investigations for review and help begin the process of locating offenders if needed. The program also identifies out-of-state sex offenders who may be subject to registration due to their presence in North Carolina. Bringing offenders into compliance keeps North Carolina residents safe.

In 2024, SOR-C had been implemented by **59** county sheriff's offices, with plans to roll out the program to the other 41 counties in a phased approach. To date, **3,056** offenders have been brought into compliance since the program was implemented in 2020.

N.C. Gun Purchasing Disqualifying Analytics

In 2018, in partnership with the SBI and AOC, GDAC developed the N.C. Gun Purchasing Disqualifying Analytics program, which identifies and reports North Carolina offenders who have a conviction for an offense that disqualifies them from gun purchases. North Carolina offenders with disqualifications are reported to the National Instant Criminal Background Check System (NICS).

NICS conducts background checks on people who want to own a firearm or explosive, as required by law. When a person tries to buy a firearm, they fill out a U.S. Bureau of Alcohol, Tobacco and Firearms form. The seller, known as a federal firearms licensee, then contacts NICS electronically or by phone with the information. NICS staff then perform a background check to verify the buyer does not have a criminal record or isn't otherwise ineligible to purchase or own a firearm.

At the time of this report, approximately **204,000 North Carolina offenders** had been identified as ineligible for gun purchases since the inception of the report. Since 2018, there have been **1,592 denials** for gun purchases due to the program.

Governor's Crime Commission – Criminal Justice Reporting Warehouse Enhancing North Carolina's Criminal Justice System with the N.C. Justice Data Portal

In North Carolina, ensuring justice for our residents expands beyond law enforcement in the field. The Criminal Justice Analytics Center (CJAC) is a crucial part of the Governor's Crime Commission under the N.C. Department of Public Safety that helps shape policies that ensure safety, fairness and justice for all North Carolinians.

CJAC works to provide the state with a clearer picture of its criminal justice landscape through statistical analysis with a focus on statewide policy issues using the **N.C. Justice Data Portal**. This innovative, interactive tool centralizes criminal justice data from across the state. This repository not only makes aggregated crime data easily accessible to the public but also provides next-generation analytics tools.

Through the N.C. Justice Data Portal, CJAC enables real-time access to critical data, such as:

- **Traffic stop data**, which helps assess how law enforcement interactions are happening statewide with a geographical overview of where traffic stops are occurring
- **Computerized criminal history data**, which tracks criminal records to support informed decision-making in criminal justice processes

One of GDAC's key accomplishments in 2024 was the successful implementation of an **Audit/Alert process** to the N.C. Justice Data Portal. This new process enhances CJAC's ability to monitor and flag irregularities in the data, ensuring that insights provided are accurate and timely.

By providing on-demand reporting and analytical support to the Governor's Crime Commission, GDAC is helping enable more informed, data-driven decisions that ensure North Carolina's criminal justice system operates fairly and efficiently.

Investigation Case Management Utility

The **Integrated Case Information System (ICIS)** is a collaboration between the N.C. Department of Insurance (NCDOI) and GDAC that helps NCDOI investigate insurance fraud. Initially launched in 2020, the system has improved the efficiency of case investigations, reducing the average case-resolution time by automating formerly manual processes and increasing compliance with case deadlines.

NCDOI's Criminal Investigations Division (CID), housed within the Fraud Control Group, is charged with conducting criminal investigations and supporting the prosecution of individuals and entities committing insurance-related crimes. To carry out its investigative operations, CID requires a secure environment that supports investigative case management functions, including advanced reporting and analytics, search capabilities and built-in case activity monitoring and tracking. ICIS enables the secure sharing of case investigation records with the prosecution.

"ICIS has significantly improved productivity and streamlined NCDOI operations, particularly in the areas of completing prosecution files for court and tracking key metrics of success such as arrests, convictions, restitutions and recoveries. Since implementing ICIS, we've seen a substantial reduction in the amount of time required to complete and submit prosecution files.

"This has allowed our agents to work more cases in less time and focus on some insurance fraud prevention efforts. The time savings have been a direct contributor to our increased efficiency and effectiveness. The system provides real-time data that enables us to track progress more accurately and respond to citizen complaints quickly. It would be impossible to put a tangible dollar amount saved by the implementation of our system; however, it is evident daily."

- NCDOI ICIS Users

GDAC developed a new case management solution, the **Bail Bond Investigation System (BBIS)** in 2023. The NCDOI Bail Bond Regulatory Division, which licenses bail bondsmen and investigates consumer complaints against licensed bail bondsmen, uses the BBIS application to investigate the complaints against bondsmen. In addition, the BBIS application refers complaints to the ICIS system criminal investigations.

Previously, the Bail Bond Regulatory Division used three different systems to manage its complaints, application, license renewal and maintenance. This process was cumbersome and involved a lot of manual effort to keep systems synchronized. Integrating these business processes into the ICIS system helps reduce manual efforts and coordination. In 2024, the GDAC made enhancements to entity

resolution within ICIS that allowed case managers to review prior complaints. Now in phase 5, developments are in progress to support the addition of data from the Online Fraud Reporting System, the national exchange for fraud information, which will expand the available data needed to track insurance fraud by NCDOT investigators.

Financial, Fraud and Compliance Portfolio

GDAC's Financial, Fraud and Compliance (FFC) portfolio supports the state's efforts to prevent financial fraud and to maintain compliance with tax, benefits and employment laws. A summary of the FFC portfolio follows. Per § 143B-1385, GDAC partnered with SAS Institute on the deployment, support and expansion of the North Carolina Financial Accountability and Compliance Technology System (NC FACTS) to collect data that will create efficiencies and detect fraud, waste and abuse across state government.

Financial, Fraud and Compliance Portfolio, 2024

- **Total Projects in Production: 29**
- **Total Projects in Development: 12**
- **Agency Partners: 11**

Contents

- Financial
- N.C. Accounting System to N.C. System Transition: Enhancing Financial Reporting and Transparency
- N.C. OpenBudget Portal
- NC eProcurement eReporting Tool
- HUB Spending Report System
- N.C. Department of Public Instruction Business System Modernization
- School Report Cards
- Fraud and Compliance
- N.C. Financial Accountability and Compliance Technology System (NC FACTS) – Departments of Revenue and Commerce and Insurance
- State Treasurer Death Match
- N.C. Office of State Human Resources Human Asset Resource Platform
- N.C. Office of State Human Resources Workers' Compensation Anti-Fraud Reporting

FINANCIAL

N.C. Accounting System to N.C. Financial System Transition: Enhancing Financial Reporting and Transparency

North Carolina has undertaken a significant financial system overhaul by replacing its decades-old N.C. Accounting System (NCAS) with the new N.C. Financial System (NCFS) as part of the state's Financial Backbone Replacement project led by the Office of the State Controller (OSC). GDAC is assisting with this transition to improve data accuracy, consistency and comprehensiveness across government financial reporting and transparency tools. GDAC worked with OSC teams to develop new interfaces necessary for the continuity of GDAC financial reporting tools.

The N.C. OpenBudget, eReporting and HUB SRS reporting platforms have been successfully enhanced by GDAC to support this modernization effort, ensuring a smooth user experience and public trust in government financial transparency.

N.C. OpenBudget Portal

The NC N.C. OpenBudget Portal was developed in partnership with the OSC, N.C. Office of State Budget and Management (OSBM) and the State Chief Information Officer (SCIO) using the GDAC platform and SAS Visual Analytics. It was launched in 2016 as a way to enhance budgeting transparency by collecting financial data from all state agencies, public universities, community colleges, counties and local school administrative units. While participation for cities remains optional, full inclusion across other government entities was encouraged (Session Law 2015-241 §7.17, Session Law 2017-257, § 37.2.(c)).

The public-facing NCN.C. OpenBudget Portal serves as a central hub for exploring and analyzing state financial data. The portal not only facilitates informed decision-making among citizens but also fosters trust in government operations by making financial data readily accessible. GDAC supports the following reports in OpenBudget:³

- **Explore State Budget:** Access budgetary information, including appropriations and expenditures across various funds such as the General Fund, Highway Fund and Highway Trust Fund
- **State Grants:** Obtain information on grants awarded by state agencies, detailing recipients and funding amounts
- **Vendor Payments:** Review payments made to vendors, providing transparency on state procurement and spending
- **IT Contracts:** Examine state information technology contracts and bids
- **Transportation Contracts:** Examine state transportation contracts and payments
- **Bulk Budget Downloads:** Access comprehensive datasets for in-depth analysis and reporting

The transition from NCAS to NCFS is expected to improve the accuracy, consistency and comprehensiveness of financial reporting and enhance the quality of data available on N.C. OpenBudget.

