North Carolina Office of Recovery and Resiliency

Raleigh, NC

A Report on the Homeowner Recovery Program

November 2025

State Auditor
Dave Boliek

A Constitutional Office of the State of North Carolina

North Carolina Office of the State Auditor
Dave Boliek, State Auditor

Auditor's Transmittal

The Honorable Josh Stein, Governor
The Honorable Phil Berger, President Pro Tempore
The Honorable Destin Hall, Speaker of the House
Honorable Members of the North Carolina General Assembly
Eddie M. Buffaloe, Jr, Secretary, North Carolina Department of Public Safety
Pryor Gibson, Interim Director, North Carolina Office of Recovery and Resiliency

To all:

The North Carolina Office of Recovery and Resiliency has been a source of hardship for so many North Carolinians. What was originally created to help hurricane victims turned into a logistical nightmare. Too often, individuals and families left wondering for years when they might get back into a permanent home following Hurricanes Matthew and Florence. The story of NCORR is a story of the government failing the very people it is meant to support.

As the State Auditor's Office examined NCORR, we uncovered a disaster from the start. Management never organized and set NCORR up for success. There was no established plan for distribution of relief dollars. The repairing and rebuilding of homes destroyed by Hurricanes Matthew and Florence became secondary to process management.

NCORR's approach resulted in funds committed without fully understanding how much a project may cost. Management did not effectively reconcile budgets which led to discrepancies in financial reporting and a budget shortfall. Despite spending more than $25.4 million on design and implementation of the Salesforce platform, data quality was poor and caused significant challenges and delays. Action plans were never operationalized, so NCORR operated reactively and without proactive oversight. Vendor oversight was wholly inadequate with no systematic monitoring of vendor performance or contract compliance.

NCORR's story was further complicated by the fact that other programs were added to NCORR for administration, distracting from the core mission of disaster recovery.

The failures to properly serve the people of North Carolina are evident in both the heartbreaking stories told by hurricane victims, and in the underlying numbers and data included in our report.

It took applicants an average of 936 days to get through grant determination, just one of eight steps required to be completed. Some families remained in temporary housing for more than 1,400 days. NCORR managed its flagship Homeowner Recovery Program with three separate systems, all of which reported different total expenditures. Ultimately, NCORR ran up a $297 million budget shortfall that required emergency appropriations from the General Assembly.

As part of this report we consulted with an expert, Mr. Craig Fugate, former Director of the Federal Emergency Management Agency (FEMA) and Florida Emergency Management. His note that NCORR "spent a tremendous amount of time on process, when their job was swinging hammers," captures the long list of issues outlined in our report.

North Carolina is no stranger to hurricanes. Our state will continue to be hit by natural disasters. What matters moving forward is that state government sets itself up to aid in an effective and timely manner. The recommendations included in this report are designed to establish foundational processes for how hurricane recovery must be approached. We recommend creating a new partnership for disaster recovery, implementing robust financial oversight, strengthening vendor and contract management, improving data processes, and taking short-term actions for the closeout of NCORR and the Homeowner Recovery Program.

The response from NCORR management is included in this report. NCORR expressed appreciation for our review and identified areas from the assessment that have been implemented. The people of North Carolina deserve the very best from their government, and it's of the utmost importance that we improve disaster recovery in our state.

Respectfully submitted,

Dave Boliek
State Auditor

Executive Summary

The North Carolina Office of the State Auditor (OSA) conducted an independent assessment of the North Carolina Office of Recovery and Resiliency's (NCORR) administration of the Homeowner Recovery Program (HRP) for Hurricanes Matthew (2016) and Florence (2018). OSA initiated this assessment as required by Section 1F.2.(b) of Session Law 2024-57.

North Carolina's Commitment to Disaster Recovery: A Promise Delayed

In response to Hurricanes Matthew and Florence, NCORR was formed to oversee long-term disaster recovery and mitigation efforts, including the reconstruction and rehabilitation of homes damaged by these storms. NCORR led this initiative with over **$1 billion** in combined federal and State funding, comprising **$709 million** from federal Community Development Block Grant (CDBG) funds and **$297 million** from State appropriations, directed towards restoring affected residences and communities.

$1 billion
in combined federal and State funding

$709 million from federal Community Development Block Grant (CDBG) funds

$297 million from State appropriations

The application period for HRP closed on April 21, 2023, marking the final opportunity for eligible residents to seek assistance. According to NCORR, HRP received 11,654 applications and completed 3,522 projects as of April 2025. While not all applicants were eligible, project completion was significantly delayed.

HRP received **11,654 applications** and completed **3,522 projects** as of April 2025

There were eight steps that applicants had to go through in order for a project to be completed. Each step took at least 100 days on average, with grant determination taking an average of 936 days. Some families remained in temporary housing for more than 1,400 days, incurring lodging costs exceeding $230,000 for a single household.

Applicants had **8 steps** to complete

Each step took at least **100 days** on average

Grant determination taking an average of **936 days**

Objective

The objective of this assessment is to provide the North Carolina General Assembly with an independent and comprehensive evaluation of NCORR's administration, oversight, and effectiveness in managing disaster recovery funds and operations, specifically regarding HRP. This assessment aims to identify systemic challenges, assess the adequacy of internal controls and program management, and offer actionable recommendations to strengthen future disaster recovery efforts.

Key Findings

As part of this assessment, OSA consulted Craig Fugate, former Director of the Federal Emergency Management Agency (FEMA) and Florida Emergency Management, to provide an external perspective on NCORR's performance. Fugate cautioned:

> "Don't confuse process with outcomes. Without defined criteria, you are paying for process," and further observed that NCORR "spent a tremendous amount of time on process, when their job was swinging hammers."

In this context, "process" refers to the administrative steps, paperwork, and procedures followed by NCORR, while "outcomes" are the real-world results, such as houses rebuilt and families returned home. Fugate's comments highlight a central theme of this assessment: the need to prioritize measurable results over procedural compliance. OSA's recommendations are designed to ensure that future disaster recovery efforts are evaluated based on tangible outcomes, not just adherence to process.

Financial Commitments Exceeding Available Funds and Unreconciled Reporting Led to a $297 Million State Bailout:

NCORR committed disaster recovery funds to projects in the order applications were ready to proceed, rather than through a comprehensive assessment of total disaster related need. This approach, combined with inconsistent reconciliation across financial and program management systems, meant NCORR did not know the full cost of recovery until after the application period closed.

NCORR spent $25.4 million on Salesforce

Issues included blank fields, negative processing times, missing 'Notice to Proceed' dates, and instances of applications marked 'Complete' without corresponding end dates.

Poor Program Data Quality and Delays in Disaster Recovery Efforts Prolonged Hardship and Increased Costs:

Incomplete and inconsistent program data within Salesforce, one of the three systems used to manage HRP, caused HRP to experience operational challenges and delays. NCORR spent $25.4 million on Salesforce, including costs related to ongoing consulting and technical support. Despite the substantial funds committed to Salesforce, several issues impacting hurricane victims' ability to get through the eligibility process persisted. Issues included blank fields, negative processing times, missing 'Notice to Proceed' dates, and instances of applications marked 'Complete' without corresponding end dates.

These data shortcomings made backlog assessments and process tracking difficult. On average, eligibility determination for applicants took 140 days, and rebuilding efforts did not begin until nearly four years after NCORR made these determinations.

Insufficient Budget Controls and Monitoring Practices Led to Emergency Appropriations:

NCORR failed to translate HUD Action Plans into practical, enforceable budgets and schedules for daily management of HRP. Without a structured financial roadmap or ongoing budget monitoring, NCORR operated reactively making spending decisions based on available funds rather than comprehensive needs or performance targets. The absence of regular reconciliation between planned budgets and actual expenditures, and the lack of proactive oversight, were significant factors in the $297 million shortfall that required emergency appropriations from the General Assembly to keep recovery efforts on track.

Inadequate Oversight of Vendors Led to Increased Costs:

Vendor involvement in HRP administration was significant, but oversight by NCORR was insufficient. Fugate noted that "Contractors are a great force multiplier, but you can't farm out the governing." He emphasized the importance of having established criteria for measuring success or determining program completion. However, only one out of six program administration contracts included Key Performance Indicators (KPIs), and those KPIs lacked defined performance thresholds. Many vendor contracts referenced potential metrics without requirements for performance monitoring or payment tied to results.

Only one out of six program administration contacts included Key Performance Indicators (KPIs)

As of April 2025, NCORR's Salesforce system reported total vendor payments exceeding $784 million, underscoring both the scale of contracted disaster recovery work and the critical need for robust oversight and reconciliation across systems. Due to these shortcomings, NCORR did not systematically monitor vendor performance or contract compliance. In several instances, NCORR paid vendor invoices without verifying in all cases that the work billed was completed.

Total vendor payments exceeded $784 million

Recommendations

Long-Term Recommendations for Future Disaster Recovery

Establish a SOLID Partnership for Disaster Recovery:

The State of North Carolina's Council of State—including the Governor, Lieutenant Governor, Secretary of State, State Auditor, State Treasurer, Superintendent of Public Instruction, Attorney General, Commissioner of Agriculture, Commissioner of Insurance, Commissioner of Labor, and State Controller—and the Department of Public Safety should come together to establish a Sustainable Outcomes for Long- Term Impact and Disaster Recovery (SOLID) Partnership.

By formalizing this Partnership and including all members of the Council of State, North Carolina will build a resilient, coordinated, and accountable disaster recovery framework.

Implement Robust Budget and Financial Oversight:

- Integrate all financial and program management systems to create a unified, authoritative source of truth for decision-making and external reporting.
- Establish routine reconciliation protocols and align program outputs with financial controls from program inception through completion.

Strengthen Contract Management and Oversight:

- Codify KPI requirements in procurement policies for all disaster recovery contracts.
- Establish a dedicated vendor performance management office to monitor, evaluate, and report on contract compliance and outcomes.
- Mandate the use of contract monitoring plans with regular performance reviews and enforceable accountability measures.

Implement Comprehensive Data Governance Frameworks:

- Assign data owners and establish authoritative data fields for all critical program information.
- Develop and enforce validation rules and automated exception reporting mechanisms from the outset of each program to ensure ongoing data quality and integrity.

Short-Term Actions for NCORR and HRP Closeout

Enhance Budgeting and Financial Oversight:

- Translate HUD Action Plans budgets and output goals into a detailed, enforceable schedule with quarterly milestones.
- Integrate these targets directly into internal monitoring and reporting systems to facilitate proactive tracking of expenditures and progress toward goals.
- Implement regular reconciliations between Action Plan budgets, Salesforce, DRGR, and accounting records to ensure consistency and early identification of discrepancies.

Strengthen Contract Management:

- Amend all active vendor contracts to include HRP-specific KPIs with clear performance thresholds and measurable outcomes.
- Link invoice approvals to vendor achievement of defined performance standards and require thorough documentation of contract compliance at program closeout.
- Establish a process for routine contract compliance reviews and regular vendor performance reporting.

Improve Data Integrity and Reporting:

- Institute mandatory monthly reconciliations across all financial and program management systems to maintain accuracy and completeness of data.
- Require quarterly co-certification of HUD reports by finance and program leadership to ensure accountability.
- Develop and execute a comprehensive data cleanup plan prior to program closeout, addressing incomplete records, inconsistent fields, and unresolved discrepancies.

Recommendations

Long-Term Recommendations for Future Disaster Recovery

Establish a SOLID Partnership for Disaster Recovery

Implement Robust Budget and Financial Oversight

Strengthen Contract Management and Oversight

Implement Comprehensive Data Governance Frameworks

Short-Term Actions for NCORR and HRP Closeout

Enhance Budgeting and Financial Oversight

Strengthen Contract Management

Improve Data Integrity and Reporting

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Chapter 147, Article 5A of the North Carolina General Statutes gives the Auditor broad powers to examine all books, records, files, papers, documents, and financial affairs of every state agency and any organization that receives public funding. The Auditor also has the power to summon people to produce records and to answer questions under oath.

Background

Background

Hurricanes Matthew and Florence: A Dual Disaster in Eastern North Carolina

On October 8, 2016, Hurricane Matthew made landfall in North Carolina, bringing torrential rainfall that caused historic flooding across eastern North Carolina counties. Recovery from Hurricane Matthew was expected to take years, as thousands of people who had been displaced from their homes and lost their businesses attempted to piece their lives back together.

Less than two years later, Hurricane Florence struck on September 14, 2018, swiftly beating flood records set by Hurricane Matthew. Many people still struggling to recover from the 2016 hurricane found themselves under water once again. Communities were unprepared for another disaster resulting in widespread property damage, prolonged displacement, and significant economic hardship.

Hurricane Matthew:

4,100 people in shelters

More than **800,000** people lost power

28 fatalities

$2.8 billion in property damage

53 counties impacted

- Downgraded to Category 1 at landfall but the amount of rain was devastating. Three to four months' worth of rain was dumped in 12 hours, rapidly raising rivers and streams.
- The Lumber River reached nearly 24 feet, cutting off portions of Interstate 95.
- Interstate 40 and U.S. Highway 70 were also impassable in some areas.
- "Sadly, the poorest of the poor in North Carolina are the ones who are being hurt the most by these floods." ~ Then-Governor Pat McCrory

Hurricane Florence:

- Made landfall as a Category 1 hurricane but shattered State records by unleashing nearly 36 inches of rain.
- One million people evacuated.
- The Lumber River crested at 29 feet and the Cape Fear River at 61 feet.
- Interstates 40, 95, and U.S. Highway 70 closed in some areas.
- Wilmington was completely cut off by floodwater.
- Estimated property damage was almost ten times higher than after Hurricane Matthew.

20,000 people in shelters

More than **700,000** people lost power

40 fatalities

$22 billion

52 counties

These back-to-back disasters created unprecedented challenges for State agencies and local governments, requiring a coordinated and sustained recovery effort.

Creation of the North Carolina Office of Recovery and Resiliency

NCORR
NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

In response to the devastation, the North Carolina General Assembly established the North Carolina Office of Recovery and Resiliency (NCORR) as a division of the North Carolina Department of Public Safety (DPS) in 2018.[1] NCORR was established for long-term recovery efforts. Unlike emergency response agencies that focus on immediate relief, such as debris removal, temporary shelter, and urgent repairs, NCORR was established to manage the complex, multi-year process of rebuilding homes, restoring infrastructure, and strengthening community resilience. NCORR was also tasked with administering federal funding provided by the Community Development Block Grant Disaster Recovery (CDBG-DR) program.

NCORR's statutory responsibilities included:

- Coordinating statewide disaster recovery efforts and providing public information;
- Conducting citizen outreach and managing applications for assistance;
- Overseeing audit, finance, compliance, and reporting related to disaster recovery funds; and
- Delivering program administration and construction management services for recovery projects.

[1] Session Law 2018-136, section 5.7.(a)

Homeowner Recovery Program (HRP)

HRP was NCORR's flagship program, designed to assist homeowners whose properties were damaged by Hurricanes Matthew and Florence. The program provided financial and logistical support to help eligible homeowners repair, reconstruct, replace, or elevate their homes. HRP also offered reimbursement for completed repairs that met program guidelines.

The program included:

- Eligibility reviews and award determination;
- Inspections and environmental assessments; and
- Contractor selection, construction, and case management.

To participate in HRP, homeowners were required to submit a completed application with supporting documentation, such as proof of ownership, occupancy, income verification, and details of storm-related damage.

Application and grant activities were tracked in Salesforce.

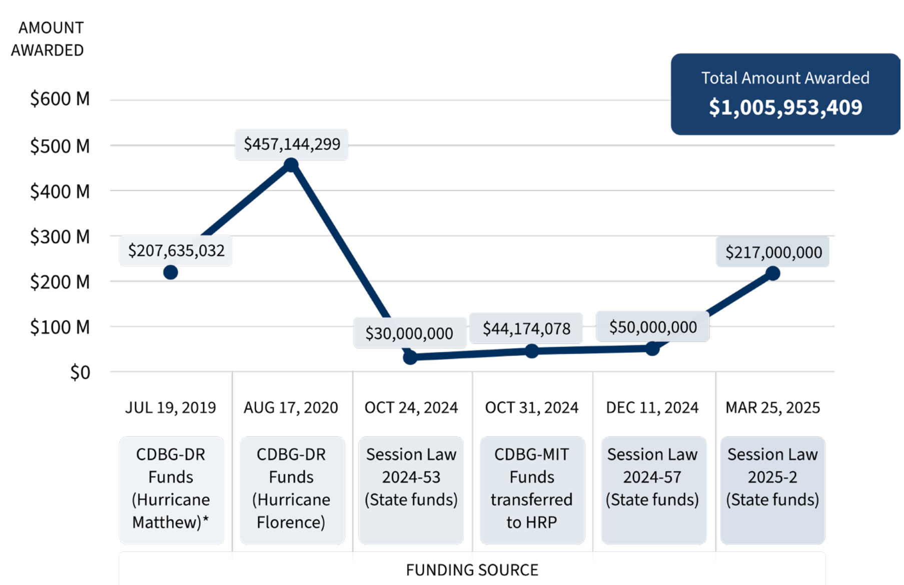
Although the application period for the program closed on April 21, 2023, NCORR continued to support existing awardees through case management, construction oversight, and customer service. The program is scheduled for closeout by October 2026.

Funding Overview

HRP was funded primarily through the U.S. Department of Housing and Urban Development (HUD)'s CDBG-DR program, with additional transfers from the Community Development Block Grant–Mitigation (CDBG-MIT) program, as well as State funding.

Since its inception, NCORR has managed more than **$1 billion** in disaster recovery funds. (See Appendix A for a timeline of funding.)

Exhibit A: Funding For Homeowner Recovery Program



*Grant transferred from NC Department of Commerce to NC Department of Public Safety related to Hurricane Matthew at the establishment of NCORR.
Source: CDBG Grant Agreements and Session Laws

Timeline

2016

Hurricane Matthew devastates parts of eastern North Carolina

2017

2018

Hurricane Florence hits eastern North Carolina, compounding the damage done by Matthew

NCORR created to oversee long-term recovery.

2019

LaVonne Merritt's father applies for NCORR assistance to build a new home

HUD allocates **$236 M** to NC for storm recovery.

2020

Vernon Harrell moves into a motel so that an NCORR contractor can begin the rehabilitation on his home, estimated to be completed in two months

HUD allocates an additional **$542 M** to NC for storm recovery.

Hal Lowder applies for NCORR assistance to rehabilitate home.

Dolores Hewett applies for NCORR assistance to rebuild her home.

David French and Marianne Williams apply for NCORR assistance to rebuild their home.

2021

LaVonne Merritt and her father move into a motel and their home is bulldozed.

LaVonne Merritt's father passes away. Ms. Merritt takes over his NCORR case as his heir.

2022

Marianne Williams passes away. David French continues with NCORR case.

Survivors share testimony to the Joint Legislative Commission on Governmental Operations about their experiences with NCORR.

Hal Lowder moves his family into a motel. Repairs were supposed to take 45 days, but Lowder still did not have a timeline for completion after **120 days**.

Legal Aid of North Carolina sends a Notice of Breach of Contract to one of NCORR's contractors on behalf of Vernon Harrell. Several days later, NCORR staff sends an email stating that Mr. Harrell may be in breach of contract and could be required to pay back all money expended by NCORR on his behalf, totaling over a quarter of a million dollars.

2023

Dolores Hewett's home is approved for rehabilitation but not full repair.

3,100 homeowners are still in some phase of the recovery program. **1,265** homes have been completed.

David French is assigned a contractor.

LaVonne Merritt's home is rebuilt.

2024

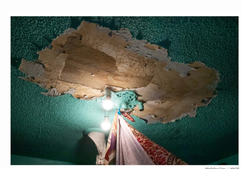
Delores Hewett goes through the contractor selection process before being informed that all projects are on hold due to budgetary concerns.

Aprox. **1,600** hurricane survivors are still displaced. NCORR announces in Dec. that it will not approve construction of any new homes due to budget deficit.

David French submits testimony regarding the lack of progress on his case for another meeting of the Joint Legislative Commission on Governmental Operations.

2025

Dolores Hewett continues to live in her deteriorating house while awaiting NCORR assistance.



2026

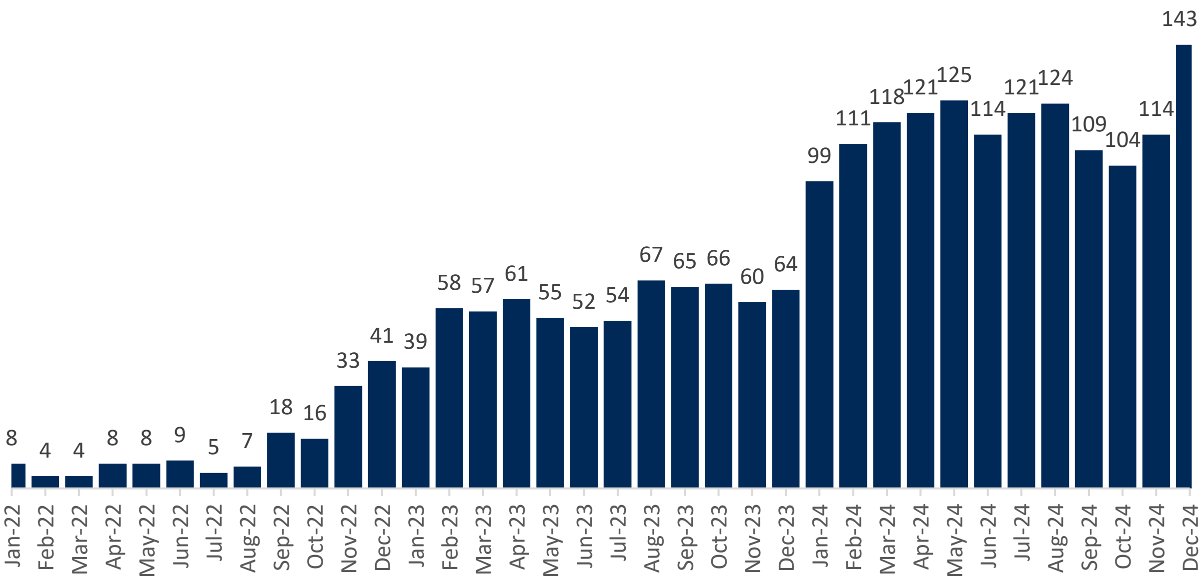
NCORR program closeout date.

Photos:
Lisa Sorg / NC Newsline

Madeline Gray / WHQR

According to NCORR, as of April 2025 HRP has completed 3,522 recovery projects. At that time, 368 homes were under construction, and 404 other projects had received a Notice to Proceed, meaning that the project was approved and funds had been allocated for it.

Exhibit B: Number of Homes Completed through December 2024



Source: Based on data provided by NCORR

Legislative Oversight and Audit Mandate

Based on concerns regarding NCORR's delays, cost overruns, and lack of transparency in use of disaster recovery funds, the General Assembly directed the Office of the State Auditor to perform a review of NCORR and report its findings to the Joint Legislative Commission on Governmental Operations.[2] This report focuses on NCORR's financial stewardship, vendor oversight, and program accountability of HRP.

Responsible Parties Discussed in this Report:

United States Department of Housing and Urban Development (HUD) – HUD is a federal agency responsible for national policies and programs that address America's housing needs, improve and develop communities, and enforce fair housing laws. In the context of disaster recovery, HUD administers programs like the Community Development Block Grant–Disaster Recovery program (CDBG-DR).

North Carolina Department of Public Safety (DPS) – DPS is composed of eight divisions: Administration Division, Chief of Staff, Alcohol Law Enforcement, Homeland Security, Division of Juvenile Justice and Delinquency Prevention, North Carolina Emergency Management, North Carolina National Guard, and the North Carolina Office of Recovery and Resiliency (NCORR).

[2] Session law 2024-57, §§ 1F.2(b), (d).

North Carolina Office of Recovery and Resiliency (NCORR) – NCORR, an office within DPS, was established to provide general disaster recovery coordination and public information; citizen outreach and application case management; audit, finance, compliance, and reporting on disaster recovery funds; and program and construction management services. (See Appendix B for organizational charts for NCORR.)

Key Terms Discussed in this Report:

HUD Action Plan – A required document that outlined how NCORR intended to use federal disaster recovery funds. The Action Plan includes a needs assessment, program design, budget allocation, implementation plan, etc. (See Appendix C for the latest Action Plans submitted for Hurricane Matthew, Appendix D for the latest Action Plans submitted for Hurricane Florence, and Appendix E for the latest Action Plans submitted for CDBG-MIT.)

Quarterly Performance Reports – A mandatory report submitted by grantees every quarter through the Disaster Recovery Grant Reporting (DRGR) system. It serves as a key compliance and monitoring tool for programs like Community Development Block Grant – Disaster Recovery (CDBG-DR) and related HUD-funded initiatives. The report documents financial and programmatic progress on all funded activities during the reporting period.

Community Development Block Grant Disaster Recovery (CDBG-DR) – A HUD administered program that provides flexible, supplemental funding to help states, local governments, and tribal entities recover from Presidentially declared disasters.

Community Development Block Grant Mitigation (CDBG-MIT) – A HUD-administered program that provides funding to states, local governments, and tribal entities to carry out strategic, high-impact activities that reduce risks from future disasters. It was created to complement CDBG-DR by focusing on forward-looking resilience investments rather than recovery from past events.

Planning Activities – Eligible activities funded by HUD's CDBG program that support strategic decision-making and preparation for recovery and resilience. Such activities include:

- Needs Assessments;
- Data Collection and analysis;
- Development of Action Plans;
- Public engagement and input processes;
- Resilience and mitigation planning; and
- Environmental and feasibility studies.

Administration Activities – Reasonable costs necessary to administer the CDBG program. Such activities include:

- Staff salaries and benefits;
- Office supplies and equipment;

- Financial management and internal auditing;
- Monitoring and reporting;
- Legal services related to the program; and
- Procurement and contracting costs.

Temporary Relocation Assistance (TRA) – Financial and logistical support provided to eligible homeowners who must temporarily move out of their primary residence so that NCORR can complete repairs, elevation, reconstruction, or environmental remediation funded by CDBG-DR.

Notice to Proceed (NTP) – A formal written authorization issued by the project owner (or their representative) to a contractor, granting permission to begin work under the terms of an executed contract.

Key Systems Discussed in this Report:

North Carolina Accounting System (NCAS) – Formerly the official statewide financial management system used by North Carolina State government agencies, NCAS was designed to record, process, and report all financial transactions, including budgeting, expenditures, revenues, and accounting for State funds. NCAS transitioned to the North Carolina Financial System in October 2023.

North Carolina Financial System (NCFS) – The State's modern, centralized financial management platform that replaced the North Carolina Accounting System (NCAS) in October 2023. NCFS is designed to handle all aspects of State government financial operations, including budgeting, accounting, expenditure tracking, and financial reporting.

HUD Disaster Recovery Grant Reporting (DRGR) – The system used to support the management and oversight of Community Development Block Grant Disaster Recovery (CDBG-DR) funds and other special appropriations. The DRGR system is used to access grant funds, submit Action Plans, and report on performance accomplishments for disaster recovery activities.

Salesforce – A cloud-based Customer Relationship Management platform customized by NCORR to serve as its system of record for disaster recovery and resiliency programs.

Findings and Recommendations

The Homeowner Recovery Program (HRP) was North Carolina Office of Recovery and Resiliency's (NCORR) flagship initiative, established in 2018 to assist North Carolinians whose homes were damaged by Hurricanes Matthew (2016) and Florence (2018). The program was funded with more than $1 billion in combined federal and State resources, including $709 million from Community Development Block Grant (CDBG) federal recovery funds and $297 million from State appropriations. The HRP application period closed on April 21, 2023, marking the final opportunity for eligible residents to seek assistance for storm-related repairs, reconstruction, or elevation. The findings and recommendations that follow pertain exclusively to the HRP and are based on program activities and data available through April 2025.

$1 billion
in combined federal and State funding

$709 million from federal Community Development Block Grant (CDBG) funds

$297 million from State appropriations

NCORR committed disaster recovery funds to projects in the order in which applications were deemed ready to proceed, rather than through a comprehensive assessment of total disaster-related need. This means that only after an application was determined to be complete, eligible, and all required documentation was provided, would it advance for funding commitment and project initiation. As a result, the actual sequence of project commitments reflected the order in which applications were fully prepared for the next phase, not simply the order of initial submission.

The absence of a comprehensive assessment of total disaster-related damage and need, combined with inconsistent reciliation across financial and program management systems, resulted in NCORR not knowing the full cost of recovery until the application period closed. This lack of strategic financial planning and forecasting was a key factor in the HRP shortfall that required emergency appropriations.

Financial Commitments Exceeding Available Funds and Unreconciled Reporting Led to a $297 Million State Bailout

NCORR committed more disaster recovery funds than were available to assist residents impacted by Hurricanes Matthew and Florence.

Due to poor budgeting practices and a lack of consistent financial reconciliation, NCORR committed more disaster recovery funds than were available to assist residents impacted by Hurricanes Matthew and Florence. This overcommitment resulted in a nearly $300 million shortfall, requiring emergency appropriations from the General Assembly to cover the gap. **As a result, in December 2024, recovery projects were paused until the North Carolina General Assembly approved emergency appropriations of $297 million.**

NCORR managed the HRP using three systems:

- North Carolina Financial System (NCFS), previously NCAS,[3] tracked expenditures, processed payments, and generated financial reports;
- Disaster Recovery Grant Reporting (DRGR) handled federal funds access, Action Plans, and compliance reporting for the U.S. Department of Housing and Urban Development (HUD); and
- Salesforce managed homeowner cases, tracked projects, and maintained program data.

Inconsistent reconciliation across these systems led to discrepancies in NCORR's financial records, with each system reporting different total Community Development Block Grant–Disaster Recovery (CDBG-DR) expenditures for HRP as of April 2025.

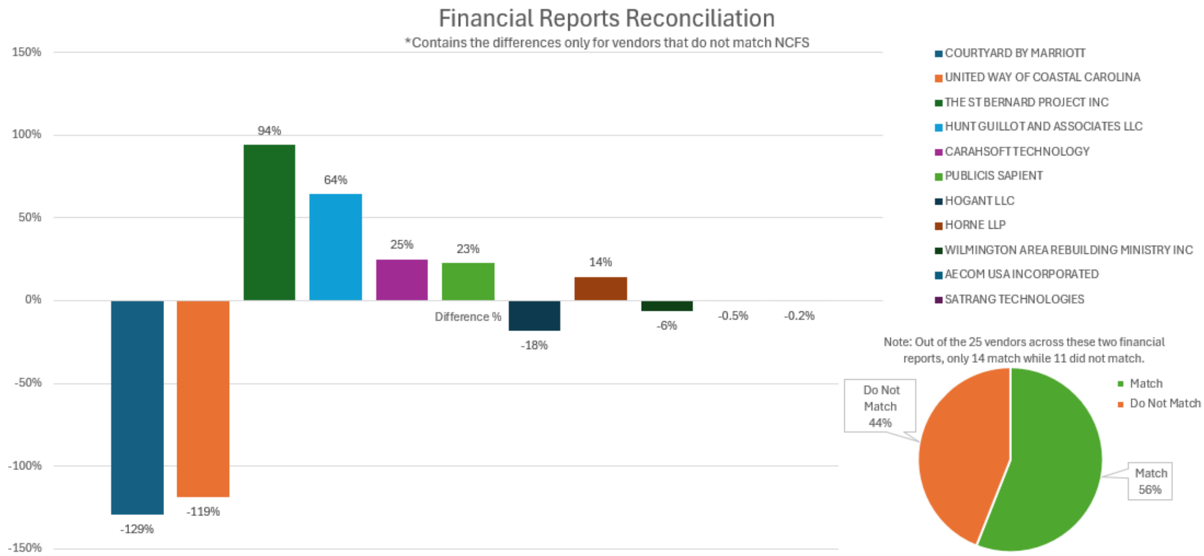
Exhibit 1: Variances Between Systems

Source: OSA's analysis based on available data from NCORR

Further evidence that the systems did not reconcile was identified in the results of a matching test during the assessment. OSA sampled approximately 22% of recorded payments involving 25 vendors and found that nine vendors had invoice amounts that differed by greater than 1% between the financial systems.

[3] NCAS (North Carolina Accounting System) was replaced by NCFS in October 2023.

Exhibit 2: Variance Between Systems for Invoices



Source: Auditor's analysis based on available data from NCORR

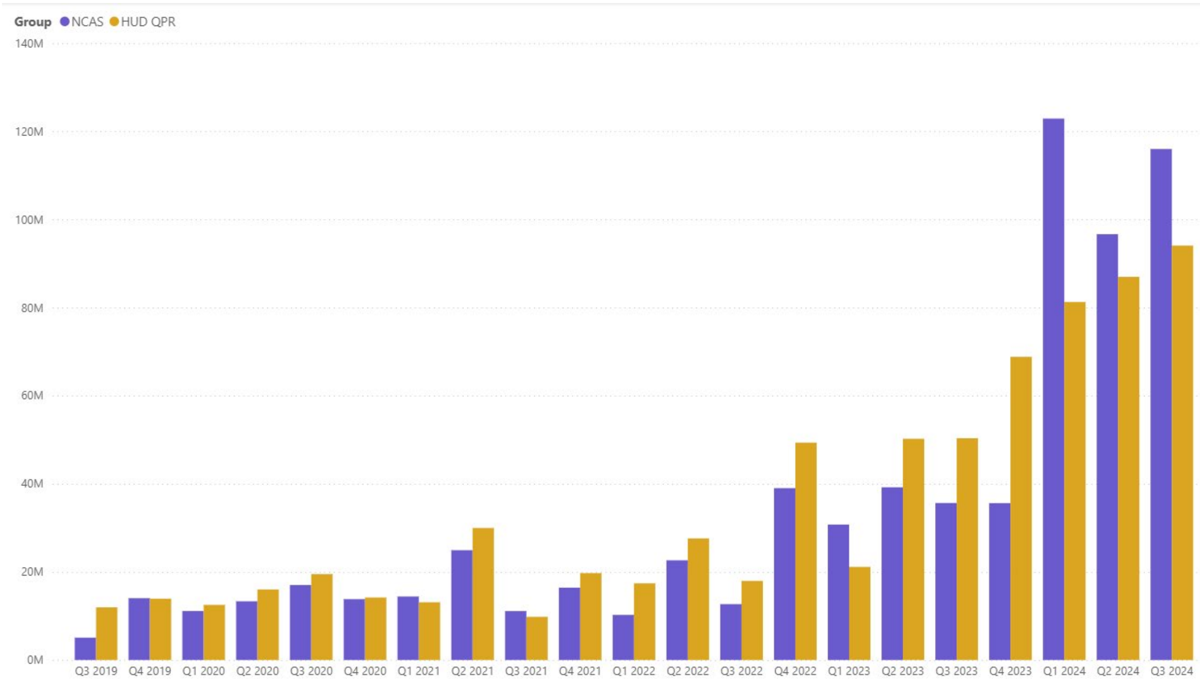
As the chart above shows, there was **a 129% difference in a payment made to Courtyard by Marriot** between two of NCORR's financial systems.

Due to the lack of accurate financial data, decision makers, including both NCORR management and staff, did not have access to the essential information required for sound decision making. Furthermore, NCORR was unable to provide HUD, the federal oversight agency for CDBG-DR funds, with reliable data in its required Quarterly Performance Reports (QPR). The exhibit below shows the variances identified from Quarter 3 of 2019 through Quarter 4 of 2024. In total, there was a $27.5 million difference in expenses reported.[4]

Decision makers, including both NCORR management and staff, did not have access to the essential information required for sound decision making.

[4] This is not the first time that NCORR's data have been identified. During the 2024 federal compliance audit of the Community Development Block Grant (as part of the State of North Carolina's Single Audit), OSA reviewed eachof NCORR's 12 quarterly Federal Financial Reports and found that the cash receipts and disbursements reported did not agree with the program's accounting records.

Exhibit 3: Variances in Reporting on QPRs



Source: OSA's analysis based on available data from NCORR

(See Appendix F for details on the variance between the accounting system and the figures reported in the QPRs.)

Unmet Needs and Funding Pause

In August 2024, due to unreconciled systems, NCORR authorized recovery expenditures that exceeded available federal funding, resulting in an approximate $300 million shortfall and paused projects.

By October 2024, after exhausting all federal grants, NCORR formally requested emergency funding from the General Assembly. As of December 11, 2024, an NCORR spokesperson reported:

> NCORR remains committed to its mission of rebuilding homes for storm-impacted communities; however, new "Notices to Proceed" are being paused as we continue working with the General Assembly for funding to start new projects.

The pause in construction and the anticipated deficit led to an initial emergency appropriation of $30 million from the General Assembly. However, this amount was insufficient to address the full scope of HRP's unmet needs. The persistent deficit was primarily due to:

- Ongoing costs for Temporary Relocation Assistance (TRA), averaging $2.1 million per month;
- $37.6 million in outstanding contractor invoices; and

- Additional expenses for re-inspections and updated environmental reviews when original inspections became outdated.

Recognizing the ongoing funding gap, the General Assembly made additional appropriations to NCORR for HRP, including $50 million in December 2024, and $217 million in March 2025. NCORR also transferred $44.2 million CDBG-MIT funds to HRP to fully address the program's deficit and allow recovery projects to resume.

Table 1: Additional Funding

Funding Source	Date	Amount Awarded
Session Law 2024-53 **(State funds)**	October 24, 2024	$30,000,000
CDBG-MIT Funds transferred to HRP	October 31, 2024	$44,174,078
Session Law 2024-57 (State funds)	December 11, 2024	$50,000,000
Session Law 2025-2 (State funds)	March 25, 2025	$217,000,000
	Total	**$341,174,078**

Source: Session Laws and HUD Action Plans

Poor Program Data Quality and Delays in Disaster Recovery Efforts Prolonged Hardship and Increased Costs

NCORR spent $25.4 million on Salesforce

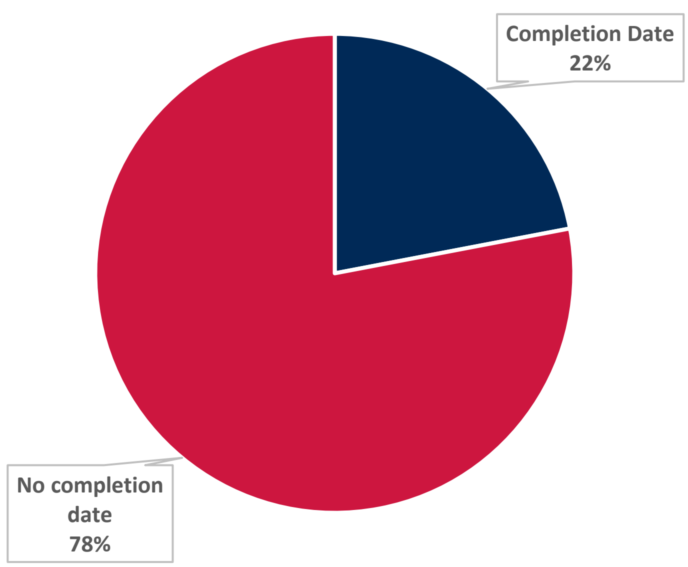
Issues included blank fields, negative processing times, missing 'Notice to Proceed' dates, and instances of applications marked 'Complete' without corresponding end dates.

Compounding the challenges of unreconciled financial reporting, the HRP was further undermined by data quality issues and process delays. Salesforce, the primary system for tracking applications and project milestones that cost NCORR $25.4 million, was compromised by widespread omissions and logical errors, resulting in critical information gaps that hindered effective decision-making. Examples of these data quality issues include:

- Numerous "test" applications that could not be properly identified or removed;
- Inconsistent blank fields within records, such as the start and end dates for various steps throughout the process;
- Instances of negative processing times (e.g., project end dates preceding start dates);
- Applications marked as complete without corresponding end dates; and
- Missing 'Notice to Proceed' dates.

For example, over 11,000 applications were processed through Salesforce for HRP. Of those, over 3,400 were marked as complete in the system, but only 771 had an end date for the project.

Exhibit 4: Completed Applications Without End Date



Source: OSA's analysis based on available Salesforce data from NCORR

NCORR did not establish formal data governance practices for Salesforce. Specifically, NCORR did not establish clear definitions for data fields, identification of persons responsible for specific data within the system, or implement systematic processes for conducting quality checks.

These weaknesses resulted in several challenges, including:

- Difficulties in accurately assessing the backlog and delays in processing applications;
- Concerns regarding the reliability of HUD Quarterly Performance Reports (QPRs); and
- Constraints on decision makers' ability to make well-informed decisions.

The lack of quality data also led to financial impacts. Four applications that were marked ineligible in the system had invoices ranging from $1,500 to over $130,000. In total, these invoices cost HRP over $211,000.

Table 2: Ineligible Applications with Costs

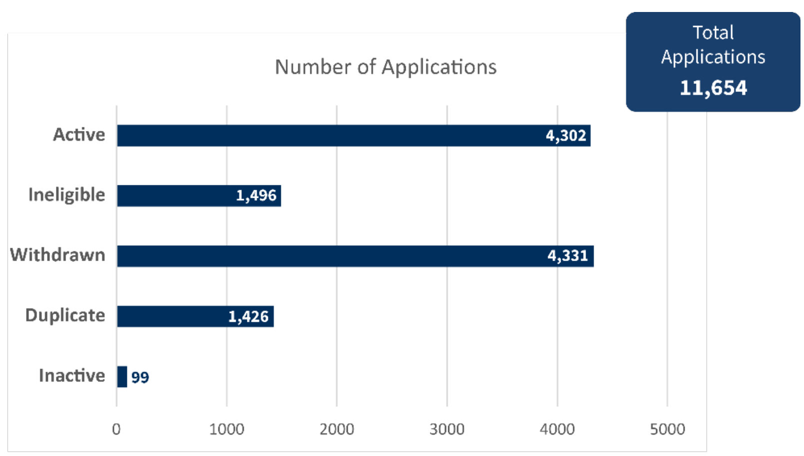
Application	Ineligible Costs	Created Date	Ineligible Date	Ineligible Step
#APP-05108-HRP	$ 131,429.00	6/16/2020	5/24/2024	Step 7
#APP-10823-HRP	$ 40,439.86	10/11/2021	1/18/2024	Step 6
#APP-09427-HRP	$ 38,208.56	3/11/2021		Step 6
#APP-07444-HRP	$ 1,500.00	9/12/2020		Step 6

Auditor's Note: Ineligible dates for two of the applications were not available in the system, highlighting ongoing quality data issues. **Source:** OSA's analysis based on available Salesforce data from NCORR

NCORR's failure to adequately track homeowner assistance applications and its delay in processing such applications significantly inhibited the initiation and finalization of HRP-related construction projects. This issue persisted throughout NCORR's administration of HRP.

Based on available Salesforce data, 11,654 applications were submitted to HRP. Exhibit 5 summarizes the status of homeowner assistance applications as of April 2025. Completed projects fall into the 'Active' category.

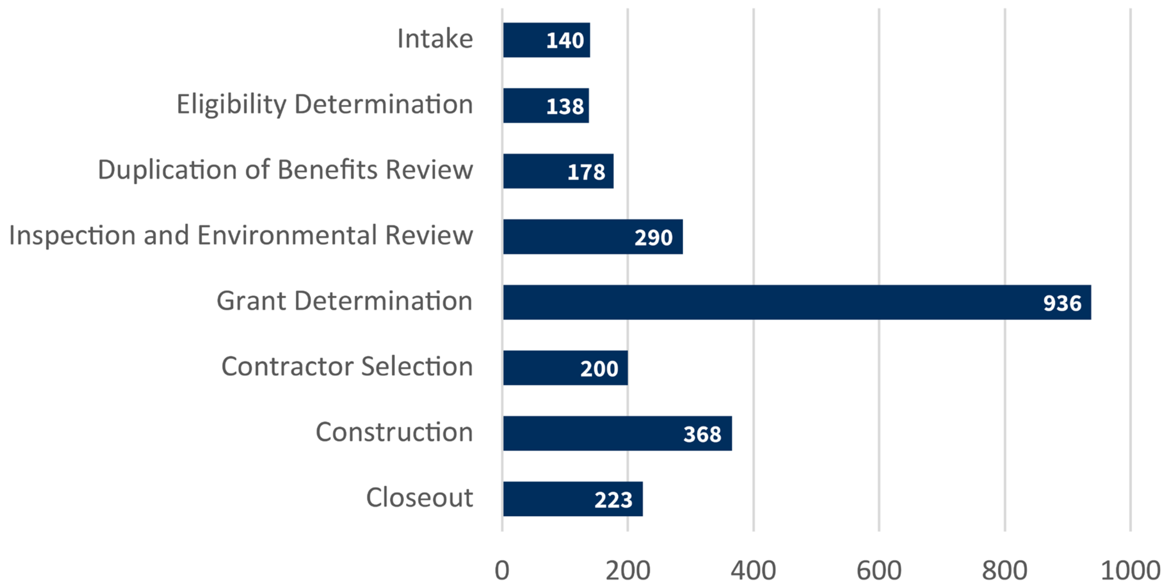
Exhibit 5: Applications by Status



Source: OSA's analysis based on available Salesforce data from NCORR

NCORR took an average of **138 days, or 4.5 months, to assess HRP applicant eligibility, the second of eight steps in the application processing procedure**. On average, NCORR did not commence **construction ('hammers swinging') on eligible projects until approximately four years after homeowners were deemed eligible for HRP**. These prolonged delays meant that many applicants remained in temporary or unsafe housing for extended periods, with some living in condemned homes due to ongoing deterioration and lack of mitigation. Exhibit 6 and Table 3 below show the average duration for each program step.[5]

Exhibit 6: Average Days in Step



Source: OSA's analysis based on available Salesforce data from NCORR.

Table 3: Average Time by Step for HRP Application Processing

Step Number	Title of Step	Explanation	Average Days in Step
1	Intake	Verifying application was complete, all documents received	140
2	Eligibility Determination	NCORR review to determine if the applicant was eligible for HRP	138
3	Duplication of Benefits Review	Determine disaster recovery funds received from other sources	178

[5] Due to data inaccuracies in Salesforce, the analysis is limited to only those applications for which an end date existed. OSA also removed applications for which the end date occurred before the start date (resulting in negative processing time) from our analysis.

4	Inspection and Environmental Review	Inspection of affected property, complete environmental review, lead and asbestos inspections, scope of work development, and estimates	290
5	Grant Determination	Determination of award amount	936
6	Contractor Selection	Bidding construction projects (for a series of homes), executing contracts, establishing timelines	200
7	Construction	Beginning construction through final inspection and walkthrough	368
8	Closeout	Completing final reviews	223

Source: OSA's analysis based on available Salesforce data from NCORR.

Homeowners had to rely on Temporary Relocation Assistance (TRA) for extended periods.

The excessive delays between each step in the HRP process resulted in increased overall program costs. Prolonged timelines between project phases, such as bidding, contract execution, and construction, meant that homeowners had to rely on Temporary Relocation Assistance (TRA) for extended periods. Additionally, these delays resulted in outdated inspections and environmental reviews, requiring costly re-inspections and further unplanned expenses.

Table 4 below summarizes TRA expenditures, which totaled $74.4 million while homeowners awaited construction.[6]

[6] Based on available data in Salesforce.

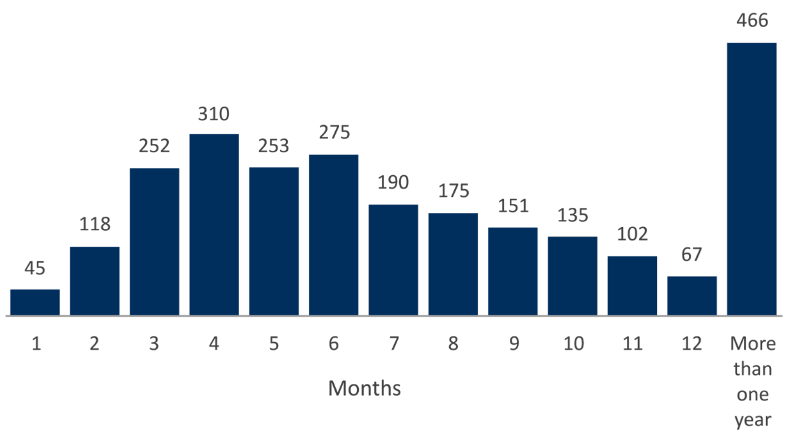
Table 4: Payments for Temporary Relocation Assistance

Type of Assistance	Total Spent	Number of Households
Stipend	$26,900,735.75	1,825
Apartment	1,079,056.79	100
Family and Friends Lodging	5,343,356.13	593
Hotel	28,032,165.14	873
Storage	13,045,419.94	2,831
Total	**$74,400,733.75**	

Source: Auditor's analysis based on available Salesforce data from NCORR

The average time between move-out and return home notices was 247 days, or more than eight months.

Exhibit 7: Time Displaced by Household

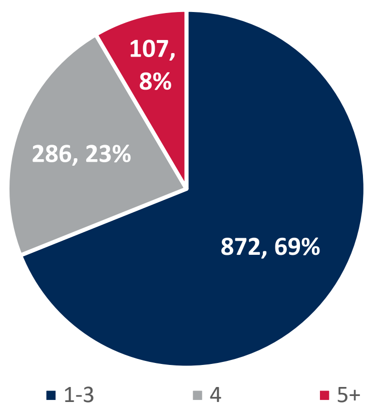


Source: Auditor's analysis based on available Salesforce data from NCORR

Due to the excessive time it took NCORR to move through the process, inspections and damage assessments often became outdated and had to be redone multiple times throughout a project. NCORR staff stated that initial damage inspections were used to decide whether a home recovery strategy would involve repairs or rebuilding. However, these inspections were often invalid, incomplete, or not reflective of the state of the property by the time construction finally commenced.

In many cases, this led to a need for re-inspections to ensure compliance with building requirements and reassess the damage, introducing additional unplanned delays and increased costs as each case had to be revisited and addressed beyond the initial schedule.

Exhibit 8: Inspection Count per Application



Source: OSA's analysis based on available Salesforce data from NCORR

Inconsistencies in inspection data within Salesforce prohibited meaningful analysis to determine the true impact of these re-inspections.

NCORR staff stated that a project would likely have multiple inspections. However, it is not clearly noted within Salesforce which inspections were original, and which were re-inspected.

Out of 1,265 active applications reviewed, 286 applications had four inspections completed. The majority, 872 applications, had between one and three inspections completed while 107 had more than four inspections.

Insufficient Budget Controls and Monitoring Practices Led to Emergency Appropriations

NCORR initiated its disaster recovery efforts without a dedicated budget plan to guide development, execution, or monitoring. While HUD approved Action Plans were created for each funding stream, NCORR did not convert these high-level plans into practical, enforceable budgets and schedules for daily management of HRP. As a result, NCORR staff lacked the tools needed to plan and execute the program efficiently, ensure fiscal accountability, or proactively identify signs of overspending.

NCORR staff lacked the tools needed to plan and execute the program efficiently, ensure fiscal accountability, or proactively identify signs of overspending.

Instead of following a structured financial roadmap, NCORR management and staff operated reactively. Interviews with NCORR's CFO and budget director confirmed that budget monitoring was minimal and focused on technical accounting rather than strategic oversight. As one staff member summarized, "If there was no money left, the program was over."

Although the Action Plans defined intended use of funds, high-level budget allocations, eligible activities, and timelines, NCORR consistently failed to convert the Plans into working budgets or schedules that NCORR could use for day-to-day oversight. Budgeting decisions were driven by available federal funds and preliminary applicant data, not by comprehensive needs assessment or performance-based targets. Critically, no defined end-state was established to ensure all affected homes would be served before funding was exhausted.

NCORR's lack of proactive monitoring and goal setting was evident through NCORR's failures to:

- Regularly reconcile Action Plan budgets and projected outputs against actual expenditures in the accounting system, DRGR reports, or Salesforce case milestones.

As of April 2025, NCORR's Salesforce system recorded payments to vendors under the HRP totaling over \$784.7 million, while DRGR reported \$748.7 million in drawdowns. This indicates that nearly \$785 million in public funds was disbursed to vendors without a single, reconciled source of financial truth or robust oversight.

- Use Action Plan targets as control baselines to monitor spending rates, backlogs, or program progress.

These deficiencies in financial oversight and planning were significant factors in the \$297 million budget shortfall that required emergency appropriations from the General Assembly to keep the program solvent. Between October 2024 and March 2025, the General Assembly provided \$297 million in emergency funding to address the deficit and resume paused recovery projects. (See Table 1: Additional Funding.)

Without a robust budget plan and ongoing budget monitoring, NCORR was unable to manage costs, detect overspending, or ensure that program activities aligned with approved budgets and schedules. This undermined fiscal accountability and contributed to delays and cost overruns throughout the recovery effort.

Inadequate Oversight of Vendors Led to Increased Costs

NCORR inadequate oversight of its vendors contributed to increased program costs and operational inefficiencies.

NCORR relied heavily on vendors to assist in the administration of HRP, including case management, construction management, and inspections (see Appendix G for a list of administration and planning vendors). However, NCORR's inadequate oversight of its vendors contributed to increased program costs and operational inefficiencies.

A review of vendor contracts determined that **only one out of six program administration contracts (17%)** included any Key Performance Indicators (KPIs), and even then, the KPIs lacked defined performance thresholds. Additionally, vendor contracts did not specify measurable standards for evaluating vendor performance, such as project milestone completion rates, budget management, program outcomes, or data integrity. Without these controls, NCORR could not systematically assess whether vendors were meeting expectations or contractual obligations.

Vendor contracts often referenced example metrics or dashboards but did not require specific performance monitoring or link payment to results. As a result, NCORR did not consistently monitor vendor performance or hold vendors accountable for contract compliance.

The consequences that arose as a result of NCORR's failure to adequately oversee vendor performance were significant:

- According to HUD, North Carolina was first placed on HUD's "slow spender" list for Hurricane Matthew funds on March 30, 2018. The "slow spender" list identifies grantees that are not on pace to meet statutory or administrative spending deadlines. North Carolina remained on this list until August 2019. According to NCORR staff, there was pressure from leadership to remove the State from the "slow spender" list. Thus, NCORR staff prioritized rapid invoice payment over validation, paying vendor invoices as quickly as they were received, with little to no review of supporting documentation or verification of work performed.
- This lack of oversight contributed to cost overruns and delayed project delivery. For example, as of April 2025, outstanding contractor invoices totaled $37.6 million, and ongoing costs for TRA averaged $2.1 million per month while projects continued to be delayed.

Ineligible Applications and Contracting Practices

A significant source of inefficiency and waste in the early years of the HRP stemmed from the structure of case management contracts and the handling of ineligible applications. Under the initial contract with Innovative Emergency Management, Inc. (IEM), the vendor was compensated with a fixed monthly fee, $480 per application per month, until each application was formally deemed ineligible in the system. This arrangement, as detailed in the contract pricing schedule (see Exhibit 9 below), incentivized delays and increased program costs, as vendors continued to receive payments for applications that could have been quickly screened out. This practice was discontinued when NCORR assumed direct administration of the HRP, and the case management process was eventually brought in-house in September 2022, resulting in significant improvements in eligibility determination efficiency.

- **Exhibit 9: IEM Case Management Vendor Cost Structure**

Labor Category	Bill Rate	Task 1 (per pg17 of Addendum) Eligibility Requirements		Task 2 Duplication of Benefits		Task 3 Site Inspections		Task 4 Lead-based Paint Testing		Task 5 Project Specific Environmental Reviews (Tier Two Only) *		Task 6 Monthly Project Management		Task 7 Monthly Case Management		Total Estimated Costs
IEM Labor		Hrs		Hrs		Hrs		Hrs		Hrs		Hrs		Hrs		
Project Executive - IEM	$ 250.00		$0		$0		$0		$0		$0	8.0	$2,000		$0	
Project Manager	$ 175.00		$0		$0		$0		$0		$0	160.0	$28,000		$0	
Manager	$ 125.00		$0		$0		$0		$0		$0	480.0	$60,000		$0	
Lead	$ 117.00		$0		$0		$0		$0		$0	640.0	$74,880		$0	
Reporting Analyst	$ 100.00		$0		$0		$0		$0		$0	160.0	$16,000		$0	
Administrative Specialist	$ 60.00		$0		$0		$0		$0		$0	160.0	$9,600		$0	
Case Worker 3	$ 105.00	3.0	$315	1.0	$105		$0		$0		$0		$0		$0	
Case Worker 2	$ 80.00		$0		$0		$0		$0		$0		$0	4.0	$320	
Inspector	$ 100.00		$0		$0	8.0	$800	9.0	$900	6.0	$600		$0		$0	
Total IEM Labor			$315		$105		$800		$900		$600		$190,480		$320	
Subcontractor Labor																
Advisor	$ 225.00		$0		$0		$0		$0		$0	16.0	$3,600		$0	
Lead	$ 117.00		$0		$0		$0		$0		$0	480.0	$56,160		$0	
Case Worker 3	$ 105.00	2.0	$210	1.0	$105		$0		$0		$0		$0		$0	
Case Worker 2	$ 80.00		$0		$0		$0		$0		$0		$0	2.0	$160	
			$0		$0		$0		$0		$0		$0		$0	
Subcontractor Labor Total			$210		$105		$400		$400		$200		$59,760		$160	
Total Personnel Hours/Costs		5.0	$525	2.0	$210	12.0	$1,200	13.0	$1,300	8.0	$800	2104.0	$250,240	6.0	$480	
Other Costs			$0		$0		$0		$0		$0		$0		$0	
Total Travel			$0		$0		$0		$0		$0		$0		$0	
Not to Exceed Unit Quantity		2,906		2,906		2,052		1,753		2,052		18		8,718		
Unit Price		$525		$210		$1,200		$1,300		$800		$250,240		$480		
Total Not To Exceed Cost			$1,525,650		$610,260		$2,462,400		$2,278,900		$1,641,600		$4,504,320		$4,184,640	$17,207,770

Monthly Project Management – 18 months

Monthly Case Management – $480 / month

Source: Excerpt from IEM Contract and Proposal

NCORR staff reported that many applications could have been determined ineligible almost immediately, but previous NCORR management instructed staff not to send ineligibility notifications or close cases. This lack of timely communication forced families to wait unnecessarily, preventing them from seeking alternative solutions for their housing needs. Several NCORR staff members stated, "We were just told not to send them [ineligibility notifications] or close the cases." Delays in application reviews and the failure to send planned communications allowed incomplete or invalid submissions to remain unresolved, increasing costs and applicant frustration.

Although NCORR was unable to provide detailed statistics on these cases, available data on application volume and processing timelines suggest significant delays. The initial goal was to complete all recovery and restoration efforts within 18 months. However, there was no evidence of criteria or controls for processing times at each program step. Without defined expectations or monitoring, NCORR could not identify inefficiencies or resource waste at any given step. Because the available data is incomplete and may contain inaccuracies, quantifying the total amount of waste incurred is not feasible.

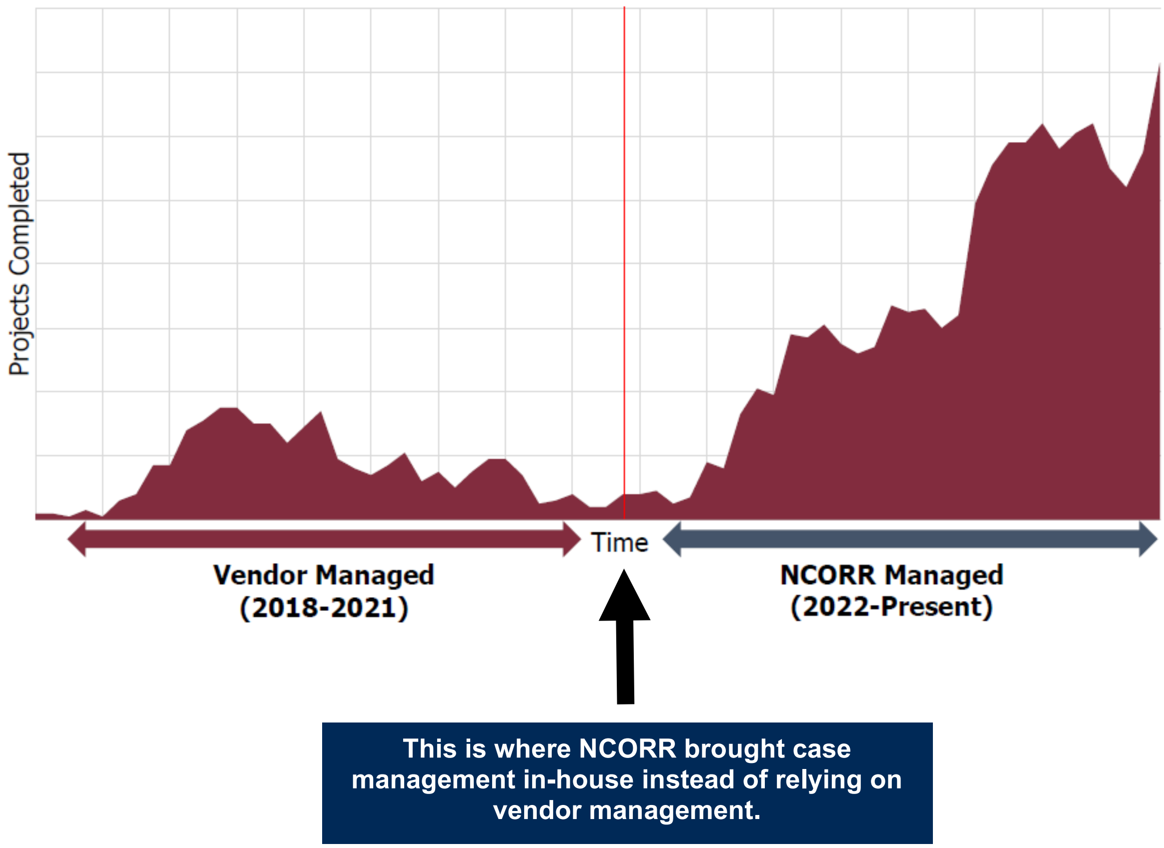
From the outset, Standard Operating Procedures should have established maximum timeframes for each application step. Proper oversight and monitoring would have reduced the risk of applicants spending years awaiting eligibility determination and minimized expenses for ultimately ineligible applications.

Transition to In-House Administration

NCORR's inadequate systematic contract monitoring made it unable to identify or promptly address issues such as incomplete work, delays, and budget overruns, further increasing program costs.

Further evidence of the impact of NCORR's failure to monitor vendors was evident when NCORR stopped using vendors to administer HRP and brought the program administration in house. According to NCORR, productivity increased, and costs decreased after NCORR brought these functions in house. See the charts below provided by NCORR.

Exhibit 10: Projects Completed Before and After NCORR Managed the Projects



Source: NCORR Program Performance Data (July 2025)

Exhibit 11: Costs Before and After NCORR Managed the Projects

Construction Manager	Avg. # of Staff Utilized	Service Years*	Total Cost of Services	# of Total Units Produced	Cost Per Unit
Vendor	~34	3.02	$23,347,327.69	568	$41,104.45
NCORR	~56	3.13	$13,557,075.54	2,996	$4,525.06 (-908% decrease)

* Vendor: May 2019 – May 2022, NCORR: May 2022 – June 2025

Source: NCORR Program Performance Data (July 2025)

NCORR's lack of robust contract management, including the use of transparent KPIs, ongoing performance tracking, and outcome-based payment arrangements, limited its ability to ensure vendor accountability. As a result, operational inefficiencies grew and HRP costs increased.

Recommendations

OSA's findings reinforce the importance of outcome-based management in disaster recovery. As Craig Fugate emphasized, agencies must avoid confusing activity with achievement:

"Don't confuse process with outcomes. Without defined criteria, you are paying for process."

In NCORR's case, significant time and resources were devoted to administrative procedures, but these did not consistently translate into timely or effective assistance for disaster victims. The recommendations below are intended to shift the focus toward clear performance criteria, measurable results, and accountability for outcomes, ensuring that future efforts deliver real benefits to affected communities.

Long-Term Recommendations

In the future, North Carolina will endure other disasters for which long-term recovery efforts are necessary. Accordingly, OSA makes the following recommendations for those future recovery efforts:

1. Establish a SOLID Partnership for Disaster Recovery

The State of North Carolina's Council of State – including the Governor, Lieutenant Governor, Secretary of State, State Auditor, State Treasurer, Superintendent of Public Instruction, Attorney General, Commissioner of Agriculture, Commissioner of Insurance, Commissioner of Labor, and State Controller – and the Department of Public Safety should work with the General Assembly on appropriate legislative changes to establish a Sustainable Outcomes for Long-Term Impact and Disaster Recovery (**SOLID**) Partnership.

All members of the Council should be members of this partnership and would be responsible for:

- Developing and maintaining a comprehensive, long-term disaster recovery plan that ensures continuity, accountability, and resilience across all disaster events;
- Preserving and transferring institutional knowledge, lessons learned, and best practices to prevent the loss of critical expertise when agencies or programs sunset;
- Coordinating recovery efforts across federal, State, and local entities, streamlining communication and resource deployment;
- Empowering experienced personnel and maintaining robust data management and reporting systems;
- Overseeing all federal and State disaster recovery funds, with clear authority to coordinate with HUD, FEMA, and other relevant agencies;
- Establishing a dedicated Disaster Recovery Financial Team to provide operational oversight, financial controls, and proactive budget management;

- Ensuring all vendor contracts contain clear performance standards, accountability measures, and incentives for high performance; and
- Taking proactive steps to implement these measures before the next inevitable disaster, rather than reacting after the fact.

By formalizing this partnership and including all members of the Council of State, North Carolina will build a resilient, coordinated, and accountable disaster recovery framework that can adapt to future challenges and deliver better outcomes for its citizens.

2. Budget and Financial Oversight

An agency charged with administering disaster recovery funding from State and federal sources must establish a budget plan, including a plan, policies, and procedures to monitor the budget. Specifically, the agency should have integrated financial and program systems for all recovery programs, establishing a single source of truth for financial and program data.

3. Contract Management

Any agency that relies on vendors to perform work should create robust contract management procedures. Contract management should:

- Codify KPI requirements in procurement – Embed KPI-driven vendor contracts and monitoring requirements in procurement rules and contract templates. These should specify clear targets for performance, outline withholding payment for non-performance, and establish escalation procedures for non-compliance.
- Establish a Vendor Performance Management Office – This office would be responsible for managing vendor scorecards and ensuring that payments to vendors are based on results.
- Mandate contract monitoring plans – All contracts should include a mandatory monitoring plan, which defines what will be measured, the frequency of measurement, responsible parties, and the link between monitoring and payment.

4. Data Integrity and Reporting

The disaster recovery agency should implement robust data management systems to ensure complete and accurate financial and programmatic records. Data governance frameworks should be implemented, which include:

- Authoritative field definitions,
- Assigned data owners,
- Validation rules,
- Exception dashboards, and
- Quarterly certifications.

Further, the data governance framework should include automated exception reporting and reconciliation routines. From program inception, systems should support automated exception reporting and reconciliation between program, financial, and DRGR data.

Short-Term Recommendations

While NCORR is scheduled to close out HRP and dissolve by October 1, 2026, immediate action is needed to ensure the program's wind-down is transparent. OSA makes the following recommendations for the remainder of HRP and NCORR.

1. Improve Budgeting and Financial Oversight

As detailed in this report, NCORR initiated its disaster recovery efforts without a dedicated budget plan to guide development, execution, or monitoring.

To improve program accountability and ensure compliance with HUD requirements during the closeout phase, NCORR should align its processes and decision-making with the HUD Action Plans.

Specifically, NCORR should:

- Develop a Working Schedule
  - Translate the Action Plan's approved budget and performance outputs into a detailed schedule that outlines quarterly milestones. This schedule should include:
    - ✓ Budget allocations mapped to timeframes;
    - ✓ Specific deliverables tied to each output category; and
    - ✓ Responsible teams or units for each milestone.
- Establish Quarterly Targets
  - Define measurable quarterly targets that reflect progress toward final outputs. These targets should be:
    - ✓ Quantitative (e.g., number of homes repaired, funds disbursed);
    - ✓ Time-bound and realistic; and
    - ✓ Aligned with HUD's reporting and compliance expectations.
- Integrate Monitoring and Reporting
  - Embed these quarterly targets into NCORR's internal monitoring systems to:
    - ✓ Track progress against the schedule;
    - ✓ Identify delays or budget variances early; and
    - ✓ Support transparent reporting to HUD and stakeholders.

- Use Targets to Drive Closeout Readiness
    - Quarterly progress should inform readiness for closeout by:
        - ✓ Demonstrating completion of key activities;
        - ✓ Ensuring that all expenditures are consistent with the approved budget; and
        - ✓ Ensuring that all required outputs are met before final reporting.

By implementing the Action Plans in this way, NCORR can enhance program transparency, improve performance management, and ensure a smoother and more compliant closeout process.

2. Strengthen Contract Management

NCORR relied on vendors to assist with the administration of HRP without providing adequate oversight. To strengthen performance accountability during closeout, NCORR should:

- Amend active contracts to include HRP-specific KPIs. These could include:
    - Median days from Eligibility to Notice to Proceed,
    - Percentage of on-time completions,
    - Re-inspection rates,
    - Data error rates, and
    - Cost per closed home.

  Each KPI should be associated with clear numeric thresholds and provisions for non-payment if KPIs are not met.
- Link all remaining invoice approvals directly to vendor performance.
- Document the status of contract compliance for each vendor at closeout.

3. Enhance Data Integrity and Reporting

Data reliability was an issue with both financial and program data for NCORR. Financial data was stored in three separate systems. However, routine monthly reconciliations between the three systems were not conducted. NCORR's lack of reconciliation deprived its leadership of a single, reliable source of truth for decision making.

Further, the lack of quality data within Salesforce made it difficult to provide accurate program updates to HUD through the QPRs.

To ensure accurate financial reporting and transparency, NCORR should:

- Mandate a monthly reconciliation between NCFS, DRGR, and Salesforce for both financial and program data until closeout, ensuring identified variances are analyzed and corrected.
- Institute quarterly financial and program co-certification of QPR data before submission to HUD.
- Prepare a final reconciliation report for legislative oversight, summarizing all resolved variances and remaining obligations before program termination.

To ensure accurate programmatic reporting to HUD and other stakeholders, NCORR should:

- Create and execute a final data cleanup plan. This involves completing Notice to Proceed, Final Inspection, and Closeout dates for all active cases, removing or flagging test records, and correcting contradictory fields such as discrepancies between End Date and Complete flag.
- Run monthly exception reports throughout the closeout, identifying duplicate records, status-date conflicts, and missing fields. Each exception noted should have an assigned owner and defined time for remediation.

Objectives, Scope, and Methodology

Objective

The objective of this assessment is to provide the North Carolina General Assembly with an independent and comprehensive evaluation of the administration, oversight, and effectiveness of disaster recovery funds and operations managed by the North Carolina Office of Recovery and Resiliency (NCORR), specifically, the Homeowner Recovery Program (HRP). This assessment aims to identify systemic challenges, assess the adequacy of internal controls and program management, and offer actionable recommendations to strengthen future disaster recovery efforts.

Scope

The scope of this assessment was limited to NCORR's management of disaster recovery efforts related to Hurricanes Matthew (2016) and Florence (2018), focusing exclusively on the **Homeowner Recovery Program** through April 2025. While NCORR is responsible for a portfolio of programs, including the Affordable Housing Development Fund, Multifamily Development Fund, Public Housing Restoration Fund, Homeownership Assistance Program, and various resilience and infrastructure initiatives, this assessment did not evaluate those programs. The findings and recommendations contained herein pertain solely to the HRP, which was NCORR's flagship initiative for assisting homeowners with repair, reconstruction, and elevation of homes damaged by these hurricanes.

Methodology

To achieve the objectives, auditors examined:

- Vendor contracts executed by NCORR for disaster recovery services, including construction management, project management, staff augmentation, and data management;
- Financial management practices, including budgeting, spending plans, and monitoring of federal disaster recovery funds;
- Data management systems and reporting, including the accuracy and completeness of financial and programmatic data submitted to oversight agencies (e.g., HUD); and
- Relevant policies, procedures, and internal controls governing contract management, budgeting, and data integrity.

The assessment also included:

- Review of financial management practices, including budgeting, spending, and reconciliation of federal and State disaster recovery funds;
- Evaluation of contract management, vendor oversight, and performance monitoring;
- Analysis of program data integrity, reporting practices, and operational processes; and
- Consideration of applicable statutes, policies, and standards governing disaster recovery and public sector management.

Staff from NCORR, the North Carolina Department of Public Safety, and the North Carolina Office of State Budget and Management were interviewed as part of this assessment.

Data Reliability

The reliability of data used in this assessment was affected by limitations in the completeness and consistency of program and financial records. While efforts were made to corroborate information across multiple sources, certain data gaps and inconsistencies were identified. These limitations may affect the precision of some analyses and should be considered when interpreting the results and recommendations presented in this report.

Limitations

This assessment was not conducted as an audit under Government Auditing Standards. Accordingly, no assurance is provided regarding the effectiveness of internal controls or the completeness and accuracy of the information reviewed.

The observations and recommendations presented are based on the procedures performed and should be interpreted as the results of an independent evaluation, not as audit findings or conclusions.

Response From the North Carolina Office of Recovery and Resiliency

North Carolina Department of Public Safety
Office of Recovery and Resiliency

Josh Stein, Governor
Eddie M. Buffaloe, Jr., Secretary

Pryor Gibson, Interim Director

November 17, 2025

The Honorable Dave Boliek
NC Office of the State Auditor
20601 Mail Service Center
Raleigh, North Carolina 27699

Dear Auditor Boliek:

Thank you for the opportunity to respond to the November 7, 2025, assessment of the North Carolina Office of Recovery and Resiliency (NCORR). North Carolina experienced unprecedented back-to-back storms with Hurricanes Matthew and Florence. NCORR continues to make progress in ensuring that over 4,200 families impacted by these storms return to their homes, while also moving to bring the program to a close in 2026.

We appreciate the review your team provided of NCORR and the Homeowner Recovery Program. Your feedback provides opportunities for NCORR to reflect on challenges faced, lessons learned, and progress made. We would like to highlight a few items from the assessment that have been implemented:

- In partnership with OSBM, NCORR has significantly improved its financial management systems to ensure the program can complete its work and close out in accordance with statutory timelines.
- NCORR continues to implement process improvements with regards to strengthening vendor management, local governments, and construction vendors.
- Our leadership has actively shared lessons learned with leaders of Helene recovery efforts, including GROW NC and the Division of Community Revitalization.

We remain committed to continuous improvement in fulfilling our mission to serve those impacted by Hurricanes Matthew and Florence.

Together, we can build a stronger, more resilient North Carolina.

Sincerely,

Signed by:
Pryor Gibson
B6E44736669F4A9...

