



# 2024 Climate Strategy Report

NC Department of Adult Correction

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# Introduction

## About the NC Department of Adult Correction

The North Carolina Department of Adult Correction (NCDAC), one of the state's largest agencies, has the responsibility for the rehabilitation, care, custody and supervision of more than 31,000 individuals in prison and more than 83,000 people on probation, post-release, or parole in our communities. NCDAC provides corrections supervision, justice reinvestment, reentry planning, crime prevention, and victim services and is the state's largest agency by number of employees with more than 14,000 full time positions. The department protects the public by collaboratively focusing on rehabilitation, protection, innovation, accountability, and professionalism.

The agency has always considered energy and water efficiency important to our organization. Last year the Sustainability, Efficiency & Resilience Services (SE&R) team was created to further align our actions with the Governor's Executive Orders related to Climate Change. Two parallel and complementary organizations are in the process of being created, the SE&R Services Management team that reports to the Director of the Division of Engineering, Construction and Maintenance (DECM) and the SE&R Field Engineering team reporting to the DECM Assistant Director of Maintenance Operations. The SE&R Program Management team establishes the standards of excellence and define goals and objectives. The SE&R Field Engineering team will provide feedback to the Program Management team regarding goals and standards, and ensure the appropriate goals are put into action. The entire team will consist of thirteen (13) positions. In addition to the SE&R Services Manager, two positions have been hired since last year: The Building Automation Systems and the Sustainable Land Use Managers.

## NC Department of Adult Correction's Vulnerabilities to Climate Change

The North Carolina Department of Adult Correction (NCDAC), one of the state's largest agencies, has the responsibility for the rehabilitation, care, custody and supervision of more than 31,000 individuals in prison and more than 83,000 people on probation, post-release, or parole in our communities. NCDAC provides corrections supervision, justice reinvestment, reentry planning, crime prevention, and victim services and is the state's largest agency by number of employees with more than 14,000 full time positions. The department protects the public by collaboratively focusing on rehabilitation, protection, innovation, accountability, and professionalism.

## NC Department of Adult Correction's Approach to Fulfilling the Strategies in the Climate Risk Assessment and Resilience Plan

Climate stressors increase the vulnerability and risk for our correctional institutions and to the health and safety of our employees. Hurricanes have focused attention on the effects of riverine and overland flooding and storm surge, but wildfires, sea level rise, tidal flooding, extreme heat, and drought are also

becoming major concerns. Our primary concerns are flooding of facilities in low lying elevations, heat stroke and overly warm nighttime sleeping conditions in about a third of our facilities.

Sites at risk for flooding include Neuse, Carteret Correctional, Hyde, New Hanover, Pamlico and Tyrrell Correctional Center. In consideration of this, the Safety, Occupational and Environmental Health Office and Emergency Preparedness will consider using tabletop discussions and Continuity of Operations Planning (COOP) efforts to minimize or mitigate flood and drought risks due to severe weather or storm surge including sewer and power challenges, placing greater emphasis on food availability to our offenders, and the potential for heat stroke among our employees and offender populations during severe heat events. And, with the recent hiring of our Sustainable Land Use Manager we will begin a resiliency awareness campaign throughout the organization.

Heat illness related to high overnight temperatures is also a challenge for DAC. For this reason, \$80 million to date has been allocated to add cooling to our un-airconditioned offender facilities. The final anticipated cost is around \$116 million and will impact 37 sites and 108 buildings to remedy this challenge.

### Reducing Energy Use

Incremental gains towards a 40% reduction in energy and water intensity were occurring while NCDAC was part of DPS, measured in usage per gross square foot (GSF). See **Table 1** below.

**Table 1: Change In Energy and Water Intensities**

FY	Division	Energy Intensity (%)	Water Intensity (%)
21-22	NCDPS inclusive (includes NCDAC)	-29	-24
21-22	NCDAC	-11	-7
22-23	NCDAC	-22	-13
23-24	NCDAC	-26	11

Progress is being slowed by the addition of air conditioning needed to address other resiliency challenges. ~30% of our correctional beds are being impacted. This has the potential to dramatically increase our electrical intensity from now through 2026.

