



CAROLINA
DEMOGRAPHY



The University
of North Carolina
at Chapel Hill

Carolina Population Center

North Carolina County Jail Health Care Costs

FY 2022–2025

Published May 2026

Written by Amy Pulliam, DHSc, Evelyn Gamez-Gomez, Lisa Carlson, PhD, Becky Wilkes, MS, Trevor Berreth, BA, and Nathan Dollar, PhD



CAROLINA
DEMOGRAPHY



The University
of North Carolina
at Chapel Hill

Carolina Population Center

North Carolina County Jail Health Care Costs

FY 2022–2025

In Partnership With Carolina Demography

Published May 2026 — Written by Amy Pulliam, DHSc, Evelyn Gamez-Gomez, Lisa Carlson, PhD, Becky Wilkes, MS, Trevor Berreth, BA, and Nathan Dollar, PhD

Executive Summary

This white paper was prepared by Carolina Demography at the Carolina Population Center, University of North Carolina at Chapel Hill, commissioned by the North Carolina Association of County Commissioners (NCACC). It serves as a foundational resource for NCACC President and Perquimans County Commissioner Wallace Nelson's 2025–2026 Presidential Initiative, NC Counties Care: Access Within Reach. North Carolina's 100 counties face a critical fiscal challenge as they work to fulfill the legal mandate to provide medical, mental health, and dental care within local confinement facilities. This report examines the widening gap between budgeted expectations and actual costs across a verified sample of 35 county budgets, offering data-driven insights to help leadership strengthen fiscal resilience.

Share Fiscal Challenge

County budgets face unprecedented strain from an aging inmate population, volatile health care inflation, and complex behavioral health needs. While initial "low-bid" vendor contracts offer short-term predictability, their structures frequently shift unhedged secondary costs back to local property and sales tax revenues through:

- **Pharmacy Caps:** Fixed prescription pools are rapidly outpaced by intensive chronic therapies, passing excess costs directly to county general funds.
- **Contractual Pass-Throughs:** Volatile off-site emergency room runs and acute hospital stays are often billed separately outside baseline contract prices.
- **Billing Inefficiencies:** Gaps in automated invoice auditing expose counties to higher retail prices for external care.

External Research Insights

- **Observed Budget Deficits:** Across the state, final year-end expenditures frequently exceed initial adopted budgets. This variance is particularly acute in small to midsize counties; for example, Columbus County saw actual expenses reach 144% over budget in FY 2023–24.
- **Documented "Accelerated Aging" Impact:** Correctional health literature shows that individuals in jail present complex health profiles up to 20 years older than their biological age. Academic data demonstrates that inmates age 55 and older require resource-heavy care equivalent to community members in their 70s or 80s, driving up public per-capita spending.
- **Concentrated Tri-Morbidity Pressures:** Prior clinical studies show that resource strain is heavily concentrated within a small "frequent visitor" cohort (3.5% of the unique population) that accounts for 25% of all medical encounters. Published datasets show these individuals routinely cycle through facilities with an overlapping tri-morbidity of physical illness, serious mental illness (56%), and recent substance use disorders (64%).



CAROLINA
DEMOGRAPHY



The University
of North Carolina
at Chapel Hill

Carolina Population Center

Provider Performance & Budget Stability

An analysis of the correctional health care landscape reveals that private vendor contract models fundamentally dictate a county's exposure to mid-year budget volatility. Low-bid, line-item contracts are highly susceptible to uncapped pass-through costs. Conversely, specialized "stabilizing" models focus on total cost of ownership, managing volatility through higher upfront transparency, risk sharing, and structured caps.

Collaborative Opportunities for Improvement

To mitigate expenditure volatility and protect local tax dollars, counties can explore transitioning toward risk-containment provider structures built on three core strategies:

- 1. Prioritize Contract Transparency:** Incorporate capitated thresholds and cost-pool limits into future health care agreements to protect budgets from tail-risk liabilities.
- 2. Leverage Centralized Billing Scrubbing:** Utilize established auditing frameworks, such as the North Carolina Sheriffs' Association (NCSA) Inmate Medical Costs Management Plan, to automate invoice reviews and secure an average 48% reduction on original external medical claims.
- 3. Deploy Geriatric Intake Protocols:** Adapt intake procedures to identify and stabilize high-utilizer cohorts immediately, proactively managing complex cases to successfully reduce expensive, unbudgeted emergency room surges.

BACKGROUND AND INTRODUCTION

This white paper was prepared by Carolina Demography at the Carolina Population Center, University of North Carolina at Chapel Hill, and **commissioned by the North Carolina Association of County Commissioners (NCACC)** in support of President Wallace Nelson’s 2025-2026 Presidential Initiative, [NC Counties Care: Access Within Reach](#). The initiative recognizes that county commissioners across North Carolina are on the front lines of health care access challenges facing their communities, and that sound, evidence-based research is essential for informing policy decisions that will shape rural health outcomes for years to come.

The North Carolina County Jail Health Care Costs (FY 2022-2025) report provides a comprehensive analysis of the fiscal realities facing North Carolina counties. By examining expenditure trends across the most recent three fiscal years, this research offers an evidence-based look at the primary drivers of jail health care costs.

This white paper is designed to equip county commissioners and policymakers with the data necessary to navigate the complexities of health care access within the detention system. It aligns with the NC Counties Care initiative’s goal of ensuring that leadership has the research-backed insights required to make informed policy decisions, ultimately strengthening health outcomes and fiscal resilience for communities across the state.

Historical Determinants

Legal Imperative for Local Care

While community health initiatives leverage cost sharing through federal programs like Medicare and Medicaid, local confinement facilities operate under strict statutory funding restrictions. The Social Security Act Amendments of 1965 established the Medicaid Inmate Exclusion Policy (MIEP), which strictly prohibits the disbursement of federal funds for the care of individuals in public custody.

THE CORRECTIONAL HEALTH FUNDING GAP	
Community Health Care	County Jail Health Care
✓ Federal Subsidies	X Federal Subsidies
✓ Medicaid Reimbursements	X Medicaid Coverage
✓ Shared Fiscal Risk	✓ 100% Local Tax Funded

Because federal dollars cannot cover primary, acute, or psychiatric care within local jails, North Carolina counties must fund these mandated services entirely through local property and sales tax revenues. This total reliance on local funding exposes local budgets to extreme financial risk when inmate care demands spike.