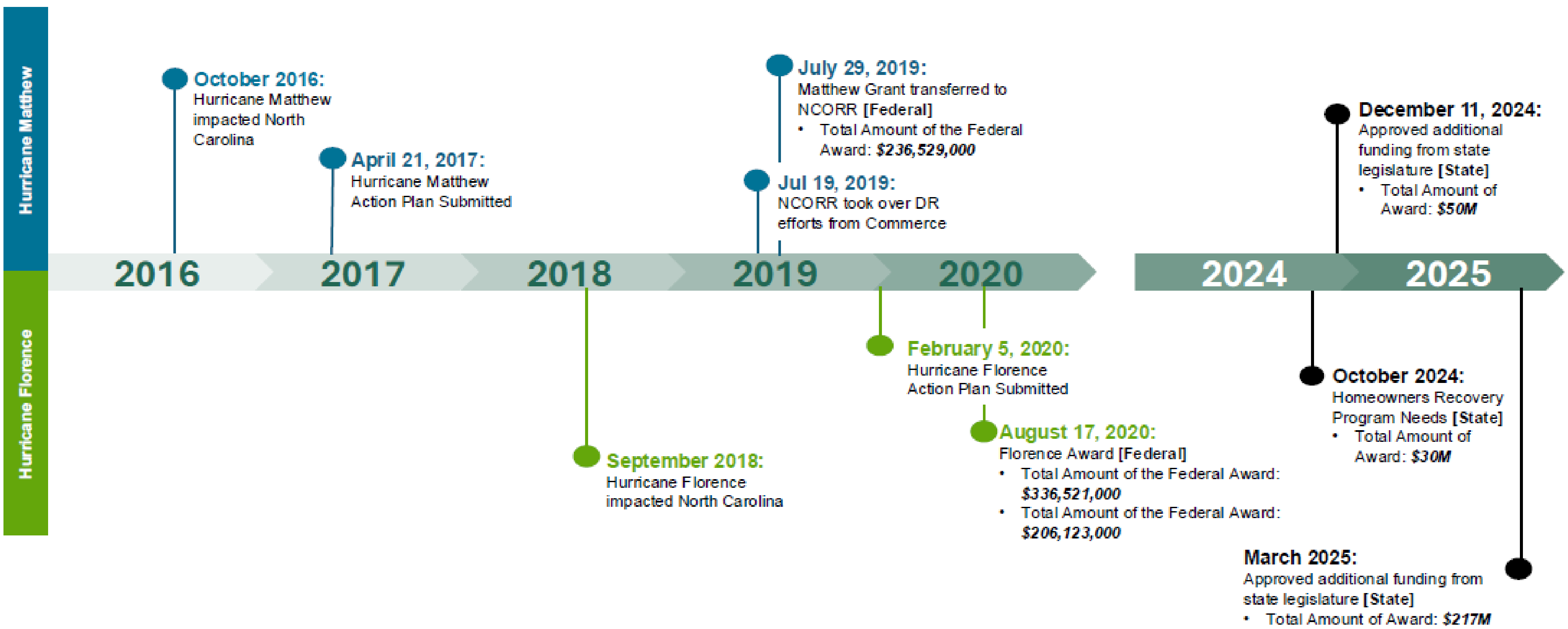
Pryor Gibson

Appendices

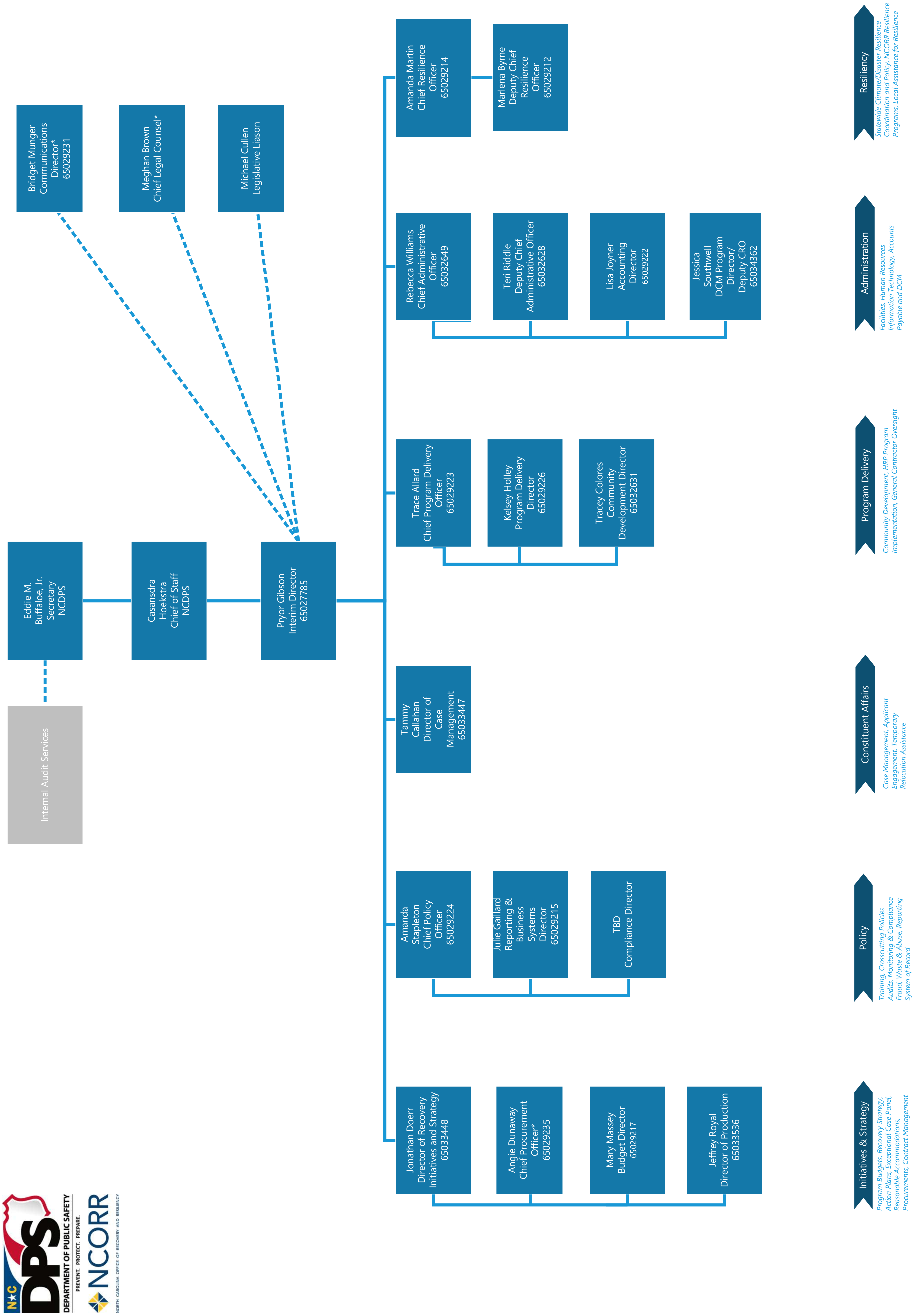
Appendix A

NCORR HRP Funding Timeline Graphic

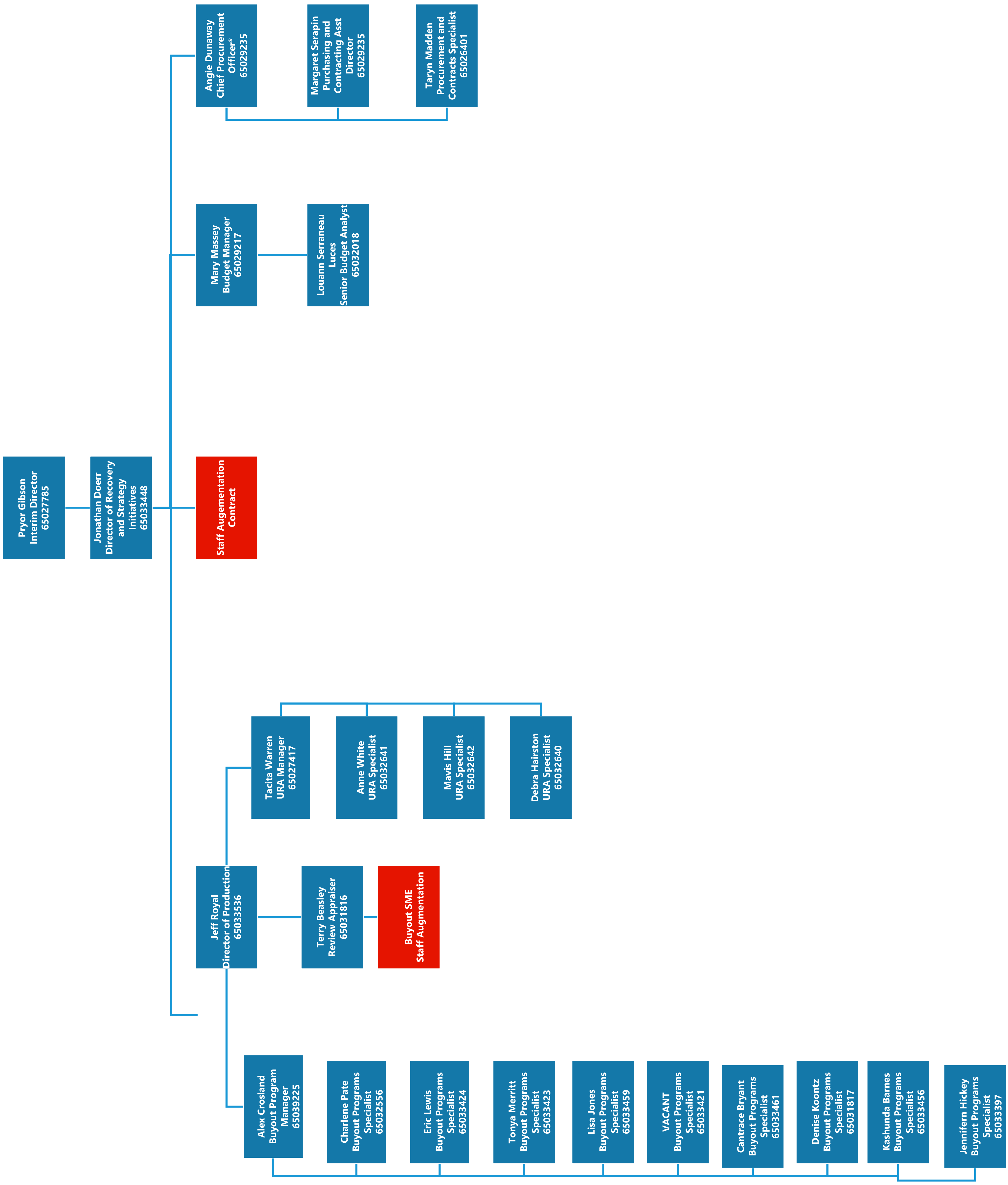
Key:
- Hurricane Matthew
- Hurricane Florence
- Non-specific



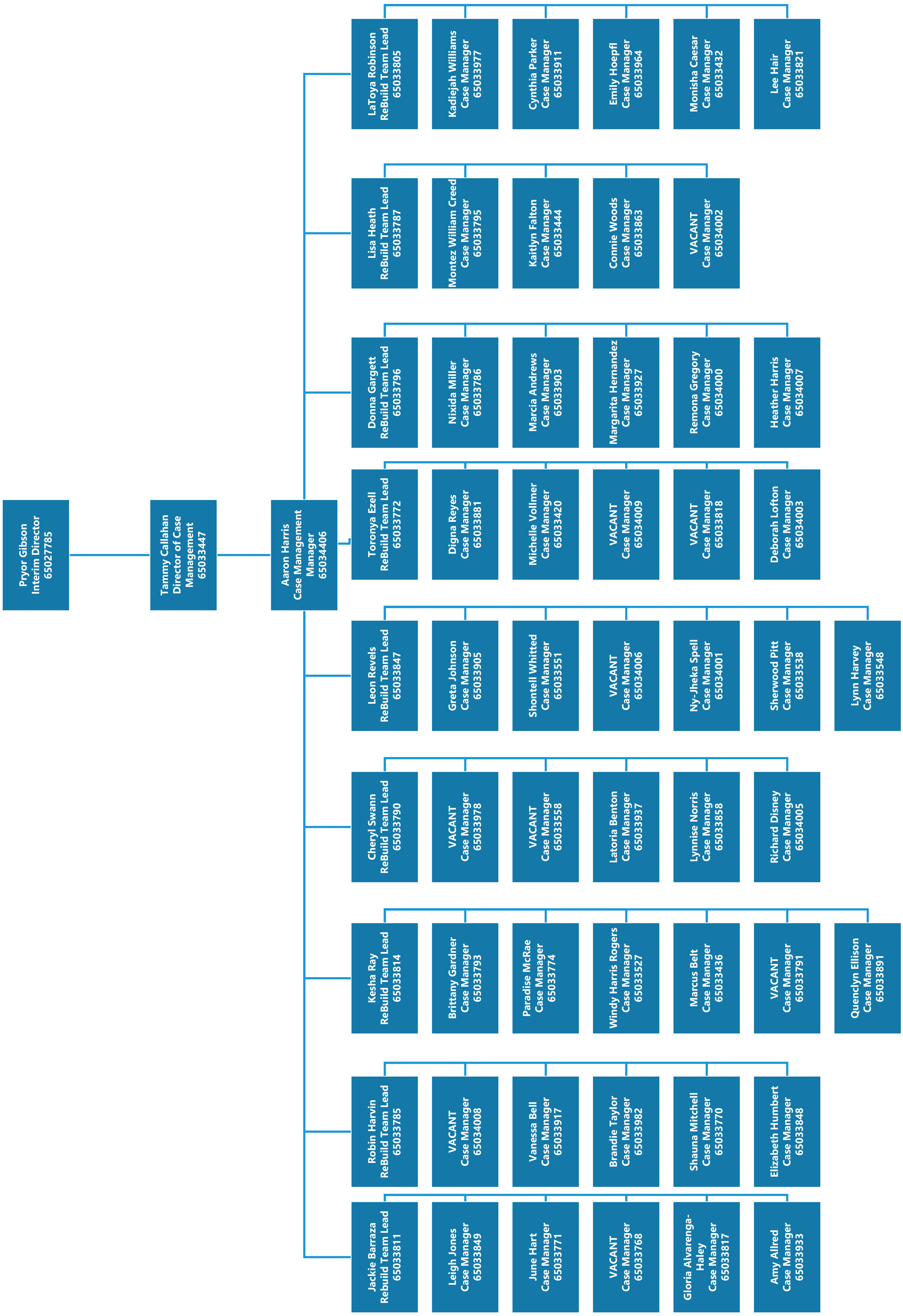
Appendix B - NCORR Organizational Charts



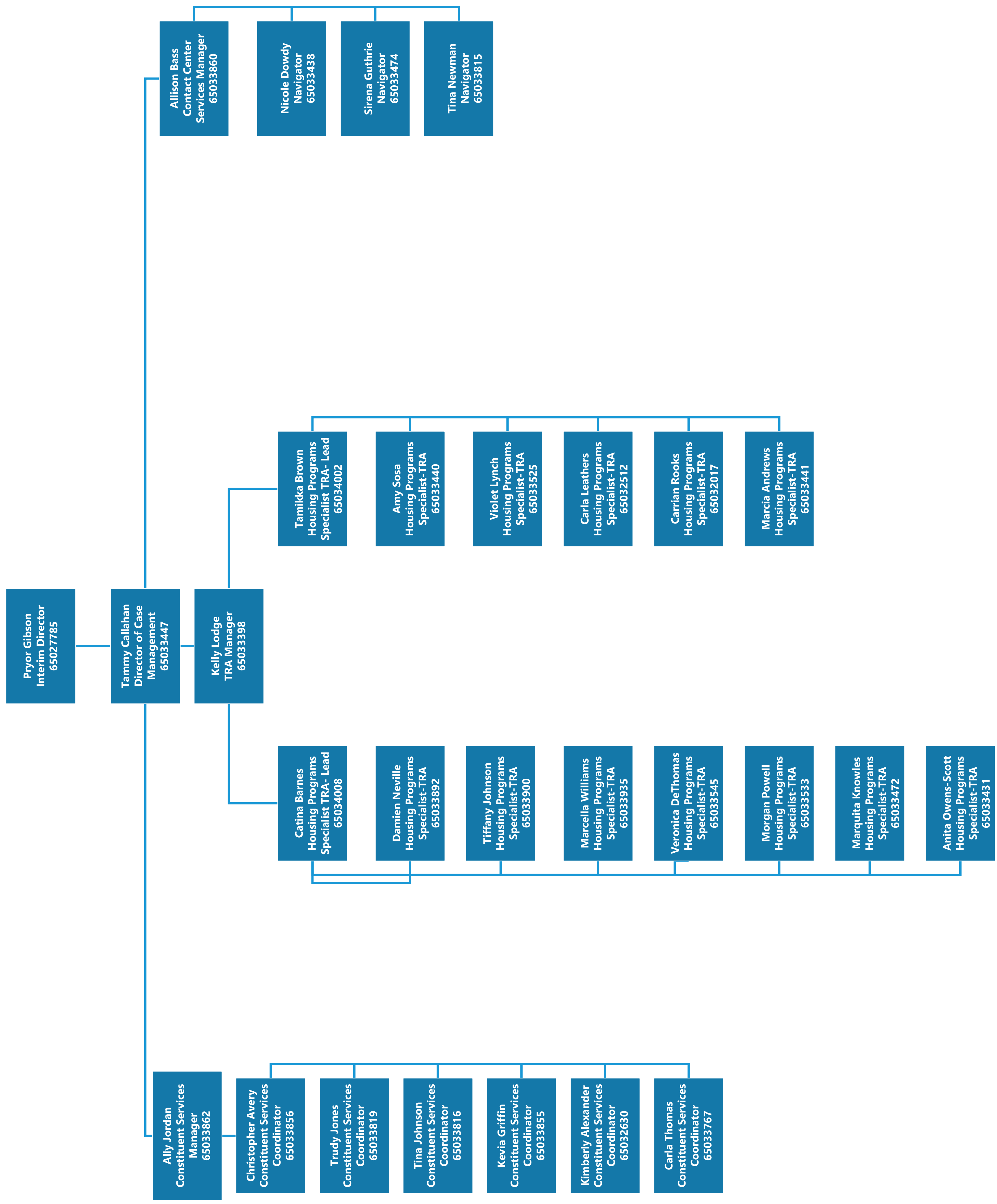
Appendix B - NCORR Organizational Charts



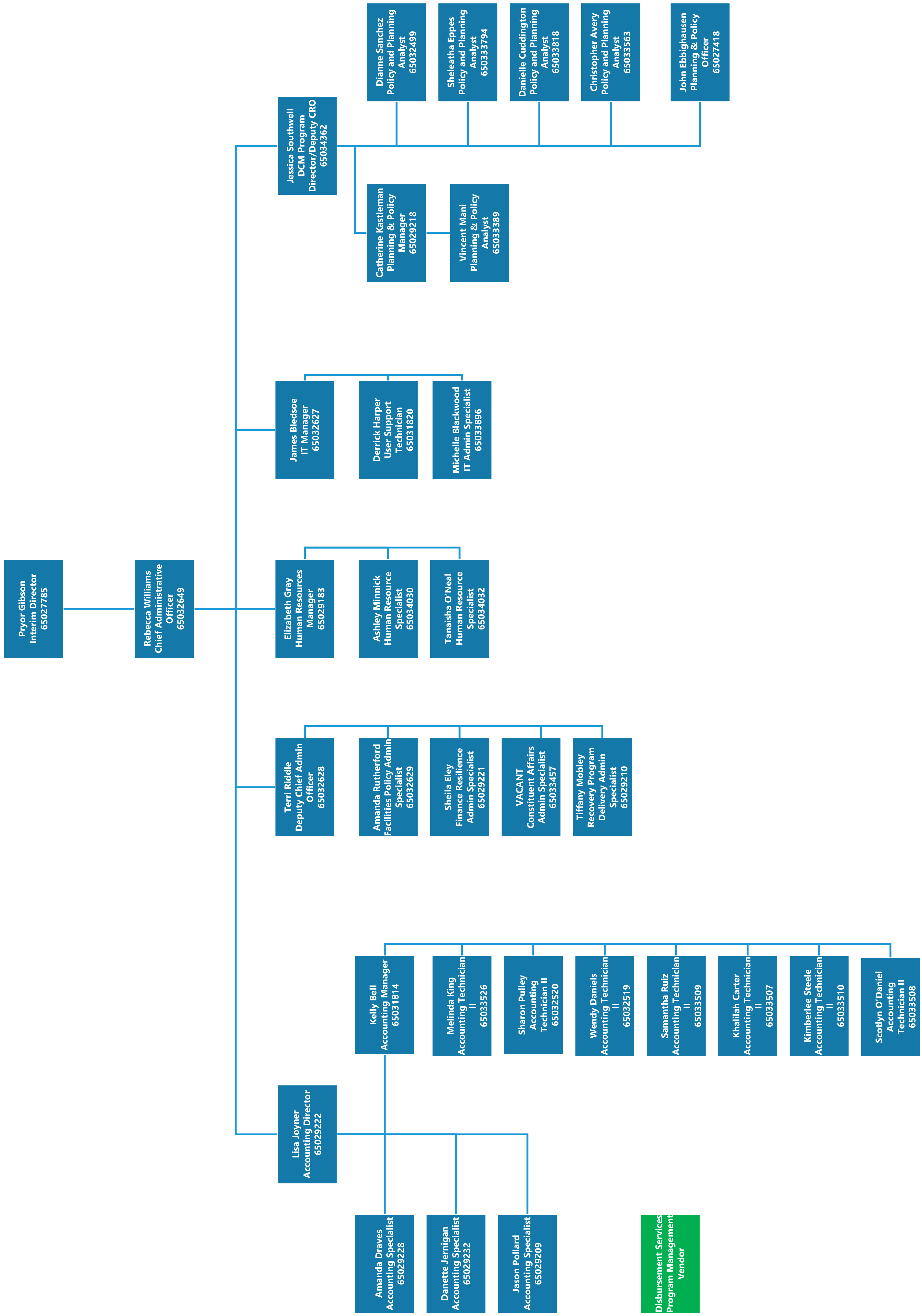
Appendix B - NCORR Organizational Charts



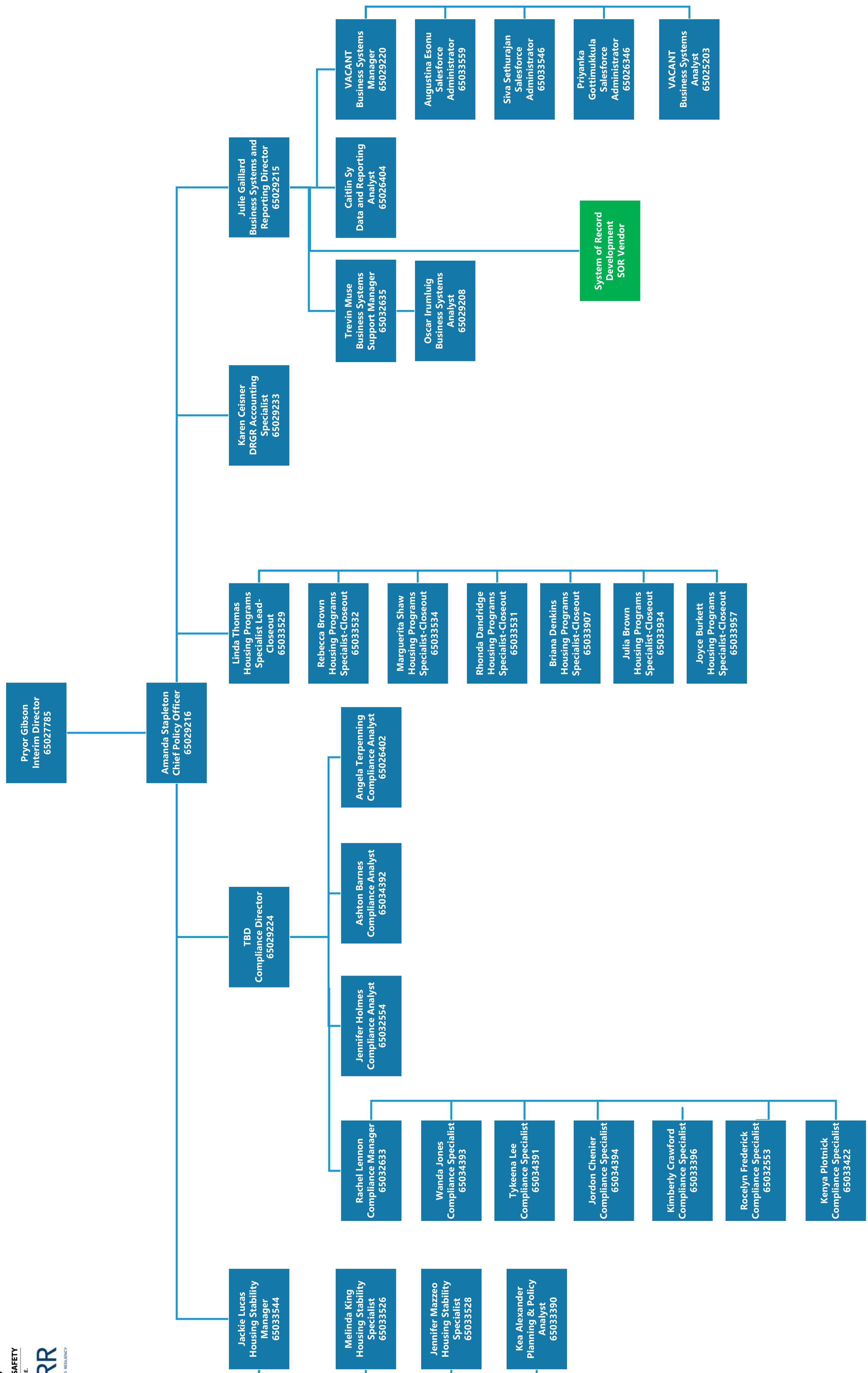
Appendix B - NCORR Organizational Charts



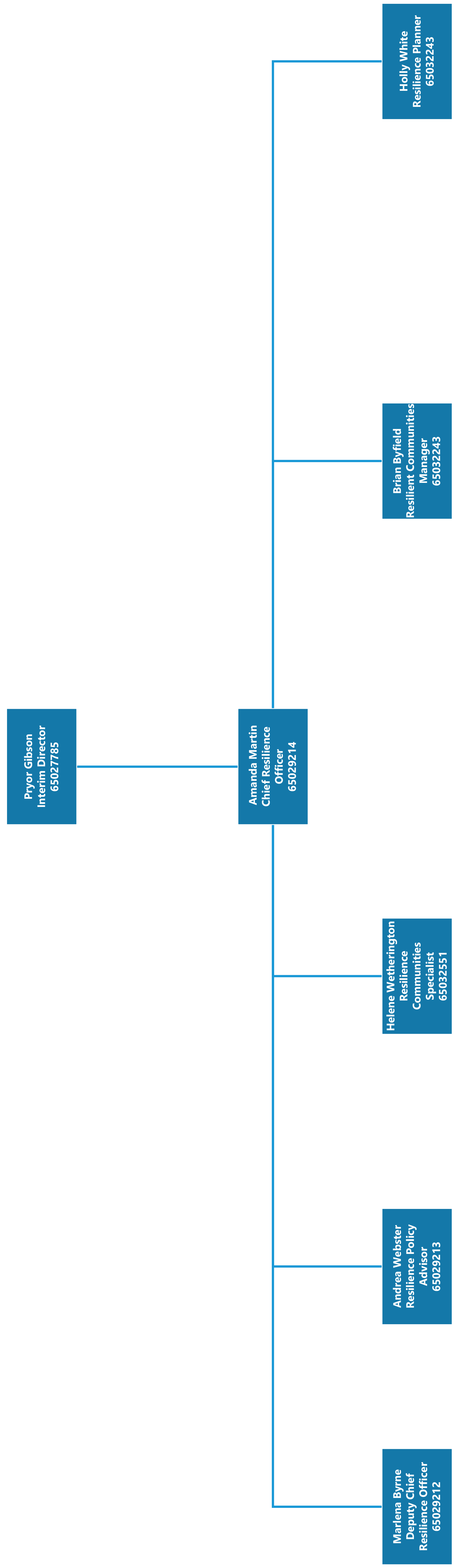
Appendix B - NCORR Organizational Charts



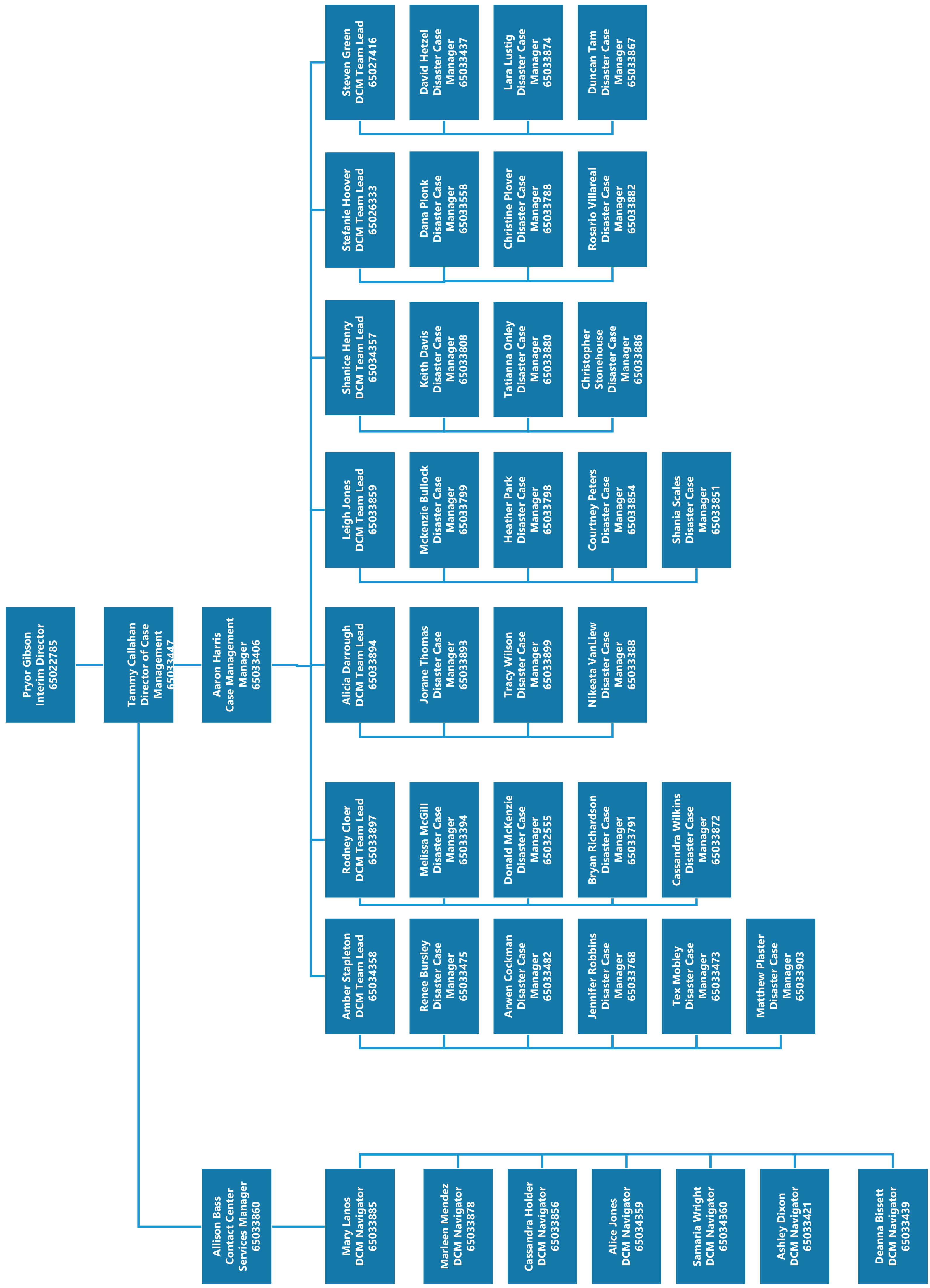
Appendix B - NCORR Organizational Charts



Appendix B - NCORR Organizational Charts



Appendix B - NCORR Organizational Charts



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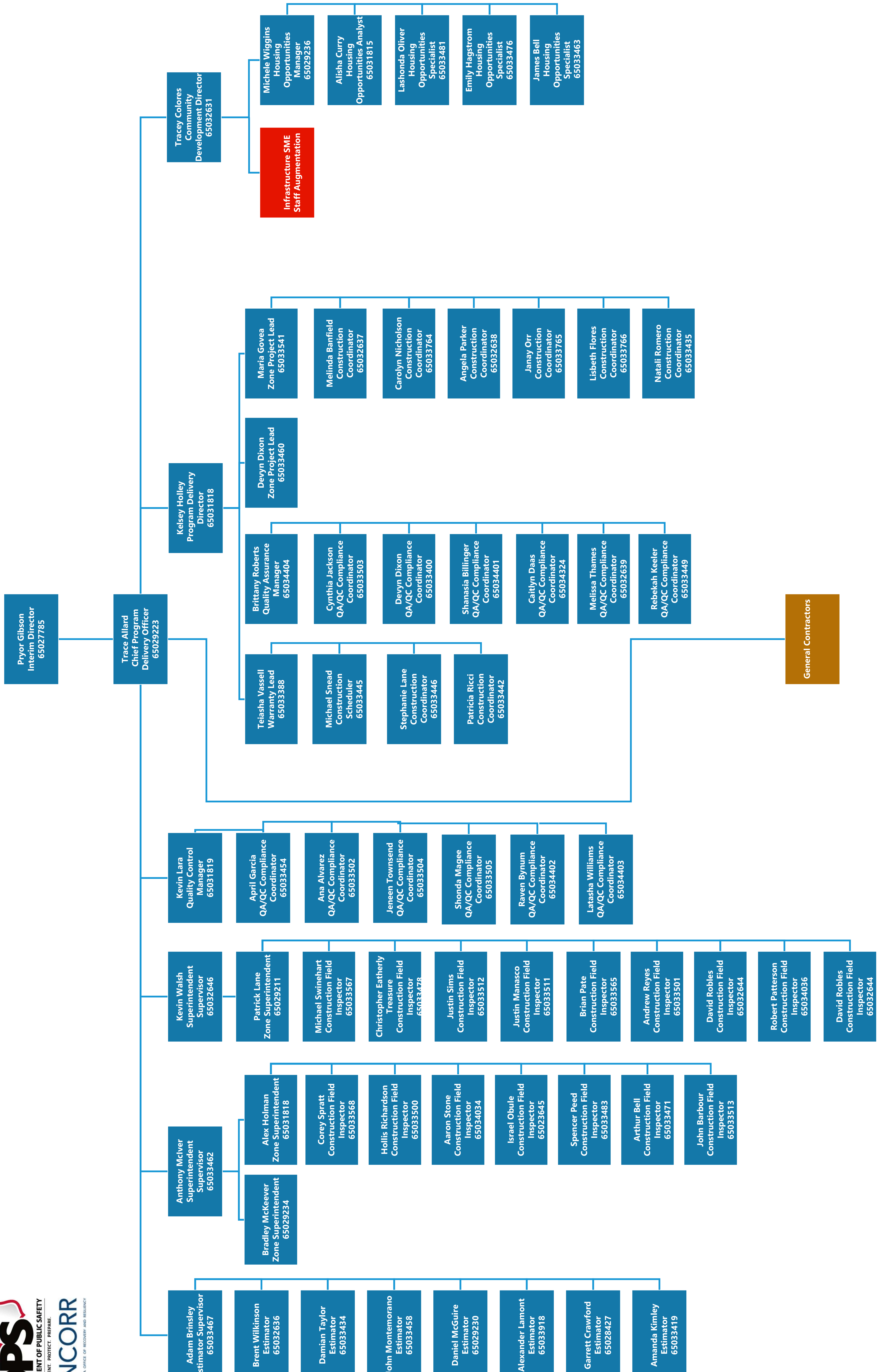
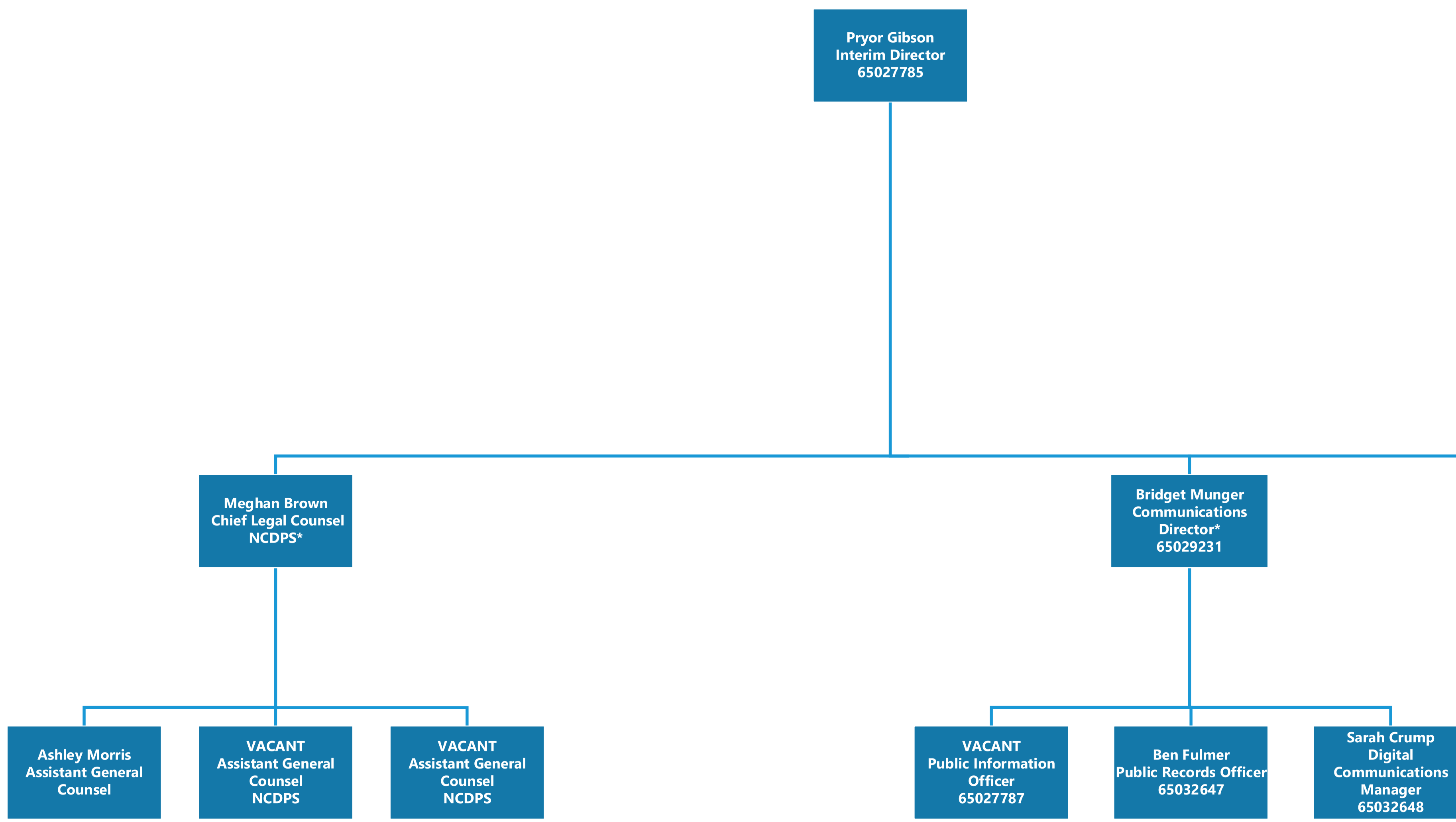


*Indirect reports report directly to a DPS central office but provide support to, and are funded by, NCORR.



NCORR

NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

NORTH CAROLINA DEPARTMENT OF PUBLIC SAFETY

OFFICE OF RECOVERY AND RESILIENCY

Nonsubstantial Action Plan Amendment 12
August 23, 2024

Hurricane Matthew CDBG-DR Action Plan

State of North Carolina

For U.S. Department of Housing and Development CDBG-DR Funds.

(Public Law 115-254 and 115-31)

NC DPS

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Revision History

Version	Date	Description
1.0	April 21, 2017	Initial Action Plan Submitted
2.0	November 7, 2017	Substantial Amendment 1
3.0	April 9, 2018	Non-substantial Amendment 2 Clarification of Method of Distribution
4.0	December 16, 2018	Substantial Amendment 3 – Method of Distribution and Program Caps
5.0	March 12, 2019	Non-substantial Amendment 4 – Amended method of determining construction intent (rehabilitation vs. reconstruction) and amended method of determining elevation assistance.
6.0	November 22, 2019	Substantial Amendment 5 —NCORR designated as grantee, federal and local policy and programmatic changes such as incorporation of DOB policy changes, award cap changes to reconstruction, eligibility threshold changes for TRA, updates to MID areas from HUD guidance, emergency repairs defined, and reallocation of grant funds.
7.0	June 9, 2020	Substantial Amendment 6 – Changes in programs and Action Plan to align Hurricane Matthew recovery with Hurricane Florence recovery.
8.0	January 11, 2021	Substantial Amendment 7 – Allocation changes, changes to some program definitions, changes to the substantial action plan amendment criteria.
9.0	April 20, 2021	Non-substantial Amendment 8 – Allocation changes.
10.0	January 18, 2022	Substantial Amendment 9 – Reallocation of the small rental recovery program, infrastructure and homeowner recovery allocation changes,
11.0	December 9, 2022	Substantial Amendment 10 – Allocation changes, changes to program descriptions, updates to program timelines.
12.0	March 15, 2024	Non-substantial Amendment 11 – Minor allocation changes, technical updates to elevation requirements, and minor clarifications to program timelines and reimbursement only awards for the Homeowner Recovery Program.
13.0	August 23, 2024	Non-substantial Amendment 12 – Minor allocation changes and technical updates in preparation of closeout of grant.

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Table of Contents

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1.0 Summary of Action Plan Changes – Nonsubstantial Amendment 12

1.1 Overview

This CDBG-DR Action Plan modification is classified as a Nonsubstantial Amendment. Nonsubstantial amendments to the Action Plan are generally defined as minor changes. For example, a nonsubstantial amendment should not be construed as allowing the general administrative budget to exceed the allowable limit or as a modification that materially changes the activities or eligible beneficiaries. Additionally, a Substantial Amendment is generally not required in cases where the grantee is providing additional technical clarifications to a program activity that already received approval from U.S. Department of Housing and Urban Development (HUD). Nonetheless, HUD must be notified at least 10 business days in advance of a Nonsubstantial Amendment becoming effective. HUD typically acknowledges receipt of the notification of nonsubstantial amendments via email within 10 business days.

As outlined in Section 13 of the Action Plan, NCORR identifies the following criteria which constitute a substantial amendment:

- A change in program benefit or eligibility criteria.
- The addition or deletion of an activity.
- An allocation or reallocation of $15 million or more.

Only amendments that meet the definition of a Substantial Amendment are subject to the public notification, public comment procedures, and other general Action Plan expectations outlined in the applicable Federal Register Notices by HUD (82 FR 36812 and 82 FR 5591). All amendments (nonsubstantial and substantial) will be posted on NCORR's website https://rebuild.nc.gov. Additionally, the CDBG-DR Action Plan will be revised to reflect the amendments (Nonsubstantial and Substantial) to the Action Plan. As with all amendments, hard copies of the Nonsubstantial Action Plan will also be made available upon request. Each amendment submitted to HUD will be numbered sequentially and is meant to supersede the earlier amendments in the published Action Plan.

1.2 Small Business Recovery

After a final review of the closeout of activities related to the Small Business Recovery Program, the State conducted a final analysis of remaining funds initially obligated to the program. The updated analysis yielded $0.10 in unspent funds that can be reallocated to other remaining disaster recovery costs related to Hurricane Matthew.

As outlined later in this amendment, NCORR has opted to reallocate those funds to support remaining efforts related to the Homeowner Recovery Program.

In addition to the unspent funds, the final allocation analysis provided a better understanding of the national objectives and geographic reach met with the obligations paid and activities delivered by the program. Such analysis resulted in the final numbers reported in the allocation tables of $484,985 for the Low-to-Moderate Income (LMI) National Objective and $2,514,929.5 in funds spent in the Most Impacted and Distressed (MID) counties. As a program once operated by the previous responsible entity for CDBG-DR Matthew Funds, the North Carolina Department of Commerce, the figures presented in this Action Plan amendment for the LMI national objective and MID areas, showcase the actual outcomes and deliverables of the completed program and not necessarily any changes to the eligibility criteria of the projects and activities that were concluded years ago.

1.3 Planning

After concluding a final analysis of funds allocated to Planning and remaining costs associated with such efforts, $434,000 of unspent Planning funds will be reallocated to cover other disaster recovery costs related to Hurricane Matthew.

1.4 Multi-Family

A final review of the Multi-Family Program concluded that $9,694,500 in program funds for projects slated to be moved to the CDBG-DR Florence grant to accommodate for a longer timeline of completion were available for reallocation. The $9,694,500 is being reallocated to the Homeowner Recovery Program and its disaster recovery efforts. The final allocation for the Multi-Family Program will be $9,821,518.

1.5 Homeowner Recovery Program

In preparation of closing out the CDBG-DR grant for Hurricane Matthew, unspent funds previously allocated to other activities and programs, such as the Small Business Recovery Program, Planning, and Multi-Family, have been reallocated to the Homeowner Recovery Program to cover remaining costs associated with ongoing disaster recovery efforts. The reallocated $10,128,500.10 reflected in this non-substantial action plan amendment bring the total allocation for the program from the CDBG-DR Hurricane Matthew grant to $207,635,032.10.

1.6 Allocation Changes

The allocations for several CDBG-DR programs have been adjusted. The table below includes a breakdown of the allocations and a comparison to the allocation in the previous Action Plan Amendment. A description and rationale for the changes is included at Section 6.

Activity	PREVIOUS APA 11 Allocation	CURRENT APA 12 Allocation	CURRENT APA 12 LMI Allocation	CURRENT APA 12 MID Allocation
Administration	$11,826,450	$11,826,450	$0	$9,461,160
Planning	$4,176,353	$3,742,353	$0	$2,542,046.5
Homeowner Recovery Program	$197,506,532	$207,635,032.1	$163,718,790.2	$166,557,907.9
Multi-Family	$19,516,018	$9,821,518	$9,821,518	$9,821,518
Public Housing Restoration	$0	$0	$0	$0
Small Business Recovery	$4,500,000	$3,503,646.9	$484,985	$2,514,929.5
Infrastructure Recovery	$0	$0	$0	$0
TOTAL	**$236,529,000**	**$236,529,000**	**$174,025,293.2**	**$190,897,562**
% OF TOTAL ALLOCATION	**100%**	**100%**	**74%**	**81%**

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2.0 Introduction

Hurricane Matthew began as a Category 5 storm in the Caribbean, before hitting the coast of North Carolina (the State) on October 8, 2016. Fifty counties in North Carolina were declared federal disaster areas with historic communities in eastern North Carolina like Princeville, Kinston, Lumberton, Goldsboro, Fayetteville, and Fair Bluff experiencing catastrophic damages. Matthew lingered along the North Carolina coast for several days, causing rivers and their tributaries to swell and ultimately overflow into adjacent communities. Over a three-day period, central and eastern parts of North Carolina were inundated with rain, and 17 counties set new records for rain and flooding. Five river systems, the Tar, Cape Fear, Cashie, Lumber, and Neuse Rivers, flooded, remaining at flood levels for two weeks.

After Matthew passed, the State assessed the damage and documented that Matthew's impact was devastating, significantly impacting residents in eastern and central North Carolina and causing catastrophic losses in the housing, business, public infrastructure, and agricultural sectors. More than 800,000 families lost power from Matthew, resulting in millions of dollars in food cost losses for families whose food needed to be frozen or refrigerated. In total, 3,744 individuals needed to be moved to shelters, and 77,607 households applied for Federal Emergency Management Agency (FEMA) emergency assistance.

When FEMA completed its analysis of impacts to housing stock, 34,284 households had evidence of flood damage and nearly 5,000 homes had major to severe damage, many of which were located in rural communities, where not only the home but also the farm and livestock were impacted and/or lost. The State estimated that more than 300,000 businesses experienced physical and/or economic impacts from the storm, including many small "mom and pop" businesses located in small rural communities. Matthew's impact on the agricultural industry was particularly hard hit, as the industry has a significant presence in driving the local economy in eastern North Carolina, where the State is among leaders in the nation in livestock and crop production. North Carolina's farms, including many small multi-generational family farms, along with the firms that provide materials needed to grow livestock and produce crops and food producers that take these products to market, lost tremendous amounts of inventory, livestock, and crops, with millions of dollars of the losses not covered by United States Department of Agriculture (USDA) programs. The impact to communities was also catastrophic, with public buildings, parks, schools, roads, water and wastewater systems, and other public infrastructure heavily impacted. Portions of the interstate system closed in some cases for up to 10 days. In total, the State estimated that Matthew's total economic impact was roughly $2 billion.

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3.0 Impact and Unmet Needs Assessment

The Impact and Unmet Needs Assessment within this Action Plan represents the third analysis of unmet needs in the State of North Carolina following Hurricane Matthew. It presents damage estimates as of October 15, 2017, roughly one year after the flooding occurred. Under Substantial Amendment 10, the State used most recent State damage inspection data, Small Business Administration (SBA), Federal Emergency Management Agency (FEMA) and National Flood Insurance Program (NFIP) data to reevaluate unmet needs specifically related to owner-occupied housing, rental housing, and infrastructure.

Reanalysis of the owner-occupied and rental housing unmet need under Substantial Amendment 10 indicates that the housing unmet need remains largely unchanged when compared to initial housing unmet need estimates. Through reanalysis of the infrastructure unmet need under Substantial Amendment 10, the State found that the infrastructure unmet need has decreased significantly when compared to the initial infrastructure unmet need estimates. The reanalysis highlights that additional Federal Obligations have been made through the FEMA Public Assistance (PA) program to address infrastructure unmet need since the initial estimates were calculated in October 2017. Additionally, a considerable amount of funding from the State has been awarded and spent to address the match for federal disaster programs related to infrastructure recovery.

Based on the revaluation, North Carolina's current unmet recovery needs for Hurricane Matthew total $777,374,146 summarized in Table 1.

Table 1: Hurricane Matthew Unmet Needs Summary

Category	Estimated Unmet Need	Percent of CDBG Total Unmet Need
Owner-Occupied & Rental Housing	$428,276,828	55%
Economic (Small Business)	$263,435,519	34%
Total Unmet Need for CDBG-DR Activities	**$691,712,347**	**89%**
Public Housing	$15,200,000	2%
Infrastructure	$70,461,799	9%
Total Unmet Need for CDBG-MIT Activities	**$85,661,799**	**11%**
Grand Total Unmet Need for CDBG Activities	**$777,374,146**	**100%**

Under Substantial Amendment 10, funding allocated to CDBG-DR activities will address owner-occupied housing, rental housing and economic (small business) unmet need, representing 89% of the total unmet recovery needs. The State has also identified an additional need for public services to support recovery efforts, with an estimated need of $36,248,561 outlined in Section 3.1.9.3.

Public Housing and Infrastructure represent 11% of the total unmet recovery need ($85,661,799). In consideration of the significant owner-occupied housing, rental housing and economic recovery need, funding allocations for public housing and infrastructure are being reallocated to the State's CDBG-MIT program under Substantial Amendment 10. Refer to the State's Mitigation Action Plan for more details on these activities and any additional unmet needs analyses.

The decrease noted in infrastructure unmet need further supports the State's decision to focus CDBG-DR funding on the significant unmet need that remains for owner-occupied housing, rental housing, and economic recovery.

Since the publication of the State's initial Unmet Needs Assessment in the Spring of 2017 and subsequent amendments, the State has focused recovery actions in four areas:

1. Designing housing programs focused on the findings of the State's ongoing Unmet Needs Assessments and centered around the needs of low to moderate income persons and housing recovery in the most impacted communities and counties;
2. Completing the State's 50 county planning process to determine how to best align and structure the Community Recovery Program/Infrastructure Recovery Program with information and projects developed through this bottom-up community planning process;
3. Working with FEMA to ensure that damages to public infrastructure were captured; and
4. Working to confirm that the Matthew impacts to small businesses and the agricultural sector are being addressed through state, local, and other funding and activities outside of CDBG-DR.

As a result, the current reevaluation of unmet needs has validated that the State's prior Unmet Needs Assessment remains valid as housing recovery remains a significant unmet need. The public infrastructure and facilities focus of the Unmet Needs Assessment has been updated to reflect the increase in FEMA Public Assistance obligations that are in line with initial estimates and projections. In the Economic Recovery section, as shown by previous SBA data analysis, it remains possible that small businesses and agricultural enterprises in eastern and central North Carolina may continue to need assistance.

The analysis presented in the initial Unmet Needs Assessment, particularly for housing and vulnerable populations in most impacted communities, remains particularly relevant and is included in this revised analysis as it is unchanged and is a key component for the overall program design.

As part of this Action Plan Amendment, the State of North Carolina has made it a priority to focus on continuing to assist low- and moderate-income families who experienced severe flooding and saw their homes and communities impacted by Matthew. Therefore, the funding priorities in this Action Plan Amendment emphasize housing and supportive public service needs with the majority of this allocation going to housing recovery and housing assistance programs. The State understands that community health is not just about rebuilding homes but restoring the basic fabric of neighborhoods and ensuring future economic health. Therefore, the State is also providing funding to assist small businesses and farmers struggling to get back on their feet and ensuring that, as the planning process is complete, projects to rebuild and make more resilient communities can occur.

3.0.1 Amendment 10 Update

See Section 3.0 for revised Impact and Unmet Needs Assessment including revaluation of Housing Unmet Need and Infrastructure Unmet Need based on the most recent disaster recovery data sets.

3.1 Housing

3.1.1 Summary

As part of the Substantial Action Plan Amendment 10 process, the State reanalyzed unmet needs related to owner-occupied and rental housing. This revised Housing Unmet Needs Assessment updates the previous analysis conducted by the State in the initial Action Plan and previous Substantial Action Plan Amendments. The State's revised Housing Unmet Needs Assessment is based on the most recent disaster recovery data sets, applying the methodology and assumptions outlined in Appendix C.

Based on the most recent data sources consistent with HUD methodology for estimating housing unmet need for owner-occupied and rental housing, the State observed the housing unmet need remains largely unchanged, showing only a slight 1.33 percent decrease. The reanalysis outlined in this section of the Action Plan Amendment revalidates the State's plan to allocate most of the CDBG-DR funding to address continuing housing unmet needs.

It is important to note that previous analyses related to housing unmet need point to a large unmet need for homeowners who wish to sell their homes and relocate to higher and safer ground, and additional damages and unmet need for Public Housing Authorities in storm impacted counties. Substantial Amendment 10 and previous amendments outline that funding related to Strategic Home Buyout and the Public Housing Restoration Fund activities have been reallocated from CDBG-DR to CDBG-MIT. Refer to the State's Mitigation Action Plan for more details on these activities and any additional unmet needs analyses.

3.1.1.1 Amendment 10 Update

See Section 3.1.1 for revised Summary including revaluation of Housing Unmet Need based on the most recent disaster recovery data sets.

3.1.2 Analysis

This housing Impact and Unmet Needs Assessment relies heavily on the work that was conducted in the original Action Plan and subsequent Substantial Action Plan Amendments.

Hurricane Matthew inflicted devastating damage to families throughout North Carolina's eastern and central parts. The swelling of the Tar, Neuse, and Lumber Rivers caused rainwater to overflow into neighboring towns, inundating business districts and homes with floodwaters. In total, almost 35,000 homes were damaged in the storm, and the homes of roughly 5,000 families were damaged so extensively as to make them unlivable.

North Carolina's number one priority is to allow families to return to their homes and to ensure those homes are in safe and sanitary conditions. For this reason, the Unmet Needs Assessment focuses on housing recovery programs and supportive services for families and persons in need. Additionally, this analysis was completed with an understanding of where homes experienced the greatest damage and the capacity of those families to recover from the disaster.

The analysis and resulting recovery programs also account for long-term sustainability, with a priority placed on the homeowner and renter finding safe and suitable housing rather than simply rebuilding a damaged unit. Therefore, North Carolina will conduct an analysis when rebuilding a severely damaged home versus constructing a new home in an area safe from repetitive flood loss, which will consider the cost of repairing versus replacement and estimated long-term losses due to repeat flood events.

The State began the process of assessing housing impact and housing unmet need by analyzing the prior Unmet Needs Assessment, which included who applied for FEMA assistance, the first step most flood victims take immediately after a disaster. This information is combined with the State's own damage assessments, SBA's loan application information and NFIP data sets. From this data, the State generated a detailed understanding of housing damages and recovery needs and compared the original analysis with updated data from FEMA, SBA and NFIP. Specifically, the State was able to estimate the following:

- What counties, towns, and neighborhoods experienced the greatest damage;
- The types of units that were damaged (rental versus homeowner and the structure);
- The incomes of the impacted homeowner or renter, and, combined with household size, the income classification of these impacted individuals/families;
- How many homeowners and renters were impacted, categorized by severity of damage;
- An estimate of housing recovery needs (in dollars); and
- In combination with other data, what impacted neighborhoods have a high concentration of vulnerable populations and/or additional needs.

The following is a summary of this housing impact and housing unmet needs analysis, which North Carolina will continue to build upon as the State captures more information from our community engagement meetings and outreach efforts at the county and local level.

3.1.3 Severely Impacted Communities

Hurricane Matthew concentrated its damage within specific areas, in particular riverine communities already grappling with a heavy rain season. There are six towns we consider "severely impacted," where more than 100 homes experienced major to severe damage. These communities are predominantly low- and moderate-income (LMI) and have a higher concentration of African American, Native American, and Hispanic residents.

Princeville – 367 homes had major to severe damage: The Town of Princeville, with a population of 2,373, is located in Edgecombe County along the Tar River just south of Tarboro. It is a largely African American community (96 percent of its residents are African American) and is reportedly the oldest community settled by freed slaves in the US. It is also located in a floodplain that has experienced frequent and substantial flooding over the years. The community is a low-income community, with the median household income of $33,011. In addition to flooded homes, the school and fire station were reported as flooded.

Kinston – 181 homes had major to severe damage: The town of Kinston, with a population of 21,589, is located in Lenoir County along the Neuse River. The community is predominantly African American (67 percent), and most of its residents are low-income, with the median household income of $28,608. The town experienced substantial damage to its main business district, flooding many small businesses serving the community.

Lumberton – 876 homes had major to severe damage: The city of Lumberton, with a population of 21,707, is located in Robeson County along the Lumber River. A racially and culturally diverse county, where 33.8 percent of the population is African-American, 12.4 percent Native American (the Lumbee Tribe), and 11 percent Hispanic/Latino. Most of its families are LMI, with a median household income of $31,899. The community experienced substantial flooding after Hurricane Matthew, particularly along Fifth Street, its main commercial corridor, and among its public housing residents, where almost 500 very low-income renters lost their homes.

Goldsboro – 251 homes had major to severe damage: The town of Goldsboro, with a population of 35,086, is located in Wayne County along the Neuse River. It is a diverse, LMI community, where roughly 53 percent of the population is African American, and the median income is $29,456. It is also an agricultural community, where substantial livestock was lost.

Fayetteville – 452 homes had major to severe damage: Fayetteville, located on the Cape Fear River in Cumberland County, is a densely populated city of 200,000. It is a middle-income community, with a median household income of $44,514, and is racially diverse, where 41 percent of the population is African American, and 10 percent are Hispanic. The flooding in Fayetteville was concentrated in the downtown area and in subdivisions near the Little River tributary, where flooding was so severe many residents had to be rescued to evacuate.

Fair Bluff – 109 homes had major to severe damage: Fair Bluff is a small town located along the Lumber River in Columbus County. Given its small population of 1,181 households, it was devastated by Hurricane Matthew, where approximately 25 percent of all families were severely impacted. The community is racially diverse, with 38 percent of the population white and 60 percent African American, and the majority of families are very low-income, with the median household income at $17,008. Fair Bluff's main commercial district was particularly impacted by the floodwaters.

3.1.4 Most Impacted and Distressed (MID) Areas Identified by the State

Based on data as of May 2020, NCORR conducted an analysis of damage to counties that were impacted by both Hurricane Matthew and Hurricane Florence in consideration of the unique recovery needs created by the large area of the State that was impacted by both hurricanes. The threshold to be considered a State Defined MID areas is greater than $10 million in combined estimated housing unmet need at county level for both hurricanes.

The result is the addition of seven counties which are considered the State Defined MID areas. These counties are Beaufort, Dare, Harnett, Johnston, Lenoir, Pitt, and Sampson and are in **bold** font in Table 2 below. The map of state-identified MID areas is located at Section 6.5.

See Appendix B for the Methodology & Detailed Data to Identify State Defined MID Areas for Hurricane Matthew and Hurricane Florence.

Table 2 – Estimated Combined Housing Unmet Need, State and HUD Defined MID Areas

County	Estimated Combined Housing Unmet Need	MID Area
Robeson (County)	$ 197,307,459	Matthew, Florence
Craven (County)	$ 161,228,095	Florence
Pender (County)	$ 101,788,288	Florence
Cumberland (County)	$ 88,747,142	Matthew, Florence (Zip Code 28390)
Duplin (County)	$ 66,873,164	Florence
Wayne (County)	$ 56,865,628	Matthew
Columbus (County)	$ 56,750,640	Matthew, Florence
Onslow (County)	$ 54,835,052	Florence
Carteret (County)	$ 54,012,059	Florence
New Hanover (County)	$ 50,222,920	Florence
Edgecombe (County)	$ 42,011,156	Matthew
Brunswick (County)	$ 36,152,959	Florence
Lenoir (County)	**$ 30,491,620**	**State Defined**
Jones (County)	$ 30,486,444	Florence

County	Estimated Combined Housing Unmet Need	MID Area
Bladen (County)	$ 29,008,386	Matthew, Florence (Zip Code 28433)
Pamlico (County)	$ 25,970,454	Florence (Zip Code 28571)
Beaufort (County)	**$ 21,732,584**	**State Defined**
Sampson (County)	**$ 17,194,081**	**State Defined**
Scotland (County)	$ 15,971,064	Florence (Zip Code 28352)
Pitt (County)	**$ 14,642,648**	**State Defined**
Harnett (County)	**$ 12,141,829**	**State Defined**
Dare (County)	**$ 10,888,976**	**State Defined**
Johnston (County)	**$ 10,796,876**	**State Defined**

3.1.4.1 Amendment 10 Update

Reference Appendix B for the Methodology & Detailed Data to Identify State Defined MID Areas.

3.1.5 Where did most of the damage occur?

Hurricane Matthew impacted 50 counties in North Carolina, largely along the eastern and central regions and along major rivers and tributaries. As previously noted, almost 35,000 families experienced some degree of damage to their homes, but the majority of damage was minor.

Unfortunately, families whose homes received major to severe damage have a far greater challenge in recovering, particularly when their homes are rendered uninhabitable due to mold, insulation issues, unstable foundations, leaky roofs, and lack of heat or plumbing due to flood damage of pipes and HVAC systems. These families either remain in their damaged homes, living in unsafe conditions because they are unable to find alternative housing they can afford, or they are displaced from their homes. The families with limited resources – low and moderate-income families who have limited savings or disposable income – are the families with the greatest needs. These homes are the focus of this impact assessment.[1]

To determine which counties, towns and neighborhoods experienced major damage, the State mapped the FEMA applications by the address of the damaged unit and then associated that "point" with the neighborhood[2], town, and county the home falls within.

[1] Major and Severe Damage is defined using United States (US) Department of Housing and Urban Development's (HUD's) definition within FR-6012-N-01, where an owner-occupied home is considered majorly or severely damaged if it incurs at least $8,000 in real property loss according to FEMA Individual Assistance inspections. Similarly, a renter-occupied home is considered majorly or severely damaged if it incurs at least $2,000 in personal property loss.
[2] For this analysis, a neighborhood is defined as a Census Tract, which is a geographic area defined by the US Census that on average contains 2,000 to 4,000 residents.

Based on this analysis, major housing damage happened in very specific areas, as follows:

- 64 percent of major to severe damage is concentrated in the "most impacted" four counties.
- 52 percent of major to severe damage is concentrated in 13 towns.
- 41 percent of major to severe damage is concentrated in 14 neighborhoods.

So, while damage was widespread due to power outages, minor flooding, and wind damage, the serious impacts of Hurricane Matthew were felt in a specific handful of places. These counties, towns, and neighborhoods are defined in Table 3 through
Table 5.

Table 3: Most Impacted Counties *(updated October 17, 2019)*

County	Owners	Renters	Total
CUMBERLAND	408	447	855
EDGECOMBE	270	305	575
ROBESON	687	705	1,392
WAYNE	299	275	574
COLUMBUS	168	125	293
BLADEN	71	13	84
TOTAL	**1,903**	**1,870**	**3,773**

Note that since the initial Action Plan, Columbus and Bladen Counties have been added to the MID areas.

Table 4: Towns that Experienced Major to Severe Damages from Hurricane Matthew *(where at least 100 homes experienced major to severe damage)*

County	Community	Damage Level	Owners	Renters	Total
COLUMBUS	Fair Bluff	Severe	50	59	109
CUMBERLAND	Fayetteville	Severe	169	283	452
EDGECOMBE	Princeville	Severe	156	211	367
LENOIR	Kinston	Severe	49	132	181
ROBESON	Lumberton	Severe	350	526	876
WAYNE	Goldsboro	Severe	87	164	251
Total			**984**	**1,570**	**2,554**
As % of All Major to Severe Damage in NC			**38%**	**66%**	**52%**

Table 5: Neighborhoods that Experienced Major to Severe Damages from Hurricane Matthew
(where at least 50 homes experienced major to severe damage)

Town	County	Neighborhood	Owner	Renter	Total
LUMBERTON	ROBESON	37155960801	150	320	470
PRINCEVILLE	EDGECOMBE	37065020900	156	211	367
LUMBERTON	ROBESON	37155960802	125	144	269
FAYETTEVILLE	CUMBERLAND	37051003203	26	107	133
FAIR BLUFF	COLUMBUS	37047930600	50	59	109
FAYETTEVILLE	CUMBERLAND	37051000200	53	40	93
Rural	WAYNE	37191000901	44	48	92
GOLDSBORO	WAYNE	37191001500	24	61	85
Rural	ROBESON	37155961802	16	61	77
Rural	DARE	37055970502	47	28	75
Rural	CUMBERLAND	37051003001	52	16	68
Rural	PENDER	37141920502	41	24	65
KINSTON	LENOIR	37107010800	2	62	64
Rural	ROBESON	37155961500	47	14	61

Figure 1: Most Impacted Counties

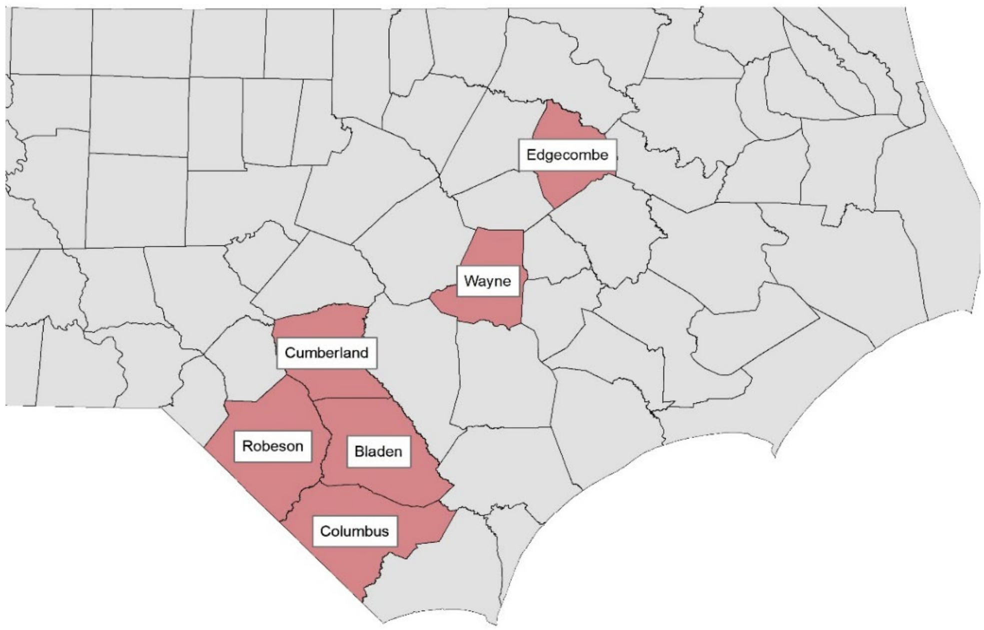


Figure 2: Most Impacted Communities

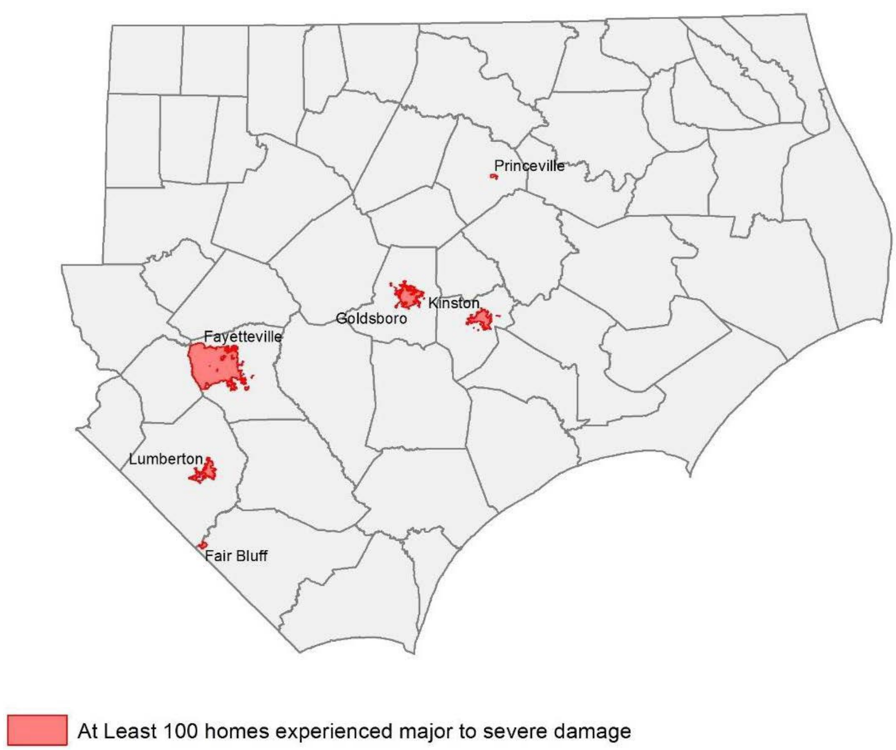
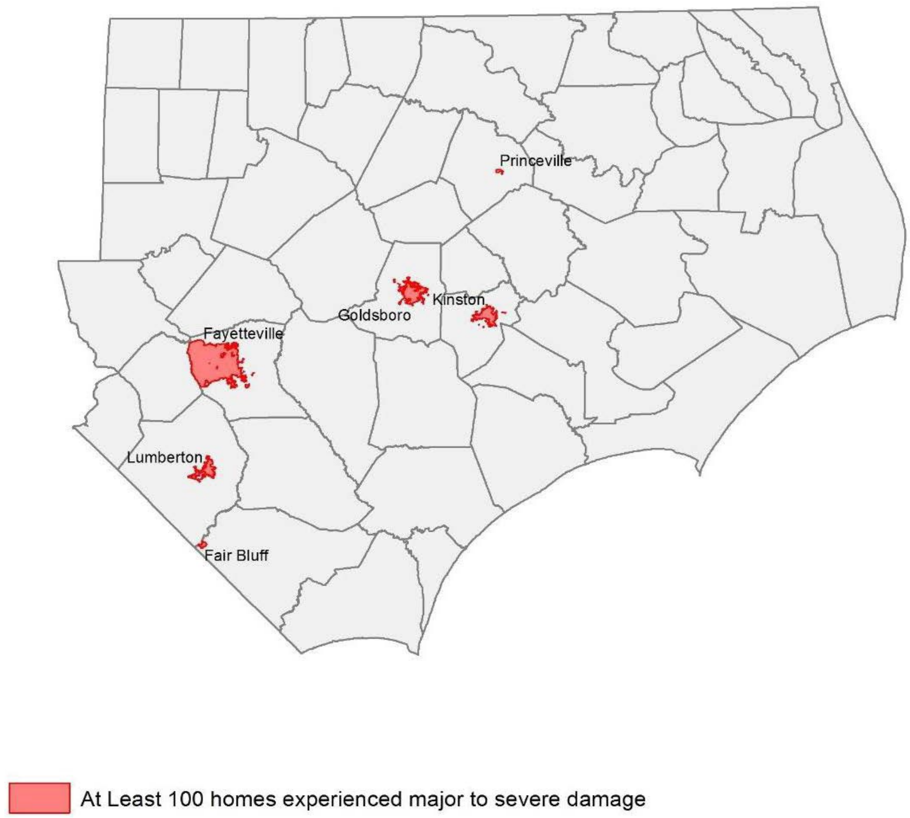


Figure 3: Most Impacted Neighborhoods



3.1.6 Impact to Owner-Occupied Housing

In total, 28,164 homeowners experienced some degree of damage to their homes; 2,569 homeowner families experienced major to severe damage. 78 percent of the total damages were to LMI owners, while 69 percent of LMI homeowners had major or severe damage.

Table 6: Damage Counts of Owner-Occupied Homes by Damage Category and Income of Homeowner Family

Damage Category	All Owners	Low and Moderate Income (LMI) Owners
Minor-Low	22,795	18,128
Minor-High	2,800	2,102
Major-Low	1,581	1,121
Major-High	830	550
Severe	158	107
Total - All Damage	**28,164**	**22,011**
Total - Major to Severe Damage	**2,569**	**1,780**

Source(s): FEMA IA analysis effective 9/13/17

The initial Impact Assessment examined what types of owner-occupied homes experienced major to severe damage. Approximately two thirds were single family structures, while the remaining one third were mobile homes.

Table 7: Owner-Occupied Housing Units that Experienced Major to Severe Damage by Structure Type

	Count	Percent
Apartment	1	0%
Boat	1	0%
Condo / Townhouse	8	0%
House/Duplex	1,709	67%
Mobile Home	831	32%
Other / (blank)	13	0%
Travel Trailer	6	0%
Total	**2,569**	**100%**

Source(s): FEMA Individual Assistance data. Analysis effective 3/15/17

3.1.7 Impact to Rental Housing

Almost half of all the housing that withstood major to severe damage from Hurricane Matthew was rental housing. The storm caused severe damage or destroyed at least 2,388 occupied rental homes, with 83 percent of this damage occurring in the six most impacted counties. Lumberton experienced the greatest loss of rental housing, with 526 units impacted. This is followed by Fayetteville (283 units) and Princeville (211 units). Far more than owner-occupied homes, the vast majority (86 percent) of renters severely impacted by the storm were LMI.

Table 8: Damage Counts of Renter-Occupied Homes by Damage Category and Income of Renter Family

Damage Category	All Renters	Low- and Moderate-Income Renters
Minor-Low	2,632	1484
Minor-High	1,097	618
Major-Low	963	543
Major-High	1,244	701
Severe	181	102
Total - All Damage	**6,117**	**3,448**
Total - Major to Severe Damage	**2,388**	**1,346**

Source(s): FEMA Individual Assistance data. Analysis effective 9/15/17

Of the rental units, seriously damaged by Hurricane Matthew, we see approximately half were apartment buildings, while 40 percent were single family homes or duplexes. A significant number of rented mobile homes were also flooded (13 percent of all major to severe damage).

Table 9: Rental Housing Units that Experienced Major to Severe Damage by Structure Type

	Count	Percent
Apartment	1,084	45%
Assisted Living Facility	4	0%
Condo	13	1%
House/Duplex	955	40%
Mobile Home	308	13%
Other	5	0%
Townhouse	8	0%
Travel Trailer	1	0%
Unknown	10	0%
Total	**2,388**	**100%**

Source(s): FEMA Individual Assistance data. Analysis effective 9/15/17

3.1.8 Impact to Public, Subsidized and Other Supportive Rental Housing

The State of North Carolina conducted outreach to housing providers in impacted areas to determine the damages, displacement, and unmet needs of subsidized and supportive rental housing. This included emails, a survey, and follow-up phone calls that took place between March 2 and March 20, 2017. NCEM contacted multiple Public Housing Authorities (PHAs), the State Housing Finance Agency, State Community Development Block Grant Disaster Recovery (CDBG-DR) Communities, and North Carolina's Department of Health and Human Services (DHHS) to quantify the disaster's results, understand how it has impacted the families served by the agencies, and determine what needs are still unmet. The following is a summary of these communications. This information will be updated as more details become available to include any data from the most impacted counties and communities.

3.1.8.1 Public Housing

The State contacted PHAs in the most impacted areas, including Greenville Housing Authority, Pembroke Housing Authority, Lumberton Housing Authority, the Housing Authority of the City of Rocky Mount, and Wilmington Housing Authority. Via survey, the State asked which properties/units (if any) were damaged and where they are located; how many people were displaced and if they have returned; what the overall damage cost is; whether the units have been repaired; and if any costs or repairs are remaining. Information was received from four of the five housing authorities, which showed that Wilmington incurred no damage, Greenville and

Rocky Mount received minor damage, and Lumberton experienced severe damage. Pembroke is calculating the overall costs and will provide the information when available. Each of these facilities will be eligible for FEMA Public Assistance (PA) and will have, in addition to unmet needs, a 25 percent local match requirement that will need to be met and is part of the State's unmet need.

Table 10: Survey Results from Public Housing Authorities as of March 15, 2017

City/County	What are the overall damage costs?	What amount of those costs was/is/will be covered by insurance and/or other sources?	Remaining Costs	Are there repairs that still need to be made?
Lumberton	$8,000,000 +/-	$3,000,000 +/-	Yes	Yes, $5,200,000
Greenville	~$8,000-$10,000	None	No	No
Rocky Mount, Edgecombe, Nash Counties	$6,000	$2,020	$3,980	Interior water damage not covered by insurance - repairs are being completed by force labor.
Wilmington	0			
Pembroke	Unknown			

Source: Survey results from PHA outreach, effective 3/10/17.

The Lumberton Housing Authority had, by far, the most extensive damage totaling an estimated $8 million, with approximately $5 million in remaining unmet need. There are currently 264 families displaced, currently living with family members or using housing vouchers, who have yet to move back into their homes as all units are still in the process of being repaired.

In addition to Lumberton, Greenville and Rocky Mount had damages with a combined total of $16,000, and Rocky Mount still has $3,980 costs remaining. In Greenville, 105 Public Housing families were displaced; however, all of the units have since been repaired, and all families have moved back.

The results of these outreach efforts to housing providers in the areas impacted by Hurricane Matthew will remain relevant as the State leverages CDBG-MIT to address remaining public housing restoration needs.

3.1.8.1.1 Amendment 5 Update

After the initial PHA recovery needs were addressed, additional unmet recovery needs for PHAs were identified. In addition to the ongoing need in Robeson County with the City of Lumberton, The Housing Authority of the City of Goldsboro and the Wilson Housing Authority have both identified recovery needs. NCORR reviewed these recovery needs and included them in the unmet recovery needs analysis of this Amendment and intended to fund these initiatives through the Public Housing Restoration Fund, which has been added to the Mitigation Action Plan.

The housing programs within this Action Plan Amendment aimed to address remaining unmet needs, after considering funds available from insurance and other sources, to restore public housing and return families to their homes.

3.1.8.1.2 Amendment 7 Update

An additional need for funds was identified by Wilson Housing Authority during the selection process for the Whitfield Homes Expansion project. The total expected cost of that project has increased to $2,712,905. The updated public housing need is therefore $11,172,422. As public housing recovery needs change, these estimates are subject to revision.

Table 11: PHA Recovery Needs (September 2020)

Area	PHA	Housing Need	# of Projects	# of Units (Minimum)	Project Name
Robeson County	Lumberton Housing Authority	$ 6,959,517	3	72	Hilton Heights, Myers Park
Wayne County	Goldsboro Housing Authority	$ 1,500,000	1	48	Park Court
Wilson County	Wilson Housing Authority	$ 2,712,905	1	32	Whitfield Homes Expansion
Total	-	$ 11,172,422	5	152	-

3.1.8.1.3 Amendment 8 Update

Significant construction cost overruns currently experienced by the Homeowner Recovery Program are expected to also impact public housing projects. In anticipation of potential changes in scope and project cost related to current market conditions, a funds contingency is allocated to the Public Housing Restoration activity to permit quick and decisive action on proposed project cost and scope changes without requiring an action plan amendment for every proposed change. As project costs are finalized, the Action Plan will be amended with final cost information.

3.1.8.2 Other Subsidized Housing

Similar to the PHAs, the State sent a survey to the North Carolina Housing Finance Agency (NCHFA), USDA, and other housing providers in impacted communities, to assess damages and unmet needs due to Hurricane Matthew. According to the NCHFA, 397 units were damaged. The agency believes they have sufficient funds to make the needed repairs using insurance proceeds. However, if there are instances where subsidized affordable rental housing has remaining unmet needs, their recovery will be given priority in the rental housing programs outlined in this Action Plan.

Table 12: NC Housing Finance Agency Properties Damaged by Hurricane Matthew

Name	City	County	Units
Prince Court Apartments	Princeville	Edgecombe	30
Asbury Park Apartments	Princeville	Edgecombe	48
Holly Ridge Apartments	Lumberton	Robeson	110
Mount Sinai Homes	Fayetteville	Cumberland	99
ARC/HDS Northampton Co GH	Woodland	Northampton	6
First Baptist Homes	Lumberton	Robeson	40
Cypress Village	Fair Bluff	Columbus	40
Glen Bridge	Princeville	Edgecombe	24

Source: North Carolina Housing Finance Agency, effective 3/10/17

The State also sent surveys to CDBG-DR Entitlement Communities in the impacted areas, and received responses back from Fayetteville and Rocky Mount. In Fayetteville, a reported 952 rental properties were severely damaged, and 671 remain unrepaired. The City cited a need for substantial mitigation and resiliency measures, as many damaged properties were severely damaged, exceeding 50 percent value. The city is currently determining the costs of repair and unmet needs, after factoring in other federal assistance and insurance proceeds. Rocky Mount reported 340 rental homes damaged and are currently determining repair costs and unmet needs.

3.1.8.3 Permanent Supportive Housing

The State contacted North Carolina's housing partners to understand the impact Hurricane Matthew had on homeless shelters, transitional housing facilities, or any housing facilities that serve those with disabilities or supportive housing. They were asked what the total damaged properties were, how many people were displaced, and if they are still displaced.

The North Carolina Department of Health and Human Services (DHHS) manages the delivery of health- and human-related services for all North Carolinians, especially our most vulnerable citizens – children, elderly, disabled, and low-income families. DHHS has not yet reported damage to any permanent supportive housing or service facilities, while the State is currently assessing unmet needs.

In addition to restoring existing permanent supportive housing and services, this disaster event likely calls for new services to families and residents who have not historically been served by DHHS. For many very low-income owners and renters, older adults, and persons with disabilities, the impact of severe flooding can lead to a variety of needs. For many families, the loss of their homes; lost wages due to job interruption; limited access to transportation; and the stress associated with living in overcrowded or unsafe conditions due to "doubling up" or remaining in their damaged homes out of necessity warrants additional services in the form of emergency housing assistance, mental health support services, homeless prevention services, and health and transportation assistance. The State will address these needs, working closely with local communities, with emphasis on assisting families currently displaced or at risk of displacement.

3.1.9 Housing Unmet Need Assessment

The State has taken multiple steps in estimating the housing unmet needs resulting from Hurricane Matthew. This includes conducting field inspections of damaged homes; analyzing and updating FEMA IA data, SBA loan data, and NFIP data; conducting county-led planning efforts; and surveying PHAs and other housing providers to determine what financial needs will be required to restore our homes and neighborhoods.

The State estimates a total housing unmet need of $443,476,828 to address unmet needs related to owner-occupied housing, rental housing and public housing. Additional public service needs to support the recovery process are estimated at $36,248,561, for a total estimated need of $479,725,389.

Table 13: Hurricane Matthew Summary of Housing Unmet Need & Public Services Need

Source	Estimated Need
Owner-Occupied & Rental Housing Unmet Need	$428,276,828
Public Housing Unmet Need	$15,200,000
Total Housing Unmet Need	**$443,476,828**
Total Public Services Need	**$36,248,561**
Grand Total Housing Unmet Need + Total Public Services Need	**$479,725,389**

3.1.9.1 Owner-Occupied and Rental Housing

The State conducted a Housing Unmet Need Assessment by examining the estimated total loss (need) and resulting unmet need for owner-occupied and rental housing. The assessment is aligned to HUD's own standard approach to analyzing housing unmet need, with slight modifications to the original methodology and assumptions based on reanalysis of the most recent data sets under Substantial Amendment 10. The reanalysis uses the most recent FEMA Individual Assistance (IA) data, SBA loan data to homeowners, NFIP data, and damage inspections performed by the State. See Appendix C for the detailed source data, methodology and assumptions used to estimate housing unmet need for owner-occupied and rental housing.

To estimate unmet needs for owner-occupied and rental housing, the Assessment subtracts the estimated funds received from FEMA, SBA, and NFIP from the total estimated loss (need).

Through reanalysis of the most recent data sets summarized in Table 14, the State has determined that the total owner-occupied and rental housing unmet need is largely unchanged, with a total estimated housing unmet need of $428,276,828 for owner-occupied and rental housing. The September 2017 Housing Unmet Need Assessment outlined in Appendix D estimated a total housing unmet need of $433,965,933 related to owner/renter repair damages and elevation/buyout, representing only a 1.33 percent decrease when compared to the reanalysis.

Table 14: Hurricane Matthew Owner-Occupied and Rental Housing Unmet Need Summary

Category	Estimated Total Loss (Need)	Estimated Resources Available/ Received	Estimated Unmet Need (Estimated Total Loss less Estimated Resources Available/Received)
Owner-Occupied Housing Loss	$548,358,109		$548,358,109
Rental Housing Loss	$102,940,148		$102,940,148
FEMA Individual Assistance		$83,628,670	($83,628,670)
SBA Loans: Residential		$33,483,522	($33,483,522)
NFIP Assistance		$105,909,236	($105,909,236)
Total Owner-Occupied & Rental Housing	**$651,298,256**	**$223,021,428**	**$428,276,828**

Source(s): See Appendix C for data sources, detailed methodology and assumptions

3.1.9.2 Public Housing

As outlined in Section 3.1.8, the State conducted outreach via a survey to housing providers in impacted areas to determine the damages, displacement, and unmet needs of subsidized and supportive rental housing in March 2017. Throughout the recovery and planning process, the State has continued coordination and planning efforts with multiple Public Housing Authorities (PHAs), the State Housing Finance Agency, State Community Development Block Grant Disaster Recovery (CDBG-DR) Communities, and North Carolina's Department of Health and Human Services (DHHS) to revise housing unmet needs related to public housing. Based on the survey data and data gathered through continued planning efforts, the State estimates the unmet need to repair severely damaged public housing units is $15,200,000.

Table 15: Hurricane Matthew Public Housing Unmet Need

Category	Estimated Unmet Need
Total Public Housing	**$15,200,000**

Source(s): March 2017 survey responses from State and local housing providers and agencies, and Continued Coordination and Planning Data

3.1.9.3 Additional Public Services

As outlined in Section 3.1.8.3, the State in coordination with the North Carolina Department of Health and Human Services (DHHS) identified a need for additional public services to families and residents who have not historically been served by DHHS. In 2017, the State estimated $17,371,361 would be needed to provide support services for persons needing assistance relating to homeless, families living in poverty, persons needing medical or mobility assistance due to disabilities, permanent supportive housing needs, persons who are currently displaced and need additional housing assistance, and services to older residents especially challenged by displacement.

This need was largely addressed through the Back@Home NC program, administered by the DHHS. This program is a $12 million initiative for individuals and families who are not eligible for Individual Assistance through the Federal Emergency Management Agency (FEMA) or who may be receiving limited FEMA assistance and still need help securing housing or other supportive services. Services include help finding housing, rent and utility assistance, move-in supplies, and, if needed, help accessing other resources like job training and placement and childcare.

The State has identified a need to provide funds to address shortfalls for homeowners who sell their homes to the State through a buyout program and, because of the cost of new housing, will have a gap in their home sale price and the cost to move into the new residence. The State estimates $10,077,200 will be needed to assist homeowners with the process of moving to new residence.

Under previous Action Plan Amendments, Buyout Funds were reallocated from CDBG-DR to CDBG-MIT. Refer to the State's Mitigation Action Plan for more details on these activities and any additional unmet needs analyses.