NC OpenBudget Metrics 2024
Total Views in 2023-2024: **47,856**
Available Reports: **13**

N.C. eProcurement eReporting Tool

The N.C. Department of Administration's (NCDOA) N.C. eProcurement provides visibility to state agencies, community colleges, school systems and local governments. It allows government entities to aggregate their purchasing data in order to obtain better prices from suppliers. Additionally, N.C. eProcurement allows greater visibility into statewide procurement information, enabling the state to determine what other goods and services should be placed on contracts.

In July 2024, GDAC released several valuable enhancements to NCDOA's eReporting tool to ensure continuity and provide improved system performance. The FFC team integrated a one-time data feed containing the final batch of NCAS eProcurement data for historical reference in eReporting. This completed the integration of both NCAS and NCFS data sources, allowing users to access historical and current financial information in one interface. Additionally, 11 new NCFS accounting fields were added to the Purchase Order file for greater insights for eReporting users.

³ **Statewide and Agency Contracts:** As of October 2024, this report is no longer managed by GDAC. It is now managed by the N.C. Department of Administration.

HUB Spending Report System

The NCDOA Office for Historically Underutilized Businesses advocates for and promotes the utilization of HUB organizations in the purchase of goods and services for the state. The HUB Office is required to monitor reporting requirements to determine compliance with the state’s policy of cooperation in promoting the use of small, minority, physically handicapped and women contractors in purchasing state goods and services (N.C.G.S. 143-48). The HUB Office is also tasked with developing a plan to emphasize economic recovery for small businesses disproportionately affected by COVID-19.

The HUB Office partners with GDAC in the implementation of a reporting mechanism currently used by all state agencies, ensuring that these agencies receive full credit for HUB participation. It also increases and improves opportunities for HUB participation and spending by indicating HUB certification for budget transparency.

The GDAC FFC team announced in October 2024 that the NCAS to NCFS conversion took effect for the HUB Spend Reporting System (SRS) as part of OSC’s Financial Backbone Replacement project, modernizing reporting data for NCDOA’s Small Business Enterprise Program (NCSBE) and HUB programs.

HUB Reporting System Metrics 2024

Total Users: **43**

Agencies and Universities Served: **28**

Employee Hours Saved: **560**

This update allows the two reports to reflect legacy data found in the NCAS system and new NCFS data for historical comparison. It also enables monthly processes to take place on new NCFS data on existing data feeds and improved system performance.

N.C. Department of Public Instruction Business System Modernization

Session Law 2017-57 §7.16(a-d) directs the N.C. Department of Public Instruction (NCDPI) through GDAC to provide for a common reporting system and analytics system. The purpose of the project is to support the effort to modernize state and local education systems’ financial, human capital and school information systems. The resulting effort included the development of the NCDPI Educator Quality Dashboard (decommissioned in 2024) and State Operational Data Store (SODS).

School Report Cards

NCDPI’s School Report Cards website is available to the public, including parents, educators, state leaders, researchers and more, as a resource for school- and district-level data. It provides information for all public schools in 115 districts, including charter and alternative schools. The School Report Cards are also used heavily by real estate agents to provide potential home buyers with important local school-related information mainly for their clients moving to and around North Carolina.

GDAC’s FFC portfolio team refreshes the data for the report every spring and fall. The 2023-24 School Report Cards were built using over **25 million** records.

FRAUD AND COMPLIANCE

N.C. Financial Accountability and Compliance Technology System

The North Carolina Financial Accountability and Compliance Technology System (NC FACTS) is a fraud detection and prevention platform developed by GDAC and SAS. Designed to improve transparency, accountability and financial integrity across the state, NC FACTS combines a suite of alerts, reports, dashboards and analytics to help agencies detect and respond to potentially fraudulent activities.

NC FACTS was launched under Session Law 2013-360 as part of North Carolina's broader initiative to modernize and integrate financial data across agencies. The system enhances the state's financial data management and compliance efforts by ensuring data is integrated, secure and useful for real-time decision-making.

At its core, NC FACTS functions as a fraud alerting and lead-generation system, using risk and recovery modeling to prioritize the most urgent and high-impact cases. This allows state agencies to take timely, informed action in cases where financial misconduct or misrepresentation may be occurring. Currently, NC FACTS is the product of a collaborative effort between GDAC and key state partners, including:

- N.C. Department of Commerce, Division of Employment Security (DES)
- N.C. Department of Insurance, N.C. Industrial Commission (NCIC)
- N.C. Department of Revenue (DOR)

NC FACTS: N.C. Division of Employment Security

The fraud and compliance alerts generated for DES identify patterns that may indicate an employer's non-compliance with unemployment tax or misclassification of workers.

- **Unemployment Insurance Wage/Tax Analysis Alerts:** Focus on compliance, eligibility and overpayments.
- **Unemployment Insurance Claimant and Benefit Analysis and Alerts:** Support the analysis of benefit claims data and identification of suspect claims associated with possible identity theft and eligibility compliance. These alerts help ensure that benefits go to those claimants who are truly eligible for payments.
- **Enhanced Self-Service and Benefit Integrity Dashboard and Executive Leadership Dashboard:** Reporting dashboards that interface with DES workflows and provide potential identity theft alerts.

Unemployment Tax and Benefits Compliance Metrics FY2023–2024

Misclassified Workers Identified Via Tax Audits:

Total Audits: **1,478**

Total Number of Workers: **6,346**

Total Amount of Taxes Assessed: **\$489,829**

Overpayments Confirmed Via Wage Audit Notice (WAN) Alerts: **\$16.4M**

Overpayments to Deceased Claimants (Written Off): **\$585,000 Fraudulent Payments**

Overpayments Prevented Via Fraud Alerts: **\$8.7M**

DES Tax Modernization

After the DES tax mainframe was replaced in 2023, the FFC team was tasked with replacing impacted data sources to ensure continued functionality of DES/GDAC services. The tax modernization data model went live in early 2024 for six GDAC supported workstreams:

- DES–Tax Integrity
- DES–Benefits Integrity (Identity Theft Fraud Prevention)
- DES–Southeast Consortium for Unemployment Benefits Integration (Fraud Detection)
- N.C. Industrial Commission (NCIC) Worker’s Compensation
- DES/NCIC–Underground Economy/Employee Misclassification
- OSHR Workers’ Compensation Anti-Fraud

The effort included:

- Adapting the source of DES unemployment insurance tax data in GDAC from the DES legacy mainframe system to their modernized system
- Data remapping from legacy interfaces to accommodate the new data source
- Updating analytics and application processes to ensure the functional continuity of fraud alert generation for GDAC workstreams
- Updating the reporting for GDAC workstreams to account for changes that result from the new data models and updates to analytics

Enhancements to Claimant ID Verification

The FFC team delivered a set of valuable enhancements to the current DES unemployment insurance claimant registration ID verification process. These enhancements will better protect North Carolina residents from unemployment insurance identity theft and benefit fraud. Working in partnership with the DES Benefits Integrity group, GDAC enhanced the current application programming interface (API) with additional identity verification measures based on analytic criteria. DES utilizes this additional data for automated customer self-service follow-up security questions to improve ID verification, save third-party verification costs and prevent unnecessary delays in claimant benefit filing in 2025 and beyond.

NC FACTS: N.C. Industrial Commission

NC FACTS also generates alerts to identify businesses that have failed to maintain workers’ compensation insurance. These alerts are accessible via a Workers’ Compensation tab in the GDAC Portal. Employers identified as being out of compliance are at risk of being served potential civil penalties and/or criminal charges.

NCIC Legal Case Management System Interface Redesign For Fraud Analytics

Workers’ Compensation reporting is now done in the NCIC’s new Legal Case Management System (LCMS), which launched in January 2024 as a replacement data source for the system originally implemented in 2014. The FFC team finished the redesign of the GDAC interface to this new system in August 2024.

The FFC team managed the downstream updates to the Workers’ Compensation and the Employee Misclassification portions of NC FACTS to ensure functional continuity of NCIC alert generation for Tax Integrity, Benefits Integrity, the Southeast Consortium for Unemployment Benefits Integration,

Underground Economy and Workers' Compensation workstreams. These updates involved changes to extraction, transformation and loading (ETL) processes, data preparation steps and analytic programs resulting from the new NCIC data model.