These challenges have only spurred us to pursue funding continuously and aggressively for and execution of our energy initiatives as reflected in **Table 1** above. And, in summary our last year annual efficiency savings have resulted in the following:

Avoided Costs	\$3,632,000
Energy Usage Reduction	126,370 MMBTUs
CO2 Emission Reductions	21,841,000 lbs.

Our water efficiency efforts are lagging as reflected in Table 1. Our water usage intensity has increased by 24 points.

We anticipate reversing this trend once our Water Efficiency Program Manager is hired in the next few months. These upward pressures on utility usage have not impacted significant progress in our other sustainability initiatives including:

- The purchase or lease of over 19 Electric vehicles and ten hybrid Ford Mavericks and 46 EV charging station deployments/installation.
- The purchase of 32 low emission diesel buses
- Green (electric) lawn care for 16 sites
- Reemphasis on recycling and waste management.

Program success is not possible without funding. Since FY 17-18 over \$100 million has been allocated to these efforts to meet this goal and we will continue to aggressively seek funding to fulfill our mission. And we now have a recurring “income” stream. Until last year cabinet agencies did not have legislation to retain our energy and water cost savings and use them for additional projects and cost savings. Universities have HB 1292 – allowing them to carry over their 60% of their utility savings and use these to further energy efficiency efforts. That bill also ensures the utility budget is never reduced based on these savings. We are proud to announce that SB 492 – legislation specific to DAC - was passed in October of 2023. It mirrors HB 1292 with one important exception – the funds are non-reverting which will allow us to utilize funds over multiple years more wisely. In July 2024 we successfully submitted documentation to retain over \$3.6M in recurring energy and water savings to use for future projects. We anticipate even higher savings this next fiscal year. The remaining 40% of the savings will be used for our other sustainability initiatives and incentives for the same.

## Addressing Environmental Injustices and Inequities

As requested by Executive Order 246, NCDAC has named its environmental justice lead, Justin Duncan, Director of Partnerships and Outreach. NCDAC has since begun new initiatives to address environmental injustices inherent in its mission and observed throughout the state.

In accordance with Executive Order 292, DAC is tasked with developing three draft Environmental Justice goals with measurable outcomes. Director Duncan is the appointed member of the Governor’s Environmental Justice Advisory Council. DAC goals were developed in alignment with North Carolina Executive Orders 303, 246, 292, and 80, DAC Strategic Plan, and the NCDAC Climate Strategy Report. Please see the North Carolina Environmental Justice report for more information.

## Public Participation Plan

The North Carolina Department of Adult Correction (NCDAC) recognizes that all citizens of North Carolina have the right to access government services and to meaningfully contribute to government decisions. Building a more inclusive society affects and requires the participation of all North Carolinians. Outreach to and engagement with North Carolinians is critical for NCDAC to be successful in meeting its

mission to protect the public by collaboratively focusing on rehabilitation, protection, innovation, accountability, and professionalism.

To this end, the NCDAC Public Access and Participation Plan includes the commitment to:

- Develop staff capacity to represent NCDAC to the public, and to be responsive to citizens who contact the Department seeking help;
- Continually review how the public accesses NCDAC services, resources, and digital content, to promote transparency, and better enable meaningful participation; and
- Strive for continuous improvement in the areas of public access, building community trust, participation, and engagement.

The purpose of this plan is to ensure consistency across the Department in both the understanding and implementation of public access, participation, outreach, and engagement strategies. NCDAC recognizes public engagement is an active and intentional dialogue between members of the public and NCDAC.

By applying the guidance and best practices presented in this plan, NCDAC aims to:

- Create better opportunities and mechanisms to receive public input.
- Promote respectful and meaningful dialogue between community members, organizations, and the Department.
- Educate the public about the Department's programs.
- Build trust with the public to strengthen community ties and partnerships.
- Work with community organizations to identify shared goals and opportunities for collaboration.
- Work with the public on strategies to improve future public engagement.