Lastly, the State has also identified a need for LMI homeowners who will expect to see their insurance premiums increase and will not be able to afford flood insurance once their homes are rebuilt. The State estimates $8,800,000 will be needed to provide flood insurance subsidies to LMI homeowners.

Table 16: Additional Public Service Needs

Source	Estimated Need
Supportive Services	$17,371,361
Homeowner Assistance Program	$10,077,200
Insurance Subsidies for LMI Owners	$8,800,000
Total Public Service Needs	**$36,248,561**

Source(s): FEMA Individual Assistance, Small Business home loan data; survey responses from State and local housing providers and agencies; analysis effective 9/13/17

3.1.9.4 Amendment 10 Update

See Section 3.1.9 for the revaluation of Housing Unmet Need based on the most recent data sets. Reference Appendix C for the Methodology and Assumptions for Estimating Housing Unmet Need under the revaluation. Reference Appendix D for the previous Action Plan's September 2017 Housing Unmet Need Assessment. With Substantial Amendment 10, the Public Housing Restoration funds are being reallocated from CDBG-DR to CDBG-MIT. Refer to the State's Mitigation Action Plan for more details on these activities and any additional unmet needs analyses.

3.2 Vulnerability of the Most Impacted Communities

As was articulated in the initial Action Plan, North Carolina's approach to recovering its homes and neighborhoods after Hurricane Matthew is to strategically examine where the damage occurred and then focus its recovery efforts in those areas, paying special attention to the housing types, household types, and special needs of these unique communities. The allocation of funds in the Action Plan Amendment, shows North Carolina's commitment to the most vulnerable communities. The original analysis remains unchanged, and the use of the metrics in this analysis is shaping program design.

Families and individuals with social vulnerabilities oftentimes face greater challenges in evacuating during a disaster event, including finding suitable and affordable housing if displaced, and being able to afford making the repairs needed so that they can return to their homes. To address this issue, North Carolina analyzed IA applications to determine which neighborhoods withstood the brunt of Hurricane Matthew's impact and then examined the socio-economic and demographic profiles of these neighborhoods.

For the purpose of this study, we consider a neighborhood to be "most impacted," if at least 25 homes experienced major to severe damage (i.e. homes with a category 3, 4, and 5 damage level, or Major-Low, Major-High, and Severe damage), or where at least 5 percent of all homes had major to severe damage. The analysis defines vulnerable populations as older residents (65 years old or older), persons with disabilities, homeless or individuals at risk of homelessness, neighborhoods where at least 50 percent of households earn less than 80 percent Area Median Income (AMI) (LMI neighborhoods), households with English language barriers, and households who do not own personal vehicles. This data is publicly available using the 2010-2014 American Community Survey (ACS) and is collected at the Census Tract-level (aligned with our definition of a neighborhood). To determine if a Census Tract has a disproportionate number of residents or families with social vulnerability, we compare the figures to state averages, or use HUD-standard benchmarks (i.e. majority of households are low-income, for example).

Based on this analysis, there are five neighborhoods located in Lumberton, Princeville, Fayetteville, and Fair Bluff that were severely impacted (where at least 100 homes experienced major to severe damage). Of these five neighborhoods, an impacted family is more likely to be low-income, minority, and without a family car than what is typical in the State. Among the other impacted neighborhoods, there are pockets of damage where residents have English language barriers, disabilities, and are also low-income and minority neighborhoods. There are no substantially impacted neighborhoods with a disproportionate number of older residents. Even so, North Carolina understands that many older households have substantial rebuilding challenges, and their needs will be addressed through local outreach efforts and prioritization among programs.

Additionally, North Carolina is committed to rebuilding damaged communities in a manner that furthers fair housing opportunities to all residents. For this reason, the Assessment identifies which impacted neighborhoods have a disproportionate concentration of minority populations.

As these communities rebuild, the State will focus its planning and outreach efforts to ensure that rebuilding is equitable across all neighborhoods, which may include providing affordable housing in low-poverty, non-minority areas where appropriate and in response to natural hazard-related impacts.

Table 17: Most Impacted Neighborhoods and Social Vulnerability [Y = Disproportionate Social Vulnerability]

Town	County	Neighborhood	Owner	Renter	Total	Disability	Language Barriers	No Access to Vehicle	Minority	LMI
Lumberton	ROBESON	37155960801	150	320	470	N	N	Y	Y	Y
Princeville	EDGECOMBE	37065020900	156	211	367	N	N	Y	Y	Y
Lumberton	ROBESON	37155960802	125	144	269	Y	N	Y	Y	Y
Fayetteville	CUMBERLAND	37051003203	26	107	133	N	N	N	Y	N
Fair Bluff	COLUMBUS	37047930600	50	59	109	Y	N	Y	N	N
Fayetteville	CUMBERLAND	37051000200	53	40	93	Y	N	Y	Y	Y
Rural	WAYNE	37191000901	44	48	92	N	Y	N	N	N
Goldsboro	WAYNE	37191001500	24	61	85	Y	N	Y	Y	Y
Rural	ROBESON	37155961802	16	61	77	Y	N	N	Y	Y
Rural	DARE	37055970502	47	28	75	N	N	N	N	Y
Rural	CUMBERLAND	37051003001	52	16	68	N	N	N	N	N
Rural	PENDER	37141920502	41	24	65	N	N	N	N	N
Kinston	LENOIR	37107010800	2	62	64	Y	N	N	Y	N
Rural	ROBESON	37155961500	47	14	61	N	N	N	N	N
Hope Mills	CUMBERLAND	37051001601	32	17	49	N	N	N	N	N
Fayetteville	CUMBERLAND	37051003800	4	42	46	Y	N	Y	Y	Y
Lumberton	ROBESON	37155961302	23	23	46	N	Y	N	Y	N
Rural	ROBESON	37155961601	35	10	45	N	N	N	Y	N
Goldsboro	WAYNE	37191001400	12	31	43	N	N	Y	Y	Y
Rural	EDGECOMBE	37065021500	34	8	42	N	N	N	N	N
Fayetteville	CUMBERLAND	37051001400	22	20	42	Y	N	N	Y	Y
Goldsboro	WAYNE	37191002000	13	27	40	N	N	Y	Y	Y
Rural	WAYNE	37191001101	27	13	40	N	N	N	N	N
Rural	PENDER	37141920501	31	8	39	N	Y	N	Y	N
Rural	BLADEN	37017950100	34	4	38	Y	N	N	N	N
Seven Springs	WAYNE	37191000602	22	12	34	N	Y	N	Y	N
Kinston	LENOIR	37107010200	7	26	33	Y	N	Y	Y	Y
Rural	SAMPSON	37163971000	30	3	33	N	Y	Y	Y	N

Town	County	Neighborhood	Owner	Renter	Total	Disability	Language Barriers	No Access to Vehicle	Minority	LMI
Whiteville	COLUMBUS	37047930900	6	26	32	Y	N	Y	Y	Y
Lumberton	ROBESON	37155960701	29	2	31	N	Y	N	Y	Y
Kinston	LENOIR	37107011300	23	7	30	Y	N	N	N	N
Windsor	BERTIE	37015960400	18	12	30	Y	N	Y	Y	N
Rural	CUMBERLAND	37051001903	0	29	29	N	N	N	N	N
Tarboro	EDGECOMBE	37065021000	10	19	29	N	N	Y	Y	Y
Rural	CRAVEN	37049960200	24	3	27	Y	N	N	N	N
Rural	LENOIR	37107011300	15	12	27	Y	N	N	N	N
Rocky Mount	EDGECOMBE	37065020400	0	27	27	N	N	Y	Y	Y
Rural	WAYNE	37191001000	24	3	27	N	Y	N	N	N
Fayetteville	CUMBERLAND	37051000800	0	26	26	N	N	N	N	N
Rural	CUMBERLAND	37051001400	6	19	25	Y	N	N	Y	Y
Rural	GREENE	37079950102	20	5	25	Y	N	N	Y	Y
Rural	MOORE	37125950501	14	11	25	N	N	N	N	N

Source: Source(s): FEMA Individual Assistance data dated 1/16/17; American Community Survey 2010-2014; analysis effective 3/15/17.

The challenges associated with vulnerable populations can be categorized as follows:

Evacuation Needs – Many low-income families lack the financial capacity to evacuate during a storm event, with limited resources to pay for alternative lodging. Many do not own a vehicle and simply cannot evacuate without assistance. Similarly, older residents and persons with disabilities may not be able to evacuate due to mobility challenges and the need to be near their existing medical care. There are also residents who are unaware of impending disasters due to language barriers and social isolation from to lack of technology. These individuals and families often risk their safety, and even their lives, due to their inability to get out of harm's way as storm approaches. Although the storm has since passed, North Carolina acknowledges that many impacted neighborhoods are at continued risk of flooding in the event of a future storm and are using this flood event to understand what the evacuation needs may be for the neighborhoods hit hardest by flooding.

Displacement and Temporary Housing Needs – The greatest challenge most low-income families face immediately after evacuation is finding suitable temporary housing that is affordable and located near their jobs and basic services. Many are not able to pay for two homes (a mortgage on their damaged home and renting a new home) leading to severe debt or households "doubling up" with other family members. Even more challenging, many older adults and persons with disabilities have mobility challenges and medical needs, and moving far from their existing support network can lead to a sedentary, unhealthy living environment, or worse, a medical crisis. Very low-income residents, persons with disabilities, and many older adults impacted by Hurricane Matthew have supportive service needs like medical care, access to medicine, transportation assistance, and financial support during the rebuilding process.

Rebuilding Needs – The long-term goal of North Carolina is to safely return families and individuals to their communities and homes. The cost of repair is a major issue for low-income homeowners, particularly for those whose homes were devastated by flooding and whose insurance did not cover the damages. Many low-income residents cannot afford to move and cannot afford to rebuild. What often happens is that they remain in their damaged home, living in an environment that poses health risks like mold and structural damage. Renters may face even greater challenges, since it is up to the landlord to rebuild or not, and if the rental income was insufficient to encourage rebuilding, the landlord may choose to keep the insurance payout and not rebuild. This leads to long-term displacement of renters, which can be particularly challenging in smaller communities where there is a limited supply of rental units.

North Carolina will address these challenges by tailoring its housing recovery programs to the communities most impacted while providing a suite of supportive services and financial assistance to low-income families and other vulnerable populations struggling to rebuild their lives.

Figure 4: Most Impacted Neighborhoods that are Low- and Moderate-Income

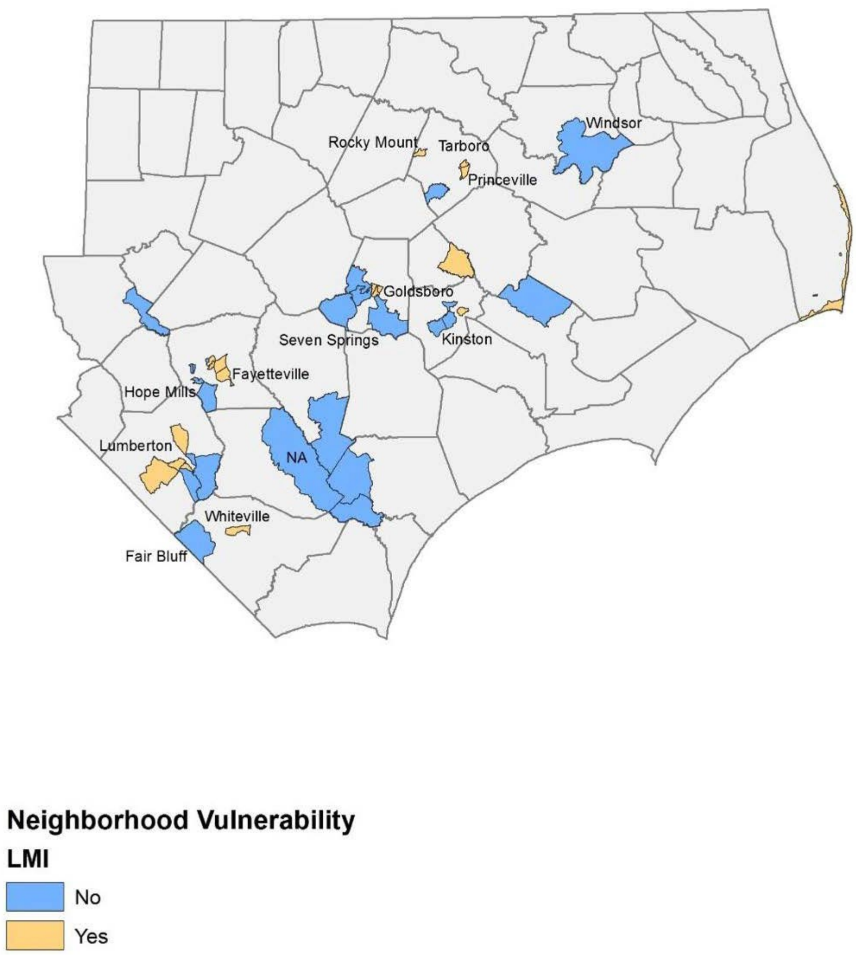


Figure 5: Most Impacted Neighborhoods with a Disproportionate Concentration of Households without a Car

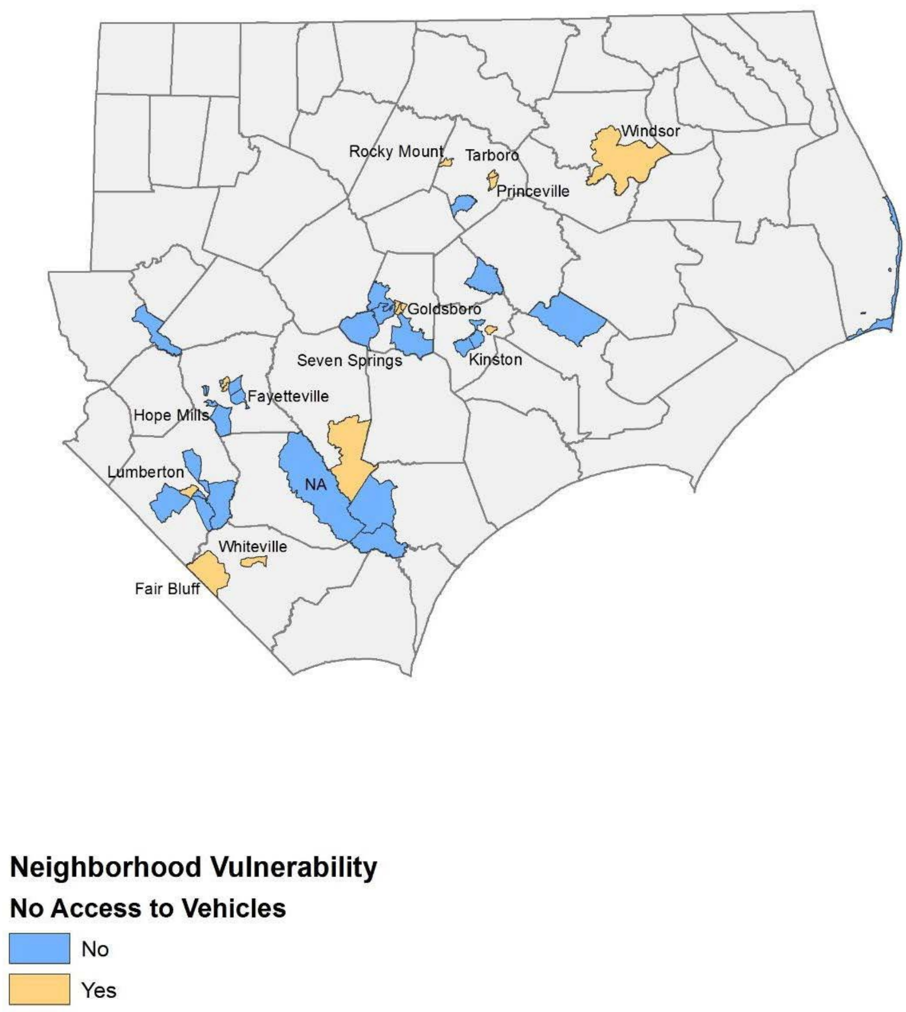
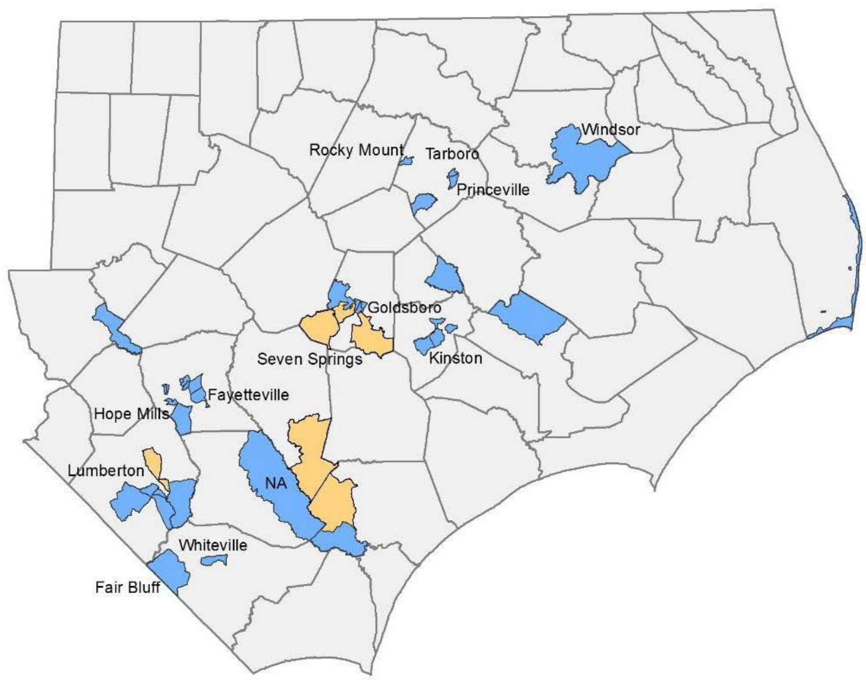


Figure 6: Most Impacted Neighborhoods with a Disproportionate Concentration of Residents who Maintain Language Barriers



Neighborhood Vulnerability

Language Barrier

No

Yes

Figure 7: Most Impacted Neighborhoods with a Disproportionate Number of Residents with Disabilities

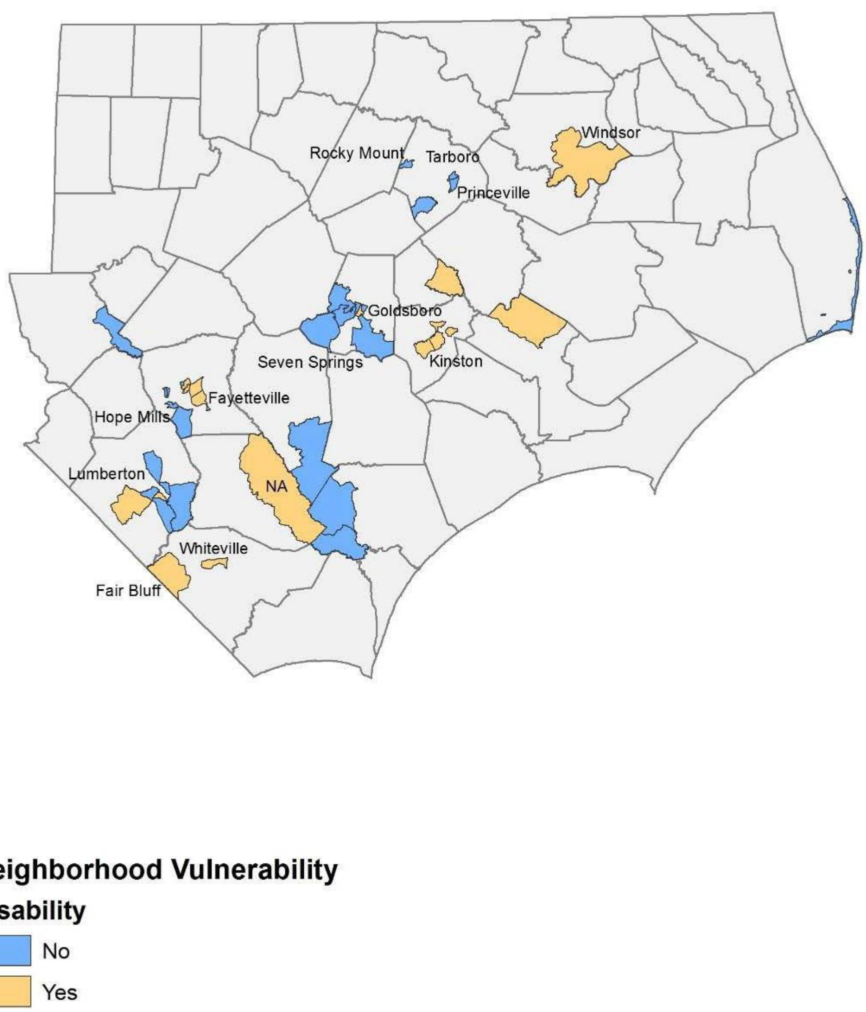
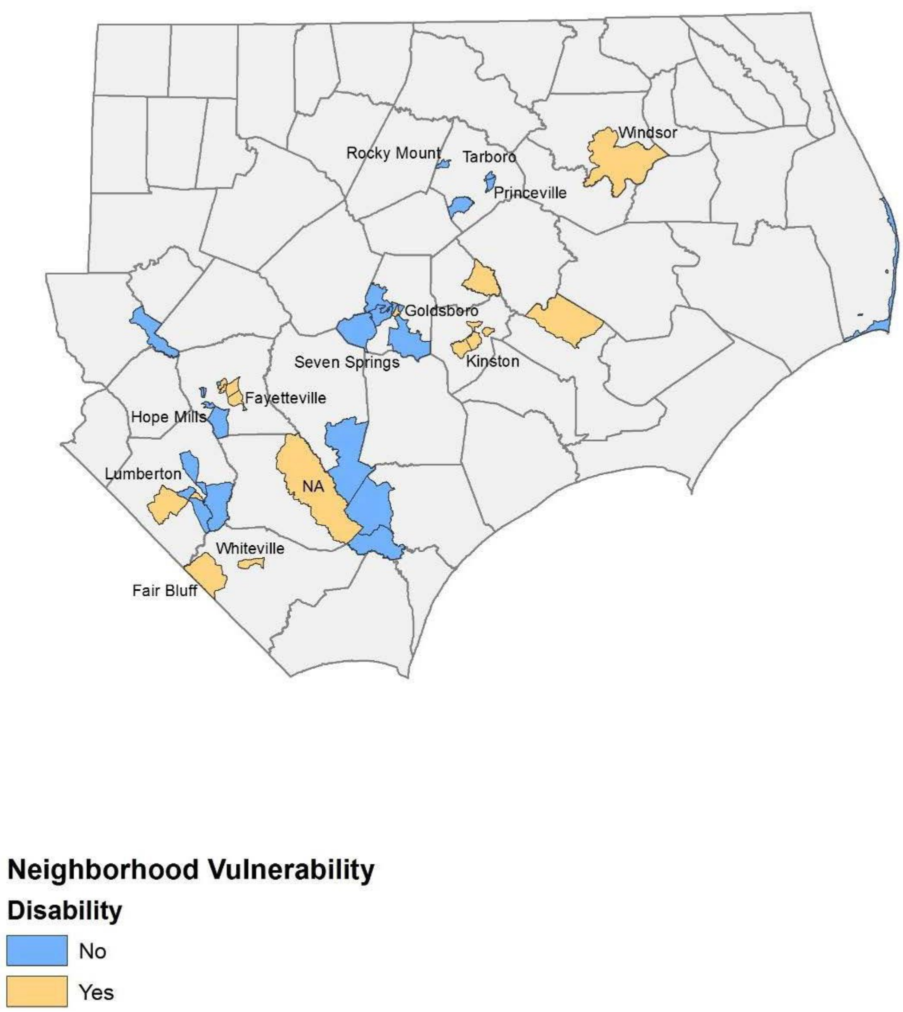


Figure 8: Most Impacted Neighborhood with a Disproportionate Concentration of Minority Populations



3.3 Economic Recovery

As was shown in the initial Unmet Need Assessment, Hurricane Matthew caused extensive damage to small businesses in eastern and central North Carolina with most businesses located in rural counties leaving a large unmet need. That analysis continues to be accurate as, to date, neither the SBA nor USDA has addressed the recovery needs following Matthew. Small businesses are the economic backbone of most towns in North Carolina, and these businesses are where residents shop for groceries, buy gas, dine, lodge, and acquire retail and other services that define the community. Many businesses also support and rely on the state's agricultural economy, including family farms and agribusinesses, for survival. As was shown in the initial Action Plan, a key industry sector that was impacted by Matthew was the State's agricultural economy. The State still estimates that in part due to SBA loan denials and lack of dedicated recovery funding from the USDA for the farming community, the agricultural and small business community continues to have a $263 million unmet need.

The most recent data from the SBA, continues to show that the counties most impacted by Matthew have the highest number of per county applications for assistance, and 95 percent of these businesses have less than 100 employees. Based on the September 2017 data on business related loans programs, small businesses in North Carolina are seeing more loans denied than approved, with 645 applications approved and 752 denied.

In addition to the businesses who were denied an SBA loan, there were 7,740 businesses who were referred to the program but never applied. The State, in consultation with community leaders and through the planning process, believes that many of these businesses, while having unmet recovery need, did not submit the loan package to SBA because they knew they would not qualify.

A primary component of North Carolina's economic strength is its agricultural sector. The USDA declared 79 of the State's 100 counties as having significant agricultural damage from Matthew and the North Carolina Department of Agriculture and Consumer Services reported that 48 counties were seriously impacted, with these counties accounting for 71 percent of the total farm cash receipts and representing $9.6 billion of the $13.5 billion total. The Department assessed that Matthew had a $422 million impact to major commodities and, because agriculture production is seasonal, many farms lost an entire year's crop from Matthew and, along with it, a potential loss of markets. As a result, the State is continuing to assess agricultural recovery throughout the 2017-2018 growing season, but based on current information, there is substantial evidence that small agricultural businesses were substantially impacted, losing their anticipated 2017 earnings in the floodwaters. Without being fully compensated from USDA or SBA, they represent a large, unmet need.

Based on information from State Agencies and SBA, the current estimated unmet need for small businesses, including the agricultural sector, is $263,435,519. This assessment is based on a conservative approach of taking (1) 10 percent of the business losses for firms that were referred to FEMA who did not apply for SBA assistance, (2) all businesses that applied for an

SBA loan but were denied, (3) an assumption that SBA business loans cover 80 percent of unmet needs, and (4) State estimates of ongoing agricultural losses that were not addressed by USDA through its programs. The data highlights that the most vulnerable businesses in North Carolina continue to be small businesses in rural counties, within the service, agriculture, and retail industries. The fact that these firms are located within or connected to the residential areas in the hardest hit counties amplifies the importance of obtaining funding to address the unmet needs of the business and agricultural sector as the services, local employment, and stability provided by small businesses are critical factors in ensuring that overall community and regional recovery will occur.

Table 18: Unmet Economic (Small Business) Needs

	Business Loans Denied	Business Loans Approved	Referrals only	Average Loan Amount	Estimated Damages	Amount Received	Estimated Unmet Need
Total	752	645	25,064	$92,981	$288,186,019	$24,750,500	$263,435,519

Source: US SBA, 09/18/17

3.4 Public Infrastructure and Facilities

As was shown in the State's initial Action Plan, Matthew devastated public infrastructure in eastern and central North Carolina. The State recognizes that the primary funding source used to repair and restore damaged public infrastructure is the Federal Emergency Management Agency's Public Assistance (FEMA PA) program. Since the initial Action Plan was published, the State has completed its 50-county comprehensive, ground up, community planning process. As a result, infrastructure-related projects will be implemented that were developed from these plans.

The following sections provide information from the Initial Action Plan outlining the initial infrastructure impact and unmet need.

3.4.1 Community and Supportive Facilities

As was documented in the State's original Action Plan, some public facilities that were damaged will be repaired using FEMA PA funds. However, State facilities that provide social, community, and health (including mental health) services to support Matthew recovery also incurred unmet needs that are not eligible for FEMA PA program funds. Through local outreach and needs assessments under the Initial Action Plan, the State estimated an additional unmet need of $45.4 million to address and pay for these services and facility upgrades.

3.4.2 Dams and Levees

As was documented in the State's original Action Plan, North Carolina has the largest number of dams in the nation with 1,200 high hazard dams that could potentially endanger lives and property if they fail. North Carolina's Division of Energy, Mineral, and Land Resources reported that 20 dams were breached and 46 additional dams damaged as a result of Matthew, including the levee protecting the Town of Princeville, which resulted in millions of dollars in damages while other dams threatened more than 500 structures and residences.

North Carolina's dam/levee work, which represented an unmet need of $38 million under the initial Action Plan, will ensure the structures admitted under the United States Army Corps of Engineers (USACE) P.L. 84-99 are accredited under the FEMA National Flood Insurance Program (NFIP).

3.4.3 Department of Transportation (DOT)/HUD/Federal Highway Association (FHWA) Transportation Facilities and Infrastructure

As was shown in the State's original Action Plan, North Carolina's road system was heavily impacted by Matthew. An important component of the national disaster response plan is the integration and delineation of how FEMA and US DOT provide funding to states to address storm-related repairs to road systems. As a result of Matthew, approximately 42,000 miles of roads needed to have either debris removal, emergency protective measures, and or specific site repairs. These activities will require the State to provide matching and, as disclosed in the initial Action Plan, represented an unmet need of $52.6 million.

3.4.4 USDA / FSA Disaster Grant Programs

As was shown in the State's original Action Plan and highlighted in the Economic Recovery section, Hurricane Matthew caused substantial damage to North Carolina's rural areas. This included the loss of field crops and livestock who perished in the floodwaters, causing environmental hazards in the streams, ponds, and other bodies of water. The State, working with the USDA under the Initial Action Plan, estimated an unmet need of $177.7 million for USDA related activities including clean-up efforts and restoration of watersheds that are tied to Matthew.

3.4.5 Environmental Protection Agency (EPA) – Drinking Water and Wastewater Repair and Mitigation

As was highlighted in the State's original Action Plan, since the publication of the plan, the State has continued to work with the EPA and FEMA, to address the substantial unmet needs for the repair and mitigation of the water and wastewater treatment systems that were impacted by Matthew. The State estimated under the Initial Action Plan an unmet need of $274 million even after considering opportunities to restore and mitigate these systems with FEMA PA funds.

3.4.6 National Guard Facilities and Equipment

The National Guard plays a vital and critical role in disaster recovery during the initial response period, providing emergency response functions (ESFs), helping citizens to safe ground, and securing assets. The National Guard's staging facilities and equipment must be maintained. Matthew impacted five facilities that will require a match that under the Initial Action Plan represented an unmet need of $730 thousand.

3.4.7 Infrastructure Unmet Need Assessment

The State conducted a revaluation of the Infrastructure Unmet Need Assessment by examining the estimated total loss (need) and resulting unmet need using HUD's own standard approach to analyzing infrastructure unmet need. The Assessment is based on a reanalysis of the most recent FEMA Public Assistance (PA) data set under Substantial Amendment 10.

To estimate unmet need for infrastructure, the reanalysis uses only a subset of the Public Assistance damage estimates reflecting the categories of activities most likely to require CDBG funding above the Public Assistance and State match requirement. Those activities are categories: C, Roads and Bridges; D, Water Control Facilities; E, Public Buildings; F, Public Utilities; and G, Recreational—Other. Categories A (Debris Removal) and B (Protective Measures) are largely expended immediately after a disaster and reflect interim recovery measures rather than the long-term recovery measures for which CDBG funds are generally used.

The total estimated loss (need) was based on the total FEMA PA Project Amount for damage categories C through G. To estimate total unmet need, the Assessment subtracts the total federal obligations (FEMA PA Federal Share Obligated amount) from the total estimated loss (need).

Through reanalysis of the most recent data set summarized in Table 19, the State has determined that the infrastructure unmet need has decreased significantly, with a total estimated unmet need of $70,461,799.

Table 19: Hurricane Matthew Infrastructure Unmet Need Summary by Damage Category

Damage Category	Estimated Total Loss (Need)	Federal Obligations (FEMA PA Federal Share Obligated)	Estimated Unmet Need (Estimated Total Loss less Federal Obligations)	Percent of Total Estimated Unmet Need
C - Roads and Bridges	$119,754,373	$89,815,780	$29,938,593	42%
G - Recreational or Other	$49,851,811	$37,388,858	$12,462,952	18%
F - Public Utilities	$48,799,869	$36,599,902	$12,199,967	17%
E - Public Buildings	$40,335,679	$30,251,760	$10,083,920	14%
D - Water Control Facilities	$23,105,468	$17,329,101	$5,776,367	8%
Total Infrastructure	**$281,847,201**	**$211,385,402**	**$70,461,799**	**100%**

Source(s): FEMA Public Assistance (PA) data as of 11/8/2022

The October 2017 Infrastructure Unmet Need Assessment outlined in Appendix E estimated a total infrastructure unmet need of $543,597,450, representing an 87 percent decrease when compared to the reanalysis.

In October 2017, applications to the FEMA PA program were anticipated to increase. For this reason, the previous assessment supplemented the FEMA data sets with the initial unmet need estimates outlined in Sections 3.4.1 to 3.4.6; this approach was taken to use the data available at the time to best estimate the infrastructure unmet need. Removing these initial unmet need estimates and aligning the reanalysis with HUD's standard approach to analyzing infrastructure unmet need contributed greatly to the 87 percent decrease noted above.

It is also important to note that the latest FEMA PA data set shows that over $87 million in federal funds were obligated to projects in damage categories C through G since October 2017 (based on FEMA PA Obligated Date), which is what prompted the State to use the latest FEMA PA data to reevaluate the infrastructure unmet need aligned to HUD's standard methodology.

The reanalysis also highlights that 77 percent, or $54,601,512, of the total estimated infrastructure unmet need is related to damage categories: C, Roads and Bridges; G, Recreational—Other; and F, Public Utilities.

The State has also made a considerable amount of funding available under the State Emergency Response and Disaster Relief Fund to address the State match for federal disaster programs. $88,528,370 was awarded to this fund, with 56% of those awarded funds being spent as of September 2018 and totaling to $49,783,649.[3] When accounting for the State match funds spent as of September 2018, the total estimated infrastructure unmet need decreases further to $20,678,150.

Through the reanalysis of the most recent FEMA PA data set, the State also found that 68 percent of the estimated infrastructure unmet need, totaling to $47,925,765, is for statewide projects or for projects in counties that have been defined as MID areas by HUD. Another 21 percent of the estimated infrastructure unmet need, totaling to $14,507,949, is for projects in counties that have not been defined as MID areas by HUD or the State. Table 20 summarizes the infrastructure unmet need by MID category.

[3] https://www.ncleg.gov/PED/Reports/documents/Disaster/Disaster_Report.pdf, May 20, 2019, Page 7 of 50

Table 20: Hurricane Matthew Infrastructure Unmet Need Summary by MID Category

MID Category	Estimated Total Loss (Need)	Federal Obligations (FEMA PA Federal Funds Obligated)	Estimated Unmet Need (Estimated Total Loss less Federal Obligations)	Percent of Total Estimated Unmet Need
Statewide	$123,387,295	$92,540,471	$30,846,823	44%
HUD Defined MID	$68,315,766	$51,236,825	$17,078,941	24%
Non-MID	$58,031,797	$43,523,848	$14,507,949	21%
State Defined MID	$32,112,343	$24,084,257	$8,028,086	11%
Total	**$281,847,201**	**$211,385,402**	**$70,461,799**	**100%**

Source(s): FEMA Public Assistance (PA) data as of 11/8/2022

The State recognizes that the data collection and documentation of community infrastructure and public facilities needs is ongoing. In addition to the documented costs from Federal sources with the completion of the State's community planning effort, additional recovery related projects will be implemented that represent an unmet need for infrastructure projects. The infrastructure projects are contained in each of the 50 county plans that were submitted to the State in the summer of 2017 and are shown on the rebuild.nc.gov website at https://www.rebuild.nc.gov/resiliency/hurricane-matthew-resilient-redevelopment-plans.

As it was disclosed in the original Action Plan, all infrastructure related projects will refer to the *Federal Resource Guide for Infrastructure Planning and Design*: http://portal.hud.gov/hudportal/documents/huddoc?id=BAInfra ResGuideMay2015.pdf.

3.4.8 Amendment 9 Update

Significant construction cost increases may impact the ongoing infrastructure recovery. To permit the NCORR Community Development team greater speed in responding to requests to adjust construction scopes of work, a contingency of approximately 25% is added to the infrastructure allocation. This contingency allows the Community Development team to be able to assess the needs of each project as they change over time and respond quickly and effectively, without the need for an action plan amendment related to every change request.

3.4.9 Amendment 10 Update

See Section 3.4.7 for the revaluation of the Infrastructure Unmet Need based on the most recent FEMA PA data set. Reference Appendix E for the previous Action Plan's October 2017 Infrastructure Unmet Need Assessment. With Substantial Amendment 10, the Infrastructure recovery funds are being reallocated from CDBG-DR to CDBG-MIT. Refer to the State's Mitigation Action Plan for more details on these activities and any additional unmet needs analyses.

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4.0 Planning, Coordination, and Community Outreach Needs

The State's initial Action Plan highlighted the robust planning effort in response to the unmet needs resulting from Hurricane Matthew. In addition to the Action Plan process, the North Carolina General Assembly established the North Carolina Resilient Redevelopment Planning (NCRRP) program as part of the *2016 Disaster Recovery Act* (Session Law 2016-124). This effort was funded by the State and did not use CDBG-DR funds. North Carolina Emergency Management served as the coordinating body to develop regional planning strategies to ensure consistency across the State and establish the basis for the state's disaster recovery action plan. The planning effort was initiated in February of 2017 and was completed in August of 2017 with the final submission of 50 county recovery plans. The plans can be found at https://www.rebuild.nc.gov/resiliency/hurricane-matthew-resilient-redevelopment-plans#a-b-c.

The purpose of the program was to 1) provide a roadmap of strategic plans and actions for a more resilient community rebuilding and revitalization for areas that were impacted by the Matthew, and; 2) define any unmet funding needs required to implement those actions after other funds are used. The program empowered communities to prepare locally-driven recovery plans, to identify redevelopment strategies, suggest innovative reconstruction projects, and identify other needed actions to allow each community not only to recover from Matthew but also to become more resilient to future storm events. At the state level, this planning effort assisted in promoting sound, sustainable, long- term recovery planning. By using post-disaster evaluation of hazard risk, especially land-use decisions that reflect responsible floodplain management, the potential for possible sea level rise, increasing frequency and severity of rain and other storm events, the plans helped shape the recovery process that is incorporated in this Action Plan, which along with citizen input, provides a roadmap for how recovery, rebuilding, and resiliency can occur in impacted counties.

With the planning process complete, implementation of the proposed projects and actions described in the Plans can begin, subject to applicable federal, state, and local laws and regulations. Proposed projects or actions may be eligible for state or federal funding or could be accomplished with municipal, nonprofit, or private investments. While the State will utilize the Plans as a roadmap for recovery as it engages with community and county governments through this recovery process, inclusion of a project or action in a specific Plan does not guarantee that it will be eligible for recovery funding as currently the State is significantly oversubscribed and underfunded across all program areas.

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5.0 Nexus Between Unmet Need and Allocation of Resources

The State's initial Action Plan prioritized providing funds to communities that experienced the most significant damage from Hurricane Matthew as described in the Impact and Unmet Needs Assessment. The State continues to be focused on aiding these communities and the counties that were most impacted. Based on the recently completed 50 county planning process, the State will support recovery objectives in each of the impacted counties, with a focus on the four most impacted counties. Based on the county planning process, community outreach, and research and analysis of revised and updated available Federal data, the following unmet needs are the main priorities for this Action Plan Amendment #1 as reflected in the proposed recovery activities:

- Providing a significant portion of the allocation as additional assistance to the housing sector to ensure that homeowners that were impacted by Matthew have resources and options available as they begin to rebuild, repair, or replace homes with major to severe damage. Continuing to ensure that an adequate supply of rental housing is available that is safe, sustainable, and affordable in the most impacted areas.
- Providing additional assistance to LMI families and other persons with supportive service needs.
- Providing additional assistance to address community recovery needs, including funds to assist with the local match for FEMA funded programs (PA and HMGP) so that homeowners can relocate to higher and safer ground, to assist units of government address recovery and rebuilding needs of public infrastructure, and to ensure that some projects and priorities identified in the county planning process can be implemented.

All proposed activities and uses described in the following programs are authorized under Title I of the Housing and Community Development Act of 1974 or allowed by waiver or alternative requirement and will be located in a Presidentially declared county eligible for assistance.

5.1 National Flood Insurance Restrictions

Homeowners who receive Hurricane Matthew CDBG-DR funds detailed in the Action Plan should be aware that the State must conduct a check to see if the homeowner has maintained flood insurance if they were previously assisted with FEMA IA or other federal disaster funds and were required to maintain flood insurance as a condition of receiving those funds. In the event that a homeowner is found to have not maintained adequate flood insurance when required to do so, the property will be ineligible for repair, replacement, or restoration assistance with CDBG-DR funds.

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6.0 Allocation of CDBG-DR Funding

The State of North Carolina continues to prioritize housing activities for CDBG-DR assistance with a total of $217,456,550.10 (92 percent) in funding dedicated to this activity. This is a combination of the Homeowner Recovery Program and Multi-Family Housing Program.

Previous Action Plan amendments have defined MID and non-MID areas as Tier 1 and Tier 2 counties, respectively. Since then, the Tier 1 and Tier 2 designation have been clarified in favor of MID or non-MID designations. MID refers to the designation assigned by HUD for "most impacted and distressed" area. HUD defines MID areas as counties that are eligible to receive FEMA Individual Assistance (IA) funds, have a housing recovery need greater than $13 million after other funds to repair have been received. Table 21, as shown below, summarizes the current allocation of CDBG-DR funding followed by a description of the methods of distribution to MID and non-MID Counties.

Table 21: Distribution of CDBG-DR Funds by Program

Activity	PREVIOUS APA 11 Allocation	CURRENT APA 12 Allocation	CURRENT APA 12 LMI Allocation	CURRENT APA 12 MID Allocation
Administration	$11,826,450	$11,826,450	$0	$9,461,160
Planning	$4,176,353	$3,742,353	$0	$2,542,046.5
Homeowner Recovery Program	$197,506,532	$207,635,032.10	$163,718,790.2	$166,557,907.9
Small Rental	$0	$0	$0	$0
Multi-Family	$19,516,018	$9,821,518	$9,821,518	$9,821,518
Public Housing Restoration	$0	$0	$0	$0
Small Business Recovery	$3,503,647	$3,503,646.90	$484,985	$2,514,929.5
Infrastructure Recovery	$0	$0	$0	$0
TOTAL	**$236,529,000**	**$236,529,000**	**$174,025,293.2**	**$190,897,562**
% OF TOTAL ALLOCATION	**100%**	**100%**	**74%**	**81%**

Of the allocated amounts, at least 80 percent of the total funds provided to the state of North Carolina will address unmet needs in HUD's Most Impacted and Distressed (MID) counties of Cumberland, Edgecombe, Robeson, Wayne, and as of June 21, 2019, Bladen and Columbus. Non-MID counties, including Anson, Beaufort, Bertie, Brunswick, Camden, Carteret, Chatham, Chowan, Craven, Currituck, Dare, Duplin, Franklin, Gates, Greene, Halifax, Harnett, Hertford, Hoke, Hyde, Johnston, Jones, Lenoir, Martin, Moore, Nash, New Hanover, Northampton, Onslow, Pamlico, Pasquotank, Perquimans, Pitt, Richmond, Sampson, Tyrrell, Wake, Warren, and Wilson remain eligible for the remaining 20 percent of CDBG-DR assistance. Recent guidance provided by HUD on the use of Florence MID areas allows for expenditures in Brunswick, Carteret, Craven, Duplin, Jones, New Hanover, Onslow, Pamlico, Pender, and Scotland to meet the MID expenditure requirement.

A minimum of 70 percent of the total CDBG-DR program funds will be used to support activities benefitting low- and moderate-income persons.

6.1 Allocation Changes – Action Plan Amendment 9

Action Plan Amendment 9 introduced several changes to allocations including the reallocation of the Small Rental Recovery Program funds to support the Homeowner Recovery Program and the Infrastructure Recovery Program. This reallocation was made in consideration of the amount of funding dedicated to multi-family housing support and other affordable housing programs across both the Matthew CDBG-DR and Florence CDBG-DR grants and the projected increased funding needs for current operating activities.

Construction cost overruns experienced by the Homeowner Recovery Program are expected to also impact the cost of delivering infrastructure recovery. To address that expected need, a funding contingency has been added to the Infrastructure Recovery Program to permit NCORR to quickly make decisions on scope changes and proposed cost changes without requiring an action plan amendment for every change in cost. Although increased costs are anticipated, costs must remain reasonable and necessary to be considered for CDBG-DR funds for these activities. Activity cost changes that are realized during activity delivery will be documented in future action plan amendments.

6.2 Allocation Changes – Action Plan Amendment 10

Action Plan Amendment 10 presents additional allocation updates. The reallocation of the Multi-Family program funds and transfer of the Public Housing Restoration and Infrastructure funds to the CDBG-MIT Action Plan further strengthens the ongoing recovery efforts of the Homeowner Recovery Program. Such reallocations are in consideration of the amount of funding dedicated to multi-family housing support and other affordable housing programs across both the Matthew and Florence CDBG-DR grants; continued anticipated increased funding needs for currently operating activities; and, a realignment of longer-term resilience and mitigation activities, such as those in the Public Housing Restoration and Infrastructure programs, with the objectives of the CDBG-MIT funds.

As detailed in Action Plan Amendment 9, construction cost overruns experienced by the Homeowner Recovery Program are expected to continue impacting the cost of delivering disaster recovery efforts. To address such expected need and the potential impacts of economic inflation, additional funds have been reallocated to the Homeowner Recovery Program. Although these increased costs and economic impacts are anticipated, NCORR will ensure that costs remain reasonable and necessary to be considered for CDBG-DR funds. Activity cost changes that are realized during activity delivery will continued to be documented in future action plan amendments.

Reference Appendix F for an analysis of estimated unmet need across CDBG funding sources to inform State allocation changes.

6.3 Allocation Changes – Action Plan Amendment 11

After reviewing the closeout of activities related to the Small Business Recovery Program, the State conducted a reanalysis of remaining funds initially obligated to the program. The updated analysis yielded $996,353 in unspent funds that could be reallocated to other disaster recovery efforts related to Hurricane Matthew. As highlighted in Table 21, NCORR has opted to reallocate those funds to support remaining planning efforts.

6.4 Allocation Changes – Action Plan Amendment 12

After a final review of projects and activities related to the Small Business Recovery Program, Planning, and the Multi-Family Program, the State concluded an analysis of remaining costs and funds once obligated to those activities. Such analysis yielded $10,128,500.10 in funds that could be reallocated to other disaster recovery efforts. As highlighted in Table 21, NCORR has opted to reallocate those funds to support costs associated with the ongoing efforts of the Homeowner Recovery Program.

Additionally, minor updates to the LMI and MID numbers were made, as appropriate, to more accurately reflect the actual outcomes of the deliverables and activities completed by the different programs prior to closing out the grant. Definitive figures will be published as part of the final QPR after the closeout process of the grant is completed. These minor updates do not reflect any changes to the eligibility criteria for the activities or programs.

6.5 MID Allocation of Funding

In accordance with the State's Citizen Participation Plan, the CDBG-DR program held several public meetings throughout the impacted regions to review the State's Action Plan and proposed activities eligible for the first allocation of CDBG-DR funding resulting from Public Law 114-254. These meetings were held during the months of June, July and August 2017 and were targeted to County Managers, Emergency Management Personnel, Planners and Community Development Specialists. The meetings highlighted the total amount of funding ($198,553,000) that the State received for the DR program and potential amount of funding by activity that would be made available to both MID and Non-MID counties as well as the process for applying for funding. Public comments were also submitted and included as part of the State's initial Action Plan.

After the first Action Plan, the State of North Carolina was provided an additional $37,976,000, bringing the total CDBG-DR allocation to $236,529,000 under Public Laws 114-254 and 115-31. This additional funding was amended into the first Substantial Action Plan Amendment in which public commentary was considered and included as part of the plan.

The Federal Register Notices for both State allocations require the expenditure of 80 percent of CDBG-DR funding in the "most impacted and distressed areas" which include the counties of Cumberland, Edgecombe, Robeson, Wayne, and as of June 21, 2019, Bladen, and Columbus. The breakdown of available funding for MID counties is as follows:

Federal Register Notice	CDBG-DR Allocation	MID Counties Allocation
Public Law 114-254	$198,553,000	$158,842,400
Public Law 115-31	$ 37,976,000	$30,380,800
TOTAL	**$236,529,000**	**$189,223,200**

As required, a minimum of $189,223,200 will be disbursed in MID Counties in order to address unmet needs in all program areas. Existing subrecipient agreements with MID Counties will be adjusted as funds are re-allocated and/or as specific projects are approved.

6.6 Non-MID Allocation of Funding

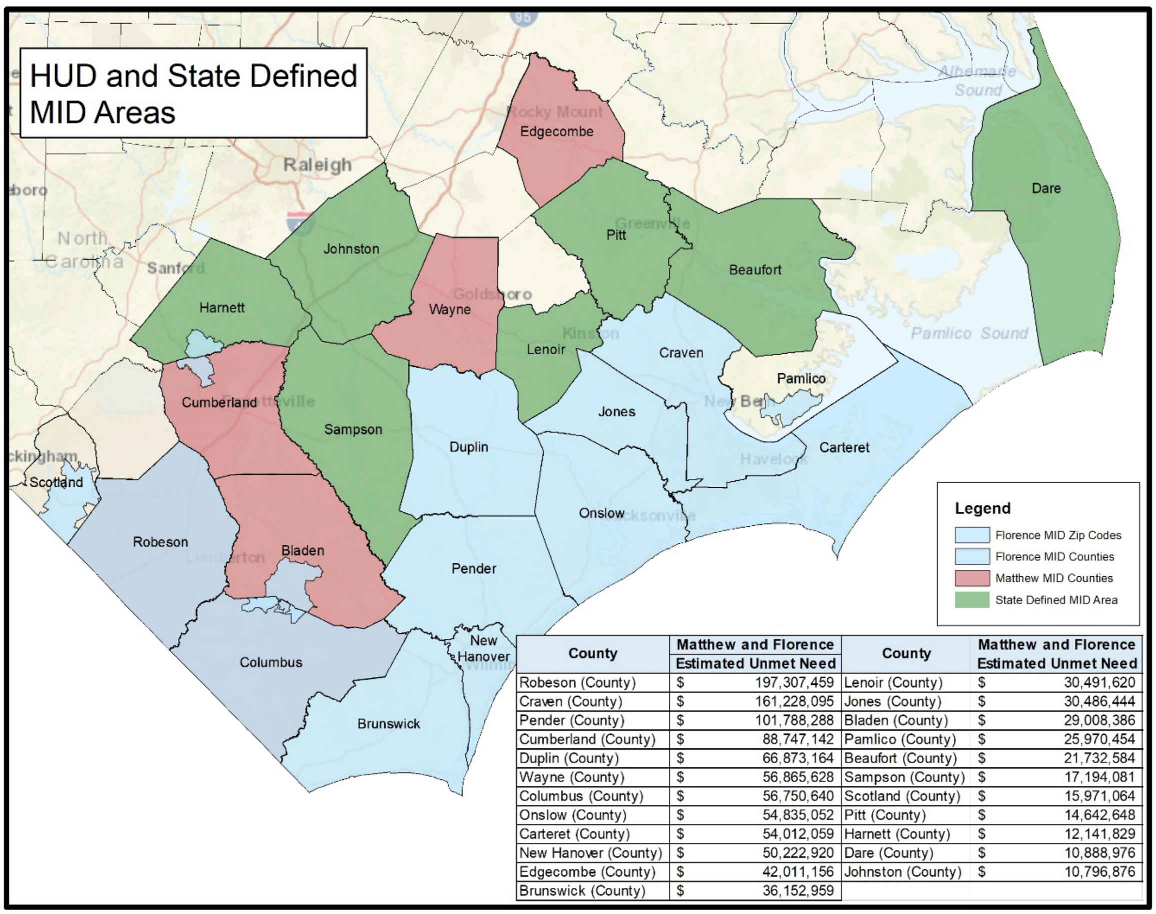
Funding is currently available to Non-MID Counties for CDBG-DR projects. Non-MID county funding will be obligated, de-obligated, or re-allocated to specific projects as detailed applications are reviewed and approved by NCORR as part of an application process. Existing subrecipient agreements with certain Non-MID Counties will be adjusted as funds are reallocated and/or specific projects are approved.

6.7 State-Identified MID Areas

In consideration of the unique recovery needs created by the large area of the State that was impacted by both Hurricane Matthew and Hurricane Florence, NCORR conducted an analysis of damage to areas that were impacted by both storms. In adherence with the allocation methodology outlined in Appendix A for both 82 FR 5591 for Hurricane Matthew and 85 FR 4681 for Hurricane Florence, NCORR calculated an estimated unmet need for both events combined. This analysis used the Major-Low, Major-High, and Severe damage categories for both events and multiplied those damage categories by the repair estimation factors included in Appendix A for each respective notice. The threshold to be considered a State-identified MID is greater than $10 million in combined losses at the county level for both storm events.

The result is the addition of seven counties which are considered the State-identified MID areas. These counties are Beaufort, Dare, Harnett, Johnston, Lenoir, Pitt, and Sampson.

Figure 9 - State-Identified Most Impacted and Distressed Areas



County	Matthew and Florence Estimated Unmet Need	County	Matthew and Florence Estimated Unmet Need
Robeson (County)	$ 197,307,459	Lenoir (County)	$ 30,491,620
Craven (County)	$ 161,228,095	Jones (County)	$ 30,486,444
Pender (County)	$ 101,788,288	Bladen (County)	$ 29,008,386
Cumberland (County)	$ 88,747,142	Pamlico (County)	$ 25,970,454
Duplin (County)	$ 66,873,164	Beaufort (County)	$ 21,732,584
Wayne (County)	$ 56,865,628	Sampson (County)	$ 17,194,081
Columbus (County)	$ 56,750,640	Scotland (County)	$ 15,971,064
Onslow (County)	$ 54,835,052	Pitt (County)	$ 14,642,648
Carteret (County)	$ 54,012,059	Harnett (County)	$ 12,141,829
New Hanover (County)	$ 50,222,920	Dare (County)	$ 10,888,976
Edgecombe (County)	$ 42,011,156	Johnston (County)	$ 10,796,876
Brunswick (County)	$ 36,152,959		

These state-identified areas are for recovery planning purposes and for a deeper understanding of the hardest hit dual impacted areas of the State. While expenditures in these state-identified

MID areas do not meet the 80 percent expenditure requirement set by HUD, they do satisfy the requirement set at 85 FR 4686 which reiterates that:

> *"CDBG–DR grants in response to Hurricane Matthew may be used interchangeably and without limitation for the same activities that can be funded by CDBG–DR grants in the most impacted and distressed areas related to Hurricane Florence. Additionally, all CDBG–DR grants under the 2018 and 2019 Appropriations Acts in response to Hurricane Florence may be used interchangeably and without limitation for the same activities in the most impacted and distressed areas related to Hurricane Matthew."*

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7.0 Method of Distribution & Delivery

The HUD designated Grantee is the North Carolina Office of Recovery and Resiliency (NCORR). In addition to Program Administrative and Planning funding, NCORR, as the Grantee, will be responsible for managing the majority of CDBG-DR programs to include the Homeowner Recovery Program, Small Rental Recovery, and Strategic Buyout Programs. The North Carolina Department of Commerce (NCDOC), acting as a subrecipient to NCORR, will manage the Small Business Recovery Assistance Program in conjunction with Community Development Financial Institutions (CDFIs). The North Carolina Housing Finance Authority (NCHFA) will be subgranted funds to execute the Multi-Family Rental Housing Program. Counties executing program delivery will be responsible for administering Community Recovery/Infrastructure Programs. In some instances, counties executed elements of the Homeowner Recovery Program. These roles are indicated on Table 22. If requested by a county, NCORR may enter into a subrecipient agreement with municipalities within the county, or with other non-federal entities such as public housing authorities, to carry out CDBG-DR programs within the county.

Supplemental to the Method of Distribution for CDBG-DR funding, Table 22 depicts the method of delivery for the Homeowner Recovery Programs for counties that have elected not to participate in the State-Centric model managed by NCORR. While most affected counties have elected to participate in the state-centric model managed by NCORR, some have chosen to become Subrecipients and administer all or a portion of housing assistance provided by the Homeowner Recovery Program. Table 22 depicts the 8-steps of the Homeowner Recovery Program and the method of program delivery in each county not participating in the state-centric model. Note that only counties which are participating in program delivery are depicted. If a county is not included in the table, the State-Centric model applies. As of Substantial Action Plan Amendment 6, the State administers all aspects of the Homeowner Recovery Program. Table 22 is included only to record past program administration efforts.

Table 22: Method of Program Delivery for CDBG-DR Homeowner Recovery Programs (Prior to Amendment 6)

	1 Step 1 Application	2 Step 2 Eligibility Review	3 Step 3 Duplication Check	4 Step 4 Inspection & Environmental Review	5 Step 5 Grant Determination	6 Step 6 Contractor Selection	7 Step 7 Construction	8 Step 8 Completion
Cumberland	C	S	S	S	S	S	S	S
Edgecombe	C	S	S	S	S	S	S	S
Robeson	C	C	C	C	C	C	C	C
Wayne	C	S	S	S	S	S	S	S

S=State-Centric Activity administered by NCDEM
C=County-Centric Activity administered by the *County and/or Municipality*

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8.0 Recovery Programs

The State's initial Action Plan created a suite of disaster recovery programs to address the impacts from Hurricane Matthew. Occasionally, some program requirements and caps are adjusted to address any potential unmet needs that may arise. The following sections of the Action Plan describe each program in detail.

8.1 Homeowner Recovery Program

The Homeowner Recovery Program (HRP) will aid homeowners who experienced major to severe damage to their homes and have remaining unmet needs, after accounting for assistance received to recover. The program will include rehabilitation, repair, reconstruction, and new construction activities as well as elevation and flood insurance subsidies to eligible homeowners. In consideration of changing construction costs and the availability of labor and materials, NCORR has made the strategic decision to use modular home construction as a viable replacement for reconstruction and certain manufactured home unit (MHU) replacement work. Homeowner Recovery Programs will be administered by NCORR. Available homeowner assistance is listed below.

8.1.1 Homeowner Rehabilitation and Reconstruction

For homeowners who wish to remain in their homes or rebuild on their existing property, the program will provide grants for rehabilitation or reconstruction. Applicants eligible for rehabilitation assistance may reach a level of repair scope, cost, or other situation in which reconstruction, instead of rehabilitation, is more feasible. Building a new stick-built home on a different site is also allowable in certain situations, as set forth in the HRP Policy. The method of determining the construction intent (rehabilitation or reconstruction/new construction) will be outlined in detail in the *ReBuild NC Homeowner Recovery Program Manual* and may change over time.

8.1.2 Manufactured Home Repair or Replacement

Manufactured homes with damages between $1,000 and $5,000 may be eligible for assistance with repairs. Applicants with repairs exceeding $5,000 may be eligible for replacement. Replacing a damaged MHU on a different site is allowable in certain situations, as set forth in the HRP Policy.

New applicants participating in the 2020 application period (and beyond) with a double-wide or larger MHU will be eligible for repairs between $1,000 and $10,000 and replacement of units with damages greater than $10,000.

8.1.3 Reimbursement

For new applicants in 2020, homeowners who expended funds that are not duplicated with other assistance received in order to make necessary repairs or purchased a replacement manufactured home may be eligible for a reimbursement grant if these expenses were incurred prior to application for assistance to the program or September 14, 2018, whichever occurred first. Applicants earning more than 80 percent AMI shall no longer need to demonstrate a hardship to the Program to receive a reimbursement award.

Homeowners that performed Emergency Repairs after the “stop work” period (from the time of the application until completion of the Tier II environmental review) may still be eligible for assistance following a review of the scope of the repairs. Emergency Repairs are defined at 24 CFR Part 58.34(a)(10) as repairs that ‘do not alter environmental conditions and that are necessary only to arrest the effects from a state or federally declared public disaster or imminent threats to the public safety including those resulting from physical deterioration’.

Homeowners that performed Emergency Repairs during the “stop work” period will be asked to submit documentation demonstrating that the repairs performed comply with 24 CFR Part 58.34(a)(10). Homeowner-provided documentation will be reviewed to determine eligibility to participate in the program. Participating homeowners must certify that their repairs meet the definition of Emergency Repairs before receiving reimbursement funding.

Reimbursement only awards may be offered to eligible homeowners that wish to be reimbursed for work performed and not proceed with program-managed rehabilitation, if the remaining rehabilitation scope is modest and the homeowner is satisfied with a reimbursement only award. The method for calculating this award type is noted in each project file that accepts this alternative award.

8.1.4 Elevation Assistance

In addition to assistance for rehabilitation, reconstruction, and MHU replacement, homeowners may receive elevation assistance to ensure that their homes are elevated. Elevation assistance is provided in addition to the rehabilitation and reconstruction award limits. The elevation assistance maximum for rehabilitation awards is a $/SF cap based on the conditions of the project and limited to the actual cost of elevation. Applicants that meet the criteria to be elevated (defined below) are offered resilient reconstruction as an alternative to the rehabilitation and elevation scope of work. After a review of the average cost of elevation (including elevation design, engineering, and other “soft costs” of elevation), the average cost of repair, and a comparison to the cost of a comparable reconstruction, NCORR has determined that elevation is not a suitable alternative to reconstruction. This determination is based on the cost of elevation compared to a safer, more resilient, and mitigated reconstruction project. NCORR has accordingly adjusted the elevation program to be supplemental to the reconstruction program and is not offered as a part of the rehabilitation scope. Applicants may appeal to have their property elevated as a part of a rehabilitation rather than reconstructed. In some instances, reconstruction will not be allowable (such as with SHPO requirements), and elevation may need to be pursued instead. NCORR will make determinations on these instances on a case-by-case basis.

Mandatory Elevation

- Properties located within the 100-year floodplain that meet the FEMA definition of substantially damaged, will be substantially improved, or meet the Program reconstruction threshold and not yet elevated 2 ft. above base flood elevation (BFE) or 2 ft. above an interior high-water mark.
  - Properties located within a Disaster Risk Reduction Area (DRRA) as formally adopted by NCORR, within or outside of the 100-year floodplain must also meet this requirement. DRRA adoption is effective as of the date that the DRRA was finalized by NCORR and approved by NCORR Senior Staff. Applicants who completed construction prior to the effective date of the DRRA, or applicants who are undergoing CDBG-DR funded construction (i.e. the contractor has been issued a notice to proceed) for rehabilitation, reconstruction, or MHU replacement prior to the date of DRRA adoption are not retroactively affected by the DRRA adoption.
  - Properties that are required to be elevated by local ordinance or by the local code enforcement officials within and outside of the 100-year floodplain.

At a minimum, homes will be elevated to two feet above the BFE as required by HUD or at least 2 ft. above the interior documented water marks as measured by the assessor, whichever documented water level is highest and reasonable. Local requirements for elevations more than two feet above BFE and the HUD requirement prevail where required. For MHUs, if the Program elevation standard makes it infeasible to elevate, the HUD elevation requirement prevails. The Program is unable to elevate structures that are situated on leased land unless the permission of the landowner is secured.

Optional Elevation

- Properties outside of the 100-year floodplain that:
  - Sustained at least six inches of interior water damage during Hurricane Matthew or Hurricane Florence and/or sustained water damages from both Hurricanes Matthew and Florence due to flooding and not roof or other “horizontal” water penetration; and
  - Are considered to be “substantially damaged” or will be “substantially improved” by the Program, as determined by program policies or the local jurisdiction or meet the Program’s “not suitable for rehabilitation” threshold.

Applicants who qualify for an optional elevation will be provided the option to reconstruct. Applicants who do not wish to reconstruct must forgo the optional elevation component of their scope of work. Applicants outside of an area with a designated Base Flood Elevation (BFE) that request optional elevation will be required to elevate their home above the height of interior documented water marks. For MHUs, if the program elevation standard makes it infeasible to elevate, the local requirement prevails. Otherwise, if a local requirement is not available, the program may opt to forego the optional elevation. The Program is unable to elevate structures that are situated on leased land unless the permission of the landowner is secured. If permission cannot be secured, the applicant must forgo the optional elevation.

8.1.5 Flood Insurance Assistance

LMI homeowners whose damaged home is located in the 100-year floodplain may be eligible for payment of their flood insurance premiums for up to $2,000 and a maximum of two years.

8.1.6 Subsidized Forgivable Loan

In cases where a DOB analysis is performed and the Program identifies that there would be a duplication for a household whose damaged home still requires recovery assistance, the Program may provide a CDBG-DR subsidized forgivable loan up to duplication amount not to exceed $50,000. If the household demonstrates a hardship or the facts and circumstances of their recovery warrant a loan greater than $50,000, the Program may extend an offer to loan more. The rationale for loans more than $50,000 will be documented in NCORR's system of record.

Additional details on subsidized loan, payment rates, forgiveness or cancellation terms, repayment schedule, monitoring requirements, acceleration schedule, and other loans terms will be found in the loan documents and Program manual or procedures.

8.1.7 Application Process

North Carolina citizens who were directly impacted by the disaster who are located in an eligible county could apply to the Homeowner Recovery Programs through one application into the program at any of the ReBuild NC Centers as listed on the ReBuild NC website until applications for assistance were closed on April 21, 2023. Additional avenues were available for remote applications during the COVID-19 pandemic. The application allowed applicants to list their housing recovery needs in more than one eligible category of assistance listed above.

8.1.8 Allocation for Homeowner Recovery Activities

8.1.9 $207,635,032.1 Maximum Award

Homeowner Rehabilitation: up to $20,000 per home. This cap has been adjusted to prioritize resilient reconstruction rather than rehabilitation of damaged property. Projects that were offered an award under the previous threshold ($70,000) will have that award type honored and will not need to agree to a new award, unless that award has been determined to be infeasible based on a review of the conditions on site. In those instances, a reconstruction may be required.

- Additional assistance is available for structural elevation, consistent with the elevation assistance cost calculation found in the Elevation SOP, based on actual elevation costs.
- Costs necessary to perform lead abatement and/or asbestos remediation are in addition to the program cap. Reasonable and necessary costs for lead abatement and asbestos remediation will be paid as needed separate from the program cap of $20,000.
- Unforeseen circumstances identified by a construction contractor, engineer, or architect may result in change orders which exceed the $20,000 cap. Change orders will be reviewed to ensure that costs are necessary and reasonable. Change orders that increase the costs of the rehabilitation above the $20,000 cap may be allowable based on a review of the facts and circumstances of each change order proposed.

The minimum amount of rehabilitation assistance needed to participate is $1,000.

LMI applicants located in the 100-year floodplain may also receive up to $2,000 in Flood Insurance Assistance.

Homeowner Reconstruction: The Program will provide awards necessary to completely reconstruct the damaged property, and in some circumstances, build the property on a new site, including demolition and removal of the original structure. The specific award amount is capped based on the size of the applicant's selected floorplan. Additional funds may be provided above the award cap to address site-specific accessibility needs (i.e. ramps and lifts), environmental issues, resiliency/mitigation measures, elevation requirements, and municipal ordinances, as needed.

Reimbursement: up to $70,000 to reimburse homeowners for non-duplicative expenses to repair their homes following the disaster prior to applying to the Homeowner Recovery Program. The reimbursement of expenses will be paid to homeowners who have completed disaster related repairs verified by inspections and program staff subject to environmental review. The conditions for exceeding the program cap specified in the 'Maximum Award' section of the Homeowner Rehabilitation Program are also in effect for the Reimbursement Program. Costs are only reimbursable if expended after Hurricane Matthew and prior to application for CDBG-DR assistance or September 14, 2018, whichever occurred first.

Mobile/Manufactured Home Repair: Up to $5,000 per applicant for homes with damages totaling between $1,000 and $5,000. For new applicants in 2020, double-wide and larger MHUs may be repaired when damaged between $1,000 and $10,000.

Manufactured Home Replacement: The Program will provide awards necessary to replace the damaged MHU, including demolition and removal of the original structure. MHUs may be replaced on a different site in certain situations. ADA compliant units are available for applicants that require those accommodations. Awards cover the cost of the unit as well as delivery, installation, and setup of the selected unit. Environmental remediation and accessibility features such as ramps or lifts are included in the award cost. An additional allowance is available for structural elevation.

Temporary Relocation Assistance (TRA): NCORR has adopted an Optional Relocation Policy to provide households with incomes less than or equal to 120 percent of Area Median Income (AMI) with temporary relocation assistance while they are unable to occupy their home during construction activities. Households earning greater than 120 percent AMI may qualify for TRA through a hardship exception. The Program will pay reasonable costs based on rate schedules developed by NCORR. This benefit is in addition to program caps for construction assistance.

Uniform Relocation Act (URA) policies and notification requirements will be followed to assist any tenants who are temporarily or permanently displaced due to program activities.

Table 23 - Homeowner Recovery Program Maximum Award Amounts

Program	Maximum Awards and Clarifications
Rehabilitation	Up to $20,000 per home. Does not include costs for lead abatement, asbestos remediation, accessibility costs (including disability accessible ramps or lifts), and unforeseen conditions necessitating an approved, reasonable change order.
Reimbursement	The Program cap for reimbursement is the same as the activity being reimbursed. For example, a rehabilitation reimbursement is capped at $70,000 per home.
Reconstruction	The Program will provide awards necessary to completely reconstruct the damaged property, including demolition and removal of the original structure. The specific award amount is capped based on the size of the applicant's selected floorplan. Additional funds may be provided above the award cap to address site-specific accessibility needs (i.e. ramps and lifts), environmental issues, resiliency/mitigation measures, elevation requirements, and municipal ordinances, as needed.
MHU Repair	Up to $5,000 for single-wide units and up to $10,000 for double wide units.
MHU Replacement	The Program will provide awards necessary to replace the damaged MHU, including demolition and removal of the original structure. ADA compliant units are available for applicants that require those accommodations. Awards cover the cost of the unit as well as delivery, installation, and setup of the selected unit. Environmental remediation and accessibility features such as ramps or lifts are included in the award cost. An additional allowance is available for structural elevation.
Elevation Assistance	The Program will provide grant funds in order to elevate structures to comply with program or local elevation requirements, whichever standard is greater. Elevation costs are separate from other program award caps. Costs associated with structural elevation are determined based on the activity. Eligible elevation costs are included in the HRP Policy Manual.

Program	Maximum Awards and Clarifications
Temporary Relocation Assistance (TRA)	The Program will pay reasonable costs based on rate schedules developed by NCORR to cover the amount of time an applicant must be temporarily relocated out of the unit while it is repaired, replaced, or reconstructed.
Flood Insurance Assistance	Up to $2,000, and a maximum of two years of assistance.
Subsidized Forgivable Loan	Up to duplication found in the DOB analysis and not to exceed $50,000 unless hardship or the facts and circumstances of the household's recovery warrant a greater amount. The rationale for the greater amount will be documented in NCORR's system of record.

8.1.10 National Objective

LMI, Urgent Need.

8.1.11 Eligible Activities

105 (a) (1) (3) (4) (5) (6) (7) (8) (9) (10) (11) (13) (14) (15) (16) (18) (20) (23) (24) (25) Rehabilitation; Reconstruction, Acquisition; New Residential Construction; Relocation, Demolition and Clearance, Non-Federal Match, and Homeowner Assistance.

8.1.12 Geographic Eligibility

Homes must be located in one of the disaster-declared counties eligible to receive HUD funds.

8.1.13 Priorities

LMI households will be prioritized for assistance.

8.1.14 Eligible Applicants

All owner-occupants whose primary residence was directly or indirectly impacted by Hurricane Matthew are eligible for Homeowner Rehabilitation, Homeowner Reconstruction, Manufactured Home Repair, and Manufactured Home Replacement. Owner-occupants are eligible for the track of the Homeowner Recovery Program which best suits their recovery needs. In accordance with HUD guidance that CDBG-DR funds may rehabilitate units not damaged by the disaster if the activity clearly addresses a disaster related impact and is located in a disaster-affected area (81 FR 83259 and 83 FR 5851), HRP will now assist properties in need of rehabilitation, reconstruction, or replacement in the most impacted and distressed (MID) areas regardless of the direct storm impact, as lingering challenges in suitable housing continue to stress housing availability in the MID areas. This MID designation includes the State-identified MID areas.

For new applicants to recovery programs beginning in 2020 and beyond, the maximum income for participating individuals and families is 150 percent area median income (AMI). HUD releases AMI updates periodically. AMI information is available at https://www.huduser.gov/portal/datasets/il.html#2020_data. Individuals and families earning greater than 150 percent AMI with a demonstrable hardship as defined in program policies are eligible. Some program tracks within the Homeowner Recovery Program require less than 150 percent AMI. Those alternative requirements are specified in their respective sections of the Action Plan.

8.1.15 Program Start Date

Q3 2017

8.1.16 Projected End Date

Q4 2024

8.2 Multi-Family Rental Housing Program

The Multi-Family Rental Housing Program has been designed to provide financing to repair majorly to severely damaged rental housing in the most impacted communities, and to create new affordable multi-family housing for LMI renters in the most impacted communities. The Multi-Family Rental Housing Program may also fund the one for one replacement of demolished units within the 100-year floodplain to a new location outside of the 100-year floodplain. The program will be administered by the North Carolina Housing Finance Authority (NCHFA) on behalf of NCORR. NCHFA will loan CDBG-DR funds to qualified developers to execute construction of new multi-family facilities. NCORR will monitor NCHFA to ensure compliance with the Action Plan and adherence to the Multi-Family Rental Housing Program policies and procedures, as well as crosscutting federal statutory requirements. NCHFA will determine what reasonable rent is based on the nature of the project.

Action Plan Amendment 8 included an additional $5.1 million in contingency to allow NCORR flexibility to review and potentially approve increased construction costs if they arise.

8.2.1 Allocation for Activity:

$9,821,518.

8.2.2 Maximum Award

Up to $53,000 per unit for rehabilitation. Up to $150,000 per unit for reconstruction or new construction. The State, upon review of applications for this Housing Program, reserves the right to alter the maximum award based on applications and may on a case-by-case basis utilize this exception policy to address specific rental housing needs. The conditions through which the program maximum award can be exceeded will be detailed in program policies and procedures and NCORR will document when the exception is applied.

8.2.3 National Objective

LMI

8.2.4 Eligible Activity

Sec. 105 (a) (1) (3) (4) (5) (6) (7) (8) (9) (10) (11) (13) (14) (15) (16) (20) (23) (25) Rehabilitation; Reconstruction, Acquisition; New Residential Construction; Relocation, Demolition and Clearance, Non-Federal Match, Construction of Housing.

8.2.5 Geographic Eligibility

Rental housing must be located in a damaged-declared county eligible to receive HUD funds.

8.2.6 Priorities

Priority will be given to projects located in the most impacted and distressed counties. Priority will also be given to projects that leverage other resources and produce new housing that is sustainable, integrated with neighborhood services and jobs, and provides deeper affordability.

8.2.7 Eligible Applicants

Developers and local government entities building rental housing reserved for households earning less than 80 percent of AMI. Projects must be multi-family new construction or substantial rehabilitation, consisting of more than eight units.

8.2.8 Projected Start Date

Q3 2019

8.2.9 Projected End Date

Q4 2023

8.3 Strategic Buyout Program

Homeowners who do not wish to remain at their damaged address may be eligible for participation in the Strategic Buyout Program if their property is located in an NCORR approved Disaster Risk Reduction Area (DRRA). The Strategic Buyout Program will be funded through the CDBG-MIT grant. Aligning the Strategic Buyout Program under a single funding source with a single set of rules and requirements simplifies the implementation of this program and better supports the mission of CDBG-MIT as a grant focused on long-term mitigation and resiliency. Future amendments to the Matthew CDBG-DR Action Plan will not include this activity.

Individuals interested in the Strategic Buyout Program are encouraged to visit https://rebuild.nc.gov/mitigation to learn more. Further information on the Strategic Buyout Program is also included in the CDBG-MIT Action Plan, found at https://rebuild.nc.gov/action-plans.

8.4 Public Housing Restoration Fund

The State's initial Action Plan created the Public Housing Restoration Fund with an allocation totaling to $13.4 million across the initial Action Plan and subsequent Substantial Amendments. The types of activities that PHAs can engage in, including using funds to cover the non-federal share or local match from FEMA PA program and engaging in activities that make facilities and units more resilient to future storm events, have also been added.

The $13.4 million previously allocated to the Public Housing Restoration Fund have been reallocated to the CDBG-MIT Action Plan. The reallocation further strengthens the ongoing recovery efforts of the Homeowner Recovery Program. The reallocation is also in consideration of a realignment of longer-term resilience and mitigation activities, such as those in the Public Housing Restoration Fund, with the objectives of the CDBG-MIT funds. Refer to the State's Mitigation Action Plan for more details on these activities.

8.5 Small Business Recovery Assistance

The State's initial Action Plan created the Small Business Recovery Assistance Program providing forgivable loans to impacted businesses after highlighting the significant damages that small businesses suffered as a result of Hurricane Matthew. For the purposes of the programs detailed herein, economic revitalization is not limited to activities that are ‘‘special economic development’’ activities under the Housing and Community Development (HCD) Act, or to activities that create or retain jobs. For CDBG-DR purposes, Economic Revitalization can include any activity that demonstrably restores and improves some aspect of the local economy; the activity may address job losses, or negative impacts to tax revenues or businesses. All Economic Revitalization activities must address any economic impact(s) caused by the disaster (e.g., loss of jobs, loss of public revenue). At the time of unmet needs analysis, 10,419 North Carolina small businesses had applied for assistance with SBA with business types ranging from, retail operations, entertainment, and tourism-based businesses to industries that support the agricultural and fishing sectors. While many businesses were impacted by Matthew, unfortunately, two-thirds of businesses that applied for an SBA business loan were denied funding, due to SBA's tightened credit requirements, reporting requirements, and repayment stipulations, leaving a large amount of unmet need.

The Small Business Recovery Assistance Program is administered by NCDOC on behalf of NCORR. A total allocation of $ $3,503,646.9 was allocated to complete delivery of this program.

8.5.1 Program Description

The Small Business Recovery Assistance Program will be administered by the NCDOC who has expertise and experience working with small businesses providing resources and technical assistance. The NCDOC also has relationships with key partners including Small Business Development Centers (SBDCs) and Community Development Financial Institutions (CDFIs) located in the impacted areas. This lending program is being carried out through multiple Community Development Financial Institutions (CDFIs), established as program subrecipients. The NCDOC has begun to implement this recovery program.

Funding of up to $300,000 per business can be used to address unmet recovery needs and to rehabilitate small businesses that were damaged from Hurricane Matthew. This includes using funds to address storm-related business losses, repair or replace and install furniture fixtures and equipment, provide working capital, pay for marketing costs, operating expenses, and inventory or to undertake storm-related repairs in the future. The Small Business Loan Program will provide small businesses the financial support needed to stabilize their business operations. Standard, uniform, underwriting procedures will be followed by the program CDFI's in determining both capacity and amount of loan per business and will be documented in the programs policy and procedures manuals and provided online at the ReBuild NC website.

The program will enable a broad spectrum of activities to support the varied needs of businesses and communities recovering from the Matthew. By expanding assistance to include a comprehensive range of economic development activities, the State and local governments will also have the opportunity to address economic impacts of the disaster in such a way that aligns with the long-term economic development goals of impacted communities. Additional activities supporting the business sector may include: small business technical assistance, commercial redevelopment or enhancement by public or private entities, development of public facilities related to economic development, industry cultivation and/or preservation, workforce training or development, planning for economic growth, and other activities to catalyze the state's economic recovery. Eligible activities may also include infrastructure development for economic revitalization purposes as well as mitigation, resiliency, and green building efforts to protect, strengthen, and increase efficiency of such investments. Through this comprehensive approach to revitalize, the State will be able to support communities as they rebuild and grow.

8.5.2 Allocation for Activity

$3,503,646.9

8.5.3 Maximum Award

Up to $300,000 per business.

8.5.4 Activity Type

Reimbursement, repair, replacement, or rehabilitation of damaged facilities and equipment, business operating losses, inventory, and customer base.

8.5.5 National Objective

LMI, Urgent Need.

8.5.6 Eligible Activity

Sec. 105 (a) (1) (2) (4) (8) (11) (14) (15) (17) (21) (22) (24) 42 U.S.C. 5305(a) (14) (15) (17) (22); Economic Revitalization FR– 5696–N–01 (VI) (D);

Applicants can use funds to address business operation losses that were already incurred (reimbursement for the repair and/or replacement of damaged structures and equipment) or to undertake remaining repair and business rebuilding and expansion costs.

In addition to providing direct assistance to impacted small business through the loan program mentioned above and assisting microenterprise and special economic development activities needed to restore commercial activity, the program can use economic revitalization efforts to enable a multi-pronged approach to ensure the businesses in North Carolina's most impacted areas are provided the support they require. This includes: financial and technical assistance to microenterprise, small and medium-sized businesses coordination of priority projects and to key economic revitalization needs identified within the County Resiliency Reconstruction Plans.

Aligning with state and local long-term economic development priorities, financial support can be provided to impacted communities for economic revitalization efforts including, but not limited to:

- Prioritized economic revitalization assistance to impacted LMI communities.
- Workforce training in key economic sectors.
- Development of high-growth industry clusters.
- Revitalization and preservation of key industry sectors including agriculture and fisheries.
- Rebuilding and expansion of infrastructure to attract and retain businesses and improve job access.
- Rebuilding and development to mitigate and increase resiliency for future impacts.
- Conducting planning activities to develop comprehensive revitalization and development plans.
- Enhancement of public facilities promoting economic development, including but not limited to: streetscapes, lighting, sidewalks, other physical improvements to commercial areas, and other activities for transformative projects such as property acquisition, demolition, site preparation and infrastructure repair and installation.

