



2022 Climate Strategy Report

Department of Administration

October 15, 2022

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Introduction

About Department of Administration

As stated on the [NCDOA website](#), the N.C. Department of Administration serves as the business manager for North Carolina state government. The department oversees government operations such as building construction, purchasing and contracting for goods and services, maintaining facilities and grounds, managing state vehicles, acquiring and disposing of real property, and operating services such as courier mail delivery and the sale of surplus property.

Additionally, NCDOA oversees many of the state's advocacy programs, which advocate for and serve diverse segments of the state's population that have been traditionally underserved.

The North Carolina Department of Administration (NCDOA) includes the following divisions: [Women & Youth Programs and Services](#), [Historically Underutilized Businesses \(HUB\)](#), [Commission of Indian Affairs](#), [Division of Non-Public Education](#), [Mail Service Center](#), [Purchase and Contract](#), [Motor Fleet Management](#), [State Surplus Property Agency](#), [State Construction](#), [Facility Management](#), [State Parking](#), and [State Property Office](#).

Department of Administration's Vulnerabilities to Climate Change

State-owned buildings and grounds are subject to climate change impacts. Climate change and other stressors affect the cooling, heating, electrical, and storm water systems of NCDOA managed buildings.

The North Carolina Department of Administration (DOA) provides a broad range of diverse governmental services to the citizens of North Carolina, including services to approximately 100 State owned buildings in Wake County. Technical and maintenance oversight of building engineering services for the buildings administered by the Department of Administration is provided by the Facility Management Division within the Department of Administration. The State Construction Office, another division within the Department of Administration, provides engineering services for the downtown Raleigh state government complex. The effect of climate and other stressors on the cooling, heating, electrical, and storm water systems at these buildings are important concerns to be addressed by the DOA through increased resiliency efforts.

DOA uses district energy systems to provide heating and cooling for the larger buildings in the downtown Raleigh state government complex. Central chiller plants connected to chilled water loops provide chilled water to meet cooling needs in the major buildings including operational temperature requirements for data systems, elevator equipment, and other building systems. Likewise, a central heating plant with steam boilers are connected to the steam loop serving the heating needs of the major buildings. Some resilience strategies include: Thermal Energy Storage (TES) tank; chillers located at key buildings to supplement cooling provided by the central plants on peak days; and connection points to support temporary chillers in the event of a critical failure.

Extreme Heat

DOA, through the Facility Management Division, provides chilled water to many State-owned buildings in the downtown Raleigh state government complex, as described above. Chilled water supplied to these buildings is produced by large chillers located at two primary chilled water plants, plus smaller chillers located at several individual buildings. This chilled water is supplied to numerous air handling units in the downtown complex buildings to cool the buildings throughout the year. The peak cooling loads occur in the summer months; however, demand for chilled water in these buildings continues in every season. Data centers, server rooms and IT Data closets are among the cooling loads that remain year-round.

The major climate stressor with respect to chilled water is extreme heat which exceeds the ability of the chilled water system to provide adequate quantities of chilled water. This could lead to loss of building use if the buildings in the downtown Raleigh complex cannot be maintained within acceptable summer temperatures. Potential consequences of loss or inadequacy of chilled water capacity range from uncomfortably warm buildings to complete loss of building use due to excessive interior temperatures and/or humidity. An important consideration in terms of indoor comfort, especially during summer months, is the reheat of conditioned air to reduce indoor humidity levels. Reheat in the downtown Raleigh state government complex is accomplished with the use of heat provided by the downtown boilers. Therefore, indoor comfort during the summer months is reliant on both chilled water and steam provided in the downtown energy plants administered by DOA.

Our government buildings and the associated cooling system design for each were based on American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards which listed the expected environmental temperature. As weather temperatures increase above the design temperature the buildings will experience more challenges in maintaining a comfortable environment for the user groups. Adequate chilled water system capacity currently exists to handle the summer cooling load on a typical summer day in DOA buildings. However, during peak summer cooling loads, the existing chiller plants are at maximum capacity. Some of the downtown buildings served by the chilled water loop also have chillers located at the buildings. These chillers are needed during the hottest days.