Legal Case Management System Metrics 2024
Penalties Collected: **\$1,572,999**
Non-Insured Employers Brought Into Compliance: **567**
Cases Resolved: 1,108
Death-Related Overpayments Discovered: **\$58,474**
Cost Savings: **\$257,214**

Underground Economy and Employee Misclassification

The FFC team has developed and continues to enhance a suite of tools to help the NCIC fight against employee misclassification – a deceptive practice in which businesses intentionally mislabel workers to dodge responsibilities such as paying fair wages, contributing payroll taxes, maintaining proper insurance or meeting safety and licensing standards. These tools help reveal when employers are skirting the rules, often to the detriment of their workers and honest businesses playing by the book.

In 2024, GDAC successfully integrated its systems with N.C. State Unemployment Insurance Tax System (NCSUITS), the new DES cloud-based unemployment insurance tax system. This upgrade ensured that GDAC's alert systems remained operational and accurate as North Carolina transitioned away from the older infrastructure.

Underground Economy and Employee Misclassification Metrics FY2023–2024
Alerts Received: **7,158**
Employers Brought Into Compliance: **218**
Initial Penalty Assessments Made: **\$3,108,097**
Paid to N.C. Department of Labor-Investigated Misclassified Employees by Employers: **\$15,572**
Recovered from NCDOR-Related Misclassifications: **\$19,540,159**

NC FACTS: N.C. Department of Revenue

The N.C. Department of Revenue's (NCDOR) partnership with GDAC has resulted in several short-term and long-term projects, including Alcohol Beverage Control Collections, 1099-K Audits and Sales Tax Reports. N.C. General Statute 105-259 precludes NCDOR from providing specific details regarding the data and standards used to determine the selection of audit candidates for various NCDOR audits, including those for 1099-K and Individual Tax Identification Numbers (ITIN).

Improving both operational efficiency and return on investment are shared project objectives of both NCDOR and GDAC. Projects continue to assist in the automation of manual functions, reducing the time needed for business tax audits and ultimately increasing the state's return on investment. Additionally, advanced analytic models have been implemented to improve overall tax compliance

within multiple tax schedules and to enhance NCDOR’s ability to determine identity theft prior to issuance of a refund check.

N.C. Department of Revenue Tax Fraud Analytics and Electronic Filing Portals

NCDOR utilizes a system of fraud analytics to help identify tax fraud, including inflated withholdings, identity theft and underreported income. The department also manages the eNC3 (Annual Withholding Reconciliation), eNC5Q (Quarterly Income Tax Withholding Return) and NCIR (information reporting) electronic forms filing portals.

Tax Fraud Analytics and Electronic Filing Portals Metrics 2024

eNC3 Forms Filed: 12,793,339

eNC5Q Forms Filed: **212,449**

NCIR Forms Filed: **1061**

Refund Tax Savings (FY2023-2024): **\$966M**

Audit Assessments (FY2023-2024): **\$25.3M**

State Treasurer Death Match

In 2024, the FFC team implemented a yearly death match reporting process in partnership with the N.C. Department of State Treasurer to match data from the N.C. National Guard files to the GDAC Enterprise Deceased Master File to identify deceased individuals and ensure compliance in payment and delivery of services for the Retirement Division’s management and provision of retirees’ services and benefit.

N.C. Office of State Human Resources Human Asset Resource Platform

The goal of the N.C. Office of State Human Resources (OSHR) is to help state agencies, universities and local government unlock the full potential of the state’s greatest asset – its employees. GDAC is proud to be part of those innovative solutions with robust analytics and data integration through the Human Asset Resource Platform (HARP). This platform gives executive leadership the tools to turn complex workforce data into actionable insights for better decision-making and better support of state employees.

In 2024, GDAC modified the OSHR HARP 31-Day Compliance Report (N.C. General Statute 126-6.3(b)) that monitors and helps ensure a mandatory 31-day break for temporary employees hired through Temporary Solutions. The modification ensures that the report now includes those temporary employees with an exemption to work longer than 11 months, instead of only those temporary employees without an exemption. Now, all temporary employees can be flagged for non-compliance or proactively identified by OSHR leaders before non-compliance occurs.

N.C. Office of State Human Resources Workers’ Compensation Anti-Fraud Reporting

GDAC is also helping OSHR to better combat workers’ compensation fraud. In 2024, GDAC implemented a new anti-fraud report that detects and alerts officials to potentially ineligible or fraudulent workers’ compensation claims. Wage-matching capabilities were also enhanced, making the detection process even more effective.

Longitudinal Portfolio

In 2024, GDAC’s longitudinal portfolio team was moved organizationally under the Longitudinal Data System team for operational alignment and efficiency. The longitudinal portfolio supports educational institutions and state agencies by providing access to data for use in evidenced-based policy analysis and performance management for programs and services provided to North Carolinians. Involved agencies include the N.C. Community College System (NCCCS), N.C. Department of Commerce (NCDOC), N.C. Department of Health and Human Services (NCDHHS), N.C. Department of Public Instruction (NCDPI), N.C. Independent Colleges and Universities (NCICU), N.C. Pandemic Recovery Office and the University of North Carolina (UNC) System, state licensure and certification agencies, and research and evaluation partners.

Longitudinal Portfolio

Total Projects in Production: 35

Total Projects in Development: 13

Agency/Organization Partners: 12

Contents

- N.C. Longitudinal Data System
- N.C. Early Childhood Integrated Data System
- Common Follow-Up System
- North Carolina SchoolWorks Data Selector
- Career and College Promise Impact Analysis
- Data Warehousing Services

North Carolina Longitudinal Data System

The North Carolina Longitudinal Data System (NCLDS) is an initiative established by N.C. General Statute 116E to enable cross-agency data sharing. When fully implemented, NCLDS will provide a unified, efficient framework for longitudinal analysis with the goal of helping state leaders, educators, researchers and policymakers better understand education and workforce outcomes to inform continuous improvement across sectors.



Current data contributors include:

- N.C. Community College System
- N.C. Department of Commerce
- N.C. Department of Health and Human Services
- N.C. Department of Public Instruction
- University of North Carolina System
- N.C. Independent Colleges and Universities

NCLDS submits a separate detailed annual report every July; highlights of this year’s report are included below.

The cornerstone of NCLDS is its Data Request Service, which provides comprehensive governance for managing, preparing and fulfilling requests for data from its various contributors. The service entered its pre-launch test phase in 2024. Once the test phase is complete, the service will allow state agencies, research and evaluation partners, and practitioners to access cross-sector, linked data that will help answer some of the state’s most pressing questions to inform policy and practice.

As part of the test phase, NCLDS is processing two pre-planned requests for custom cross-sector datasets, with data sourced from all current data contributors. These first two requests will help NCLDS support analyses of keys to successful transitions from early childhood to elementary school and from school to the workforce.

In preparation for the service’s full open (projected for the first quarter of 2026), NCLDS is also finalizing the establishment of shared data quality standards and a process for expanding its data contributor partnerships.

N.C. Early Childhood Integrated Data System

The NCDHHS Division of Child Development and Early Education partnered with GDAC to develop a system that integrates early childhood data from selected education, health and social services programs. The Early Childhood Integrated Data System (ECIDS) is designed to help practitioners and researchers access the data needed to answer key program and policy-related questions, inform practice and improve outcomes for North Carolina’s children.

Over the past few years, the Longitudinal team completed the ECIDS integrative dashboards, integrating data from multiple data sources and replacing existing static reports on education, health and social services programs. These dashboards allow users to generate customizable reports to summarize the number of children receiving early childhood services by program, fiscal year, gender, race, ethnicity, age and county; provide a distinct count of children served by each program; and differentiate the number of children receiving services from two or more of these 10 early education, health and social services programs. These include:

- NC Pre-K
- Subsidized Child Care
- NC Infant–Toddler Program
- Food and Nutrition Services
- Child Protective Services Program
- Work First Family Assistance (Temporary Assistance for Needy Families)
- Preschool Exceptional Children’s Program
- Early Hearing Detection and Intervention
- Home Visiting–Healthy Families America
- Home Visiting–Nurse-Family Partnership

In 2024, the Longitudinal team finalized ECIDS public-facing dashboards and administrative reports. While the team wraps up many activities in preparation for readying ECIDS for NCDHHS staff, the partnership will continue with plans to continuously improve entity resolution and integrate early childhood data via the ECIDS system into the N.C. Longitudinal Data Service.

Common Follow-Up System

N.C. General Statute 96-30–96-35 directs NCDOC’s Labor and Economic Analysis Division to operate the Common Follow-Up System (CFS). This system evaluates the performance and effectiveness of the state’s job training, education and placement programs by measuring participants’ presence in the workforce.