8.5.7 Geographic Eligibility

Small Businesses located in one of the damaged-declared counties.

8.5.8 Priorities

80 percent of program funds are set aside for services within the most impacted counties.

8.5.9 Eligible Applicants

Any SBA/NC defined Small Business or agriculture enterprise who has documented unmet recovery needs related to Hurricane Matthew, or will contribute to the economic recovery of one of the damage-declared counties through the addition of jobs and added economic activity to the community. Eligible applicants may also include local and county governments and nonprofits, who are engaged in activities that support small business economic recovery in the most impacted areas.

8.5.10 Projected Start Date

Q1 2019

8.5.11 Projected End Date

Q3 2023

8.6 Infrastructure Recovery Program

Previously, the Infrastructure Recovery Program refocused on infrastructure repair and new infrastructure development as a tie-back to the housing recovery need. Funding in this program was be used to address a wide range of community recovery and infrastructure needs including engaging in projects that restore, repair, rebuild, or make more resilient public assets that were impacted by Matthew.

After a review of the housing programs available and in response to increased demand for Homeowner Recovery Program activity, the CDBG-DR Matthew Infrastructure Recovery Program has had its allocation removed. Necessary infrastructure to support housing may be included as a part of a scope of work for affordable housing projects funded by the Affordable Housing Development Fund. The Infrastructure Recovery Program will be funded through the CDBG-MIT grant in order to better support the mission of CDBG-MIT as a grant focused on long-term mitigation and resiliency. NCORR may reevaluate the need and resources available for infrastructure recovery at a later date.

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9.0 General Eligibility Requirements

According to federal regulations mandated under the National Flood Insurance Reform Act (NFIRA) of 1994, buildings and property which utilized financial assistance from the Federal Government following a presidentially declared disaster may have been required to have and maintain flood insurance coverage. In the event that flood insurance lapsed or was no longer in effect at the time of Hurricane Matthew's impact, the owner of the building and/or property may not be eligible for additional federal assistance for the repair, replacement, or restoration of that property.

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10.0 Leveraging

The State's initial Action Plan and through this Amendment has described how, given the limited resources and large amount of unmet need, the State would need to leverage and maximize every available resource to address the recovery needs from Matthew. Since the posting of the original Action Plan, the State has continued to advance strategies that will maximize Federal funds, and is looking at innovative strategies and techniques that other States who are recovering from disasters are employing to repair, rebuild, and make more resilient public and private assets. The State continues to look for additional funding to address large unmet needs in three primary areas;

1. Funds in the housing and Homeowner Assistance Programs;
2. Funds for the Community Recovery Program/Infrastructure Recovery Program that will not only address public assets that were damaged by Matthew but also funding for innovative projects identified through the planning process that will make communities more resilient to future storm events; and
3. Targeted recovery funds for the business community focusing on the needs of rural businesses and key industry sectors including the agriculture industry.

The State is committed to maximizing the impact and use of all CDBG-DR funds. This includes ensuring that all other available funds available for recovery are utilized before CDBG-DR funds are used; continuing to work in close coordination with other local, State, and federal agencies, to address North Carolina's recovery needs; and, when feasible, combining CDBG-DR funds with other public and private investment as a means to increase the overall benefit to impacted residents, families, businesses, and communities.

The State of North Carolina most recently introduced and identified Opportunity Zones as part of its effort to leverage additional funding and maximize other community investment opportunities as part of the overall recovery strategy across the state in the areas impacted by the storm. This new federal program was created by the recently passed federal tax legislation, known as the *Tax Cuts and Jobs Act* (H.R.1). North Carolina's Governor designated 252 Opportunity Zones throughout the state on May 18, 2018. Of these 252 zones, 50 of them correlate with counties that have been impacted by [both] Hurricanes Matthew and Florence. The complete list of North Carolina Opportunity Zones can be downloaded here: https://public.nccommerce.com/oz/

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11.0 Program Income

In the previously submitted Action Plan, the State described how any program income that is derived will be utilized to address remaining unmet recovery needs within the program area where the program income was derived. This Action Plan Amendment modifies how the State will address program income. In the event that the State receives program income from a project, the State will assess and determine how to allocate the program income to other recovery programs that maintain unmet recovery needs. The determination of what program to allocate the funding will be based on existing program priorities, determining what remaining unmet needs have not been addressed with prior CDBG-DR funding, and prioritizing what programs are in the most urgent need. While throughout the life of this recovery program priorities are expected to change, the State currently estimates the program area with the most pressing unmet recovery need is housing. In the event that program income results from economic revitalization and development projects or from assisting small business through the planned revolving loan program, to address other recovery needs in the housing or infrastructure recovery program areas, the State may use the program income generated from those programs and create a revolving loan fund for future generations of loans to address remaining unmet recovery needs and community recovery and revitalization objectives that are consistent with the policies and procedures of the program.

The State will retain up to 5 percent of any funds to address unanticipated administrative costs resulting from the program income. The maximum 5 percent administrative cap will be maintained for the overall total of CDBG-DR funds including program income. In the case that program income is generated through an activity that a subrecipient undertakes, the State, in consultation with the sub-recipient, may determine that program income will remain with the subrecipient, providing the activity or activities in the subrecipient agreement continue to have unmet need. The State reserves the right to have the program income be returned to the State to address other unmet recovery needs. In the case of a subrecipient which maintains no remaining unmet needs, any program income shall be returned to the State. The State will then allocate the funds to programs and projects in a manner consistent with this policy. The State's administrative policy and procedure manual will document how reallocation of any program income will occur.

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12.0 Schedule of Expenditures and Outcomes

NCORR routinely updates the schedule of expenditures and outcomes section shown in the original Action Plan to adhere to its reporting requirements. The schedule of expenditures and outcomes is located at https://www.rebuild.nc.gov/reporting-and-compliance/reporting. All funds will be expended within six years of HUD's grant execution date.

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13.0 Minimum Threshold for Substantial Amendment

In the State's initial Action Plan, the State identified the thresholds which will trigger the requirement for a substantial amendment. Those thresholds being 1) a change in program benefit or eligibility criteria, 2) the addition or deletion of an activity or 3) allocation or reallocation of $5 million within the approved Action Plan activity allocations.

With the addition of Hurricane Matthew CDBG-MIT funds and Hurricane Florence CDBG-DR funds, NCORR is adjusting the minimum threshold for Substantial Action Plan Amendments to match the requirements set in those Action Plans. The revised criteria are:

1. A change in program benefit or eligibility criteria; or
2. The addition or deletion of an activity; or
3. An allocation or reallocation of $15 million or more.

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14.0 Green Building Standards for Construction and Contractor Oversight

The State will follow best practices such as those provided by the U.S. Department of Energy's Guidelines for Home Energy Professionals–Professional Certifications and Standard Work Specifications for homes that are rehabilitated. Reconstruction and replacement activities that include changes to the structural elements such as flooring systems, columns, or load bearing interior or exterior walls must incorporate Green Building Standards.

For homes that are rehabilitated or substantially rehabilitated, the project scope will incorporate Green Building materials to the extent feasible according to specific project scope. Materials must meet established industry-recognized standard that have achieved certification under at least one of the following programs:

1. ENERGY STAR (Certified Homes or Multifamily High-Rise);
2. Enterprise Green Communities;
3. LEED (New Construction, Homes, Midrise, Existing Buildings Operations and Maintenance, or Neighborhood Development);
4. ICC-700 National Green Building Standard,
5. EPA Indoor AirPlus (ENERGY STAR a prerequisite), or
6. Any other equivalent comprehensive green building program.

In some instances, NCORR has evaluated alternate proposed green building design standards for single-family residential reconstruction, such as a Home Energy Rating System (HERS) rating that provide a significant energy savings and alternate ENERGY STAR compliance, such as ENERGY STAR 2.0 for multi-family projects, and finds those building standards acceptable in lieu of the proposed standards above. These alternate building standards substantially conform to a comprehensive green building program. The specific green building design features and standards selected are included in each project file.

North Carolina will implement and monitor construction results to ensure the safety of residents and the quality of homes assisted through the program. All Single-Family, Rental and Manufactured Home repairs will comply with current HUD Decent, Safe, and Sanitary (DSS) standards. In addition, NCORR will ensure that applicants are aware of the risks associated with mold and take steps to limit the impact of any mold issues that may arise. Rehabilitation of non-substantially damaged structures must comply with the HUD CPD Green Building Retrofit Checklist available at https://www.hudexchange.info/resource/3684/guidance-on-the-cpd-green-building-checklist/, to the extent that the items on the checklist are applicable to the rehabilitation.

New housing developed with CDBG-DR funds will comply with accessibility standards set at 24

CFR Part 40. NCORR will utilize the UFAS Accessibility Checklist as a minimum standard for structures with five or more units to assist in the compliance of Section 504 of the Rehabilitation Act. The checklist will be used when reviewing the design of all newly constructed residential structures (other than privately owned residential structures). The Fair Housing Act (including the seven basic design and construction requirements set in the Fair Housing Act)[4] also applies to buildings with four or more units. Titles II and III of the Americans with Disabilities Act also applies to public housing.

Contractor compliance will be maintained through the review and approval of monthly project performance reports, financial status reports, and documented requests for reimbursement throughout the contract period. The State will utilize the HUD-provided contract reporting template (for PL 113-2) for upload to the Disaster Recovery Grant Reporting (DRGR) on a quarterly basis: https://www.hudexchange.info/resource/3898/public-law-113-2-contract-reporting-template/.

All program activities will meet HUD requirements for national objectives, which will be supported by documentation in the program file system of record. North Carolina is dedicated to prioritizing assistance toward residents that face the most financial barriers to recovery and fully intends to comply with the HUD Low-to-Moderate Income (LMI) national objective requirement of 70 percent of the total grant.

Residents will be required to provide household income information and supporting documentation at the time of application for processing and verification. North Carolina will apply a methodical approach to applicant assistance that assigns priority to program applicants based on household income and other social vulnerability factors.

The State will review files and test for compliance with financial standards and procedures including procurement practices and adherence to cost reasonableness for all operating costs and grant-funded activities. All program expenditures will be evaluated to ensure they are:

- Necessary and reasonable;
- Allocable according to the CDBG contract;
- Authorized or not prohibited under state/local laws and regulations;
- Conform to limitations or exclusions (laws, terms, conditions of award, etc.);
- Consistent with policies, regulations and procedures;
- Adequately documented; and
- Compliant with all Cross Cutting Federal Requirement including Uniform Administrative Requirements at 2 CFR 200. Per 2 CFR § 200.317, Subrecipients utilizing Program funds must follow all procurement guidelines contained in 2 CFR §§ 200.318-327.

[4] Fair Housing Accessibility First. *Fair Housing Requirements.* https://www.fairhousingfirst.org/fairhousing/requirements.html

The FR allows individuals, businesses, and non-profits to be reimbursed for out-of-pocket repair costs that would have been covered under a CDBG-DR repair program if the program had existed at the time. This type of reimbursement is eligible for repairs made up to one year after the disaster, although an extension can be granted by HUD if requested by the Grantee on a case-by-case basis, or until application to the CDBG-DR repair program (whichever comes first). Before making these reimbursements, a retroactive environmental review must be done by the program. This is when State Historic Preservation Office (SHPO), Fish and Wildlife Service (FWS), and National Marine Fisheries Service (NMFS) will be contacted. These steps will be followed before any reimbursement for repairs is made by the State.

14.1 Broadband

The State's initial Action Plan, highlighted that all recipients receiving CDBG-DR funds for the substantial rehabilitation or new construction of residential units, with four or more units per structure, must include broadband infrastructure in accordance with program requirements. This requirement remains in force with this Action Plan Amendment.

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15.0 Duplication of Benefits (DOB)

Applicants to disaster recovery programs will be required to provide information regarding all assistance received for the recovery purposes as required by the HUD's Certification of Duplication of Benefits Requirements under the Stafford Act for Community Development Block Grant (CDBG) Disaster Recovery Grantees (76 FR 71060, November 16, 2011). Any funds found to be duplicative will be deducted from the CDBG-DR award prior to the disbursement of the award amount. A review of potential DOB is necessary for all CDBG-DR funded activities.

On June 20, 2019, HUD published two Federal Register (FR) notices on the calculation of Duplication of Benefits (DOB): 84 FR 28836 (here after referred to as the *DOB Notice*) and 84 FR 28848 (here after referred to as the *DOB Implementation Notice*). After reviewing the notices, NCORR has updated its DOB policy to comply with the new guidance.

In review of the guidance on multiple storm impacts and DOB provided at 84 FR 28844 and clarifying guidance received from HUD, NCORR has developed a DOB policy that applies funds received to recover from the qualifying event (i.e. the event that the application for assistance is tied back to) rather than all assistance received for each disaster that impacted the recovering applicant. NCORR reviews assistance received for applicants in multiple disaster scenarios, such as those impacted by Hurricanes Matthew and Florence, and assesses which assistance is duplicative. Assistance received to recover from a disaster declaration other than the qualifying event is not considered duplicative. The application of assistance from multiple storms as a duplication of benefit is only applicable when an applicant is continuing to recover from multiple storms. NCORR establishes whether an applicant is recovering from Hurricane Florence and not recovering from Hurricane Matthew when storm tie-back is determined.

15.1 NCORR Subsidized Loans

In some instances, a homeowner may continue to face challenges reconciling other funds received to recover before receipt of CDBG-DR funds to recover. In lieu of receiving an escrow payment, NCORR may offer a subsidized loan for the DOB amount due from the applicant. These subsidized loans (sometimes referred to as promissory notes) are forgivable based on the terms included in the note. These conditions and other terms of the note are included in the subsidized loan agreement executed between the applicant and the disaster recovery program.

In recognition that some households may experience challenges making regular payments on the subsidized loan, in cases where a DOB analysis is performed and NCORR notes that there would be a duplication of benefits, NCORR will apply a forgivable loan structure that would allow the loan and loan payment to be forgiven over time as the applicant lives in the house and otherwise complies with the terms of the subsidized loan agreement. This approach would be exclusively available for LMI households and is only available for households that earn up to 120% area median income that can demonstrate hardship, as defined by the disaster recovery program. Other exceptions may be granted on a case-by-case basis to targeted populations, such as the elderly, persons with disabilities, families with children, or others that may face disproportional challenges in their disaster recovery. NCORR has determined that a set proportion of the subsidized loan will be forgiven on an annual basis after completion of the recovery work is a reasonable basis for loan forgiveness. Additional details on NCORR's mechanism for collecting any remaining balance of the loan will be included in the household's loan documents. NCORR shall identify any additional monitoring procedures in its monitoring process for these loans. NCORR will use its flexibility as a grantee to use a variety of sources for the forgivable loan, including CDBG-DR funds as part of the household's disaster recovery assistance or other available funding sources. This approach is allowable because a subsidized loan is not a duplication under the DRRA amendments to Section 312 of the Stafford Act for DRRA-covered disasters (84 FR 28842) if the funds were used for a disaster-related purpose. Hurricanes Matthew and Florence are DRRA-covered disasters.

A household unable to be assisted by NCORR may experience housing instability as they ultimately are unable to repair their damaged home or fully recover from disaster. If faced with housing instability, the household may require assistance from other sources, such as housing vouchers, subsidized housing, or public housing units. The preservation of housing for impacted households, particularly LMI households, is central of HUD's mission and the risk of losing housing for impacted households is real if a DOB issue is not able to be overcome. If not but for this concept, impacted households may be disproportionately affected and unable to participle in the recovery effort. Such considerations are central to this subsidized forgivable loan framework.

15.2 Other Subsidized Loans

For the purpose of this Action Plan, subsidized loans (including forgivable loans) are loans other than private loans. Both SBA and FEMA provide subsidized loans for disaster recovery. Subsidized loans may also be available from other sources. Subsidized loans are assistance that must be included in the DOB analysis, unless an exception applies.

The following policies regarding subsidized loans apply to housing recovery programs, including Reconstruction, Rehabilitation, MHU Replacement, and in some instances other housing benefit. The *DOB Notice* provided guidance on the treatment of subsidized loans in Duplication of Benefits analysis as follows: "The full amount of a subsidized loan available to the applicant for the same purpose as CDBG-DR assistance is assistance that must be included in the DOB calculation unless one of the exceptions [in the *DOB Notice*] applies including the exceptions in V.B.2 (i), V.B.2 (ii), and V.B.2 (iii), which were authorized in the DRRA amendments to section 312 of the Stafford Act (which applies to disasters occurring between January 1, 2016 and December 31, 2021, until the amendment sunsets October 5, 2023). A subsidized loan is available when it is accepted, meaning that the borrower has signed a note or other loan document that allows the lender to advance loan proceeds."

Declined loans are loan amounts that were offered by a lender in response to a loan application, but were turned down by the applicant, meaning the applicant never signed loan documents to receive the loan proceeds. NCORR will not treat declined loans as DOB. NCORR will request documentation for the declined loan only if the subsidized loan is not otherwise exempt for DOB considerations or the information received from the third party (SBA, FEMA, etc.) indicates that the applicant received an offer for the not exempted subsidized loan and NCORR is unable to determine from that available information that the applicant declined the loan. In such cases, the applicant must provide written certification that they did not receive the loan. The applicant will complete the Affidavit of Declined or Canceled Subsidized Loan form. NCORR will submit the Affidavit of Declined or Canceled Subsidized Loan to SBA (or other lender) and will re-verify DOB at project close-out.

Cancelled loans are loans (or portions of loans) that were initially accepted, but for a variety of reasons, all or a portion of the loan amount was not disbursed and is no longer available to the applicant. The cancelled loan amount is the amount that is no longer available. The loan cancellation may be due to the agreement of both parties to cancel the undisbursed portion of the loan, default of the borrower, or expiration of the term for which the loan was available for disbursement. The following documentation will be required to demonstrate that any undisbursed portion of an accepted not exempted subsidized loan is cancelled and no longer available to the applicant:

1. A written communication from the lender confirming that the loan has been cancelled and undisbursed amounts are no longer available to the applicant, OR;
2. A legally binding agreement between NCORR and the applicant indicating that the period of availability of the loan has passed and the applicant agrees not to take actions to reinstate the loan or draw any amounts in the future.

Without either of the two documents listed above, any approved but undisbursed portion of an otherwise not exempted for DOB considerations subsidized loan must be included in the DOB calculation of the total assistance unless another exception applies.

For not exempted canceled loans, NCORR will send the Affidavit of Declined or Canceled Subsidized Loan to the lender as notification that the applicant has agreed to not take any actions to reinstate the cancelled loan or draw down any additional undisbursed loan amounts.

In cases of cancelled loans not otherwise exempted for DOB considerations where partial disbursements were made prior to cancellation of the loan, the disbursed funds will be treated as funds disbursed for active loans below. As with not exempted declined loans, awards with not exempted canceled subsidized loans will have DOB re-verified at project close-out.

A subsidized loan is not a prohibited duplication of benefits under section 312(b)(4)(C) of the *Stafford Act*, as amended by section 1210 of the DRRA, provided that all Federal assistance is used towards a loss suffered as a result of a major disaster or emergency declared between January 1, 2016, and December 31, 2021 (DRRA Qualifying Disasters). As part of the DOB analysis, NCORR will exclude disbursed loan amounts as non-duplicative. The exception for DRRA Qualifying disasters no longer applies after October 5, 2023. NCORR will evaluate not exempted loans remaining open for non-duplicative activities. In cases where the undisbursed loan amount is for potentially duplicative activities, NCORR will notify the lender and will obtain a written agreement from the applicant that the applicant will not make additional draws from the subsidized loan without NCORR's approval. Applicable program funding caps remain in effect for any award amount changes performed under this guidance.

NCORR reviews and confirms DOB calculations at project closeout if there is reason to believe that the DOB calculation has changed. If duplicative assistance was received, NCORR exercises the subrogation agreement in place with applicants for assistance to recapture duplicate assistance, if necessary. Specific policy on DOB review is found in each program manual as well as the *NCORR DOB Uniform Procedures.*

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16.0 Monitoring Standards and Procedures

The State will begin monitoring shortly after commencement of contracted activities, and risk-based on-site monitoring will occur as appropriate to contracted activities and award amounts. The State will also conduct at least one on-site monitoring visit with each subrecipient prior to project completion, to verify funds were expended appropriately.

The State will implement its monitoring and compliance program for both state-managed and subrecipient-managed programs using policies and guidance that are designed to be consistent with the US HUD monitoring policies as defined in the HUD Monitoring Desk Guide: Policies and Procedures for Program Oversight. The Desk Guide is located at: http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_35339.pdf.

16.1.1 Summary of Monitoring Objectives

1. To determine if an entity is carrying out its grant-funded program, and its individual activities, as described in the Grant Agreement between the State of North Carolina and sub-recipients.
2. To determine if an entity is carrying out its activities in a timely manner, in accordance with the schedule included in the Agreement.
3. To determine if an entity is charging costs to the project which are eligible under applicable laws and federal regulations and reasonable in light of the services or products delivered.
4. To determine if an entity is conducting its activities with adequate control over program and financial performance, and in a way that minimizes opportunities for waste, mismanagement, fraud and abuse.
5. To assess if the entity has continuing capacity to carry out the approved project, as well as other grants for which it may apply.
6. To identify potential problem areas and to assist the entity in complying with applicable laws and regulations.
7. To assist entities in resolving compliance problems through discussion, negotiation, and the provision of technical assistance and training.
8. To provide adequate follow-up measures to ensure that performance and compliance deficiencies are corrected by entities, and not repeated.
9. To determine if any conflicts of interest exist in the operation of the federally funded program.
10. To ensure that required records are maintained to demonstrate compliance with applicable regulations, such as rent, occupancy, household income, meeting property standards, Fair Housing, Affirmative Action and Davis-Bacon wage rates.

11. To conduct site visits/inspections of CDBG-R assisted units to ensure that units are in full compliance with all applicable regulations, codes and ordinances.

16.1.2 Risk Analysis

The State will, at the beginning of each calendar year, conduct a monitoring Risk Analysis for all recipients of CDBG-DR funding. The Risk Analysis identifies risk criteria and establishes a baseline level of risk for each recipient on annual basis. The Risk Analysis is used to determine which recipients will need to receive an on-site monitoring visit during the funding year, the frequency of visits, and if additional reporting and monitoring requirements are necessary. Each criterion is weighted based on the level of risk indicated by each item and applicants that are selected for monitoring following the published procedures will be informed of the monitoring activity.

All recipients are assigned levels of monitoring based on the outcome of the above Risk Analysis criteria. A preliminary schedule of on-site monitoring visits is established at the beginning of the calendar year. The level of monitoring can be adjusted during the contract period for reasons such as non-compliance with contract provisions, failure to meet performance objectives, failure to submit accurate and timely reports, findings identified from on-site monitoring, staff turnover in key positions of the organization, and other identified changes that increase the risk of administering grant funds. Non-compliance by the recipients can result in suspension of funds, termination of the contract, and request for repayment of all funds provided under the contract.

16.1.3 On-Site Agency Monitoring

Prior to notifying organizations of an on-site monitoring, the monitoring staff will read the grant agreements, notes any late and/or incorrect submissions of invoices and performance reports, and reviews any previous monitoring letters, regardless of the funding source. The purpose of this review is to determine the scope of the monitoring visit prior to sending a letter notifying the organization of the visit.

Two weeks prior to conducting an on-site monitoring visit, a letter is sent to the organization. The letter confirms the dates and scope of the monitoring and indicates the information and/or documentation that will be reviewed.

Within 45 days of the monitoring visit, staff issues a monitoring letter noting any findings, concerns, and any resolutions discovered during the review. The letter is addressed to the appropriate staff member(s). Organizations will be given 30 days to respond to monitoring letters.

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17.0 Contractor Performance Standards and Appeals Process

In the State's initial approved Action Plan, the State outlined the contractor performance standards and appeals process, stating that construction contractors performing work funded with CDBG-DR funds shall be required to be a licensed contractor with the State of North Carolina and to possess all applicable licenses and permits from applicable jurisdictions where work will be performed, prior to incurring any costs to be CDBG-DR reimbursed. Licenses will confirm the required standards set forth by the applicable county, city and/or town code to conduct work within the jurisdiction and the reflected scope of work (SOW) in the construction contract. Permits will be the required registration and documentation of county, city, and/or town code to be secured prior to any construction work commences. It will be the obligation of the contractor to secure all such permits, provide copies to the State agency or subrecipient administering the contract prior to commencing work.

This requirement will be included as a standard provision in any applicable subrecipient agreement and will need to be enforced by the subrecipient involving housing, small business, or infrastructure recovery programs and or projects. All CDBG-DR-funded contracts involving construction contractors performing work for homeowners and small business activities shall be required to have in the contract work pertaining to an individual homeowner and small business owner a one-year warranty on all work performed. The contractor is required to provide notice six months and one month prior to the end of the one-year warranty to the homeowner and small business owner with a copy of each notice to the state agency and/or sub recipient administering the applicable activity.

Each homeowner and small business shall be provided prior to the commencement of any work involved through such contracts, a written notice of their right to appeal the work being performed when it is not to the standards set forth or the scope established. The homeowner and small business owner shall be provided an appeal contact person within the state agency or sub recipient responsible for managing the activity. Policies and procedures will be established as part of the activity setting forth timelines and step-by-step process for resolving appeals and said policies and procedures shall be provided to each homeowner and small business prior to the start of any work and shall be included in the contract with each participating contractor as an enforceable part of the contract.

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18.0 Citizen Participation Plan

The State of North Carolina is in receipt of a U.S. Department of Housing and Community Development Block Grant-Disaster Recovery (CDBG-DR) appropriation in accordance with the *Disaster Relief Appropriations Act*, 2016 (Public Laws 114-254 and 115-31). The Act describes the applicable waivers and alternative requirements, relevant statutory and regulatory requirements, the grant award process, criteria for the action plan approval, and eligible disaster recovery activities. These funds are being made available to assist disaster recovery efforts in response to Hurricane Matthew as described in Federal Register Notice published Wednesday January 18, 2017, at 82 FR 5591.

The primary goal of this *Citizen Participation Plan* is to provide all North Carolina citizens with an opportunity to participate in the planning, implementation, and assessment of all the State's recovery programs. The plan sets forth policies and procedures for citizen participation, which are designed to maximize the opportunity for involvement in the community recovery process from citizens, property owners, renters, business owners, developers as well as federal, state, local stakeholders. A copy of the *Citizen Participation Plan* is available on the ReBuild NC website at https://rebuild.nc.gov/action-plans.

18.1 Encouragement of Citizen Participation and Outreach

NCORR will invite and encourage citizen participation in the Action Plan and associated amendments process with a focus on outreach to low- and moderate-income persons, racial/ethnic minorities, persons with disabilities, and persons with Limited English Proficiency.

Strategy: The State will advertise opportunities for public participation in the Action Plan process through various state, federal, local governments, tribal communities, public housing authorities, other housing related service providers, churches and faith-based organizations, for-profit developers, professional organizations, other known constituency groups, and citizens who have requested notification. Additionally, the State will advertise through:

- Neighborhood associations and groups, community-based organizations, agencies, and churches providing services to or advocating for low- and moderate-income persons, racial/ethnic minorities, persons with disabilities, and persons with Limited English Proficiency; and
- Media sources that have direct contact with low- and moderate-income persons, culturally diverse persons, racial/ethnic minorities, persons with disabilities, and persons with Limited English Proficiency.

The North Carolina Office of Recovery and Resiliency (NCORR) is committed to ensuring that all populations impacted by the storm are aware of and have equal access to information about the programs to assist in the recovery from Hurricane Matthew. Through in person meetings, outreach events, online and traditional media, the State has publicized existing programs and will publicize changes to such programs, and conducted outreach efforts throughout the storm impacted areas. In addition, the Governor's Office has engaged a grass-roots community driven process that engages the public as a key stakeholder in the planning and rebuilding process.

18.2 Individuals with Limited English Proficiency (LEP)

Based on LEP data within the impacted areas collected by the State, both the instructions for commenting on, and access to, the Action Plan will be translated into Spanish. Comments will be accepted through the online commenting form in English and Spanish. The State will make every possible effort to translate and consider comments submitted in any other language within the timeframe.

NCORR provides both oral Interpretation and written Translation services to persons at no cost and are available upon request. Meaningful and equal access to federally funded programs and activities is required by Title VI of the Civil Rights Act of 1964 and its implementing regulations.

18.3 Persons with Disabilities

As noted above, hard copies of Action Plans will be available in large print format (18pt font size) at the location listed above. The online materials will also be accessible for the visually impaired. For more information on how people with disabilities can access and comment on the Action Plan, dial (800) 735-2962.

18.4 Response to Citizen Complaints and Appeals

The State of North Carolina shall provide a response to every complaint relative to the CDBG-DR Program within fifteen (15) working days of receipt. The state will execute its Appeals Process in response to appeals received and will require subgrantees to adopt a similar process. The process will be tiered whereby applicants will be able to appeal a decision and received further review from another level.

All sub-contractors and local government grantees will be required to develop an appeals and complaint procedure to handle all complaints or appeals from individuals who have applied for CDBG-DR housing, infrastructure and business programs or other programs that may be included through subsequent amendments. A written appeal may be filed when dissatisfied with program policies, eligibility, level of service or other complaints by including the individual facts and circumstances as well as supporting documentation to justify the appeal.

Generally, the appeal should be filed with the administrating entity or sub-contractor. The appeal will be reviewed by the administrating entity with notification to NCORR, the CDBG-DR state implementation agency, for the purpose of securing technical assistance. If the appeal is denied or the applicant is dissatisfied with the decision, an appeal can be made to NCORR directly. If NCORR denies the appeal, the final step in the internal appeals process is to appeal to the Secretary of the Department of Public Safety

Applicants to the State's Recovery Programs may appeal their award determinations or denials that are determined based on Program policies. However, it should be noted that an applicant is unable to appeal a federal statutory requirement.

18.5 Public Notice, Comment Period and Website

A comment period of at least 14 days, as required by HUD, shall be provided for citizens, affected local governments, and other interested parties to comment on substantial amendments to the Action Plan. Generally, Hurricane Matthew CDBG-DR and Hurricane Florence CDBG-DR action plans are amended together as the use of funds between both grants are similar. When multiple action plans are amended together, NCORR often adopts the Hurricane Florence CDBG-DR public comment period of 30 days for the Hurricane Matthew CDBG-DR public comment period as well.

In accordance with CDBG-DR requirements, NCORR has developed and will maintain a comprehensive website regarding all disaster recovery activities assisted with these funds. NCORR will post all Action Plans and amendments on the NCORR's CDBG-DR website at https://rebuild.nc.gov/action-plans. The website gives citizens an opportunity to read the plan and to submit comments on substantial amendments. This website is featured prominently on, and is easily navigable from, NCORR's homepage. NCORR will maintain the following information on its website: actions plan, any substantial amendments, all performance reports, citizen participation requirements, and activities/program information that are described in the action plan, including details on contracts and ongoing procurement opportunities and policies, including opportunities for minorities, women and other disadvantaged persons, veteran, and other historically underutilized businesses (HUB). Paper copies of the Action Plan Amendment will be available in both English (including large, 18pt type) and Spanish as needed at applicant service centers. Applicant service center locations are found at the ReBuild NC website at https://www.rebuild.nc.gov/information-assistance.

After the conclusion of any required comment period, all comments shall be reviewed and the state will provide responses to the comments received. The State's consideration of public comment is available as an appendix to the action plan, when applicable.

Upon approval of the state's original Action Plan, HUD provided the state an action plan approval letter, grant terms and conditions, and grant agreement. After receipt of the grant agreement, the State reviewed and executed the grant agreement with HUD.

18.5.1 Contact Information

Interested parties may make comments or request information regarding the Citizen Participation Planning process by mail, telephone, facsimile transmission, or email to NCORR.

Comments and complaints may be submitted as follows:

- Written comments may be mailed to:

North Carolina Office of Recovery and Resiliency (NCORR)
PO Box 110465
Durham, NC 27709

- Email comments: publiccomments@rebuild.nc.gov

  Please include "CDBG-DR Matthew" in the subject line

- By telephone for those hearing impaired:

  (984) 833-5350, TDD 1-800-735-2962

- By Fax transmission:

  (919) 405-7392

NCORR will post this and all Action Plans and amendments on the State's CDBG-DR website at https://www.rebuild.nc.gov/action-plans. When public comment is required the method for submitting public comment is also included on the website.

According to 81 FR 83262, NCORR must notify HUD of a nonsubstantial amendment but is not required to undertake a public comment period. HUD must be notified at least five business days before the amendment becomes effective.

Appendix A: Response to Public Comments

The public comment period for Substantial Action Plan Amendment 10 began December 9, 2022 and ended January 9, 2023. In some instances, public comments are shortened to focus on the specific elements of the comment as they pertain to the Action Plan. Personal details or private information has been removed from public comments where necessary to protect the identity of the commenter. Lastly, public comments that related to the Hurricane Matthew Action Plan and Hurricane Florence Action Plan are included in both documents.

Comments specific to the status of an individual's CDBG-DR application for assistance were referred internally for additional review and direct response and may not be reflected in this response to public comments.

1. **Comment**: A comment was received from Legal Aid of North Carolina (LANC) on the topic of financial hardships that LMI applicants that are unable to pay their assessed Duplication of Benefits amount into the escrow.

   Response: NCORR has received additional guidance from HUD on how to work with applicants facing financial challenges in reconciling other funds before receiving CDBG-DR funds for homeowner recovery. Such additional guidance has been added to the Action Plan. In lieu of providing an escrow payment, NCORR may offer a subsidized loan for the Duplication of Benefits (DOB) amount due from the applicant. These subsidized loans (sometimes referred to as a promissory note) are forgivable based on the terms included in the note.

   In recognition that some households may experience challenges making regular payments, in cases where a DOB analysis is performed and NCORR notes that there would be a duplication of benefits, NCORR will apply a forgivable loan structure would allow the loan and loan payment to be forgiven over time as the applicant lives in the house.

   This approach would be exclusively available for LMI households and is only available for those that earn up to 120% area median income in cases of demonstrated hardship, as defined by the disaster recovery program. Other exceptions may be granted on a case-by-case basis to targeted populations, such as the elderly, persons with disabilities, families with children, that may face disproportional challenges in their disaster recovery. NCORR has determined that a set proportion of the subsidized loan at a set timeframe will be forgiven on an annual basis after completion of the recovery work is a reasonable calculation of the loan cancellation for the impacted household remaining in their dwelling.

Additional details on subsidized loan, payment rates, forgiveness or cancellation terms, repayment schedule, acceleration schedule, and other loans terms will be found in the loan documents and Program manual.

2. **Comment**: A comment was received highlighting that in Section 5.6 (Assessment of Public Services Required) the table detailing the number of inspectors with more than 1 certification to inspect one trade other than fire, for Carteret County were actually lower in Table 42 in the Florence Action Plan.

   Response: NCORR analyzed the public services required and concluded in this section that there was a need to significantly increase and augment the code enforcement workforce to help avoid any potential delays in project start date, reduce timely inspections, and ultimately slow the completion of projects.

   Given that NCORR referenced the best data available, with anticipating the recovery of several thousand housing units and the construction of multiple multi-family and larger projects, the current amount of local county inspectors is still very low.

   There is a significant need to train more inspectors and enhance a progressively aging work force to help increase the capacity of local county inspectors' offices and reduce the potential wait time in scheduling and executing required inspections to help complete these critical housing projects.

3. **Comment**: A comment was received regarding citizen participation and outreach regarding both the Hurricane Florence and Hurricane Matthew Action Planning Amendment process.

   Response: NCORR is committed to ensuring that all populations impacted by the storms are aware of and have equal access to information as well as encouraging citizen participation with a focus on outreach to low-and moderate-income persons, racial/ethnic minorities, persons with disabilities, and persons with Limited English Proficiency. Additionally, NCORR has previously sought feedback from other local and regional planning partners and stakeholders to inform the Action Plan, including:

   - Legal Aid of North Carolina;
   - The North Carolina Justice Center;
   - Disability Rights North Carolina;
   - American Rivers;
   - The Conservation Trust for North Carolina;
   - The Natural Resources Defense Council;
   - The North Carolina Conservation Network;
   - The North Carolina Coastal Federation;
   - The North Carolina Housing Coalition;

- The North Carolina Coalition to End Homelessness; and
- The North Carolina Housing Resource Center.

Finally, there were public comments that were received that were misconceptions about the program or that the Action Plan had established, and therefore those comments were not included within this Public Comment section.

An example of public comments received in this category related to having a Citizen Advisory Committee for the CDBG-DR Hurricane Matthew and Hurricane Florence Action Planning processes.

> HUDs federal regulations referring grantees to establish a Citizen Advisory Committee structure pertain to CDBG-Mitigation funding and not CDBD-Disaster Recovery funding, there are different federal requirements for citizen participation and engagement for those differing funding programs (CDBG-Disaster Recovery and CDBG-Mitigation).
>
> As part of the CDBG-DR Citizen Participation Requirements, NCORR follows the required procedures detailed in the citizen participation plan, in addition to consulting with diverse stakeholder groups including, local governments, federal partners, non-governmental organizations, private sector partners, and other stakeholders and groups that advocate on behalf of members of protected classes, vulnerable populations, and underserved communities impacted by the disaster, within the affected and surrounding geographic areas.
>
> More details about NCORR's community engagement, public comment, citizen participation, and outreach processes will be found in the Citizen Participation Plan.

Another example of a public comment received, related to how NCORR calculated the allocation and budget amounts regarding programmatic activities.

> NCORR details in each Action Plan that the most significant consideration in developing CDBG-DR activities and allocations of funding results from the Unmet Needs Assessment which reviews the recovery needs of the State and the communities impacted by the disaster events.
>
> Further information about the allocation rationale and budget funding amounts can be found within the Unmet Needs Assessment within this Action Plan.

Appendix B: Methodology & Detailed Data to Identify State Defined MID Areas

Based on data as of May 2020, the State conducted an analysis of damage to counties that were impacted by both hurricanes Matthew and Hurricane Florence in consideration of the unique recovery needs created by the large area of the State that was impacted by both hurricanes. Aligning with the allocation methodology outlined in Appendix A for both 82 FR 5591 (Hurricane Matthew) and 85 FR 4681 (Hurricane Florence), the State calculated an estimated housing unmet need for each county, for each hurricane. This analysis used the Major-Low, Major-High, and Severe damage categories for both hurricanes and multiplied those damage categories by the repair estimation factors included in Appendix A for each respective notice. The threshold to be considered a State Defined MID is greater than $10 million in combined unmet need at the county level. Table 2 in the Housing Impact and Unmet Needs Assessment combines the data below to create the State and HUD Defined MID areas.

County	Hurricane Matthew		
	Major-Low	**Major-High**	**Severe**
Robeson (County)	$ 76,874,000	$ 35,179,760	$ 6,365,751
Craven (County)	$ 2,223,855	$ 822,384	$ -
Pender (County)	$ 2,718,045	$ 3,380,912	$ 2,201,241
Cumberland (County)	$ 33,357,825	$ 20,742,352	$ 6,246,765
Duplin (County)	$ 3,376,965	$ 1,279,264	$ 297,465
Wayne (County)	$ 28,635,565	$ 14,346,032	$ 3,510,087
Columbus (County)	$ 13,782,410	$ 6,533,384	$ 1,070,874
Onslow (County)	$ 164,730	$ 91,376	$ 59,493
Carteret (County)	$ 54,910	$ 45,688	$ 59,493
New Hanover (County)	$ -	$ -	$ -
Edgecombe (County)	$ 19,987,240	$ 15,122,728	$ 6,901,188
Brunswick (County)	$ 1,070,745	$ -	$ 178,479
Lenoir (County)	$ 15,759,170	$ 6,533,384	$ 1,011,381
Jones (County)	$ 741,285	$ 319,816	$ 59,493
Bladen (County)	$ 5,765,550	$ 2,147,336	$ 773,409
Pamlico (County)	$ -	$ -	$ -
Beaufort (County)	$ 2,553,315	$ 685,320	$ 59,493
Sampson (County)	$ 5,655,730	$ 1,918,896	$ 713,916
Scotland (County)	$ 247,095	$ -	$ -

County	Hurricane Matthew		
	Major-Low	**Major-High**	**Severe**
Pitt (County)	$ 9,389,610	$ 3,426,600	$ 535,437
Harnett (County)	$ 4,035,885	$ 1,507,704	$ 178,479
Dare (County)	$ 6,616,655	$ 3,974,856	$ 297,465
Johnston (County)	$ 5,463,545	$ 3,380,912	$ 1,130,367

County	Hurricane Florence		
	Major-Low	**Major-High**	**Severe**
Robeson (County)	$ 63,040,160	$ 13,359,500	$ 2,488,288
Craven (County)	$ 72,534,160	$ 70,562,450	$ 15,085,246
Pender (County)	$ 24,038,808	$ 34,613,250	$ 34,836,032
Cumberland (County)	$ 17,317,056	$ 5,951,050	$ 5,132,094
Duplin (County)	$ 12,228,272	$ 28,540,750	$ 21,150,448
Wayne (County)	$ 8,848,408	$ 1,214,500	$ 311,036
Columbus (County)	$ 22,671,672	$ 10,748,325	$ 1,943,975
Onslow (County)	$ 29,773,184	$ 19,614,175	$ 5,132,094
Carteret (County)	$ 35,545,536	$ 14,574,000	$ 3,732,432
New Hanover (County)	$ 35,621,488	$ 12,812,975	$ 1,788,457
Edgecombe (County)	$ -	$ -	$ -
Brunswick (County)	$ 20,165,256	$ 10,383,975	$ 4,354,504
Lenoir (County)	$ 5,392,592	$ 1,639,575	$ 155,518
Jones (County)	$ 12,304,224	$ 10,141,075	$ 6,920,551
Bladen (County)	$ 14,316,952	$ 4,372,200	$ 1,632,939
Pamlico (County)	$ 18,950,024	$ 5,465,250	$ 1,555,180
Beaufort (County)	$ 13,785,288	$ 4,493,650	$ 155,518
Sampson (County)	$ 4,671,048	$ 2,368,275	$ 1,866,216
Scotland (County)	$ 10,253,520	$ 4,615,100	$ 855,349
Pitt (County)	$ 987,376	$ 303,625	$ -
Harnett (County)	$ 4,177,360	$ 1,153,775	$ 1,088,626
Dare (County)	$ -	$ -	$ -
Johnston (County)	$ 683,568	$ 60,725	$ 77,759

Appendix C: Methodology & Assumptions for Estimating Housing Unmet Need

Owner-Occupied and Rental Housing

Data Source	Methodology & Assumptions Estimated Total Loss (Need)	Methodology & Assumptions Estimated Resources Available/Received
NCORR Hurricane Matthew Homeowner Recovery Program Damage Assessments as of 11/2/2022	**Based on estimated construction intent from approved Homeowner Recovery Program Damage Inspections:**	**N/A**
	For Mobile Home Replacement or Single-Family Reconstruction an average estimation of replacement or reconstruction costs	N/A
	For Rehabilitation/Reimbursement the sum of verified completed repair costs and verified estimate of remaining repair costs	N/A
Hurricane Matthew SBA Home Loans as of 10/21/2022	**Based on verified damage amounts**	**Based on current amounts for non-canceled loans**
	Sum of verified damage amounts excluding contents, debris removal and landscaping	Sum of current amounts excluding contents, debris removal, landscaping and refinance
Hurricane Matthew FEMA IA as of 10/10/2019	**Based on Real Property (RP) Verified Loss for Owners**	**Based on FEMA IA Repair/Replace assistance received for Owners**
	Multiplied by 5.6 based on State Determined Multiplier (see Analysis Comparing FEMA Verified Loss and SBA Verified Damage below)	No other assumptions
	Based on Personal Property (PP) Verified Loss for Renters	**Based on Renter Income reported to FEMA for Renters**
	Multiplied by 7.6 based on State Determined Multiplier (see Analysis Comparing FEMA Verified Loss and SBA Verified Damage below)	Renters with income $20,000 and below likely have landlords without insurance to cover estimated total loss ($0.00 for assistance available/received)

Data Source	Methodology & Assumptions Estimated Total Loss (Need)	Methodology & Assumptions Estimated Resources Available/Received
Hurricane Matthew NFIP as of 4/5/2020	**Based on NFIP Building Payment Amount**	**Based on NFIP Building Payment Amount**
	Increased by 20% under assumption NFIP Building Payment Amounts cover 80% of total building loss	No other assumptions

Duplicate property addresses that applied for multiple sources of assistance across the various data sets were identified and only the highest estimated property loss was used when aggregating the Estimated Total Loss (Need).

Analysis Comparing FEMA Verified Loss and SBA Verified Damage

Because FEMA's initial inspections arriving at verified loss historically underestimate total damage and typically only estimate costs to make the home habitable, FEMA's verified loss amounts were adjusted upwards based on a State Determined Multiplier. The State Determined Multiplier was calculated based on comparing the FEMA Verified Loss for owners and renters to the SBA Verified Damage amount using the most recent FEMA and SBA data for both Hurricane Matthew and Hurricane Florence. The FEMA and SBA data sets were matched based on the FEMA Registration ID, and only includes owners and renters with loss amounts calculated by both FEMA and SBA.

The State's analysis shows that for owners the SBA Verified Damage Amount in total is 5.6 times higher than FEMA's Verified Loss, and for renters the SBA Verified Damage Amount in total is 7.6 times higher than FEMA's Verified Loss:

Owners versus Renters	Total Applicants Analyzed	FEMA Verified Loss (FVL)	SBA Verified Damage Amount	Percent Difference	State Determined Multiplier Applied to FEMA Verified Loss (FVL)
Owners	10,403	$64,189,984	$427,199,692	566%	**5.6**
Renters	1,034	$2,664,706	$23,012,782	764%	**7.6**

Appendix D: September 2017 Housing Unmet Need Assessment

This estimate accounts for the costs to repair damaged homes that are owned or rented by LMI persons. The State estimates that, to assist 7,831 LMI homeowners, it would need an additional $104,081,224 and, to assist 3,448 LMI renters, it would need an additional $68,912,793, which includes providing required mitigation for these homes to avoid future losses, resulting in an additional $172,994,017 in unmet need.

There are additional needs beyond repairing damaged homes. The State has been proactive in initiating outreach with the most impacted communities to determine the cost benefit of repairing homes that experience repetitive flood loss and/or are located in flood-prone areas versus the cost of acquiring these properties and relocating these families to safer ground. This is an ongoing effort, and as of October 15, 2017, the State estimates an additional need of $260,971,916 to elevate homes, or acquire and demolish homes, and then relocate families to new housing.

Additionally, the State will require that all new construction and repair of substantially damaged homes meet, at a minimum, Advisory Base Flood Elevations. All homes located in the 100-year floodplain that receive assistance for reconstruction or repair of substantial damage shall be elevated to at least two-feet above Base Flood Elevation. The method of determining elevation assistance and cost-reasonableness will be outlined in detail in the ReBuild NC Homeowner Recovery Program Manual.

The estimate also accounts for the repair of the public housing units that were severely damaged ($15,200,000) as well as an increased estimate of need for support services for persons needing assistance relating to the homeless, families living in poverty, persons needing medical or mobility assistance due to disabilities, permanent supportive housing needs, persons who are currently displaced and need additional housing assistance, and services to older residents especially challenged by displacement ($17,371,361).

Finally, the unmet needs analysis factors in a preliminary estimate of subsidies needed for LMI homeowners who will expect to see their insurance premiums increase and who will not be able to afford flood insurance once their homes are rebuilt ($8,800,000). In addition, the estimate includes the providing funds to address shortfalls for homeowners who sell their homes to the State through a buyout program and, because of the cost of new housing, will have a gap in what the home sale price was and the cost to move into the new residence ($10,077,200).

These estimates are based on existing data; as the State and local planning efforts continue to work with the most impacted communities, these figures may be adjusted based on better data and feedback.

Table 24: Housing Unmet Needs

Source	Amount
Owner - Repair Damages	$104,081,224
Renter - Repair Damages	$68,912,793
Elevation/Buyout	$260,971,916
Public Housing	$15,200,000
Supportive Services	$17,371,361
Homeowner Assistance Program	$10,077,200
Insurance Subsidies for LMI Owners	$8,800,000
TOTAL	$485,414,494

Source(s): FEMA Individual Assistance, Small Business home loan data; survey responses from State and local housing providers and agencies; analysis effective 9/13/17

Appendix E: October 2017 Infrastructure Unmet Need Assessment

FEMA, through its PA program, assists communities rebuild following a disaster. Table 25 shows the current FEMA PA obligations for Matthew. In total, over 424 applicants now have eligible PA projects. While the amount of funding and number of applicants in the FEMA PA program is expected to grow as of October 10, 2017, these applicants had $292,780,270 obligated to PA projects, an increase of $279,253,605 since the initial Action Plan was published. As was shown in the State's initial Action Plan, and remains true for this Amendment, the State estimates that once all FEMA PA projects are accounted for, the PA program will exceed $400 million, with over $101 million in match required.

Table 25: FEMA PA Obligations by Category

FEMA Category	Category	Project Obligations (Project Worksheets (PWs))		Match Requirements	
		100% PW	Estimated	Current	Estimated
Debris Removal	A	$43,520,496	$46,648,598	$10,880,124	$11,662,150
Emergency Protective Measures	B	$54,284,215	$55,465,188	$13,571,054	$13,886,297
Roads & Bridges	C	$43,792,986	$116,750,334	$10,948,246	$29,187,584
Water Control Facilities	D	$17,304,456	$10,634,800	$4,326,114	$2,658,700
Public Buildings and Contents	E	$35,885,478	$74,620,505	$8,971,370	$18,655,126
Public Utilities	F	$47,524,289	$48,290,124	$11,881,072	$12,072,531
Parks, Recreational, Other Facilities	G	$50,468,351	$53,932,676	$12,617,088	$13,483,169
FEMA PA Total		$292,780,270	$406,342,226	$73,195,067	$101,585,557

FEMA PA Data: October 10, 2017

In addition, to the PA program the State anticipates receiving $100 million in Hazard Mitigation Grant Program (HMGP) funding with FEMA providing $75 million and the State required to provide $25 million. The State will use its HMGP allocation to buyout and acquire homes turning them into greenspace. As a result, the match required for both the FEMA PA and HMGP programs the current estimate for all FEMA programs exceeds $107 million.

As was disclosed in the original Action Plan, all infrastructure related projects will refer to the *Federal Resource Guide for Infrastructure Planning and Design*: http://portal.hud.gov/hudportal/documents/huddoc?id=BAInfra ResGuideMay2015.pdf.

Table 26: Infrastructure Unmet Need

Source	Unmet Need
FEMA PA and HMGP Match (estimate)	$101,585,557
Repair health care, daycare, and other supportive facilities with remaining unmet needs (after subtracting FEMA and insurance)	$45,370,264
Other Federal Agencies	**Unmet Need**
USACE - Levee and Dam Repair Safety	$38,132,675
DOT/HUD/FHWA - Pavement, Storm Pipes, Highway Embankment	$52,586,192
USDA /FSA Disaster Grant Programs	$177,663,583
EPA - Drinking Water and Waste Water Repair and Mitigation	$274,481,000
National Guard	$734,000
TOTAL	$543,597,450

The State recognizes that the data collection and documentation of community infrastructure and public facilities needs is ongoing at this stage in the State's recovery process. In addition to the documented costs in from Federal sources with the completion of the State's community planning effort, additional recovery related projects will be implemented that represent an unmet need for infrastructure projects. The infrastructure projects are contained in each of the 50 county plans that were submitted to the State in the summer of 2017 and are shown on the rebuild.nc.gov website at https://www.rebuild.nc.gov/resiliency/hurricane-matthew-resilient-redevelopment-plans. As a result of the large unmet need in this program area, the State will need to maximize all funding sources and obtain additional resources to address this program area's unmet need. As a result, the State may need to modify funding levels for sub-programs within this CDBG-DR allocation.

Appendix F: SAPA 10 Analysis of Estimated Unmet Need Across CDBG Funding Sources to Inform State Allocation Changes

The following sections reflect NCORR's ongoing analysis of unmet needs across CDBG disaster recovery and mitigation programs and the corresponding reallocations implemented in SAPA 10. Given that the total CDBG funding allocations from HUD have not changed, NCORR will continue to make the necessary allocation changes for its CDBG-DR and CDBG-MIT grants to respond to the remaining unmet needs highlighted in this reanalysis and support the lingering demand for housing recovery programs. Such changes will be reflected in future amendments of this Action Plan.

Section F1: Background

The Department of Housing and Urban Development (HUD) and the State have recognized the exacerbating impact of Hurricane Matthew and Florence due to the occurrence of the storms in quick succession. The State can use funds allocated in response to Hurricane Matthew interchangeably and without limitation for the same activities in the most impacted and distressed areas related to Hurricane Florence, and vice versa[5]. For this reason, the State conducted an analysis of combined estimated unmet need for Hurricane Matthew and Florence to inform allocation changes in the following Substantial Action Plan Amendments:

- Hurricane Matthew CDBG-DR Action Plan Substantial Amendment 10
- Hurricane Florence CDBG-DR Action Plan Substantial Amendment 4
- CDBG-MIT Action Plan Substantial Amendment 4

Under the substantial amendments noted above, there were allocation changes within each CDBG funding source, and reallocations across CDBG funding sources.

[5] "Public Law 116-20: Additional Supplemental Appropriations for Disaster Relief Act, 2019." (Sec. 1101(a); Date: 06/06/2019). https://www.congress.gov/bill/116th-congress/house-bill/2157/text.

Section F2: Executive Summary

This analysis highlights that the $52.8 million allocation increase to the CDBG-DR housing recovery programs are rooted in the fact that the estimated owner-occupied and rental housing unmet need is so great when compared to the unmet need across all other categories. Additionally, this allocation increase is tied to the fact that this category also has the highest estimated funding gap when accounting for the revised allocations. The increased demand for Homeowner Recovery Program and increased construction costs further supports the State's decision to maximize funding for the CDBG-DR housing recovery programs.

Given that the total CDBG funding allocations from HUD have not changed, the State made a series of allocation changes for the CDBG-DR and CDBG-MIT grants to support an increase to the CDBG-DR housing recovery program allocations.

For CDBG-DR funds, this included a reallocation of $47.7 million in funding for public housing and infrastructure to the CDBG-MIT grant, which also aligns the longer-term resilience and mitigation activities for these programs with the objectives of the CDBG-MIT funds. A decrease of $5.1 million across the Code Enforcement Support Program and planning allocations accounted for the remaining funds needed to allocate the additional $52.8 million in funding to the housing recovery programs.

For CDBG-MIT funds, the Strategic Buyout Program allocation was subsequently decreased by $59.4 million, largely to offset the increase of funding to the CDBG-MIT grant with the reallocation of the $47.7 million in public housing and infrastructure funds. This decrease also allowed for an increase of $5.1 million in the planning allocation and an increase of $6.6 million in the public housing allocation. These allocation increases will support the additional planning capacity anticipated for the larger scale public housing and infrastructure projects, and the anticipated increase in construction costs needed to support public housing restoration.

The State recognizes the significant estimated unmet need across all categories of recovery, however, has rooted the recent allocation changes in addressing the most significant estimated unmet need – owner-occupied and rental housing. Given the limited HUD funding available to address the total estimated unmet need, the State will continue to assess current allocations and use the limited funding to reduce the estimated funding gap across all categories of recovery and mitigation.

Section F3: Supporting Data for Analysis

Table F1 below provides a summary of allocation changes including revised total allocations for Hurricane Matthew (CDBG-DR), Hurricane Florence (CDBG-DR) and Mitigation (CDBG-MIT) activities combined.

Table F1 – Allocation Change Summary: Revised Total Allocations by CDBG Funding Source, Category & Program

CDBG Funding Source	Category	Program(s)	Revised Total Allocation	Allocation Change Summary
CDBG-DR	Owner-Occupied & Rental Housing	Homeowner Recovery Program	$581,085,307	**Increased** by $52 million
		Affordable Housing Development Fund	$121,719,805	**Increased** by $785,000
		Multi-Family Rental Housing Program	$19,516,018	
		Homeownership Assistance Program	$3,000,000	No allocation change
		Housing Counseling Fund	$1,500,000	No allocation change
		Code Enforcement Support Program	$3,000,000	**Decreased** by $2.4 million
	Economic (Small Business)	Small Business Recovery Assistance	$4,500,000	No allocation change
	Administration & Planning	N/A	$44,851,870	**Decreased** by $2.7 million
Total CDBG-DR Allocation			**$779,173,000**	--
CDBG-MIT	Owner-Occupied & Rental Housing	Strategic Buyout Program	$123,103,334	**Decreased** by $59.4 million
	Public Housing	Public Housing Restoration Fund	$36,246,916	**Increased** by $6.6 million; includes **Re-allocation** of $29.7 million from CDBG-DR
	Infrastructure	Infrastructure Recovery Program	$18,000,000	**Reallocation** from CDBG-DR
	Administration & Planning	N/A	$25,335,750	**Increased** by $5.1 million
Total CDBG-MIT Allocation			**$202,686,000**	--
Total CDBG-DR & CDBG-MIT Allocations			**$981,859,000**	--

This appendix provides additional context and a consolidated justification for the allocation changes rooted in the combined analysis of estimated unmet needs. Table F2 below summarizes the combined unmet need estimates for Hurricane Matthew, Hurricane Florence and Mitigation activities, along with revised program funding allocations as the basis for contextualizing and justifying the allocation changes. Table F2 also includes an estimated funding gap, calculated as the estimated unmet need less the revised program funding allocated.

Table F2 - Hurricane Matthew, Hurricane Florence & Mitigation Activities: CDBG Unmet Need and Allocation Summary

Category	CDBG Funding Source(s)	Estimated Unmet Need	% of Total Unmet Need*	Revised Program Funding Allocated	% of Total Allocation*	Estimated Funding Gap (Estimated Unmet Need less Revised Program Funding Allocated)	% of Total Estimated Funding Gap*
Owner-Occupied & Rental Housing	DR & MIT	$1,510,608,417	63%	$852,924,464	87%	$657,683,953	44%
Economic (Small Business)	DR	$584,411,718	24%	$4,500,000	<1%	$579,911,718	39%
Public Housing	MIT	$127,434,056	5%	$36,246,916	4%	$91,187,140	6%
Infrastructure	MIT	$181,657,339	8%	$18,000,000	2%	$163,657,339	11%
Administration & Planning	DR & MIT	--	--	$70,187,620	7%	--	--
Total CDBG Activities		**$2,404,111,530**	**100%**	**$981,859,000**	**100%**	**$1,492,440,150**	**100%**
Subtotal for CDBG-DR Activities		*$2,095,020,135*	*87%*	*$779,173,000*	*79%*	*$1,483,802,339*	*85%*
Subtotal for CDBG-MIT Activities		*$309,091,395*	*13%*	*$202,686,000*	*21%*	*$254,844,479*	*15%*

*Percentages may not add to 100% due to rounding

For reference, see Section F9 for a high-level summarization of the estimated unmet need reanalysis as outlined in the substantially amended CDBG-DR Action plans for Hurricane Matthew and Florence.

Following is a discussion of the data summarized in Table F2 by category.

Section F4: Owner-Occupied & Rental Housing

The owner-occupied and rental housing category has the highest estimated unmet need at $1.5 billion and represents 63 percent of the total estimated unmet need across all qualified disasters. The estimated unmet need for this category is nearly three times greater than the economic (small business) estimated unmet need, the next highest category in terms of estimated unmet need. The owner-occupied and rental housing category has the highest allocation with nearly $853 million in funding, representing 87 percent of the total CDBG allocations. This category also has the highest estimated funding gap at roughly $658 million, representing 44 percent of the total estimated funding gap across all categories.

The reanalysis of owner-occupied and rental housing unmet need conducted by the State (see Section F9) highlights an increased serious housing unmet need, specifically for Hurricane Florence, when compared to previous estimates. Additionally, the CDBG-DR Action Plans note an increased demand for the Homeowner Recovery Program and increased construction costs which further necessitate a need for additional funding. For these reasons, coupled with the significant estimated unmet need and estimated funding gap, the State has chosen to maximize funding in this category to further support the housing recovery efforts.

The increased allocations for the housing recovery programs were largely achieved through a reallocation of previous CDBG-DR funding to CDBG-MIT funding for Infrastructure ($18 million) and the Public Housing Restoration Fund ($29.7 million). To offset the reallocation of these funds to the CDBG-MIT grant, the State decreased the CDBG-MIT Strategic Buyout allocation in this category. These reallocations coupled with a decrease of $2.4 million in the Code Enforcement Support Program allocation allowed the State to allocate an additional $52.8 million to the housing programs.

It is also important to note that more funding has been allocated to the Homeowner Recovery Program as the estimated owner-occupied housing loss (need) represents over 90% of the estimated total loss (need) in this category. To further maximize funding allocated for the Homeowner Recovery Program, no additional allocations were made to the Homeownership Assistance Program or Housing Counseling Fund.

Section F5: Economic (Small Business)

The economic (small business) category represents 24 percent of the total estimated unmet need, with over $584 million in estimated unmet need. While there is a significant estimated unmet need for this category, as noted above the estimated unmet need for owner-occupied and rental housing is nearly three times greater. Additionally, the estimated funding gap for the economic (small business) category is roughly $580 million, however is five percent lower than the estimated funding gap for the owner-occupied and rental housing category. For these reasons, the State has chosen to maximize funding for housing recovery and has not made any additional allocations to the existing $4.5 million allocation for the economic (small business) category.

Section F6: Public Housing

The public housing category represents five percent of the total estimated unmet need, with over $127 million in estimated unmet need. The public housing category has $36.2 million in funding allocated, representing four percent of the total CDBG allocations. This category has the lowest estimated funding gap at $91 million, representing six percent of the total estimated funding gap across all categories.

As noted in the owner-occupied and rental housing discussion, the State has reallocated $29.7 million of funding for the Public Housing Restoration Fund from CDBG-DR to CDBG-MIT. This reallocation not only allows the State to further strengthen the ongoing recovery efforts related to housing with CDBG-DR funds, but also creates a realignment of longer-term resilience and mitigation activities, such as those in the Public Housing Restoration program, with the objectives of the CDBG-MIT funds. The public housing allocation under CDBG-MIT was further increased by $6.6 million in anticipation of increased construction costs which further necessitate a need for additional funding.

Section F7: Infrastructure

The infrastructure category represents eight percent of the total estimated unmet need, with over $181 million in estimated unmet need. The infrastructure category has $18 million in funding allocated, representing eight percent of the total CDBG allocations. This category has the second lowest estimated funding gap at $164 million, representing 11 percent of the total estimated funding gap across all categories.

The reanalysis of infrastructure unmet need conducted by the State (see Section F9) highlights a decrease in infrastructure unmet need for both Hurricane Matthew and Florence when compared to previous estimates. The reanalysis also highlights that a significant amount of Federal and State funds has been obligated or allocated to address the ongoing infrastructure unmet needs for both hurricanes. For these reasons, the State has chosen to maximize funding for housing recovery and has not made any additional allocations to the infrastructure category.

As noted in the owner-occupied and rental housing discussion, the State has reallocated $18 million of funding for the Infrastructure Recovery Program from CDBG-DR to CDBG-MIT. This reallocation not only allows the State to further strengthen the ongoing recovery efforts related to housing with CDBG-DR funds, but also creates a realignment of longer-term resilience and mitigation activities, such as those in the Infrastructure Recovery program, with the objectives of the CDBG-MIT funds.

Section F8: Administration & Planning

The administration and planning category has $70.2 million in funding allocated, representing seven percent of the total CDBG allocations. This category allocates funds for administrative costs associated with implementing the various CDBG recovery/mitigation programs and planning related activities, such as Action Plan development, public outreach, and coordination on future planning with local and regional coordinating entities.

CDBG-DR funding allocated for planning has decreased by $2.7 million, and CDBG-MIT funding allocated for planning has increased by $5.1 million; the net change across CDBG allocations for planning is a $2.4 million increase. These planning allocation changes are tied to the reallocation of the public housing and infrastructure funds from CDBG-DR to CDBG-MIT referenced above and efforts to enhance resilience planning efforts in impacted counties. Larger scale public housing and infrastructure projects may require significant planning efforts necessitating a need for additional planning funds under the CDBG-MIT grant. Moreover, ongoing support for resilience planning efforts will continue to help impacted communities mitigate and prepare for future disasters. Administration allocations have not changed across the CDBG funding sources.

Section F9: Summary of Unmet Need Reanalysis for Hurricane Matthew and Florence

The State conducted a reanalysis of unmet need specifically related to owner-occupied housing, rental housing and infrastructure, based on most recent disaster recovery data sets. The methodology used to complete the reanalysis aligns closely to HUD's own standard approaches to analyzing unmet need, with a slight modification to the previous methodology. The revised methodology for the reanalysis accounts for additional and more finalized disaster recovery data sets that were not available when previous unmet need estimates were calculated.

As it relates to owner-occupied and rental housing for Hurricane Florence, the reanalysis estimates the serious housing unmet need for owner-occupied and rental housing is roughly $1.1 billion. The reanalysis highlights a roughly 26 percent increase in serious housing unmet need when compared to previous estimates. For Hurricane Matthew, the reanalysis estimates the housing unmet need for owner-occupied and rental housing is roughly $428 million. The reanalysis highlights a slight 1.33 percent decrease in housing unmet need when compared to previous estimates.

As it relates to infrastructure for Hurricane Florence, the reanalysis estimates the infrastructure unmet need is roughly $111 million. The reanalysis highlights a roughly 20 percent decrease in infrastructure unmet need when compared to previous estimates. For Hurricane Matthew, the reanalysis estimates the infrastructure unmet need is roughly $70 million. The reanalysis highlights an 87 percent decrease in infrastructure unmet need when compared to previous estimates. The reanalysis also highlights that a significant amount of Federal and State funds has been obligated or allocated to address the ongoing infrastructure unmet needs for both hurricanes.

These revised estimates for unmet need were combined with existing unmet need estimates related to public housing and economic (small business) to determine the total estimated unmet need. For the full reanalysis details, see *Hurricane Matthew CDBG-DR Action Plan Substantial Amendment 10* and *Hurricane Florence CDBG-DR Action Plan Substantial Amendment 4.*

NCORR
NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

NORTH CAROLINA DEPARTMENT OF PUBLIC SAFETY

OFFICE OF RECOVERY AND RESILIENCY

Nonsubstantial Action Plan Amendment 9
September 26, 2024

Hurricane Florence CDBG-DR Action Plan

State of North Carolina

For U.S. Department of Housing and Development CDBG-DR Funds.

(Public Law 115-254 and 116-20)

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Revision History

Version	Date	Description
1.0	February 5, 2020	Initial Action Plan
1.1	March 13, 2020	Revised Action Plan – Public Comment Period and HUD Review
2.0	June 9, 2020	Amendment 1 - Establishment of an upper limit on income eligibility
3.0	January 11, 2021	Amendment 2 – Changes to programs, removal of the Strategic Buyout and Infrastructure funding allocations, updates to timeframes and some definitions.
4.0	January 18, 2022	Amendment 3 – Multiple allocation changes, including reallocating from the Small Rental Recovery Program and Construction Trades Training Program to the affordable housing effort and increasing the Homeowner Recovery Program allocation; programmatic eligibility and detail changes in several programs.
5.0	December 9, 2022	Amendment 4 – Reanalysis of Unmet Need specifically related to owner-occupied housing, rental housing and infrastructure. Multiple allocation changes, including: (1) increases to Homeowner Recovery Program and Affordable Housing Development Fund, (2) decreases in Planning and the Code Enforcement Compliance and Support Program. Removal of Public Housing Development Fund allocation which is being reallocated to CDBG-MIT under the State's CDBG-MIT Action Plan. Programmatic detail changes in several programs. General Requirements changes related to promissory notes, subsidized loans, procurement standards and displacement.
6.0	June 23, 2023	Amendment 5 – Nonsubstantial Amendment that includes technical clarifications to the Affordable Housing Development Fund program.
7.0	March 15, 2024	Amendment 6 – Multiple allocation changes, including the following: Allocation increases to the Homeowner Recovery Program and Planning. Decreases in allocation to the Affordable Housing Development Fund, reflecting a partial reallocation to State's CDBG-MIT Action Plan. Removal and complete reallocation to the State's CDBG-MIT Action Plan of three programs, the Code Enforcement and Compliance Support Program (CECSP), the Homeownership Assistance Program, and the Housing Counseling Fund. Programmatic updates to several programs. General Requirements updates related to elevation requirements, duplication of benefits, and application status. Updates to Appendices A and F.
8.0	August 23, 2024	Amendment 7- Nonsubstantial Amendment that includes minor allocation changes to the Affordable Housing Development Fund and Homeowner Recovery programs.
9.0	September 18, 2024	Amendment 8- Nonsubstantial Amendment that includes additional minor allocation changes to the Affordable Housing Development Fund and Homeowner Recovery programs.
10.0	September 26, 2024	Amendment 9 -Nonsubstantial Amendment to include minor allocations changes to the Affordable Housing Development Fund and Homeowner Recovery Programs.

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1.0 Summary of Action Plan Changes – Amendment 9

The following sections summarize the changes made in the Nonsubstantial Action Plan Amendment 9 (NSAPA 9).

1.1 Overview

This CDBG-DR Action Plan modification is classified as a Nonsubstantial Amendment. Nonsubstantial amendments to the Action Plan are generally defined as minor changes. For example, a nonsubstantial amendment should not be construed as allowing the general administrative budget to exceed the allowable limit or as a modification that materially changes the activities or eligible beneficiaries. Additionally, a Substantial Amendment is generally not required in cases where the grantee is providing additional technical clarifications to a program activity that already received approval from the U.S. Department of Housing and Urban Development (HUD). Nonetheless, HUD must be notified in advance of a Nonsubstantial Amendment becoming effective.

As outlined in Section 8 of the Action Plan, NCORR identifies the following criteria which constitute a substantial amendment:

- A change in program benefit or eligibility criteria.
- The addition or deletion of an activity.
- An allocation or reallocation of $15 million or more.

Only amendments that meet the definition of a Substantial Amendment are subject to the public notification, public comment procedures, and other general Action Plan expectations outlined in the Federal Register Notices by HUD. Based on Federal Register Notice guidelines (85 FR 4681 and 83 FR 5844), all amendments (nonsubstantial and substantial) will be posted on NCORR's website https://rebuild.nc.gov. Additionally, the CDBG-DR Action Plan will be revised to reflect the amendments (Nonsubstantial and Substantial) to the Action Plan. As with all amendments, hard copies of the Nonsubstantial Action Plan will also be made available upon request. Each amendment submitted to HUD will be numbered sequentially and is meant to supersede the earlier amendments in the published Action Plan.

1.2 Affordable Housing Development Fund

The Affordable Housing Development Fund allocation has decreased by $14,999,999 to account for additional projects with a pending commitment of alternative funding sources. The remaining allocation will continue to support projects in communities impacted by Hurricanes Matthew and Florence. This reallocation of funds seeks to leverage and maximize a variety of available funding resources to create resilient and affordable housing while shifting the funds to meet the remaining unmet needs of individual homeowners. Additional details on these changes are found at Section 7.4.

1.3 Homeowner Recovery Program

The allocation changes for the Affordable Housing Development Fund of $14,999,999 is added to the Homeowner Recovery Program. Additional details on these changes are found at Section 7.2.

1.4 Allocation Changes

The allocations for two CDBG-DR programs have been adjusted. Table 44 includes a breakdown of the allocations and a comparison to the allocation in the previous version of the Action Plan. This table is also found below in the Executive Summary of the plan, Section 2.0. A description and rationale for each change is included at Section 6.2.

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2.0 Executive Summary

Hurricane Florence made landfall near Wrightsville Beach, North Carolina on September 14, 2018. Florence, which struck North Carolina less than two years after its last major Hurricane declaration (Hurricane Matthew), heavily disrupted Hurricane Matthew recovery. Combined, the two storms impacted over half of the counties in the State. Many recovering homeowners, local jurisdictions, and other stakeholders currently face obstacles recovering from repeated storm impacts after two historic events.

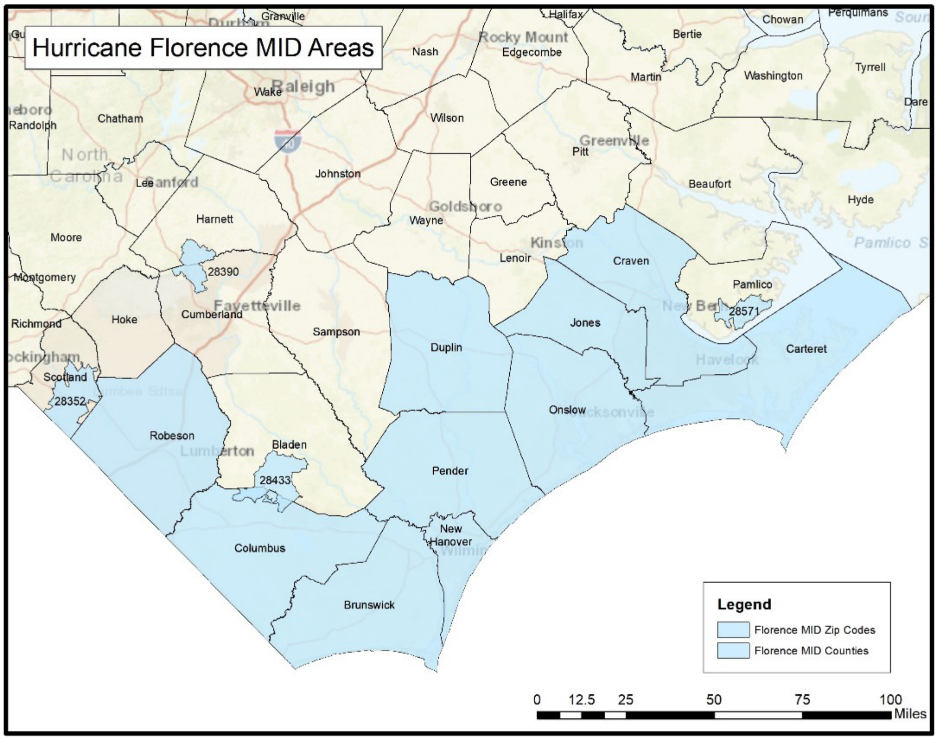
To better address the storm recovery, the North Carolina General Assembly created the North Carolina Office of Recovery and Resiliency (NCORR) through Session Law 2018-136, less than a month after Hurricane Florence made landfall. Since the creation of NCORR, the State has made tremendous strides in disaster recovery through the administration of $236,529,000 in Community Development Block Grant – Disaster Recovery (CDBG-DR) funds provided by the U.S. Department of Housing and Urban Development (HUD) to deliver programs to those recovering from the impacts of Hurricane Matthew. With the receipt of $542,644,000 in CDBG-DR funds to provide Hurricane Florence-specific recovery programs, NCORR seeks to continue to build on the successes of the existing programs for Hurricane Matthew recovery.

Generally, programs offered through Hurricane Florence recovery are similar in approach and consistent with those offered through the Hurricane Matthew recovery. This strategy allows NCORR to rapidly deliver recovery programming while capitalizing on lessons learned. NCORR will work to use already established processes, leverage existing systems, and quicken the pace of recovery – a major priority of NCORR given the significant time that has passed since Hurricane Florence impacted the state.

HUD specifies rules for the use of these funds in a Federal Register Notice (85 FR 4681). To use these funds correctly, NCORR must determine that projects and programs are eligible for funding under the Housing and Community Development Act of 1974 and its amendments (HCDA Part 105(a) includes a list of eligible activities) or otherwise specifically allowed in the Federal Register Notice, and that projects and programs respond to a disaster-related impact to infrastructure, housing, or economic revitalization.

In consideration of HUD requirements, NCORR will spend funds primarily on the housing recovery. NCORR must also spend 70 percent of all funds on activities that benefit LMI individuals and households. In addition, 80 percent of all funds must be spent in in HUD identified most impacted and distressed (MID) areas. HUD has reviewed the damage to North Carolina and determined that the following 10 counties and four zip codes are MID areas: Brunswick County, Carteret County, Columbus County, Craven County, Duplin County, Jones County, New Hanover County, Onslow County, Pender County, Robeson County, Zip Code 28433 (Clarkton, Bladen County), Zip Code 28352 (Laurinburg, Scotland County), Zip Code 28390 (Spring Lake, Cumberland County), and Zip Code 28571 (Oriental, Pamlico County). NCORR has reviewed these MID areas with HUD and has determined that recovery activities funded in counties with a MID zip code (Bladen, Scotland, Cumberland, and Pamlico Counties) will also meet the MID expenditure criteria regardless if the specific activity takes place in the identified ZIP code.

Hurricane Florence MID areas



NCORR has also identified seven counties which received significant damage combined from Hurricane's Matthew and Florence, and is considering those counties to be State-Identified MID areas. Those counties are reviewed in Section 4.5.1 below.

NCORR's primary focus is housing recovery for both homeowners and renters across the Hurricane Florence impacted area. $441.7 million is allocated directly to homeowners seeking to rehabilitate or reconstruct damaged homes or replace damaged modular home units. Other programs, such as the Affordable Housing Development Fund, address renter needs with a total of about $69.3 million allocated. These funds will build new, affordable rental housing through a variety of approaches, and will also work closely with activities in the CDBG-MIT Action Plan to provide down payment assistance to storm-impacted low- and moderate-income (LMI) renters to help them purchase a home.

The remaining grant funds will be spent on planning costs, which help NCORR and other stakeholders develop plans related to disaster recovery and resilience ($4.5 million allocated) and administrative costs, capped at 5 percent of the total grant funds ($27 million allocated). These allocations have changed since the original Action Plan to focus on the most urgent recovery needs.

Hurricane Florence CDBG-DR Programs

Program	PREVIOUS NSAPA 8 Allocation	CURRENT NSAPA 9 Allocation	CURRENT $ to LMI	CURRENT $ to HUD-defined MID
Administrative Costs	$27,132,200	$27,132,200	$0	$21,705,760
Planning Costs	$4,500,000	$4,500,000	$0	$3,600,000
Homeowner Recovery Program	$441,674,385	$456,674,384	$326,454,397	$365,339,508
Affordable Housing Development Fund	$69,337,415	$54,337,416	$54,337,416	$54,337,416
Homeownership Assistance	$0	$0	$0	$0
Housing Counseling Fund	$0	$0	$0	$0
Small Rental Recovery Program	$0	$0	$0	$0
Public Housing Restoration Fund	$0	$0	$0	$0
Construction Trades Training Program	$0	$0	$0	$0
Code Enforcement Compliance and Support Program	$0	$0	$0	$0
Total	**$542,644,000**	**$542,644,000**	**$380,791,813**	**$444,982,684**
% of Total	**100%**	**100%**	**70%**	**82%**

The development of programs is supported by an analysis of the unmet recovery need found in Part 4.0 below. Part 6.0 and Part 7.0 of the Action Plan outline how funds were allocated and delve into more detail about program specifics. Program implementation details not found in the Action Plan will be set forth in program-specific policies and procedures. Readers interested in the recovery need and how programs related to that need should focus on those parts of the Action Plan.

NCORR constantly seeks to hone its recovery programs, plans, policies, and procedures to better serve the recovering citizens of North Carolina. Significant public comment has contributed to the strengthening of this Action Plan in particular. NCORR has incorporated comments and adjusted the Action Plan to respond to those comments, within the framework provided for by CDBG-DR funding. Of special concern is the treatment of LMI individuals, limited English speaking individuals, disabled individuals, and other historically underrepresented or disparately treated groups. People with disabilities have been historically denied opportunities to participate on an equal basis due to discriminatory rules and policies; architectural, communication and transportation barriers; intentional exclusion; qualification standards; relegation to lesser services and opportunities, and lack of reasonable modifications or accommodations. NCORR commits to working with recovering individuals and stakeholders to affirm the rights of disabled people to have equal access to the recovery effort, and better serve the most vulnerable citizens of the State in their unique recovery conditions and needs.

NCORR is dedicated to continuing the mission of delivering recovery resources to recovering individuals, cities, counties, and other stakeholders across the impacted areas of the State. At all times, NCORR's focus is on a rapid, compliant, and comprehensive recovery approach that best serves the people and places of the State of North Carolina to help them rebuild and recover safer, stronger, and smarter.

2.1.0 Amendment 9 Update

See Section 2.0 for revised narrative incorporating allocation changes under Nonsubstantial Amendment 9. See Section 6.2 for summarization and rationale of allocation changes.

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3.0 Authority

Public Law 115-254, the "FAA Reauthorization Act of 2018", was enacted on October 5, 2018 and provided for an initial appropriation of $1.68 billion to HUD to address major disaster declarations for 2018. $336,521,000 of these funds were allocated to the State of North Carolina in CDBG-DR funds to assist in recovery needs due to Hurricane Florence. A subsequent law, Public Law 116-20, the "Additional Supplemental Appropriations for Disaster Relief Act, 2019" was enacted on June 6, 2019. In this appropriation, HUD was allocated $2.431 billion to continue to assist states and communities affected by 2018 and 2019 disasters. HUD allocated another $206,123,000 from this allocation in CDBG-DR funds to the State of North Carolina.

Federal Register Notice 85 FR 4681 includes allocations, common application, waivers, and alternative requirements for CDBG-DR grantees. HUD issued separate guidance for CDBG – Mitigation (CDBG-MIT) funds which were addressed in a separate Action Plan. Details on the use of those funds, and how they may intersect the use of CDBG-DR funds, may be found in that Action Plan. The CDBG-MIT Action Plan is available for review at https://rebuild.nc.gov/mitigation.

Prior to Public Law 115-254 and Public Law 116-20, North Carolina Session Law 2018-136 established NCORR as the administering agency for CDBG-DR funds specific to Hurricane Matthew recovery. NCORR is an office within the NC Department of Public Safety. NCORR will continue its role in administering CDBG-DR and CDBG-MIT funds.