Please see the NCDAC Public Participation Plan for more information.

## 1.0. Reduce greenhouse gas emissions

### 1.1 Reduce energy consumption per square foot in state-owned buildings by at least 40% from fiscal year 2002-2003 levels

#### 1.1.1 LED in '23! Campaign: Completely retrofit all NCDAC facilities with LED lighting by FY 23-24<sup>1</sup>.

Status: Underway

Expected Completion Date: December 2024 (Original Target: June 2024)

- **Progress to Date:** Purchased over \$6.6 (up from \$5.2 million) in exterior and interior LED lighting fixtures for Adult Correction. We have now purchased over 93% (up from 85% last year) and installed approximately 73% (up from 60%) of all exterior lighting fixtures required. This does not include lighting included under the Thousand Cell Performance Contract (PC). Additional operational funds were secured for the Thousand Cell PC to upgrade lighting in the offender cells to a new correctional grade fixture in lieu of lamp replacements in the existing correctional grade fixtures. Additional R&R funds were secured to ensure the success of this program. A performance contract Request for Proposal (RFP) for Central Prison was recently advertised. When this project is completed every single facility and every single lamp will have been retrofitted or replaced with LED technology.
- **Anticipated Plans This FY:** We plan on completing this campaign by December 2024 provided staffing shortages can be addressed.

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<sup>1</sup> There are two exceptions: Thousand-Cell facilities lighting is being retrofit as part of a performance contract with anticipated completion of the lighting by December 2024. We anticipate issuing a request for proposal (RFP) for a performance contract at Central Prison by September 2024 that will include LED lighting at this facility. Our original target date for this was January 2024. Current plans are for September 2024.

**1.1.2 Building Automation Systems (BAS) Fix in 26! Campaign: Convert all sites to a common Niagara based building automation system (BAS) platform, implement data analytics and begin on-going commissioning of these systems to reduce energy use on-site.**

Status: Underway

Expected Completion Date: June 2027

- **Progress to Date:** A full time BAS Program Manager has been hired to oversee the program. Additional \$13M in R&R received to replace obsolete BAS systems in the Thousand Cell facilities with our new standard. Revisions to our Phase II BAS Design Guidelines are underway. Central Prison integration into our Niagara standard completed. Our Tier II (most robust) graphics package requirement is now standard for all projects.
- **Anticipated Plans This FY:**
  - Completion of our Phase II BAS Design Guidelines.
  - Completion of our Tier II Graphic Revisions.
  - BAS training pilot program for staff and offenders.
  - Limited state-wide technical support structure in place.

**1.1.3 Use Performance Contracting (PC) to reduce on-site energy use.**

Status: Underway

Expected Completion Date: December 2027

- **Progress to Date:**
  - **Thousand Cell Performance Contract:** Construction underway since January 2024. Water management installations complete at Alexander, Bertie and Maury; All lighting except offender cells completed at same.
  - **Central Prison:** RFP advertised in early September 2024.
- **Anticipated Plans This FY:**
  - **Thousand Cell PC:** Substantial completion of lighting and water management at all six sites; Tabor solar field groundbreaking.
  - **Central Prison:** Investment Grade Audit (IGA) contract for Central Prison executed by April 2025.



#### 1.1.4 Install Water Management Systems at our Adult Correctional Facilities

Status: Underway

Expected Completion Date: June 2027

- **Progress to Date:** Systems purchased for 12 sites in FY 22-23; system installations underway at the six (6) Thousand Cell facilities through the performance contract; systems already installed at Harnett, NCCIW and Nash. System upgrades completed at Caldwell and Orange CC; system studies completed for two sites (Pamlico, Pasquotank); system installations started at three sites (Sampson, Lincoln Roanoke River).
- **Anticipated Plans This FY:** Complete Lincoln and attain 75 % completion at Sampson, Roanoke River; complete system designs for five sites based on studies completed above (Pamlico, Mountain View, Pasquotank, Foothills, Marion). Purchase equipment and begin installation at Hyde.