Session Law 2014-100 directed NCDOC to develop a plan to transfer CFS’s information and capabilities to GDAC. The objective of the CFS migration and modernization was to improve access to the state’s longitudinal data, providing flexibility and scalability and advanced data analysis capabilities associated with workforce and educational program operation and performance.

In 2024, the Longitudinal team collaborated closely with three key contributing agencies – the University of North Carolina (UNC), NCDHHS’ Division of Aging and Adult Services (DAAS) and NCDOC’s Division of Workforce Solutions (DWS) – to develop a clear scope for the changes needed to update CFS as they work toward modernizing the system. Preliminary discussions also began regarding the potential integration of CFS into NCLDS. Wage data from CFS and NC SchoolWorks already have been integrated.

To support the modernization effort, the team partnered with the NCDOC to plan for system upgrades, scheduled to begin in 2025.

North Carolina SchoolWorks Data Selector

In June 2012, the U.S. Department of Education awarded a \$3.6 million grant to NCDPI to undertake the P20-W System Statewide Longitudinal Data System Project (SLDS Project), named NC SchoolWorks. The objective of NC SchoolWorks is to enable five statewide entities to partner and share data. This encompasses data from the N.C. Community College System, NCDPI, NCICU, UNC System and DES.

The Longitudinal team keeps the NC SchoolWorks system operational, performing routine maintenance and root cause analysis on any issues that arise. In the coming months, the team will work with the vendor to develop a proof of concept for a new approach for retrieving federated data. Plans are also underway to integrate NC SchoolWorks data into NCLDS.

Career and College Promise Impact Analysis

The Career and College Promise (CCP) Impact Analysis examines the impact of the early college model, the Cooperative Innovative High School Pathway (CIHS), on students’ long-term outcomes, including earning a postsecondary credential, employment and earnings, and participation in the criminal justice system. The analysis also considers the implementation, impact and cost of all components of CCP in North Carolina, including three structured dual enrollment pathways: College Transfer, Career and Technical Education, and Cooperative Innovative High Schools.

In 2024, the Longitudinal team partnered with the project lead (the University of North Carolina-Greensboro SERVE Center) to complete two rounds of data matching and analysis, as well as descriptive and root cause workforce outcomes analyses, for the first set of cohorts in the first year of this multi-year, longitudinal study. Without the partnership of the Longitudinal team, the analysis would not have been able to report on longer-term workforce outcomes for program participants.

Data Warehousing Services

In 2024, the Longitudinal team created new data warehouses for the NCDPI National Student Clearinghouse (NSC) and the N.C. Community College System (NCCCS).

Data from the NSC on about **1 million** high school students from 2014 to present was made available through CFS, a collaborative effort by the agency with NCDOC. The N.C. Community College System Warehouse makes data on about **2.4 million** students from 2012 to present available for use by the CFS, N.C. Longitudinal Data Service and the UNC System Office.

Child and Family Safety Portfolio

The N.C. Department of Public Safety’s (DPS) Division of Juvenile Justice and Delinquency Prevention (DJJDP) and N.C. Department of Health and Human Services (NCDHHS) are working with GDAC to integrate data to improve access to information for social services case workers and juvenile court counselors in the development of appropriate care plans.

Contents

- Case Worker ASSIST (CWA)
- Juvenile Justice Service Directory
- N.C. Integrated Care for Kids (NC InCK)

Case Worker ASSIST (CWA)

Session Law 2014-100 §12C.1.(e) directed NCDHHS to coordinate with GDAC to establish and implement a Child Protective Services pilot program to enhance coordination of services and information sharing for families needing special assistance.

Session Law 2015-241 §12C.11.(a) (House Bill 97) directed continued collaboration between NCDHHS and NCDIT to enhance the pilot, leading to the development of a dashboard linking multiple data sources across social services and criminal justice to provide a comprehensive profile of a child and families. This includes demographic and caretaker information, histories, related associations and eligibility for programs such as Work First, Medicaid and Subsidized Childcare.

Case Worker ASSIST Metrics FY2023-2024

Total Child Welfare Users: **4,489**

Total Child Care Users: **196**

Total Searches (2023-2024 FY): **12,489**

The dashboard, now referred to as Case Worker ASSIST (Accessing and Searching Sensitive Information through Technology), is a web-based application that integrates information from multiple data sources to support case workers caring for clients and citizens of the state of North Carolina and has approximately 4,500 users. Case

Worker ASSIST aims to help social service professionals make better and more informed decisions in delivery of appropriate services for individuals and families and is accessible 24/7 for registered users at the state and county levels.

Case Worker ASSIST has helped to better protect social workers in the field, better inform them as they learn the family history of a child involved with the child welfare system and better serve children and families by aligning their needs to services for which they are eligible.

In 2024, user acceptance testing was completed to integrate two new data sources from NCDHHS’ Special Assistance in Home (SAH) and Adult Protective Services (APS). After production implementation in early 2025, the next phase of CWA data integration will include the remaining Aging and Adult Services programs from the Social Services and Aging divisions of NCDHHS.

Juvenile Justice Service Directory: Providing Easy Access to Programs for At-Risk Youth

The Juvenile Justice Service Directory is a centralized, statewide catalog of intervention programs that provide resources to serve juveniles in crisis across the state. The catalog serves as a one-stop shop for programs that serve at-risk youth, including services for substance use, mental health, behavioral challenges and more. By centralizing this information, DJJDP staff and service providers such as case workers, health care providers and behavioral health providers can work together to match youth with the support they need, reducing barriers to treatment and improving outcomes.

Juvenile Justice Service Directory Programs

Total Programs Included: **1,046**

Modifications in 2024 included a series of changes implemented in phase 7 of the NCDAC Juvenile Justice Service Directory project, including communications updates, data refreshes and editing of workflows. Development of phase 8 modifications are on track to begin in 2025. North Carolina remains at the forefront of smart, data-informed justice strategies that reduce redundancy, improve service delivery and steer youth away from future justice involvement.

N.C. Integrated Care for Kids (NC InCK)

N.C. Integrated Care for Kids (NC InCK) is an innovative model to promote child and family well-being in central North Carolina by integrating needs and services beyond traditional health care to address social drivers of behavioral and physical health.

NCDHHS participates in the NC InCK project, a seven-year pilot with the Duke and UNC Health Systems that utilizes funds from the U.S. Centers for Medicare and Medicaid Services to improve the integration of medical and social services care, reduce out-of-home placement and improve health outcomes for children. The project serves children receiving Medicaid and the Children's Health Insurance Program (CHIP) in five pilot counties: Alamance, Durham, Granville, Orange and Vance. GDAC serves as the data partner for the pilot project.

The NC InCK pilot utilizes health, education and juvenile justice data from NC Medicaid (NCDHHS Division of Health Benefits), NCDPI and DJJDP to identify services to meet participants' needs. GDAC generates risk stratification files from the cross-sector data and integrates them into a non-GDAC case management system accessed by health care providers and their care teams. To calculate the risk score, GDAC leverages 275 data elements from six input files across the three agency partners.

The program is proving to be successful, with NC InCK-engaged members half as likely as non-engaged members to have three or more ER visits over the past 12 months. **Medicaid costs for highest-risk members were also one-third lower for NC InCK members.**

In 2024, the Financial, Fraud and Compliance team integrated kindergarten readiness and chronic absenteeism data from NCDPI into the NC InCK system and provided summary files to NCDHHS to help staff understand which kids were at risk and where to target interventions. Looking ahead, the FFC team plans to finalize research and quality improvement steps to identify children who may be missed for engagement opportunities or have support gaps.

Health Care Portfolio

GDAC's health care portfolio is managed by the N.C. Health Information Exchange Authority (NC HIEA) and supports several divisions within NCDHHS in providing data to facilitate the delivery of their services. Additionally, the NC HIEA operates the state-designated health information exchange, NC HealthConnex. Beginning in state fiscal year 2025-2026, the NC HIEA will submit a separate legislative report from GDAC.

Health Care Portfolio

Total Applications/Services in Production: 15

Total Projects in Development: 27

Partners: NCDHHS Divisions of Public Health, Mental Health and Medicaid, State Health Plan, Sheps Center for Health Services Research at UNC-Chapel Hill, UNC Health, Duke-Margolis Institute for Health Policy, Blue Cross Blue Shield of North Carolina

Contents

- Advisory Board
- Pharmacy Connections
- ACURE4Moms
- System Upgrade
- Disaster Response
- Health Data Utility
- Medicaid Partnership
- Controlled Substance Reporting System

NC HealthConnex: The State-Designated Health Information Exchange

In 2015, the N.C. General Assembly passed the Statewide Health Information Exchange Act (Session Law 2015-241), establishing the N.C. Health Information Exchange Authority to oversee and manage the state-designated



health information exchange, NC HealthConnex. The law requires health care providers who receive state funds, such as Medicaid or the State Health Plan, for the provision of health care services to connect and submit clinical and demographic patient data by certain mandated dates.