To fulfill the requirements of this allocation, NCORR must submit an Action Plan for CDBG-DR activities that identifies unmet recovery needs to HUD and promotes programs to address those recovery needs. These activities primarily address *housing* recovery needs, but other activities are considered if they increase the State's ability to continue to meet its housing recovery obligations. This Action Plan provides a summary of the actions, activities, and resources used to address the State's priority recovery needs and goals. It is designed to help the State, local units of government, and other recovery partners assess current and future needs, and will be updated as new information or changing conditions warrant a change in recovery approach.

3.1 NCORR and ReBuild NC

While the state agency charged with CDBG-DR and CDBG-MIT funded operations is NCORR, the public-facing entity is branded "ReBuild NC". ReBuild NC is the common name for all recovery programs funded with CDBG-DR or CDBG-MIT funds, and is used when communicating with the public through public hearings or meetings, phone calls, applicant correspondence, social media, and other official communication lines.

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4.0 Recovery Needs Assessment

The State of North Carolina consulted multiple resources to better understand the unmet recovery needs relative to housing, infrastructure, and economic revitalization following the catastrophic impacts of Hurricane Florence. The following analysis identifies the effects, long-term recovery needs, and recovery priorities relative to the CDBG-DR allocation provided to the State to perform disaster recovery activities. The unmet recovery needs analysis considers the impacts of DR – 4393, the presidentially-declared disaster designation for Hurricane Florence. Where feasible, recovery programs are taken in context with the ongoing recovery needs relative to the impacts of Hurricane Matthew to find efficiencies in planning, program design, and eventual program implementation.

The foundation of the analysis of the unmet recovery need concerning housing is the State of North Carolina Housing Impact Assessment, completed by the Federal Housing Recovery Support Team (RSF) in coordination with HUD on March 12, 2019. The results of the Housing Impact Assessment were compared to the requirements set forth in 85 FR 4681 and previous Federal Register Notices. Where necessary, the Housing Impact Assessment assumptions were built upon or modified to better meet HUD guidance on the unmet housing recovery need methodology set therein.

Other data sources were necessary to complete the analysis of unmet infrastructure recovery needs and the analysis of economic impacts from the storm. The analysis is based on data provided by state and federal agencies, impacted areas, local nonprofits and other stakeholders, the U.S. Census Bureau, the U.S. Small Business Administration (SBA), The Federal Emergency Management Agency (FEMA), and other sources. The North Carolina State Office of Budget and Management (NCOSBM) drafted multiple reports in October 2018 that cataloged initial impacts and provided an estimate of the unmet recovery needs at that time. This groundwork was necessary to develop the current unmet recovery needs analysis. The full NCOSBM report is available at https://files.nc.gov/ncosbm/documents/files/Florence_Report_Full_rev20181016v10.pdf.

The analysis includes details specific to the HUD-identified most impacted and distressed (MID) areas as well as other impacted areas. The analysis provides details on the assistance received to date, catalogs any pre-existing challenges these impacted communities face, and provides the foundation for delivering recovery programming that seeks to cure the effects of the disaster while also preparing North Carolina for future disaster events.

NCORR is charged with administering CDBG-DR funds as Grantee to HUD. Therefore, NCORR has sought to develop an unmet needs analysis which is true to the conditions in the State using the best available data and resources to help inform the disaster recovery. NCORR understands that future information may become available that would adjust the findings of the unmet needs analysis. Changes to the Action Plan may result if additional funds become available or if new information is discovered during program planning, development, and delivery that informs a more beneficial recovery.

4.1 Hurricane Florence

On September 14, 2018 Hurricane Florence made landfall near Wrightsville Beach in New Hanover County, North Carolina. In the days prior to landfall, Florence had exhibited wind speeds typical of a Category 4 Hurricane but was downgraded to Category 1 before eventual landfall.

Despite the downgrade in intensity, Florence inundated parts of North Carolina and was the wettest tropical cyclone in the history of the Carolinas with rainfall totals greater than 25 - 35 inches in parts of the State. The rainfall intensity, combined with the slow-moving southwest track of the system and large wind field contributed to historic flooding across Southeastern and Central North Carolina. The rainfall fed the Cape Fear, Lumberton, and Waccamaw Rivers and lead to intense riverine flooding, damaging infrastructure, homes, and businesses in the surrounding area. More than nine river gauges registered flood conditions greater than a 500-year event. The majority of damage caused by Hurricane Florence is due to this extended rainfall as the storm trekked southwest slowly through coastal North Carolina for six days.

In addition to rainfall, Florence drove a record-breaking storm surge of 9 – 13 feet. The result of the storm surge, rainfall, and river overflow was catastrophic and life-threatening floods for a massive geographical extent of the State.[1]

[1] National Weather Service. *Historic Hurricane Florence, September 12-15, 2018*. https://www.weather.gov/mhx/Florence2018.

Figure 1 - Preliminary Rainfall Reports, Post-Storm, Hurricane Florence

Hurricane Florence Preliminary Rainfall Reports
North Carolina - As of 2 pm September 17, 2018

Rainfall Total	
Elizabethtown NC	35.93"
Swansboro NC	34.00"
Gurganus NC	30.38"
Hoffman Forest NC	29.62"
Hampstead NC	29.52"
Sunny Point NC	27.44"
Oak Island NC	26.98"
Wilmington NC	26.58"
Whiteville NC	25.91"
Jacksonville NC	25.28"
Newport NC (NWS Office)	25.20"
Mount Olive NC	25.04"
Bolivia NC	23.33"
Wilmington ((ILM) NC	23.02"
Emerald Isle NC	23.66"
Maysville NC	23.14"
Lumberton NC	22.76"
Yaupon Beach NC	22.07"
Supply NC	21.92"
Cedar Point NC	21.96"
Croatan NC	21.70"
Morehead City NC	21.20"
Back Island NC	20.87"
Hope Mills NC	20.54"
Dunn NC	20.41"
Sandy Run NC	19.92"
Kinston NC	18.88"

Rainfall Total	
Pink Hill NC	18.31"
Chadbourn NC	18.23"
Wallace NC	18.08"
Clinton NC	17.85"
Trent Woods NC	17.28"
New Bern NC	16.65"
Stedman NC	16.38"
Cameron NC	16.36"
Pine Knoll Shores NC	16.32"
Fayetteville NC	15.27"
Roseboro NC	15.15"
Linden NC	15.11"
Goldsboro NC	14.39"
Rockingham NC	14.37"
Raeford NC	14.32"
Grantsboro NC	14.11"
Burgaw NC	13.60"
Fort Bragg NC	13.29"
Greenville NC	11.66"
Snow Hill NC	11.50"
Pittsboro NC	11.40"
Burnsville NC	11.26"
Ashboro NC	10.67"
Sparta NC	10.20"
Barrett NC	9.97"
Durham NC	9.58"
Apex NC	9.52"
Ocracoke NC	9.29"

Rainfall Total	
Chapel Hill NC	9.18"
Wilson NC	8.75"
Clayton NC	8.57"
Fairview NC	7.86"
Concord NC	7.62"
Aho NC	7.29"
Garner NC	7.12"
Greensboro NC	6.99"
Raleigh NC	6.98"
Williamston NC	6.93"
Washington NC	6.71"
Rocky Mount NC	6.33"
Charlotte NC	6.13"
Boone NC	6.07"
Gastonia NC	6.06"
Rocky Mount NC	6.33"
Lawsonville NC	5.70"
Cape Hatteras NC	5.59"
Tarboro NC	5.16"
North Wilkesboro NC	5.00"
Winston-Salem NC	4.85"
Yadkinville NC	4.59"
Edenton NC	4.49"
Yanceyville NC	4.15"
Roanoke Rapids NC	3.92"
Hickory NC	3.72"
Asheville NC	3.29"
Elizabeth City NC	2.01"

Often overlooked by the historic flooding event is the extensive wind damage to the coastal regions of North Carolina, where wind gusts over 100 miles per hour were recorded.[2] The combined impact of rainfall, flooding, storm surge, and wind damage had devastating effects on housing and infrastructure. The total number of Hurricane Florence related deaths in North Carolina stands at 40.[3]

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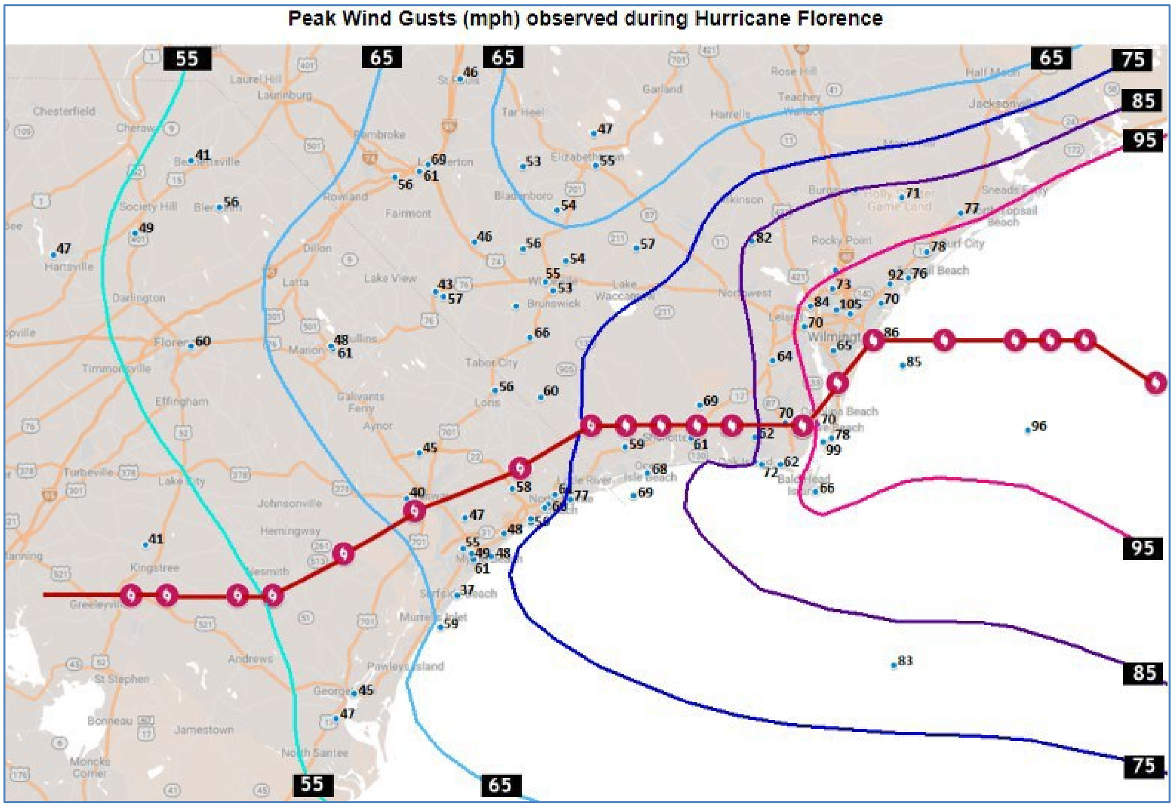
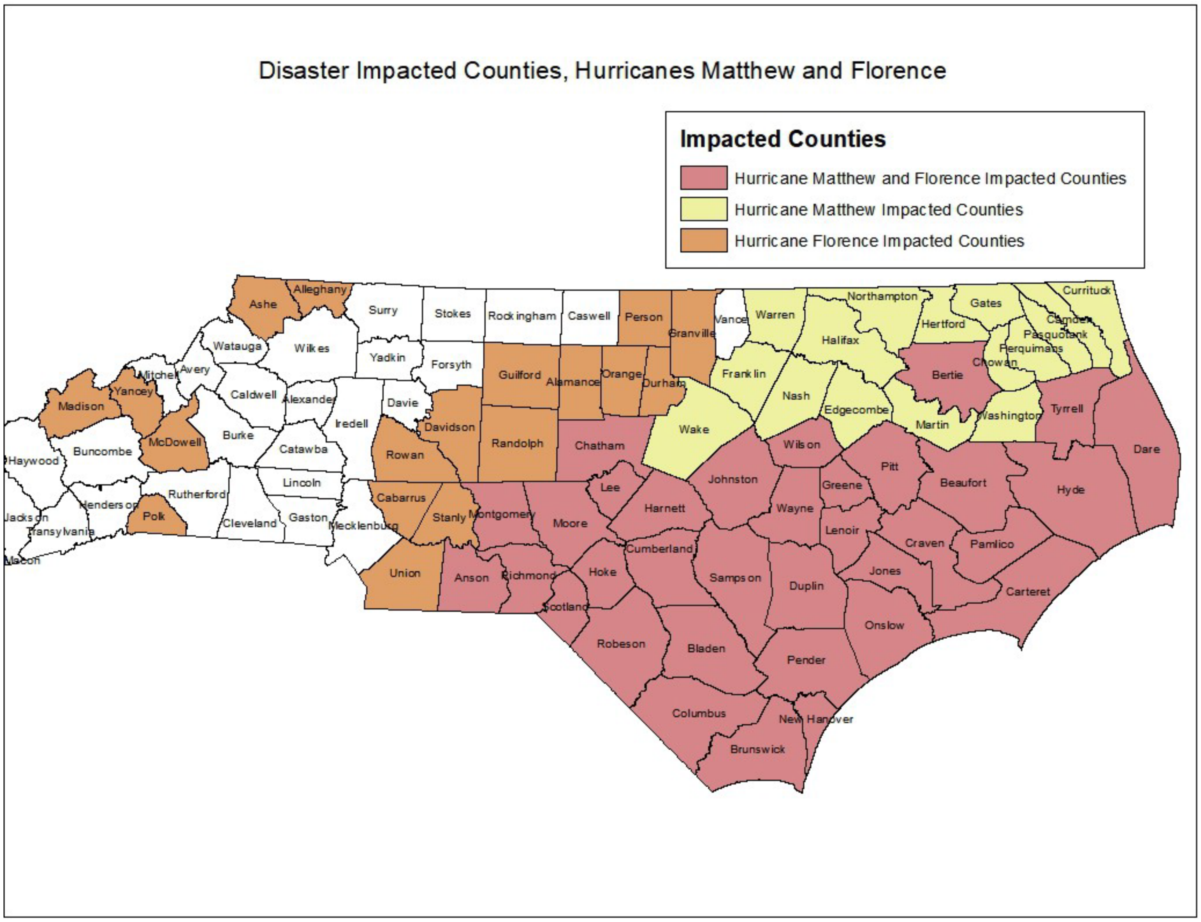
[2] National Weather Service. *Hurricane Florence: September 14, 2018*. https://www.weather.gov/ilm/HurricaneFlorence.
[3] North Carolina Office of State Budget and Management. *Building Communities Stronger and Smarter Based on Preliminary Damage and Needs Assessment*. https://files.nc.gov/ncosbm/documents/files/Florence_Report_Full_rev20181016v10.pdf

Figure 2 - Wind Gusts in MPH, September 14, 2018, Hurricane Florence (NWS)



The effects on housing and infrastructure by Hurricane Florence were worsened by the ongoing recovery effort statewide for Hurricane Matthew, which struck North Carolina in 2016. There are a total of 34 counties with overlapping disaster impacts from Matthew and Florence based on FEMA availability of Public Assistance (PA) and Individual Assistance (IA) for impacted areas. As the impacts of Hurricane Florence disrupted the progress of many impacted areas still recovering from Hurricane Matthew, the counties and municipalities with storm impacts from both disaster events are especially hard hit and in need of assistance.

Figure 3 - Impacted Counties, Hurricanes Matthew and Florence



To date, FEMA has made IA and/or PA applications available to 52 counties for Hurricane Florence. 34 of those impacted counties are eligible for IA, while another 18 are eligible for PA only. The final two counties to be eligible for PA, Guilford and McDowell, were granted PA funds in Amendment 10 to the FEMA Internal Agency Docket on DR-4393 on November 15, 2018, two months after Hurricane Florence made landfall.[4]

Unless otherwise specified, the term "impacted counties" in this analysis refers to the 34 counties which received IA funds, as those counties were hardest hit by Florence and this analysis seeks to identify areas where the recovery need is greatest. The maps above and below demonstrate all counties approved for FEMA PA funds.

[4] Federal Emergency Management Agency. *Internal Agency Docket No. FEMA-4393-DR*. https://www.fema.gov/disaster/notices/amendment-no-10-1

Figure 4 - Hurricane Florence Impacted Counties (FEMA PA)

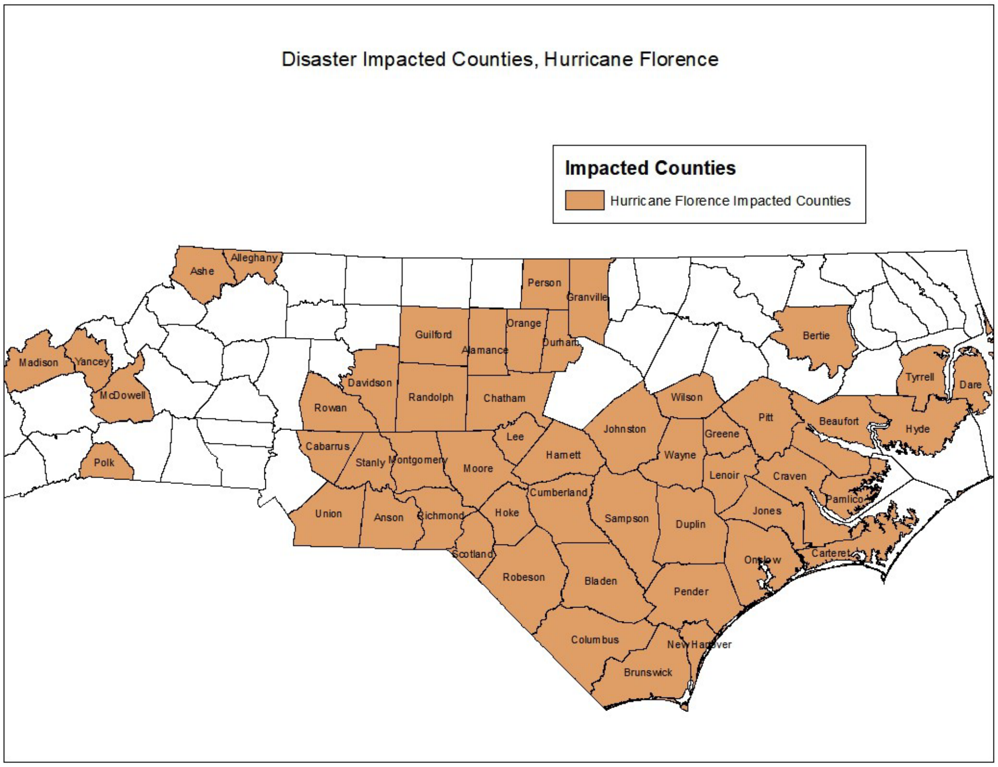
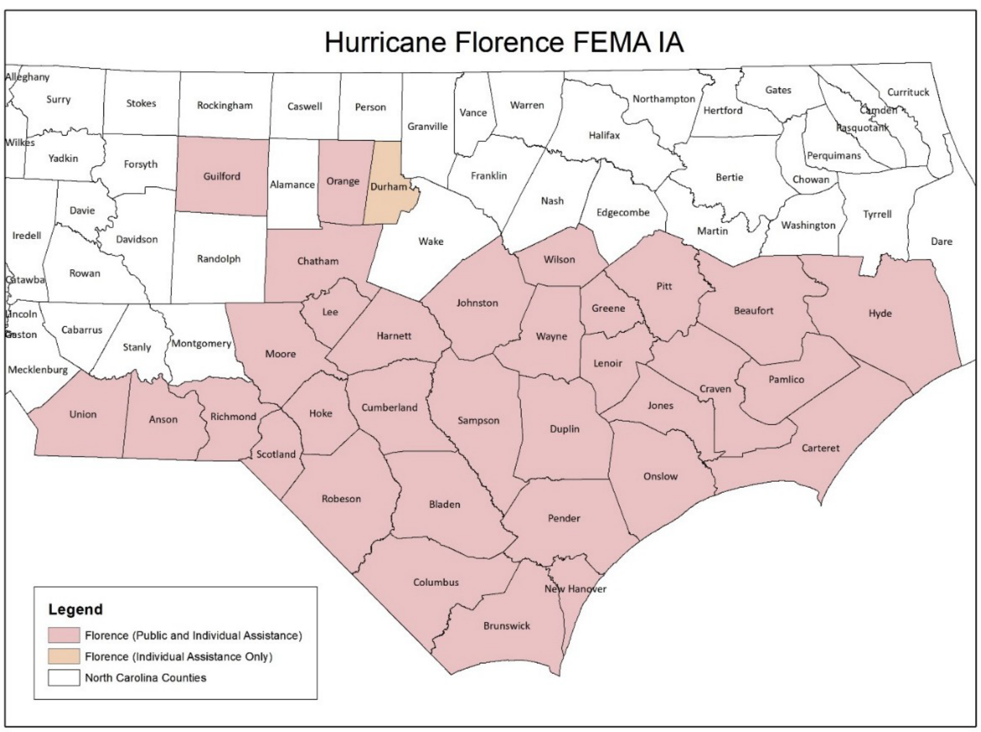


Figure 5 - Hurricane Florence Impacted Counties (FEMA IA)



4.2 Summary of Immediate Disaster Impacts

Immediately following Hurricane Florence, NCOSBM developed a preliminary Damage and Unmet Needs Assessment. The original report, completed on October 11, 2018 and later revised on October 26, 2018, broadly estimated the total costs of damages to the State of North Carolina at $17 billion.[3] Later reports provided by the National Oceanic and Atmospheric Administration estimate the total storm impact to be $24 billion, greater than the total damage caused by Hurricane Matthew and Hurricane Floyd (1999) combined.[5]

The conclusions drawn in this analysis will be difficult to directly compare to these initial estimates. The unmet recovery needs analysis primarily addresses the applicability and use of CDBG-DR funds to meet recovery objectives. Therefore, some unmet recovery needs are not able to be funded. Additionally, significant recovery funds have been made available to help close the gap from these initial figures, including private insurance, National Flood Insurance Program (NFIP) flood insurance, SBA loans, FEMA IA, FEMA PA, multiple agriculture recovery programs and insurance, and many other resources.

4.2.1 Preliminary Housing Impact

The initial reports on housing impacts were dire. NCOSBM estimates that more than 434,000 homes were impacted by the storm, a combination of rental and owner-occupied property that took either wind or flood damage. The total estimated cost to repair damaged residential property was $4.8 billion. The true cost of repairing this damage is estimated to be 10 percent higher due to higher than average expected construction costs. NCOSBM also considered damages to personal property such as automobiles, however that analysis is not included in this assessment.

Figure 6 - NCEM Flood Damages to Properties

SUMMARY OF NCEM ESTIMATED FLOOD DAMAGES TO RESIDENTIAL PROPERTIES							
		All Flood Hazards		Surge Flooding		Riverine Flooding	
FLOOD DEPTH	DAMAGE LEVEL	Estimated Damages (M)	Building Count	Estimated Damages (M)	Building Count	Estimated Damages (M)	Building Count
Substructure	Minor	$142	37,391	$52	8,900	$91	28,491
0 - 2 ft	Minor	$563	15,474	$341	8,552	$222	6,922
2 - 4 ft	Moderate	$766	10,712	$550	7,617	$215	3,095
4 - 6 ft	Major	$624	6,711	$467	4,880	$157	1,831
6+ ft	Destroyed	$435	4,275	$321	2,938	$114	1,337
Total		**$2,530**	**74,563**	**$1,730**	**32,887**	**$799**	**41,676**

Source: NC Division of Emergency Management; estimates include temporary lodging, nursing homes, and institutional dormitories, which are otherwise excluded from housing damage estimates.

NCOSBM's methodology primarily used the North Carolina Department of Public Safety's (NCDPS) Division of Emergency Management (NCEM) data on flood modeling as well as

[5] National Oceanic and Atmospheric Administration. *U.S. Billion-Dollar Weather & Climate Disasters 1980-2019*. https://www.ncdc.noaa.gov/billions/events.pdf.

insurance claim information gathered from the North Carolina Department of Insurance (NCDOI). NCEM used GIS data to model storm surge and combined that data with NOAA data on riverine flooding to develop an accurate model of impacts to housing in disaster affected areas. NCEM's modeling estimate is included to provide a foundation for NCEM's estimate of damages. Note that NCEM's estimate includes temporary housing, nursing homes, and dormitories. That damage estimate is included elsewhere in the analysis and not in the residential housing analysis.

Table 1 - Preliminary Damage Estimate, Housing (NCOSBM)

Preliminary Cost of Housing Needs	
Item	Cost Estimate
Residential (single family, multi-family, rental residences, and supportive housing)	**$ 4,820,000,000**

4.2.2 Preliminary Infrastructure Impact

NCOSBM also assessed losses to utilities, water and sewer services, and transportation systems statewide. Information on utility damage was provided by the North Carolina Electrical Cooperatives Association, the Public Works Commission of Fayetteville, Greenville Utilities Commission, and Duke Progress Energy. These agencies (Duke Progress Energy excluded) are non-profit organizations and have coordinated with FEMA on the extent of the damage to utility systems. The total cost estimated to restore gas and electric service to impacted areas of the State is $691 million.

For water and sewer system information, NCOSBM released a survey to local governments to catalog disaster impacts to these systems. The survey results reveal an estimated $88 million in damage to water and sewer systems such as wastewater treatment facilities, as well as damage to systems which are used to manage stormwater.

Preliminary estimates provided by NCOSBM reflect $320 million in damage to public infrastructure such as bridges and roads, public transportation, rail systems, ports, and aviation. Another $9.82 million in damage was done to local and private roads.

Table 2 - Preliminary Damage Estimate, Infrastructure (NCOSBM)

Preliminary Cost of Infrastructure Impacts	
Item	Cost Estimate
Gas and electric	$ 691,000,000
Water, sewer, and stormwater management systems	$ 88,000,000
State bridges and roads	$ 260,000,000
Public transportation	$ 1,700,000

Preliminary Cost of Infrastructure Impacts		
Rail and rolling stock	$	1,100,000
Ports	$	54,000,000
Aviation	$	4,000,000
Local roads	$	5,460,000
Private roads	$	4,360,000
Total	**$**	**1,109,620,000**

4.2.3 Preliminary Economic Impact

The economic impact on the State was immense. The 31 counties FEMA originally declared eligible for FEMA IA assistance account for 23 percent of the State's total Gross Domestic Product (GDP).[3] The impact on GDP would only be increased as additional counties became eligible for IA after NCOSBM's report was complete. Based on reports from the NCDOI, the initial estimate is that approximately 27,900 businesses and nonprofits experienced damage to vehicles, equipment, or property from flooding or wind. NCOSBM's estimate for the cost of these damages exceeds $1 billion.

Damages to commercial and nonprofit businesses sent ripple effects through the impacted counties. Losses contributed to decreased economic output for these impacted businesses, resulting in lost production and decreased sales in certain sectors. As employees and business owners focused on recovery, they remained out of work and experienced lost wages or lost revenue as businesses and nonprofits worked to get back on their feet. The true cost of these impacts is difficult to quantify and unevenly distributed across economic sectors and impacted geographies. However, NCOSBM estimates that the direct economic loss is as much as $3.78 billion.

An additional $1.9 billion in induced losses was considered by NCOSBM, however accurately estimating induced losses and recovering from induced loss is beyond the scope of the unmet recovery needs analysis as it relates to funding opportunities for CDBG-DR funds.

Table 3 - Preliminary Damage Estimate, Economic Recovery (NCOSBM)

Preliminary Cost of Economic Impacts		
Item	Cost Estimate	
Commercial real estate and equipment	$	1,080,000,000
Economic losses	$	2,700,000,000
Total	**$**	**3,780,000,000**

4.2.4 Other Impacts

NCOSBM identified multiple other significant impacts. Primarily extensive damage was done to the agriculture sector, with significant loss of crops and livestock, damage to agricultural buildings and equipment, damage to fishing and aquaculture, loss of commercial forestry and timber, and other adverse environmental conditions which otherwise impacted agricultural output.

Table 4 - Preliminary Damage Estimate, Agriculture (NCOSBM)

Preliminary Cost for Agriculture Impacts	
Category	Cost Estimate
Crops and livestock	$ 2,031,900,000
Cooperatives and growers' association	$ 9,700,000
Emergency livestock disposal	$ 20,000,000
Agricultural buildings & equipment	$ 61,800,000
Agricultural infrastructure	$ 55,900,000
Commercial fishing and aquaculture	$ 33,300,000
Forestry	$ 84,900,000
Stream restoration and stream debris removal (agriculture)	$ 57,500,000
Total	**$ 2,355,000,000**

Hurricane Florence also produced other environmental impacts. The North Carolina Department of Environmental Quality (NCDEQ) assessed damage to underground commercial petrochemical storage tanks and found that flood water caused some tanks to shift, float to the surface, or fill with water. There are 78 reported damaged storage tanks that require remediation at an estimated cost of $3 million.

DEQ also collected preliminary information from impacted counties to better understand the impacts to beaches and river systems. According to DEQ estimates from these polls, the cost of dredging is approximately $89.8 million while beach renourishment is expected to cost $287.9 million. DEQ reports dam and dike impacts of approximately $29.2 million at 19 dam sites, including damages at Boiling Spring Lakes and Sutton Lake which account for $20 million of that total alone. As these dams were built in the 1960s and may not have met state or federal requirements for dams, any rebuilding would require improvements to bring these dams in compliance with both state and federal requirements.

Table 5 - Preliminary Damage Estimate, Environmental Considerations (NCOSBM)

Preliminary Cost for Environmental Impacts		
Item	Cost Estimate	
Hazardous waste/waste management	$	3,000,000
Dredging	$	89,800,000
Beach renourishment	$	287,900,000
Dams, dikes, and levees	$	29,200,000
Total	**$**	**409,900,000**

Governmental and publicly-owned facilities were also damaged by Hurricane Florence. NCEM flood mapping data was used to estimate the damage to local governmental property. The estimated damage to local and state government buildings is $323.9 million combined. These estimates include damage suffered by the University of North Carolina (UNC) system buildings. State attractions, such as State parks and State-owned recreational facilities, suffered an estimated $4.5 million in damage. State owned timber suffered $4.2 million in damage, with an expected further loss of $7.2 million in future lost revenue from timber production. While there is an expectation that revenue sources for state and local governments were also stunted by the storm (such as state and local fees and tax revenue lost). Those considerations are not included in this analysis.

The K-12 public school system and community college system was also damaged by the storm. 13 Local Education Agencies (LEAs) in disaster areas estimated the damage to local schools. That estimate was applied to the schools located throughout the disaster impacted area. The result is an estimated $267 million in direct damage to school facilities. Community colleges were contacted by NCOSBM to provide their damage estimates. The result of that survey was approximately $4.9 million in damage to facilities and another $500,000 in equipment damage to 21 of the 58 colleges across the State.

Table 6 - Preliminary Damage Estimate, Public Buildings and Education

Preliminary Cost for Public Buildings and Education		
Item	Cost Estimate	
Local Government Buildings	$	143,500,000
State Government Buildings	$	180,400,000
State Attractions	$	4,500,000
State Owned Timber	$	11,400,000
Public K-12 Schools	$	267,000,000

Preliminary Cost for Public Buildings and Education	
Community Colleges	$ 4,900,000
UNC System	$ 300,000
Total	**$ 612,000,000**

Another $50.5 million in direct damage was estimated to have occurred to private health care facilities serving the impacted areas of the State. This estimate was developed by comparing the physical damage to hospital systems against the costs to repair these facilities due to Hurricane Sandy in New York. This method was used to calculate an average cost of damage per bed. The final estimate was scaled down according to the severity of damage classifications developed after Hurricane Sandy as well as a 56 percent reduction in cost to account for reduced construction costs compared to New York. NCOSBM goes on to estimate expected costs for mosquito abatement, mold remediation, social and child services, food and health needs, and mental health services. However, as the unmet recovery needs analysis primarily considers direct impacts and damage, these calculations are omitted.

4.2.5 Summary

The work done by NCOSBM in cataloging immediate impacts is instrumental in the current understanding of the remaining recovery need. Where better data is unavailable, NCOSBM assumptions are adopted as the best available measure of the impacts of Hurricane Florence. Where more accurate data exists, NCOSBM assumptions are modified or replaced by that data. In summary, NCOSBM has identified $13 billion in damages caused by Hurricane Florence outlined in Table 7.

Table 7 - NCOSBM Impact Estimates Applicable to the Unmet Needs Assessment

Category	Cost Estimate
Housing	$ 4,820,000,000
Infrastructure	$ 1,109,620,000
Economic Impacts	$ 3,780,000,000
Agriculture	$ 2,355,000,000
Environmental	$ 409,900,000
Public Buildings & Education	$ 612,000,000
Health Care	$ 50,500,000
Total:	**$ 13,137,020,000**

Reviewing NCOSBM’s analysis, the most significant unmet need is found in 1) housing, 2) economic revitalization needs, 3) agriculture, and 4) infrastructure. Further analysis on the current amount of the unmet need, including revised estimates of the total damage, is included in this unmet recovery needs analysis.

As previously indicated, this unmet recovery needs analysis will differ from the NCOSBM analysis. Primarily the unmet recovery needs analysis seeks to identify items which can be addressed by CDBG-DR funds using best practices for successful recoveries throughout the country. Therefore, total estimated impacts may be less than this initial estimate. The unmet recovery needs analysis also primarily focuses on the unmet needs relative to housing, infrastructure, and economic revitalization in accordance with the Notice.

4.3 Resilience Solutions and Mitigation Needs

As evidenced by the establishment of CDBG-MIT funds, practical application of effective resilience solutions and mitigation components for CDBG funds has become a critical component to the recovery effort. A review of housing and infrastructure resilience needs helps NCORR prepare to fund activities which provide substantial resilience and long-term benefit for CDBG funded projects.

4.3.1 Housing Resilience Needs

The increased cost to build or rehabilitate single or multi-family residential structures to a green building standard is considered an unmet need for the housing recovery in North Carolina.

In its early stages, green building techniques were thought to cost a significant premium over traditional building techniques. A 2017 study performed by Dodge Data & Analytics in coordination with the National Association of Home Builders asked homebuilders and remodelers what the additional cost of implementing green building techniques was. The result of the survey was that 49 percent of builders and 44 percent of remodelers believed that green construction methods cost 5 – 10 percent more than traditional building methods in a single-family home. When asked the same question for a multi-family structure, 36 percent of builders and remodelers answered that costs increased 5 – 10 percent and another 29 percent answered that it only added 1 – 4 percent to the total cost of the work.[6] Therefore, there is some cost savings to implementing green building techniques in larger, multi-family residences.

Green building techniques result in fewer greenhouse gas emissions and cost savings to homeowners and renters due to deceased utility bills. As a condition of expending CDBG-DR funds, the needs of LMI individuals and areas must be prioritized. Green building techniques may prove beneficial to low-income households due to these operational cost savings.
In consideration of this survey data, for the purpose of unmet needs calculation a 5 percent increase in cost is expected on average for residential construction work to comply with E.O. 80. The 5 percent factor is used to balance different expected costs for single family and multi-family construction, and to account for cost savings in economies of scale given the large

[6] National Association of Home Builders, Green Multifamily and Single Family Homes 2017. https://www.nahb.org/-/media/Sites/NAHB/research/priorities/green-building-remodeling-development/green-multifamily-and-sf-homes-2017-smartmarket-brief-fff.

number of builders expected to enter the market to perform reconstructions and repairs. The 5 percent factor is also reliable as it is derived from a recent survey and does not need to be adjusted for inflation or other market factors other than those already captured in the market analysis following Hurricane Florence.

Housing resilience elements must also consider the accessibility needs of those with disabilities. Access needs such as ramps and lifts, accessible bathrooms, and widened hallways are considered in the design and construction of new or repaired housing. These accessibility items are covered by program funds above the standard award cap.

4.3.2 Infrastructure Resilience Needs

Estimated unmet infrastructure recovery needs in relation to climate change is difficult to assess due to the variety of infrastructure projects which require recovery funding. NCORR commits to complying with E.O. 80 by assessing potential climate change impacts on vulnerable infrastructure projects as it relates to reconstruction. Further, NCORR commits to implementing recommendations provided by state reports on climate change impacts, including the 2020 NC Climate Risk Assessment and Resilience Plan and other recommendations put forth by the North Carolina Climate Change Interagency Council. Recommendations from the Council will be implemented to the greatest extent feasible in that they align with the unmet needs identified herein, comply with the Action Plan, meet a CDBG National Objective, and costs for those measures are determined to be reasonable.

Infrastructure, including public buildings, must be made accessible to those with disabilities, including sloped curbs, ramps, lifts, and elevators. The removal of architectural barriers for those with disabilities will be covered by CDBG-DR funds.

4.4 Housing Impact Assessment

On March 12, 2019, The Housing Recovery Support Function, in coordination with FEMA and HUD, provided a final Housing Impact Assessment. The Housing Impact Assessment is the foundation of the unmet recovery need analysis specific to housing.

4.4.1 Limitations of the Data

Both the unmet needs analysis and the housing impact assessment rely on accurate data. To better understand the housing impact analysis, it is critical to understand the limitations of the data therein. The analysis used a combination of data, including FEMA IA inspection data, redevelopment plans, NCOSBM data, community stakeholder information, and lessons learned from the Hurricane Matthew recovery. The following provides some pros and cons for the major data sources to lend context to the analysis:

- **FEMA Individual Assistance.** Registration for FEMA IA is voluntary, and therefore limited to those with the means and resources to seek aid. Because it is not the entire damaged population it is only an approximation of the total damage. FEMA IA data also evolves over time as inspections occur and awards are made. Generally the inspections conducted by FEMA IA registrants are basic and not as comprehensive as the Small Business Administration (SBA) inspections. However, those familiar with disaster such as households that also went through the Hurricane Matthew recovery process are accustomed to the FEMA IA process and may more readily seek assistance than those unaccustomed to receiving disaster recovery assistance.

- **Redevelopment plans.** Redevelopment plans provide a best-case scenario relative to long term disaster recovery and are an excellent foundation from which to begin recovery planning. The weakness of redevelopment plans is that some concepts contained in the plans can be technically infeasible with the resources available. Implementing redevelopment plans includes architecture and engineering, environmental review, and acquisition phases which may not provide immediate benefit to the impacted community. Additionally, large-scale infrastructure implementation may require coordination with adjacent municipalities and counties as well as interagency coordination at the local and state level which could further add time to the implementation of some redevelopment plans. Some elements of the redevelopment plans could also be unpopular with stakeholders and citizens of impacted communities if they appear to disrupt the neighborhood “way of life” or status quo. Additional outreach may be required to explain the potential benefits of redevelopment plans.
- **NCOSBM data.** NCOSBM’s initial review of disaster impacts was critical groundwork to begin the unmet needs analysis. Other data sources were used to clarify and refine the NCOSBM assumptions on the impact of the storm. It is well documented that the NCOSBM assumptions were preliminary and the plan is rightfully used as a starting point for a deeper analysis.
- **Community stakeholders.** Community stakeholders are most in touch with real disaster impacts, understand constituent’s specific needs, and are the first place many impacted households or individuals turn with their recovery concerns. However, the community level can lack the full scale or scope of the recovery unfolding statewide and the unmet recovery needs of the impacted communities must be balanced with the resources available to provide an equitable but comprehensive plan for recovery.

NCORR recognizes the weaknesses and strengths inherent in the data collected to complete the unmet needs analysis. It has reviewed the data made available from NCEM and NCOSBM and incorporated into the unmet recovery needs analysis the elements which best inform a complete, comprehensive understanding of the unmet recovery need.

4.4.2 Housing Impact Assessment Methodology

The Housing Impact Assessment was completed in coordination with HUD and used FEMA data to develop a comprehensive analysis of housing needs post-Florence. The Housing Impact Assessment builds upon the work done by NCOSBM in their initial findings. Excerpts of the analysis constitute the majority of the unmet housing needs analysis.

To complete the analysis, the Housing Recovery Support Function:

- Analyzed FEMA IA inspection data as of January 3, 2019 for Hurricane Florence.
- Reviewed the NC Resilient Redevelopment Plans for 34 of the 50 counties impacted by both Hurricane Matthew and Hurricane Florence.
- Reviewed the 50 Resilient Redevelopment Plans funded after Hurricane Matthew.
- Reviewed the existing Consolidated Plan, including the Analysis of Impediments to Fair Housing Choice.
- Reviewed the housing section of the Hurricane Florence Recovery Recommendations – Building Communities Stronger and Smarter.
- Given the likely overlap in recovery between Hurricane Florence and Hurricane Matthew, the staff reviewed the relevant materials related to recovery from Hurricane Matthew including the:
    - Mission Scoping Assessment;
    - Recovery Support Strategy; and
    - Community Development Block Grant – Disaster Recovery (CDBG-DR) Action Plan.
- Conducted community site visits, stakeholder interviews with several recovery stakeholder organizations' representatives, and attended community informational meetings.

4.4.3 Analysis of FEMA Inspection Data

FEMA IA claims and inspection data were used by the Housing Recovery Support Function to catalog the total damage. As of January 4, 2019, FEMA inspections in the 34 counties eligible for FEMA IA revealed that at least 64,581 housing units sustained some level of damage as a result of Hurricane Florence.

HUD interprets FEMA IA inspections into 5 broad damage categories for homeowners:

- **Minor-Low.**
    - Homeowners: Less than $3,000 of FEMA inspected real property damage, or less than $2,500 in personal property damage.
    - Renters: Less than $1,000 of FEMA inspected personal property damage.
- **Minor-High.**
    - Homeowners: Between $3,000 and $7,999 of FEMA inspected real property damage, or $2,500 to $3,499 in personal property damage.
    - Renters: Between $1,000 and $1,999 of FEMA inspected personal property damage.

- **Major-Low.**
    - Homeowners: Between $8,000 and $14,999 of FEMA inspected real property damage, and/or 1 to 4 feet of flooding in the first floor, or $3,500 to $4,999 in personal property damage.
    - Renters: Between $2,000 and $3,499 of FEMA inspected personal property damage or 1 to 4 feet of flooding in the first floor.
- **Major-High.**
    - Homeowners: Between $15,000 and $28,800 of FEMA inspected real property damage, and/or 4 to 6 feet of flooding on the first floor, or $5,000 to $9,000 in personal property damage.
    - Renters: Between $3,500 and $7,500 of FEMA inspected personal property damage or 4 to 6 feet of flooding on the first floor.
- **Severe.**
    - Homeowners: Greater than $28,800 of FEMA inspected real property damage or the structure is determined to be destroyed, and/or 6 or more feet of flooding on the first floor, or $9,001 or more of personal property damage.
    - Renters: Greater than $7,500 of FEMA inspected personal property damage or the structure is determined to be destroyed and/or 6 or more feet of flooding on the first floor.

Note that HUD considers properties with Minor-Low or Minor-High damage to be able to sufficiently recover through a combination of other benefits received, such as insurance or FEMA assistance. The extent of the damage also makes it likely that private resources are enough to recover. Therefore, Minor-Low and Minor-High damage categories are excluded from the unmet needs analysis.

Rental damage is approximated by using personal property damage as a proxy for real property damage, as most rental property is not inspected for real property damage by FEMA. Therefore rental property unmet need must be augmented with existing information about the rental conditions prior to storm impacts. This information has been provided by the North Carolina Housing Finance Agency, North Carolina Housing Coalition, and North Carolina Coalition to End Homelessness. This data is included in Sections 4.10.3, 4.10.4, and 4.10.5 below.

The Major-Low, Major-High, and Severe categories (“Serious” damage categories), may not have the resources to recover. Homeowners and renters without insurance will require other assistance to recover, such as CDBG-DR funds. Those with insurance may also have a remaining unmet recovery need after FEMA assistance, SBA loans, flood insurance, and other benefits received are applied to the recovery effort.

The breakdown of FEMA inspections in the impacted counties are detailed below. The FEMA damage inspections support that 71 percent of the FEMA inspections that made damage determinations were to owner occupied structures. 68 percent of the serious damage classification impacted owner occupied structures. 82 percent of damaged homes were single family homes.

Table 8 -FEMA IA Inspections (from Housing Impact Assessment)

HUD Categorization of FEMA Damage Inspections		All units with FEMA Inspection showing any damage	Owner Occupied			Renter Occupied		
			Total Owners	% Low-Income	% Uninsured	Total Renters	% Very Low-Income	% Single-Family Homes
Minor-Low	Minor Damage	42,914	37,974	58%	53%	4,940	62%	82%
Minor-High		10,017	3,914	53%	56%	6,103	57%	83%
Major-Low	Serious Damage	5,373	3,879	47%	67%	1,494	51%	79%
Major-High		4,486	2,671	38%	53%	1,815	48%	81%
Severe Damage		1,791	1,373	36%	52%	418	43%	94%
Total Serious Damage		**11,650**	**7,923**	**42%**	**60%**	**3,727**	**49%**	**82%**
Total All Damage		**64,581**	**49,811**	**55%**	**54%**	**14,770**	**57%**	**82%**

In addition to the damage classification, FEMA inspections also determined the primary source of the damage. While only 31 percent of structures inspected were damaged primarily by flooding, the majority of serious damage was done by flood impacts and not by other factors. Conversely, while precipitation damage such as hail and rain damage were the primary source of damage for 44 percent of residences inspected, the amount of serious damage from these conditions is low.

Table 9 - Primary Source of Damage

Damage Category	Homes with a Real Property Inspection	Flood Damage	Hail/Rain/Wind Driven Rain Damage	Tornado/Wind Damage
Minor-Low	42,914	18%	51%	31%
Minor-High	10,017	27%	53%	20%
Major-Low	5,373	76%	18%	6%
Major-High	4,486	85%	10%	6%
Severe	1,791	94%	2%	4%
Overall	**64,581**	**31%**	**44%**	**24%**

FEMA inspects each property to ascertain the flood height. FEMA's flood height determinations confirm the assumption that the majority of serious damage was sustained by significant flood heights in the first floor of the property. Properties which had greater than one foot of flood depth in the first floor comprise the majority of serious damage designations. As to be expected, properties with flood depths greater than four feet all sustained serious damage.

Table 10 - Flood Depth and Damage Category (Housing Impact Assessment)

Damage Category	Damaged Homes	No Flood	Basement	1st floor <1 foot	1 to 4 feet	4 to 6 feet	Over 6 feet	Total
Minor-Low	42,914	72%	1%	16%	10%	0%	0%	100%
Minor-High	10,017	66%	2%	26%	5%	0%	0%	100%
Major-Low	5,373	16%	1%	29%	54%	0%	0%	100%
Major-High	4,486	14%	0%	20%	55%	11%	0%	100%
Severe	1,791	5%	0%	4%	45%	21%	25%	100%
Total	**64,581**	**61%**	**1%**	**18%**	**17%**	**2%**	**1%**	**100%**

4.4.4 Impacts on Housing with Insufficient Insurance

The Hurricane Florence impacted areas face additional challenges recovering from disaster due to a lack of insurance or underinsurance – including insufficient flood insurance participation from the NFIP.

Of 86,225 total FEMA IA registrants, only 60,247 or 69.9 percent report having homeowners' insurance. For flood insurance provided through the NFIP, only 10,199 or 11.8 percent of owners report carrying flood insurance. Renters carried flood insurance even less frequently, with only 2.1 percent reporting flood insurance coverage.

Examining the North Carolina owner-occupants without insurance covering structural damage experiencing Major-High or Severe damage, there were 1,207 owner-occupants with Major-High damage and 469 with Severe damage. The uninsured group constituted about half (53 percent for Major-High damage and 49 percent for Severe damage) of the owners experiencing those levels of damage. For renter-occupants that were both very low income and experienced Major-High and Severe damage, there were 837 with Major-High damage and 186 with Severe damage. For renters, the dollar thresholds are both lower and considered personal property losses rather than real property losses.

Owners without insurance present a challenge to recovery. In the absence of a potential insurance settlement, these owners may have fewer financial resources to support the necessary repairs.

While renters often possess the ability to respond to changed property conditions (such as disaster damage) with relocation, renters at the lowest end of the income spectrum may experience more limited options. As a result, they may remain in disaster damaged housing due to their lack of resources. Landlords operating rental stock catering to low income families, particularly unassisted housing, may lack the resources to repair the damaged stock. As a result, the units may simultaneously remain damaged and occupied. Target investments by the communities in establishing an effective rental market (both assisted and unassisted) may permit residents in the bottom of the income spectrum to remain in the community and engage in employment necessary for the economic recovery of the community. This would simultaneously satisfy part of the Section 3 requirements for CDBG-DR assisted undertakings.

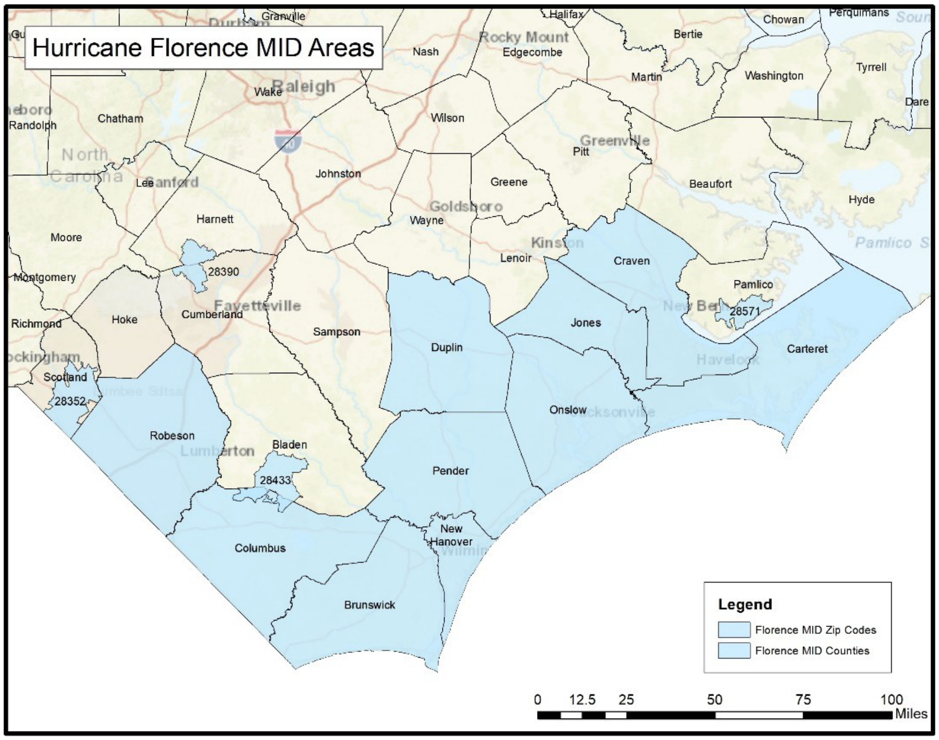
4.5 HUD Designated Most Impacted and Distressed Areas (MID)

To align recovery efforts with the Most Impacted and Distressed Areas (MID), HUD requires that 80 percent of CDBG-DR funds are spent within areas designated by HUD to be MID areas. HUD determines MID areas using the following factors:

- Areas where FEMA has allocated FEMA Individual Assistance/Individual Household Program funds.
- Areas with concentrated damage defined as:
    - Counties exceeding $10 million in serious unmet housing needs.
    - Zip codes with $2 million or more in serious unmet housing needs.

Pursuant to this calculation, HUD identified 10 counties and four zip codes as MID areas. The areas are: Brunswick County, Carteret County, Columbus County, Craven County, Duplin County, Jones County, New Hanover County, Onslow County, Pender County, Robeson County, Zip Code 28433 (Clarkton, Bladen County), Zip Code 28352 (Laurinburg, Scotland County), Zip Code 28390 (Spring Lake, Cumberland County), and Zip Code 28571 (Oriental, Pamlico County).

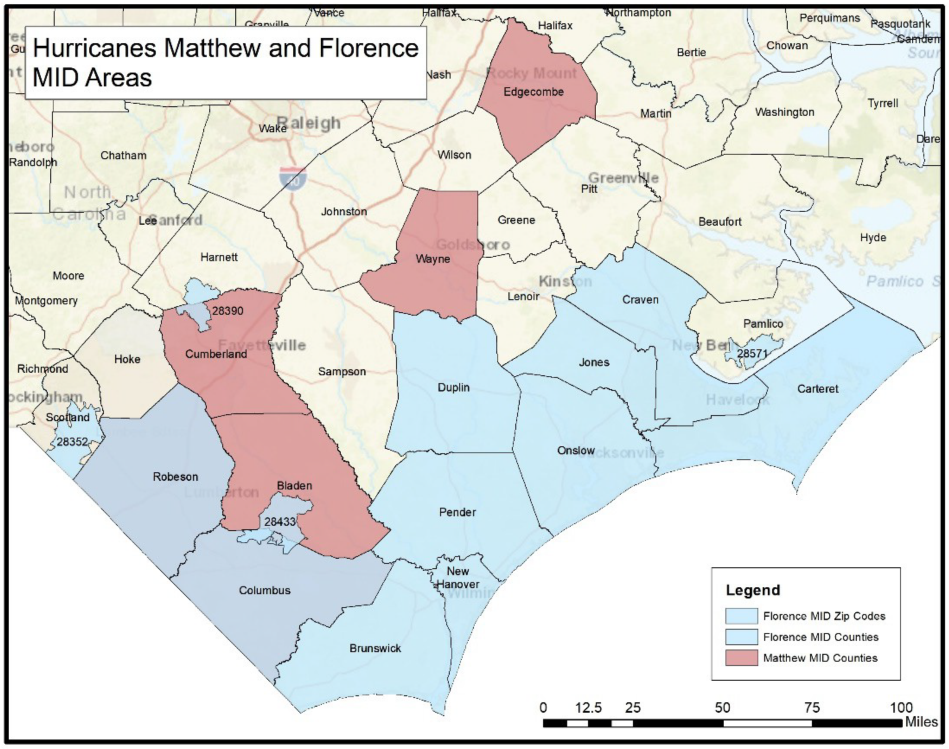
Figure 7 - HUD Designated MID areas



Because of the impact of two major storms in quick succession, the State of North Carolina is able to use funds allocated in response to Hurricane Matthew interchangeably and without limitation for the same activities in the most impacted and distressed areas related to Hurricane Florence, and vice versa[7]. In consideration of this unique condition, NCORR considers the full MID area for both Hurricane and Florence to include the entirety of Bladen County and Cumberland County, Edgecombe County, and Wayne County. HUD has supported this approach. Note that of particular concern are Robeson, Columbus, and parts of Cumberland and Bladen Counties, which are considered MID areas for both storms.

[7] "Public Law 116-20: Additional Supplemental Appropriations for Disaster Relief Act, 2019." (Sec. 1101(a); Date: 06/06/2019). https://www.congress.gov/bill/116th-congress/house-bill/2157/text.

Figure 8 - HUD Designated MID areas, Matthew and Florence



For Hurricane Florence, based on FEMA damage inspections showing some level of damage to residential property, these areas account for 78 percent of all homes with a FEMA inspection documenting damage and 90 percent of homes with serious damage. The table below breaks down damage by MID area along with owner or renter status. Note that zip code MID areas are displayed at the county level to help with data consistency and comparisons across geographic areas. To the greatest extent possible, recovery efforts will be focused in MID zip codes but according to HUD guidance, recovery effort outside of the MID zip code but within the county the zip code is located will be considered to meet the recovery need of the MID area. Therefore NCORR considers activities within the counties of Bladen, Cumberland, Pamlico, and Scotland to satisfy the MID criteria.

Table 11 - MID areas, Any Damage by Owner and Renter

County	Owner, Any Damage	Renter, Any Damage	Total, Any Damage
Bladen (County)	1,608	304	1,912
Brunswick (County)	3,648	644	4,292
Carteret (County)	3,710	879	4,589
Columbus (County)	2,541	720	3,261
Craven (County)	4,341	1,570	5,911

County	Owner, Any Damage	Renter, Any Damage	Total, Any Damage
Duplin (County)	2,185	545	2,730
Jones (County)	932	175	1,107
New Hanover (County)	4,782	2,707	7,489
Onslow (County)	5,205	2,236	7,441
Pender (County)	3,697	773	4,470
Robeson (County)	5,444	1,174	6,618
Scotland (County)	728	301	1,029
Cumberland (County)	201	158	359
Pamlico (County)	261	28	289
Total	**39,283**	**12,214**	**51,497**

Table 12 - MID Areas, Serious Damage by Owner and Renter

County	Owner, Serious Damage	Renter, Serious Damage	Total, Serious Damage
Bladen (County)	192	78	270
Brunswick (County)	396	126	522
Carteret (County)	630	225	855
Columbus (County)	353	172	525
Craven (County)	1,708	771	2,479
Duplin (County)	684	250	934
Jones (County)	346	75	421
New Hanover (County)	450	411	861
Onslow (County)	521	534	1,055
Pender (County)	1,036	329	1,365
Robeson (County)	596	213	809
Scotland (County)	63	128	191
Cumberland (County)	49	81	130
Pamlico (County)	86	5	91
Total	**7,110**	**3,398**	**10,508**

Within the MID areas, Craven, Duplin, and Pender counties have 50 percent of the total FEMA Verified Loss (FVL). However, 59 percent of National Flood Insurance Program (NFIP) paid claims were from Carteret, Craven, and New Hanover, which also accounted for 51 percent of the total dollar amount of claims paid in the MID areas. Analyzing the FEMA estimated flood depths indicates that Craven, Duplin, Jones, and Pender experienced deeper flooding than the remainder of the impacted counties, with 33 percent to 47 percent of the homes flooding, receiving more than 24 inches of flood water.

Table 13 - Selection of top 10 Most Impacted Counties, by FEMA Registrations

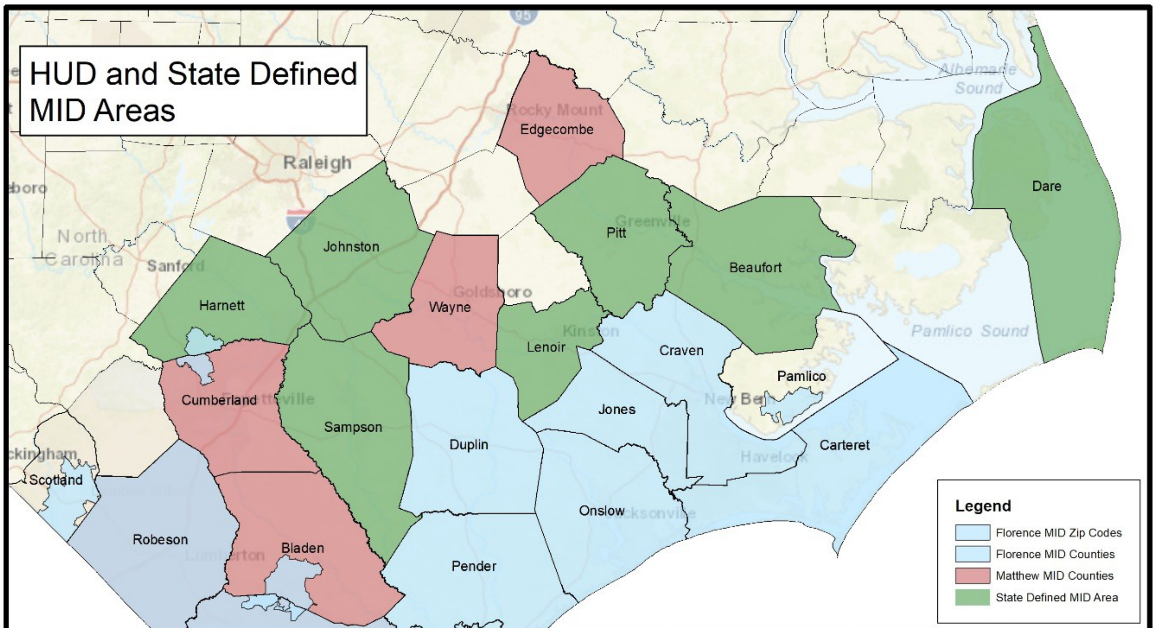
All Real Property Damage		Real Property Damage >$17k	
County	**FEMA Registrants**	**County**	**FEMA Registrations**
Onslow	6,587	Pender	764
New Hanover	6,125	Craven	601
Robeson	6,020	Duplin	548
Craven	5,539	Onslow	232
Carteret	4,311	Carteret	176
Pender	4,243	Jones	166
Brunswick	3,961	Brunswick	149
Cumberland	3,008	Robeson	112
Columbus	2,897	New Hanover	109
Duplin	2,524	Cumberland	90

4.5.1 State-Designated MID Areas

In consideration of the unique recovery needs created by the large area of the State that was impacted by both Hurricane Matthew and Hurricane Florence, NCORR conducted an analysis of damage to areas that were impacted by both storms. In adherence with the allocation methodology outlined in Appendix A for both 82 FR 5591 for Hurricane Matthew and 85 FR 4681 for Hurricane Florence, NCORR calculated an estimated unmet need for both events combined. This analysis used the Major-Low, Major-High, and Severe damage categories for both events and multiplied those damage categories by the repair estimation factors included in Appendix A for each respective notice. The threshold to be considered a State-identified MID is greater than $10 million in combined losses at the county level.

The result is the addition of seven counties which are considered the State-identified MID areas. These counties are Beaufort, Dare, Harnett, Johnston, Lenoir, Pitt, and Sampson.

Figure 9 - State-Identified Most Impacted and Distressed Areas



County	Matthew and Florence Estimated Unmet Need		County	Matthew and Florence Estimated Unmet Need	
Robeson (County)	$	197,307,459	Lenoir (County)	$	30,491,620
Craven (County)	$	161,228,095	Jones (County)	$	30,486,444
Pender (County)	$	101,788,288	Bladen (County)	$	29,008,386
Cumberland (County)	$	88,747,142	Pamlico (County)	$	25,970,454
Duplin (County)	$	66,873,164	Beaufort (County)	$	21,732,584
Wayne (County)	$	56,865,628	Sampson (County)	$	17,194,081
Columbus (County)	$	56,750,640	Scotland (County)	$	15,971,064
Onslow (County)	$	54,835,052	Pitt (County)	$	14,642,648
Carteret (County)	$	54,012,059	Harnett (County)	$	12,141,829
New Hanover (County)	$	50,222,920	Dare (County)	$	10,888,976
Edgecombe (County)	$	42,011,156	Johnston (County)	$	10,796,876
Brunswick (County)	$	36,152,959			

These state-identified areas are for recovery planning purposes and for a deeper understanding of the hardest hit dual impacted areas of the State. While expenditures in these state-identified MID areas do not meet the 80 percent expenditure requirement set by HUD, they do satisfy the requirement set at 85 FR 4686 which reiterates that "CDBG–DR grants in response to Hurricane Matthew may be used interchangeably and without limitation for the same activities that can be funded by CDBG–DR grants in the most impacted and distressed areas related to Hurricane Florence. Additionally, all CDBG–DR grants under the 2018 and 2019 Appropriations Acts in response to Hurricane Florence may be used interchangeably and without limitation for the same activities in the most impacted and distressed areas related to Hurricane Matthew."

4.5.2 Substantial Damage Determinations

After disaster, local building code officials inspect damaged dwellings to determine if they were substantially damaged. Substantial damage is when the value of the proposed work to repair equals or exceeds 50 percent of the fair market value of the building or structure before the damage has occurred or the improvement is started. If it is determined that the proposed work is a substantial improvement or restoration of substantial damage, the building official shall require existing portions of the entire building or structure to meet the requirements of Section R322 of the residential building code, which addresses flood-resistant construction.

According to the Housing Impact Study, FEMA conducted inspections of 6,566 owner-occupied property in the MID counties and identified 979 properties that were substantially damaged. In a parallel effort, impacted communities conducted similar inspections of both owner-occupied and rental property, and 1,100 additional properties are expected to be identified (for a total of approximately 2,080 substantially damaged properties). To normalize these inspection results, the substantially damaged properties were compared to the number of registrations as well as properties where the FVL exceeded $5,000. In the first comparison, Pender County was identified with 7 percent of the number of substantially damaged properties compared to registrations. For the latter comparison, Pender County (49 percent), Lumberton (Robeson County, 18 percent), and Pamlico County (13 percent) were identified as having the largest portion of the damaged housing declared substantially damaged. As expected, these inspections are well correlated with the MID areas.

It is important to note that this analysis only considers the substantial damage incurred by FEMA IA registrants, and not substantial damage to the entire area (i.e. those that did not register for FEMA assistance). The analysis also may not consider dual-impacted structures or those already damaged recently by Hurricane Matthew, which means the full count of substantially damaged structures in the impacted area may be far higher. Ultimately the local jurisdiction determines substantial damage, and therefore the analysis may be underrepresenting the full extent of the substantially damaged property.

Table 14 – FEMA-based Substantial Damage Determinations

Community	County	Inspections	Substantial Damage Properties	FEMA Registrations	Substantial Damage, % of Registrations with FVL
Belhaven	Beaufort	157	2	330	11%
Bladen	Bladen	81	15	3,102	7%
Brunswick County	Brunswick	604	11	10,156	2%
Carteret County	Carteret	733	23	8,941	3%
Columbus County	Columbus	509	37	5,475	9%
Bridgeton	Craven	80	3	150	7%
Havelock	Craven	42	3	2,624	2%
New Bern	Craven	614	110	7,380	7%
Riverbend	Craven	309	16	1	N/A
Jones County	Jones	64	41	1,692	11%

Community	County	Inspections	Substantial Damage Properties	FEMA Registrations	Substantial Damage, % of Registrations with FVL
New Hanover County	New Hanover	302	27	20,955	5%
Pamlico County	Pamlico	891	39	1,449	13%
Pender County	Pender	1,531	586	7,817	49%
Lumberton	Robeson	649	66	5,683	18%

Section R322 requires that substantially damaged structures within a FEMA designated Special Flood Hazard Area (SFHA) must elevate above the base flood elevation (BFE) as part of the rehabilitation or reconstruction scope of work. Previous recovery efforts for Hurricane Matthew recovery required two feet of freeboard above the BFE. Elevating existing structures or reconstructed buildings to meet the freeboard requirement adds cost to the rehabilitation or reconstruction effort but is necessary to mitigate future losses and protect vulnerable structures in SFHAs.

4.6 Demographic Profile of Impacted Counties

The Housing Impact Assessment cataloged the demographics of the impacted counties. The primary data source for the demographic analysis was the U.S. Census Bureau's American Community Survey.[8]

Several demographic factors were highlighted during the analysis to draw attention to recovery concerns that may affect how an impacted county may recover. These criteria are highlighted to provide context to the recovery activities in these counties and help inform the Action Plan to better respond to the unique challenges of each impacted area.

Table 15 - MID Key Demographics

County	Age		Family Size	Income	Education		Disability	Race		Latino	LEP
	Under 18	65 and over			No HS Grad	BA/BS or higher		White	Minority		
Bladen	21.80%	18.40%	2.92	$30,408	20.80%	14.50%	21.60%	58%	42%	7.50%	3.00%
Brunswick	17.20%	26.90%	2.73	$49,356	10.90%	28.00%	17.20%	84%	17%	4.70%	2.10%
Carteret	18.50%	21.80%	2.77	$50,599	9.20%	26.70%	19.90%	89%	11%	4.20%	1.80%
Columbus	22.20%	17.80%	2.99	$35,847	19.40%	12.50%	20.10%	62%	38%	5.00%	2.60%
Craven	22.50%	17.10%	2.92	$47,957	12.30%	24.30%	17.40%	71%	30%	7.00%	3.60%

[8] U.S. Census Bureau. *American Community Survey*. https://www.census.gov/programs-surveys/acs.

County	Age		Family Size	Income	Education		Disability	Race		Latino	LEP
	Under 18	65 and over			No HS Grad	BA/BS or higher		White	Minority		
Cumberland	25.00%	11.00%	2.56	$44,737	11.00%	22.40%	14.00%	51%	49%	11.20%	3.20%
Duplin	24.80%	15.80%	3.28	$35,364	26.70%	10.80%	19.00%	65%	36%	21.30%	12.10%
Jones	19.00%	22.00%	2.79	$34,080	18.20%	14.20%	23.80%	66%	34%	4.20%	2.40%
New Hanover	19.40%	15.70%	2.95	$51,232	7.70%	38.90%	12.60%	81%	19%	5.30%	2.80%
Onslow	25.40%	8.50%	3.20	$46,786	8.60%	20.20%	16.90%	74%	26%	11.80%	2.00%
Pamlico	16.00%	26.80%	2.88	$45,211	15.00%	18.10%	20.80%	76%	24%	3.60%	0.50%
Pender	22.40%	17.10%	3.37	$46,580	13.20%	25.60%	16.70%	77%	23%	6.40%	3.00%
Robeson	26.00%	13.00%	3.49	$31,298	22.90%	12.80%	16.60%	29%	71%	8.30%	3.60%
Scotland	23.30%	16.20%	3.06	$32,739	18.40%	15.90%	19.50%	45%	55%	2.80%	0.40%
Statewide	22.10%	16.30%	3.10	$53,855	11.80%	31.90%	13.30%	68%	32%	9.60%	4.50%

4.6.1 Education

In this analysis, education is split between adults without a high school degree and those with a bachelor's degree or higher. Of the most impacted counties, Bladen, Columbus, Duplin, Jones, Robeson, and Scotland have a significant portion of the population without high school degrees, ranging from 18 – 27. This compares unfavorably with the North Carolina State average, where 13 percent of residents lack a high school degree.

A lack of education affects the recovery in many ways. Less educated individuals experience greater difficulty securing jobs and are at a greater risk of losing their jobs due to the disaster. Impediments to accessing programs is more frequent among this demographic. Recovery planning and programs must be carried out differently in counties with lower education levels to mitigate these barriers.

4.6.2 Disability

Individuals with disabilities face additional challenges with respect to disaster recovery. The U.S. Census Bureau American Community Survey (ACS) data presents disability information for three age groups, under 18, 18 - 64, and 65 years of age and over. The proportion of the most impacted counties with individuals with disabilities is similar to that for the declared counties and North Carolina as a whole. Among the working age groups, the disability percentages are higher in Bladen, Carteret, Columbus, Duplin, and Jones Counties. The disability rate statewide is 7.0 percent. For the older group, the disability percentages are higher in Brunswick, Carteret, Columbus, Duplin, and Jones Counties, where older group disability rates range from 7.5 - 9.2 percent, compared to 5.4 percent for the State.

Planning for individuals with disabilities is essential as they often need additional housing considerations, particularly individuals with mobility challenges. In areas prone to flooding, the challenge is to balance requisite elevation while considering Americans with Disabilities Act/Section 504 standards in design and its applicability and feasibility by site. While mechanical lifts may be a solution for elevated units, the long-term maintenance as well as the required generators to act as back-up power must be considered. Disabled individuals by HUD definition are presumed to be low- and moderate-income and may not have the resources to maintain these features.

Chapter 3 of the HUD Relocation Assistance Handbook includes information on serving the needs of disabled individuals during relocation activities, including eligible costs and activities for relocating individuals with disabilities as well as guidance on Section 504 compliance for those individuals.

4.6.3 Race

Race must be considered when looking at individual communities when understanding specific needs, historical context, identity, and aspirations. According to the ACS, while 68 percent of the State population identifies as White, in the most impacted counties the percentage of individuals that identify as White ranges dramatically, from 29 – 89 percent. 29 percent of Robeson County identifies as White, with Cumberland next highest at 51 percent. Black or African American populations range from 5.7 percent of the population of Carteret County to 36.6 percent in Cumberland County. The Native American population is concentrated in Robeson County, where they represent 38.9 percent of the population. Latino or Hispanic populations are particularly high in Cumberland (11.2 percent), Onslow (12.2 percent), and Duplin (21.7 percent) Counties, compared to the North Carolina average of 9.1 percent. Latino or Hispanic populations are comparatively low in Brunswick, Carteret, Columbus, Jones, New Hanover, and Scotland Counties.

CDBG-DR allocations cannot fully relieve disparities caused by historic inequalities based on race and income. However, CDBG-DR funds can be expended in communities based on the unique needs of the community, including different rental programs to address the rental need, an emphasis on job training in lower-income and areas with depressed jobs outlook because of storm impacts, and local capacity support for jurisdictions and municipalities attempting to recover after multiple storm impacts. To the greatest extent possible, CDBG-DR funds will work to address each community's recovery needs without disrupting community fabric or the vital way of life, and further the resilience and longevity of these recovering communities.

4.6.4 Limited English Proficiency

In the most impacted counties, only one, Duplin County, stands out with a larger number of residents with Limited English Proficiency (LEP), with 12.1 percent of the individuals 5 years or older speaking English less than "very well" at home. The ACS data further shows that these are largely Spanish language speakers. LEP presents barriers to communication and understanding between disaster recovery programs and impacted communities. A significant Spanish speaking population of disaster survivors warrants specific planning and coordination to ensure that disaster programming is messaged correctly to impacted individuals and households. Title VI of the 1964 Civil Rights Act requires that no person is discriminated against, excluded from participation, or denied benefits under any program or activity receiving federal financial assistance based on race, color, or national origin. Therefore, NCORR commits to assisting LEP households and communities in accordance with state and federal requirements. More information on LEP and the Language Access Plan (LAP) are found in Part 5.7 below.

4.7 Impacts on Low- and Moderate-Income (LMI) Population

Low- and moderate-income (LMI) individuals are some of the most vulnerable populations impacted by major disasters. LMI individuals do not have the same financial resources to rebuild and may experience difficulty seeking disaster assistance.

HUD defines LMI as individuals that earn less than 80 percent of the Area Median Income (AMI). The requirement set forth in the Notice require that 70 percent of all CDBG-DR funds allocated must be spent to assist LMI individuals or areas. In consideration of this requirement, the unmet needs analysis sought to determine the extent to which LMI areas were impacted.

Of the 2,407 block groups in the disaster impacted areas, 873 are LMI block groups. The total population of the areas receiving FEMA IA funds, based on ACS data for LMI estimates[9], is 3,660,890. Of that total population, 43 percent or 1,574,083 of those individuals qualify as LMI.

Table 16 - LMI Population in FEMA IA Counties

County	MID Area	LMI Population	Total Population	% LMI
Robeson County	Yes	70,970	131,455	53.99%
Scotland County	Yes	17,835	33,675	52.96%
Johnston County	-	92,715	176,620	52.49%
Duplin County	Yes	29,900	58,775	50.87%
Anson County	-	12,005	24,295	49.41%
Bladen County	Yes	16,735	34,105	49.07%
Durham County	-	134,820	275,290	48.97%
Richmond County	-	21,705	44,665	48.60%
Lenoir County	-	27,790	57,525	48.31%
Greene County	-	9,090	19,235	47.26%
Sampson County	-	29,415	62,945	46.73%

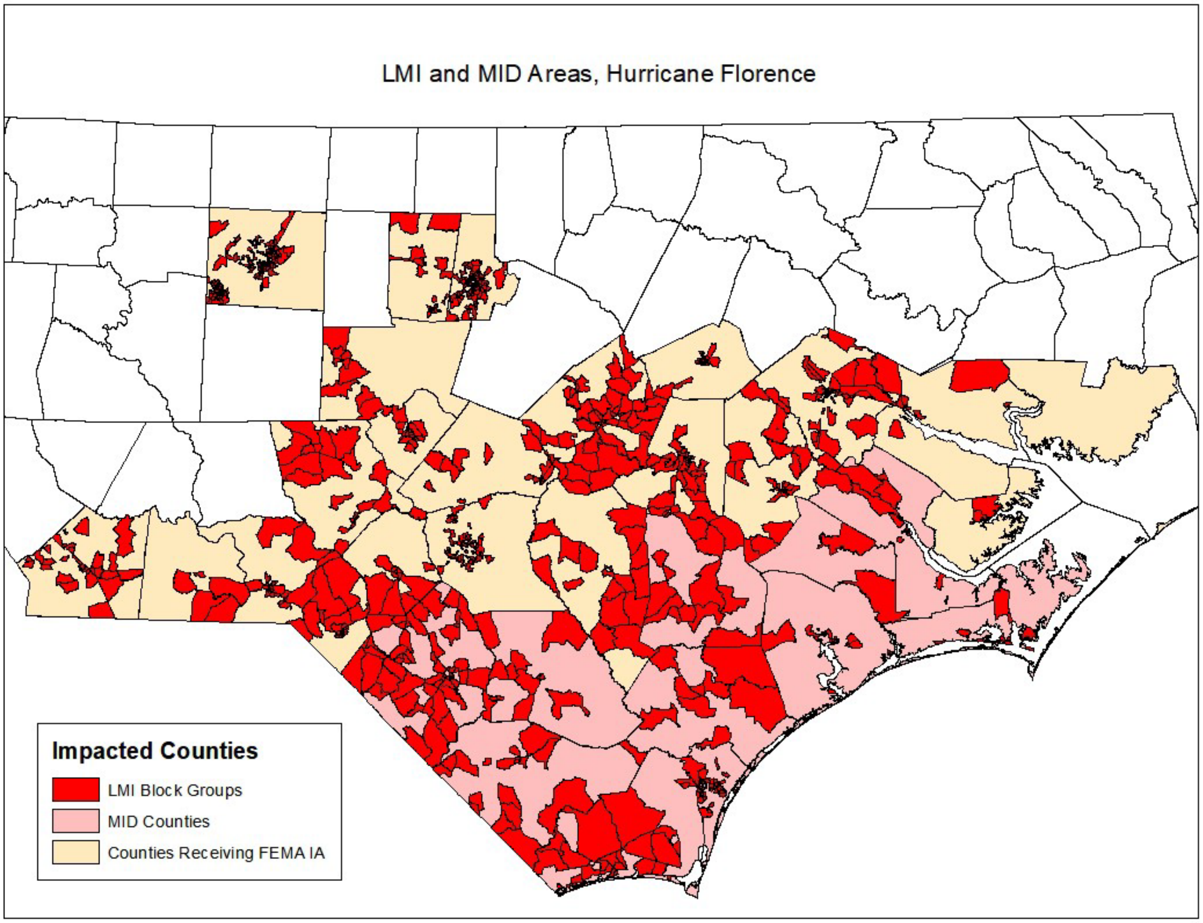
[9] U.S. Census Bureau. *ACS 5-Year 2011-2015 Low- and Moderate-Income Summary Data.* https://www.hudexchange.info/programs/acs-low-mod-summary-data/

County	MID Area	LMI Population	Total Population	% LMI
New Hanover County	Yes	94,235	206,370	45.66%
Jones County	Yes	4,565	10,040	45.47%
Columbus County	Yes	24,610	54,415	45.23%
Pitt County	-	75,519	167,660	45.04%
Wayne County	-	52,850	121,450	43.52%
Wilson County	-	34,285	80,005	42.85%
Chatham County	-	28,425	66,565	42.70%
Orange County	-	54,145	128,180	42.24%
Guilford County	-	205,120	490,610	41.81%
Hoke County	-	20,520	49,850	41.16%
Brunswick County	Yes	47,235	115,025	41.06%
Pender County	Yes	22,025	53,820	40.92%
Beaufort County	-	19,205	47,075	40.80%
Moore County	-	36,635	90,530	40.47%
Pamlico County	Yes	4,965	12,350	40.20%
Lee County	-	23,400	58,375	40.09%
Harnett County	-	48,490	121,000	40.07%
Carteret County	Yes	26,895	67,125	40.07%
Cumberland County	Yes	117,930	314,220	37.53%
Craven County	Yes	36,490	100,565	36.28%
Union County	-	73,680	211,280	34.87%
Onslow County	Yes	58,239	170,790	34.10%
Hyde County	-	1,640	5,005	32.77%
Total		**1,574,083**	**3,660,890**	**43.00%**

Geographically, there is a concentration of LMI areas in the MID counties, specifically in Columbus (45.23 percent), Jones (45.47 percent), New Hanover (45.66 percent), Bladen (49.07 percent), Duplin (50.87 percent), Scotland (52.96 percent) and Robeson (53.99 percent).

Non-MID counties with a high proportion of LMI populations include Durham County (48.97 percent), Anson County (49.41%), and Johnston County (52.49 percent).

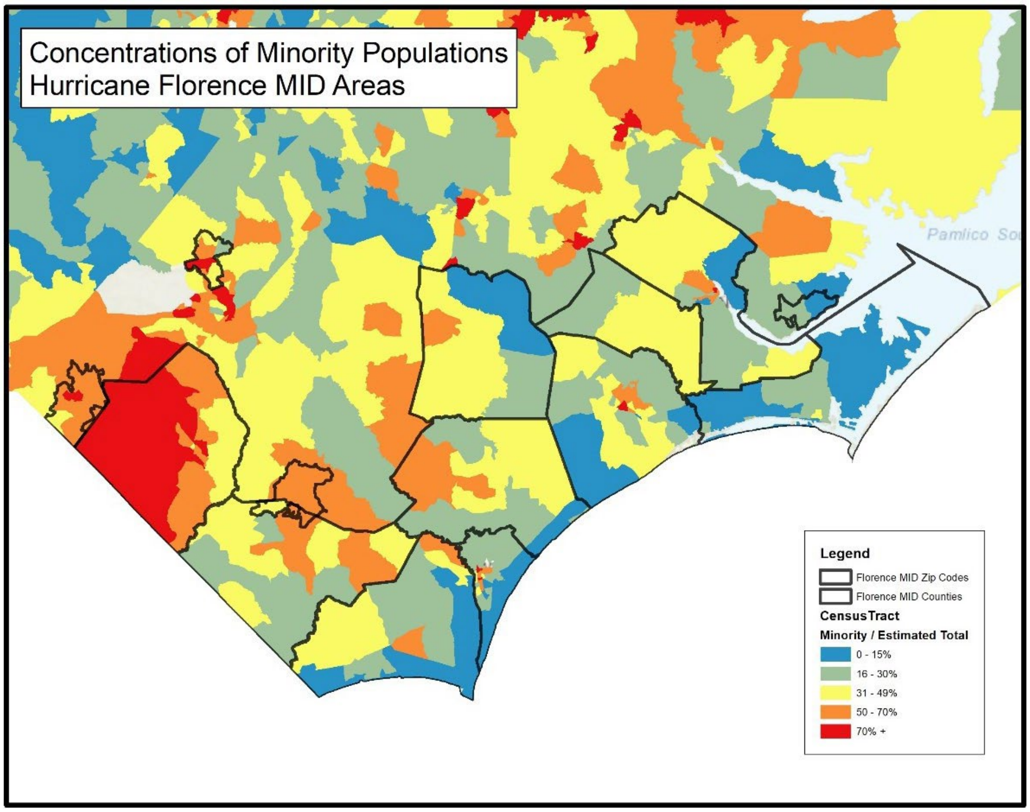
Figure 10 - LMI Block Groups, FEMA IA Counties and MID Counties, Hurricane Florence



Concentrations of minority groups also face unique recovery challenges. A comparison of the MID areas with census tract data overlaid for minority groups reveals that significant minority concentrations exist in some impacted areas. For the purpose of this analysis, a minority is an individual that identifies as Black or African American, American Indian or Native Alaskan, Native Hawaiian or Pacific Islander, Asian, or more than one race.