Strategies for resilience include the use of Thermal Energy Storage (TES). A three-million-gallon Thermal Energy Storage Tank was added to the downtown chilled water system in 2007. The tank can be charged by filling it with chilled water during non-peak hours. The TES can be used to supplement the cooling capacity by discharging it during the peak cooling hours. This also allows plant operations to shift peak electrical usage to non-peak hours. This is beneficial to DOA, the utility provider, and the wider community. Maintenance and repair of the TES is required.

Ample boiler capacity is available to provide steam for reheat purposes in the summer months.

Funding was approved at the end of 2021 to expand the chiller plant to add an additional chiller to the central chilled water system, to add a separate summer boiler capability to the downtown heating plant, and to repair the Thermal Energy Storage tank. The additional chiller will increase system capacity to better allow the central plant to meet the cooling load on peak days. The additional chilled water

capacity also allows DOA to extend the chilled water loop to begin serving existing buildings that are not currently on the central chilled water system.

The existing heating plant currently has sufficient boiler capacity to meet the heating load for the complex, even on a peak day for heating load. Multiple boilers provide a level of system resilience for meeting heating load needs on the coldest days in Raleigh. Although not intuitive, boilers are needed throughout the year for comfort control, and more importantly for humidity control. The summer steam load is much lower than winter. The current configuration requires all the boilers in the plant to shut down to perform the full required maintenance on the boilers and the plant. Unfortunately, shutting down all the boilers for maintenance results in loss of the ability to maintain proper humidity control. The addition of the summer boiler capability will allow the existing heating plant to be isolated from the heating loop for plant shut down and maintenance, while allowing the new summer boiler to continue to serve the off-season steam needs of the downtown complex. It also allows an extended period for maintenance during the summer when humidity control is critical.

Museums in DOA maintained facilities are a great example of buildings with critical requirements for humidity control. Museum exhibits and artifacts require humidity control for proper long-term preservation.

The chiller plant and heating plant expansion and improvements are currently in the design phase. Design considerations include more efficient plant operations and operational flexibility. The chiller plant expansion will add one additional boiler, as well as space to add one chiller in the future.

Auxiliary connections for chillers provide resilience. An auxiliary connection point was added several years ago to the Salisbury Street Chiller Plant to enable a temporary chiller to feed the chilled water loop in the event of a main chiller failure. Some important buildings also have connection points for temporary chillers. Examples of temporary connections at critical facilities: DHHS; Chiller Plant 2; Legislative Building.

A major non-climate stressor is the aging infrastructure of the downtown complex chilled water system. Ongoing maintenance of the chilled water infrastructure, principally piping and primary and secondary chilled water pumps, is required to maintain the resilience of the chilled water system.

Extreme Cold

The downtown State Government Complex in Raleigh is heated by four large boilers in the Central Heating Plant near the Albemarle Building. These boilers burn natural gas and/or fuel oil to produce the steam needed to heat approximately twenty-five major buildings in Raleigh's Downtown State Government Complex including the State Capitol Building, Legislative Building, Legislative Office Building, and Governor's Residence. The steam provided to these buildings not only heats these buildings but also heats potable water and enables all-season humidity control in the buildings.

Winter temperature setpoints in State owned buildings served by the downtown energy complex can be lowered to provide reduced indoor winter temperatures, allowing a reduction in energy consumption for heating purposes.

The boilers in the central plant burn natural gas and fuel oil, which are fossil fuels. For resilience, DOA will continue to focus on energy efficiency, well maintained and operated plants, and efficient control of building systems. District energy, or central plants with distribution loops, when well maintained and operated, are more energy efficient than each building having dedicated chillers and boilers. A district energy system also offers resilience in its ability to manage the load when equipment failures occur and when equipment shutdown is required for maintenance or repair.

HVAC Controls that can be monitored remotely are often called Building Automation Systems, or BAS. Such systems can help facilitate energy efficient building operations and plant operations. A resilience strategy is to upgrade the building automation infrastructure, including technology upgrades for aging automation systems.