Advisory Board

Appointed Members

- Brent Lamm, chair, *individual with technical expertise in health information technology* – Senior vice president and chief information officer at UNC Health, Lamm oversees information technology and clinical engineering solutions at UNC Health. He also serves as the system's chief analytics officer, leading enterprise analytics and data sciences teams.
- Ryan Craig, *representative of a health system* – Vice president of analytics at Lumeris, Craig focuses on providing value-based care solutions for health systems across the United States, with over 25 years of experience in IT, data warehousing, analytics and data management.
- Laura Gruebel, *patient representative* – A trained physical therapist, Gruebel is president of a non-profit and a volunteer guardian ad-litem.

- Dr. John J. Meier, *representative of licensed physicians* – A practicing internist and pediatrician at Wake Internal Medicine Consultants, Inc., Dr. Meier serves as president-elect of the North Carolina Medical Society and is on the boards of Carolina Complete Health and Key Physicians.
- Michael Robinson, *representative with technical expertise in health data analytics* – Manager of interoperability and clinical data exchange at Blue Cross and Blue Shield of North Carolina, Robinson has over a decade of experience in IT, focusing on workflow-driven systems and data exchange.
- Tanya Thompson, *representative of a critical access hospital* – Vice president of information systems applications at East Carolina University (ECU) Health, Thompson has over 27 years of healthcare and technology management experience leading the development and execution of IT strategies that align with ECU Health’s vision and goals.
- Ryan Wilkins, *representative of behavioral health providers* – Senior database administrator at Crossnore Communities for Children and senior consultant for Cansler Collaborative Resources, Wilkins has worked with behavioral health agencies for two decades in various capacities, ranging from direct care to agency consulting.
- *Representative of a federally qualified health center* – Awaiting appointment

Ex-Officio Members

- Secretary and State CIO Teena Piccione, N.C. Department of Information Technology
- Secretary Devdutta Sangvai, N.C. Department of Health and Human Services
- Christie Burris, state chief data officer and Government Data Analytics Center director
- Thomas Friedman, executive administrator, North Carolina State Health Plan

NC HealthConnex is a secure, standardized electronic system that helps create a more complete, longitudinal clinical patient record. The NC HealthConnex Clinical Portal is a web-based application through which providers can securely share important patient health information, such as labs, diagnostics, history, allergies, medications and more. With direct secure messaging (DSM), providers can also send encrypted emails to other providers to share health information and imaging. NC*Notify, the event notification service of NC HealthConnex, alerts providers when patients whom they choose to monitor have a care event outside of their regular health care setting, such as a visit to the emergency department.

In addition to submitting data, health care providers can also share information on patients with whom they have a treatment relationship. This is possible through the offering of additional value-added services such as data exchange via bidirectional interface with a participant’s electronic health record, access to a web-based clinical portal, clinical and care transition alerts via NC*Notify.

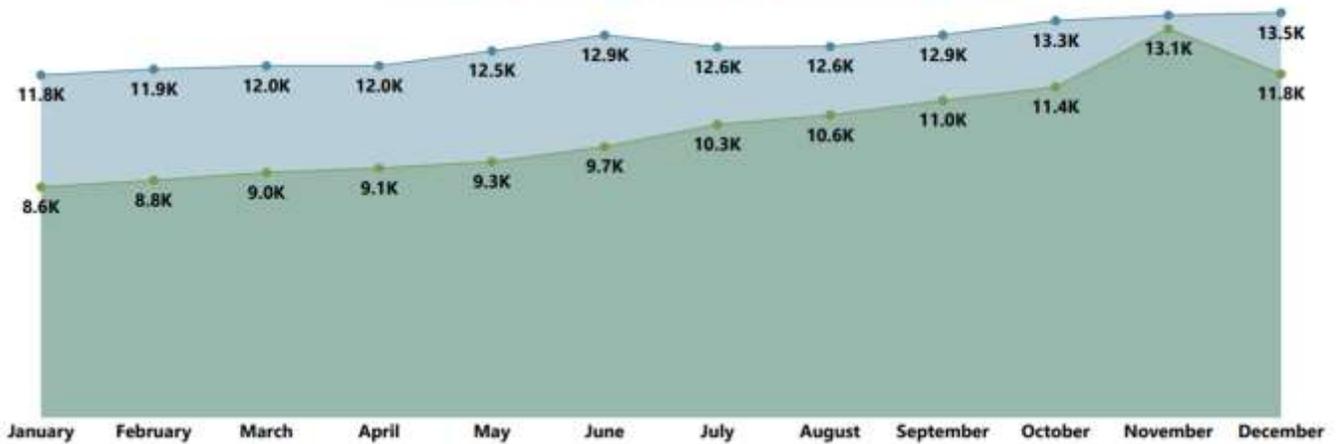
NC HealthConnex Metrics CY 2024
 Total Facilities Connected: **10,000+**
 New Medicaid Provider Facilities Onboarded: **44**
 New Pharmacies Onboarded: **13**
 New Participation Agreements: **160**
 Total Portal Accounts: **13,543**

With active use, these tools reduce duplicative testing, enhance the efficiency and accuracy of diagnoses, recommendations and treatments, and improve coordination across all levels of care.

In addition to health care providers, NC HealthConnex supports state agencies such as NCDHHS with care management, quality measurement, value-based payment and public health surveillance. NC HealthConnex also improves continuity of care for incarcerated persons for the N.C. Department of Adult Correction.

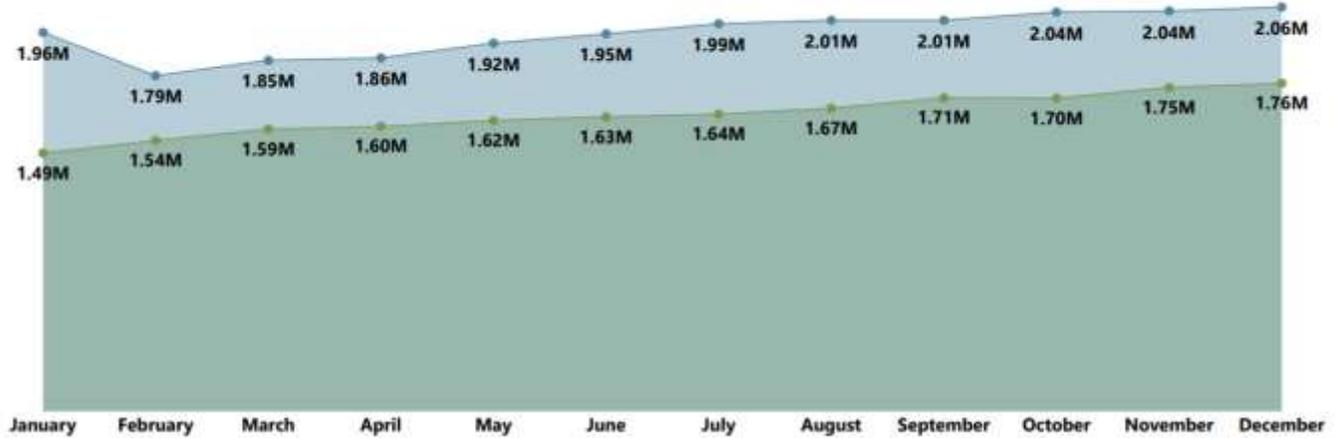
NC HealthConnex Clinical Portal Accounts