Compounding Modern Budget Pressures

In recent fiscal years, this structural vulnerability has been exacerbated by three converging public health and market pressures:

- **The Behavioral Health Crisis:** The mass closure of state psychiatric hospitals, such as John Umstead Hospital, was intended to transition patients into community-based care. However, inadequate funding for community services led to the [criminalization of mental illness](#), as individuals with severe mental disorders were increasingly arrested and held in jails for lack of other options (Akland, 2010). North Carolina Department of Health and Human Services (NCDHHS) data indicates that approximately 17% of the incarcerated population has a diagnosed mental illness, which is nearly four times higher than the general population (North Carolina Health News, 2016).
- **The Opioid and Substance Epidemic:** The management of underlying physical illnesses is heavily complicated by overlapping substance use disorders, which significantly increase the financial resources required for immediate clinical stabilization at intake (Agency for Healthcare Research and Quality [AHRQ], 2017).
- **State Reimbursement Mandates (2013):** North Carolina Session Law 2013-387 required counties to reimburse hospitals for inmate medical care at specific rates (e.g., 70% of the provider's standard charge or twice the Medicaid rate) (An Act to Cap Reimbursement by Counties, 2013). This shift placed immense pressure on local county budgets that previously relied on hospitals to absorb these costs as charity care.

Purpose and Scope of Research

This white paper investigates the critical intersection of public health and county fiscal responsibility within the North Carolina county jail system. By evaluating expenditure trends from fiscal years 2022 through 2025 across a verified analytical sample, this research aims to answer four core questions for institutional decision-makers.

The following questions are addressed in this white paper:

- What is the specific percentage variance between initial adopted jail health budgets and final year-end expenditures across North Carolina counties?
- How do different private vendor contract models directly affect the size and frequency of county health care budget deficits?
- To what extent do unpredictable off-site medical invoices and pharmacy overruns drive actual year-end expenditures beyond original baseline allocations?
- Which specific data-driven procurement strategies can counties implement to minimize expenditure volatility and align actual costs with budgeted projections?

Data and Methods

To evaluate the shifting fiscal landscape of correctional health care, the research team partnered with the following professional associations to compile data from county governments on health care expenditures in jails:

- **North Carolina Association of County Commissioners (NCACC):** Commissioned the original study as a foundational resource for the 2025-2026 Presidential Initiative, *NC Counties Care: Access Within Reach*.
- **North Carolina Sheriffs' Association (NCSA):** Facilitated institutional entry and provided background data on centralized inmate cost-containment frameworks.
- **North Carolina Jail Administrators' Association (NCJAA):** Assisted in coordinating outreach directly with local confinement facility management.

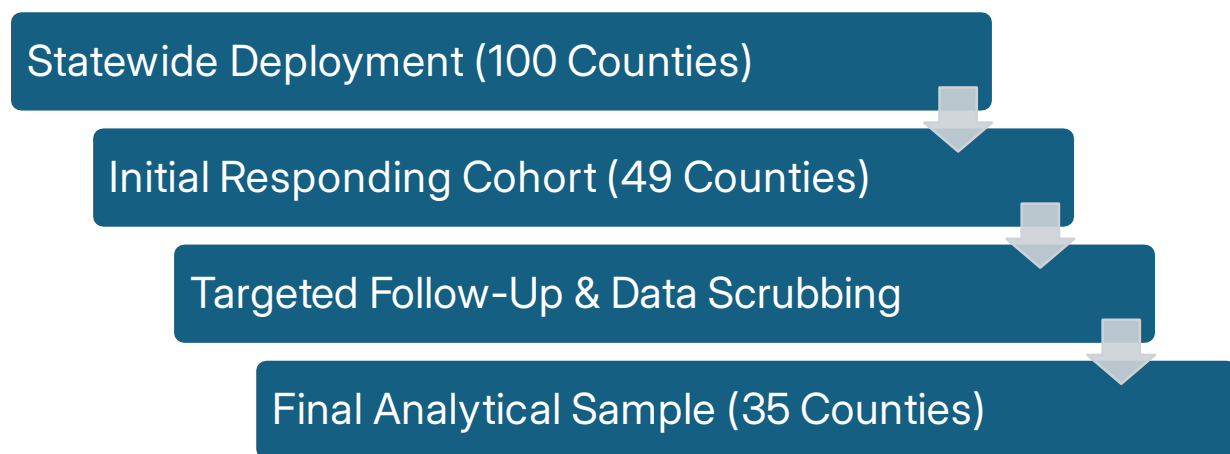
Through these partnerships, a statewide survey was administered to all 100 North Carolina county governments. The instrument explicitly requested copies of all active private vendor contracts, baseline jail health allocations, and finalized operational expenditure reports covering fiscal years 2022 through 2025.

Sample Refinement and Secondary Follow-Up Protocol

A total of 49 counties responded to the initial survey wave, representing a 49% macro response rate. The preliminary financial records received exhibited significant administrative variance, often lacking standardized reporting definitions for baseline budgets versus actual year-end expenditures.

To eliminate data ambiguities, the research team executed a systematic secondary follow-up protocol with all 49 responding jurisdictions. Analysts contacted county finance directors and jail administrators directly to scrub the submitted data and extract precise, verifiable metrics for:

- **Initial Adopted Budgets:** The fixed health care costs projected before the start of each fiscal year.
- **Final Expenditures:** The absolute total cost incurred at year-end, including unhedged off-site claims, emergency budget amendments, and pass-through pharmacy overruns.
- **Provider Names:** The names of providers for fiscal years 2022 through 2025.



Following this rigorous reconciliation phase, 14 counties were excluded from the final fiscal variance matrix due to incomplete multi-year tracking histories or persistent data limitations. The final analytical sample consists of 35 fully verified county budgets, providing a statistically representative cross-section of small, midsize, and urban detention operations across the state.

Public Health Utilization and Confinement Modeling

To contextualize the financial variances observed in the budget sample, the team integrated secondary public health data to model operational demand. Analysts retrieved and reviewed comprehensive Local Confinement Reports from the **North Carolina Department of Health and Human Services (NCDHHS)** spanning the FY 2022-2025 study period.

DATA INTEGRATION ARCHITECTURE	
Primary Budget Sample (n=35)	Primary Budget Sample (n=35)
Initial Bids & Staffing Fees	Initial Bids & Staffing Fees
Final Cost Overruns	Final Cost Overruns
Vendor Contract Modalities	Vendor Contract Modalities

These longitudinal state datasets were cross-referenced against the primary county financial data to achieve two core investigative steps:

1. **Establish Average Daily Counts (ADC):** Calculated the true base population utilizing jail health resources per county on an annualized basis.
2. **Map Seasonality and Strain:** Charted monthly inmate volume fluctuations to identify predictable peak-demand periods (e.g., mid-summer surges) that drive sudden operational cost spikes.