Of significant concern is the ongoing recovery of Robeson County, which has the largest concentration of minorities in the Florence impacted area. Other concentrated areas include parts of Scotland County, Onslow County, Craven County, and New Hanover County. NCORR recognizes the historically underserved populations present in these areas and acknowledges that special consideration must be made to the preexisting conditions and barriers to recover that some of these communities face. There is also some spatial correlation between LMI block groups and a higher percentage of minority groups within a census tract.

Figure 11 - Minority Concentrations in the MID Area



4.8 Public Housing Impact

The Housing Impact Assessment also analyzed the impact to HUD assisted housing. There are 53,387 HUD assisted housing units in the disaster declared counties, supported by HUD's Public and Multifamily Housing programs. Most of these impacted households are participants in the Housing Choice Voucher program where voucher holders reside in privately owned rental units, with a total of 25,826 units (48.4 percent of the total assisted units). There are 11,260 (21.1 percent) Project Based Section 8 units where families reside in privately owned multifamily rental buildings receiving a subsidy. There are also 14,405 (27.0 percent) Public Housing units operated by Housing Authorities as well as smaller numbers (1,894) of units providing supportive housing for the elderly and disabled.

Within the Public Housing assets in the declared counties, 38 Public Housing Authorities experienced damage to 1,804 dwelling units. The repair work from one public housing authority is estimated to take 15 - 22 months. These damages have resulted in the displacement of 261 families from public housing sites and another 523 families previously residing in Housing Choice Voucher units. As of December 21, 2018, the HUD assisted multifamily portfolio in the impacted counties reported 138 properties that suffered minor damage, 18 with modest damage and 21 with severe damage. HUD continues to work directly with the housing providers to return the affected families to a permanent, stable housing solution.

HUD assisted households that remain displaced are in temporary housing, including staying with friends and family, participating in FEMA's Transitional Sheltering Assistance (TSA) program, and other temporary housing options. HUD conducts a comparison of FEMA TSA data with HUD client data, which permits HUD staff to work with available housing providers to expedite the displaced family's transition out of the TSA program and their return to permanent housing.

The unmet public housing need after Hurricane Matthew was estimated to be 152 units at a cost of approximately $9.5 million.[10] On a per unit cost basis, the average cost to repair is $62,214. To repair the damaged 1,804 dwelling units, NCORR estimates a cost of repair as high as $112 million. Currently, $46,221,000 in project costs were requested by Public Housing Authorities from FEMA Public Assistance (PA). However, many PHAs were unfamiliar with FEMA PA, were already recovering from Matthew and did not seek additional assistance, or saw their unmet recovery needs evolve since the filing deadline. Other funds are needed to address this need, and funds from other programs are available. NCORR will continue to review the need to determine how CDBG-DR funds can maximize public housing repair.

4.9 Pre-Existing Housing Conditions

A review of the pre-existing housing conditions informs the unmet recovery needs for the impacted areas. While disaster recovery funds cannot fully cure pre-existing conditions (such as pre-existing limitations in affordable housing availability), an understanding of pre-existing housing conditions provides greater context in the development of housing recover plans and programs. The analysis of the housing stock in the declared counties is largely drawn from estimates from the American Community Survey (ACS), and further distilled in the Housing Impact Assessment.

4.9.1 Housing Stock

There are 1.72 million housing units in the declared counties, with 1.47 million occupied and 250,000 vacant. Many of the vacant homes are not available for rent for several reasons including the fact that the properties are kept vacant during vacations or for summer homes, are in un-rentable condition, or other reasons. In the most impacted counties, there are 648,781 housing units, with 518,436 units occupied. The vacant units are concentrated in those counties. While those counties have 38 percent of the housing, they are home to 52 percent of the vacant units (130,345 vacant or 20 percent of the housing stock) in the most impacted counties compared to 251,543 vacant (15 percent of housing stock) in all declared counties. The highest vacancy rate is estimated to be 39 percent in Carteret County, 37 percent in Brunswick County, and 25 percent in Pender County.

In the declared counties, 63 percent of the housing stock is single-family detached. This proportion is similar to the most impacted counties. About six percent of the housing units are

[10] ReBuild NC CDBG-DR Action Plan for Hurricane Matthew, Amendment 5. Section 3.1.7.1.

single-family attached and other two-unit buildings. Larger multi-family (three units or more) constitute 16 percent of the housing stock, with the greatest number in Carteret, Cumberland, and New Hanover Counties; with multi-family stock being 16 – 24 percent of the total. Manufactured housing comprises 17 percent of the most impacted counties and ranges from 5 percent of the housing stock in New Hanover to greater than 30 percent of the stock in Columbus County (32 percent), Jones County (34 percent), Duplin County (36 percent) and Robeson County (39 percent). High proportions of manufactured housing may indicate lower income and possibly housing which is in disrepair, as poorly maintained manufactured housing will deteriorate at an accelerated rate and cannot withstand serious storm damage as well as stick-built housing.

4.9.2 Tenure and Age

In the most impacted counties, the owner-occupied portion of housing stock ranges from 51 – 79 percent, with the lowest portion of owners in Cumberland, New Hanover, and Onslow Counties. Among the owner-occupied homes, those that are owned without mortgages are generally represented in greater rates in the most impacted counties when compared to the State or declared counties, where both have 36 percent of owner-occupied homes owned without a mortgage. In Columbus, Duplin, and Robeson Counties, the rate of homes owned without a mortgage is 55 – 59 percent. Those three counties also have the lowest median home value and greatest number of homes built before 1980.

A reliable measure of the condition of the housing stock is its age. Older housing is often in increased disrepair, showing the effects of deferred maintenance. In the most impacted counties, 35 percent of the housing stock was built before 1980. This ranges from 18 percent in Brunswick County to 44 – 51 percent in Robeson, Jones, Duplin and Columbus Counties. In areas of comparatively low income, older housing stock is often deteriorated and may be prone to increased disaster damage.

4.9.3 Housing Cost

The median value of an owner-occupied home in North Carolina is $161,000. In the most impacted counties, the range of the median value is $72,100 to $225,600. The four counties with the lowest median value (Columbus, Duplin, Jones, and Robeson, with values ranging from $72,100 to $92,700) also have the highest portion of pre-1980 housing.

A commonly used metric for housing cost is the concept of rent burden. A renter paying more than 30 percent of their household income is considered rent burdened and may be limited in their ability to afford other necessities. Statewide, 49 percent of renters are considered rent burdened and in both the declared and most impacted counties, the estimate is 51 percent. Jones County stands out, with 61 percent of the renters considered rent burdened, even though the median rent in the county ($621) is among the lowest in the most impacted counties. The repair or reconstruction cost may quickly exceed the fair market value for lower valued properties. For affordable rental properties, this may delay repairs as the cash-flow for the rental units may not permit rapid or comprehensive repairs.

The conditions of the housing stock before Hurricane Florence provide some indication of the challenges those counties will face with recovery. Older, cheaper stock may be deteriorated and is almost certainly less energy efficient than homes which are newer and more valuable. To that end, reconstruction may be considered a more cost-effective strategy than repairing older housing which was in poor condition prior to the storm event.

North Carolina's challenge to increase the availability of affordable housing for low- to moderate-income and special needs populations is not different from what communities across the country face. Local income and number of households seeking housing may vary, as well as the cost of land, labor and materials, but not substantially enough to alter the methods for creating new affordable housing opportunities.

4.9.4 Affordable Housing

A report by the National Low-Income Housing Coalition (NLIHC), finds a national shortage of 7.2 million available affordable rental homes for extremely low income (ELI) renter households. The report calls for increasing investments in affordable housing programs that serve those with low incomes.[11]

As of 2013, North Carolina had over 292,000 households that were severely rent burdened, more than 65,000 rental units that were overcrowded, and more than 20,000 rental units that lacked either complete kitchen and/or complete bathroom facilities.

The table below shows the cost burden for homeowners and renters as reported on the North Carolina Housing Coalition website.[12]

Table 17 - Cost Burdened Households, MID areas

County	# Cost-Burdened Households	% of cost-burdened households	# Cost Burdened Homeowners	# Families facing Foreclosure	# Cost Burdened Renters	# Families facing eviction
Onslow	24,303	39%	9,709	1,036	14,594	2,274
New Hanover	33,366	38%	14,390	489	18,976	3,419
Cumberland	44,302	36%	16,907	1,163	27,395	8,857
Scotland	4,607	35%	2,090	45	2,517	433
Bladen	4,681	33%	2,945	41	1,736	268
Craven	13,370	33%	6,619	258	6,751	1,066
Pender	6,549	33%	4,721	149	1,828	302
Brunswick	16,429	33%	10,742	438	5,687	611

[11] National Low-Income Housing Coalition. *March 13, 2018 Press Release*. https://nlihc.org/press/releases/9493.
[12] North Carolina Housing Coalition. *County Profiles.* https://nchousing.org/county-fact-sheets/

County	# Cost-Burdened Households	% of cost-burdened households	# Cost Burdened Homeowners	# Families facing Foreclosure	# Cost Burdened Renters	# Families facing eviction
Columbus	6,939	32%	4,188	121	2,751	324
Robeson	14,028	31%	6,913	213	7,115	1,900
Duplin	6,766	31%	3,793	87	2,973	300
Jones	1,270	31%	783	14	487	44
Carteret	8,883	30%	5,293	185	3,590	354
Pamlico	1,419	27%	939	15	480	31

The data reflects a need for affordable housing to service all income levels and with additional focus on:

- Single-family housing that is resilient to storms, energy efficient, and right-sized for larger families as needed.
- Multi-family rental and ownership.
- Multi-family housing for young professionals and civil servants (e.g. teachers, uniformed) that are first-time homebuyers.
- Housing to accommodate aging and disabled populations.
- New neighborhoods with affordable housing that reflects community preferences in design and siting, such as space between homes for gardens or town center designs geared toward urban convenience and less maintenance.
- New opportunities for homeownership for renters.

4.9.5 Construction Activity and Capacity

The State of the Cities Data System[13] reports that for 2018, there were a total of 16,509 building permits issued in the declared counties. This tracking system tracks only permits issued for new construction, as opposed to rehabilitation or remodeling. Construction permits serve as a good proxy for construction starts, as significant planning and investment is necessary to reach the point where a permit application is submitted.

Of the construction activity, 82 percent was characterized as single-family construction and 85 percent of the permits or 11,504 were issued in 10 counties. In the 20 declared counties with the lowest number of single-family permits, only 688 permits were issued, just 5 percent of the total. This is not well correlated to the number of homes, in that the top 10 counties had 58 percent of the existing housing stock in the 34 declared counties and the bottom 20 had 30 percent of the stock.

[13] HUD Office of Policy Development and Research. *State of the Cities Data Systems.* https://www.huduser.gov/portal/datasets/socds.html

Normalizing the permitting activity as a function of the number of housing units shows the relative level of construction activity. Expressing activity as permits for 2018 per 1,000 housing units provides insight to the construction activity in the declared counties. For all declared counties, there were an average of 9.6 permits issued for every 1,000 existing homes. This varied widely, with 15 counties having very low construction activity (less than one permit per 1,000 homes) and 10 counties with more than the average.

There were four counties where the permitting activity was greater than double the average for the declared counties. They were Durham, Chatham, Orange, and Johnston Counties, with about 41 percent of the permitting activity in the declared counties.

In 2018, 83 percent of the permits issued were for the construction of one to four-unit homes, work that is often done by the same type of builders. The remainder (17 percent) are for buildings with five or more units with work done by commercial builders. There is no significant overlap between these two types of builders, therefore construction activity in one of those sectors would likely have comparatively little impact on the other.

There were 24 counties with construction activity that was below the average, which suggests the housing market in those counties is relatively sluggish. While the permitting numbers suggest a general lack of housing demand, they may not indicate a lack of construction capacity. In rural areas where production builders are not generally active, many builders operate in a wider range of projects than in urban areas. This may result in the residential capacity becoming dormant during periods of low demand, often working on other construction projects or shifting to non-construction employment.

In times of low demand, small homebuilders in urban areas often shrink their workforce and focus on related work, such as remodeling. As the workforce for those builders often function as subcontractors, the cost of this strategy to the builder is comparatively small. The actual workers will typically take other jobs in the area, awaiting the opportunity to return to residential construction. Because construction is generally more lucrative than other employment, inducing the workers to return to building is not difficult. Production builders in the urban areas may reduce their construction activity and may leave the market. Because those production builders often rely on subcontractors for much of the work, the capacity may remain in the community even if the actual builder leaves the market.

While it is expected that significant residential construction capacity remains in areas where there is little physical construction, there may be additional strategies to magnify the capacity. These could include the use of a variety of factory-built construction strategies ranging from panelized to modular. In those approaches, much of the work would be done off-site in a factory. This approach has advantages by reducing the demands for on-site labor as well as the other aspects of the construction supply chain. These homes are also cost effective for the recovery program and would allow for realized savings. Workers can reside closer to the factory so their availability as well as travel expenses can be reduced. Construction workers often must travel some distance to the job site when performing site building, a situation that increases the costs to the workers, their employer, or the customer.

NCORR anticipates strains on capacity due to multiple disasters throughout the state (including Hurricanes Michael and Dorian, which do not currently have CDBG-DR allocations), and other disasters nationwide which may limit the pool of contractors even further.

4.10 Analysis of Housing Unmet Need

North Carolina's number one priority is to allow families to return to their homes and to ensure those homes are in safe and sanitary conditions. For this reason, the Unmet Needs Assessment focuses on housing recovery programs and supportive services to families and persons in need.

As part of the Substantial Action Plan Amendment 4 process, the State reanalyzed unmet need data, specifically as it relates to owner-occupied and rental housing. This revised Housing Unmet Needs Assessment updates the previous analysis conducted by the State for the initial Florence Action Plan and subsequent Substantial Action Plan Amendments. The State's revised Housing Unmet Needs Assessment is based on the most recent disaster recovery data sets, applying the methodology and assumptions outlined in Appendix B.

Based on the most recent data sources consistent with HUD methodology for estimating serious housing unmet need for owner-occupied and rental housing, the State observed a roughly 26 percent increase for serious housing unmet need when compared to the previous assessment. The reanalysis outlined in this section of the Action Plan revalidates the State's plan to allocate most of the CDBG-DR funding to address continuing housing unmet need.

This Housing Unmet Need Assessment also relies on the work that was conducted in the original Florence Action Plan and subsequent Substantial Action Plan amendments. The analysis and resulting recovery programs also account for long-term sustainability, with a priority placed on the homeowner and renter finding safe and suitable housing rather than simply rebuilding a damaged unit. Therefore, North Carolina will conduct an analysis when rebuilding a severely damaged home versus constructing a new home in an area safe from repetitive flood loss, which will consider the cost of repairing versus replacement and estimated long-term losses due to repeat flood events.

It is important to note that previous analyses related to housing unmet need point to a large unmet need for homeowners who wish to sell their homes and relocate to higher and safer ground, and additional damages and unmet need for Public Housing Authorities in storm-impacted counties. Substantial Amendment 4 and previous amendments outline that funding related to Strategic Home Buyout and the Public Housing Restoration Fund activities have been reallocated from CDBG-DR to CDBG-MIT. Please refer to the State's CDBG-MIT Action Plan for more details on these activities and related unmet needs analyses.

4.10.1 Owner-Occupied and Rental Housing

The State conducted an Housing Unmet Needs Assessment by examining the estimated post-disaster total loss (need) and resulting unmet needs for owner-occupied and rental housing. As previously noted, the Assessment is aligned to HUD's own standard approach to analyzing housing unmet need, with slight modifications to the original methodology and assumptions based on reanalysis of the most recent data sets under Substantial Amendment 4. The reanalysis uses the most recent FEMA Individual Assistance (IA) data, SBA loan data for homeowners, NFIP data, damage inspections performed by the State and NC Step program data. See Appendix B for the detailed source data, methodology and assumptions used to estimate housing unmet need for owner-occupied and rental housing.

To estimate unmet needs for owner-occupied and rental housing, the Assessment subtracts the estimated funds received from FEMA, SBA, NFIP and NC Step from the total estimated loss (need). Through reanalysis of the most recent data sets summarized in Table 18, the State has determined that the ***total*** owner-occupied and rental housing unmet need is $1,397,557,176.

Table 18 - Hurricane Florence Owner-Occupied and Rental Housing Unmet Need Summary (Total)

Category	Estimated Total Loss (Need)	Estimated Resources Available/Received	Estimated Unmet Need (Estimated Total Loss less Estimated Resources Available/Received)
Owner-Occupied Housing Loss	$1,877,390,856		$1,877,390,856
Rental Housing Loss	$132,489,773		$132,489,773
FEMA Individual Assistance		$151,492,435	($151,492,435)
SBA Loans: Residential		$201,854,077	($201,854,077)
NFIP Assistance		$240,587,785	($240,587,785)
NC Step		$18,389,156	($18,389,156)
Total Owner-Occupied & Rental Housing	**$2,009,880,629**	**$612,323,453**	**$1,397,557,176**

Source(s): See Appendix B for data sources, detailed methodology and assumptions

The previous Housing Unmet Needs Assessment in late 2019 (outlined in Appendix C) estimated serious housing unmet in concert with HUD's guidance provided in 85 FR 4681 for Hurricane Florence. To provide a point of comparison to the previous assessment, the State also estimated the serious housing unmet need based on analysis of the most recent data sets and following a similar approach as the previous assessment (outlined in Appendix B, Section B2). The assessment of serious housing unmet need quantifies the unmet need for properties estimated to have major or severe damage, and excludes properties estimated to have minor damage.

Through reanalysis of the most recent data sets summarized in Table 19, the State has determined that the total owner-occupied and rental housing serious unmet need has increased, with an estimated serious unmet need of $1,082,331,589 for owner-occupied and rental housing. The previous assessment estimated a serious housing unmet need of $860,255,361 related to owner/renter repair damages (FEMA IA) and elevation/buyout, representing a roughly 26 percent increase when compared to the reanalysis.

Table 19 - Hurricane Florence Owner-Occupied and Rental Housing Unmet Need Summary (Serious)

Category	Estimated Total Loss (Need)	Estimated Resources Available/Received	Estimated Unmet Need (Estimated Total Loss less Estimated Resources Available/Received)
Owner-Occupied Serious Housing Loss	$1,395,879,885		$1,395,879,885
Rental Serious Housing Loss	$93,014,113		$93,014,113
FEMA Individual Assistance		$115,260,692	($115,260,692)
SBA Loans: Residential		$107,224,025	($107,224,025)
NFIP Assistance		$184,077,693	($184,077,693)
NC Step		$0	$0
Total Owner-Occupied & Rental Housing (Serious)	**$1,488,893,999**	**$406,562,410**	**$1,082,331,589**

The previous assessment completed in late 2019 utilized only FEMA IA and SBA data to calculate an estimate of serious housing unmet need, using the best data available at the time. The availability of additional data (i.e., state damage inspections and NC Step program data) is what prompted the State to reevaluate the previous estimates of serious housing unmet need, and slightly modify the previous methodology to account for the both the additional data sets and most recent data sets.

Taking into account all of data that is now available, the State has verified what is anecdotally heard in communities across the State; there is a significant unmet need for both homeowners and renters as it relates to housing recovery due to the impacts of Hurricane Florence. The reanalysis of housing unmet need under Substantial Amendment 4 highlights not only an increase in estimated serious housing unmet need, but also shows that roughly 77 percent of estimated total housing unmet need is related to serious housing unmet need.

4.10.2 LMI Owner-Occupied Households

HUD requires that the State must spend a minimum of 70 percent of the total CDBG-DR grant to benefit LMI populations.

Based on the self-reported FEMA IA data from late 2019, for owner-occupied households, 7,923 owner-occupied households (42 percent of owner-occupied households), are below the 80 percent Area Median Income threshold. Based on the HUD methodology, the owner-occupied household unmet need is approximately $234 million as of late 2019. This is before considering the elevation costs that may be required to to elevate damage properties located in floodplains.

4.10.3 Renter Occupied Households

Renter-occupied households often have obstacles to recovery that differ from owner-occupied households. Renters are not as likely to carry insurance against losses, and are at the mercy of a landlord when it comes to returning to their damaged homes.

In MID counties, approximately six percent (6%) of the total rental stock was damaged based on FEMA inspection data from late 2019. Table 25 shows damage to market rate rental units in the impacted area:

Table 18 - Renter Damage, All Units, and Rental Income

County	Any Damage[14]	Renter Occupied	Cost-Burdened Renters	Fair Market Rent (2BR)	Income Needed for 2BR	Median Household Income
Anson		3,380 (35%)	1,377 (41%)	$679	$27,160	$38,123
Beaufort		5,539 (29%)	2,347 (42%)	$679	$27,160	$41,101
Bladen	304 (7%)	4,481 (31%)	1,681 (38%)	$679	$27,160	$32,396
Brunswick	644 (5%)	12,121 (23%)	5,637 (47%)	$852	$34,080	$51,164
Carteret	879 (11%)	8,199 (27%)	3,206 (39%)	$869	$34,760	$51,584
Chatham		6,696 (24%)	2,500 (37%)	$1,055	$42,200	$59,684
Columbus	720 (11%)	6,541 (29%)	2,644 (40%)	$679	$27,160	$36,261
Craven	1,570 (11%)	14,902 (37%)	6,500 (44%)	$894	$35,760	$49,391
Cumberland	158 (<1%)	60,967 (49%)	29,216 (48%)	$893	$35,720	$44,737
Duplin	545 (8%)	6,570 (30%)	2,622 (40%)	$679	$27,160	$36,679
Durham		56,268 (47%)	25,768 (46%)	$1,055	$42,200	$56,393
Greene		2,254 (31%)	957 (42%)	$679	$27,160	$36,989
Guilford		82,586 (41%)	39,163 (47%)	$769	$30,760	$49,253
Harnett		15,582 (35%)	6,493 (42%)	$787	$31,480	$50,323
Hoke		5,736 (33%)	2,622 (46%)	$742	$29,680	$45,713
Hyde		435 (24%)	142 (33%)	$908	$36,320	$40,532
Johnston		18,524 (28%)	8,563 (46%)	$1,086	$43,440	$54,610
Jones	175 (15%)	1,139 (27%)	503 (44%)	$679	$27,160	$37,256
Lee		7,091 (33%)	2,938 (41%)	$737	$29,480	$49,272

[14] FEMA damage inspection data: number and percent of renters in MID counties where FEMA damage inspections reported any damage. In MID counties, FEMA damage inspections found 11,441 (< 6%) out of 204,491 renter-occupied units had Florence-related damage.

County	Any Damage[14]	Renter Occupied	Cost-Burdened Renters	Fair Market Rent (2BR)	Income Needed for 2BR	Median Household Income
Lenoir		9,271 (40%)	3,981 (43%)	$703	$28,120	$37,515
Moore		9,783 (26%)	3,813 (39%)	$777	$31,080	$54,468
New Hanover	2,707 (7%)	39,062 (43%)	19,369 (50%)	$1,003	$40,120	$51,457
Onslow	2,236 (8%)	29,958 (47%)	13,604 (45%)	$843	$33,720	$48,162
Orange		19,910 (38%)	8,955 (45%)	$1,055	$42,200	$65,522
Pamlico	28 (2%)	1,355 (25%)	524 (39%)	$725	$29,000	$45,211
Pender	773 (18%)	4,395 (21%)	1,905 (43%)	$794	$31,760	$49,357
Pitt		32,848 (48%)	17,184 (52%)	$774	$30,960	$43,526
Richmond		6,346 (35%)	3,233 (51%)	$679	$27,160	$33,607
Robeson	1,174 (7%)	16,304 (35%)	6,510 (40%)	$679	$27,160	$32,407
Sampson		7,129 (30%)	3,404 (48%)	$679	$27,160	$37,765
Scotland	301 (6%)	5,038 (38%)	2,557 (51%)	$696	$27,840	$32,739
Union		14,370 (19%)	6,052 (42%)	$1,028	$41,120	$70,858
Wayne		18,623 (39%)	8,360 (45%)	$753	$30,120	$41,766
Wilson		12,677 (40%)	6,004 (47%)	$730	$29,200	$42,095
Total MIDs	**11,441**	**204,491**				

On average, renters occupy 33 percent of units and homeowners occupy 67 percent in FEMA IA declared counties. The average proportion of renters to owners is similar across MID counties.

Renter occupied households with FVL greater than $0 account for 3,727 registrants. 49 percent of those registrants met the LMI criteria. Based on the FEMA IA data for renter occupied households, the total renter occupied household unmet need is approximately $87 million. This is before considering the elevation costs that may be required to to elevate damage properties located in floodplains.

4.10.4 Public, Affordable Housing, and Transitional Housing

Public and affordable housing provides a valuable service for the impacted area. Some Public Housing Authorities (PHAs) continue to grapple with the effects of Hurricane Matthew while dealing with Hurricane Florence-specific recovery needs. The total FEMA Public Assistance claims for Hurricane Florence related to Public Housing is over $46 million. This includes significantly dual-impacted areas such as Fayetteville, Laurinburg, and Lumberton. However, the true unmet need is expected to be closer to the $112 million figure quoted in Section 4.8.

Table 19 - FEMA PA Claims for Public Housing

Preliminary Cost for Public Housing Authorities	
Public Housing Authority	FEMA Damage Claim
Bladenboro	$ 220,000
Fayetteville	$ 404,000
Laurinburg	$ 2,408,000
Lumberton	$ 21,531,000
New Bern	$ 20,867,000
Pender County	$ 764,000
Robeson County	$ 27,000
Total	**$ 46,221,000**

Further, there is a need to assist individuals in transitional housing. Transitional housing is supportive housing that helps fight the homelessness problem. Transitional housing is generally for a limited time period - stays can be from two weeks to 24 months. Transitional housing also provides people with help after a crisis such as homelessness or domestic violence.

The North Carolina Coalition to End Homelessness reports a total of 142 beds offline after Hurricane Florence. Availability of these beds are critical to maintaining effective transitional housing service. The loss of even a small number of beds can have significant consequence to the homeless population in the recovering area. Of critical concern is the bed stock in New Hanover, Pender, and Brunswick, which combine their bed count and total a loss of 52 beds.

County	People in shelters or transitional housing	Children in homeless shelters or transitional housing	Adults in homeless shelters	Total people experiencing homelessness	Bed Capacity 2019	Beds reported offline after Florence
Anson	-	-	-	-	-	-
Beaufort	8	0	8	13	20	12
Bladen	0	0	0	0	-	
Carteret	39	12	27	41	48	18
Chatham	-	-	-	-	-	-
Columbus	0	0	0	0	10	17
Craven	35	9	26	49	43	-
Cumberland	103	60	43	329	-	-
Duplin	5	3	2	8	8	-

County	People in shelters or transitional housing	Children in homeless shelters or transitional housing	Adults in homeless shelters	Total people experiencing homelessness	Bed Capacity 2019	Beds reported offline after Florence
Durham	-	-	-	-	-	-
Greene	0	0	0	1	-	-
Guilford	-	-	-	-	-	-
Harnett	20	7	13	26	45	-
Hoke	48	0	48	48	48	-
Hyde	0	0	0	0	-	-
Johnston	16	1	15	16	56	-
Jones	0	0	0	0	-	-
Lee	83	15	68	163	103	-
Lenoir	12	4	8	50	46	-
Moore	18	10	8	18	50	-
New Hanover, Pender, Brunswick	269	58	211	431	371	52
Onslow	20	0	20	45	36	28
Orange	-	-	-	-	-	-
Pamlico	0	0	0	0	-	-
Pitt	106	18	88	121	130	-
Richmond	24	2	22	36	56	-
Robeson	29	3	26	42	63	-
Sampson	0	0	0	0	-	15
Scotland	0	0	0	0	14	-
Union	-	-	-	-	-	-
Wayne	19	0	19	57	24	-
Wilson	34	6	28	52	**37**	**-**

To the extent possible, the Affordable Housing Development Fund (see Section 7.4 below) will seek to fund projects that interface or augment the affordable and transitional housing need.

4.10.5 Funds Directed toward MID Areas and LMI Individuals and Households

In accordance with the HUD directive to expend 1) 80 percent of all CDBG-DR funds in MID areas, and 2) 70 percent of all CDBG-DR funds to benefit LMI individuals, NCORR believes that the unmet need in MID areas and with LMI individuals is sufficient to meet these requirements. The total allocation for housing recovery reflects the unmet need for LMI individuals and MID counties.

The table below summaries housing needs for owner-occupied, renter-occupied, and unit type (single or multi-unit). Conditions widely differ across the impacted area, and this analysis will inform the method of housing recovery to be considered in each impacted area. Areas of significant concern for rental housing include Cumberland, Onslow, Pitt, and Durham Counties which have significant renter populations compared to the total occupancy of units. Durham, Guilford, and New Hanover also have significant multi-family units, which may mean that a multi-family housing solution may be more appropriate in those areas.

Table 20 - Owner Occupied and Rental Need by County and Housing Type

County	Total Housing Units	% occupied	% renter occupied	% owner occupied	Single Units % of total	Multi-units % of total	Mobile Homes % of total
Anson	11,594	9,516 (82%)	3,146 (33%)	6,370 (67%)	7,816 (67%)	834 (7%)	2,929 (25%)
Beaufort	25,930	19,325 (75%)	5,711 (30%)	13,614 (71%)	16,994 (66%)	1,946 (8%)	6,963 (27%)
Bladen	17,877	13,968 (78%)	4,082 (29%)	9,886 (71%)	10,099 (56%)	1,154 (7%)	6,624 (37%)
Brunswick	92,284	56,752 (62%)	9,024 (16%)	47,728 (84%)	63,758 (69%)	10,259 (11%)	18,188 (20%)
Carteret	50,719	28,720 (57%)	7,282 (25%)	21,438 (75%)	32,333 (64%)	9,309 (18%)	9,015 (18%)
Chatham	33,007	28,343 (86%)	6,185 (22%)	22,158 (78%)	25,596 (78%)	2,291 (7%)	5,120 (16%)
Columbus	26,250	22,306 (85%)	6,265 (28%)	16,041 (72%)	16,381 (62%)	1,589 (6%)	8,234 (31%)
Craven	47,453	40,412 (85%)	16,317 (40%)	24,095 (60%)	35,036 (74%)	6,116 (13%)	6,301 (13%)
Cumberland	147,123	127,911 (87%)	61,922 (48%)	65,989 (52%)	97,982 (67%)	35,560 (24%)	13,475 (9%)
Duplin	25,876	21,781 (84%)	6,529 (30%)	15,252 (70%)	15,006 (58%)	1,510 (6%)	9,346 (36%)
Durham	138,960	127,527 (92%)	56,998 (45%)	70,529 (55%)	91,656 (66%)	45,040 (32%)	2,264 (2%)
Greene	8,316	7,259 (87%)	2,129 (29%)	5,130 (71%)	4,799 (58%)	318 (4%)	3,191 (38%)

County	Total Housing Units	% occupied	% renter occupied	% owner occupied	Single Units % of total	Multi-units % of total	Mobile Homes % of total
Guilford	230,468	209,842 (91%)	89,654 (43%)	120,188 (57%)	156,846 (68%)	67,282 (29%)	6,319 (3%)
Harnett	52,561	46,015 (88%)	16,056 (35%)	29,959 (65%)	36,770 (70%)	4,397 (8%)	11,278 (22%)
Hoke	20,709	17,722 (86%)	5,734 (32%)	11,988 (68%)	15,331 (74%)	1,238 (6%)	4,120 (20%)
Hyde	3,249	1,769 (55%)	565 (32%)	1,204 (68%)	2,522 (78%)	181 (6%)	546 (17%)
Johnston	77,354	70,001 (91%)	20,862 (30%)	49,139 (70%)	55,667 (72%)	7,243 (9%)	14,444 (19%)
Jones	4,958	4,137 (83%)	1,125 (27%)	3,012 (73%)	3,138 (63%)	184 (4%)	1,628 (33%)
Lee	24,463	21,744 (89%)	7,255 (33%)	14,489 (67%)	17,294 (71%)	3,610 (15%)	3,531 (14%)
Lenoir	27,550	23,121 (84%)	9,382 (41%)	13,739 (59%)	16,744 (61%)	4,217 (15%)	6,497 (24%)
Moore	47,931	40,756 (85%)	9,526 (23%)	31,230 (77%)	34,703 (72%)	5,597 (12%)	7,631 (16%)
New Hanover	113,231	98,151 (87%)	43,299 (44%)	54,852 (56%)	72,583 (64%)	37,367 (33%)	3,243 (3%)
Onslow	80,259	66,834 (83%)	31,017 (46%)	35,817 (54%)	55,673 (69%)	13,569 (17%)	11,017 (14%)
Orange	59,198	53,959 (91%)	19,749 (37%)	34,210 (63%)	39,686 (67%)	13,673 (23%)	5,839 (10%)
Pamlico	7,721	5,352 (69%)	1,332 (25%)	4,042 (75%)	5,339 (69%)	406 (5%)	1,970 (26%)
Pender	28,601	21,766 (76%)	4,246 (20%)	17,520 (81%)	20,217 (71%)	1,584 (6%)	6,773 (24%)
Pitt	80,244	69,288 (86%)	32,296 (47%)	36,992 (53%)	48,584 (61%)	23,261 (29%)	8,399 (11%)
Richmond	21,380	18,546 (87%)	6,286 (34%)	12,260 (66%)	13,716 (64%)	2,090 (10%)	5,574 (26%)
Robeson	53,186	46,026 (87%)	16,336 (36%)	29,690 (65%)	28,888 (54%)	5,005 (9%)	19,254 (36%)
Sampson	27,610	23,537 (85%)	7,346 (31%)	16,191 (69%)	16,063 (58%)	1,395 (5%)	10,152 (37%)
Scotland	15,295	13,113 (86%)	5,079 (39%)	8,034 (61%)	9,599 (63%)	2,097 (14%)	3,599 (24%)
Union	82,559	77,696 (94%)	14,824 (19%)	62,872 (81%)	73,334 (89%)	4,498 (6%)	4,727 (6%)

County	Total Housing Units	% occupied	% renter occupied	% owner occupied	Single Units % of total	Multi-units % of total	Mobile Homes % of total
Wayne	54,467	49,019 (90%)	18,840 (38%)	30,179 (62%)	32,160 (59%)	9,952 (18%)	12,355 (23%)
Wilson	36,316	31,817 (88%)	12,677 (40%)	19,140 (60%)	24,899 (69%)	6,703 (19%)	4,714 (13%)

Based on data as of May 2020, NCORR conducted an analysis of damage to counties that were impacted by both Hurricane Matthew and Hurricane Florence to identify and define consideration of the unique recovery needs created by the large area of the State that was impacted by both hurricanes. The threshold to be considered a State Defined MID area is greater than $10 million in combined estimated housing unmet need at the county level for both hurricanes.

The result is the addition of seven counties which are considered the State Defined MID areas. These counties are Beaufort, Dare, Harnett, Johnston, Lenoir, Pitt, and Sampson and are in **bold** font in Table 4 below. The map of state identified MID areas are located at Section 4.5.1.

See Appendix D for the Methodology & Detailed Data to Identify State Defined MID areas for Hurricane Matthew and Hurricane Florence, including Tables 28 - 30.

Table 31 – Estimated Combined Housing Unmet Need, State and HUD Defined MID Areas

County	Estimated Combined Housing Unmet Need	MID Area
Robeson (County)	$ 197,307,459	Matthew, Florence
Craven (County)	$ 161,228,095	Florence
Pender (County)	$ 101,788,288	Florence
Cumberland (County)	$ 88,747,142	Matthew, Florence (Zip Code 28390)
Duplin (County)	$ 66,873,164	Florence
Wayne (County)	$ 56,865,628	Matthew
Columbus (County)	$ 56,750,640	Matthew, Florence
Onslow (County)	$ 54,835,052	Florence
Carteret (County)	$ 54,012,059	Florence
New Hanover (County)	$ 50,222,920	Florence
Edgecombe (County)	$ 42,011,156	Matthew
Brunswick (County)	$ 36,152,959	Florence
Lenoir (County)	**$ 30,491,620**	**State Defined**
Jones (County)	$ 30,486,444	Florence

County	Estimated Combined Housing Unmet Need	MID Area
Bladen (County)	$ 29,008,386	Matthew, Florence (Zip Code 28433)
Pamlico (County)	$ 25,970,454	Florence (Zip Code 28571)
Beaufort (County)	**$ 21,732,584**	**State Defined**
Sampson (County)	**$ 17,194,081**	**State Defined**
Scotland (County)	$ 15,971,064	Florence (Zip Code 28352)
Pitt (County)	**$ 14,642,648**	**State Defined**
Harnett (County)	**$ 12,141,829**	**State Defined**
Dare (County)	**$ 10,888,976**	**State Defined**
Johnston (County)	**$ 10,796,876**	**State Defined**

4.10.6 Amendment 4 Update

See Sections 4.10 and 4.10.1 for the revaluation of Housing Unmet Need based on the most recent data sets. Reference Appendix B for the Methodology and Assumptions for Estimating Housing Unmet Need under the revaluation. Reference Appendix C for the Previous Housing Unmet Need Assessment (late 2019) including Tables 20 – 24. Reference Appendix D for the Methodology & Detailed Data to Identify State Defined MID Areas. With Substantial Amendment 4, the Public Housing Restoration funds are being reallocated from CDBG-DR to CDBG-MIT. Refer to the State's Mitigation Action Plan for more details on these activities and any additional unmet needs analyses.

4.11 Analysis of Infrastructure Impact and Unmet Need

4.11.1 Initial Infrastructure Impact Assessment

Hurricane Florence caused significant infrastructure damage in many impacted counties statewide. Florence damaged roads, bridges, schools, landfills and sanitation facilities, public parks and recreational assets, and other infrastructure systems which are in need for repair to return them to service. Following is an analysis of FEMA Public Assistance (PA) and FEMA Hazard Mitigation Grant Program (HMGP) data to provide an initial assessment of the impact of Hurricane Florence on infrastructure.

4.11.1.1 FEMA Public Assistance (PA)

The primary method by which unmet needs are assessed for infrastructure impacts from the storm are through the FEMA Public Assistance (PA) Program. PA funds a portion of recovery work to public infrastructure, such as bridges, roads, and public buildings. PA applicants may be the State, a local municipality, or other entity. FEMA processes PA grant funding according to the type of work the applicant plans to undertake. Work must be required as a result of the declared incident (Hurricane Florence), be located in the designated area, be the legal responsibility of the applicant, and be undertaken at a reasonable cost.

Eligible work is classified into the following categories:

- **Emergency Work.**
  - Category A: Debris removal.
  - Category B: Emergency protective measures.
- **Permanent Work.**
  - Category C: Roads and bridges.
  - Category D: Water control facilities.
  - Category E: Public Buildings and Contents.
  - Category F: Public utilities.
  - Category G: Parks, recreational, and other facilities.

The State suffered significant impacts which resulted in category A and B projects. In total, 923 unique projects were identified across all impacted counties. The total approximate cost of the debris removal and emergency protective measures is $407 million across all counties. The cost of FEMA PA projects is split between federal and non-federal share, with the federal share contributing 75 percent of the cost and the non-federal share contributing 25 percent of the cost.

Table 21 - FEMA PA Categories A and B

Category A		
Total Approx. Cost	Approx. Federal Share	Approx. Non-Federal Share
$ 182,491,841	$ 137,118,961	$ 45,372,880
Category B		
Total Approx. Cost.	Approx. Federal Share	Approx. Non-Federal Share
$ 224,675,886	$ 168,506,915	$ 56,168,972
Total		
$ 407,167,727	$ 305,625,876	$ 101,541,852

State resources were engaged to fund these projects. North Carolina Session Law 2018-134, passed on October 3, 2018, allocated $50 million in State funds to meet the match requirements for these projects. Other allocations were provided in subsequent bills for other recovery priorities, but not specifically to fund infrastructure costs. However, it is expected that the infrastructure recovery need will be funded by existing State resources.

For the purpose of assessing ongoing, long-term recovery needs, FEMA PA categories C – G are used as the foundation of the analysis. FEMA PA projects include a non-federal cost share or a percentage of total costs which must be paid by the applicant in order to fully fund the necessary work. For Categories C – G, the non-federal cost share is 25 percent.[15]

As of June 2019, $859.7 million in PA projects in categories C – G had been identified and submitted to FEMA for DR – 4393. This includes an approximate federal share of $644.8 million and a non-federal share of $214.9 million.

The following data was collected on PA applicants for DR – 4393 on June 17, 2019 for FEMA PA categories C – G, the anticipated total costs of those projects, and the total amount of federal and non-federal share. It is important to note that FEMA's priority is to restore damage structures to service, while CDBG-DR funds work to develop a long-term recovery need, including implementing resiliency measures where appropriate to safeguard against future losses.

Table 22 - FEMA PA Projects Categories and Total Costs

FEMA PA Categories	Total Approximate Cost	Total Approximate Federal Share	Total Approximate Non-Federal Share
C - Roads and Bridges	$ 104,008,244	$ 78,006,183	$ 26,002,061
D - Water Control Facilities	$ 36,803,374	$ 27,602,531	$ 9,200,844
E - Buildings and Equipment	$ 359,648,098	$ 269,736,074	$ 89,912,025
F - Utilities	$ 109,413,474	$ 82,060,105	$ 27,353,368
G - Parks, Recreational Facilities, and Other Items	$ 249,894,668	$ 187,421,001	$ 62,473,667
Total	**$ 859,767,859**	**$ 644,825,894**	**$ 214,941,965**

The two most damaged category types are 1) public buildings and equipment, and 2) parks, recreational facilities, and other items. By percent of total projects, 56 percent of all projects were for repairs to buildings and equipment. Another 16 percent of all projects were for parks, recreational facilities, and other items. This is similar to the percent of all projects that were for utility repairs (17 percent). However, by percent of all anticipated PA project cost, 42 percent of PA project costs are for damage to public buildings and equipment and 29 percent of PA project costs are for repairs to parks, recreational facilities, and other items.

[15] Federal Emergency Management Agency. *Public Assistance Fact Sheet.* https://www.fema.gov/media-library-data/1534520705607-3c8e6422a44db5de4885b516b183b7ce/PublicAssistanceFactSheetJune2017_Updated2018.pdf.

Table 23 - Number of Projects and, % of Total Projects, and % of Total Cost of PA Projects

FEMA PA Categories	# of Projects	% of Total # of Projects	% of Cost of All PA Projects
C - Roads and Bridges	116	7%	12%
D - Water Control Facilities	64	4%	4%
E - Buildings and Equipment	953	56%	42%
F - Utilities	293	17%	13%
G - Parks, Recreational Facilities, and Other Items	264	16%	29%
Total	**1690**	**100%**	**100%**

MID counties experienced a disproportionate amount of damage based on both the number of PA projects and anticipated total cost. The tables below show the count of PA projects in FEMA categories C – G for the 11 MID counties as well as the total approximate cost of PA projects in those categories.

Table 24 - PA Projects in select MID Counties

FEMA PA Category	Bladen	Brunswick	Carteret	Columbus	Craven	Duplin
C	3	13	11	1	8	2
D	1	12	11	2		1
E	4	73	121	46	25	49
F	5	41	29	3	33	7
G	5	20	48	11	19	5
Total	*18*	*159*	*220*	*63*	*85*	*64*
FEMA PA Category	**Jones**	**New Hanover**	**Onslow**	**Pender**	**Robeson**	**Total**
C	5	17	2	1	4	67
D		16	1		1	45
E	26	89	114	34	68	649
F	6	13	10	5	22	174
G	3	22	40	7	3	183
Total	**40**	**157**	**167**	**47**	**98**	**1118**

Of the total 1690 PA projects in categories C – G as of June 2019, 1118 or 66 percent of all PA projects were in a MID county. However, 74 percent of the total approximate cost of all PA projects in categories C – G occurred in MID counties.

Table 25 - PA Projects in select MID Counties, Total Approximate Cost

FEMA PA Category	Bladen	Brunswick	Carteret
C	$ 409,000.00	$ 1,276,285.84	$ 981,200.00
D	$ 591,838.17	$ 18,633,724.81	$ 46,000.00
E	$ 818,737.44	$ 3,864,565.71	$ 13,659,009.61
F	$ 538,324.80	$ 16,251,654.92	$ 9,477,323.92
G	$ 2,457,750.00	$ 18,161,711.43	$ 85,279,920.00
Total	**$ 4,815,650.41**	**$ 58,187,942.71**	**$ 109,443,453.53**
FEMA PA Category	**Columbus**	**Craven**	**Duplin**
C	$ 441,230.00	$ 5,541,991.00	$ 19,580.03
D	$ 308,500.00	$ 3,205,500.00	$ 540,000.00
E	$ 2,733,518.91	$ 53,701,603.91	$ 7,015,434.57
F	$ 278,751.00	$ 9,452,607.45	$ 1,138,553.06
G	$ 122,104.20	$ 3,483,071.00	$ 135,874.49
Total	**$ 3,884,104.11**	**$ 75,384,773.36**	**$ 8,849,442.15**
FEMA PA Category	**Jones**	**New Hanover**	**Onslow**
C	$ 84,000.00	$ 1,904,634.50	$ 150,736.00
D	$ -	$ 2,564,795.37	$ 170,000.00
E	$ 1,590,916.70	$ 147,193,722.41	$ 18,751,458.50
F	$ 255,000.00	$ 3,605,077.27	$ 15,260,749.50
G	$ 39,000.00	$ 3,473,246.61	$ 86,071,401.23
Total	**$ 1,968,916.70**	**$ 158,741,476.16**	**$ 120,404,345.23**
FEMA PA Category	**Pender**	**Robeson**	**Total**
C	$ 226,000.00	$ 816,346.72	*$ 11,851,004.09*
D	$ -	$ 6,539,544.75	*$ 32,599,903.10*
E	$ 7,541,051.70	$ 47,278,224.37	*$ 304,148,243.83*
F	$ 11,452,671.20	$ 4,089,754.69	*$ 71,800,467.81*
G	$ 19,361,500.00	$ 394,670.15	*$ 218,980,249.11*
Total	**$ 38,581,222.90**	**$ 59,118,540.68**	**$ 639,379,867.94**

4.11.1.2 FEMA Hazard Mitigation Grant Program (HMGP)

FEMA provides public assistance via a number of programs under the Hazard Mitigation Assistance (HMA) umbrella. The Hazard Mitigation Grant Program (HMGP), a sub-program of the HMA, serves as a resource to fund programs that reduce the risk of loss of life and property and is offered following a presidentially declared major disaster. HMGP funds, based on the amount of FEMA disaster recovery assistance under the presidential declaration, are allocated based on a sliding scale formula based on an appropriate percentage of the estimated total federal assistance (less administrative costs) wherein each individual activity is required to have at least a 25 percent non-federal cost share.

HMGP application data was requested from NCEM to evaluate impact and unmet needs based on local matching dollar amounts required. In total, 28 HMGP projects were submitted in a Letter of Interest (LOI) within disaster declared counties. These projects include infrastructure flood management, community safe rooms, early warning systems, and wind retrofits. The total approximate project cost for these mitigation measures is $62.8 million.

Table 26 - Proposed HMGP Projects, Disaster Impacted Areas

County	MID	Approximate Cost	Federal Share	Non-Federal Share
Beaufort County	No	$ 2,500,000	$ 1,875,000.00	$ 625,000.00
Brunswick County	Yes	$ 3,146,350	$ 2,359,762.50	$ 786,587.50
Carteret County	Yes	$ 1,403,366	$ 1,052,524.50	$ 350,841.50
Craven County	Yes	$ 250,000	$ 187,500.00	$ 62,500.00
Cumberland County	Yes	$ 1,458,160	$ 1,093,620.00	$ 364,540.00
Moore County	No	$ 2,310	$ 1,732.50	$ 577.50
New Hanover County	Yes	$ 15,298,060	$ 11,473,545.00	$ 3,824,515.00
Onslow County	Yes	$ 1,000,000	$ 750,000.00	$ 250,000.00
Robeson County	Yes	$ 37,755,000	$ 28,316,250.00	$ 9,438,750.00
Total	**-**	**$ 62,813,246**	**$ 47,109,935**	**$ 15,703,312**

It is critical to note that these are preliminary and approximate calculations that are subject to change as projects develop. Currently, NCORR expects the total unmet need to increase rather than decrease as additional infrastructure issues are uncovered. In consideration of the data currently available, the total need for infrastructure recovery is initially estimated as $282 million, corresponding to a combination of the non-federal share of both FEMA PA projects and proposed HMGP projects.

As stated above, it is expected that State resources are available to fund the recovery need for infrastructure. The recovery needs assessment considers that the project cost for infrastructure recovery is typically for repair only. CDBG-DR funds may be expended to complete upgrades for greater resiliency and long-term recovery as opposed to a repair of current damage. To estimate this need, NCORR applies a 15 percent factor to the total project cost to account for the increased cost of relocating vulnerable items out of the floodplain, funding improved design, using green building design and sustainable construction techniques. Therefore, NCORR estimates the initial unmet recovery need for infrastructure at $138.3 million.

4.11.2 Infrastructure Unmet Need Assessment

The State conducted a revaluation of the Infrastructure Unmet Need Assessment by examining the estimated total loss (need) and resulting unmet need using HUD's own standard approach to analyzing infrastructure unmet need. The Assessment is based on a reanalysis of the most recent FEMA Public Assistance (PA) data set under Substantial Amendment 4.

To estimate unmet needs for infrastructure, the reanalysis uses only a subset of the Public Assistance damage estimates reflecting the categories of activities most likely to require CDBG funding above the Public Assistance and State match requirement. Those activities are categories: C, Roads and Bridges; D, Water Control Facilities; E, Public Buildings; F, Public Utilities; and G, Recreational—Other. Categories A (Debris Removal) and B (Protective Measures) are largely expended immediately after a disaster and reflect interim recovery measures rather than the long-term recovery measures for which CDBG funds are generally used.

The total estimated loss (need) was based on the total FEMA PA Project Amount for damage categories C through G. To estimate total unmet need, the Assessment subtracts the total federal obligations (FEMA PA Federal Share Obligated amount) from the total estimated loss (need).

Through reanalysis of the most recent data set summarized in Table 37A, the State has determined that the infrastructure unmet need has decreased, with a total estimated unmet need of $111,195,540.

Table 37A - Hurricane Florence Infrastructure Unmet Need Summary by Damage Category

Damage Category	Estimated Total Loss (Need)	Federal Obligations (FEMA PA Federal Share Obligated)	Estimated Unmet Need (Estimated Total Loss less Federal Obligations)	Percent of Total Estimated Unmet Need
G - Recreational or Other	$143,399,315	$107,549,486	$35,849,828	32%
C - Roads and Bridges	$113,937,853	$85,453,390	$28,484,463	26%
F - Public Utilities	$104,687,505	$78,515,629	$26,171,876	24%
E - Public Buildings	$70,255,988	$52,691,992	$17,563,996	16%
D - Water Control Facilities	$12,501,503	$9,376,127	$3,125,376	3%
Total Infrastructure	**$444,782,165**	**$333,586,625**	**$111,195,540**	**100%**

Source(s): FEMA Public Assistance (PA) data as of 11/8/2022

The initial infrastructure unmet needs outlined in section 4.11.1 estimated a total infrastructure unmet need of $138.3 million, representing a roughly 20 percent decrease when compared to the reanalysis. The initial assessment utilized FEMA PA and HMGP to calculate a preliminary estimate of infrastructure unmet need using the best data available at the time. The latest FEMA PA data set shows that over $289 million in federal funds were obligated to projects in damage categories C through G since the last analysis in June 2019 (based on FEMA PA Obligated Date), which is what prompted the State to use the latest FEMA PA data to reevaluate the preliminary estimate of infrastructure unmet need aligned with HUD's standard methodology.

The reanalysis also highlights that 81 percent, or $90,506,168, of the total estimated infrastructure unmet need is related to damage categories: G, Recreational—Other; C, Roads and Bridges; and F, Public Utilities.

On February 26, 2020, the State made a considerable amount of funding available under the Local Government Infrastructure Fund with $84,168,000 in appropriations to address infrastructure recovery for Hurricane Florence and other disasters.[16] When accounting for these State funds, the total estimated infrastructure unmet need decreases further to $27,027,540.

Through the reanalysis of the most recent FEMA PA data set, the State also found that 92 percent of the estimated infrastructure unmet need, totaling to $102,438,770, is for statewide projects or for projects in counties that have been defined as MID areas by HUD. Table 37B summarizes the infrastructure unmet need by MID category.

Table 37B - Hurricane Florence Infrastructure Unmet Need Summary by MID Category

MID Category	Estimated Total Loss (Need)	Federal Obligations (FEMA PA Federal Share Obligated)	Estimated Unmet Need (Estimated Total Loss less Federal Obligations)	Percent of Total Estimated Unmet Need
HUD Defined MID	$246,339,415	$184,754,562	$61,584,853	55%
Statewide	$163,415,669	$122,561,752	$40,853,917	37%
Non-MID	$22,391,522	$16,793,642	$5,597,880	5%
State Defined MID	$12,635,559	$9,476,670	$3,158,890	3%
Total Infrastructure	**$444,782,165**	**$333,586,625**	**$111,195,540**	**100%**

Source(s): FEMA Public Assistance (PA) data as of 11/8/2022

4.11.3 Amendment 4 Update

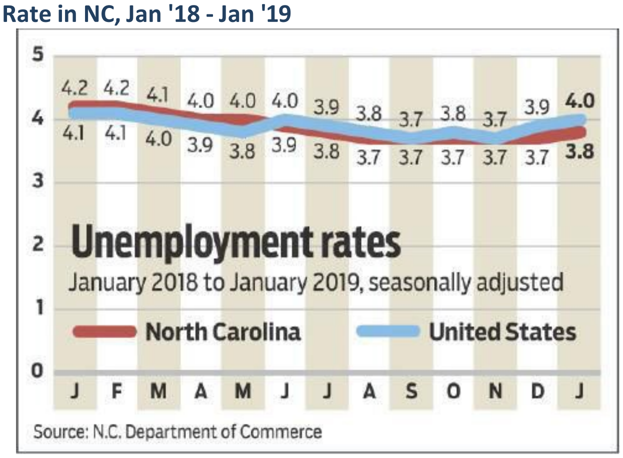
See Section 4.11.2 for the revaluation of the Infrastructure Unmet Need based on the most recent FEMA PA data set.

[16] https://www.osbm.nc.gov/media/1106/open, February 26, 2020, pages 10 and 11

4.12 Analysis of Economic Revitalization Unmet Need

Hurricane Florence struck the State at a time of economic strength. Unemployment had reached a post-recession low of 3.7 percent statewide in September 2018. That unemployment rate holds from the same level in August 2018 and was down significantly from the 4.1 percent in January 2018. Following the storm, unemployment rates continued to hold at 3.7 percent, with a slight uptick to 3.8 percent in January 2019.[17]

Figure 12 - Unemployment Rate in NC, Jan '18 - Jan '19



While the total unemployment rate appears unaffected by the storm, nonfarm employment fell by 21,900 jobs during September 2018. Hourly workers and the leisure and hospitality sector were hardest hit by the storm, with a loss of 14,600 jobs in that sector.[18]

A more accurate indicator of the impact to jobs after Hurricane Florence is the Disaster Unemployment Assistance (DUA) program. The DUA is administered by the North Carolina Department of Commerce (NCDOC) Division of Employment Security (DES) on behalf of FEMA. The program provides temporary unemployment benefits to jobless workers and self-employed people who have lost their job or work hours as a direct result of Hurricane Florence.

DUA applicants are vetted through a review process which determines if they qualify for DUA or regular unemployment services. If the applicant qualifies for regular state unemployment service, they are routed through that channel instead of continuing in the DUA program. If they do not qualify for state unemployment, DES works to determine eligibility for disaster unemployment benefits. DUA is available for weeks of employment beginning with the week starting September 9, 2018 (the week which Hurricane Florence made landfall in North Carolina) and may last for up to 27 weeks as long as the applicant is experiencing unemployment as a direct result of Hurricane Florence.

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[17] Craver, Richard. Winston-Salem Journal. *N.C. begins 2019 with slight uptick in jobless rate to 3.8 percent.* https://www.greensboro.com/rockingham_now/n-c-begins-with-slight-uptick-in-jobless-rate-to/article_828ef8bd-a34f-57a9-bdf7-264b8726dbda.html

[18] Craver, Richard. Winston-Salem Journal. *N.C. jobless rate slides to 18-year low; Hurricane Florence has effect on leisure, hospitality sector*. https://www.journalnow.com/business/n-c-jobless-rate-slides-to--year-low-hurricane/article_cf891b77-9084-5811-9289-1ee6dade3875.html

The deadline for applications to DUA is 30 days after the availability of funds is made to DES. The deadline to apply for assistance for Hurricane Florence was extended to October 31, 2018 for many impacted counties. The latest counties to be added to the DUA program – Chatham, Durham, and Guilford – had a deadline of November 28, 2018 for individuals to apply for assistance.

DUA tracks the county of residence for each applicant that applies. For this analysis, the loss is considered to be within the same county as the applicant's address. Some applicant data was removed from the analysis because the county listed by the applicant was out of state. Removing these applications from the analysis did not have a significant impact on the total DUA claims. As of June 20, 2019, a total of 2,170 claimants in North Carolina have applied and been approved for DUA for a total of $2.1 million. Only 8.5 percent of claimants and 10.6 percent of payments came from outside of the MID areas, indicating a heavy concentration of unemployment due to the storm in the MID areas. Especially hard hit were New Hanover, Carteret, and Onslow counties, which had the three highest totals of both payments and claimants. New Hanover in particular had over two times the number of claimants (508) than Carteret (241), which was the second highest county by number of claimants. However, both New Hanover and Carteret counties were the only two counties with DUA payments greater than $300,000.

As DUA claims are only payable for 27 weeks total, NCDOC data was used to calculate the average wage for 27 weeks of missed work.[19] The total wages expected over 27 weeks multiplied by the number of claimants was considered to be the impact to employment. By subtracting the DUA claims paid from the total impact for all claimants, there is approximately $38.4 million in unmet recovery need resulting from lost wages due to the storm.

Table 27 - DUA Claims and Payments Made

County	Payment ($)	# of Claimants	Average Wage, 27 weeks	Unmet Need
New Hanover	$ 386,394	508	$ 22,151.94	$ 10,866,793
Carteret	$ 348,133	241	$ 16,412.88	$ 3,607,372
Onslow	$ 244,986	281	$ 15,334.96	$ 4,064,138
Brunswick	$ 185,643	198	$ 19,471.67	$ 3,669,749
Craven	$ 169,235	126	$ 19,782.69	$ 2,323,385
Pender	$ 145,902	164	$ 16,940.94	$ 2,632,413
Robeson	$ 107,498	145	$ 16,842.81	$ 2,334,710
Cumberland	$ 85,299	108	$ 18,912.98	$ 1,957,303

[19] NC Dept. of Commerce, Labor & Economic Analysis Division. *Average Private Sector Wages.* https://files.nc.gov/nccommerce/documents/files/County_average_wages_Jan_2019.pdf

County	Payment ($)	# of Claimants	Average Wage, 27 weeks	Unmet Need
Duplin	$ 83,981	78	$ 17,791.44	$ 1,303,752
Lenoir	$ 45,300	36	$ 19,090.04	$ 641,941
Pamlico	$ 32,361	11	$ 14,158.38	$ 123,381
Beaufort	$ 30,833	13	$ 19,528.79	$ 223,041
Columbus	$ 28,458	56	$ 17,558.83	$ 954,837
Sampson	$ 25,234	20	$ 19,170.52	$ 358,177
Jones	$ 25,063	18	$ 17,210.94	$ 284,734
Bladen	$ 25,046	33	$ 18,390.63	$ 581,845
Pitt	$ 21,696	13	$ 20,545.44	$ 245,395
Wayne	$ 15,717	28	$ 18,424.90	$ 500,181
Scotland	$ 14,050	19	$ 18,540.17	$ 338,214
Hyde	$ 10,154	8	$ 14,312.60	$ 104,347
Wake	$ 10,034	4	$ 30,187.04	$ 110,714
Edgecombe	$ 9,697	3	$ 17,862.06	$ 43,889
Harnett	$ 9,405	17	$ 17,166.29	$ 282,422
Johnston	$ 6,500	4	$ 20,621.77	$ 75,987
Richmond	$ 6,422	4	$ 17,658.00	$ 64,210
Wilson	$ 5,525	5	$ 22,852.38	$ 108,737
Hoke	$ 3,358	4	$ 17,750.42	$ 67,644
Lee	$ 3,314	4	$ 21,582.87	$ 83,017
Forsyth	$ 3,181	2	$ 27,120.46	$ 51,060
Mecklenburg	$ 1,715	4	$ 34,637.37	$ 136,834
Moore	$ 1,690	2	$ 20,316.98	$ 38,944
Caswell	$ 876	2	$ 17,181.35	$ 33,487
Greene	$ 562	2	$ 16,068.63	$ 31,575
Other County	$ 10,844	9	$ -	$ 183,680
Total	**$ 2,104,102**	**2,170**	**$ -**	**$ 38,427,907**

The SBA offers Business Disaster Loans and Economic Injury Disaster Loans (EIDL) to businesses to repair or replace disaster damaged property owned by the business, including real estate, inventories, supplies, machinery, equipment and working capital until normal operations resume. Businesses of all sizes are eligible. Private, nonprofit organizations such as public service, faith-based, and private universities are also eligible. The law limits these business loans to $2 million and the amount cannot exceed the verified uninsured disaster loss.

A total of 20,198 commercial business loans were applied for through SBA in the impacted counties, totaling $435 million in total verified loss. Of that amount, 1,405 commercial SBA applications were approved for funding, representing a total of $112 million in damage verified loss. Therefore only 7 percent of applications and 26 percent of verified losses were funded. $110 million was loaned to impacted businesses total.

Guilford, Horry, and Wake County had businesses with SBA applications approved but without verified loss.

Table 28 - SBA Applications, Businesses

Counties	Approved SBA Applications	Total Verified Loss	Total SBA Loans
Craven	242	$ 21,435,692	$ 20,044,000
New Hanover	314	$ 20,678,018	$ 22,025,300
Carteret	146	$ 13,419,976	$ 13,146,100
Onslow	194	$ 13,092,461	$ 11,198,400
Cumberland	62	$ 7,439,385	$ 5,461,400
Pender	65	$ 6,673,123	$ 6,601,200
Scotland	16	$ 4,391,414	$ 4,570,200
Beaufort	29	$ 4,226,868	$ 3,634,700
Brunswick	82	$ 3,808,656	$ 6,651,600
Wayne	18	$ 3,491,468	$ 1,434,700
Duplin	46	$ 2,855,451	$ 4,459,600
Jones	18	$ 2,226,483	$ 2,115,500
Pamlico	16	$ 1,982,223	$ 1,761,000
Robeson	39	$ 1,862,101	$ 1,181,800
Columbus	23	$ 1,839,073	$ 1,879,000
Richmond	9	$ 807,665	$ 632,300
Bladen	16	$ 580,550	$ 598,100
Lenoir	14	$ 299,889	$ 889,300
Sampson	14	$ 268,991	$ 372,900
Durham	4	$ 234,707	$ 94,200

Counties	Approved SBA Applications	Total Verified Loss	Total SBA Loans
Harnett	8	$ 200,914	$ 217,900
Hyde	2	$ 87,545	$ 75,000
Orange	3	$ 72,723	$ 75,000
Hoke	4	$ 56,441	$ 41,800
Moore	3	$ 34,084	$ 54,600
Chatham	1	$ 27,585	$ 15,000
Pitt	8	$ 24,628	$ 575,400
Greene	2	$ 1,100	$ 21,300
Guilford	1	$ -	$ 10,600
Horry	4	$ -	$ 134,400
Wake	2	$ -	$ 312,000
Total	**1,405**	**$ 112,119,214**	**$ 110,284,300**

Craven and New Hanover had the largest number of approved disaster loans and payments. Guilford, Horry, and Wake County had businesses with SBA applications approved but without verified loss.

HUD calculates unmet need for economic impacts by using SBA disaster loans to businesses. HUD established a five category system based on real estate and content losses experienced by businesses. The categories are:

- Category 1. Real estate + content loss is less than $12,000.
- Category 2. Real estate + content loss is between $12,000 and $29,999.
- Category 3. Real estate + content loss is between $30,000 and $64,999.
- Category 4. Real estate + content loss is between $65,000 and $149,999.
- Category 5. Real estate + content loss is above $150,000.

For properties with real estate and content loss of $30,000 or more, HUD calculates the estimated amount of unmet needs for small businesses by multiplying the median damage estimates for the categories above by the number of small businesses denied an SBA loan, including those denied a loan prior to inspection due to inadequate credit or income (or a decision had not been made), under the assumption that damage among those denied at pre-inspection have the same distribution of damage as those denied after inspection.

A total of 3,326 applications were denied or in some other stage such as inactive which means the SBA funds are not available. The median of the damage for Categories 3, 4, and 5 is \$85,903. Therefore, the unmet recovery need for impacts to businesses is \$285 million.

To partially relieve the unmet recovery need, the \$2.1 million in DUA payments are also included in the total funds received for economic revitalization. Additionally, Session Law 2018-138 provided \$5 million to the Golden LEAF Foundation, a non-profit organization which provides small business assistance. As the specific purpose of this \$5 million is to provide disaster recovery assistance to small businesses, this \$5 million is included in the analysis to partially offset the unmet recovery need for economic revitalization.

In consideration of the extensive damage caused to the economic condition of the State and the total funds available to recover from other sources, the total unmet recovery need for economic revitalization is the sum of the unmet need for wages and the unmet recovery need for SBA. The total unmet recovery need is \$320.9 million.

4.13 Analysis of Other Unmet Needs

Where applicable, the unmet needs for the environmental impacts and public buildings and education are captured in FEMA PA or FEMA HMGP projects. Additionally, Session Law 2018-136 allocated \$111.5 million to public education recovery, including the University Of North Carolina Board of Governors, the Community Colleges System, and the Department of Instruction. \$4 million was allocated to the Department of Environmental Quality to assist in debris removal specific to environmental impacts. NCORR acknowledges that there may be remaining unmet recovery needs specific to the environment and education. However, as significant State resources have been tapped for these issues, the unmet recovery needs analysis will continue to primarily focus on housing, infrastructure, and economic revitalization.

4.13.1 Amendment 4 Update

Reference Appendix E for the Previous Analysis of Other Unmet Needs (Agriculture) including Table 40.

4.14 Unmet Need Summary

The previous sections of the unmet needs analysis provide an overview of the State's current understanding of the impacts and remaining unmet needs related to Hurricane Florence. The impacted communities continue to face a daunting rebuilding and recovery process, and there remain significant unmet recovery needs. CDBG-DR funds will have a meaningful effect on the impacted counties and the implementation of programs supported by the unmet needs analysis will provide targeted, consequential, and meaningful assistance.

Reanalysis of the owner-occupied and rental housing serious unmet need under Substantial Amendment 4 indicates that serious housing unmet need has increased when compared to initial serious housing unmet need estimates. The increase is largely attributed to the availability of additional data sets and more recent data from FEMA, SBA and NFIP, which provides a better source for estimating housing unmet need.

Through reanalysis of the infrastructure unmet need under Substantial Amendment 4, the State found that the infrastructure unmet need has decreased when compared to the initial infrastructure unmet need estimates. The reanalysis highlights that additional Federal Obligations have been made through the FEMA Public Assistance (PA) program to address infrastructure unmet need since the initial estimates were calculated. Additionally, a considerable amount of funding from the State has been allocated to address the infrastructure recovery needs.

The reanalysis of owner-occupied housing, rental housing and infrastructure, and previous analyses of unmet need, are aligned to HUD's own standard approach to analyzing unmet need.

Based on the reanalysis of unmet need, North Carolina's current unmet recovery needs for Hurricane Florence total $1,626,737,384 summarized in Table 41. It is important to note that the previous unmet need estimate for Agriculture ($159,320,750) has been removed; CDBG-DR funding will not be used to address agricultural needs as significant State resources have been tapped to address these needs (see Section 4.13).

Table 29 - Hurricane Florence Unmet Need Summary

Category	Estimated Unmet Need	Percent of Total Unmet Need*
Owner-Occupied & Rental Housing (Serious)	$1,082,331,589	67%
Public Housing	$112,234,056	7%
Infrastructure	$111,195,540	7%
Economic (Small Business)	$320,976,199	20%
Total	**$1,626,737,384**	**100%**

**Percentages may not add to 100% due to rounding*

Under Substantial Amendment 4, funding allocated to CDBG-DR activities will address owner-occupied housing and rental housing, representing 67% of the total unmet recovery needs.

Public Housing and Infrastructure represent 14% of the total unmet need, totaling to $223,429,596. In consideration of the serious owner-occupied and rental housing unmet need, funding allocations for public housing and infrastructure are being reallocated to the State's CDBG-MIT program under Substantial Amendment 4. Refer to the State's Mitigation Action Plan for more details on these activities and any additional unmet needs analyses.

The Federal Register Notice allocated $542,644,000 in CDBG-DR funding. The total unmet needs are more than $1 billion greater than the available CDBG-DR funds. It remains the imperative of

NCORR to primarily address the housing recovery need. The State will use the unmet recovery needs analysis to produce programs which will be most impactful to storm affected individuals and communities and maximize the use of CDBG-DR funds available.

4.14.1 Amendment 4 Update

See Section 4.14 for revised Unmet Need Summary and Table 41 accounting for the reanalysis of unmet need related to owner-occupied housing, rental housing and infrastructure.

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5.0 General Requirements

According to federal regulations mandated under the National Flood Insurance Reform Act (NFIRA) of 1994, buildings and property which utilized financial assistance from the Federal Government following a Presidentially Declared disaster may have been required to have and maintain flood insurance coverage. In the event that flood insurance lapsed or was no longer in effect at the time of Hurricane Florence's impact, the owner of the building and/or property may not be eligible for additional federal assistance for rehabilitation or reconstruction.

5.1 Elevation Requirements

NCORR will establish reasonableness requirements when comparing elevation to other mitigation measures, such as buyout (in NCORR developed and community approved areas) or demolition and reconstruction of the structure. Based on a review of the costs of elevation and rehabilitation compared to reconstruction, NCORR favors reconstruction rather than rehabilitation and reconstruction given the significant cost of providing elevation along with rehabilitation, as seen with Hurricane Matthew CDBG-DR rehabilitation and elevation implementation. The method for determining cost reasonableness for elevation assistance is outlined in the ReBuild NC Homeowner Recovery Manual. The elevation assistance maximum for rehabilitation awards is a dollar-per-square foot ($/SF) cap and constrained to the actual cost of elevation. The cap is based on actual elevation cost data developed through implementation of the CDBG-DR programs for Hurricane Matthew recovery, and is found in the NCORR Construction Standard Operating Procedure (SOP). Elevation assistance costs are in addition to the program cap for rehabilitation, reconstruction, and Mobile/Modular Home Unit (MHU) replacement activities. Accessibility features such as ramps and lifts are required for those with disabilities. Accessibility requirements are further set for multifamily projects at Section 5.4.

NCORR requires that new construction, reconstruction, or substantially damaged residential structures are elevated two feet or more above the base flood elevation (BFE) or high water mark if outside the floodplain. Local requirements for elevations more than two feet above BFE prevail, where required. For MHUs, if the Program elevation standard makes it infeasible to elevate, the HUD requirement prevails. For new construction or reconstruction using CDBG-DR funds, NCORR will remain consistent with this requirement and depending on the facts and circumstances of the construction project, may require additional freeboard or other mitigation technique to ensure that new construction is sufficiently protected from future flood risk.

Nonresidential structures must be elevated or floodproofed to two feet above the BFE. Critical Actions, as defined at 24 CFR Part 55.2(b)(3), within the 500-year floodplain must be elevated or floodproofed to the higher of the 500-year floodplain elevation or three feet above the 100-year floodplain elevation. If the 500-year floodplain or elevation is unavailable, and the Critical Action is in the 100-year floodplain, then the structure must be elevated or floodproofed at least three feet above the 100-year floodplain elevation. Public nonresidential structures must incorporate access features such as ramps, lifts, and/or elevator access for those with disabilities in accordance with the ADA and the Architectural Barriers Act of 1968.

Critical Actions are defined as an ''activity for which even a slight chance of flooding would be too great, because such flooding might result in loss of life, injury to persons or damage to property.'' For example, Critical Actions include hospitals, nursing homes, police stations, fire stations and principal utility lines.

5.2 Flood Insurance Requirements

New requirements from HUD prohibit NCORR from providing CDBG–DR assistance for the rehabilitation or reconstruction of a house if (a) the combined household income is greater than 120 percent area median income (AMI) or the national median, (b) the property was located in a floodplain at the time of the disaster, and (c) the property owner did not maintain flood insurance on the damaged property, even when the property owner was not required to obtain and maintain such insurance.

When a homeowner located in the floodplain allows their flood insurance policy to lapse, it is assumed that the homeowner is unable to afford insurance and/or is accepting responsibility for future flood damage to the home. HUD established this alternative requirement to ensure that adequate recovery resources are available to assist lower income homeowners who reside in a floodplain but who are unlikely to be able to afford flood insurance. Higher income homeowners who reside in a floodplain, but who failed to secure or decided to not maintain their flood insurance, should not be assisted at the expense of those lower income households. Therefore, NCORR may only provide assistance for the rehabilitation or reconstruction of a house located in a floodplain if: (a) the homeowner had flood insurance at the time of the Hurricane Florence and still has unmet recovery needs; or (b) the household earns less than the greater of 120 percent AMI or the national median and has unmet recovery needs.

With respect to flood insurance, CDBG-DR funded homeowners of a property located in a Special Flood Hazard Area (SFHA) must obtain and maintain flood insurance in the amount and for the duration prescribed in FEMA's National Flood Insurance Program. Section 102(a) of the Flood Disaster Protection Act of 1973 (42 U.S.C. 4012a) mandates the purchase of flood insurance protection for CDBG-DR (a HUD-assisted property) within a SFHA, when CDBG-DR is used to finance acquisition or construction, including rehabilitation. NCORR will encourage the purchase of flood insurance outside of SFHA's, to the greatest extent possible. NCORR will also provide educational literature to citizens and Buyout participants about the benefits of flood insurance and the risks of flooding during local meetings and at application. These materials will highlight the facts about flooding risks, including the risk that can occur outside of Special Flood Hazard Areas.

Section 582 of the National Flood Insurance Reform Act of 1994, as amended, (42 U.S.C. 5154a) prohibits flood disaster assistance in certain circumstances. In general, it provides that no Federal disaster relief assistance made available in a flood disaster area may be used to make a payment (including any loan assistance payment) to a person for "repair, replacement, or restoration" for damage to any personal, residential, or commercial property if that person at any time has received Federal flood disaster assistance that was conditioned on the person first having obtained flood insurance under applicable Federal law and the person has subsequently failed to obtain and maintain flood insurance as required under applicable Federal law on such property. This means that CDBG-DR assistance may not be provided for the repair, replacement, or restoration of a property to a person who has failed to meet this requirement.

Section 582 also imposes a responsibility on NCORR and its subrecipients to inform property owners receiving assistance that triggers the flood insurance purchase requirement that they have a statutory responsibility to notify any transferee of the requirement to obtain and maintain flood insurance in writing and to maintain such written notification in the documents evidencing the transfer of the property, and that the transferring owner may be liable if he or she fails to do so. These requirements are set at http://uscode.house.gov/view.xhtml?req=granuleid:U.S.C.-prelim-title42-section5154a&num=0&edition=prelim.

NCORR will detail a process for checking flood insurance compliance for CDBG-DR grant fund recipients in its policies and procedures to ensure compliance with this requirement. To the greatest extent possible, NCORR will provide educational materials and inform applicants (especially low-income and minority property owners) about the benefits of maintaining flood insurance, even when not required to maintain flood insurance as a condition of participating in a CDBG-DR funded recovery program.

5.3 Duplication of Benefits (DOB)

Applicants to recovery programs will be required to provide information regarding all assistance received for the recovery purposes as required by the HUD's Certification of Duplication of Benefits Requirements under the Stafford Act for Community Development Block Grant (CDBG) Disaster Recovery Grantees (76 FR 71060, November 16, 2011). Any funds found to be duplicative will be deducted from the CDBG-DR award prior to the disbursement of the award amount. A review of potential DOB is necessary for all CDBG-DR funded activities.

On June 20, 2019, HUD published two Federal Register (FR) notices on the calculation of Duplication of Benefits (DOB): 84 FR 28836 (here after referred to as the *DOB Notice*) and 84 FR 28848 (here after referred to as the *DOB Implementation Notice*). After reviewing the notices, NCORR has updated its DOB policy to comply with the new guidance.

In review of the guidance on multiple storm impacts and DOB provided at 84 FR 28844 and clarifying guidance received from HUD, NCORR has developed a DOB policy that applies funds received to recover from the qualifying event (i.e. the event that the application for assistance is tied back to) rather than all assistance received for each disaster that impacted the recovering applicant. NCORR reviews assistance received for applicants in multiple disaster scenarios, such as those impacted by Hurricanes Matthew and Florence, and assesses which assistance is duplicative. Assistance received to recover from a disaster declaration other than the qualifying event is not considered duplicative. The application of assistance from multiple storms as a duplication of benefit is only applicable when an applicant is continuing to recover from multiple storms. NCORR establishes whether an applicant is recovering from Hurricane Florence and not recovering from Hurricane Matthew when storm tie-back is determined.

5.3.1 NCORR Subsidized Loans

In some instances, a homeowner may continue to face challenges reconciling other funds received to recover before receipt of CDBG-DR funds to recover. In lieu of receiving an escrow payment, NCORR may offer a subsidized loan for the DOB amount due from the applicant. These subsidized loans (sometimes referred to as promissory notes) are forgivable based on the terms included in the note. These conditions and other terms of the note are included in the subsidized loan agreement executed between the applicant and the disaster recovery program.

In recognition that some households may experience challenges making regular payments on the subsidized loan, in cases where a DOB analysis is performed and NCORR notes that there would be a duplication of benefits, NCORR will apply a forgivable loan structure that would allow the loan and loan payment to be forgiven over time as the applicant lives in the house and otherwise complies with the terms of the subsidized loan agreement. This approach would be exclusively available for LMI households and is only available for households that earn up to 120% area median income that can demonstrate hardship, as defined by the disaster recovery program. Other exceptions may be granted on a case-by-case basis to targeted populations, such as the elderly, persons with disabilities, families with children, or others that may face disproportional challenges in their disaster recovery. NCORR has determined that a set proportion of the subsidized loan will be forgiven on an annual basis after completion of the recovery work is a reasonable basis for loan forgiveness. Additional details on NCORR's mechanism for collecting any remaining balance of the loan will be included in the household's loan documents. NCORR shall identify any additional monitoring procedures in its monitoring process for these loans. NCORR will use its flexibility as a grantee to use a variety of sources for the forgivable loan, including CDBG-DR funds as part of the household's disaster recovery assistance or other available funding sources. This approach is allowable because a subsidized loan awarded before the amendment sunset on October 5, 2023 is not a duplication under the DRRA amendments to Section 312 of the Stafford Act for DRRA-covered disasters (84 FR 28842) if the funds were used for a disaster-related purpose. Hurricanes Matthew and Florence are DRRA-covered disasters.

A household unable to be assisted by NCORR may experience housing instability as they ultimately are unable to repair their damaged home or fully recover from disaster. If faced with housing instability, the household may require assistance from other sources, such as housing vouchers, subsidized housing, or public housing units. The preservation of housing for impacted households, particularly LMI households, is central of HUD's mission and the risk of losing housing for impacted households is real if a DOB issue is not able to be overcome. If not but for this concept, impacted households may be disproportionately affected and unable to participle in the recovery effort. Such considerations are central to this subsidized forgivable loan framework.

5.3.2 Other Subsidized Loans

For the purpose of this Action Plan, subsidized loans (including forgivable loans) are loans other than private loans. Both SBA and FEMA provide subsidized loans for disaster recovery. Subsidized loans may also be available from other sources. Subsidized loans are assistance that must be included in the DOB analysis, unless an exception applies.

The following policies regarding subsidized loans apply to housing recovery programs, including Reconstruction, Rehabilitation, MHU Replacement, and in some instances other housing benefit. The *DOB Notice* provided guidance on the treatment of subsidized loans in Duplication of Benefits analysis as follows: "The full amount of a subsidized loan available to the applicant for the same purpose as CDBG-DR assistance is assistance that must be included in the DOB calculation unless one of the exceptions [in the *DOB Notice*] applies including the exceptions in V.B.2 (i), V.B.2 (ii), and V.B.2 (iii), which were authorized in the DRRA amendments to section 312 of the Stafford Act (which applies to disasters occurring between January 1, 2016 and December 31, 2021, until the amendment sunsets October 5, 2023). A subsidized loan is available when it is accepted, meaning that the borrower has signed a note or other loan document that allows the lender to advance loan proceeds."