2024 2023



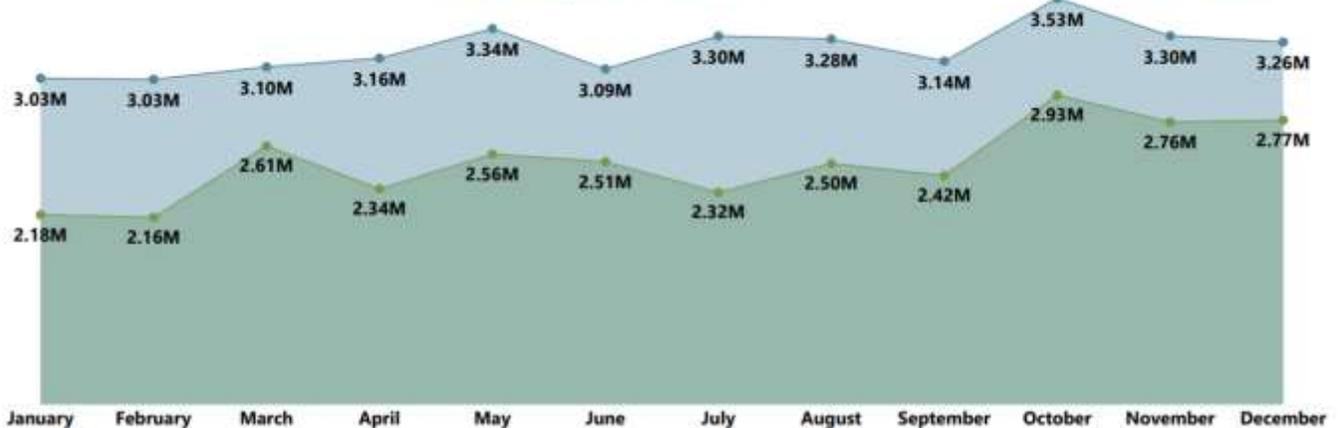
NC Notify+ Patients Monitored

2024 2023



NC Notify+ Alerts Sent

2024 2023



With NC HealthConnex, pharmacists can access patients’ comprehensive records across facilities, review labs, diagnostics and allergies, and can access medication history to reduce medication errors and confirm with lab results that medications are working. Currently, 55 pharmacists are actively using the NC HealthConnex Clinical Portal, and that number is expected to increase as NC HIEA outreach to pharmacists continues.

Having access to this system can reduce redundant lab tests, improve diagnoses and treatment, and improve coordination across all levels of care for patients in North Carolina.

NC HealthConnex System Upgrade

The NC HIEA, along with GDAC’s technical partner SAS Institute, completed a necessary system upgrade to the NC HealthConnex platform in August 2024 after 18 months of preparation and planning.

The goal of this upgrade was to modernize the NC HealthConnex infrastructure to current health information exchange standards, resulting in improved system performance and a better user experience for those participants utilizing exchange services such as the NC HealthConnex Clinical Portal.

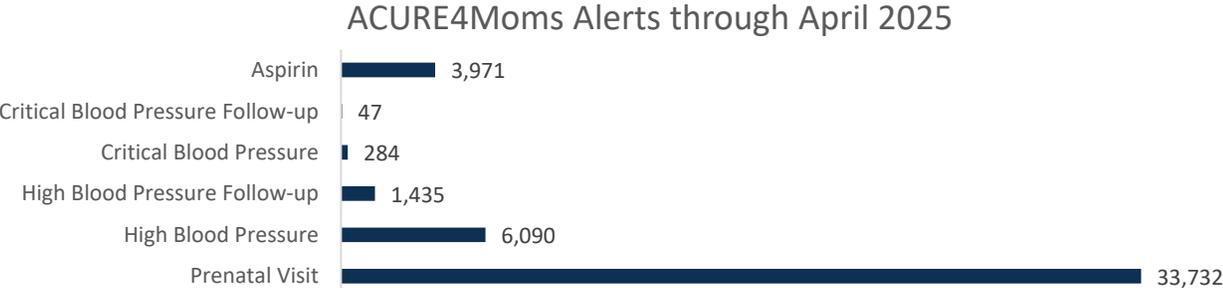
With the upgrade, Clinical Portal users saw an improved Clinical Summary section allowing data to be viewed in two columns, the ability to do a text search within individual chartbook pages and additional clinical sections within the patient record. Moreover, the upgrade opened the door to perform compression on much of the historical data in NC HealthConnex, which will result in savings on storage.

Onboarding activities for NC HealthConnex data exchange services were subject to a planned change freeze temporarily during the upgrade. This downtime did not impact participants’ compliance with the HIE Act.

ACURE4Moms Adds Aspirin Alerts

The NC HIEA serves as the data partner for the ACURE4Moms initiative. This study, funded by a grant from the Patient Centered Outcomes Research Institute (PCORI), seeks to improve health outcomes for Black mothers, who are more likely to experience pregnancy-related complications, and their infants. The 40 clinics in the University of North Carolina–Chapel Hill-led study are full participants of NC HealthConnex.

In 2024, the NC HIEA added Aspirin Alerts to the Maternal Early Warning System, which generates alerts through NC*Notify when a patient has a risk factor for low birthweight. Aspirin is known to cause pregnancy loss and defects during the first trimester of pregnancy. This system helps alert providers when a patient has been taking aspirin during this time.



NC HIEA Rallies to Help Health Care Providers and Displaced Patients After Hurricane Helene

In the aftermath of Hurricane Helene, which devastated western North Carolina in September 2024, the NC HIEA played a critical role in ensuring continuity of care for displaced patients.

As thousands of North Carolinians were forced to seek care outside of their communities, NC HealthConnex enabled health care providers to securely access and exchange patient records as displaced individuals sought care in other facilities or across state lines.

Clinical teams needing access to patient records were encouraged to obtain credentials for the NC HealthConnex Clinical Portal. In a rapid and focused response to the disaster, the NC HIEA – in partnership with NCDHHS – prioritized the onboarding and credentialing of providers in the hardest-hit areas of western North Carolina. This effort led to the creation of 141 new portal accounts, giving clinicians immediate access to vital patient information through the secure web-based platform.

Leveraging its connection to the [national eHealth Exchange Network](#), NC HealthConnex facilitated bidirectional sharing of clinical data with multiple regional and federal health information networks, including in Tennessee, Georgia, Virginia and the U.S. Departments of Defense and Veterans Affairs. Through these connections, providers in neighboring states were able to access the medical histories, medications and treatment plans of North Carolina patients displaced by the storm.

NC HealthConnex also enabled data exchange with HIEs in 25 states via participation in the [Patient Centered Data Home™ \(PCDH\)](#), a national initiative managed by Civitas Networks for Health. This secure system alerted North Carolina providers when their patients received care in other states, supporting more coordinated and informed follow-up care as residents returned home.

The NC HIEA also researched vulnerable populations who were missing or in need of wellness checks after Hurricane Helene to see if they had a clinical encounter in NC HealthConnex.

“In partnership with NC Medicaid, the NC HIEA identified more than 27,500 Medicaid beneficiaries from the impacted region and reviewed their data in NC HealthConnex to determine whether they had received clinical care following the storm. Of those researched, approximately 56% of medically fragile children and disabled adults receiving home and community-based services were found to have had medical encounters, along with approximately 47% of individuals with intellectual or development disabilities who get long-term care services in their home or community, rather than in an institutional setting.”

The NC HIEA’s swift action and strategic use of health information technology were instrumental in mitigating the disruption of care caused by Hurricane Helene and ensuring continuity of patient care at a critical time.

Designation as a Health Data Utility

Health data utilities (HDUs) are emerging as trusted, multi-sector entities that aggregate and exchange clinical, claims and social data to support care delivery, public health and research. The HDU model gained traction in the early 2020s, catalyzed by the COVID-19 pandemic, which underscored the urgent need for a more coordinated, equitable and resilient health data infrastructure. National organizations such as Civitas Networks for Health, the Commonwealth Fund and the National Committee for Quality Assurance (NCQA) have played a pivotal role in advocating for HDUs as the next evolution of health information exchanges – expanding their mission to serve broader public interests. NC HIEA is seeking designation as an HDU.

HDUs facilitate participation and data sharing across a wide range of stakeholders, including public health and other governmental agencies, hospitals, laboratories, health plans and social service organizations. This bidirectional exchange of information allows providers near real-time access to public health data, while ensuring the privacy and security of that data.

In many respects, NC HealthConnex already functions as a de facto HDU. It supports public health reporting to the N.C. Division of Public Health (DPH), helping providers comply with communicable disease and vaccine reporting requirements. NC HIEA has partnered with DPH to build chronic disease registries for stroke and diabetes, provide data for syndromic surveillance and support communicable disease contact tracing.

Currently considered an expanded health information exchange, NC HealthConnex facilitates data exchange services with a variety of partners, including pharmacies and local health departments. Achieving formal HDU designation through legislative action would enable even broader participation from sectors such as emergency services and social care. It would also inform enhancements to NC HIEA’s governance model and technical infrastructure to support emerging use cases.

More about the initiatives to further this effort are included in the section below.