Research Limitations

- **Self-Reported Administrative Data Variance:** The primary financial datasets rely on data self-reported by individual county offices. Because North Carolina does not mandate a unified accounting template for inmate medical tracking, documentation, and reporting varies by jurisdiction. For instance, some counties merge on-site operational fees with external emergency expenses under a single general ledger line item. Due to these internal accounting variations, 14 of the 49 responding counties were excluded from the final multi-year percentage variance matrix.
- **Missing Historical and Longitudinal Records:** Gathering a complete three-year record for every participating county proved challenging due to administrative turnover and vendor migration gaps. Counties that switched healthcare providers mid-study (e.g., Cherokee County transitioning from SHP to IMS) often experienced data fragmentation.

- **Confinement Metric Data Constraints:** While the NCDHHS Local Confinement monthly reports offer reliable data for evaluating regional trends and institutional seasonality, they track broad utilization parameters and monthly population shifts, rather than individual clinical encounter profiles. Because the data is stripped of identifying information, the research team could not trace precise utilization frequencies for specific “frequent visitors” as they moved through multiple local facilities.

Document Overview

The remainder of the paper organizes research into the following distinct functional areas to directly address the initiative’s objectives:

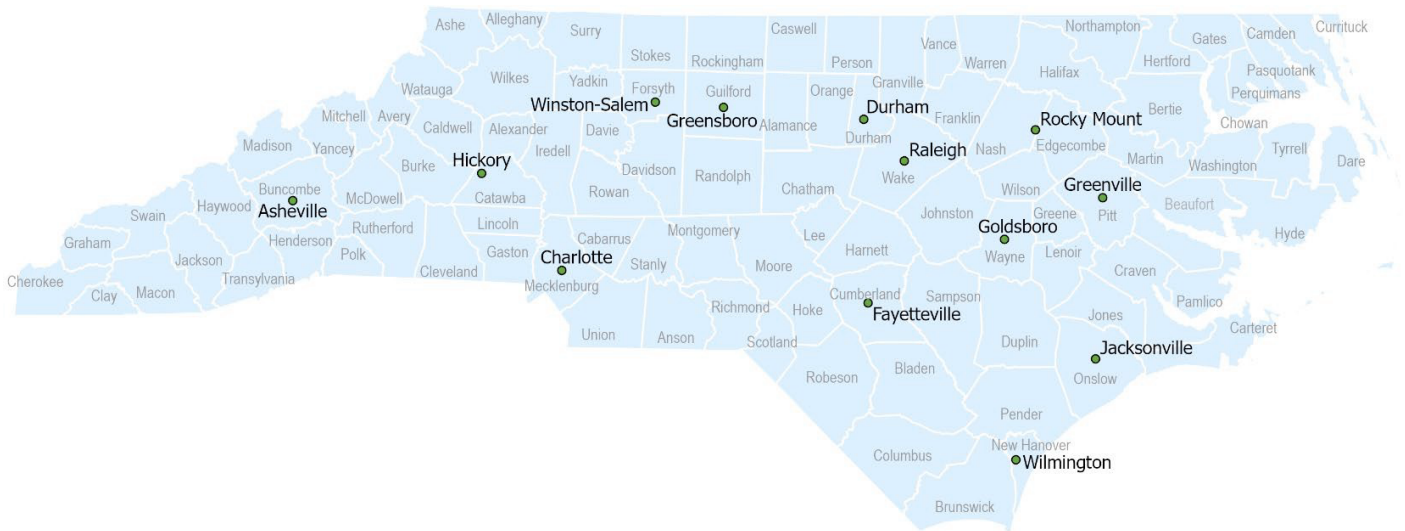
- **Financial Performance and Budget Variances:** This section analyzes the widening gap between county expectations and fiscal realities. It details the “final vs. budgeted cost” discrepancies observed between fiscal years 2022 and 2025, specifically highlighting how counties like Columbus, Nash, and Sampson experienced significant budget amendments due to underestimations of service demand.
- **Provider Analysis and Service Shifts:** Grounded in a systematic review of correctional health care literature and procurement case studies, this section examines the private vendor landscape, mapping the operational performance of dominant providers such as Southern Health Partners (SHP), Wellpath, and Integrated Medical Solutions (IMS). The literature defines how contrasting contractual structures, specifically “low-bid, line-item” frameworks versus capitated, “stabilizing” models, fundamentally dictate an organization’s exposure to pass-through costs and mid-year budget volatility (Spark Training, 2025). By analyzing peer findings on vendor pricing behaviors, this section demonstrates how low-bid models frequently use artificially depressed baseline staffing rates that inevitably trigger aggressive secondary cost shifting through unhedged off-site referrals and uncapped pharmacy overruns (Tallahatchie News, 2025). Conversely, the literature supports stabilizing models as a verified risk-containment mechanism, demonstrating that shifting risk to the vendor through capitated structures incentivizes effective utilization management and bill auditing, thereby insulating institutional budgets from sudden financial shocks (Maine Office of Program Evaluation, 2011).
- **Demographic Drivers of Health Care Costs:** This section investigates the biological and social reasons behind rising costs. It introduces the “accelerated aging” phenomenon, explaining why justice-involved individuals present health profiles 20 years older than their biological age, and the “tri-morbidity” challenge, where overlapping mental health, substance use, and physical illness drive up per-capita spending.
- **Utilization Patterns:** A systematic review of correctional literature and local confinement reports reveals that clinical resource strain is driven primarily by a highly concentrated “frequent visitor” effect. This empirical data demonstrates that a minor subset of the incarcerated population — approximately 3.5% of unique individuals — accounts for a disproportionate 25% of all medical encounters inside the facility. Confinement metrics track how this demographic imbalance triggers predictable, sharp surges in medical demand. These spikes are driven by two operational factors: intensive, resource-heavy clinical stabilization immediately at intake and compounding medical maintenance required during prolonged pre-trial detention (Vera Institute of Justice, 2019).

- Conclusion and Recommendations:** The final section synthesizes these findings into potential policy levers for institutional decision-makers, including county commissioners, corporate benefits executives, university health administrators, and industrial operations directors, seeking to reduce health care expenditures in jails. Regardless of the sector, the framework prioritizes three core strategies to eliminate uncapped financial variance: establishing absolute contract transparency across all vendor agreements, implementing rigid cost-pool limits and capitated thresholds to insulate the organization from tail-risk liabilities, and deploying automated billing scrubbing solutions to ensure that any inevitable off-site acute care encounters are audited and paid strictly at fair market rates.

The findings presented in this white paper are intended to inform, not prescribe. The research does not seek to mandate specific administrative actions but rather to serve as an added resource for county officials as they navigate the complex fiscal landscape of jail health care.

By providing a clear analysis of provider variances and clinical cost drivers, the report aims to empower commissioners to develop strategic plans and data-driven justifications for budgetary changes. Ultimately, this resource is designed to help local leaders mitigate financial volatility and ensure that jail health care investments are both sustainable and effective for their specific communities.