Declined loans are loan amounts that were offered by a lender in response to a loan application, but were turned down by the applicant, meaning the applicant never signed loan documents to receive the loan proceeds. NCORR will not treat declined loans as DOB. NCORR will request documentation for the declined loan only if the subsidized loan is not otherwise exempt for DOB considerations or the information received from the third party (SBA, FEMA, etc.) indicates that the applicant received an offer for the not exempted subsidized loan and NCORR is unable to determine from that available information that the applicant declined the loan. In such cases, the applicant must provide written certification that they did not receive the loan. The applicant will complete the Affidavit of Declined or Canceled Subsidized Loan form. NCORR will submit the Affidavit of Declined or Canceled Subsidized Loan to SBA (or other lender) and will re-verify DOB at project close-out.

Cancelled loans are loans (or portions of loans) that were initially accepted, but for a variety of reasons, all or a portion of the loan amount was not disbursed and is no longer available to the applicant. The cancelled loan amount is the amount that is no longer available. The loan cancellation may be due to the agreement of both parties to cancel the undisbursed portion of the loan, default of the borrower, or expiration of the term for which the loan was available for disbursement. The following documentation will be required to demonstrate that any undisbursed portion of an accepted not exempted subsidized loan is cancelled and no longer available to the applicant:

1. A written communication from the lender confirming that the loan has been cancelled and undisbursed amounts are no longer available to the applicant, OR;

2. A legally binding agreement between NCORR and the applicant indicating that the period of availability of the loan has passed and the applicant agrees not to take actions to reinstate the loan or draw any amounts in the future.

Without either of the two documents listed above, any approved but undisbursed portion of an otherwise not exempted for DOB considerations subsidized loan must be included in the DOB calculation of the total assistance unless another exception applies.

For not exempted canceled loans, NCORR will send the Affidavit of Declined or Canceled Subsidized Loan to the lender as notification that the applicant has agreed to not take any actions to reinstate the cancelled loan or draw down any additional undisbursed loan amounts.

In cases of cancelled loans not otherwise exempted for DOB considerations where partial disbursements were made prior to cancellation of the loan, the disbursed funds will be treated as funds disbursed for active loans below. As with not exempted declined loans, awards with not exempted canceled subsidized loans will have DOB re-verified at project close-out.

A subsidized loan is not a prohibited duplication of benefits under section 312(b)(4)(C) of the *Stafford Act*, as amended by section 1210 of the DRRA, provided that all Federal assistance is used towards a loss suffered as a result of a major disaster or emergency declared between January 1, 2016, and December 31, 2021 (DRRA Qualifying Disasters). As part of the DOB analysis, NCORR will exclude disbursed loan amounts as non-duplicative. The exception for DRRA Qualifying disasters no longer applies after October 5, 2023. NCORR will evaluate not exempted loans remaining open for non-duplicative activities. In cases where the undisbursed loan amount is for potentially duplicative activities, NCORR will notify the lender and will obtain a written agreement from the applicant that the applicant will not make additional draws from the subsidized loan without NCORR's approval. Applicable program funding caps remain in effect for any award amount changes performed under this guidance.

NCORR reviews and confirms DOB calculations at project closeout if there is reason to believe that the DOB calculation has changed. If duplicative assistance was received, NCORR exercises the subrogation agreement in place with applicants for assistance to recapture duplicate assistance, if necessary. Specific policy on DOB review is found in each program manual as well as the *NCORR DOB Uniform Procedures.*

5.4 Construction and Green Building Standards

NCORR acknowledges the emphasis in the Notice to institute green building design, specifically when executing new construction or replacement of substantially damaged residential buildings and will follow the guidance located in 84 FR 4844 concerning green building design. Rather than be limited by a single green building design technique, NCORR will require that new construction meet the best fit for new construction from many possible approaches. For all new or replaced residential buildings, the project scope will incorporate Green Building materials to the extent feasible according to specific project scope. Materials must meet established industry-recognized standard that have achieved certification under at least one of the following programs:

- ENERGY STAR (Certified Homes or Multifamily High-Rise).
- Enterprise Green Communities.
- LEED (New Construction, Homes, Midrise, Existing Buildings Operations and Maintenance, or Neighborhood Development).
- ICC-700 National Green Building Standard,
- EPA Indoor AirPlus (ENERGY STAR a prerequisite).
- Any other equivalent comprehensive green building program.

For each project subject to the above, the specific green building technique or approach used will be recorded. NCORR will implement and monitor construction results to ensure the safety of residents and the quality of homes assisted through the program. All new housing created in whole or in part with CDGB-DR funds will comply with current HUD Decent, Safe, and Sanitary (DSS) standards. Rehabilitation of non-substantially damaged structures must comply with the HUD CPD Green Building Retrofit Checklist available at https://www.hudexchange.info/resource/3684/guidance-on-the-cpdgreen-building-checklist/, to the extent that the items on the checklist are applicable to the rehabilitation. NCORR will consult FEMA P-798, Natural Hazards and Sustainability for Residential Buildings, to align green building practices with the increased sustainability and resiliency.

Contractor compliance will be maintained through the review and approval of monthly project performance reports, financial status reports, and documented requests for reimbursement throughout the contract period. The State will utilize the HUD-provided contract reporting template (for PL 113-2) for upload to the Disaster Recovery Grant Reporting (DRGR) on a quarterly basis: https://www.hudexchange.info/resource/3898/public-law-113-2-contract-reporting-template/.

New housing developed with CDBG-DR funds will comply with accessibility standards set at 24 CFR Part 40. NCORR will utilize the UFAS Accessibility Checklist as a minimum standard for structures with five or more units to assist in the compliance of Section 504 of the Rehabilitation Act. The checklist will be used when reviewing the design of all newly constructed residential structures (other than privately owned residential structures). The Fair Housing Act (including the seven basic design and construction requirements set in the Fair Housing Act)[20] also applies to buildings with four or more units. Titles II and III of the Americans with Disabilities Act also applies to public housing.

[20] Fair Housing Accessibility First. *Fair Housing Requirements.* https://www.fairhousingfirst.org/fairhousing/requirements.html

5.4.1 Construction Performance

Construction contractors performing work funded with CDBG-DR funds shall be required to be a licensed contractor with the State of North Carolina and to possess all applicable licenses and permits from applicable jurisdictions where work will be performed, prior to incurring any costs to be CDBG-DR reimbursed. Permits will be the required registration and documentation of county, city, and/or town code to be secured prior to any construction work commences. It will be the obligation of the contractor to secure all such permits, provide copies to NCORR or the subrecipient administering the contract prior to commencing work.

This requirement will be included as a standard provision in any applicable subrecipient agreement and will need to be enforced by the subrecipient involving housing or infrastructure recovery programs and or projects. All CDBG-DR-funded contracts involving construction contractors shall be required to have in the contract work a one-year warranty on all work performed. The contractor is required to provide notice six months and one month prior to the end of the one-year warranty to the owner with a copy of each notice to the state agency and/or subrecipient administering the applicable activity.

Each homeowner shall be provided prior to the commencement of any work involved through such contracts a written notice of their right to appeal the work being performed when it is not to the standards set forth or the scope established. The homeowner shall be provided an appeal contact person within the state agency or subrecipient responsible for managing the activity. Policies and procedures will be established as part of the activity setting forth timelines and step-by-step process for resolving appeals and said policies and procedures shall be provided to each homeowner prior to the start of any work and shall be included in the contract with each participating contractor as an enforceable part of the contract.

5.4.2 Broadband

Any substantial rehabilitation, as defined by 24 CFR Part 5.100, or new construction of a building with more than four rental units must include installation of broadband infrastructure, except where it is documented that:

1. The location of the new construction or substantial rehabilitation makes installation of broadband infrastructure infeasible, or
2. The cost of installing broadband infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden, or
3. The structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

5.4.3 Cost Verification

At all times, construction costs must remain reasonable and consistent with market costs at the time and place of construction. NCORR uses an internal team of experts to determine that construction costs are reasonable and necessary and uses this data to conduct an evaluation of the cost or price of a product or service. The primary mechanism for these cost controls is the use of Xactimate, an industry standard construction cost estimating tool used by NCORR and its vendors to determine that construction costs are reasonable.

Some projects, such as infrastructure projects or larger multi-family projects, do not have clearly defined items in the Xactimate software. For these projects, NCORR will perform independent cost estimates prior to project start and evaluate the cost using a cost or price analysis when bids or proposed construction costs are received. NCORR will use qualified third parties to determine that costs are necessary and reasonable for the completion of the intended project. The requirement that costs remain reasonable extends to potential change orders. Ensuring that construction costs are reasonable is a part of the *NCORR Procurement Manual*. Note that per 2 CFR § 200.317, Subrecipients utilizing Program funds must follow all procurement guidelines contained in 2 CFR §§ 200.318-327.

Additionally, costs are controlled on housing projects with eight or more units through a competitive selection process and project selection criteria that favors lower costs-per-unit as a significant contributor in the selection of projects. Further cost controls and selection criteria for residential projects will be included in the selection criteria provided to potential applicants for those funds as defined in the Affordable Housing Development Fund in Section 7.4.

Any NCORR selected subrecipient must establish a similar process to those outlined above to ensure proper cost controls. These controls will be reviewed during a capacity and risk assessment prior to subrecipient selection.

NCORR will review projects and test for compliance with financial standards and procedures including procurement practices and adherence to cost reasonableness for all operating costs and grant-funded activities. All program expenditures will be evaluated to ensure they are:

- Necessary and reasonable.
- Allocable according to the CDBG contract.
- Authorized or not prohibited under state/local laws and regulations.
- Conform to limitations or exclusions (laws, terms, conditions of award, etc.).
- Consistent with policies, regulations and procedures.
- Adequately documented.

- Compliant with all Cross Cutting Federal Requirement including Uniform Administrative Requirements at 2 CFR 200. Per 2 CFR § 200.317, Subrecipients utilizing Program funds must follow all procurement guidelines contained in 2 CFR §§ 200.318-327.

In compliance with 83 FR 5850, NCORR has evaluated alternative strategies to elevation, such as reconstruction or buyout. An analysis of current applicants for CDBG-DR assistance located in floodplains indicates that when considering the cost of rehabilitation, green building retrofit design, lead based paint and asbestos containing material abatement and removal, and other costs to properly rehabilitate as well as safely elevate, reconstruction is typically the more cost-effective approach. Therefore NCORR is de-emphasizing the rehabilitation and elevation approach in favor of reconstruction. In such instances where an alternative recovery strategy is determined to be more cost reasonable and/or feasible, NCORR will document the decision making process and ensure that the recovering homeowner is permitted to choose between similarly effective options, in consideration of cost and feasibility.

Proposed construction projects will be evaluated to determine adequate compliance with modern and resilient building codes and mitigation of hazard risk, including sea level rise, high winds, storm surge, and flooding.

Contractor compliance will be maintained through the review and approval of monthly project performance reports, financial status reports, and documented requests for reimbursement throughout the contract period.

NCORR will also require Section 3 plans from both subrecipients and contractors, when applicable, and monitor for compliance with Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u), and implementing regulations at 24 CFR part 135.

The State will utilize the HUD-provided contract reporting template (for PL 113-2) for upload to the Disaster Recovery Grant Reporting (DRGR) on a quarterly basis: https://www.hudexchange.info/resource/3898/public-law-113-2-contract-reporting-template/.

5.4.4 Timely Expenditure of Funds

NCORR has adopted procedures to ensure the timely expenditure of funds, track expenditures in each month, monitor expenditures of recipients, reprogram funds in a timely manner, and project expenditures over time.

Subrecipients must be able to report expenditures for each approved activity. A record of the account balances is maintained for each approved activity that accounts for expenses accrued as well as obligations that have been incurred but not yet been paid out. As part of those controls, the system of record (Salesforce) includes the submission of Requests for Payment to track expenditures against pre-established activity budgets as well as for retention of records related to expenditures. Monthly expenditures are recorded in Salesforce as well as through the reporting mechanisms established by the Reporting and Business Systems team. The

Reporting and Business Systems team also ensures that actual and projected expenditures of funds are reported in the Disaster Recover Grant Reporting system (DRGR) quarterly performance report (QPR). The use of these systems will ensure that contracts and bills are paid timely.

To further monitor and ensure timeliness of expenditures, subrecipients will be required to attend training to assist in defining clear roles and responsibilities and the expectations for timely performance under all Subrecipient Agreements (SRA).

NCORR establishes strict timelines and milestones within each of the SRA agreements entered into with subrecipients, contractors, consultants and recipients of funds. These requirements and milestones will be specifically outlined in each agreement and will be designed to be specific to categories of funding. All grantees are required to expend all funds within a certain timeframe as outlined in the Public Law and Federal Register Notices that govern the obligation of funds.

At times, it may be necessary for NCORR to reprogram grant funds. Funds may need to be reprogrammed for many reasons, including but not limited to:

- The Activity did not expend all funds awarded.
    - The grant time period expired.
    - Projects or programs were completed under budget and funds were remaining.
- A grant agreement expired, with no amendment necessary.
- A projected award is unable to be contracted.
- A project is determined to be ineligible.
- Slow or untimely project start date.
- An additional mitigation need is identified.

NCORR will review the use of funds quarterly as a part of the quarterly expenditure reports and may use those reports as a foundation to approach reallocation. Alternatively, changes in program design which necessitate a substantial Action Plan amendment may present an opportunity for NCORR to expediently reprogram funds. Through the grant cycle, subrecipients and contractors may request additional funds. These requests for funds will be evaluated as they are received. If the facts and circumstances of the request warrant additional funds, and additional funds are available, NCORR may reprogram funds at that time. Any funds reprogrammed which exceed the threshold criteria for a substantial Action Plan amendment will be formalized through the substantial Action Plan amendment process.

NCORR has adopted a Program Income Policy and adheres to this policy in the generation of any program income from NCORR administered or subrecipient administered programs. Subrecipients that generate more than $35,000 in program income must report such income to

NCORR. Subrecipients will generally be permitted to use program income to reimburse operation, repair, and maintenance expenses of a CDBG-DR funded project, must otherwise follow the rules and requirements for CDBG-DR funds, and must seek permission from NCORR before expending program income. Subrecipient agreements contain provisions for the treatment of program income, if applicable, and require notification and approval from NCORR prior to the generation of program income.

HUD established new requirements for the procurement of contracts which provide discrete services or deliverables, including:

- Requiring an establishment of the period of performance or date of completion in all contracts.
- Requiring performance requirements and liquidated damages into each procured contract.
    - Contracts that describe work performed by general management consulting services need not adhere to this requirement.
- Prohibiting the delegation or contract to any other party any inherently governmental responsibilities related to management of the grant, such as oversight, policy development, monitoring, internal auditing, and financial management.

NCORR agrees to align future procurements for Hurricane Florence recovery with these requirements. NCORR will follow all guidelines contained within the North Carolina Procurement Manual. Per 2 CFR § 200.317, Subrecipients utilizing Program funds must follow all procurement guidelines contained in 2 CFR §§ 200.318-327.

5.4.5 Operation and Maintenance Plans

To sustain CDBG-DR funded investments, NCORR requires that certain infrastructure projects include a projection of revenue for the operation and maintenance costs in the outyears. CDBG-DR funds may not be applied to the operation and maintenance of those facilities, and instead NCORR will require these projects to include a plan for operation and maintenance prior to funding. Operation and maintenance costs may be funded through reserve funds, borrowing authority, new tax or service fee, or retargeting of existing resources, amongst other approaches. NCORR will evaluate operations and maintenance plans to ensure that plans appear reasonable and feasible to fund the long-term use of the facility, with the understanding that some operations and maintenance plans must be more robust than others.

5.5 Long Term Planning and Risk Considerations

With the allocation of multiple grants from two major disasters, NCORR has significant planning funds available to pursue various sound, sustainable long-term recovery planning efforts. Principally planning may focus on construction standards and land-use decisions that reflect responsible floodplain and wetland management and consider continued sea level rise and coordinate with local and regional planning efforts.

On October 29, 2018, Governor Roy Cooper signed Executive Order No. 80, "North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy." E.O. 80 requires the following actions specific to NCORR activities:[21]

- **E.O. 80, Part two.** Requires that cabinet agencies shall evaluate the impacts of climate change on their programs and operations and integrate climate change mitigation and adaptation practices into their programs and operations.
- **E.O. 80, Part nine.** Requires that cabinet agencies shall integrate climate adaptation and resiliency planning into their policies, programs, and operations:
    - To support communities and sectors of the economy that are vulnerable to the effects of climate change; and
    - To enhance the agencies' ability to protect human life and health, property, natural and built infrastructure, cultural resources, and other public and private assets of value to North Carolinians.

As NCDPS is a cabinet agency and NCORR is an office operating within NCDPS, the requirements of E.O. 80 apply to NCORR activities. To comply with E.O. 80, the unmet needs analysis must evaluate changes in need based on the requirement to anticipate and respond to climate change in disaster impacted areas. This analysis will inform the Action Plan so that proposed programs contained therein are responsive to this executive order.

Aside from the vertical flood elevation height requirements discussed in Part 5.1 above, NCORR commits to ensuring responsible floodplain and wetland management based on the history of flood mitigation efforts and the frequency and intensity of precipitation events.

5.5.1 High Wind

In addition to this vertical height requirement, NCORR will take into consideration high wind considerations for new or rehabilitated buildings. There are many informational resources available to safeguard against high wind conditions, including *FEMA 543: Risk Management Series Design Guide for Improving Critical Facility Safety from Flooding and High Winds*. FEMA 543 recommends incorporating hazard mitigation measures into all stages and at all levels of critical facility planning and design, for both new construction and the reconstruction and rehabilitation of existing facilities.[22] While the guidelines in FEMA 543 are applicable to critical facilities, they may also be applied to new construction of other buildings and infrastructure. In all instances, NCORR will defer to engineering and design experts to ensure that high wind hazards are addressed.

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[21] Executive Order No. 80. *North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy.* https://governor.nc.gov/documents/executive-order-no-80-north-carolinas-commitment-address-climate-change-and-transition.

[22] Federal Emergency Management Agency. *Risk Management Series Design Guide for Improving Critical Facility Safety from Flooding and High Winds.* https://www.fema.gov/media-library-data/20130726-1557-20490-1542/fema543_complete.pdf

NCORR shall also consider resources and lessons learned from other states in the implementation of their recovery programs. The State of Florida has adopted the Hurricane Michael FEMA Recovery Advisory (RA) 2 Best Practices for Minimizing Wind and Water Infiltration Damage[23] as a guiding principle in its recovery programs. This advisory describes specific issues observed in newer residential buildings after Hurricane Michael. The buildings observed were built after the adoption of the first edition of the Florida Building Code (FBC) (March 2002). The advisory provides key points for consideration during rebuilding and mitigation activities. The references cited in the advisory contain additional best practices and guidance for issues commonly observed after storm events. NCORR shall apply the guidance in this document where feasible in the development of new construction funded with CDBG-DR funds.

5.5.2 Sea Level Rise

In addressing flood mitigation, it is essential to the long-term planning process to also consider the effects of sea level rise on the coastal communities of the State. According to National Oceanic and Atmospheric Administration (NOAA) data, the sea level off of the coast of North Carolina has risen 11 inches higher than its 1950 level.[24] Sea level rise is of increasing concern to vulnerable coastal areas of the State because sea level rise has been accelerating over the past 10 years and is now rising an average of one inch every two years. These measurements are conducted with sound methodology and have become increasingly accurate, leading to the conclusion that sea level rise is a significant threat to coastal areas of the State.[25]

NCORR commits to using the best available data to determine whether structures would be at risk of sea level rise and avoid construction or rehabilitation of structures which may be subject to increased risk due to sea level rise and coastal erosion.

5.5.3 Stakeholder Engagement

NCORR is committed to developing and implementing recovery programs which best suit the needs of recovering individuals, households, local jurisdictions, and other public or private stakeholders. While NCORR generally administers programs at the state-level, frequent and transparent communication with stakeholders is a key component of program design and a necessity for a successful recovery program. The feedback received from local, regional, and state-level stakeholders will be critical to program design and planning. Feedback is incorporated from the public comment period, occasional meetings with local jurisdictions by phone or face-to-face, and can be provided by email at info@rebuild.nc.gov.

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[23] Federal Emergency Management Agency. Risk Management Series Design Guide for Improving Critical Facility Safety from Flooding and High Winds. https://www.fema.gov/media-library-data/20130726-1557-20490-1542/fema543_complete.pdf

[24] National Oceanic and Atmospheric Administration. *Tides and Currents Data, Wilmington, NC.* https://tidesandcurrents.noaa.gov/waterlevels.html?id=8658120&units=standard&bdate=19500101&edate=20171231&timezone=GMT&datum=MSL&interval=m&action=data

[25] National Oceanic and Atmospheric Administration. *FAQ – Tide Predictions and Data.* https://tidesandcurrents.noaa.gov/sltrends/faq.html

5.6 Assessment of Public Services Required

The primary focus of CDBG-DR funds is to address the unmet housing recovery need. However, CDBG-DR funds may be used to fund public services which complement the housing need. Public services include activities which provide a benefit to employment, crime prevention, child care, health, drug abuse, education, fair housing counseling, energy conservation, certain welfare activities, or recreational needs. The Housing and Community Development Act of 1974, as amended (HCDA) permits the use of CDBG funds for the purpose of public services under HCDA 105(a)(8). In accordance with HCDA 105(a)(8), no more than 15 percent of the allocation will be directed to the provision of public service.

After an assessment of the unmet recovery needs related to housing, it is evident that some public services would provide a benefit to the housing recovery. The greatest complementary need are public services to increase construction capacity. NCORR will address this capacity issue by funding education programs intended to increase the stock of construction labor.

In an annual survey of construction firms conducted in August 2019, 33 firms that listed North Carolina as their principal state of operations said they plan to hire for replacement or expansion - 97 percent want craft personnel and 77 percent seek salaried workers. At the same time, 91 percent of the North Carolina contractors said they are having a difficult time filling craft positions and 73 percent said the same about salaried jobs. Construction employment in the state has fallen in 2019, attributed to retirement of qualified workers and a lack of new qualified individuals entering the job market[26]. Disaster recovery does not happen in a vacuum, and as the State's population grows and as demand for new housing increases, disaster recovery programs will be challenged by the market demand for new housing in growing areas. To the extent possible, these programs will include accommodations for individuals with wide-ranging disabilities, including mobility, sensory, developmental, emotional, and other impairments.

5.7 Minimizing Displacement and Ensuring Accessibility

NCORR is continuing to make every effort to minimize temporary and permanent displacement of persons due to the delivery of the HUD's CDBG-DR and CDBG-MIT programs it administers. NCORR has agreed to follow the plan described in the NCORR Residential Anti-Displacement and Relocation Assistance Plan, available at https://www.rebuild.nc.gov/media/2626/open, Appendix 38. NCORR has and will continue to minimize adverse impacts on persons of low-and-moderate income resulting from acquisition, rehabilitation, and/or demolition activities assisted with funds provided under Title 1 of the Housing and Community Development (HCD) of 1974, as amended, as described in 24CFR 570.606 (b-g).

[26] GroundBreak Carolinas, LLC. *North Carolina Construction Outlook.* https://groundbreakcarolinas.com/north-carolina-construction-outlook/

Further, NCORR, continues to provide comprehensive training to its subgrantees and subrecipients to adopt the State's Residential Anti-Displacement and Relocation Assistance plan or develop and adopt their own plan regarding any activity assisted with funding from the CDBG-MIT grant. NCORR will provide guidance and approval to its sub-recipients that develop their own plan. Subrecipients that develop their own plans, must subsequently adhere to and comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, (42 U.S.C. 4601 et seq.) ["URA"], for any household, regardless of income which is involuntarily and permanent displaced.

The Uniform Relocation Assistance and Real Property Acquisition Act (URA), is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The URA's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects.

- 49 CFR Part 24 is the government-wide regulation that implements the URA.
- HUD Handbook 1378 provides HUD policy and guidance on implementing the URA and 49 CFR Part 24 for HUD funded programs and projects.

As part of condition of compliance with programs subject to URA, NCORR will:

- Provide uniform, fair and equitable treatment of person whose real property is acquired or who are displaced in connection with federally funded projects as well.
- To ensure relocation assistance is provided to displaced persons to lessen the emotional and financial impact of displacement
- To ensure that no individual or family is displaced unless decent, safe and sanitary (DSS) housing is available with the displaced person's financial means
- To help improve the housing conditions of displaced persons living in substandard housing
- To encourage and expedite acquisition by agreement and without coercion.

In practice, when a tenant is displaced by a CDBG-DR activity, relocation case managers are assigned to both owners and tenants work with applicants to coordinate activities and communicate updates in real time concerning when to expect to move out of their residences, assist the displaced individuals with securing temporary housing arrangements, and all other aspects of moving belongings. One of the case manager's primary goals is to minimize the time that the tenant/owner will be impacted by coordinating the construction calendar in real time and during construction, keeping the displaced individual updated on the construction progress and communicating an expected timeline for construction completion and eventual move in.

NCORR's Strategic Buyout Program is voluntary and NCORR will not utilize the power of eminent domain. While NCORR has no direct authority to perform eminent domain, it could request the Division of Administration to execute eminent domain on its behalf. Although NCORR does not intend to use the State's eminent domain authority, NCORR will follow the four-part criteria required of eminent domain under 49 CFR 24.101(b)(1) (i-iv) when presenting buyout as an option for buyout program applicants.

Under the reasonable accommodation policy, case managers shall assess the specific needs of each program beneficiary and determine if a 504/ADA modification is required based on the unique facts and circumstances presented by the applicant. To ensure accessibility for applicants, NCORR has adopted a Section 504/Americans with Disabilities Act (ADA) policy which ensures the full right to reasonable accommodations by all program participants. No otherwise qualified individual with disabilities shall solely by reason of his or her disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded with CDBG-DR funds provided by NCORR.

To the maximum extent feasible, alterations made to existing non-housing facilities shall be made to ensure that such facilities are readily accessible to and usable by individuals with disabilities. Any new non-housing facilities constructed by NCORR shall be designed and constructed to be readily accessible to and usable by persons with disabilities.

New housing developed with CDBG-DR funds will comply with accessibility standards set at 24 CFR Part 40. NCORR will utilize the UFAS Accessibility Checklist as a minimum standard for structures with five or more units to assist in the compliance of Section 504 of the Rehabilitation Act. The checklist will be used when reviewing the design of all newly constructed residential structures (other than residential structures that do not receive federal financial assistance). The Fair Housing Act (including the seven basic design and construction requirements set in the Fair Housing Act)[27] also applies to buildings with four or more units. New housing developed with CDBG-DR funds will also comply with Titles II and III of the Americans with Disabilities Act, as applicable.

NCORR also complies with the Americans with Disability Act, which prohibits discrimination in employment based upon disability. NCORR complies with Title II of the ADA in its implementation of other non-housing projects, such as infrastructure, to include accessibility features at all improved sites such as curb ramps, sloped areas at intersections, and the removal of any barriers to entry for those with disabilities.

All public facilities that are federally assisted shall also exceed the minimum threshold for 504/ADA compliance. Multifamily and other housing development programs will also be required to have the minimum numbers of mobility units and hearing/vision units in a range of bedroom sizes in accordance with 504/ADA requirements. Along with single family programs, the affordable housing rental programs will be required to have an architect's/engineer's

[27] Fair Housing Accessibility First. *Fair Housing Requirements.* https://www.fairhousingfirst.org/fairhousing/requirements.html

signature on a form stating that the designed unit meets 504/ADA compliance. Failure to deliver the appropriately constructed ADA/504 compliant unit(s) will result in the construction firm not being paid and in breach of contract until the deficiencies are corrected.

North Carolina qualifies as a safe harbor state in that over 5 percent of its population speaks another primary language outside of English in the home. The adopted LAP is cognizant of these demographics and offers print material of vital documents in Spanish and will provide other language translation services as needed.

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6.0 Allocation Methodology

The most significant consideration in developing CDBG-DR activities and the allocation of funds is the Unmet Recovery Needs Assessment. The assessment, found in Part 4.0 above, reviews the recovery needs of the State following Hurricane Florence. For CDBG-DR funded activities, the focus remains on restoring impacted housing and other services needed to supplement the housing recovery.

6.1 Connection between Unmet Recovery Need and Programming

A detailed list of funded programs is included below. Each funded program is in direct response to an unmet need identified in Section 4.0 above. The CDBG eligible activity is presented as the subsection of the Housing and Community Development Act, or specific waiver as stated in the Notice. The HUD National Objective criteria include the following:

- **LMA (Low/mod area benefit).** Activities providing benefits that are available to all the residents of a particular area, at least 51 percent of whom are low- and moderate-income. The service area of an LMA activity is identified by NCORR.
- **LMC (Low/mod limited clientele).** Activities which benefit specific low- and moderate-income individuals. LMC activities provide benefits to a specific group of persons rather than to all residents of a particular area.
- **LMH (Low/Mod housing benefit).** Activities undertaken which improve or provide permanent residential structures that will be occupied by low/mod income households.
- **LMB (Low/Mod Buyout).** Set by HUD in 82 FR 36825 to allow for meeting a National Objective when CDBG-DR funds are used for a buyout award to acquire housing owned by a qualifying LMI household, where the award amount (including optional relocation assistance) is greater than the post-disaster (current) fair market value of that property.
- **LMHI (Low/Mod Housing Incentive).** Set by HUD in 82 FR 36825 to allow for meeting a National Objective when CDBG-DR funds are used for a housing incentive award, tied to the voluntary buyout or other voluntary acquisition of housing owned by a qualifying LMI household, for which the housing incentive is for the purpose of moving outside of the affected floodplain or to a lower-risk area; or when the housing incentive is for the purpose of providing or improving residential structures that, upon completion, will be occupied by an LMI household.
- **UN (Urgent Need).** Urgent Need projects include projects which pose a serious and immediate threat to the health or welfare of the community, are of recent origin or recently became urgent, and are unable to be otherwise financed.

This Action Plan does not modify any Federal standards or other legal requirements. Any effort by the State of North Carolina or its agents to modify such standards or other legal requirements must be preceded by the ordinary procedures to request a waiver from the appropriate Federal authority. As Public Law 115-123 provided "The Secretary of Housing and Urban Development may waive, or specify alternative requirements for, any provision of any statute or regulation that the Secretary administers in connection with the obligation by the Secretary or the use by the recipient of these funds (except for requirements related to fair housing, nondiscrimination, labor standards, and the environment), if the Secretary finds that good cause exists for the waiver or alternative requirement and such waiver or alternative requirement would not be inconsistent with the overall purpose of Title I of the Housing and Community Development Act of 1974." Notice of proposed waivers must be accompanied by evidence of public comment including, but not limited to, review and input by low-income and minority residents, businesses, and other institutions.

6.2 Allocations and Programming

The total combined CDBG-DR allocation set forth in PL 115-254 and PL 116-20 is $542,644,000. NCORR will set aside five percent of these funds ($27.1 million) for administrative costs associated with the recovery activities described below. Another $4.5 million will be set aside for planning related activities, such as Action Plan development, public outreach, and coordination on future planning with local and regional coordinating entities. The allocation for planning related activities has increased under Substantial Amendment 6, as planning activities specific to Hurricane Florence recovery efforts will continue during the period of performance for the funds. The bulk of planning activities will continue to be funded with CDBG-Mitigation funds, such as ongoing and anticipated resilience and mitigation planning recommendations made by the various Recovery Support Functions (RSFs) operating in the State and NCORR. The use of the remaining CDBG-DR planning funds will be directed toward planning efforts which directly or indirectly affect MID areas. The remaining funds will be allocated to multiple activities defined in Part 7.0 below.

Considering the greatest outstanding need and in accordance with HUD guidance to primarily address housing recovery, $426.8 million is allocated to a suite of programs to benefit homeowners (the *Homeowner Recovery Program*). This allocation has been increased substantially from the original Action Plan (including an allocation increase under Substantial Amendment 6) due to increased interest in this program when applications reopened in Summer 2020 and before the application period for assistance closed on April 21, 2023.

NCORR recognizes the significant recovery challenges that face renters across the impacted areas of the State. Approximately one in four individuals receiving FEMA assistance are renters. To address the significant renter recovery need, NCORR has proposed two programs across its disaster recovery and mitigation portfolio to address the unique conditions of renters across the State: the *Affordable Housing Development Fund and* the *Public Housing Restoration Fund*.

For Hurricane Florence CDBG-DR funded activities, $69.3 million remain allocated to the *Affordable Housing Development Fund*). It is worth noting that an additional $47.5 million was reallocated for this activity under the CDBG-MIT Action Plan. This represented a shift in approach based on the reallocation of this activity from the CDBG-DR Action Plan to the CDBG-MIT Action Plan and an increased emphasis on meeting the renter and housing stock mitigation needs in the long term. This objective will be served through program activities such as the acquisition and conversion, repair, rehabilitation, or development of new affordable homeownership or rental housing, on a single site or on scattered sites, to be used as long-term, affordable homeownership or rental housing for low and moderate income (LMI) households.

Under Substantial Amendment 4, $16.3 million of funding for the *Public Housing Restoration Fund* was reallocated to the CDBG-MIT Action Plan. The Public Housing Restoration Fund will focus on long-term, sustainable recovery of disaster impacted Public Housing Authorities (PHAs) that is more aligned with CDBG Mitigation funding goals. The policies and guidance for these programs will be included in their respective policy manuals. Refer to the State's Mitigation Action Plan for more details on these activities and allocation.

To further support the transition of community-level resilient housing development activities, such as those by the Public Housing Restoration, Affordable Housing Development Fund, and the Strategic Buyout Program, to the CDBG-MIT Action Plan and encourage longer term mitigation efforts, NCORR has reallocated in SAPA 6 additional programs that supplement the housing recovery needs for impacted areas. These programs include the *Homeownership Assistance Program* ($3 million), the *Housing Counseling Fund* ($1.5 million), and the *Code Enforcement Compliance and Support Program* ($3 million). The funding for these programs has been reallocated to the CDBG-MIT Action Plan to further strengthen the State's ongoing longer term mitigation and resiliency efforts and streamline its housing recovery activities under this action plan. Additional details on these activities and reallocations can be found in the State's Mitigation Action Plan.

The Strategic Buyout Program was previously consolidated into the CDBG-MIT Action Plan to simplify the administration and implementation of that program under a single set of guidance. Significant changes have been made in the Strategic Buyout Program. Individuals interested in the Strategic Buyout Program should review the CDBG-MIT Action Plan and visit https://www.rebuild.nc.gov/about-us/mitigation.

The allocation for the *Infrastructure Recovery Program* was previously removed to provide greater emphasis on housing recovery programs, as directed in the Federal Register Notice(s) guiding the implementation of CDBG-DR grant funds. Infrastructure damaged by Hurricane Matthew and Hurricane Florence remains eligible for the Hurricane Matthew-funded Infrastructure Recovery Program. NCORR continues to manage and implement that program. The original allocation for the *Construction Trades Training Program* was previously reallocated in response to an unclear need for this program due to uncertain labor markets due to the COVID-19 pandemic and lack of a clear implementation path for this program.

The allocation of funds to MID areas reflects the MID determinations made by HUD for Hurricane Florence. According to the 2019 appropriations act, the State may use funds allocated in response to Hurricane Matthew interchangeably with funds allocated for Hurricane Florence for the same activities, and vice versa, in the most impacted and distressed areas. Therefore the MID areas are assumed to include the Hurricane Matthew-established MID areas (Bladen, Columbus, Cumberland, Edgecombe, Robeson, and Wayne). The remaining 20 percent of the "non-MID" allocation is reserved for those areas determined to be most impacted as reflected in the unmet recovery needs analysis completed above.

Table 30 – Hurricane Florence CDBG-DR Allocations

Program	PREVIOUS NSAPA 8 Allocation	CURRENT NSAPA 9 Allocation	CURRENT $ to LMI	CURRENT $ to HUD-defined MID
Administrative Costs	$27,132,200	$27,132,200	$0	$21,705,760
Planning Costs	$4,500,000	$4,500,000	$0	$3,600,000
Homeowner Recovery Program	$441,674,385	$456,674,384	$326,454,397	$365,339,508
Affordable Housing Development Fund	$69,337,415	$54,337,416	$54,337,416	$54,337,416
Homeownership Assistance	$0	$0	$0	$0
Housing Counseling Fund	$0	$0	$0	$0
Small Rental Recovery Program	$0	$0	$0	$0
Public Housing Restoration Fund	$0	$0	$0	$0
Construction Trades Training Program	$0	$0	$0	$0
Code Enforcement and Compliance Support Program	$0	$0	$0	$0
Total	**$542,644,000**	**$542,644,000**	**$380,791,813**	**$444,982,684**
% of Total	**100%**	**100%**	**70%**	**82%**

6.2.1 Amendment 6 Update

See Section 6.2 for summarization of current allocations. The reanalysis of housing unmet need under Substantial Amendment 4 highlighted a higher serious housing unmet need than originally estimated that was reflected in the allocations under Substantial Amendment 6. The result of such ongoing reevaluation and increased interest in housing recovery prior to the closing of applications in April 2023 prompted the State to further increase allocations to the *Homeowner Recovery Program* ($54.2 million allocation increase) under Substantial Amendment 6. The reallocation of funding for the Homeownership Assistance Program, Housing Counseling Fund, Code Enforcement Compliance and Support Program and partial transfer of the Affordable Housing Development Fund program funds to the CDBG-MIT Action Plan further strengthened the ongoing recovery and mitigation efforts of the State's housing programs. These reallocations were in consideration of the amount of funding dedicated to housing programs across both the Matthew and Florence CDBG-DR grants, continued anticipated funding needs for currently operating activities, and the realignment of longer-term resilience and mitigation activities, such as those related to housing stock development further by the Affordable Housing Development Fund program, with the objectives of the CDBG-MIT funds. The Planning allocation was also been increased as planning activities related to Hurricane Florence recovery efforts continue. However, the bulk of planning activies remain largely consolidated in the CDBG – Mitigation (CDBG-MIT) Action Plan.

6.2.2 Amendment 7 Update

Under Nonsubstantial Action Plan Amendment 7, the vision and larger picture of funding and program implementation for the disaster recovery and mitigation efforts of NCORR presented in SAPA 6 remain in place. Minor allocations changes to the Affordable Housing Development Fund and the Homeowner Recovery Program, as presented in Table 44, are necessary to facilitate the closeout of the CDBG-DR Matthew grant and provide a longer timeframe for the completion of multifamily projects previously allocated to CDBG-DR Matthew. A reallocation of a similar amount is reflected in NSAPA 12 for the CDBG-DR Matthew grant, thus balancing the overall allocations for the multifamily and homeowner disaster recovery efforts of NCORR across CDBG-DR Matthew and CDBG-DR Florence grants.

6.2.3 Amendment 8 Update

As a follow-up to Nonsubstantial Action Plan Amendment 7, Nonsubstantial Action Plan Amendment 8 (NSAPA 8) presents additional minor allocations changes to the Affordable Housing Development Fund and the Homeowner Recovery Program, as presented in Table 44. The changes are necessary to accommodate projects no longer active or viable and to diversify the sources of funding supporting the creation of resilient and affordable housing in areas impacted by Hurricane Florence. As such, the reallocation of CDBG-DR funds does not signify a reduction in NCORR's overall commitment to the goals of the Affordable Housing Development Fund. Instead, the reallocation highlights an opportunity to leverage a diverse set of funding sources for affordable housing development and a redistribution of CDBG-DR funding to meet other critical unmet needs, such as those of individual homeowners participating in the Homeowner Recovery Program.

6.2.4 Amendment 9 Update

Nonsubstantial Action Plan Amendment 9 (NSAPA 9) provides minor allocations changes to the Affordable Housing Development Fund and the Homeowner Recovery Program, as presented in Table 44. The changes are necessary to accommodate the potential for alternate sources of funding supporting the creation of resilient and affordable housing in areas impacted by Hurricane Florence. As with NSAPA 8, the reallocation of CDBG-DR funds in this amendment does not signify a reduction in NCORR's overall commitment to the goals of the Affordable Housing Development Fund. Instead, the reallocation highlights an opportunity to leverage a diverse set of funding sources for affordable housing development and a redistribution of CDBG-DR funding to meet other critical unmet needs, such as those of individual homeowners participating in the Homeowner Recovery Program.

6.3 Method of Distribution and Delivery

In previous CDBG implementation and delivery, NCORR has consistently prioritized providing funds to communities that experienced the most significant damage from Hurricanes Matthew and Florence. NCORR continues to provide assistance to each impacted county, with a primary focus on those that were most impacted and distressed.

Previous allocations allowed for counties to enter into a subrecipient agreement (SRA) with NCORR to administer aspects of the grant. In consideration of NCORR's increased capacity, knowledge, and expertise since CDBG-DR funds were first allocated, NCORR will first consider a state-centric model of implementation. In some instances, such as for affordable housing development or infrastructure recovery, a subrecipient agreement (SRA) with the local jurisdiction or other entity may be the most advantageous approach for the State and the success of the project.

If SRAs are determined to be beneficial to NCORR for the expedient and proficient use of CDBG-DR funds, the method of distributing funds to the subrecipient will be set forth in the SRA. New and updated SRAs will also include:

- The threshold of the grant award and the amount to be subgranted.
- The use of the CDBG-DR funds by responsible organization, activity, and geographic area.
- The CDBG eligibility criteria and national objective, as well as any additional criteria for the subrecipient's use of funds.

The selection of subrecipients will weigh the following factors, in order of importance:

- Subrecipient alignment with CDBG-DR objectives and priorities.
- Subrecipient capacity.
- Project/Program feasibility.
- Project/program cost and/or leverage.

Specific terms may be implemented to SRAs depending on the selection criteria reviewed above. Sub-criteria may expand upon these selection criteria in order to fully understand the nature of the proposed project. Specific application selection criteria will be incorporated into specific program manuals and guidance. NCORR notes that CDBG-DR funds may not be used for ineligible activities, including but not limited to a forced mortgage payoff, construction of dam/levee beyond original footprint, incentive payments to households that move to disaster-impacted floodplains, assistance to privately-owned utilities, and not prioritizing assistance to businesses that meet the definition of a small business. NCORR will ensure that all CDBG-DR funds are for eligible uses.

6.4 Vulnerable Populations

Of significant concern is housing which typically serves vulnerable populations, including transitional housing, permanent supportive housing, permanent housing serving individuals and families (including subpopulations) that are homeless and at-risk of homelessness, and public housing developments. NCORR develops each program with consideration for recovering individuals, especially concerning individuals with access and functional needs that will require assistance with accessing and/or receiving CDBG-DR disaster resources. These individuals may be children, senior citizens, persons with disabilities, from diverse cultures, transportation disadvantaged, homeless, having chronic medical disorders, and/or with limited English speaking, reading, having comprehension capacity, or altogether be non-English speaking.

6.4.1 Terms Defined

HUD and other federal crosscutting requirements and standards are applicable to activities proposed in this Action Plan. These requirements and standards and some common definitions of these items are included below.

- **Accessibility and Accessibility Standards.** The Uniform Accessibility Standards Act (UFAS) requires that buildings and facilities designed, constructed, or altered with federal funds be accessible and these standards were developed to define what “accessible” means. UFAS is one of the standards which federal grantee shall use to comply along with Title II of the Americans with Disabilities Act.

- **Affirmatively Furthering Fair Housing (AFFH).** AFFH is a legal requirement that NCORR further the requirements of the Fair Housing Act. The obligation to affirmatively further fair housing has been in the Fair Housing Act since 1968 (for further information see Title VIII of the Civil Rights Act of 1968, 42 U.S.C. 3608 and Executive Order 12892).

- **Areas of Opportunity.** The federal government defines high opportunity areas as either an area designated by the Department of Housing and Urban Development (HUD) as a Difficult Development Area (DDA) during any year covered by the Duty to Serve Plan or in the year prior to the Plan’s effective date, whose poverty rate is lower than the rate specified by FHFA in Evaluation Guidance-those tracts with poverty rates below 10 percent (for metropolitan DDAs) and below 15 percent (for non-metropolitan DDAs); or an area designated by a state or local Qualified Allocation Plan (QAP) as a high opportunity area and which meets a definition identified as eligible for Duty to Serve credit in the Evaluation

Guidance for the issuance of Low Income Housing Tax Credits.

- **Community Participation.** The primary goal is to provide citizens where CDBG-funded activities will take place an opportunity to participate in an advisory role in the planning, implementation, and assessment of proposed programs and projects. NCORR commits to hearing from all impacted individuals regardless of race, color, national origin, income, or any other potential social disparity.

- **Effective Communication.** Communication methods include the provision of appropriate auxiliary aids and services, such as interpreters, computer-assisted real time transcription (CART), captioned videos with audible video description, visual alarm devices, a talking thermostat, accessible electronic communications and websites, documents in alternative formats (e.g., Braille, large print), or assistance in reading or completing a form, etc.

- **Environmental Justice.** Environmental justice means ensuring that the environment and human health are protected fairly for all people regardless of race, color, national origin, or income. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations" (2/94) requires certain federal agencies, including HUD, to consider how federally assisted projects may have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

- **Fair Housing and Equal Opportunity**. NCORR commits to working toward eliminating housing discrimination, promote economic opportunity, and achieve diverse, inclusive communities by leading the nation in the enforcement, administration, development, and public understanding of federal fair housing policies and laws. The laws implemented and enforced by FHEO include the Fair Housing Act, Title VI of the Civil Rights Act of 1964, Section 109 of the Housing and Community Development Act of 1974, Section 504 of the Rehabilitation Act of 1973, Titles II and III of the Americans with Disabilities Act of 1990, The Architectural Barriers Act of 1968, and The Age Discrimination Act of 1975.

- **Limited English Proficiency**. Under Title VI of the Civil Rights Act of 1964 and in accordance with Supreme Court precedent in *Lau v. Nichols*, recipients of federal financial assistance are required to take reasonable steps to ensure meaningful access to their programs and activities by limited English proficient (LEP) persons. In accordance with Executive Order 13166, the meaningful access requirement of the Title VI regulations and the four-factor analysis set forth in the Department of Justice (DOJ) LEP Guidance apply to the programs and activities of federal agencies, including HUD. In addition, EO 13166 directs each federal agency that provides financial assistance to non-federal entities to publish guidance on how their recipients can provide meaningful access to LEP individuals and thus comply with Title VI regulations forbidding funding recipients from restricting an individual in any way in the enjoyment of any advantage or privilege enjoyed by others receiving any service, financial aid, or other benefit under the program. The Fair Housing Act prohibits national origin discrimination in both private and federally-assisted housing. For example, a housing provider may not impose less favorable terms or conditions on a group of residents of a certain national origin by taking advantage of their limited ability to read, write, speak or understand English.

- **Minority Low-income areas and Populations.** A low-income population is defined as a group of individuals living in geographic proximity to one another, or a geographically dispersed or transient (migrant) group of individuals that have household incomes at or below poverty level. Individuals who are members of the following population groups are considered minorities: American Indian or Alaskan Native, Asian or Pacific Islander, Black (not of Hispanic origin), or Hispanic. A low income or minority population can be identified where either: Low income or minority individuals constitute more than 50% of the population of the project area; or the percentage of low income or minority individuals in an affected area is twice that as the county or state as a whole (for example: 30% of the

  project area is low income but only 15 percent of the county is low income). Several methods can be used to determine if there are low income or minority populations present in your project area. The most common and defensible method is to review data provided by the US Census Bureau. This data may be obtained from the American Factfinder portion of Census Bureau website. The website maintains data for a variety of different areas, including: the entire country, a state, county, census tract, block group, and block. For most projects, data from the census tract or block group level are the most relevant.

- **Non-discrimination.** The practice of implementing programs such that no applicant or prospective applicant is treated differently based on race, color, national origin, religion, sex, familial status, and disability. This also includes taking steps to ensure access to those with Limited English Proficiency (LEP) and those with disabilities. North Carolina also prohibits discrimination based on sexual orientation and gender identity.

- **Protected Classes.** The seven classes protected under the Federal Fair Housing Act are color, disability, familial status, (i.e. having children under 18 in a household, including pregnant women), national origin, race, religion, and sex. Discrimination is also forbidden based on age (those 40 years of age or older) or genetic information.

- **Reasonable Accommodation.** A change, exception, or adjustment to a rule, policy, practice, or service that may be necessary for a person with disabilities to have an equal opportunity to use and enjoy a dwelling, including public and common use spaces, or to fulfill their program obligations. Please note that the ADA often refers to these types of accommodations as “modifications.” Any change in the way things are customarily done that enables a person with disabilities to enjoy housing opportunities or to meet program requirements is a reasonable accommodation. In other words, reasonable accommodations eliminate barriers that prevent persons with disabilities from fully participating in housing opportunities, including both private housing and in federally-assisted programs or activities. Housing providers may not require persons with disabilities to pay extra fees or deposits or place any other special conditions or requirements as a condition of receiving a reasonable accommodation.

6.4.2 Assessing the Needs and Location of Vulnerable Populations

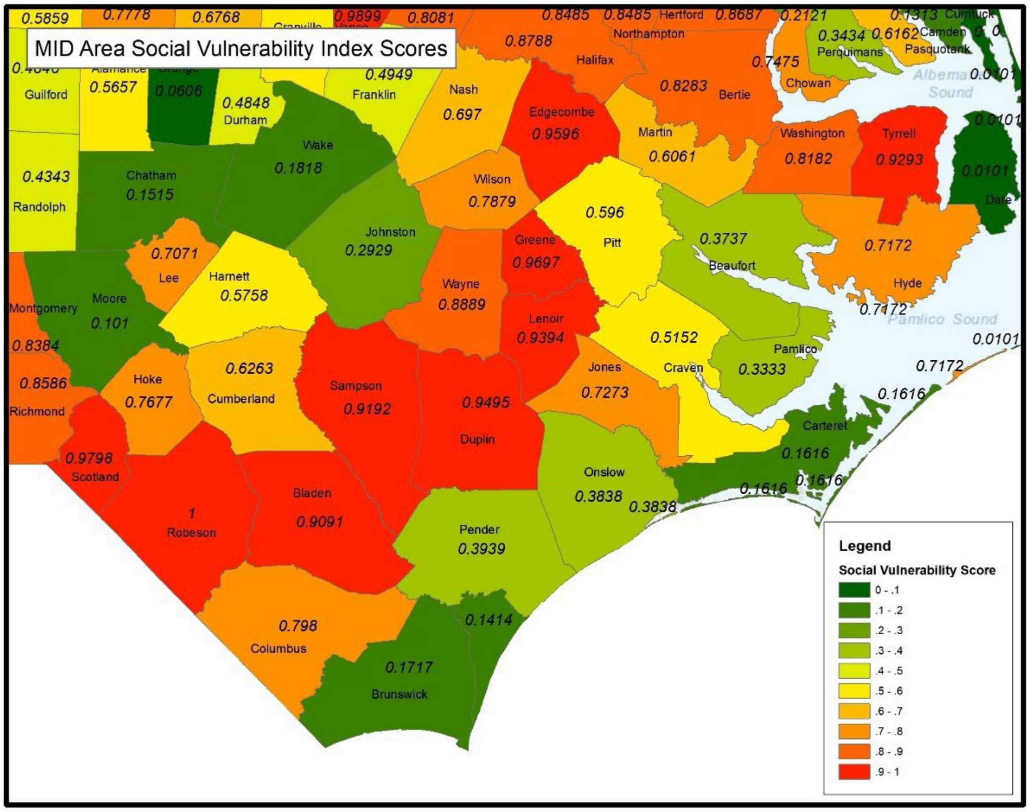
NCORR considers the provision of specialized resources that may include, but are not limited to, public or private social services, transportation accommodations, information, interpreters, translators, I-speak cards, and other services for those persons who may be visually or speech impaired during the Action Plan process free of charge. NCORR is taking care to ensure that individuals are able to access disaster recovery resources.

A full analysis of the demographic population of the recovering areas affected by Hurricane Florence are found in Part 4.6 of the Action Plan. NCORR believes that the affordable housing development program is an avenue to address vulnerable populations in the recovery process. NCORR will prioritize through its selection criteria affordable housing projects which include service for very-low income individuals and households, provide transitional or supportive housing, those homeless or at-risk of homelessness, the elderly, disabled, and those with

alcohol or drug addiction. The Public Housing Restoration Fund will also provide for individuals recovering from disaster which currently participate or may participate in public housing programs.

The Center for Disease Control's Social Vulnerability Index (updated 2016) for the State of North Carolina is mapped below. The social vulnerability score indicated for each county below is an aggregate of the vulnerability for socioeconomic, household composition and disability, minority status and language, and housing and transportation factors. Counties are ranked from 0 to 1. Counties which are in the top 10 percent of vulnerability – meaning most vulnerable – are assigned a score of 1. Scores closer to 0 are relatively less vulnerable than those with scores closer to 1.

Figure 13 - Social Vulnerability Index



Robeson County presents a unique challenge in that it is the most socially vulnerable county, before accounting for the dual impact and MID designation for both Hurricanes Matthew and Florence. Similarly, a swatch of MID areas including Scotland, Bladen, and Duplin present similar challenges with a social vulnerability score close to 1. Edgecombe County, a MID area for Hurricane Matthew Recovery, also has a high social vulnerability score. An awareness of these vulnerabilities is critical to understanding the unique recovery challenges for these areas and ensuring that recovery programs account for those vulnerabilities, and if possible, address them.

NCORR commits to Affirmatively Furthering Fair Housing, and complies with Civil Rights laws in the implementation of its programs. NCORR further understands the complexity of housing resilience in racially and ethnically concentrated areas, as well as concentrated areas of poverty. NCORR will coordinate with impacted stakeholders to determine the best course of action to provide equitable, meaningful housing solutions for all impacted individuals. To best serve vulnerable populations such as those requiring transitional housing, permanent supportive housing, permanent housing serving individuals and families (including subpopulations) that are homeless and at-risk of homelessness, and public housing developments, NCORR will engage local Public Housing Authorities (PHAs) to support resilience needs for public housing at the local level to help serve these groups. Further, resident consultation is a requirement under the PHA Plan process and requires coordination between the PHA and the Consolidated Planning Process. Before expending CDBG-DR funds, NCORR will work with PHAs to reach LMI and minority communities.

Organizationally, NCORR has sought staff and resources to ensure that vulnerable populations receive equitable and fair treatment. NCORR has a dedicated Resiliency Team, charged with assisting the Housing Recovery Support Function (RSF), a task force charged in part with addressing inequality. Key NCORR staff members have also participated in the Racial Equity Institute's Groundwater Approach Training, a nationally-recognized program for helping individuals and organizations who want to proactively understand and address racism, both in their organization and in the community.

NCORR has taken additional steps to address extremely low income (ELI) individuals and households, defined as those which earn equal to or less than 30 percent of area median income, as well as individuals with disabilities. In the prioritization criteria for affordable housing proposals received for the Affordable Housing Development Fund, proposals which include considerations for these groups will receive prioritization over similar projects which do not include plans for these populations.

NCORR is committed to rebuilding damaged communities in a more resilient manner that affirmatively furthers fair housing opportunities to all residents. For this reason, the analysis identifies which impacted neighborhoods have a disproportionate concentration of minority populations as well as those with Limited English Proficiency. As these communities rebuild, the State will focus its planning and outreach efforts to ensure that rebuilding is equitable across all neighborhoods, including making provision for all information available about CDBG-MIT funding and programs in both English and Spanish and having appropriate translation, interpretation, and others services for persons with disabilities free of charge and accessible to the public in accordance with all HUD regulations and program guidelines.

Table 31 - Key Demographics, Florence Impacted Counties

County	MID Area	LMI Population	Total Population	% LMI	Minority	Hispanic	LEP	Persons with Disabilities
Anson County	-	12,005	24,295	49.41%	48.6	4.3%	4.9%	12.5%
Beaufort County	-	19,205	47,075	40.80%	25.1%	8.0%	6.1%	13.1%
Bladen County	Yes	16,735	34,105	49.07%	42%	7.5%	3.0%	21.6%
Brunswick County	Yes	47,235	115,025	41.06%	17%	4.7%	2.10%	17.2%
Carteret County	Yes	26,895	67,125	40.07%	11%	4.2%	1.8%	19.9%
Chatham County	-	28,425	66,565	42.70%	12.7%	12.3%	5.8%	10.3%
Columbus County	Yes	24,610	54,415	45.23%	38%	5.0%	2.6%	20.1%
Craven County	Yes	36,490	100,565	36.28%	30%	7.0%	3.6%	17.4%
Cumberland County	Yes	117,930	314,220	37.53%	51%	11.2%	3.2%	14.0%
Duplin County	Yes	29,900	58,775	50.87%	36%	21.3%	12.1%	19.0%
Durham County	-	134,820	275,290	48.97%	37.3%	13.7%	8.9%	7.0%
Greene County	-	9,090	19,235	47.26%	36.8%	15.5%	7.1%	18.1%
Guilford County	-	205,120	490,610	41.81%	35.1%	8.2%	5.7%	7.5%
Harnett County	-	48,490	121,000	40.07%	22.0%	13.0%	3.5%	10.1%
Hoke County	-	20,520	49,850	41.16%	35.3%	13.6%	5.2%	13.4%
Hyde County	-	1,640	5,005	32.77%	29.0%	9.2%	6.9%	6.8%
Johnston County	-	92,715	176,620	52.49%	16.8%	14.0%	5.5%	10.5%
Jones County	Yes	4,565	10,040	45.47%	34%	4.2%	2.4%	23.8%
Lee County	-	23,400	58,375	40.09%	20.1%	19.5%	8.4%	11.6%
Lenoir County	-	27,790	57,525	48.31%	41.5%	7.5%	4.8%	19.1%
Moore County	-	36,635	90,530	40.47%	12.2%	6.8%	2.5%	10.1%
New Hanover County	Yes	94,235	206,370	45.66%	19%	5.3%	2.8%	12.6%
Onslow County	Yes	58,239	170,790	34.10%	26%	11.8%	2.0%	16.9%
Orange County	-	54,145	128,180	42.24%	11.8%	8.6%	6.0%	5.9%
Pamlico County	Yes	4,965	12,350	40.20%	24%	3.6%	.50%	20.8%
Pender County	Yes	22,025	53,820	40.92%	23%	6.4%	3.0%	16.7%
Pitt County	-	75,519	167,660	45.04%	35.7%	6.3%	2.6%	8.9%
Richmond County	-	21,705	44,665	48.60%	32.0%	6.7%	3.4%	13.2%
Robeson County	Yes	70,970	131,455	53.99%	16.6%	8.3%	3.6%	16.6%

County	MID Area	LMI Population	Total Population	% LMI	Minority	Hispanic	LEP	Persons with Disabilities
Sampson County	-	29,415	62,945	46.73%	26.6%	20.4%	9.8%	13.8%
Scotland County	Yes	17,835	33,675	52.96%	55%	2.8%	.40%	19.5%
Union County	-	73,680	211,280	34.87%	12.3%	11.4%	4.9%	6.3%
Wayne County	Yes	52,850	121,450	43.52%	32.3%	12.3%	6.2%	12.2%
Wilson County	-	34,285	80,005	42.85%	40.4%	10.8%	4.7%	11.4%

Note that this table differs from Table 15 - MID Key Demographics and Table 16 - LMI Population in FEMA IA Counties in that it considers the entire impacted area, not just the MID areas, and includes key demographics together for comparison.

6.4.3 LMI Populations

As a result of historic and structural racism, communities of color are disproportionally concentrated in low- and moderate-income (LMI) neighborhoods. In every one of the 16 counties considered most-impacted and distressed (MID) zones for Florence CDBG-DR funds, the mean per capita income of white households is higher than the mean income of African-American households and Latino/Hispanic households, and white mean per capita income is higher than mean Native American household income in all but two counties. White mean per capita income is at least twice as high as the mean per capita income for African Americans in two counties, and at least twice as high as Hispanic/Latino mean per capita income in 11 of the 16 counties. Given these racial disparities in income across the impacted counties, it is particularly important to consider how this action plan affects LMI, very low-income (VLI), and extremely low-income (ELI) communities. Low-income households have fewer resources to prepare for storms – by elevating structures, moving out of flood zones, or strengthening home construction – and fewer resources to dedicate to storm recovery, putting them at still greater risk of continuing damage as repairs are not made. Low-income households may also have less capacity to relocate during disasters. All these factors put these communities at risk for greater damage during Hurricane Florence and will continue to put them at risk in future storms. The ReBuild NC program is explicitly intended to assist the most vulnerable of North Carolina's citizens. These citizens, as HUD and NCORR rightly recognize, face the greatest barriers to long-term recovery.

NCORR is committed to serving the LMI population of the impacted areas of the State. A minimum of 70 percent of all allocated funds must be used to the benefit of low- and moderate-income individuals and households. To the greatest extent possible, VLI and ELI groups will also be served through the Affordable Housing Development Fund.

The affordable housing components of the CDBG-DR allocation remain 100 percent allocated to the benefit of LMI individuals and households. To the extent that it is feasible, all other programs will also be delivered to maximize LMI individual and household benefit.

6.4.4 Affordability Requirements

In 83 FR 40314, HUD clarified affordability requirements for new construction and rehabilitation of units. NCORR will require these affordability requirements for new construction for home ownership, rehabilitation or reconstruction of multi-family rental projects with eight or more units, and new construction of multi-family projects with five or more units.

Table 32 - Affordability Periods

Project Type	Use	Affordability Period
New construction of single-family housing for LMI individuals and households	Ownership	5 years
Rehabilitation or Reconstruction of multi-family projects, 8 or more units	Rental	15 years
New construction of multi-family projects, 5 or more units	Rental	20 years

Rental units subject to these affordability requirements must be rented to LMI individuals and families at affordable rents. NCORR defines affordable rents in the Affordable Housing Development Fund Program description at Part 7.4 below.

Rental units that are rehabilitated or reconstructed with fewer than eight units, and rental units that are newly constructed with fewer than five units are not subject to these affordability requirements, although alternative requirements may be enforced by match funds or as a condition of participation in the Affordable Housing Development Fund. NCORR will require a minimum of a five-year affordability period on units served through the Small Rental Recovery Program, which serves one to four-unit properties. Affordability periods for greater than five years may be established based on project cost, project type, or project scope. Affordability periods do not otherwise apply to rehabilitation or reconstruction of single-family property.

NCORR will ensure that affordability requirements are enforced through deed restriction, covenant, or similar mechanism dependent on the type and scope of the funded project. Recapture terms of granted or loaned funds for projects subject to these affordability requirements will be provided to the applicant to the program prior to construction start. NCORR or a selected subrecipient will be charged with ensuring that resale and recapture provisions for each funded project subject to these requirements are followed during project execution. The recapture provisions will be specific to each funded project, but at a minimum NCORR will:

- Enforce recapture of grant or loan funds if the affordability period is determined to be broken.
- Perform occasional site monitoring or subgrant monitoring responsibilities to subrecipients to ensure compliance.
- Place specific recapture provisions in deed restrictions, covenants, liens, or other mechanisms so that a change of use or ownership may require repayment of funds.

NCORR or its subrecipients will review the facts and circumstances of items triggering recapture, such as a change of ownership or sale, and determine if the deficiency can be cured prior to initiating funds recapture.

6.4.5 Application Status

NCORR is committed to sharing timely and accurate updates on applications to the multiple programs that take applications directly from recovering individuals and families.

For the Homeowner Recovery Program, application centers were opened across the state where applicants submitted applications, provided documentation, saw their case manager, and otherwise met with a program representative. The application start date and end datewere widely publicized to ensure a far-reaching and thorough intake period for potential applicants. Application centers will remain available for program participants as the program responds to their recovery needs.

For buyout, NCORR will publicize the application start date to potential applicants living within the “Buyout Zones”/DRRAs identified by NCORR and accepted by the local municipality. After submitting an application, applicants will be assigned a case manager to see them through the buyout process. This application process is scheduled to begin seamlessly with the identification of buyout zones.

For all direct applicant service programs, applicants can learn more about the status of their application through the following methods:

- 833-ASK-RBNC (833-275-7262).
- Phone call directly to the assigned case manager.
- Direct email to the assigned case manager.

The Resilient Affordable Housing Development Fund, Public Housing Restoration Fund, Infrastructure Recovery Program, will not interface with individual applicants directly. Instead, NCORR will coordinate directly with the selected subrecipients, public housing authorities, or other entities to review applications for funding and provide other updates to projects. Where those programs accept applications, NCORR will review the method to advertise to, screen for, and select applicants prior to program launch.

6.5 Leverage Opportunities

NCORR commits to advancing recovery programs and activities that provide long term benefits and improved resilience to current and future hazards. NCORR also aligns its CDBG-DR programs or projects with other planned federal, state, regional, or local capital improvements, where feasible, including other CDBG-DR and CDBG-MIT grants.

The recovery effort for the State of North Carolina has been assisted through the provision of multiple funding sources. Primarily of interest to the recovery are funds received for FEMA Public Assistance (PA), FEMA Individual Assistance (IA), FEMA Hazard Mitigation Grant Program (HMGP), Small Business Administration (SBA) Disaster Loans, Department of Transportation

(DOT) funds, and U.S. Army Corps of Engineers (USACE) funds.

In January 2020, a list of proposed USACE projects include five "Investigations" across the State, including Carolina Beach, the Lumber River Basin, the Neuse River Basin, the Tar-Pamlico River Basin, and Wrightsville Beach for a total of $15 million.[28] Another three projects are pledged for construction in the State, including a project in Carteret County, levee work in the Town of Princeville, and Surf City and North Topsail Beach, for a total of over $321 million.[29] As these projects mature, an analysis of whether they would be appropriate for leverage of CDBG-DR funds will be performed. Given the limited CDBG-DR funds available to the State, it is difficult to meaningfully interface with the major infrastructure projects that the USACE typically undertakes. Instead, infrastructure recovery programs funded with CDBG-DR will support housing recovery more directly.

NCDOT has shared information on potential future projects to lend context to multiple mitigation approaches, including potential buyout areas and Disaster Risk Reduction Areas (DRRAs). As these projects have not been approved for construction and are in the early planning stages, they do not yet present a leverage opportunity for CDBG-DR programs. As NCDOT projects develop, NCORR will reassess the viability of a leverage opportunity with NCDOT projects.

FEMA PA projects may present a leverage opportunity for CDBG-DR funds. Traditionally, the State of North Carolina has provided the 25 percent match required to fund FEMA PA and FEMA HMGP projects. However, the commitment of additional CDBG-DR funds to FEMA-assisted projects may be beneficial to allow for improved resiliency, mitigation, or increase the long-term useful life of the improved project. NCORR will assess funded FEMA PA and HMGP projects to determine if the use of CDBG-DR funds will provide a benefit to otherwise funded projects.

FEMA IA and SBA Disaster Loan funds received present a leverage opportunity for all housing programming. Where feasible, CDBG-DR funds will be combined with FEMA IA and SBA funds to provide additional funds for recovery activities such as rehabilitation, reconstruction, new

[28] United States Army Corps of Engineers. *FY19 Additional Supplemental Appropriations Disaster Relief Act, 2019.* https://usace.contentdm.oclc.org/digital/collection/p16021coll5/id/35638/rec/32.

[29] United States Army Corps of Engineers. *FY19 Additional Supplemental Appropriations Disaster Relief Act, 2019.* https://usace.contentdm.oclc.org/digital/collection/p16021coll5/id/35637/rec/32.

construction, or buyout. NCORR will have policies and processes in place to ensure that CDBG-DR is not duplicated with other assistance for the same purpose.

For affordable housing projects, NCORR will review applications for funding in the context of other funds available. In its project selection, NCORR will evaluate the complete funding package and assess how other funds are leveraged to the fullest to maximize a return on investment with federal funds. Potential sources of leverage include other federal funds, such as SBA loans, Low Income Housing Tax Credits (LIHTC), private funding, and State or local funds. Favorable leverage opportunities will receive greater prioritization for CDBG-DR funding. NCORR will evaluate proposer capacity as well as the individual projects proposed, and may elect to enter into other subrecipient or partner relationships to execute affordable housing that is advantageous to the program and to the impacted area.

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7.0 Activities

The NCORR philosophy for Hurricane Florence recovery is to continue funding projects which have existing operations and administrative elements in place. NCORR is able to do the most good by limiting programs to those which currently exist in service of the Hurricane Matthew recovery, with some adjustments to account for the expanded area and need specific to Hurricane Florence.

The following section provides a description for each recovery program and provides a general program overview, including award limits, eligibility criteria (both geographic and applicant criteria), prioritization criteria, and projected start and end dates. For all allocations, the focus remains on primarily addressing the housing recovery need. Therefore programs which do not directly fund housing, such as the Infrastructure Recovery Program, must have a documented tie-back to housing recovery.

Recovery needs change over time. As program needs evolve, programs may shift and change to meet the need. Changes to unmet needs which result in a change in program benefit or eligibility criteria, the addition or deletion of an activity, or the allocation or reallocation of $15 million or more will result in a substantial amendment to the Action Plan.

7.1 Planning Activities

Generally, the CDBG-MIT funds are the primary means that NCORR will use to fund planning activities. However, some CDBG-DR funds are necessary for planning activities that more closely relate to recovery rather than mitigation needs. NCORR intends to consider using planning funds based on recommendations proposed by the State Disaster Recovery Task Force's active Recovery Support Function (RSF) groups, opportunities received from coordinating state agencies, such as the DOT, DEQ, and NCEM, and from planning needs identified in the creation and maintenance of the Action Plan.

NCORR has also established significant internal resources to assist in the identification of suitable plans, including the internal Resilience Team and the Policy and Community Development Team. These teams, as well as other internal NCORR staff, have the expertise necessary to identify plans that align with the state's recovery goals.

The Action Plan will not be amended every time a planning activity is pursued. Instead, NCORR will provide details on ongoing planning activities on its website at https://rebuild.nc.gov.

7.2 Homeowner Recovery Program

Homeowner Recovery Program			
Allocation: **$456,674,384**	$ to LMI: **$326,454,397**	$ to MID: **$365,339,508**	CDBG-Eligibility Criteria: **HCDA 105(a)(1), 105(a)(4), 105(a)(5), 105(a)(11), 105(a)(14), 105(a)(23), 105(a)(25)**
% of Total Allocation: **84%**	% to LMI: **71%**	% to MID: **80%**	National Objective: **LMH, UN**

7.2.1 Program Description

The Homeowner Recovery Program (HRP) will aid homeowners who experienced major to severe damage to their homes and have remaining unmet needs, after accounting for assistance received to recover. The program will include rehabilitation, repair, reconstruction, and new construction activities as well as elevation and flood insurance subsidies to eligible homeowners. In consideration of changing construction costs and the availability of labor and materials, NCORR has made the strategic decision to use modular home construction as a viable replacement for reconstruction and certain manufactured home unit (MHU) replacement work. Homeowner Recovery Programs will be administered by NCORR. Available homeowner assistance is listed below.

7.2.2 Homeowner Rehabilitation and Reconstruction

For homeowners who wish to remain in their homes or rebuild on their existing property, the program will provide grants for rehabilitation or reconstruction. Applicants eligible for rehabilitation assistance may reach a level of repair scope, cost, or other situation in which reconstruction, instead of rehabilitation, is more feasible. Building a new stick-built home on a different site is also allowable in certain situations, as set forth in the HRP Policy. The method of determining the construction intent (rehabilitation or reconstruction/new construction) will be outlined in detail in the *ReBuild NC Homeowner Recovery Program Manual* and may change over time.

7.2.3 Manufactured Home Repair or Replacement

Manufactured homes with damages between $1,000 and $5,000 may be eligible for assistance with repairs. Applicants with repairs exceeding $5,000 may be eligible for replacement. Replacing a damaged MHU on a different site is allowable in certain situations, as set forth in the HRP Policy.

New applicants participating in the 2020 application period (and beyond) with a double-wide or larger MHU will be eligible for repairs between $1,000 and $10,000 and replacement of units with damages greater than $10,000.

The Program may reimburse reasonable costs to an eligible applicant that replaces an MHU without using the state-managed procurement of a replacement unit. More details on this alternative process shall be included in a Homeowner Recovery Program Manual revision.

7.2.4 Reimbursement

For new applicants in 2020, homeowners who expended funds that are not duplicated with other assistance received in order to make necessary repairs or purchased a replacement manufactured home may be eligible for a reimbursement grant if these expenses were incurred prior to application for assistance to the program or September 14, 2018, whichever occurred first. Applicants earning more than 80 percent AMI shall no longer need to demonstrate a hardship to the Program.

Homeowners that performed Emergency Repairs after the “stop work” period (from the time of the application until completion of the Tier II environmental review) may still be eligible for assistance following a review of the scope of the repairs. Emergency Repairs are defined at 24 CFR Part 58.34(a)(10) as repairs that ‘do not alter environmental conditions and that are necessary only to arrest the effects from a state or federally declared public disaster or imminent threats to the public safety including those resulting from physical deterioration’.

Homeowners that performed Emergency Repairs during the “stop work” period will be asked to submit documentation demonstrating that the repairs performed comply with 24 CFR Part 58.34(a)(10). Homeowner-provided documentation will be reviewed to determine eligibility to participate in the program. Participating homeowners must certify that their repairs meet the definition of Emergency Repairs before receiving reimbursement funding.

Reimbursement only awards may be offered to eligible homeowners that wish to be reimbursed for work performed and not proceed with program-managed rehabilitation, if the remaining rehabilitation scope is modest and the homeowner is satisfied with a reimbursement only award. The method for calculating this award type is noted in each project file that accepts this alternative award.

7.2.5 Elevation Assistance

In addition to assistance for rehabilitation, reconstruction, and MHU replacement, homeowners may receive elevation assistance to ensure that their homes are elevated. Elevation assistance is provided in addition to the rehabilitation and reconstruction award limits. The elevation assistance maximum for rehabilitation awards is a $/SF cap based on the conditions of the project and limited to the actual cost of elevation. Applicants that meet the criteria to be elevated (defined below) are offered resilient reconstruction as an alternative to the rehabilitation and elevation scope of work. After a review of the average cost of elevation (including elevation design, engineering, and other “soft costs” of elevation), the average cost of repair, and a comparison to the cost of a comparable reconstruction, NCORR has determined that elevation is not a suitable alternative to reconstruction. This determination is based on the cost of elevation compared to a safer, more resilient, and mitigated reconstruction project.

NCORR has accordingly adjusted the elevation program to be supplemental to the reconstruction program and is not offered as a part of the rehabilitation scope. Applicants may appeal to have their property elevated as a part of a rehabilitation rather than reconstructed. In some instances, reconstruction will not be allowable (such as with SHPO requirements), and elevation may need to be pursued instead. NCORR will make determinations on these instances on a case-by-case basis.

Mandatory Elevation

- Properties located within the 100-year floodplain that meet the FEMA definition of substantially damaged, will be substantially improved, or meet the Program reconstruction threshold and not yet elevated 2 ft. above base flood elevation (BFE) or 2 ft. above an interior high-water mark.
    - Properties located within a Disaster Risk Reduction Area (DRRA) as formally adopted by NCORR, within or outside of the 100-year floodplain must also meet this requirement. DRRA adoption is effective as of the date that the DRRA was finalized by NCORR and approved by NCORR Senior Staff. Applicants who completed construction prior to the effective date of the DRRA, or applicants who are undergoing CDBG-DR funded construction (i.e. the contractor has been issued a notice to proceed) for rehabilitation, reconstruction, or MHU replacement prior to the date of DRRA adoption are not retroactively affected by the DRRA adoption.
    - Properties that are required to be elevated by local ordinance or by the local code enforcement officials within and outside of the 100-year floodplain.

At a minimum, homes will be elevated to two feet above the BFE as required by HUD or at least 2 ft. above the interior documented water marks as measured by the assessor, whichever documented water level is highest and reasonable. Local requirements for elevations more than two feet above BFE and the HUD requirement prevail, where required. For MHUs, if the Program elevation standard makes it infeasible to elevate, the HUD elevation requirement prevails. The Program is unable to elevate structures that are situated on leased land unless the permission of the land owner is secured.

Optional Elevation

- Properties outside of the 100-year floodplain that:
    - Sustained at least six inches of interior water damage during Hurricane Matthew or Hurricane Florence and/or sustained water damages from both Hurricanes Matthew and Florence due to flooding and not roof or other "horizontal" water penetration; and
    - Are considered to be "substantially damaged" or will be "substantially improved" by the Program, as determined by program policies or the local jurisdiction or meet the Program's "not suitable for rehabilitation" threshold.

Applicants who qualify for an optional elevation will be provided the option to reconstruct. Applicants who do not wish to reconstruct must forgo the optional elevation component of their scope of work. Applicants outside of an area with a designated Base Flood Elevation (BFE) that request optional elevation will be required to elevate their home above the height of interior documented water marks. For MHUs, if the program elevation standard makes it infeasible to elevate, the local requirement prevails. Otherwise, if a local requirement is not available, the program may opt to forego the optional elevation. . The Program is unable to elevate structures that are situated on leased land unless the permission of the land owner is secured. If permission cannot be secured, the applicant must forgo the optional elevation.

7.2.6 Flood Insurance Assistance

LMI homeowners whose damaged home is located in the 100-year floodplain may be eligible for payment of their flood insurance premiums for up to $2,000 and a maximum of two years.

7.2.7 Subsidized Forgivable Loan

In cases where a DOB analysis is performed and the Program identifies that there would be a duplication for a household whose damaged home still requires recovery assistance, the Program may provide a CDBG-DR subsidized forgivable loan up to duplication amount not to exceed $50,000. If the household demonstrates a hardship or the facts and circumstances of their recovery warrant a loan greater than $50,000, the Program may extend an offer to loan more. The rationale for loans more than $50,000 will be documented in NCORR's system of record.

Additional details on subsidized loan, payment rates, forgiveness or cancellation terms, repayment schedule, monitoring requirements, acceleration schedule, and other loans terms will be found in the loan documents and Program manual or procedures.

7.2.8 Application Process

North Carolina citizens who were directly impacted by the disaster who are located in an eligible county could apply to the Homeowner Recovery Programs through one application into the program at any of the ReBuild NC Centers as listed on the ReBuild NC website until applications for assistance were closed on April 21, 2023. Additional avenues are available for remote applications during the COVID-19 pandemic. The application allows applicants to list their housing recovery needs in more than one eligible category of assistance listed above.

7.2.9 Allocation for Homeowner Recovery Activities

$456,674,384

7.2.10 Maximum Award

Homeowner Rehabilitation: up to $20,000 per home. This cap has been adjusted to prioritize resilient reconstruction rather than rehabilitation of damaged property. Projects that were offered an award under the previous threshold ($70,000) will have that award type honored and will not need to agree to a new award, unless that award has been determined to be infeasible based on a review of the conditions on site. In those instances, a reconstruction may be required.

- Additional assistance is available for structural elevation, consistent with the elevation assistance cost calculation found in the Elevation SOP, based on actual elevation costs.
- Costs necessary to perform lead abatement and/or asbestos remediation are in addition to the program cap. Reasonable and necessary costs for lead abatement and asbestos remediation will be paid as needed separate from the program cap of $20,000.
- Unforeseen circumstances identified by a construction contractor, engineer, or architect may result in change orders which exceed the $20,000 cap. Change orders will be reviewed to ensure that costs are necessary and reasonable. Change orders that increase the costs of the rehabilitation above the $20,000 cap may be allowable based on a review of the facts and circumstances of each change order proposed.

The minimum amount of rehabilitation assistance needed to participate is $1,000.

LMI applicants located in the 100-year floodplain may also receive up to $2,000 in Flood Insurance Assistance.

Homeowner Reconstruction: The Program will provide awards necessary to completely reconstruct the damaged property, and in some circumstances, build the property on a new site, including demolition and removal of the original structure. The specific award amount is capped based on the size of the applicant's selected floorplan. Additional funds may be provided above the award cap to address site-specific accessibility needs (i.e. ramps and lifts), environmental issues, resiliency/mitigation measures, elevation requirements, and municipal ordinances, as needed.

Reimbursement: up to $70,000 to reimburse homeowners for non-duplicative expenses to repair their homes following the disaster prior to applying to the Homeowner Recovery Program. The reimbursement of expenses will be paid to homeowners who have completed disaster related repairs verified by inspections and program staff subject to environmental review. The conditions for exceeding the program cap specified in the 'Maximum Award' section of the Homeowner Rehabilitation Program are also in effect for the Reimbursement Program. Costs are only reimbursable if expended after Hurricane Matthew and prior to application for CDBG-DR assistance or September 14, 2018, whichever occurred first.

Mobile/Manufactured Home Repair: Up to $5,000 per applicant for homes with damages totaling between $1,000 and $5,000. For new applicants in 2020, double-wide and larger MHUs may be repaired when damaged between $1,000 and $10,000.

Manufactured Home Replacement: The Program will provide awards necessary to replace the damaged MHU, including demolition and removal of the original structure. MHUs may be replaced on a different site in certain situations. ADA compliant units are available for applicants that require those accommodations. Awards cover the cost of the unit as well as delivery, installation, and setup of the selected unit. Environmental remediation and accessibility features such as ramps or lifts are included in the award cost. An additional allowance is available for structural elevation.

Temporary Relocation Assistance (TRA): NCORR has adopted an Optional Relocation Policy to provide households with incomes less than or equal to 120 percent of Area Median Income (AMI) with temporary relocation assistance while they are unable to occupy their home during construction activities. Households earning greater than 120 percent AMI may qualify for TRA through a hardship exception. The Program will pay reasonable costs based on rate schedules developed by NCORR. This benefit is in addition to program caps for construction assistance.

Uniform Relocation Act (URA) policies and notification requirements will be followed to assist any tenants who are temporarily or permanently displaced due to program activities.