Electrical Power Loss

The North Carolina Department of Administration and other agencies occupying buildings administered by the Department of Administration provide a broad range of diverse services to the citizens of North Carolina. Loss of any of the buildings administered by the Department of Administration will result in serious disruption of governmental services.

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Electrical power is essential to the proper operation of all buildings. This power is necessary, not only for lighting but also for heating, cooling, ventilation, computer & communication systems, and dehumidification in these buildings as discussed above. Major climate stressors that affect and can shut down building electrical systems are high winds, storm conditions and flooding associated with hurricanes and other high wind events. Electrical system reliability is dependent on the severity and duration of tropical storms. Ice storms and heavy snowfall may also result in loss of electrical power.

Loss of electrical service in any of the downtown complex buildings will necessitate evacuation of the building until the electrical outage is resolved. All the buildings are equipped with emergency lighting systems to facilitate orderly evacuation in the event of power loss.

Generators are typically provided in the larger buildings to meet pumping requirements, fire protection, and provide power for lighting and data systems during extended power outages.

The vulnerability and risk of electrical power loss to the downtown Raleigh state government complex is considered low to moderate, depending on the severity and duration of the storm or flooding event. There is a low likelihood of extended electrical power loss but a moderate likelihood of temporary electrical power loss. It is likely that electrical power loss in the Raleigh state government complex will affect much of the downtown area in addition to the State complex of buildings. Although it is not possible to quantify the level of risk, the risk is directly linked to the utilities and their ability to provide reliable electrical power, including their ability to restore power following unscheduled power outages.

Risk factors include increases in frequency and severity of heavy rainfall, storm, and hurricane events in North Carolina.

As additional load is placed on the electrical grid through new construction and increased reliance on electric vehicles, the capacity of the electrical grid to deliver the needed power to all utility customers is a threat to resilience. It is impractical for DOA to duplicate the electric power generation capability to supply electrical power to the DOA maintained buildings. Therefore, DOA is reliant upon the utility provider for reliable electrical power to operate the buildings.

To address the potential loss of electrical power associated with severe weather events, DOA resiliency strategies include: Standby generators at major buildings; provisions for temporary connections of generators; Uninterruptible Power Supply (UPS) installation in data centers to ride through brief loss of power; use of work from home and remote working arrangements.

Major DOA facilities have standby generators for use during utility disruption. These generators typically are not intended to carry the entire building load. They are for targeted areas in buildings and maybe used to power critical electrical loads. The top priority for building generators is life safety systems and building egress lighting. Some generators provide backup power for data centers. Uninterruptible Power Supply (UPS) is generally a battery system to provide the capability for a critical load to ride through brief utility power outages and transition to and from generator power without loss of power. UPS systems can also provide time to gracefully shut down critical systems, when power is not restored in a timely manner. Although most of the DOA generators run on diesel fuel, the Nature Research Center (NRC) generator runs on natural gas. This generator can run for an extended period providing required power to the live exhibits.

Some buildings have provisions for temporary connections to generators. DOA plans to add auxiliary connections for temporary generators during new construction, and as part of upgrades of electrical systems in buildings.

In response to COVID-19, many employees who worked in DOA maintained buildings were asked to work from home or some other remote working arrangement. The use of laptop computers and Virtual Private Networks (VPN) are examples of exercising a resilience strategy. That experience will help develop remote working options that may be used when conditions such as extreme weather events or power outages are encountered.

Storm Water

Heavy precipitation can cause significant damage to public and private structures and utility services. This, in turn, disrupts provision of government services, often coming during times when government services are critically needed.

The consequences of urban flooding include property damage, as well as damaged infrastructure and utilities, sewer lines and pump stations. When pump stations and sewer lines are damaged important infrastructure must be replaced. Additional investments in storm water resilience are needed to counter the threat of flooding.

Department of Administration's Approach to Fulfilling the Strategies in the Climate Risk Assessment and Resilience Plan

NCDOA focuses on strategies to: reduce greenhouse gas emissions through reducing energy consumption per square foot in state-owned buildings; increase agency use of Zero Emissions Vehicles (ZEVs); participate in updating the NC uniform floodplain management policy for state Construction; and invest in historically underserved communities.