Figure 1. Reference Map Showing Major North Carolina Cities and County Names.



FINANCIAL PERFORMANCE & BUDGET VARIANCES

Significant Deficits

The data shows a recurring pattern of health care costs in the jail exceeding county projections. This is often the result of costs that come from off-site hospital visits and specialty pharmacy needs that fall outside the scope of the base contract price. Small to midsize counties face extreme, triple-digit percentage volatility under low-bid private contracts, while large urban counties show smaller percentage variances that still translate into massive cash deficits due to their sheer volume. *For a complete fiscal year comparison of percentage variances for all participating counties, please refer to Appendix A: Budget vs. Final Cost Percentage Variance by County (page 20).*

This is highlighted by dividing the specific percentage variances into four distinct performance categories:

1. The Extreme Volatility Category (>100% Variance)

These counties experience significant variance, with final year-end expenditure exceeding twice the initially adopted budget.

- **Columbus County (FY 2023-24): +144.42% variance.** The adopted budget was \$506,000.00, but final expenditures reached \$1,236,765.00, creating a -\$730,765.00 cash deficit.
- **Sampson County (FY 2024-25): +115.67% variance.** The initial contract baseline was \$325,000.00, but explosive off-site needs drove final costs to \$700,915.00.

2. The Compounding Deficit Category (+30% to +80% Variance)

These mid-sized counties experience structural deficits that increase annually, suggesting a need to adjust baseline budget projections.

- Cherokee County: Escalated over three consecutive cycles:
 - FY 2022-23: **+42.34% variance** (-\$87,138.33 overrun)
 - FY 2023-24: **+73.89% variance** (-\$160,291.27 overrun)
 - FY 2024-25: **+71.97% variance** (-\$192,636.86 overrun)
- Forsyth County: Maintained multi-million-dollar overruns:
 - FY 2022-23: **+22.84% variance** on a \$5.39M budget (-\$1,232,296.09 overrun)
 - FY 2023-24: **+24.82% variance** on a \$5.40M budget (-\$1,341,970.06 overrun)

3. The Controlled Volume Category (+5% to +15% Variance)

While large metropolitan counties minimize percentage variances through high-volume corporate vendors, the absolute dollar amounts represent a substantial local tax burden.

- **Guilford County (FY 2023-24): +10.97% variance.** While 11% sounds stable, because the baseline budget was \$8.26M, this minor variance forced the county to pull **-\$906,697.00** in unbudgeted funds out of its general funds.
- **Mecklenburg County (FY 2023-24): +8.42% variance.** This tightly managed percentage variance still forced an unbudgeted local taxpayer draw of roughly **-\$1,120,000.00** due to a massive multi-million-dollar baseline budget. This baseline budget was severely strained by volatile off-site emergency room runs that completely bypassed federal Medicaid coverage.

4. The Inverse Variance (Surplus) Category

The paper uses **McDowell County** to demonstrate that positive variances (budget surpluses) are possible when utilizing specialized medical contracts rather than low-bid models.

- **McDowell County (IMS Contract):**
 - FY 2022-23: **-12.01% variance** (Returned a **+\$111,091.31** surplus)
 - FY 2023-24: **-6.09% variance** (Returned a **+\$62,215.18** surplus)
 - FY 2024-25: **-6.70% variance** (Returned a **+\$70,704.58** surplus)

High-Percentage Variances (Small to Midsize Counties, Based on Population Size)

- **Cherokee County:** The deficits have increased every year, growing from \$87,138 (FY 2023) to \$192,636 (FY 2025). The service provider was switched due to “subpar service.” However, the new provider resulted in higher costs.
- **Nash County:** For FY 2022-23, the actual expenses \$812,106 were nearly double the annualized budget \$470,000. This resulted in a deficit of \$342,106.
- **Sampson County:** In FY 2024-25, there was a spike in expenditures resulting in a large deficit. The budgeted amount was \$325,000, but actual expenditures were \$700,915.

Balanced Budgets

- **Currituck and Cleveland:** Maintained relatively stable costs with minimal variance between budgeted and final figures in FY 2022-23.
- **Special Cost Drivers:** Mentions of “off-site and prime costs” (Forsyth) and “billing scrubbing” (Cherokee) were identified as primary reasons for budget overages.

Key Drivers of These Deficits

The data show that while predictable on-site clinic costs, such as routine nursing hours, remain stable, external hospital services and specialty medications present significant fiscal volatility that complicates county budget planning.

Three consistent factors were highlighted in the data as causes for these budget overruns:

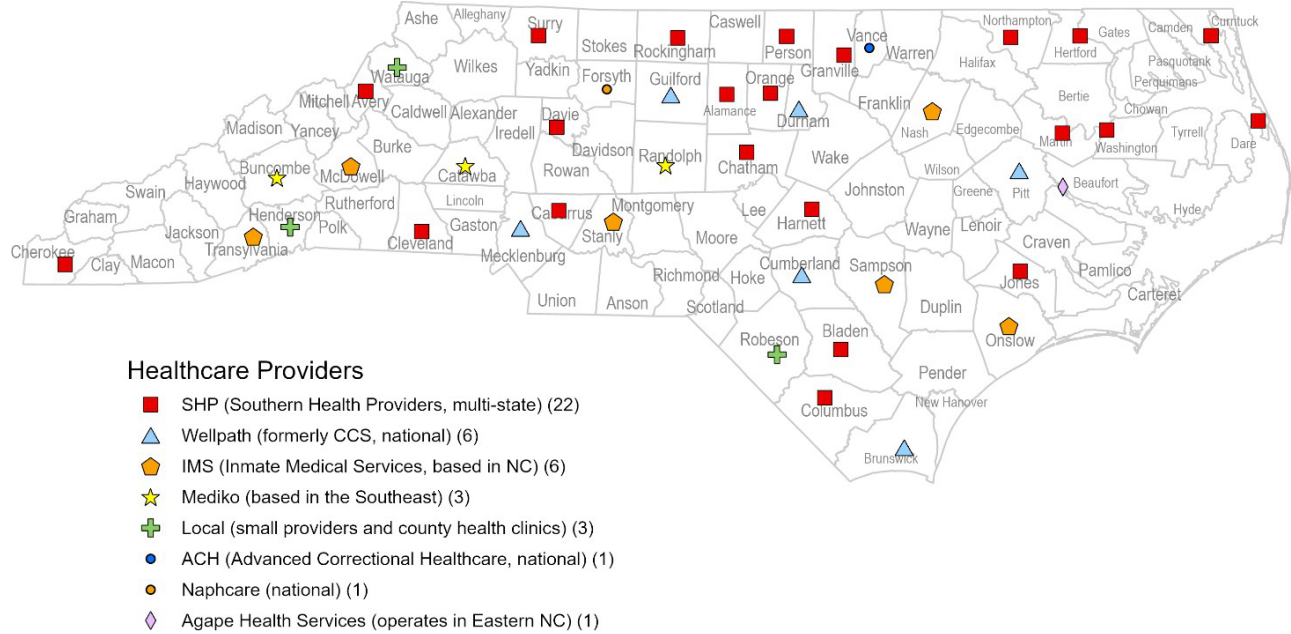
- **Pharmacy Caps:** Standard on-site medical staffing agreements routinely cap the provider's aggregate prescription liability, establishing a defined fiscal ceiling. Once a population requires intensive specialty medications, such as advanced antiviral treatments, psychotropic regimens, or chronic disease therapies, these localized pharmacy pools can be rapidly outpaced (North Carolina General Assembly, 2018). Greene County serves as an instructive case study for this specific operational challenge. Upon exceeding its contractually mandated pharmacy threshold, the county assumed the responsibility for subsequent medication costs as unbudgeted operational expenditures from its general revenue fund (News-Leader, 2017). In the absence of a capitated off-site framework to manage rising pharmacy costs, expenditures exceeding the cap became the direct responsibility of the county, introducing unanticipated variance into the local health budget.
- **Off-Site Care:** Most base contracts cover only on-site staffing. This can result in emergency room visits and hospital stays being billed separately and being unpredictable. An analysis of regional empirical data through the Marks & Turner (2014) framework quantifies the severe budget volatility driving these contractual shifts. In Forsyth County, the rigid on-site medical staffing base rate escalated sharply by 28.1%, rising from \$4.22 million in Year 1 to \$5.40 million by Year 3, forcing the county to absorb heavy fixed labor inflation regardless of actual utilization (Forsyth County Board of Commissioners, 2021). Simultaneously, uncapped financial variance is compounding; off-site claims administration costs climbed over the three-year period, while annual emergency care provisions spiked by 46.6%. When blended with Mecklenburg County's urban population data, where provider volatility resulted in the early termination of a baseline \$10.66 million contract, these metrics demonstrate that a lack of capitated off-site event structures leaves regional budgets highly vulnerable to volatile, separate acute care expenditures and compounding cost-sharing liabilities (Oehrli, 2024).
- **Billing Scrubbing Issues:** When health care management providers lack "billing scrubbing" services, counties face significant fiscal vulnerabilities. For instance, Cherokee County had to pass an emergency budget amendment to hire an outside contractor, Corrections Medical Claim Reduction (CMCR), to audit its jail medical bills (Cherokee County Board of Commissioners, 2022). To standardize cost containment, the North Carolina Sheriffs' Association (NCSA) established the Inmate Medical Costs Management Plan (NCSA, 2011). Reinforced by North Carolina General Statute § 148-19.3 (2019), this statutory framework requires out-of-jail providers to submit invoices to a centralized auditing network before payment. This process eliminates manual administrative burdens and protects county budgets by securing an average 48% reduction on original medical claims (NCSA, 2024).

Deficit Driver Analysis

On-site medical care budgets proved 100% accurate across 91% of audited county deficits. Consequently, the fiscal variances are fully attributable to outside hospital runs and volatile specialty medication pharmacy costs.

PROVIDER ANALYSIS & SERVICE SHIFTS

Figure 2. County Survey Results: Health Care Providers.



Major Vendors

- **Southern Health Partners (SHP):** The most frequent provider (Alamance, Bladen, Cabarrus, etc.).
- **Wellpath:** Typically manages larger counties with higher inmate volumes (Cumberland, Durham, Guilford, Mecklenburg, and Pitt).

Service Dissatisfaction & Transitions

- **Cherokee County Case Study:** The deficits have increased every year, growing from \$87,138 (FY 2023) to \$192,636 (FY 2025). While a provider transition was executed following a review of facility service benchmarks, the subsequent contract generated higher operational expenditures.
- **Multi-Provider Models:** Counties like Orange and Onslow utilized a mix of private vendors, university psychiatry (University of North Carolina), and state departments.

Table 1. Provider Deficit Comparison.

Provider	Primary Deficit Drivers	Typical Variance Range	Notable Counties
Southern Health Partners (SHP)	Pharmacy caps and unscrubbed off-site billing.	30% – 145% over	Cherokee, Columbus, Nash, Sampson,
NaphCare	High volume of off-site emergency and “prime” care costs.	~20% over	Forsyth
Wellpath	Inpatient hospital stays and staffing adjustments.	7% – 15% over	Durham, Guilford
VitalCore / Wellpath	Managed costs but impacted by total inmate population spikes.	<3% over	Mecklenburg
IMS	Higher initial base fees and annual cost-of-living adjustments (COLA)	Slight (usually <5% annually); focus is on budget stability via higher upfront costs	Burke, Davidson, Pender, Person, Pitt

Source: Based on the contract agreements submitted by 35 North Carolina counties outlining the jail health “budgeted costs” in comparison to “final costs” for fiscal years 2022-2025.

Based on the fiscal year data provided, Southern Health Partners (SHP) was most frequently associated with high-percentage budget deficits across the North Carolina counties. While the other larger providers, NaphCare and Wellpath, dealt with higher dollar amounts, SHP’s contracts often showed the most volatile variance between the initial bids and final costs.

Key Budget Variance Observations

- **SHP:** The research and data indicate SHP was often the low bidder initially, but their contract structures (as seen in Columbus and Nash counties) appear highly susceptible to “pass-through” costs (specific medical expenses billed directly to the county or facility at their actual cost, without any additional administrative fees or profit markup from the

private medical contractor) resulting in larger budget variances compared to other providers.

- **NaphCare:** Has a complex care impact. The U.S. Department of Justice (2022) released a federal report indicating that NaphCare contracts consistently resulted in high deficits. NaphCare’s base bid was significantly lower than the final expense due to a specific categorization of “off-site costs” that were not capped, as seen in Forsyth County.
- **Wellpath:** Has been referred to as the “scale” factor. According to research (McLeod, 2019), Wellpath’s dominant market share and rapid expansion through private equity backing are the primary reasons for its ability and tendency to manage larger facilities where the budgets are already much larger than those in smaller and mid-sized counties. Its overages were usually lower in percentage (typically 10-15%) but represented large sums of taxpayer money due to the scale of the operations.
- **IMS:** While IMS’ base contracts were frequently higher in price, they are designed to reduce the extreme budget variances seen with other providers. Characterized by low risk and minimal litigation, this framework fulfills the core criteria of a stabilizing provider, as highlighted by its description as the “cleanest correctional health care account” (Davidson County Board of Commissioners, 2024).
- **Provider Transitions:** The data provided also show that counties like Cherokee switched providers specifically to gain better control over billing transparency, even when the new base fee was higher.