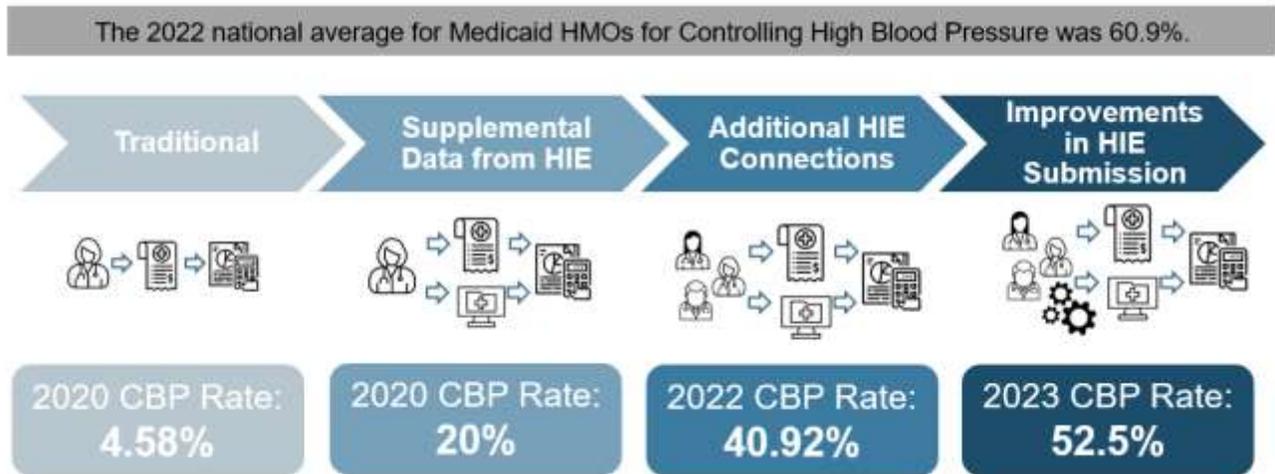
Medicaid Analytics/Priority Data Elements

Session Law 2015-241 §12A.17.(b) directed NCDHHS to coordinate with GDAC to develop a pilot program that applies analytics to NC Medicaid data to maximize health care savings and efficiencies and optimize positive impacts on health outcomes. This work was replaced with a “Priority Data Elements” initiative in 2021.

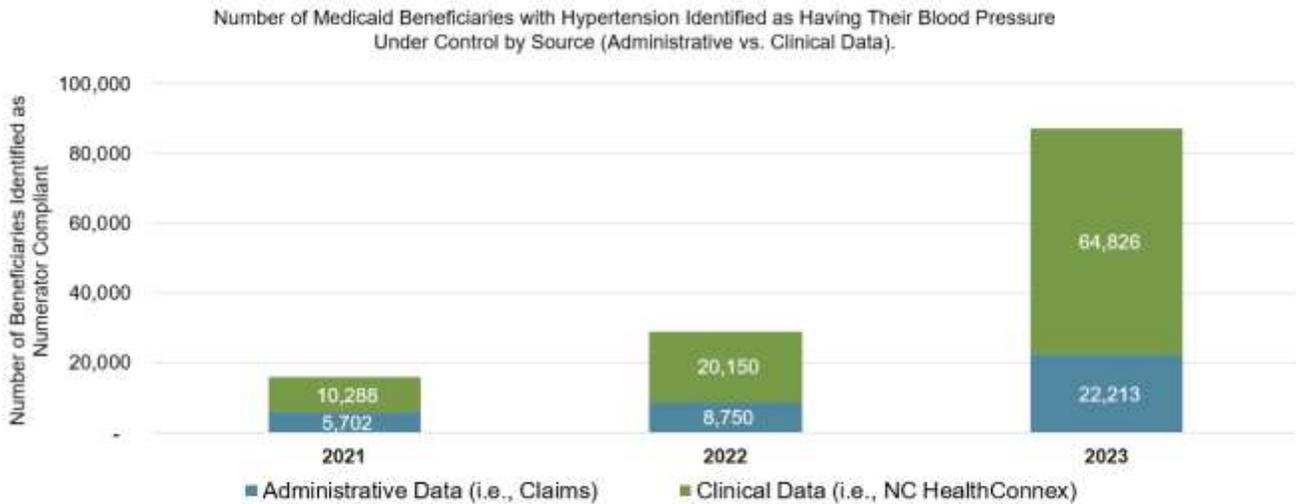
The HIEA team provides NC Medicaid with monthly Priority Data Element extracts that include demographic information and relevant, high priority clinical data elements. This information supports



quality measures that require clinical data (e.g., diabetes, hypertension, BMI and depression screening/follow-up) as well as other population health analyses. Compared to claims data, these clinical extracts offer more timely insights into the quality of care provided and beneficiary health outcomes. An example of how this supplemental clinical data has increased NC Medicaid’s performance on the Controlling High Blood Pressure (CBP) quality measure can be seen below.



The proportion of beneficiaries with hypertension that were identified as numerator-compliant for the Controlling High Blood Pressure measure via NC HealthConnex clinical data continues to increase year-over-year, outpacing those identified via claims data.



Source: Synthesis of NC Medicaid administrative data and NC HealthConnex clinical data, 2020-2024.

Expanding Monthly Data Extracts

NC Medicaid enrolled more than 470,000 individuals during the seven months of state fiscal year 2023-2024 that followed the expansion of Medicaid on December 1, 2023. This expansion was the largest health care change in the state’s history.

The N.C. Division of Health Benefits also launched Behavioral Health and Intellectual/Developmental Disability (I/DD) Tailored Plans, a new Medicaid health plan that brings together services for physical health, mental health, substance use, I/DD and traumatic brain injuries into one comprehensive plan.

Approximately 220,000 people are now enrolled. To support this effort, the HEIA team expanded its monthly extracts of key data elements to enhance clinical quality measures for Behavioral Health and I/DD services across local management entities, managed care organizations and tailored plans. Moreover, care managers and chief medical officers at the tailored plans were granted access to the NC HealthConnex Clinical Portal and are now among its most active users.

HIE Medicaid Services Program Expands Health Data Exchange

NC HIEA is partnering with the N.C. Division of Health Benefits to leverage NC HealthConnex, the state-designated health information exchange, to support NC Medicaid's quality and population health efforts by improving data exchange.

The NC HIEA has worked closely with NC Medicaid since 2020 on projects ranging from Covid-19 surveillance to the Medicaid Managed Care launch. Recognizing the success of this work, NC Medicaid submitted a request to the Centers for Medicare & Medicaid Services (CMS) for enhanced federal financial participation to support three additional use cases to leverage NC HealthConnex. The request was approved on October 24, 2024, kicking off a two-year design, development and implementation process that will run through Sept. 30, 2026. The funds will cover staffing and technical design, development and implementation for the next two federal fiscal years. The total cost will be split with 90% federal funding and 10% state funding.

This initiative is now called the HIE Medicaid Services program, and the new use cases are as follows:

- **Digital Quality Measures:** Develop the capabilities to calculate a selected set of Medicaid's high-priority quality measures combining both administrative data (claims and encounters) with clinical information from providers' EHRs to allow for more timely results
- **Health-Related Social Needs Screening:** Develop the capabilities to share Medicaid members' responses to HRSN screening questions with other providers, prepaid health plans and NC Medicaid to prevent unnecessary rescreening and facilitate referrals
- **Care Management Data Exchange:** Improve upon the ability to exchange claims/encounter data and care management interaction details between prepaid health plans and local care management entities to facilitate seamless transitions of care

The goals of the new use cases are to facilitate several data exchange services in the care management space with NC Medicaid, its health plans and providers and to assist with the development of digital quality measures for Medicaid's high priority conditions, such as high blood pressure and diabetes.

Two overview documents have been developed for the digital quality measures and health-related social needs use cases (with a care management overview document forthcoming). They can be found on the NC HIEA website on the HMS Program page: <https://hiea.nc.gov/hie-medicaid-services>

Early adopters of the program are being recruited from the list of health care providers that are current participants of the NC HIEA and connected to NC HealthConnex.

Controlled Substance Reporting System

The NCDHHS Division of Mental Health Developmental Disabilities and Substance Abuse Services manages the N.C. Controlled Substances Reporting System (CSRS). The CSRS collects information on

dispensed controlled substance prescriptions and makes this information available to prescribers and dispensers. The system is used as a clinical tool to improve patient care and safety while avoiding potential drug interactions and helps identify individuals who may need a referral to substance use disorder services.

Session Law 2015-241 directed the integration of the CSRS with the state-designated health information exchange, NC HealthConnex. The integration was completed in 2020 and provides an alternative pathway for health care providers and pharmacists to check the system prior to prescribing or dispensing controlled substances per their STOP Act requirements.