Reducing Energy Use

As specified in EO-80, NCDOA has appointed Ralph Taylor from the State Construction Office to serve as Program Designee for Energy. Additionally, NCDOA has hired a Sustainability Specialist, Brittany Quinn, to help design, implement, and coordinate sustainability related strategies and initiatives within the Facility Management Division and assist with sustainability initiatives within the agency.

Energy use per square foot has decreased since FY 19-20, getting DOA closer to reaching its 2025 EO-80 goal.

Addressing Environmental Injustices and Inequities

NCDOA has named Haley Pfeiffer-Haynes, Deputy Secretary of Service Operations, as the environmental justice lead.

Public Participation Plan

As per Executive Order 246, Office of the Secretary has drafted the first version of the [Public Participation Plan](#). The plan was published on NCDOA's website and took public feedback and comments through June 30th. The plan consists of four parts including public meetings, improvement of the website, staff trainings, and ongoing improvement of public access and participation. All four areas focus on remediating barriers to participation for historically marginalized groups to create greater engagement and transparency.

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

<p>1.1.1 LED Lighting Conversion</p>	<p>Ongoing</p>
<p>Expected Completion Date: N/A</p> <p>Fluorescent, halogen, and other non-LED bulbs are being phased out and replaced with LEDs. At least 8 buildings are fully LED, and Facility Management has phased in LEDs for most building outdoor lighting.</p> <p>Over the next 12 months, State Construction and Facility Management will continue collaborating on several upcoming full building conversions. For buildings not slated for full conversion, fluorescent bulbs are being replaced as they burn out and through small scale projects.</p>	
<p>1.1.2 DOA Government Complex Electrical Lighting Efficiency Upgrades</p>	<p>Underway</p>
<p>Expected Completion Date: March 2024</p> <p>Upgrade aging lighting to LED through a combination of retrofits and light fixture replacement. Project will also identify areas where enhanced lighting controls will improve energy efficiency.</p> <p>Over the next 12 months lighting designer will perform design and analysis and provide plans and specifications for this project to award a construction contract.</p>	
<p>1.1.3 Steam Trap Maintenance Program</p>	<p>Ongoing</p>
<p>Expected Completion Date: N/A</p> <p>The ongoing steam trap maintenance program began in 2019. The program surveys steam traps in the steam distribution system and replaces failed or ineffective traps. The duty of a steam trap is to discharge condensate, air and other incondensable gases from a steam system while not permitting the escape of live steam.</p> <p>Repairing steam traps mitigates steam loss and reduces water consumption, which reduces the amount of steam generation required and lowers CO2 emissions.</p> <p>In the next 12 months, Facility Management Division plans to continue evaluating and repairing traps within the downtown distribution system.</p>	
<p>1.1.4 Steam Pipe Insulation Project – Phase 1</p>	<p>Complete</p>
<p>Completion Date: August 2022</p>	