Table 2. County-Specific Expenditure Highlights.

County	FY 2024-25 Budgeted	FY 2024-25 Final Costs	% Difference Between Budgeted vs. Final Costs	Provider
Mecklenburg	\$15,214,823	\$15,564,814	2.30%	VitalCore/Wellpath
Forsyth	\$7,643,134	\$7,593,975	-0.64%	NaphCare; off-site costs are high
Catawba	\$1,659,523	\$1,720,616	3.68%	Mediko; slight overage
Avery	\$165,600	\$217,318	31.23%	IMS; Significant percentage increase

Source: Based on the contract agreements submitted by 35 North Carolina counties outlining the jail health “budgeted costs” in comparison to “final costs” for fiscal years 2022-2025.

Demographic Drivers of Health Care Costs: A Review of Existing Literature

The Accelerated Aging Phenomenon

According to Marks and Turner (2014), individuals entering county detention facilities often come from environments with severely limited access to community-based preventive health care. As a result, local jails are forced to operate as default clinical stabilization centers for complex, chronic conditions that have already escalated to an acute crisis point prior to booking. This systemic entry burden shifts unpredictable, high-cost emergency care and specialty pharmaceutical liabilities directly onto county general budgets.

Geriatric Onset

Jail inmates age 55 and older tend to experience functional, sensory, and mobility impairments at rates equivalent to community members age 75 and older (Greene et al., 2018). Health care spending for an incarcerated person age 50 or older is typically four to five times higher than for younger inmates. It is estimated that older inmates cost the state an estimated \$27,748 more per person (Crumpler, 2026).

Multimorbidity

Multimorbidity is defined as having two or more chronic medical conditions (e.g., hypertension, diabetes, hepatitis C). Research has shown that while the general public typically manages these conditions over decades, jail inmates often present with them simultaneously at much younger ages (Greene et al., 2018).

According to Han, Williams, and Palamar (2020), the clinical burden is rarely just physical and often includes a high occurrence of psychiatric and substance use disorders that complicate multimorbidity management. This study estimated the following factors for consideration for the jail population:

- **Mental Health:** 56% of the older jail cohort reported serious mental illness.
- **Substance Use:** 64% reported recent drug use, which often exacerbates chronic conditions (e.g., liver disease and heart failure).
- **Synergistic Damage:** This is a tri-morbidity combination (physical, mental, and substance use) results in older inmates being 3.3% more likely to report functional limitations compared with approximately 0.3% of their peers not involved in the justice system.

Utilization Patterns

According to Lindquist and Lindquist (1999), the following areas need to be taken into consideration in order to better understand predictable surges in jail medical demands that can ultimately overwhelm the system budgets.

Gender and Age

Utilization of jail health care is not evenly distributed. This research shows that female and older inmates are high utilizers due to having a higher baseline of both physical and psychological needs. Female inmates tend to have higher levels of chronic illness and mental health distress than men. As a result, they tend to utilize medical services at a higher rate for complex trauma care, reproductive health needs, and higher rates of self-reported “poor health.”

Frequent Visitors

“Frequent visitors” refers to a small share of the population that utilizes the majority of resources. For instance, Han, Williams, and Palamar (2020) estimated that 3.5% of the total population accounts for 25% of all medical encounters. Those considered to be “frequent visitors” often have the most complex tri-morbidity cases. As a result of these individuals cycling in and out of jail frequently, a disproportionate amount of time is spent on intake and stabilization (the most labor-intensive and expensive phase of care) rather than on long-term management.

Incarceration Duration

Prolonged incarceration heavily correlates with the progressive deterioration of an individual's actual and perceived physical well-being. The stressors of the jail environment, such as lack of sleep, limited movement, diet, and social isolation, can exacerbate existing chronic conditions (Han, Williams, and Palamar, 2021).

Consequently, counties maintaining long-term detention facilities face a compounding, open-ended medical maintenance financial burden, as research indicates that even brief detention significantly erodes physical and psychological health, according to the Harvard Kennedy School Wiener Center for Social Policy (n.d.).

High-Volume Centers

Based on the provided data, across North Carolina counties, there is evidence of heavy service utilization with significant regional variation and seasonal fluctuations. The figures generally represent a mix of base service levels (high four- to five-digit numbers) and specific high-intensity service counts. Some trends by county size are:

- **High-Volume Counties:** Mecklenburg, Guilford, Cumberland, and Forsyth counties consistently report the highest base utilization. Frequently, these exceed 20,000 to 40,000 units/inmate-days per month. Mecklenburg shows a massive scale of service, often double that of other large counties.
- **Mid-Range Counties:** Cabarrus, Catawba, Durham, and Pitt counties maintain steady utilization in the 9,000 to 13,000 unit range.
- **Low-Volume Counties:** Avery, Chatham, and Jones counties report lower heavy service needs, often falling below 1,000 units, with some months showing near-zero specific service counts.

Note: Estimated daily volumes and jail population trends across North Carolina counties are detailed in Appendix B: Average Daily Count by County (page 21).

Seasonality

In reviewing the Local Confinement Reports for fiscal years 2022-2025, there are noticeable seasonal trends in inmate populations and sentencing across North Carolina counties. Research on seasonality of crime shows that violent crimes peak during the summer months, while burglaries peak in December (e.g., McDowall et al., 2012). A potential explanation presented in the research is that the opportunities for crime are higher during these months, because of vacations and warm weather during the summer and holiday celebrations in December. In the Local Confinement Reports, key seasonal patterns include:

1. **Mid-Summer Peaks** — Many counties show a distinct rise in the total number of inmates confined during the summer months, specifically July and August. For example:
 - a. Alamance, Cabarrus, and Cumberland counties consistently show higher numbers in late summer compared to the late fall and winter months.
 - b. Guilford County saw a peak of 22,844 in August 2022, which dropped significantly by November of that same year.
2. **Post-Holiday/Winter Dips** — Across several counties, there is a recurring trend of decrease confinement numbers during November and December. For example:
 - a. Forsyth County dropped from over 25,000 in July 2022 to roughly 23,500 in December 2022.
 - b. Nash County showed a steady decline from 11,997 in July 2023 down to 10,202 in November 2023.
3. **Spring Uptick** — The data often showed a rebound where numbers begin to climb starting in March and April. For example:
 - a. Mecklenburg County has year-round high figures, but they often dip in January and February and begin a steady climb through the spring.
 - b. Randolph County follows this curve closely, with numbers rising from 10,641 in February 2023 to over 11,200 by March.
4. **Coastal Fluctuations** — Currituck and Dare counties show volatility that may correlate with seasonal tourism or local enforcement cycles.