### 1.2 Support the use and expansion of energy efficient and clean energy resources

#### 1.2.1 Install Solar Power at our Adult Correctional Facilities

Status: Underway

Expected Completion Date:

- December 2025 (for Thousand Cell PC)
- December 2027 for Central Prison
- **Progress to Date:**
  - **Thousand Cell Performance Contract:** Groundbreaking for Tabor Solar system is anticipated for October 2024.
  - **Central Prison:** The anticipated Central Prison performance contract includes investigating and possibly including solar installations at **any** of our remaining correctional facilities. RFP advertised in **early** September 2024.

### 1.3 Increase the number of registered Zero Emission Vehicles to at least 1,250,000 by 2030 so that 50% of in-state sales of new vehicles are zero-emission by 2030

This section is not applicable to NCDAC.

## 1.4 Prioritize Zero Emission Vehicles (ZEVs) in the purchase or lease of new vehicles and for agency business travel

### 1.4.1 Convert vehicles to clean diesel

Status: Underway

Expected Completion Date: June 2025

- **Progress to Date:** 29 of the 32 low emission diesel buses awarded under the grant have been purchased and deployed. 25 refuse haulers and 3 dump trucks remain to be ordered.
- **Anticipated Plans This FY:** Deploy the remaining low emission diesel buses, refuse haulers, and dump trucks by June 2025.

### 1.4.2 Convert Vehicles to ZEV: Purchase EVs for all Perimeter Patrol Correctional Facilities (27 sites) and complimentary charging stations

Status: Underway

Expected Completion Date: June 2030

- **Progress to Date:** PPV charging stations and EVs have been deployed at NCCIW and Columbus CI. Solar charging stations have been deployed at (7) additional sites (Nash, Neuse, Granville, Warren, Harnett, Pender, Albemarle). In addition, charging stations have been installed at (3) administrative sites: 840 Morgan Street, 2020 Yonkers Road, and 200 Leagan St. (10) Ford Lightnings have been purchased; (2) are in operation at 2020 Yonkers. A Chevy Bolt has also been assigned to 2020 Yonkers Road. (10) hybrid Ford Mavericks have been purchased.
- **Anticipated Plans This FY:** Deploy Chevy EV Bolts at the (7) Solar EV charging sites; Install EV charging at Central Prison, and an additional EV charger at Columbus, CI; Complete EV designs at (9) additional sites (Mountain View, Foothills, Lumberton, Tabor, Richmond, Maury, Alexander, Anson, Scotland). Let out contracts for the installation of EV charging stations for at least (5) of these sites.

## 1.5 Initiate other initiatives to decarbonize the transportation sector

This section is not applicable to NCDAC.

## 1.6 Initiate other projects aimed at reducing statewide greenhouse emissions

### 1.6.1 Reinvigorate Our Recycling and Waste Management Efforts, Phase I: Begin or expand paper, cardboard, metal can, plastic and scrap metal recycling at Scotland, Tabor, Harnett CI; Catawba and Lincoln CC; Correction Enterprises' Moore Recycling Center

Status: Underway

Expected Completion Date: June 2025

- **Progress to Date:** Moore Recycling Center continues to recycle road signs and old license plates, as well as recyclables from Enterprises' roadside cleanup crews in District 9. Moore has expanded their operations to include collection and handling of recyclables from Sanford CC, Scotland CI, and Tabor CI. Several correctional facilities have individual recycling programs.
- **Anticipated Plans This FY:** Implement a consolidated recycling program to divert 100% of all paper, plastic, cardboard, metal (kitchen) cans, and scrap metal from the waste stream at pilot sites (Scotland CI, Tabor CI, Harnett CI, Catawba CC, and Lincoln CC) with the intent of expanding to all correctional facilities. Deploy balers at necessary sites to compact and increase resale value of recyclables. Create defined procedures that can be easily implemented at all facilities across the State. Deploy and utilize balers at necessary sites to increase recyclables' resale value. Coordinate as much recycling collection as possible with Correction Enterprises and form individual plans for facilities as needed.