<p>DOA abated and insulated 400 linear feet of 10" steam main and 400 linear feet of 4" condensate return pipe. Pipe insulation reduces distribution heat loss, saving energy, and improves employee safety.</p>	
<p>1.1.5 Steam Plant O2 Analyzer Replacement</p>	<p>Underway</p>
<p>Expected Completion Date: October 2022</p> <p>At the Central Steam Plant, 412 N. McDowell Street, new O2 analyzers for boilers 1, 2, & 4 will replace existing analyzers. The stack gas oxygen analyzers measure the amount of oxygen in exhaust gas after combustion to support an efficient oxygen fuel mix, improving the energy efficiency of the boilers.</p>	
<p>1.1.6 Chiller Updates</p>	<p>Complete</p>
<p>Completion Date: June 2022</p> <p>Chiller Plant 2 is one of two central chiller plants downtown that supply chilled water to the downtown complex. The plant operates two 1450-ton chillers. Chiller #1 was rebuilt and recoated, and chiller #2 was replaced. This increases the longevity of the chillers and the resilience of the chiller plant.</p>	
<p>1.1.7 Chiller Plant 2 Expansion</p>	<p>Underway</p>
<p>Expected Completion Date: December 2024</p> <p>Chiller Plant 2 has two existing chillers. The plant will be expanded and provide a third chiller with space for one additional chiller in the future. This will provide redundant cooling capacity for resilience. Project is in the early design phase.</p> <p>In the next 12 months, construction documents will be completed, and the project will be bid for construction.</p>	
<p>1.1.8 Summer Boiler and Renovation of Old Heating Plant</p>	<p>Underway</p>
<p>Expected Completion Date: June 2024</p> <p>The project will renovate the Old Steam Plant and provide a "summer boiler" to allow the service of the main boiler plant during the summer season. Ultimately this modification will allow better and safer maintenance activities.</p> <p>In the next 12 months, construction documents will be completed, and the project will be bid for construction.</p>	
<p>1.1.9 State Records Building Air Handling Units Replacement</p>	<p>Underway</p>
<p>Expected Completion Date: January 2024</p> <p>This project is to replace the aged Air Handling Units (AHU's) original equipment to the building, entirely replacing them with newer energy efficient Air Handling Units. This will also</p>	

<p>replace obsolete pneumatic control systems serving the AHU's. The space temperature and humidity are critical components of long-term stable records storage.</p> <p>In the next 12 months, construction documents will be completed, and the project will be bid for construction.</p>	
<p>1.1.10 Museum of History Building Controls Replacement</p>	<p>Underway</p>
<p>Expected Completion Date: May 2024</p> <p>Due to the age and condition of the existing pneumatic control system this building needs a complete HVAC control system replacement. Furnish and install an upgrade to the existing Direct Digital Control (DDC) Building Management upgrade all field controllers with the latest revision of hardware graphics replacement of VAV box controllers and their associated reheat valves for approximately 150 identified boxes. AHU DDC controls in the mechanical rooms will also be upgraded. Replace and re-commission CO sensors in the underground parking deck. Replace existing Hot Water pumps; install new pumps pressure sensors and VFDs for pump speed control.</p> <p>In the next 12 months, construction documents will be completed, and the project will be bid for construction.</p>	
<p>1.1.11 Labor Building Window Replacement</p>	<p>Underway</p>
<p>Expected Completion Date: December 2023</p> <p>This project is to remove the existing single pane windows and replace them with new double pane windows. The existing windows are made of wood and are showing signs of deterioration and water infiltration. The replacement windows will be double pane and provide for both an increase in energy efficiency and weather protection.</p> <p>In the next 12 months, construction documents will be completed, and the project will be bid for construction.</p>	
<p>1.1.12 Obsolete Refrigerant Chiller Replacement</p>	<p>Proposed</p>
<p>Expected Completion Date: TBD</p> <p>The existing chillers at Records Building, Admin Building and Natural Science Building are R-123 machines that have been phased out. It is recommended for the chillers to be replaced as they are beyond repair as installed.</p> <p>The project schedule depends upon funding.</p>	
<p>1.1.13 Electric Vehicle (EV) Charging Stations in DOA Complex</p>	<p>Underway</p>
<p>Expected Completion Date: September 2024</p> <p>EV charging stations will be needed to support the Electric Vehicles being brought into the fleet. Funding is available for upgrading the electrical infrastructure to provide EV charging stations in Parking Deck 75. Plans call for 73 charging stations at this location.</p>	