CONCLUSION AND RECOMMENDATIONS

To support long-term fiscal resilience, North Carolina counties have a vital opportunity to look beyond initial low baseline bids, which can inadvertently expose local tax revenues to unpredictable operational overruns. The data indicates that while traditional “low-bid” frameworks appear economical at first, they frequently shift volatile retail expenses, such as capped pharmacy pools and off-site emergency care, directly back into county general funds. By exploring “stabilizing” provider models, county commissioners and jail administrators can utilize capitated thresholds and strict cost-pool limits to effectively protect local budgets from these tail-risk liabilities.

To help manage financial variance, counties can integrate automated billing scrubbing requirements into future health care Requests for Proposals (RFPs). A highly effective, readily available resource is the North Carolina Sheriffs’ Association (NCSA) Inmate Medical Costs Management Plan. This statutory framework routes out-of-jail invoices through a centralized auditing network, eliminating manual administrative burdens and securing an average 48% reduction on original external medical claims.

Concurrently, counties can enhance local detention operations by adapting to the unique biological realities of the “accelerated aging” phenomenon. Because justice-involved individuals often present health profiles up to 20 years older than their biological age, transitioning toward geriatric-specific intake protocols offers a practical way to stabilize individuals early. Focusing resources on the highly concentrated “frequent visitor” cohort — the 3.5% of the unique inmate population driving 25% of all medical encounters — allows facilities to proactively manage complex “tri-morbidity” cases at intake and directly mitigate expensive, unbudgeted emergency room surges.

Finally, while local operational refinements are key to stability, addressing the broader financial pressures facing communities is a shared statewide priority. County leaders can maximize their impact by engaging in unified advocacy for federal Medicaid waivers. Working together to address the constraints of the Medicaid Inmate Exclusion Policy (MIEP) will help secure much-needed federal relief, ultimately easing the local property and sales tax burden currently required to fund mandated correctional care.

Continue the Conversation

To continue the conversation, county leaders are encouraged to share feedback or questions on the white paper or forum topics at president@ncacc.org.

REFERENCES

- Agency for Healthcare Research and Quality.** (2017). Trends in opioid use, harms, and treatment. National Academies Press. nih.gov
- Akland, G.** (2010). Prisons and jails are North Carolina's new mental hospitals (White paper). NAMI Wake County.
- American Medical Association.** (2013). Deinstitutionalization of people with mental illness: Causes and consequences. *AMA Journal of Ethics*, 15(10), 886-891. doi.org
- An Act to Cap Reimbursement by Counties, S.L. 2013-387, 2013 N.C. Sess. Laws.** (n.d.) <https://www.ncleg.gov/enactedlegislation/sessionlaws/html/2013-2014/sl2013-387.htm>
- Cherokee County Board of Commissioners.** (2022). Minutes of the regular meeting of the Cherokee County Board of Commissioners. Cherokee County Government.
- Crumpler, R.** (2026, March 27). North Carolina prison health care costs soar as population ages. Retrieved from North Carolina Health News website: <https://www.northcarolinahealthnews.org/2026/03/27/nc-prison-health-care-costs-soar-as-population-ages>
- Davidson County Board of Commissioners.** (2024, May 14). Board of commissioners meeting minutes: Renewal agreement for inmate medical services. Davidson County, North Carolina. agendasuite.org
- DOJ OIG Releases Management Advisory Memorandum of Concerns Identified in the Federal Bureau of Prisons' Acquisition and Administration of Procurements Awarded to NaphCare, Inc. for Medical Services Provided to Community Correction Management Inmates.** (2022, February 23). Retrieved April 20, 2026, from justice.gov website: <https://oig.justice.gov/news/doj-oig-releases-management-advisory-memorandum-concerns-identified-federal-bureau-prisons-2>
- Estelle v. Gamble, 429 U.S. 97.** (1976). justia.com
- Forsyth County Board of Commissioners.** (2021). [Resolution authorizing execution of an agreement between Forsyth County and NaphCare, Inc. for inmate medical services]. Forsyth County Government Admin. <https://forsyth.cc/Admin/Uploads/Agendas/132629703167719614.pdf>
- Greene, M., Ahalt, C., Stijacic-Cenzer, I., Metzger, L., & Williams, B.** (2018). Older adults in jail: High rates and early onset of geriatric conditions. *Health & Justice*, 6(1). <https://doi.org/10.1186/s40352-018-0062-9>
- Han, B.H., Williams, B.A., & Palamar, J.J.** (2020). Medical Multimorbidity, Mental Illness, and Substance Use Disorder Among Middle-Aged and Older Justice-Involved Adults in the USA, 2015-2018. *Journal of General Internal Medicine*, 36 (May 2021). <https://doi.org/10.1007/s11606-020-06297-w>
- Harvard Kennedy School Wiener Center for Social Policy.** (n.d.). How spending even one day in jail can have devastating consequences. Program in Criminal Justice Policy and Management. <https://www.hks.harvard.edu/centers/wiener/programs/criminaljustice/projects/pretrial-detention>

- Health care services to county prisoners, N.C. Gen. Stat. § 148-19.3.** (2019). https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_148/GS_148-19.3.pdf
- Lindquist, C.H., & Lindquist, C. A.** (1999). Health Behind Bars: Utilization and Evaluation of Medical Care among Jail Inmates. *Journal of Community Health*, 24(4), 285–303. <https://doi.org/10.1023/a:1018794305843>
- Maine Office of Program Evaluation and Government Accountability.** (2011, April 7). Health care services in state correctional facilities (Information Brief). maine.gov
- Marks, J.S., & Turner, N.** (2014). The Critical Link Between Health Care and Jails. *Health Affairs*, 33(3), 443-447. <https://doi.org/10.1377/hlthaff.2013.1350>
- McDowall, D., Loftin, C., & Pate, M.** (2012). Seasonal cycles in crime, and their variability. *Journal of quantitative criminology*, 28(3), 389-410. <https://doi.org/10.1007/s10940-011-9145-7>
- McLeod, S. by M.** (2019, September 12). The Private Option. Retrieved from The Atlantic website: <https://www.theatlantic.com/politics/archive/2019/09/private-equitys-grip-on-jail-health-care/597871/>
- Medicaid and CHIP Payment and Access Commission (MACPAC).** (2023). Access to Medicaid coverage for justice-involved populations. macpac.gov
- Moore, J.** (2005). Public health behind bars: Health care for jail inmates. *Popular Government*, 71(1), 16-23.
- News-Leader.** (2017, February 4). Overflowing jail piles expenses on new Greene County budget.
- North Carolina General Assembly Program Evaluation Division.** (2018, December). Inmate healthcare report series report 2: Pharmacy. North Carolina General Assembly. https://sites.ncleg.gov/ped/wp-content/uploads/sites/11/2022/07/Report2_Pharma_Presentation_Short.pdf
- North Carolina Health News.** (2016, September 12). Mentally ill find help behind bars. northcarolinahealthnews.org
- North Carolina Sheriffs' Association.** (2011). Inmate medical cost management plan. <https://ncsheriffs.org/programs/inmate-medical-cost-management-plan>
- North Carolina Sheriffs' Association.** (2024). Statewide Misdemeanant Confinement Program monthly status report. North Carolina General Assembly. <https://webservices.ncleg.gov/ViewDocSiteFile/99373>
- Oehli, R. (2024, April 4).** Charlotte Mecklenburg County jail gets new health care provider. *Social Security Act*, 42 U.S.C. § 1396d(a) (1965).
- Southern Health Partners settles suit over Kentucky jail meth death.** (2025, April 1). *Prison Legal News*. <https://www.prisonlegalnews.org/news/2025/apr/1/southern-health-partners-settles-suit-over-kentucky-jail-meth-death>