## 2.0. Increase statewide resilience to the impacts of climate change

### 2.1 Evaluate the impacts of climate change on NC Department of Adult Correction programs and operations

#### 2.1.1 Create a DAC-wide Resiliency Team to develop criteria for assessment and recommendations for remediation/mitigation

Status: Proposed

Expected Completion Date: Ongoing

- **Progress to Date:** Potential team members identified.
- **Anticipated Plans This FY:** Organize team. Provide guidance information for developing criteria.

#### 2.1.2 Conduct a vulnerability assessment of facilities within the Division of Adult Correction

Status: Proposed

Expected Completion Date: Ongoing

- **Progress to Date:** The scope of the facility assessments for DAC has changed and no longer includes a resilience effort. In lieu of this we propose performing informal resilience studies for a number of sites.
- **Anticipated Plans This FY:** Perform informal vulnerability studies for five (5) sites.

### 2.2 Integrate climate change adaptation practices and resiliency planning into NC Department of Adult Correction's policies and operations

#### 2.2.1 Develop a North Carolina Department of Adult Correction Resilience Strategic Plan

Status: Proposed

Expected Completion Date: Annually Starting FY 2024-2025

- **Progress to Date:** A Sustainable Land Use Manager has been hired as of August 2024. This position will oversee the creation of the Resilience Master Plan.
- **Anticipated Plans This FY:** Develop a Strategic Plan.

### 2.3 Assist the communities served by NC Department of Adult Correction to implement climate change adaptation practices and resiliency planning

This section is not applicable to NCDAC.

2.4 Help complete initiatives in the Natural and Working Lands Action Plan and Executive Order 305, An Order to Protect and Restore North Carolina’s Critical Natural and Working Lands

**2.4.1 Obtain Natural Heritage Land Dedications for correctional facility properties**

Status: Underway

Expected Completion Date: June 2030

- **Progress to Date:** Natural Heritage Designations have been granted for (7) sites: A Sustainable Land Use Program Manager has been hired.
- **Anticipated Plans This FY:** Identify any additional site/area opportunities for Natural Heritage designation and/or determine next steps to bring highest potential target areas to meet Natural Heritage criteria.

**2.4.2 Develop and begin implementing a Sustainable Land Use Management Plan centered on EO 80 and EO 305**

Status: Ongoing

Expected Completion Date: Ongoing

- **Progress to Date:** A Sustainable Land Use Manager has been hired as of August 2024 to begin this effort.
- **Anticipated Plans This FY:** Complete our initial Strategic Plan. Execute on at least three of the proposed actions for FY 24-25.

## 3.0. Address the public health impacts of climate change

### 3.1 Increase understanding and awareness of the health impacts of climate change

#### 3.1.1 Develop an internal communications strategy for awareness of health impacts of climate change

Status: Ongoing

Expected Completion Date: Ongoing

- **Progress to Date:** The Safety, Communication Office and the Office of Policy Management developed, issued and communicated a Heat Management Plan.
- **Anticipated Plans This FY:** Completion of a training course/module by OSDT for the Learning Management Center by Spring 2025.

### 3.2 Advance health equity

#### 3.2.1 Design and install air conditioning in our uncooled offender bed areas

Status: Underway

Expected Completion Date: December 2026

- **Progress to Date:**
  - Completed air conditioning for 2,796 beds.
- **Anticipated Plans This FY:**
  - Complete designs for an additional 4,178 beds.
  - Complete air conditioning for an additional 11,629 beds.
  - Request additional funding in the amount of \$39 million to complete this project.

## 4.0. Invest in historically underserved communities

### 4.1 Increase affordability for low- and moderate-income households

This section is not applicable to NCDAC.

### 4.2 Create jobs and economic growth

This section is not applicable to NCDAC.

### 4.3 Alert residents and businesses, particularly those in underserved communities, of state and federal grant opportunities

This section is not applicable to NCDAC.

## Additional Information

As identified in the above relevant sections, the NC Department of Adult Correction continues to aggressively pursue these objectives.