<p>Funding has been requested to provide 30 additional EV charging stations that will be divided between Parking Deck 77 and Parking Lot 20.</p> <p>In the next 12 months, construction documents will be completed, and the project will be bid for construction. This project supports ZEVs mentioned in section 1.4 of this report.</p>	
<p>1.1.14 Administration Building 5th Floor Renovation</p>	<p>Complete</p>
<p>Completion Date: July 2022</p> <p>The 5th Floor of the Administration Building received a complete renovation including abatement, window replacement, restroom renovations, and new finishes. Energy efficiency features included improved roof insulation with the roof replacement, energy efficient windows, energy efficient lighting with lighting controls, and digital temperature controls. The design included use of interior glazing to bring natural light into the interior office spaces.</p>	
<p>1.1.15 Improve Chilled Water Efficiency in Downtown Government Complex</p>	<p>Proposed</p>
<p>Expected Completion Date: TBD</p> <p>The Improve chilled water efficiency in buildings on the chilled water loop in Downtown Government Complex. Replace chilled water coils in Air Handling Units in buildings on the chilled water distribution loop to improve Delta T. Improving Delta T (getting higher Delta T, or temperature differential) has a direct impact on existing distribution piping size from the chiller plant. It will allow desired system performance with smaller pipe size and result in better pumping efficiency. This energy efficiency project is directly related to the Chiller Plant Expansion Project.</p> <p>Project funding is needed for removing existing coils and installing new coils. Project schedule depends upon availability of funding.</p>	

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

This section does not apply.

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

NCDOA’s contribution to this goal is its work to increase agency ZEV purchasing and adoption, described in the following section.

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

1.4.1 Achieve High Rate of ZEV and Hybrid Adoption from Agencies	Ongoing
<p>Expected Completion Date: N/A</p> <p>The Motor Fleet Management (MFM) team identified and highlighted which vehicles were suitable for ZEV or hybrid replacement. NCDOA and the Governor’s Office emphasized that the vehicles identified on the replacement list are presumed suitable for replacement with a ZEV based on collected driving data and reiterated the importance of transitioning the state’s motor fleet in accordance with Executive Order 80. MFM has begun to replace identified vehicles with a hybrid or ZEV when they reach the end of their lifecycle and will continue to identify vehicles for replacement with either a ZEV or hybrid.</p> <p>MFM will continue to work with agency stakeholders to educate and answer any questions about ZEV fleet adoption. Due to the new replacement process, MFM anticipates a considerable increase in EVs purchased by agencies in the next few years.</p>	
1.4.2 State Procurement Contract	Ongoing
<p>Expected Completion Date: N/A</p> <p>Motor Fleet retooled the state vehicle procurement contract to secure more cost-effective ZEV and hybrid options. As a result of the new contract, the state fleet will standardize around hybrid sedans where ZEV sedans are not feasible.</p> <p>All agencies and MFM will track ZEV trends and benefits of agencies transitioning to ZEVs to the extent practicable and explore methods for recognizing increased ZEV utilization among state agencies, universities, and local governments. This work will include updating the state procurement contract as appropriate to take full advantage of increasing vehicle diversity and affordability.</p>	
1.4.3 Mail Service Center Vehicle Update	Complete
<p>NCDOA acquired seven new Ford E-Transit cargo vans and six charging stations that transport mail between state government agencies through Mail Service Center (MSC) located at 309 Chapanoke Road. The electric vans are charged onsite at the MSC. When fully charged, the vans can travel up to 126 miles before needing to recharge.</p> <p>Together, the vans travel 97,000 miles annually, resulting in fuel cost savings of more than \$14,000 dollars per year. Replacing fuel-operated vehicles with electric vans will save approximately 43 metric tons of carbon dioxide equivalent on an annual basis. Additionally, the state is expected to save approximately 40% of maintenance costs compared to their gas-powered equivalents over the life of the vehicle.</p>	
1.4.4 EV Charging Stations in Downtown Government Complex	Underway
<p>Expected Completion Date: September 2024</p>	

NCDOA recognizes the need to provide EV charging stations in the Downtown Government Complex to support the increasing number of state-owned EV's. Changes to the electrical infrastructure are required to support the number of EV charging stations needed. Projects are underway using initial funding provided in 2022, and additional funding is being requested. Project details are outlined in section 1.1.13 of this report.

2.0. Increase statewide resilience to the impacts of climate change

2.1 Evaluate the impacts of climate change on cabinet agencies' programs and operations

This section does not apply.