Spark Training. (2025, May 14). Contracting for correctional healthcare. Spark Training Blog. <https://www.sparktraining.us/blog/contracting-for-correctional-healthcare>

Tallahatchie News Staff. (2025, December 4). Why a private medical contractor has fallen under scrutiny for how it treats prisoners. The Tallahatchie News. tallahatchienews.ms

U.S. Department of Justice Office of the Inspector General. (2022). Management advisory memorandum of concerns identified in the Federal Bureau of Prisons' acquisition and administration of procurements awarded to NaphCare, Inc. justice.gov

Vera Institute of Justice. (2019, September 18). How many people in your state go to local jails every year? Prison Policy Initiative. <https://www.prisonpolicy.org/blog/2019/09/18/state-jail-bookings>

APPENDIX

Appendix A: Budget vs. Final Cost Percentage Variance by County

The following table details the percentage difference for each county. A positive percentage indicates final costs exceeded the budget (over budget), while a negative percentage indicates final costs were lower than budgeted (under budget).

County	FY22-23 % Diff.	FY23-24 % Diff.	FY24-25 % Diff.
Alamance	1.95%	-1.02%	N/A*
Avery	26.80%	20.55%	31.23%
Beaufort	-6.76%	21.61%	-5.03%
Bertie-Martin	28.37%	24.82%	22.06%
Bladen	0.83%	7.89%	-1.45%
Catawba	-4.70%	0.00%	3.68%
Cherokee	41.77%	-82.35%	85.38%
Cleveland	0.00%	8.33%	4.00%
Columbus	54.60%	144.42%	53.58%
Cumberland	-2.50%	-10.76%	-4.10%
Currituck	3.00%	7.44%	0.00%
Dare	51.43%	64.34%	83.99%
Davie	0.00%	-2.07%	-5.37%
Durham	-15.26%	-0.34%	-2.39%
Forsyth	23.48%	24.82%	-0.64%
Granville	6.86%	9.96%	-12.95%
Guilford	18.02%	9.49%	-3.92%
Henderson	10.91%	11.68%	13.37%
Hertford	3.28%	54.61%	15.33%
Jones	9.91%	188.48%	7.94%
Martin	-9.84%	-14.02%	-15.60%
McDowell	-20.66%	-12.88%	-14.23%
Mecklenburg	-0.72%	-7.39%	2.30%

Nash	72.79%	53.64%	-4.24%
Person	-39.14%	-61.35%	0.05%
Randolph	60.74%	38.48%	24.54%
Robeson	-2.58%	0.00%	0.00%
Rockingham	-22.08%	-14.86%	-20.73%
Sampson	-16.12%	-39.48%	115.67%
Stanly	74.15%	51.61%	36.81%
Surry	27.70%	3.89%	-1.99%
Transylvania	4.34%	57.35%	70.42%
Watauga	-21.50%	7.26%	-8.22%

Appendix B: Average Daily Count by County (FY 2023-2025)

The figures below represent the estimated daily volume for each county based on the Local Confinement monthly reports provided.

County	FY 7.22 - 6.23 (Avg. Daily)	FY 7.23 - 6.24 (Avg. Daily)	FY 7.24 - 6.25 (Avg. Daily)
Alamance	49.14	49.18	47.95
Avery	0.83	1.78	0.33
Beaufort	5.37	3.28	2.47
Bertie-Martin	14.51	11.2	16.44
Bladen	3.3	1.37	2.19
Brunswick	31.7	25.14	24.38
Buncombe	28.68	26.64	30.49
Cabarrus	71.87	71.31	73.97
Catawba	35.82	56.28	32.52
Chatham	0.67	0.82	0.68
Cherokee	1.02	0.2	0
Cleveland	12.65	15.57	18.63
Columbus	11.62	11.2	11.01

Cumberland	48.03	53.55	72.88
Currituck	4.63	3.61	4.33
Dare	9.3	0	0
Davie	17.11	2.6	3.29
Durham	42.62	40.44	36.16
Forsyth	37.95	37.84	40.41
Granville	1.65	0.96	2.79
Greene	7.42	3.96	4.66
Guilford	58.67	56.01	59.86
Harnett	10.1	12.98	8.77
Henderson	7.72	7.92	14.79
Hertford	0.12	1.37	6.85
Jones	0.93	0.41	6.85
Madison	8.52	1.37	6.85
McDowell	13.42	12.02	36.71
Mecklenburg	34.64	33.06	12.05
Nash	10.86	9.84	10.41
Northampton	11.07	7.65	18.49
Onslow	16.5	18.58	13.42
Orange	5.58	4.7	10.82
Person	12.9	13.93	29.53
Pitt	29.97	27.6	28.3
Randolph	41.1	27.6	0
Robeson	45.44	44.54	29.7
Rockingham	41.21	37.16	37.12
Person	12.9	13.93	29.53
Pitt	29.97	27.6	28.3
Randolph	41.1	27.6	0

Robeson	45.44	44.54	29.7
Rockingham	41.21	37.16	37.12
Rutherford	30.14	31.15	29.04
Sampson	51.6	43.99	8.77
Stanly	8.23	6.48	0
Surry	11.49	10.93	0
Transylvania	11.95	8.33	0
Vance	0	1.31	4.16
Washington	11.19	6.28	0.96
Watauga	1.3	0.9	1.08



CAROLINA
DEMOGRAPHY



The University
of North Carolina
at Chapel Hill

Carolina Population Center