Session Law 2017-57, Section 11A.6 directed the development and implementation of software for the performance of advanced analytics within GDAC. The objectives outlined in law include:

- Enhancement and automation of reports under General Statute 90-113.74
- Development and utilization of advanced analytics to achieve the purposes specified in General Statute 90-113.71
- Aggregation of relevant data sources, including those available within GDAC
- Enhancement of NCDHHS's ability to deploy advanced analytics to improve opioid prescribing practices, identify unusual prescribing patterns and detect behaviors indicative of misuse, addiction or criminal activity

By 2024, several key advancements were made. Data from the CSRS is now fully available within GDAC, enabling more sophisticated analysis and reporting. A new opioid dashboard was launched to visualize statewide trends, and new reports were developed specifically for the N.C. Medical Board and the N.C. Nursing Board. The team finalized plans for upcoming reports and moved a critical data extract process into full production. In addition, work began on an advanced analytics workstream, with early planning underway for predictive analytics initiatives that are scheduled to be completed by the end of 2025.

Looking ahead, the NC HIEA will continue working with the N.C. Division of Public Health to expand reporting capabilities. Efforts will focus on refining the scope and priorities for new analytic reports and enhancing the underlying CSRS data model to incorporate more data sources. Operational support will continue to ensure data from the CSRS is collected, transformed and made available for internal dashboards. Improvements will also be made to tools that calculate opioid dosage, audit reporting processes will be automated and improved, and new reports will be developed for both the State Board of Dental Examiners and the Veterinary Medical Board. Additionally, NCDHHS will collaborate with the N.C. Division of Health Benefits to link Medicaid beneficiary data to strengthen reporting and insights related to controlled substance use among Medicaid recipients.

Enterprise Solutions & Innovations

The Enterprise Solutions and Innovations (ESI) team works to develop efficient solutions and support the execution of enterprise-wide initiatives such as NC eLink, Modernization and Enterprise Projects (e.g., Data Catalog, API Framework, Operational Dashboard, Audit Reporting). ESI collaborates with other portfolio teams, NCDIT staff and our technical partners at SAS Institute to ensure the implementation of consistent processes and practices such as architecture system design, while identifying new technologies to enhance services to meet business needs.

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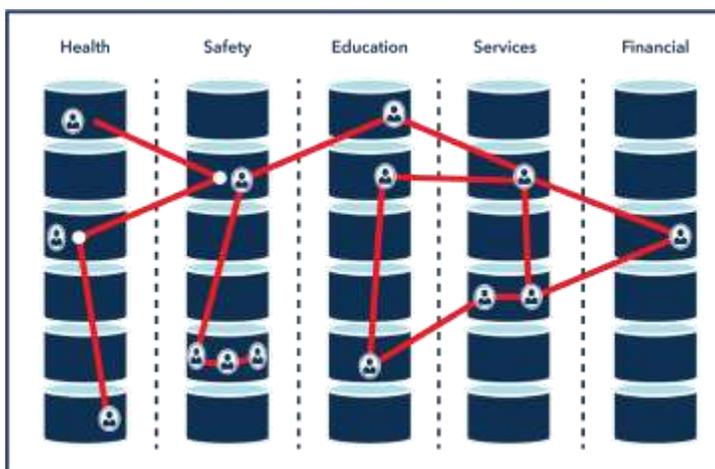
- NC eLink
- Migration to Cloud

NC eLink: An Enterprise Entity Resolution Solution

NC eLink is an enterprise entity resolution utility that helps provide more effective services to North Carolina residents and businesses by enabling the linking of entity data across state agencies and giving those agencies a more comprehensive view of the residents they serve.



Administrative processes within government are often siloed, and residents could be assigned multiple identification numbers for services across state agencies with which they interact (e.g., driver’s license number, student ID number, unemployment claimant identification number, Medicaid identification). Without the same common identifier to connect records for a person, services become fragmented and inefficient.



NC eLink integrates these data sources, improving service delivery and ensuring residents have access to all the services for which they are eligible.

GDAC had worked with agencies for many years to link data sources, but in the past, this matching process was developed for a single business problem and was repeated for the next project, which was time-consuming, costly and inconsistent.

GDAC launched the NC eLink utility in 2019, standardizing the process by matching existing IDs to a unique ID that is indexed in the utility without exposing personally identifiable information. This secure, accurate and effective entity linking utility helps improve agency decision-making, reporting and fraud detection and connects longitudinal data that informs educational and workforce policy.

NC eLink received the National Association of State Chief Information Officers' (NASCIO) Award for Cross Boundary Collaboration and Partnerships in 2023.

NC eLink Continues to Onboard New Data Sources to Improve Entity Resolution

The ESI eLink team continues to onboard new data sources to NC eLink to further improve data integration across state administrative systems. NC eLink Release 4.2 was successfully deployed in June 2024. The effort included onboarding new data sources from the following three state systems:

- **Aging Resource Management System (ARMS):** This statewide database of the N.C. Department of Health and Human Services' Division of Aging and Adult Services tracks demographic data, including eligibility for services and ties it to reimbursements to health care providers.
- **eScholar Retired ID file:** The N.C. Department of Public Instruction assigns a Unique Statewide Identifier (UID) to any student who participates in the North Carolina school system. The Retired ID file captures the student IDs that have been replaced by new IDs. This cross-reference data will help improve the clustering of IDs in NC eLink including downstream application such as the Common Follow Up System (CFS) and NCDHHS' Early Childhood Integrated Data Service (ECIDS).

The ESI eLink team plans to onboard new data sources to NC eLink to further improve data integration across state administrative systems. Data sources to be incorporated into Release 4.3 in early 2025 include:

- **N.C. Vital Birth Records:** NCDHHS' Division of Public Health is responsible for recording vital events in North Carolina in partnership with the county register of deeds offices, local health departments and birthing facilities throughout the state.
- **NC Electronic Disease Surveillance System (NC EDSS):** A centralized, web-based system used by local health departments, regional HIV/STD offices and the N.C. Division of Public Health's Environmental Health Section for communicable disease surveillance and reporting in North Carolina.

The NC eLink 2024-2026 Roadmap was completed and details future releases and planned data integrations and system updates, including migrating to the cloud (see below). Quarterly updates will be published to track progress.

NC eLink Metrics 2024

Total Data Sources: **58 from 12 agencies**

Total Source Records: **419M**

Total Clusters/Entities: **146M**

Total N.C. Entities: **25M**

Accuracy Rate: **~99% (based on last assessment in 2021)**

GDAC Migration to Cloud

The GDAC migration initiative is a multi-phase project to move GDAC information technology infrastructure and systems (15 environments including development, test and production, three applications and 15 reports) to Microsoft's Azure cloud, enabling use of the latest emerging technologies, including the SAS Viya 4 platform. This cloud-based platform provides analytics and data management in a scalable architecture environment and allows the usage of the latest AI and machine learning models.

Planning for this multi-phase and multi-year effort kicked off in 2024. The teams completed phase 1 of the project, which included setup of a sandbox environment for GDAC staff. The sandbox will be used to carry out development and testing, implementing a new Azure-based secure data transfer process that is critical for cloud-native workflows, a data catalog to organize portfolio datasets within the Viya environment and a system design prototype to guide future architecture.

GDAC Public-Private Partnerships

The state of North Carolina and SAS Institute have a public-private partnership for the hosting, licensing, application development and services to support the GDAC program and infrastructure. For each contract period, SAS has committed to contribute a minimum of \$5 million in resources to the state.

GDAC Portfolio (Excluding NC HIEA)

During the 2024 calendar year, in support of all GDAC-SAS hosted activities (non-NC HIEA), the state invested \$16,998,349.00, with an estimated SAS investment of approximately \$17,203,994.00.⁴

Cumulative Contract Total (12/23/2023–12/22/2024)	
Knowledge transfer and education activities	\$0
Software licensing [1]	\$15,554,396.00
Hosting operations [2]	\$4,170,331.00
Personnel resources [3]	\$14,442,308.00
Other agreed/resources	\$0
Total Value for Period	\$34,167,035.00
State Payments	\$16,963,041.00
SAS Investment	\$17,203,994.00

- [1] The 2024 non-discounted software licensing fees have been audited for standard, limited use software fees and use of SAS Fraud Framework modules for all other GDAC analytic initiatives.
- [2] Includes hardware and IT personnel required to support GDAC environments and solutions.
- [3] Other agreed/resources include resources leveraged for the project, such as industry consultants and subject matter experts who do not bill hours against the project.

⁴ Data pulled from the annual SAS issued NC GDAC and NC HIEA Investment Report provided to GDAC. SAS Accounting approves the investment data.