2.2 Integrate climate change adaptation practices and resiliency planning into cabinet agencies' policies and operations

2.2.1 Updating the North Carolina Uniform Floodplain Management Policy for State Construction	Underway
<p>Expected Completion Date: January 2024</p> <p>Executive Order 266 was issued July 25, 2022, and it sets forth a schedule of 18 months. The floodplain policy was last updated in 1990. The frequency and intensity of hurricanes and severe storms, riverine and estuarine flooding, saltwater intrusion and rising ground water have increased since 1990. NCDOA will take an active part in updating the policy to include a flood risk management review process and flood resilience standards for state construction. State Construction Office is representing DOA amongst the other stakeholders.</p>	

2.3 Assist the communities served by each cabinet agency to implement climate change adaptation practices and resiliency planning

This section does not apply.

3.0. Address the public health impacts of climate change

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

This section does not apply.

3.2 Advance health equity

This section does not apply.

3.3 Initiate other projects aimed at addressing the public health impacts of climate change

This section does not apply.

4.0. Invest in historically underserved communities

4.1 Increase affordability for low- and moderate-income households

This section does not apply.

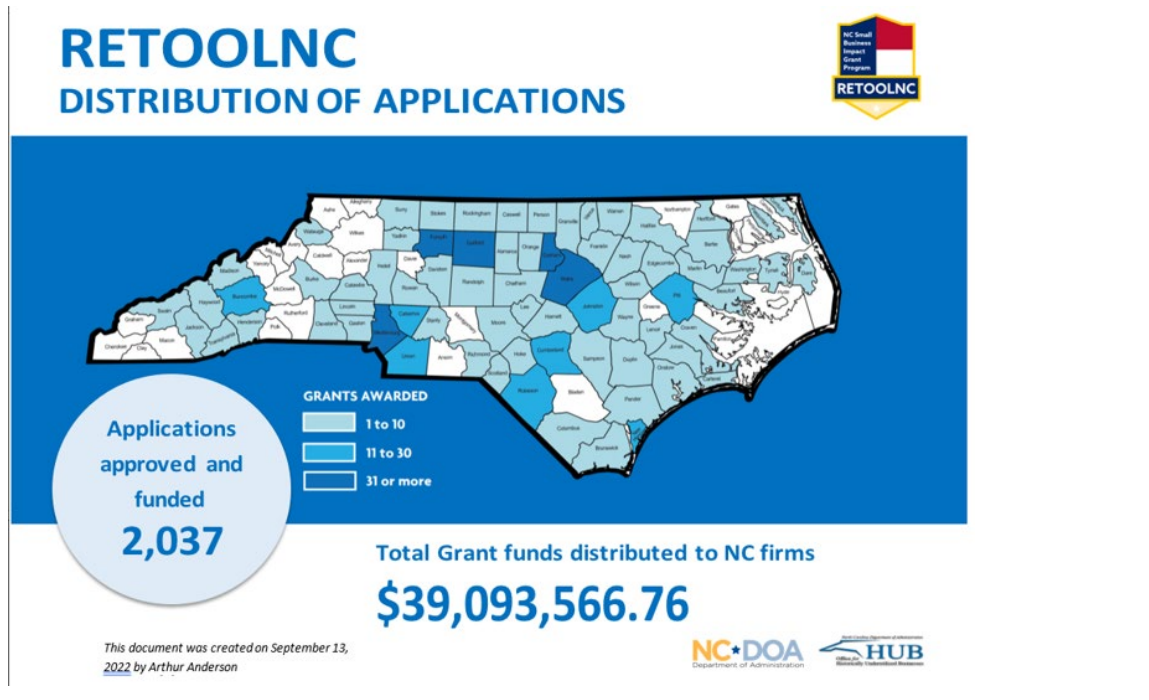
4.2 Create jobs and economic growth

<p>4.2.1 Increase spending by state and local governments on goods and services with historically underutilized businesses</p>	<p>Ongoing</p>
<p>Expected Completion Date: N/A</p> <p>In Fiscal Year 21-22 spending with certified Historically Underutilized Business (HUB) vendors reported from state agencies, school systems, public universities and community colleges included: \$640,038,803 on goods & services (5.81% of all related spending), \$7,284,059 with architects & engineers (12.57% of all related spending), and \$213,884,567 on construction (18.99% of all related spending). There is a statewide goal of 10% spending with HUBs for goods and services and construction. Each state agency, school system, public university and community college is accountable for meeting the goal for goods and services and construction. Local governments such as towns, cities and county governments are required to report on construction spending.</p>	
<p>4.2.2 Encourage HUB vendors to hire, train and retain staff from their communities</p>	<p>Underway</p>
<p>Expected Completion Date: June 30, 2026</p> <p>Staffing is a metric that the NC Minority Business Development Agency (MBDA) Business Center tracks with a Goal of 250 jobs both retained and created per year. In Fiscal Year 21-22 the NC MBDA Business Center reported 459 retained or created by clients. The NC MBDA Business Center has a 5-year grant, so it is expected that there will be over 1,200 jobs created or retained during that time.</p>	

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

<p>4.3.1 RETOOLNC</p>	<p>Ongoing</p>
<p>Expected Completion Date: N/A</p> <p>The HUB Office administered the RETOOLNC grant program providing \$10,000 to \$25,000 grants per certified firm to small HUBs and Department of Transportation Disadvantaged</p>	

Business Enterprises (DBEs). Over \$39 million has been distributed to over 2,000 HUB and DBE certified firms. With additional funding more eligible certified HUBs and DBEs could be served.



4.3.2 Share funding opportunities with HUB vendors	Ongoing
<p>Expected Completion Date: N/A</p> <p>The HUB Office served as a resource for grant opportunities from NC Department of Revenue business recovery grants, sharing details of the grant and informing HUBs of opportunities to learn more about the grants. The HUB Office also partnered with the US Small Business Administration to educate vendors on available loans and financial support programs (Paycheck Protection Program), including conducting monthly town hall meetings with HUB vendors and US SBA staff. The HUB Office will continue to share resources of funding opportunities with HUBs.</p>	
4.3.3 Outreach for HUB vendors and underserved communities	Ongoing
<p>Expected Completion Date: N/A</p> <p>Conduct outreach to HUB vendors and underserved communities through the HUBster newsletter, emails, website notices, and other avenues to inform residents and businesses of state and federal grant opportunities and ways to strengthen their ability to access capital to grow their businesses. In FY 21-22 the HUB Office sponsored or promoted three events on grants including Department of Revenue’s Business Recovery Grant and the RETOOLNC grant.</p>	

4.4 Initiate other projects aimed at investing in underserved communities

4.4.1 Training Programs	Ongoing
<p>Expected Completion Date: N/A</p> <p>The MBDA Business Center participated in outreach with construction companies and helping firms prequalify with prime contractors, including Samet Corporation, with plans to work with Messer Construction on outreach. The HUB Office collaborated with Balfour-Beatty to conduct trainings on working on Construction Management at Risk projects as a subcontractor, with Skanska training for construction contracting, and on the Bonding Education Program with the Institute’s Small Business Transportation Resource Center. HUB and MBDA presented on HUB Certification and MBDA services at the Winston-Salem Black Chamber of Commerce’s Road to Business Resilience Training, with another session to be conducted in October 2022. Additional sessions are anticipated for the Bonding Education Program (annual program).</p>	
4.4.2 Commission and council representation	Ongoing
<p>Expected Completion Date: N/A</p> <p>HUB Office staff attend quarterly meetings of the NC Commission of Indian Affairs and the Governor’s Advisory Council for Hispanic and Latino Affairs. The NC MBDA Business Center is working to partner with NC Council on Indian Affairs for MBDA and HUB certification efforts to increase the number of certified American Indian firms.</p>	
4.4.3 Networking opportunities	Ongoing
<p>Expected Completion Date: N/A</p> <p>Creating opportunities for HUBs to network with prime contractors and agencies including annual MEDweek networking events, meet-the-purchaser events, and the State Construction Conference Networking Reception. The HUB Office manages a Bid Opportunity site, conducts live trainings for vendors on doing business with the state and ways to strengthen their businesses which were recorded so vendors can view on demand. In FY 21-22 the HUB Office sponsored or participated in ten events on strengthening financial health, access to capital, business growth, as well as fourteen networking events, and nine events on how to do business with government.</p>	