Table 19 - Homeowner Recovery Program Maximum Award Amounts

Program	Maximum Awards and Clarifications
Rehabilitation	Up to $20,000 per home. Does not include costs for lead abatement, asbestos remediation, accessibility costs (including disability accessible ramps or lifts), and unforeseen conditions necessitating an approved, reasonable change order.
Reimbursement	The Program cap for reimbursement is the same as the activity being reimbursed. For example, a rehabilitation reimbursement is capped at $70,000 per home.
Reconstruction	The Program will provide awards necessary to completely reconstruct the damaged property, including demolition and removal of the original structure. The specific award amount is capped based on the size of the applicant's selected floorplan. Additional funds may be provided above the award cap to address site-specific accessibility needs (i.e. ramps and lifts), environmental issues, resiliency/mitigation measures, elevation requirements, and municipal ordinances, as needed.
MHU Repair	Up to $5,000 for single-wide units and up to $10,000 for double wide units.
MHU Replacement	The Program will provide awards necessary to replace the damaged MHU, including demolition and removal of the original structure. ADA compliant units are available for applicants that require those accommodations. Awards cover the cost of the unit as well as delivery, installation, and setup of the selected unit. Environmental remediation and accessibility features such as ramps or lifts are included in the award cost. An additional allowance is available for structural elevation.

Elevation Assistance	The Program will provide grant funds in order to elevate structures to comply with program or local elevation requirements, whichever standard is greater. Elevation costs are separate from other program award caps. Costs associated with structural elevation are determined based on the activity. Eligible elevation costs are included in the HRP Policy Manual.
Temporary Relocation Assistance (TRA)	The Program will pay reasonable costs based on rate schedules developed by NCORR to cover the amount of time an applicant must be temporarily relocated out of the unit while it is repaired, replaced, or reconstructed.
Flood Insurance Assistance	Up to $2,000, and a maximum of two years of assistance.
Subsidized Forgivable Loan	Up to duplication found in the DOB analysis and not to exceed $50,000 unless hardship or the facts and circumstances of the household's recovery warrant a greater amount. The rationale for the greater amount will be documented in NCORR's system of record.

7.2.11 National Objective

LMI, Urgent Need.

7.2.12 Eligible Activities

105 (a) (1) (3) (4) (5) (6) (7) (8) (9) (10) (11) (13) (14) (15) (16) (18) (20) (23) (24) (25) Rehabilitation; Reconstruction, Acquisition; New Residential Construction; Relocation, Demolition and Clearance, Non-Federal Match, and Homeowner Assistance.

7.2.13 Geographic Eligibility

Homes must be located in one of the disaster-declared counties eligible to receive HUD funds.

7.2.14 Priorities

LMI households will be prioritized for assistance.

7.2.15 Eligible Applicants

All owner-occupants whose primary residence was directly or indirectly impacted by Hurricane Matthew are eligible for Homeowner Rehabilitation, Homeowner Reconstruction, Manufactured Home Repair, and Manufactured Home Replacement. Owner-occupants are eligible for the track of the Homeowner Recovery Program which best suits their recovery needs. In accordance with HUD guidance that CDBG-DR funds may rehabilitate units not damaged by the disaster if the activity clearly addresses a disaster related impact and is located in a disaster-affected area (81 FR 83259 and 83 FR 5851), HRP will now assist properties in need of rehabilitation, reconstruction, or replacement in the most impacted and distressed (MID) areas regardless of the direct storm impact, as lingering challenges in suitable housing continue to stress housing availability in the MID areas. This MID designation includes the State-identified MID areas.

For new applicants to recovery programs beginning in 2020 and beyond, the maximum income for participating individuals and families is 150 percent area median income (AMI). HUD releases AMI updates periodically. AMI information is available at https://www.huduser.gov/portal/datasets/il.html#2020_data. Individuals and families earning greater than 150 percent AMI with a demonstrable hardship as defined in program policies are eligible. Some program tracks within the Homeowner Recovery Program require less than 150 percent AMI. Those alternative requirements are specified in their respective sections of the Action Plan.

7.2.16 . Program Start Date

Q1 2020

7.2.17 Projected End Date

Q2 2026

7.3 Strategic Buyout Program

Homeowners who do not wish to remain at their damaged address may be eligible for participation in the Strategic Buyout Program. The Strategic Buyout Program will be funded through the CDBG-MIT grant. Aligning the Strategic Buyout Program under a single funding source with a single set of rules and requirements simplifies the implementation of this program and better supports the mission of CDBG-MIT as a grant focused on long-term mitigation and resiliency. Future amendments to the Florence CDBG-DR Action Plan will not include this activity.

Individuals interested in the Strategic Buyout Program are encouraged to visit https://rebuild.nc.gov/mitigation to learn more. Further information on the Strategic Buyout Program is also included in the CDBG-MIT Action Plan, found at https://rebuild.nc.gov/action-plans.

7.4 Affordable Housing Development Fund

Affordable Housing Development Fund			
Allocation: **$54,337,416**	$ to LMI: **$54,337,416**	$ to MID: **$54,337,416**	CDBG-Eligibility Criteria: **HCDA 105(a)(1), 105(a)(2), 105(a)(4), 105(a)(5), 105(a)(9), 105(a)(11), 105(a)(12), 105(a)(14), 105(a)(15), 105(a)(19), 105(a)(20), 105(a)(23), 105(a)(24), 105(a)(25)**
% of Total Allocation: **10%**	% to LMI: **100%**	% to MID: **100%**	National Objective: **LMH**

7.4.1 Program Description

The Affordable Housing Development Fund program was added to NCORR's CDBG-MIT program in SAPA 6 of that action plan. The allocation for the program under the Florence CDBG-DR program was correspondingly decreased in SAPA 6 of this action plan. The shift in funding sources will facilitate coordination between the Affordable Housing Development Fund and the Strategic Buyout Program, currently funded through CDBG-MIT. The reallocation is part of NCORR's long-term strategy to mitigate damage to North Carolina's most vulnerable communities caused by future hazards, and to develop a resilient, affordable housing stock in North Carolina's most vulnerable areas. Further information can be found in the Mitigation action plan at rebuild.nc.gov/about/plans-policies-reports/action-plans.

In early versions of this action plan, NCORR has focused on the Multi-Family Rental Housing Program to assist impacted renters recovering from Hurricane Matthew**.** These programs are beneficial to renters, but may not be best suited to meet the renter recovery need of such a vast geography which spans urban, suburban, and rural communities representing vastly different demographics. Compared to the Small Rental Recovery Program and the previously implemented Multi-Family Rental Housing Program, the Affordable Housing Development Program seeks to create new housing stock in a way that is more responsive to the needs of the recovering community. In some instances, this will be "traditional" multi-family rental units. In other instances, it may be clustered or site-by-site newly created small rental units or for-sale units. The program will primarily consider new construction but may consider rehabilitation of existing units.

Similar to the use of Hurricane Matthew CDBG-DR funds, NCORR may fund projects that have been identified for funding through the Qualified Allocation Plan (QAP) process. NCORR may fund projects that are proposed in the MID areas of the state through this process.

Separately, NCORR may solicit projects from qualified property management organizations, public, private, or non-profit organizations (which may include Units of Local Government

(UGLGs)), and Community Development Housing Organizations (CHDOs)/Community Based Development Organizations (CBDOs) to determine the best fit for affordable housing, responsive to the needs for impacted communities. Upon evaluation of proposals, NCORR may subgrant funds using the SRA model or enter into a contract agreement to execute projects, based on the nature of the proposer and the proposal. The QAP process described above will not necessarily follow the selection criteria and prioritization criteria defined in the subsections below.

The definition NCORR uses for affordable rent is the same as the HOME Investment Partnership Program definition. These rental limits are updated periodically and are calculated by metro area or county. The affordable rent limits methodology is available at https://www.huduser.gov/portal/datasets/HOME-Rent-limits.html and specific affordable rent limits are updated annually. Units created or rehabilitated using CDBG-DR funds for rent must not exceed these rent limits, based on the geographic location and bedroom size of the unit. However, at times NCORR provides match funds for projects or coordinates with developers, partners, or property managers that define affordable rent differently. NCORR may elect to adopt an alternate definition of affordable rent when an alternate rent limit is proposed, in lieu of the definition of above. In those instances NCORR will document that decision in the project file.

Assistance to facilitate new construction, rehabilitation, or reconstruction of the affordable housing stock, such as rental or homeownership units, will be provided in the form of loans, unless a compelling reason is presented in the application for an alternative funding arrangement (such as a grant). The loan terms and conditions are dependent on the nature of the project and level of risk, as evaluated by the NCORR appointed selection committee or NCORR designated approver.

7.4.2 Maximum Award

The maximum award of CDBG-DR funds to affordable housing is based on actual need, not to exceed $10 million in CDBG-DR funding. As project costs are reviewed, the $10 million cap may be exceeded if a compelling and significant benefit to resiliency or the local affordable housing stock is realized through project execution. When the cap is exceeded, NCORR will document such exceptions and the rationale behind the decision-making process.

7.4.3 Geographic Eligibility

NCORR will evaluate proposals and favor those proposals which are located within MID areas of the State for both Hurricane Matthew and Hurricane Florence. New construction and rehabilitation must occur outside of the 100-year floodplain, or where floodplain designation is peripheral and distinct from the location of any planned development activity for the project.

7.4.4 Priorities

Prioritization of projects will be based on the highest scoring proposals. Proposal selection criteria may include:

- Site location and suitability;
- Proposer capacity;
- Affordability structures, with a preference for projects with units set aside to serve Extremely Low Income and Very Low Income populations;
- Proposals with units and amenities set aside for those with disabilities or for special needs populations;
- The total development cost versus the CDBG-DR share of that cost;
- Proposal feasibility;
- Proposed development's Readiness to Proceed;
- Coordination with resiliency and disaster recovery planning and/or design; and
- Proposals or solutions which present innovative and leveraged approaches to the affordable housing problem after disaster.

Specific prioritization for the selection of projects will be published prior to the launch of applications.

7.4.5 Eligible Applicants

Qualified UGLGs, property management organizations, public, private, or non-profit organizations, and Community Development Housing Organizations (CHDOs)/Community Based Development Organizations (CBDOs) may be eligible to apply for affordable housing development funds.

Specific applicant eligibility requirements will be published prior to the launch of applications and will be outlined in program manuals as additional funding is made available.

7.4.6 Projected Start and End Date

NCORR will open an application period for projects after receipt of the grant agreement from HUD. The application period is expected to begin in Q4 2020.

- Start Date: Q4 2020
- End Date: Q2 2026

7.5 Homeownership Assistance Program

The Homeownership Assistance Program provides downpayment assistance to households earning less than 120 percent of area median income. After SAPA 6, The Homeownership Assistance Program will be funded through the CDBG-MIT grant due to the need to coordinate closely with the Strategic Buyout and Affordable Housing Development programs and to better align the program with NCORR's long-term mitigation and resilience goals. Future amendments to the Florence CDBG-DR Action Plan will not include this activity.

Further information on the Homeowner Assistance Program can be found in the Mitigation action plan at rebuild.nc.gov/about/plans-policies-reports/action-plans

7.6 Housing Counseling Fund

Housing Counseling is intended to provide independent, expert advice customized to the need of the beneficiary of service from this program to address that beneficiary's housing barriers and to help achieve their housing goals. Housing counseling includes intake, financial and housing affordability analysis, the development of an action plan for the beneficiary, and follow-up. After SAPA 6, Housing Counseling will be funded through the CDBG-MIT grant in order to coordinate efforts with that grant's Affordable Housing Development and Homeownership Assistance programs and to better align with NCORR's long-term mitigation and resilience goals. Future amendments to the Florence CDBG-DR Action Plan will not include this activity.

Further information on Housing Counseling can be found in the Mitigation action plan at rebuild.nc.gov/about/plans-policies-reports/action-plans.

7.7 Small Rental Recovery Program

The Small Rental Recovery Program (SRRP) has been reallocated to focus the Hurricane Florence CDBG-DR grant on Homeowner Recovery and affordable housing development to meet the renter need. NCORR is simultaneously amending the Hurricane Matthew CDBG-DR Action Plan to reflect an increase in affordable housing programming. There are several reasons for this adjustment.

First, NCORR has had success leveraging housing partners to meet the rental need, such as the North Carolina Housing Finance Agency (NCHFA). A combination of Hurricane Matthew and Hurricane Florence CDBG-DR funded commitments to NCHFA has resulted in the creation of 1,000 affordable housing units. Leveraging success in existing programs is likely to result in a better outcome than continuing development on a program that is not yet ready for launch.

Additionally, NCORR has begun development on several approaches to affordable housing intended to address the renter need in other, more innovative ways. Planning studies are underway with the University of North Carolina School of Government's Development Finance Initiative (DFI) to identify the best approach for addressing affordable housing in the most impacted and distressed areas of the state.

NCORR remains committed to addressing the rental housing recovery need. Other approaches underway appear to be the most effective way of meeting that need.

7.8 Public Housing Restoration Fund

Previous Action Plans outlined that the Public Housing Restoration Fund will be administered by NCORR. Funds from the Program can be used to rehabilitate and/or repair Public Housing Authority (PHA) properties that were damaged from Hurricane Florence. Funds are to be used to address unmet recovery needs after accounting for insurance and other Federal disaster funding, or to make facilities more resilient from future storm events. This includes relocating PHA units out of the floodplain to help protect against future flood losses.

The $16.3 million previously allocated to the Public Housing Restoration Fund have been reallocated to the CDBG-MIT Action Plan. The reallocation further strengthens the ongoing recovery efforts of the Homeowner Recovery Program and Affordable Housing Development fund. The reallocation is also in consideration of a realignment of longer-term resilience and mitigation activities, such as those in the Public Housing Restoration Fund, with the objectives of the CDBG-MIT funds. Refer to the State’s Mitigation Action Plan for more details on these activities.

7.9 Infrastructure Recovery Program

Previously, the Infrastructure Recovery Program refocused on infrastructure repair and new infrastructure development as a tie-back to the housing recovery need. Funds may be used to restore, repair, rebuild, or add resiliency to public assets that were impacted by Hurricane Florence, where those impacts have disrupted housing recovery or impede new housing development.

After a review of the housing programs available, and the increased demand for Homeowner Recovery Program activity, the CDBG-DR Florence Infrastructure Recovery Program has had its allocation removed from this Action Plan. Necessary infrastructure to support housing may be included as a part of a scope of work for affordable housing projects funded by the Affordable Housing Development Fund. NCORR may reevaluate the need and resources available for infrastructure recovery at a later date.

7.10 Construction Trades Training Program

The Construction Trades Training Program has been reallocated to focus on the Hurricane Florence CDBG-DR recovery on the Homeowner Recovery Program and affordable housing development.

With the impacts of the COVID-19 pandemic on an uncertain job market, it is unclear whether the Construction Trades Training Program would have the necessary supporting effect on the state’s recovery. Additionally, the need for construction trades is partially met by the efforts of other state organizations, such as the North Carolina Department of Transportation (DOT).

7.11 Code Enforcement and Compliance Support Program

The CDBG-DR funding previously allocated to the Code Enforcement and Compliance Support Program (CECSP) has been reallocated to the CDBG-MIT Action Plan. With the aftermath of the COVID-19 pandemic and the resulting supply and labor market disruptions in MID areas, NCORR will continue to support and augment local code enforcement services where recovery and mitigation construction work is being planned and completed in disaster-impacted areas. Additionally, this reallocation is in consideration of a realignment of longer-term resilience and mitigation activities with the objectives of the CDBG-MIT funds, including work done with local communities to better understand, deploy, and address building code challenges. Refer to the State’s Mitigation Action Plan for more details on these activities.

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8.0 Amendments to the Action Plan

NCORR identifies the following criteria which constitute a substantial amendment:

- A change in program benefit or eligibility criteria.
- The addition or deletion of an activity.
- An allocation or reallocation of $15 million or more.

Substantial Action Plan amendments will be provided for public comment for no less than 30 days, and can be found online at https://www.rebuild.nc.gov/action-plans. NCORR will notify HUD, but is not required to seek public comment, when it makes a plan amendment that is not substantial. HUD must be notified at least five business days before the amendment becomes effective. However, every amendment to the action plan (substantial and non-substantial) will be numbered sequentially and posted on the ReBuild NC website above.

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9.0 Schedule of Expenditures and Outcomes

NCORR maintains a schedule of expenditures and outcomes, periodically updated in accordance with its mandatory reporting to HUD. The schedule of expenditures and outcomes is located at https://www.rebuild.nc.gov/reporting-and-compliance/reporting.

In accordance with the Notice, all funds will be expended within six years of HUD's initial grant agreement.

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10.0 Community Participation and Public Comment

NCORR values the input of its many impacted citizens and the decision makers and stakeholders that represent the vulnerable communities impacted by Hurricane Florence. To meet the public participation requirements of the Notice, NCORR commits to the following process for citizen complaints, appeals, and the public notice period.

NCORR followed its Citizen Participation Plan specific to CDBG-DR funds, available at https://www.rebuild.nc.gov/reporting-and-compliance/action-plans.

10.1 Encouragement of Citizen Participation and Outreach

NCORR will invite and encourage citizen participation in the Action Plan and associated amendments process with a focus on outreach to low- and moderate-income persons, racial/ethnic minorities, persons with disabilities, and persons with Limited English Proficiency.

The State will advertise opportunities for comment on the Action Plan through various state and local resources, including the engagement of recovery partners such as the Recovery Support Function Groups, tribal communities, public housing authorities, church and faith-based organizations, professional organizations, other known constituency groups, and citizens who have requested notification. Additionally, the State will advertise through:

- Neighborhood associations and groups, community-based organizations, agencies, and churches providing services to or advocating for low- and moderate-income persons, racial/ethnic minorities, persons with disabilities, and persons with Limited English Proficiency; and
- Media sources that have direct contact with low- and moderate-income persons, culturally diverse persons, racial/ethnic minorities, persons with disabilities, and persons with Limited English Proficiency.

NCORR is committed to ensuring that all populations impacted by the storm are aware of and have equal access to information about the programs to assist in the recovery from Hurricane Florence. Through in person meetings, outreach events, online and traditional media, the State has publicized existing programs and will publicize changes to such programs, and conducted outreach efforts throughout the storm impacted areas. In addition, the Governor's Office has engaged a grass-roots community driven process that engages the public as a key stakeholder in the planning and rebuilding process.

NCORR sought feedback from other local and regional planning partners and stakeholders. The contributing entities include:

- Legal Aid of North Carolina;
- The North Carolina Justice Center;
- Disability Rights North Carolina;
- American Rivers;
- The Conservation Trust for North Carolina;
- The Natural Resources Defense Council;
- The North Carolina Conservation Network;
- The North Carolina Coastal Federation;
- The North Carolina Housing Coalition;
- The North Carolina Coalition to End Homelessness; and
- The North Carolina Housing Resource Center.

10.2 Individuals with Limited English Proficiency (LEP)

Based on LEP data within the impacted areas collected by the State, both the instructions for commenting on, and access to, the Action Plan will be translated into Spanish. The State will translate and consider comments submitted in any other language within the public comment period timeframe.

NCORR provides both oral interpretation and written translation services to persons at no cost and these services are available upon request. Meaningful and equal access to federally funded programs and activities is required by Title VI of the Civil Rights Act of 1964.

10.3 Persons with Disabilities

As noted above, hard copies of Action Plans will be available in large print format (18pt font size) at ReBuild NC Centers. A list of ReBuild NC Centers is available online at https://rebuild.nc.gov. The online materials will also be accessible for the visually impaired. NCORR will ensure that all print, verbal, or electronic communications with the public regarding distribution of CDBG-DR funding and actionable information are simultaneously communicated to persons with disabilities and others with access and functional needs via qualified channels (i.e. ASL interpreters, open captions, Braille, large, high contrast print, formats accessible to screen readers, podcasts etc.) in an equitable, timely, and efficient manner. Information will be presented in an understandable manner, using plain language and identifying whom to contact for clarification or additional information. For more information on how people with disabilities can access and comment on the Action Plan, dial (800) 735-2962.

10.4 Response to Citizen Complaints and Appeals

NCORR shall provide a written response to every complaint relative to CDBG-DR within fifteen (15) working days of receipt. The state will execute its Appeals Process in response to appeals received and will require subrecipients to adopt a similar process. The process will be tiered whereby applicants will be able to appeal a decision and receive further review from another level.

All subrecipients will be required to develop an appeals and complaint procedure to handle all complaints or appeals from individuals who have applied for or have an interest in CDBG-DR funding. A written appeal may be filed when dissatisfied with program policies, eligibility, level of service or other issue by including the individual facts and circumstances as well as supporting documentation to justify the appeal.

Generally, the appeal should be filed with the administrating entity. The appeal will be reviewed by the administrating entity with notification to NCORR for the purpose of securing technical assistance. If the appeal is denied or the applicant is dissatisfied with the decision, an appeal can be made to NCORR directly. If NCORR denies the appeal, the final step in the internal appeals process is to appeal to the Secretary of the Department of Public Safety.

In programs that serve individual applicants, applicants may appeal their award determinations or denials that are contingent on program policies. However, it should be noted that NCORR does not have the authority to grant an appeal of a statutory or HUD-specified CDBG-DR requirement.

10.5 Public Notice, Comment Period, and Website

A comment period of at least thirty (30) days, as required by HUD, shall be provided for citizens, affected local governments, and other interested parties to comment on the initial draft and subsequent substantial amendments to the Action Plan.

In accordance with CDBG-DR requirements, NCORR has developed and will maintain a comprehensive website regarding all disaster recovery activities assisted with these funds. NCORR will post all Action Plans and amendments on the NCORR's CDBG-DR website at http://www.rebuild.nc.gov/action-plans.

The website includes:

- The Action Plan and all amendments.
- The current approved Disaster Recovery Grant Reporting System (DRGR) Action Plan.
- Citizen participation requirements.
- Procurement policies and procedures. NCORR will follow all guidelines contained within the North Carolina Procurement Manual. Note that per 2 CFR § 200.317, Subrecipients

utilizing Program funds must follow all procurement guidelines contained in 2 CFR §§ 200.318-327.

- Current procurements for goods and services.
- Current contract agreements.
- A summary of all procurements.

The website gives citizens an opportunity to read the plan and to submit comments. This website is featured prominently on, and is easily navigable from, NCORR's homepage. Paper copies of the Action Plan Amendment will be available in both English (including large, 18pt type) and Spanish as needed at ReBuild NC Centers. Center locations are found at the ReBuild NC website at https://www.rebuild.nc.gov.

After the conclusion of the required comment period, all comments are reviewed and the State provides responses to the comments. The State's consideration on all public comments can be reviewed in Appendix A of the final Action Plan.

10.5.1 Contact Information

Interested parties may make comments or request information regarding the Action Plan by mail, telephone, facsimile transmission, or email to NCORR.

Comments and complaints may be submitted as follows:

- Written comments may be mailed to:
  North Carolina Office of Recovery and Resiliency (NCORR)
  PO Box 110465
  Durham, NC 27709
- Email comments: publiccomments@rebuild.nc.gov
  Please include "CDBG-DR Florence" in the subject line
- By telephone for those hearing impaired: (984) 833-5350, TDD (800) 735-2962
- By Fax transmission: (919) 405-7392

NCORR will post this and all Action Plans and amendments on the State's CDBG-DR website at https://www.rebuild.nc.gov/action-plans to give citizens an opportunity to read the plan and to submit comment(s).

At the conclusion of the public comment period, all comments will be reviewed and the State will provide responses to the comments. Following submittal by NCORR of the Action Plan to HUD, HUD has a review period to consider and approve the Action Plan.

The initial Action Plan was submitted to HUD on March 13, 2020. HUD's review period concluded on April 27, 2020.

Appendices

Appendix A: Response to Public Comments

Responses to the public comments received during the public comment period for Substantial Action Plan Amendment 6 will be published in this appendix. In some instances, public comments are shortened to focus on the specific elements of the comment as they pertain to the Action Plan. Personal details or private information will be removed from public comments where necessary to protect the identity of the commenter. Lastly, public comments that relate to the Hurricane Matthew Action Plan and Hurricane Florence Action Plan are included in both documents.

Comments specific to the status of an individual's CDBG-DR application for assistance are referred internally for additional review and may not be reflected in this appendix.

Appendix B: Methodology & Assumptions for Estimating Housing Unmet Need

Section B1: Determining Total Housing Unmet Need – Owner-Occupied and Rental Housing

Data Source	Methodology & Assumptions Estimated Total Loss (Need)	Methodology & Assumptions Estimated Resources Available/Received
NCORR Hurricane Florence Homeowner Recovery Program Damage Assessments as of 11/2/2022	**Based on estimated construction intent from approved Homeowner Recovery Program Damage Inspections:**	**N/A**
	For Mobile Home Replacement or Single-Family Reconstruction an average estimation of replacement or reconstruction costs	N/A
	For Rehabilitation/Reimbursment the sum of verified completed repair costs and verified estimate of remaining repair costs	N/A
Hurricane Florence SBA Home Loans as of 10/21/2022	**Based on verified damage amounts**	**Based on current amounts for non-canceled loans**
	Sum of verified damage amounts excluding contents, debris removal and landscaping	Sum of current amounts excluding contents, debris removal, landscaping and refinance
Hurricane Florence FEMA IA as of 11/20/2019	**Based on Real Property (RP) Verified Loss for Owners**	**Based on FEMA IA Repair/Replace assistance received for Owners**
	Multiplied by 5.6 based on State Determined Multiplier (see Analysis Comparing FEMA Verified Loss and SBA Verified Damage below)	No other assumptions
	Based on Personal Property (PP) Verified Loss for Renters	**Based on Renter Income reported to FEMA for Renters**
	Multiplied by 7.6 based on State Determined Multiplier (see Analysis Comparing FEMA Verified Loss and SBA Verified Damage below)	Renters with income $20,000 and below likely have landlords without insurance to cover estimated total loss ($0.00 for assistance available/received)

Data Source	Methodology & Assumptions Estimated Total Loss (Need)	Methodology & Assumptions Estimated Resources Available/Received
Hurricane Florence NFIP as of 4/5/2020	**Based on NFIP Building Payment Amount**	**Based on NFIP Building Payment Amount**
	Increased by 20% under assumption NFIP Building Payment Amounts cover 80% of total building loss	No other assumptions
Hurricane Florence NC Step as of 8/31/2019	**Based on Estimated Scope of Work cost**	**Based on Final Scope of Work cost**
	No other assumptions	No other assumptions

Duplicate property addresses that applied for multiple sources of assistance across the various data sets were identified and only the highest estimated property loss was used when aggregating the Estimated Total Loss (Need).

Section B2: Analysis Comparing FEMA Verified Loss and SBA Verified Damage

Because FEMA's initial inspections arriving at verified loss historically underestimate total damage and typically only estimate costs to make the home habitable, FEMA's verified loss amounts were adjusted upwards based on a State Determined Multiplier. The State Determined Multiplier was calculated based on comparing the FEMA Verified Loss for owners and renters to the SBA Verified Damage amount using the most recent FEMA and SBA data for both Hurricane Matthew and Hurricane Florence. The FEMA and SBA data sets were matched based on the FEMA Registration ID, and only includes owners and renters with loss amounts calculated by both FEMA and SBA.

The State's analysis shows that for owners the SBA Verified Damage Amount in total is 5.6 times higher than FEMA's Verified Loss, and for renters the SBA Verified Damage Amount in total is 7.6 times higher than FEMA's Verified Loss:

Owners versus Renters	Total Applicants Analyzed	FEMA Verified Loss (FVL)	SBA Verified Damage Amount	Percent Difference	State Determined Multiplier Applied to FEMA Verified Loss (FVL)
Owners	10,403	$64,189,984	$427,199,692	566%	**5.6**
Renters	1,034	$2,664,706	$23,012,782	764%	**7.6**

Section B3: Determining Serious Housing Unmet Need: Owner-Occupied and Rental Housing

To analyze Serious Housing Unmet Need, the State used the Estimated Total Loss (Need) calculated from the data sets, methodology and assumptions summarized in Section B1. The State defines Serious Housing Unmet Need as:

- Flooding 1 foot or above on the first floor; or
- For Owners, Estimated Total Loss (Need) $44,800 or above; or
- For Renters, Estimated Total Loss (Need) $15,200 or above.

The thresholds based on Estimated Total Loss (Need) outlined directly above were derived from HUD's methodology to estimate Serious Housing Unmet Need:

- For Owners, HUD uses the FEMA inspected real property damage of $8,000 or above to define Serious Unmet Need; applying the State Determined Multiplier of 5.6 outlined in Section B2 arrives at the $44,800 Estimated Total Loss (Need) threshold;
- For Renters, HUD uses the FEMA personal property damage of $2,000 or above to define Serious Unment Need; applying the State Determined Multiplier of 7.6 outlined in Section B2 arrives at the $15,200 Estimated Total Loss (Need) threshold.

It is important to note that only the FEMA IA data set includes an indication of flood level; for all other data sets the determination of Serious Housing Unmet Need is based only on the Estimated Total Loss (Need).

Appendix C: Previous Housing Unmet Need Assessment (late 2019)

1.10 Analysis of Housing Unmet Need

The FEMA IA data and the Housing Impact Assessment provide a starting point for analyzing the unmet housing need. To use the best data available, the remaining unmet needs were reassessed in late 2019. Therefore, the total approximate properties with remaining unmet needs is different than what is reflected in the Housing Impact Assessment.

HUD calculates unmet housing need as the number of housing units with unmet needs multiplied by the estimated cost to repair those units less repair funds already provided by FEMA and SBA. For homeowners, unmet needs are defined as:

- FVL greater than $0 with no insurance to cover that damage and the property was located outside the 1 percent flood risk hazard area.
- FVL greater than $0 with no insurance to cover that damage and the property was located inside the flood hazard area and the household income was less than 120 percent AMI.
- FVL greater than $0 without hazard insurance with non-flood damage with incomes below the greater of the national median or 120 percent of AMI.

For renters, unmet needs include FVL to personal property greater than $0 and with incomes less than 50 percent AMI.

1.10.1 Total Housing Unmet Recovery Need

For its unmet housing need calculation, HUD only considers Major Low, Major High and Severe damage categories for both owner and renter households. Based on HUD's definition of unmet need, 12,013 owners and 3,509 renters for a total of 15,522 registrants satisfy the HUD criteria for unmet need.

Table 33 - FEMA IA Registrants meeting HUD Unmet Needs Criteria, Owners

County	Major-Low	Major-High	Severe	Total
Craven	1,335	742	138	2,215
Robeson	1,167	130	18	1,315
Pender	483	375	351	1,209
Carteret	759	148	35	942
Duplin	232	294	221	747

County	Major-Low	Major-High	Severe	Total
New Hanover	603	92	17	712
Onslow	508	124	37	669
Brunswick	406	116	50	572
Columbus	438	110	16	564
Pamlico	412	70	14	496
Jones	261	118	74	453
Bladen	299	42	16	357
Cumberland	263	41	27	331
Beaufort	271	51	1	323
Wayne	175	11	4	190
Scotland	154	12	6	172
Sampson	100	27	22	149
Lenoir	101	20	2	123
Harnett	78	12	14	104
Moore	66	21	4	91
Hyde	53	2	-	55
Richmond	42	2	-	44
Hoke	37	2	1	40
Lee	22	1	2	25
Pitt	21	2	-	23
Union	15	1	-	16
Durham	11	3	-	14
Guilford	10	3	-	13
Johnston	12	-	-	12
Chatham	7	2	1	10
Orange	10	-	-	10
Anson	8	-	-	8
Wilson	4	-	1	5
Greene	4	-	-	4
Total	**8,367**	**2,574**	**1,072**	**12,013**

Table 34 - FEMA IA Registrants meeting HUD Unmet Needs Criteria, Renters

County	Major-Low	Major-High	Severe	Total
Craven	365	356	40	761
Robeson	159	72	9	240
Pender	78	156	76	310
Carteret	102	78	9	189
Duplin	68	131	38	237
New Hanover	244	95	5	344
Onslow	219	173	25	417
Brunswick	60	43	4	107
Columbus	102	57	9	168
Pamlico	24	14	6	44
Jones	30	35	14	79
Bladen	38	25	4	67
Cumberland	105	54	34	193
Beaufort	28	12	-	40
Wayne	19	8	-	27
Scotland	64	61	5	130
Sampson	9	10	2	21
Lenoir	10	5	-	15
Harnett	12	6	-	18
Moore	5	8	3	16
Hyde	1	-	-	1
Richmond	3	-	-	3
Hoke	3	2	-	5
Lee	3	1	-	4
Pitt	3	3	-	6
Union	2	-	-	2
Durham	3	1	-	4
Guilford	7	11	1	19
Johnston	3	1	1	5
Chatham	1	1	1	3

County	Major-Low	Major-High	Severe	Total
Orange	14	20	-	34
Anson	-	-	-	-
Wilson	-	-	-	-
Greene	-	-	-	-
Total	**1,784**	**1,439**	**286**	**3,509**

HUD applies a damage multiplier that is no less than 25 percent of the median damage level of declared disasters in 2018. These multipliers are based on the average unmet housing needs less assistance from FEMA and SBA provided for repair and reconstruction to homes with serious unmet needs. The following figure provides HUD's serious unmet housing needs multipliers by damage category:

Table 35 - HUD Unmet Housing Need Multipliers by Damage Category

Damage Category	Multiplier
Major-Low	$ 37,976
Major-High	$ 60,725
Severe	$ 77,759

The total unmet recovery need, including both homeowner and renter unmet need, is $734.7 million. Approximately three-quarters of the unmet recovery need is with owner occupied structures. The remaining 25 percent of the unmet need is with renters.

The unmet need for renters is determined using the formula prescribed by HUD for unmet needs according to the supplemental information found in 85 FR 4681. As a substitute for real property damage for rental property, the amount of personal property damage for each FEMA IA claim above the "Major-Low" threshold of damage was considered to have an unmet need. This unmet need was multiplied by the damage estimate calculation determined through HUD's analysis of 2018 disasters. This estimate was aggregated by county to determine county-level unmet rental needs.

The following figure provides a breakdown of total unmet needs for owner occupied and renter occupied households using FEMA IA data and the unmet needs multipliers previously provided.

Table 36 - Total Unmet Housing Need, Owners and Renters by County

County	Total Owner	Total Renter	Grand Total
Craven	$ 106,486,652	$ 38,589,700	$ 145,076,352

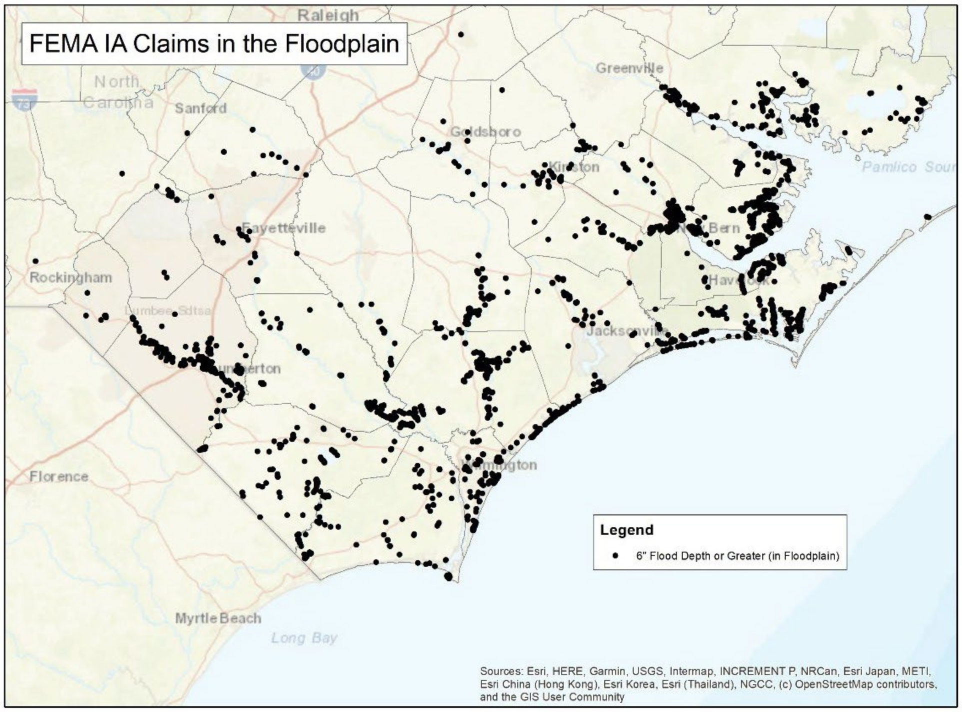
County	Total Owner	Total Renter	Grand Total
Robeson	$ 53,611,904	$ 11,110,215	$ 64,722,119
Pender	$ 68,407,692	$ 18,344,912	$ 86,752,604
Carteret	$ 40,532,649	$ 9,309,933	$ 49,842,582
Duplin	$ 43,848,321	$ 13,492,185	$ 57,340,506
New Hanover	$ 29,808,131	$ 15,423,814	$ 45,231,945
Onslow	$ 29,698,791	$ 20,766,144	$ 50,464,935
Brunswick	$ 26,350,306	$ 5,200,771	$ 31,551,077
Columbus	$ 24,557,382	$ 8,034,708	$ 32,592,090
Pamlico	$ 20,985,488	$ 2,228,128	$ 23,213,616
Jones	$ 22,831,452	$ 4,353,281	$ 27,184,733
Bladen	$ 15,149,418	$ 3,272,249	$ 18,421,667
Cumberland	$ 14,576,906	$ 9,910,436	$ 24,487,342
Beaufort	$ 13,466,230	$ 1,792,028	$ 15,258,258
Wayne	$ 7,624,811	$ 1,207,344	$ 8,832,155
Scotland	$ 7,043,558	$ 6,523,484	$ 13,567,042
Sampson	$ 7,147,873	$ 1,104,552	$ 8,252,425
Lenoir	$ 5,205,594	$ 683,385	$ 5,888,979
Harnett	$ 4,779,454	$ 820,062	$ 5,599,516
Moore	$ 4,092,677	$ 908,957	$ 5,001,634
Hyde	$ 2,134,178	$ 37,976	$ 2,172,154
Richmond	$ 1,716,442	$ 113,928	$ 1,830,370
Hoke	$ 1,604,321	$ 235,378	$ 1,839,699
Lee	$ 1,051,715	$ 174,653	$ 1,226,368
Pitt	$ 918,946	$ 296,103	$ 1,215,049
Union	$ 630,365	$ 75,952	$ 706,317
Durham	$ 599,911	$ 174,653	$ 774,564

County	Total Owner	Total Renter	Grand Total
Guilford	$ 561,935	$ 1,011,566	$ 1,573,501
Johnston	$ 455,712	$ 252,412	$ 708,124
Chatham	$ 465,041	$ 176,460	$ 641,501
Orange	$ 379,760	$ 1,746,164	$ 2,125,924
Anson	$ 303,808	$ -	$ 303,808
Wilson	$ 229,663	$ -	$ 229,663
Greene	$ 151,904	$ -	$ 151,904
Total	**$ 557,408,990**	**$ 177,371,533**	**$ 734,780,523**

Note that while Robeson County had more total claims than Pender County, Pender County was more significantly impacted by total damage than Robeson County.

The estimate for these repairs does not factor in the cost to elevate damage properties located in floodplains. A total of 6,279 FEMA IA applicants experienced a flood depth greater than six inches within the Special Flood Hazard Area (SFHA). Estimating a conservative cost of elevation of $50,000 for these properties, an additional unmet need of $313.9 million is realized if all properties were to be elevated with CDBG-DR funds.

Figure 14 - FEMA IA Claims in the Floodplain



4.10.2 Strategic Buyout Impacts on Housing Need

An additional unmet recovery need is created as an externality to the significant amount of property acquisition performed under the CDBG-MIT funded Strategic Buyout Program. As property owners voluntarily participate in buyout programs, there is a growing need for affordable housing solutions for those buyout participants to relocate to.

CDBG-DR funds will be used to develop housing that addresses the new housing need created by large-scale property buyout. As buyout is focused neighborhood-by-neighborhood, a neighborhood-based approach to housing development is preferred so that the parts of a community which elect to buyout may ideally relocate together. To the extent that is feasible and practicable, housing development would look to create innovative, clustered development to meet that housing need.

In assessing a cost to execute this activity, the HOME Investment Partnerships Program maximum per-unit subsidy is used as the baseline for comparing how much assistance may be needed for each unit created. This calculation is provided in the HUD-published Notice establishing an interim policy to use the Section 234 - Condominium Housing basic mortgage limits, for elevator-type projects, as an alternative to the Section 221(d)(3) of the National Housing Act (12 U.S.C. 17151) limits in order to determine the maximum amount of HOME funds that may be invested on a per-unit basis in HOME-assisted housing projects[30]. While a potential housing project will not be based on HOME requirements, these subsidy limits are a starting point for estimating the cost of construction. The estimated cost is based on a three-bedroom replacement house, at $112,611 a unit as set forth in 84 FR 20386 published May 9, 2019.

Using the 2,302 identified properties potentially requiring replacement housing due to the buyout program need, and with an understanding that buyout is voluntary and will therefore not reach full participation within that population, and additionally accounting for other housing solutions provided during buyout such as buyout program incentives rather than direct replacement housing, the following matrix is developed to estimate the potential cost of the affordable housing need relative to the mitigation needs assessment. Note that the housing replaced is not meant to be used by the buyout participant, but instead seeks to account for the amount of housing permanently lost in the housing stock due to buyout.

Table 37 - Additional Need for Affordable Housing in Context with Buyout

Buyout w/ Affordable Housing Need	Units Needed	Estimated Cost of Affordable Housing
10% Participation	230	$ 25,923,052
20% Participation	460	$ 51,846,104
30% Participation	**691**	**$ 77,769,157**

Construction cost for affordable housing will be based on the actual cost of construction.

Similar to the buyout process, stakeholder and community input and environmental justice will be a crucial component of the proposed development of additional affordable housing. NCORR stands in support of recovering local communities and their changing needs after disaster, and seeks to develop affordable housing that is most responsive to the needs of the clientele to be served.

This increased need is primarily funded through the Affordable Housing Development Program, the Homeownership Assistance Program, the Public Housing Restoration Fund, and the Small Rental Recovery Program.

4.10.3 Small Business Administration (SBA) Funds

Post-disaster, the U.S. Small Business Administration (SBA) provides subsidized low-interest disaster loans to homeowners and renters. SBA loans can be used to repair or replace real estate and personal property impacted by the storm.

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[30] U.S. Department of Housing and Urban Development. *HOME Maximum Per-Unit Subsidy Limits.* https://www.hudexchange.info/resource/2315/home-per-unit-subsidy/

As of June 20, 2019, there were 23,203 applicants in impacted areas that applied for assistance. 9,046 applicants were either approved for loans or are in the process of approval. The total funds approved (less personal contents funding as this will not be considered in the calculation of unmet needs) is $201.8 million.

Table 38 - SBA Funds Loaned in Impacted Areas

Impacted County	Applicant Count	Approved or Pending Applicants	Total Amount of Loan
Craven	2,698	1,245	$ 26,909,900
Pender	1,766	775	$ 25,056,261
New Hanover	3,213	1,345	$ 24,707,402
Carteret	1,980	987	$ 23,485,300
Onslow	2,878	1,148	$ 21,812,400
Duplin	975	397	$ 16,170,100
Brunswick	1,450	613	$ 13,797,100
Robeson	1,404	377	$ 7,090,000
Jones	597	241	$ 7,068,400
Cumberland	1,431	374	$ 5,897,300
Columbus	817	253	$ 4,911,900
Pamlico	455	167	$ 3,566,500
Bladen	533	148	$ 3,170,000
Sampson	397	126	$ 2,717,200
Scotland	407	153	$ 2,359,300
Wayne	399	131	$ 2,249,400
Harnett	253	89	$ 1,985,600
Beaufort	288	85	$ 1,761,600
Lenoir	270	78	$ 1,250,100
Hoke	197	70	$ 1,123,600
Moore	105	39	$ 988,700
Richmond	135	49	$ 971,900
Pitt	110	30	$ 589,500
Johnston	65	18	$ 450,600
Durham	40	16	$ 297,500
Guilford	58	13	$ 249,500

Impacted County	Applicant Count	Approved or Pending Applicants	Total Amount of Loan
Lee	39	13	$ 206,900
Greene	42	14	$ 179,500
Hyde	70	11	$ 179,400
Anson	32	8	$ 145,400
Orange	28	8	$ 140,400
Union	24	10	$ 139,700
Chatham	19	9	$ 120,400
Wilson	28	6	$ 102,300
Total	**23,203**	**9,046**	**$ 201,851,063**

In accordance with guidance issued in 84 FR 28836, "Updates to Duplication of Benefits Requirements under the Stafford Act for Community Development Block Grant (CDBG) Disaster Recovery Grantees", NCORR will review individual applicants to programs to assess whether they meet the criteria of an unmet need despite receiving SBA funds to recover due to income level or hardship. The criteria for determining applicability of SBA as a DOB for grant awards will be detailed in the descriptions of programming in the Action Plan.

4.10.4 National Flood Insurance Program (NFIP) Payments

The NFIP allows property owners in participating communities to buy insurance to protect against flood losses. Flood insurance is federally backed and administered by NFIP under the umbrella of FEMA. HUD requires that the unmet recovery needs analysis addresses flood insurance payments received by homeowners and renters in impacted areas.

As of June 2019, 14,951 claims have been made within disaster declared counties that resulted in payments of $524 million. Craven, Carteret, Onslow, and New Hanover had the largest number of claims, all with over 1,500 claims each. Craven County had the highest number of total claims (2,727) as well as the highest NFIP payments with $172 million. This figure is more than three times greater than the next highest county, Carteret, which had 2,283 total claims but only $51 million in payment.

Generally, LMI individuals and households are less likely to carry flood insurance than individuals and households with more resources. As the LMI population of Craven County is low compared to other impacted counties, the disproportionate amount of flood insurance payments in Craven County compared to its neighbors is supported.

Another source of funding provided by the NFIP is Increased Cost of Compliance (ICC). ICC coverage provides payment to help cover the cost of mitigation activities that will reduce the risk of future flood damage to a building. When a building covered by a Standard Flood

Insurance Policy suffers a flood loss and is declared to be substantially or repetitively damaged, ICC will pay up to $30,000 to bring the building into compliance with State or community floodplain management laws or ordinances. Usually this means elevating or relocating the building so that it is above the base flood elevation (BFE). Non-residential structures may also be flood-proofed. ICC coverage applies solely to buildings and only covers the cost of the compliance measures undertaken. It is filed separately from the normal flood insurance claim.

A total of $841,577 in ICC claims have been paid in the impacted counties. Craven, Carteret, and Pamlico counties have the highest total payments.

Table 39 - NFIP Claims and ICC

County	# of Claims	Sum of Claims	Sum of ICC
Craven	2,727	$ 172,487,652	$ 221,639
Carteret	2,283	$ 51,225,566	$ 180,707
Onslow	1,773	$ 33,882,429	$ -
New Hanover	1,588	$ 28,861,404	$ 17,760
Pamlico	1,259	$ 31,243,474	$ 188,722
Beaufort	1,167	$ 21,188,343	$ 91,304
Brunswick	1,066	$ 19,658,291	$ -
Robeson	715	$ 26,012,837	$ 15,000
Pender	620	$ 46,093,515	$ 30,940
Duplin	306	$ 36,574,027	$ 15,000
Columbus	298	$ 11,955,246	$ 43,618
Cumberland	203	$ 4,653,898	$ -
Lenoir	150	$ 7,530,501	$ -
Wayne	145	$ 3,923,697	$ -
Jones	104	$ 11,454,535	$ -
Orange	86	$ 3,979,933	$ -
Sampson	77	$ 5,227,164	$ 33,300
Bladen	67	$ 2,563,078	$ -
Hyde	47	$ 538,617	$ -
Durham	45	$ 947,251	$ -
Guilford	44	$ 1,133,707	$ -
Moore	35	$ 514,894	$ 3,587
Pitt	35	$ 359,738	$ -

County	# of Claims	Sum of Claims	Sum of ICC
Harnett	25	$ 500,793	$ -
Union	19	$ 280,808	$ -
Scotland	14	$ 309,869	$ -
Lee	13	$ 710,661	$ -
Johnston	12	$ 184,260	$ -
Wilson	9	$ 278,931	$ -
Hoke	7	$ 176,681	$ -
Chatham	6	$ 206,985	$ -
Greene	3	$ 123,141	$ -
Richmond	3	$ 80,353	$ -
Total	**14,951**	**$ 524,862,277**	**$ 841,577**

Appendix D: Methodology & Detailed Data to Identify State Defined MID Areas

Based on data as of May 2020 the State conducted an analysis of damage to counties that were impacted by both hurricane Matthew and Hurricane Florence in consideration of the unique recovery needs created by the large area of the State that was impacted by both hurricanes. Aligning with the allocation methodology outlined in Appendix A for both 82 FR 5591 (Hurricane Matthew) and 85 FR 4681 (Hurricane Florence), the State calculated an estimated housing unmet need for each county, for each hurricane. This analysis used the Major-Low, Major-High, and Severe damage categories for both hurricanes and multiplied those damage categories by the repair estimation factors included in Appendix A for each respective notice. The threshold to be considered a State Defined MID is greater than $10 million in combined unmet need at the county level. Table 4 in the Housing Impact and Unmet Needs Assessment combines the data below to create the State and HUD Defined MID areas.

Table 40 - Estimated Unmet Housing Need, State Identified and HUD Identified MID Areas, Matthew Data (May 2020)

County	Hurricane Matthew		
	Major-Low	Major-High	Severe
Robeson (County)	$ 76,874,000	$ 35,179,760	$ 6,365,751
Craven (County)	$ 2,223,855	$ 822,384	$ -
Pender (County)	$ 2,718,045	$ 3,380,912	$ 2,201,241
Cumberland (County)	$ 33,357,825	$ 20,742,352	$ 6,246,765
Duplin (County)	$ 3,376,965	$ 1,279,264	$ 297,465
Wayne (County)	$ 28,635,565	$ 14,346,032	$ 3,510,087
Columbus (County)	$ 13,782,410	$ 6,533,384	$ 1,070,874
Onslow (County)	$ 164,730	$ 91,376	$ 59,493
Carteret (County)	$ 54,910	$ 45,688	$ 59,493
New Hanover (County)	$ -	$ -	$ -
Edgecombe (County)	$ 19,987,240	$ 15,122,728	$ 6,901,188
Brunswick (County)	$ 1,070,745	$ -	$ 178,479
Lenoir (County)	$ 15,759,170	$ 6,533,384	$ 1,011,381
Jones (County)	$ 741,285	$ 319,816	$ 59,493
Bladen (County)	$ 5,765,550	$ 2,147,336	$ 773,409
Pamlico (County)	$ -	$ -	$ -

County	Hurricane Matthew		
	Major-Low	Major-High	Severe
Beaufort (County)	$ 2,553,315	$ 685,320	$ 59,493
Sampson (County)	$ 5,655,730	$ 1,918,896	$ 713,916
Scotland (County)	$ 247,095	$ -	$ -
Pitt (County)	$ 9,389,610	$ 3,426,600	$ 535,437
Harnett (County)	$ 4,035,885	$ 1,507,704	$ 178,479
Dare (County)	$ 6,616,655	$ 3,974,856	$ 297,465
Johnston (County)	$ 5,463,545	$ 3,380,912	$ 1,130,367

Table 41 - Table 42 - Estimated Unmet Housing Need, State Identified and HUD Identified MID Areas, Florence Data (May 2020)

County	Hurricane Florence		
	Major-Low	Major-High	Severe
Robeson (County)	$ 63,040,160	$ 13,359,500	$ 2,488,288
Craven (County)	$ 72,534,160	$ 70,562,450	$ 15,085,246
Pender (County)	$ 24,038,808	$ 34,613,250	$ 34,836,032
Cumberland (County)	$ 17,317,056	$ 5,951,050	$ 5,132,094
Duplin (County)	$ 12,228,272	$ 28,540,750	$ 21,150,448
Wayne (County)	$ 8,848,408	$ 1,214,500	$ 311,036
Columbus (County)	$ 22,671,672	$ 10,748,325	$ 1,943,975
Onslow (County)	$ 29,773,184	$ 19,614,175	$ 5,132,094
Carteret (County)	$ 35,545,536	$ 14,574,000	$ 3,732,432
New Hanover (County)	$ 35,621,488	$ 12,812,975	$ 1,788,457
Edgecombe (County)	$ -	$ -	$ -
Brunswick (County)	$ 20,165,256	$ 10,383,975	$ 4,354,504
Lenoir (County)	$ 5,392,592	$ 1,639,575	$ 155,518
Jones (County)	$ 12,304,224	$ 10,141,075	$ 6,920,551
Bladen (County)	$ 14,316,952	$ 4,372,200	$ 1,632,939
Pamlico (County)	$ 18,950,024	$ 5,465,250	$ 1,555,180
Beaufort (County)	$ 13,785,288	$ 4,493,650	$ 155,518
Sampson (County)	$ 4,671,048	$ 2,368,275	$ 1,866,216

Scotland (County)	$ 10,253,520	$ 4,615,100	$ 855,349
Pitt (County)	$ 987,376	$ 303,625	$ -
Harnett (County)	$ 4,177,360	$ 1,153,775	$ 1,088,626
Dare (County)	$ -	$ -	$ -
Johnston (County)	$ 683,568	$ 60,725	$ 77,759

Appendix E: Previous Analysis of Other Unmet Needs (Agriculture)

NCOSBM identified agricultural impacts as one of the other most important recovery needs. On September 26, 2018, the North Carolina Department of Agriculture and Consumer Services (NCDACS) estimated that agriculture losses will be greater than $1.1 billion.[31] To respond to agriculture losses due to Hurricane Florence, the North Carolina General Assembly established the Hurricane Florence Agricultural Disaster Program of 2018 (HFADP), a one-time assistance program for agricultural producers who suffered a loss due to Hurricane Florence. On October 16, 2018, a $70 million bill was signed to fund the program. An additional allocation of $240 million was signed into law in Session Law 2018-138.

Approved applicants receive a payment amount based on information submitted, county ad-hoc committee loss estimates in eligible counties, average county yield data, and state price averages provided by U.S. Department of Agriculture – National Agricultural Statistics Service (USDA-NASS). To date, over 7,000 applications for assistance have been received.[32]

The Livestock Indemnity Program (LIP) is another source of relief for the agriculture sector, with a set payment of 75 percent of the national average value of lost cattle, sheep, goats, poultry, and a variety of exotic species. The Emergency Conservation Program (ECP) is available to agriculture producers to assist in the cleanup and repair of damaged agricultural materials, buildings, and land. Finally, the Emergency Assistance for Livestock, Honey-bees, and Farm-Raised Fish Program (ELAP) provides assistance for lost or damaged pasture forage, hay, silage, and other feed. The payment rate is $.94 for each grazing day lost and 60 percent of the actual cost incurred to purchase or produce feedstuffs.

The 2014 Farm Bill provides supplemental crop insurance up to the county average of yield, but high producing or low producing farms may not benefit from crop insurance the same way an average yielding farm might. The Noninsured Crop Disaster Assistance Program (NCDAP) provides additional assistance for noninsured crops, beginning at 55 percent of the average market price for the crop for an amount of loss that exceeds 50 percent of expected production. The 2014 Farm Bill authorizes higher levels of coverage ranging from 50 to 65 percent of production at 100 percent of the average market price.[33] For the purpose of this analysis, the NCDAP and insurance amount is estimated to be 55 percent of the crop loss. As forestry, green industry, vegetable and horticulture crop, and livestock are also insured, 55

[31] North Carolina Department of Agriculture and Consumer Services. *Total agricultural losses estimated at over $1.1 billion.* https://www.ncdps.gov/news/press-releases/2018/09/26/total-agricultural-losses-estimated-over-11-billion.

[32] North Carolina Department of Agriculture and Consumer Services. *Agricultural Disaster Program Payment Calculations.* https://blog.ncagr.gov/2019/02/12/calculating-disaster-aid-payments-for-the-hurricane-florence-agricultural-disaster-program-of-2018/.

[33] United States Department of Agriculture. *Noninsured Crop Disaster Assistance Program for 2015 and Subsequent Years.* https://www.fsa.usda.gov/Internet/FSA_File/1-nap_r02_a19.pdf.

percent of the loss is considered ensured before the percent of loss programs such as LIP and ELAP are applied to the loss.

Estimating total unmet agricultural need is difficult due to the variety of programs and insurance options available to individual agriculture sector participants. While the total impacts are high, the total resources available to recover are commensurately high. Based on the extent of damages and funds available, the unmet need for agricultural recovery is $159.3 million.

Table 43 - Agricultural Unmet Needs and Assistances Received (in millions)

Agriculture Sector	Loss	Insurance/ NCDAP	ELAP	LIP	HFADP	Total Unmet Need
Row Crop	$ 986.60	$ 542.63	$ -	$ -	$ -	$ 443.97
Forestry	$ 69.60	$ 38.28	$ 18.79	$ -	$ -	$ 12.53
Green Industry	$ 30.00	$ 16.50	$ 8.10	$ -	$ -	$ 5.40
Vegetable and Horticulture Crop	$ 26.80	$ 14.74	$ 7.24	$ -	$ -	$ 4.82
Livestock, poultry, and aquaculture	$ 23.10	$ 12.71	$ -	$ 7.80	$ -	$ 2.60
Total	**$ 1,136.1**	**$ 624.9**	**$ 34.1**	**$ 7.8**	**$ 310.0**	**$ 159.32**

Based on a review of unmet need priorities, and continued discussions on agricultural recovery needs, it is NCORR's belief that the agricultural unmet need will be met through other funding sources.

Appendix F: SAPA 4 Analysis of Estimated Unmet Need Across CDBG Funding Sources to Inform State Allocation Changes

The following sections reflect NCORR's ongoing analysis of unmet needs across CDBG disaster recovery and mitigation sources and the corresponding reallocations implemented in SAPA 4. Given that the total CDBG funding allocations from HUD have not changed, NCORR will continue to make the necessary allocation changes for its CDBG-DR and CDBG-MIT grants to respond to the remaining unmet needs highlighted in this reanalysis and support the lingering demand for housing recovery programs. Such changes will be reflected in future amendments of this Action Plan.

Section F1: Background

The Department of Housing and Urban Development (HUD) and the State have recognized the exacerbating impact of Hurricane Matthew and Florence due to the occurrence of the storms in quick succession. The State can use funds allocated in response to Hurricane Matthew interchangeably and without limitation for the same activities in the most impacted and distressed areas related to Hurricane Florence, and vice versa[34]. For this reason, the State conducted an analysis of combined estimated unmet need for Hurricane Matthew and Florence to inform allocation changes in the following Substantial Action Plan Amendments:

- Hurricane Matthew CDBG-DR Action Plan Substantial Amendment 10
- Hurricane Florence CDBG-DR Action Plan Substantial Amendment 4
- CDBG-MIT Action Plan Substantial Amendment 4

Under the substantial amendments noted above, there were allocation changes within each CDBG funding source, and reallocations across CDBG funding sources.

[34] "Public Law 116-20: Additional Supplemental Appropriations for Disaster Relief Act, 2019." (Sec. 1101(a); Date: 06/06/2019). https://www.congress.gov/bill/116th-congress/house-bill/2157/text.

Section F2: Executive Summary

This analysis highlights that the $52.8 million allocation increase to the CDBG-DR housing recovery programs are rooted in the fact that the estimated owner-occupied and rental housing unmet need is so great when compared to the unmet need across all other categories. Additionally, this allocation increase is tied to the fact that this category also has the highest estimated funding gap when accounting for the revised allocations. The increased demand for Homeowner Recovery Program and increased construction costs further supports the State's decision to maximize funding for the CDBG-DR housing recovery programs.

Given that the total CDBG funding allocations from HUD have not changed, the State made a series of allocation changes for the CDBG-DR and CDBG-MIT grants to support an increase to the CDBG-DR housing recovery program allocations.

For CDBG-DR funds, this included a reallocation of $47.7 million in funding for public housing and infrastructure to the CDBG-MIT grant, which also aligns the longer-term resilience and mitigation activities for these programs with the objectives of the CDBG-MIT funds. A decrease of $5.1 million across the Code Enforcement Compliance and Support Program and planning allocations accounted for the remaining funds needed to allocate the additional $52.8 million in funding to the housing recovery programs.

For CDBG-MIT funds, the Strategic Buyout Program allocation was subsequently decreased by $59.4 million, largely to offset the increase of funding to the CDBG-MIT grant with the reallocation of the $47.7 million in public housing and infrastructure funds. This decrease also allowed for an increase of $5.1 million in the planning allocation and an increase of $6.6 million in the public housing allocation. These allocation increases will support the additional planning capacity anticipated for the larger scale public housing and infrastructure projects, and the anticipated increase in construction costs needed to support public housing restoration.

The State recognizes the significant estimated unmet need across all categories of recovery, however, has rooted the recent allocation changes in addressing the most significant estimated unmet need – owner-occupied and rental housing. Given the limited HUD funding available to address the total estimated unmet need, the State will continue to assess current allocations and use the limited funding to reduce the estimated funding gap across all categories of recovery and mitigation.

Section F3: Supporting Data for Analysis

Table F1 below provides a summary of allocation changes including revised total allocations for Hurricane Matthew (CDBG-DR), Hurricane Florence (CDBG-DR) and Mitigation (CDBG-MIT) activities combined.

Table F1 – Allocation Change Summary: Revised Total Allocations by CDBG Funding Source, Category & Program

CDBG Funding Source	Category	Program(s)	Revised Total Allocation	Allocation Change Summary
CDBG-DR	Owner-Occupied & Rental Housing	Homeowner Recovery Program	$581,085,307	**Increased** by $52 million
		Affordable Housing Development Fund	$121,719,805	**Increased** by $785,000
		Multi-Family Rental Housing Program	$19,516,018	
		Homeownership Assistance Program	$3,000,000	No allocation change
		Housing Counseling Fund	$1,500,000	No allocation change
		Code Enforcement Compliance and Support Program	$3,000,000	**Decreased** by $2.4 million
	Economic (Small Business)	Small Business Recovery Assistance	$4,500,000	No allocation change
	Administration & Planning	N/A	$44,851,870	**Decreased** by $2.7 million
Total CDBG-DR Allocation			**$779,173,000**	--
CDBG-MIT	Owner-Occupied & Rental Housing	Strategic Buyout Program	$123,103,334	**Decreased** by $59.4 million
	Public Housing	Public Housing Restoration Fund	$36,246,916	**Increased** by $6.6 million; includes **Re-allocation** of $29.7 million from CDBG-DR
	Infrastructure	Infrastructure Recovery Program	$18,000,000	**Reallocation** from CDBG-DR
	Administration & Planning	N/A	$25,335,750	**Increased** by $5.1 million
Total CDBG-MIT Allocation			**$202,686,000**	--
Total CDBG-DR & CDBG-MIT Allocations			**$981,859,000**	--

This appendix provides additional context and a consolidated justification for the allocation changes rooted in the combined analysis of estimated unmet needs. Table F2 below summarizes the combined unmet need estimates for Hurricane Matthew, Hurricane Florence and Mitigation activities, along with revised program funding allocations as the basis for contextualizing and justifying the allocation changes. Table F2 also includes an estimated funding gap, calculated as the estimated unmet need less the revised program funding allocated.

Table F2 - Hurricane Matthew, Hurricane Florence & Mitigation Activities: CDBG Unmet Need and Allocation Summary

Category	**CDBG Funding Source(s)**	**Estimated Unmet Need**	**% of Total Unmet Need***	**Revised Program Funding Allocated**	**% of Total Allocation***	**Estimated Funding Gap** (Estimated Unmet Need less Revised Program Funding Allocated)	**% of Total Estimated Funding Gap***
Owner-Occupied & Rental Housing	DR & MIT	$1,510,608,417	63%	$852,924,464	87%	$657,683,953	44%
Economic (Small Business)	DR	$584,411,718	24%	$4,500,000	<1%	$579,911,718	39%
Public Housing	MIT	$127,434,056	5%	$36,246,916	4%	$91,187,140	6%
Infrastructure	MIT	$181,657,339	8%	$18,000,000	2%	$163,657,339	11%
Administration & Planning	DR & MIT	--	--	$70,187,620	7%	--	--
Total CDBG Activities		**$2,404,111,530**	**100%**	**$981,859,000**	**100%**	**$1,492,440,150**	**100%**
Subtotal for CDBG-DR Activities		*$2,095,020,135*	*87%*	*$779,173,000*	*79%*	*$1,483,802,339*	*85%*
Subtotal for CDBG-MIT Activities		*$309,091,395*	*13%*	*$202,686,000*	*21%*	*$254,844,479*	*15%*

*Percentages may not add to 100% due to rounding

For reference, see Section F9 for a high-level summarization of the estimated unmet need reanalysis as outlined in the substantially amended CDBG-DR Action plans for Hurricane Matthew and Florence.

Following is a discussion of the data summarized in Table F2 by category.

Section F4: Owner-Occupied & Rental Housing

The owner-occupied and rental housing category has the highest estimated unmet need at $1.5 billion and represents 63 percent of the total estimated unmet need across all qualified disasters. The estimated unmet need for this category is nearly three times greater than the economic (small business) estimated unmet need, the next highest category in terms of estimated unmet need. The owner-occupied and rental housing category has the highest allocation with nearly $853 million in funding, representing 87 percent of the total CDBG allocations. This category also has the highest estimated funding gap at roughly $658 million, representing 44 percent of the total estimated funding gap across all categories.

The reanalysis of owner-occupied and rental housing unmet need conducted by the State (see Section F9) highlights an increased serious housing unmet need, specifically for Hurricane Florence, when compared to previous estimates. Additionally, the CDBG-DR Action Plans note an increased demand for the Homeowner Recovery Program and increased construction costs which further necessitate a need for additional funding. For these reasons, coupled with the significant estimated unmet need and estimated funding gap, the State has chosen to maximize funding in this category to further support the housing recovery efforts.

The increased allocations for the housing recovery programs were largely achieved through a reallocation of previous CDBG-DR funding to CDBG-MIT funding for Infrastructure ($18 million) and the Public Housing Restoration Fund ($29.7 million). To offset the reallocation of these funds to the CDBG-MIT grant, the State decreased the CDBG-MIT Strategic Buyout allocation in this category. These reallocations coupled with a decrease of $2.4 million in the Code Enforcement Compliance and Support Program allocation allowed the State to allocate an additional $52.8 million to the housing programs.

It is also important to note that more funding has been allocated to the Homeowner Recovery Program as the estimated owner-occupied housing loss (need) represents over 90% of the estimated total loss (need) in this category. To further maximize funding allocated for the Homeowner Recovery Program, no additional allocations were made to the Homeownership Assistance Program or Housing Counseling Fund.

Section F5: Economic (Small Business)

The economic (small business) category represents 24 percent of the total estimated unmet need, with over $584 million in estimated unmet need. While there is a significant estimated unmet need for this category, as noted above the estimated unmet need for owner-occupied and rental housing is nearly three times greater. Additionally, the estimated funding gap for the economic (small business) category is roughly $580 million, however is five percent lower than the estimated funding gap for the owner-occupied and rental housing category. For these reasons, the State has chosen to maximize funding for housing recovery and has not made any additional allocations to the existing $4.5 million allocation for the economic (small business) category.

Section F6: Public Housing

The public housing category represents five percent of the total estimated unmet need, with over $127 million in estimated unmet need. The public housing category has $36.2 million in funding allocated, representing four percent of the total CDBG allocations. This category has the lowest estimated funding gap at $91 million, representing six percent of the total estimated funding gap across all categories.

As noted in the owner-occupied and rental housing discussion, the State has reallocated $29.7 million of funding for the Public Housing Restoration Fund from CDBG-DR to CDBG-MIT. This reallocation not only allows the State to further strengthen the ongoing recovery efforts related to housing with CDBG-DR funds, but also creates a realignment of longer-term resilience and mitigation activities, such as those in the Public Housing Restoration program, with the objectives of the CDBG-MIT funds. The public housing allocation under CDBG-MIT was further increased by $6.6 million in anticipation of increased construction costs which further necessitate a need for additional funding.

Section F7: Infrastructure

The infrastructure category represents eight percent of the total estimated unmet need, with over $181 million in estimated unmet need. The infrastructure category has $18 million in funding allocated, representing eight percent of the total CDBG allocations. This category has the second lowest estimated funding gap at $164 million, representing 11 percent of the total estimated funding gap across all categories.

The reanalysis of infrastructure unmet need conducted by the State (see Section F9) highlights a decrease in infrastructure unmet need for both Hurricane Matthew and Florence when compared to previous estimates. The reanalysis also highlights that a significant amount of Federal and State funds has been obligated or allocated to address the ongoing infrastructure unmet needs for both hurricanes. For these reasons, the State has chosen to maximize funding for housing recovery and has not made any additional allocations to the infrastructure category.

As noted in the owner-occupied and rental housing discussion, the State has reallocated $18 million of funding for the Infrastructure Recovery Program from CDBG-DR to CDBG-MIT. This reallocation not only allows the State to further strengthen the ongoing recovery efforts related to housing with CDBG-DR funds, but also creates a realignment of longer-term resilience and mitigation activities, such as those in the Infrastructure Recovery program, with the objectives of the CDBG-MIT funds.

Section F8: Administration & Planning

The administration and planning category has $70.2 million in funding allocated, representing seven percent of the total CDBG allocations. This category allocates funds for administrative costs associated with implementing the various CDBG recovery/mitigation programs and planning related activities, such as Action Plan development, public outreach, and coordination on future planning with local and regional coordinating entities.

CDBG-DR funding allocated for planning has decreased by $2.7 million, and CDBG-MIT funding allocated for planning has increased by $5.1 million; the net change across CDBG allocations for planning is a $2.4 million increase. These planning allocation changes are tied to the reallocation of the public housing and infrastructure funds from CDBG-DR to CDBG-MIT referenced above and efforts to enhance resilience planning efforts in impacted counties. Larger scale public housing and infrastructure projects may require significant planning efforts necessitating a need for additional planning funds under the CDBG-MIT grant. Moreover, ongoing support for resilience planning efforts will continue to help impacted communities mitigate and prepare for future disasters. Administration allocations have not changed across the CDBG funding sources.

Section F9: Summary of Unmet Need Reanalysis for Hurricane Matthew and Florence

The State conducted a reanalysis of unmet need specifically related to owner-occupied housing, rental housing and infrastructure, based on most recent disaster recovery data sets. The methodology used to complete the reanalysis aligns closely to HUD's own standard approaches to analyzing unmet need, with a slight modification to the previous methodology. The revised methodology for the reanalysis accounts for additional and more finalized disaster recovery data sets that were not available when previous unmet need estimates were calculated.

As it relates to owner-occupied and rental housing for Hurricane Florence, the reanalysis estimates the serious housing unmet need for owner-occupied and rental housing is roughly $1.1 billion. The reanalysis highlights a roughly 26 percent increase in serious housing unmet need when compared to previous estimates. For Hurricane Matthew, the reanalysis estimates the housing unmet need for owner-occupied and rental housing is roughly $428 million. The reanalysis highlights a slight 1.33 percent decrease in housing unmet need when compared to previous estimates.

As it relates to infrastructure for Hurricane Florence, the reanalysis estimates the infrastructure unmet need is roughly $111 million. The reanalysis highlights a roughly 20 percent decrease in infrastructure unmet need when compared to previous estimates. For Hurricane Matthew, the reanalysis estimates the infrastructure unmet need is roughly $70 million. The reanalysis highlights an 87 percent decrease in infrastructure unmet need when compared to previous estimates. The reanalysis also highlights that a significant amount of Federal and State funds has been obligated or allocated to address the ongoing infrastructure unmet needs for both hurricanes.

These revised estimates for unmet need were combined with existing unmet need estimates related to public housing and economic (small business) to determine the total estimated unmet need. For the full reanalysis details, see *Hurricane Matthew CDBG-DR Action Plan Substantial Amendment 10* and *Hurricane Florence CDBG-DR Action Plan Substantial Amendment 4.*

NCORR
NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

NORTH CAROLINA DEPARTMENT OF PUBLIC SAFETY

OFFICE OF RECOVERY AND RESILIENCY

Action Plan Amendment 7
August 15, 2025

CDBG-MIT Action Plan

State of North Carolina

For U.S. Department of Housing and Development CDBG-MIT Funds

(Public Laws 115-123 and 116-20)

Revision History

Version	Date	Description
1.0	November 7, 2019	Initial Action Plan
1.1	March 5, 2020	Public comment period closed and edits from public comments incorporated.
2.0	January 11, 2021	Substantial Action Plan Amendment 1 – Program reallocations, change to current fair market value, introduction of the phased approach, and reallocation of the Resilient Affordable Housing Program.
3.0	June 30, 2021	Substantial Action Plan Amendment 2 – provide budget for allocation of additional $34,619,000 in CDBG-MIT funds, funds added to Strategic Buyout Program, and admin and planning budgets; update data and overall document to align with CDBG-MIT-funded activities; public comments made at public hearing and submitted after draft was published for public comment.
4.0	January 18, 2022	Substantial Action Plan Amendment 3 – clarifies the payment of incentives to households that did not maintain flood insurance; clarifies the eligibility of certain properties; clarifies that housing counseling may be provided as a public service in alignment with the Hurricane Florence CDBG-DR Action Plan; establishes that planning projects may be identified by NCORR staff.
5.0	December 9, 2022	Substantial Action Plan Amendment 4 – Program reallocations to diversify mitigation activities including addition of the Public Housing Restoration Fund and Infrastructure Recovery programs; updates to one-for-one replacement waiver; updated data added to Mitigation Needs Assessment.
6.0	March 15, 2024	Substantial Action Plan Amendment 5 – Program reallocations to continue the diversification of mitigation activities, including the reintroduction of housing development mitigation through the addition of the Affordable Housing Development Fund, the Code Enforcement Compliance and Support Program (CECSP), the Housing Counseling – Homeownership Assistance Program, and the Homeownership Assistance Program. Amendment also includes updates to the Strategic Buyout Program, including policy and waiver updates; revised Community Engagement and Comment Period section to provide prior SAPA comment periods/actions; updates to the Mitigation Needs Assessment in response to the 2023 NC State Hazard Mitigation Plan.
7.0	October 31, 2024	Substantial Action Plan Amendment 6 – Program reallocations to fund a new activity related to the mitigation of future flood loss in the form of residential property elevations.
8.0	August 15, 2025	Action Plan Amendment 7 – Completing the Strategic Buyout Program and transitioning all funds remaining to Residential Property Elevation Fund.

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1.0 Summary of Action Plan Changes – Amendment 7

1.1 Completion of the Strategic Buyout Program

The Strategic Buyout program has closed and all remaining applications are being transitioned to NCEM for review and consideration in HMGP. The remaining $2,964,099.15 will be reallocated to the newly established (in SAPA6) Residential Property Elevation Fund. The Fund was created to pay for the costs necessary to elevate property two feet above the Base Flood Elevation (BFE) as required by HUD or to any higher standard required of the local municipality. Elevation requirements are included in Section 5.2.1. All activities associated with Buyout activities will be reduced and marked complete.

1.2 Conversion to Planning Projects

Four Infrastructure Recovery Program activities have been identified as unable to be carried out as originally planned. The four activities expenditures, listed below, will transition to Planning activities via this action plan amendment. This does not reduce the Infrastructure Recovery Program budget or increase the Planning budget. The expenditures will be reclassified from the Infrastructure Recovery Program to Planning. During the course of implementing the activities, it was revealed that various factors, including cost of constructing the improvements and prioritizations of other of the subrecipient's tranche of CDBG-MIT-funded activities rendered these activities unfeasible to implement through construction.

The Infrastructure Recovery Program will be transitioning the following activities to planning projects:

- Robeson County - Rowland Drainage
- Robeson County - Public School Fueling Station
- Robeson County - Community College Drainage
- Robeson County - Fairmont Waste Water Treatment Plant Access Road

1.3 Allocation Changes

Table 1 - CDBG-MIT Allocations (APA 7)

Program	SAPA 6 Total	SAPA 7 Total	% of Total Allocation	$ to LMI	% to LMI	$ to HUD-defined MID areas	% to HUD-defined MID areas
Administrative Costs	$10,134,300	$10,134,300	5%	$0	0%	$5,067,150	50%
Planning Costs	$11,329,171	$11,329,171	6%	$0	0%	$5,664,586	50%
Residential Property Elevation Fund	$44,174,078	$47,138,177.15	23%	$25,051,138.15	53%	$22,087,039	50%
Strategic Buyout	$35,103,334	$32,139,234.85	15%	$17,551,667	50%	$17,551,667	50%
Public Housing Restoration	$24,245,117	$24,245,117	12%	$24,245,117	100%	$21,532,212	89%
Infrastructure Recovery	$24,500,000	$24,500,000	12%	$24,500,000	100%	$23,140,000	94%
Affordable Housing Development Fund	$43,700,000	$43,700,000	22%	$43,700,000	100%	$43,700,000	100%
Homeownership Assistance Program	$4,400,000	$4,400,000	2%	$3,080,000	70%	$4,400,000	100%
Housing Counseling – Homeownership Assistance Program	$100,000	$100,000	<1%	$70,000	70%	$100,000	100%
Code Enforcement and Compliance Support Program	$5,000,000	$5,000,000	2%	$4,000,000	80%	$3,500,000	70%
Total	**$202,686,000**	**$202,686,000**	**100%**	**$142,197,922.15**	**70%**	**$146,742,654**	**72%**

The Buyout activities have had their remaining budgets reallocated to increase funding for the Residential Property Elevation Fund. These reallocations mean that there is no significant change in service, but funds that were previously not expended for these activities. Revisions to the Strategic Buyout Program were done in consideration of the current Strategic Buyout Program level of participation.

2.0 Authority, Provision of Funds, and Waivers

On February 9, 2018, Public Law (PL) 115-123, the "Bipartisan Budget Act of 2018," made available $28 billion in Community Development Block Grant disaster recovery (CDBG–DR) funds and directed HUD to allocate not less than $12 billion for mitigation activities proportional to the amounts that CDBG–DR grantees received for qualifying disasters in 2015, 2016, and 2017. Of this mitigation allocation, the State of North Carolina received $168,067,000 by formula announced in the August 30, 2019, Federal Register Notice, 84 FR 45838. On January 6, 2021, an additional allocation of $34,619,000 in CDBG-Mitigation funding was made to the State under Public Law 116-20 for qualifying disasters in 2018 (announced in 86 FR 561).

North Carolina Session Law 2018-136 established the North Carolina Office of Recovery and Resiliency (NCORR), as the administering agency for CDBG-DR funds. NCORR is an office within the NC Department of Public Safety. As the implementing agency for CDBG-DR funds, NCORR assumes responsibility for the planning, administration, and implementation of CDBG-MIT funds.

PL 116-20, the "Additional Supplemental Appropriations for Disaster Relief Act, 2019" was enacted on June 6, 2019. In this law, grantees that received an allocation for mitigation funding provided by PL 115–123 in response to Hurricane Matthew may use the CDBG–MIT funds for the same activities, consistent with the requirements of the CDBG–MIT grant, in the most impacted and distressed (MID) areas related to Hurricane Florence. Therefore, the previous Action Plan contained activities that addressed the impact of both Hurricane Matthew and Hurricane Florence. On January 6, 2021, in 86 FR 561, the additional CDBG-MIT funds allocated to NCORR under PL 116-20 indicated that these funds may also be utilized for the same activities, consistent with the requirements of the CDBG-MIT grant, in the MID areas impacted by Hurricanes Matthew and Florence.

To fulfill the requirements of this new allocation, NCORR must submit a Substantial Amendment to the Action Plan for CDBG-MIT activities that identifies mitigation needs. This SAPA provides a summary of the actions, activities, and resources used to address the State's priority mitigation needs and goals. It is designed to help the State, local units of government, and other partners assess current and future needs, and will be updated as new information or changing conditions warrant a change in approach. Section 11.0 outlines the requirements for the CDBG-MIT Substantial Amendment process.

Additionally, a Federal Register notice in June 2022 described a modification to the "one-for- one" housing replacement waiver under Public Law 115-123 and 116-20 Waivers and Alternative Requirements. CDBG-MIT grantees are not required to demonstrate storm tie-back, and therefore CDBG-MIT funds may be used to remove lower-income dwellings in a hazardous zone as long as their removal meets the grantee's definition of "not suitable for replacement" due to the need to mitigate future risk.

3.0 Executive Summary

The State of North Carolina is in the unfortunate position of having to respond to two major disaster declarations in quick succession. Hurricane Matthew made landfall in the Carolinas on October 8, 2016. Less than two years later, Hurricane Florence dealt incredible damage to the recovering state when it made landfall on September 14, 2018. The ongoing recovery from Hurricane Matthew was greatly affected, as many areas impacted by Matthew were also impacted by Florence. The Unmet Recovery Needs Assessments and corresponding Action Plans for the Hurricane Matthew and Hurricane Florence recovery delve into the ongoing recovery effort specific to the CDBG-DR allocations for those disasters. Individuals seeking to familiarize themselves with the recovery efforts from those disasters should begin with those reports to understand the full breadth of the ongoing recovery. Topics relevant to CDBG-MIT funding are included in this Mitigation Needs Assessment and Action Plan, although they often intersect with storm recovery needs.

In Public Law 115-123, the State of North Carolina was allocated $168,067,000 in Community Development Block Grant – Mitigation (CDBG-MIT) funds. In Public Law 116-20, the State was allocated an additional $34,619,000 in CDBG-MIT funds for a total of $202,686,000 in CDBG- MIT funds. CDBG-MIT is a new funding approach from HUD intended to relieve the repetitive cycle of disaster relief allocations to often-impacted areas of the country. There are three Federal Register Notices that outline the requirements and expectations that HUD places on its grantees related to CDBG-MIT funds:

- 84 FR 45838, August 30, 2019 (the Main Notice);
- 85 FR 60821, September 28, 2020 (the Omni Notice); and
- 86 FR 561, January 6, 2021.

This Action Plan as amended is the State of North Carolina’s plan to use the $202.68 million allocation in accordance with the Notices. The administering agency, the North Carolina Office of Recovery and Resiliency (NCORR), an office of the North Carolina Department of Public Safety (NCDPS), will be administering the grant on behalf of the State of North Carolina.

References to the HUD grantee and to the State as a decision-making entity are construed to mean NCORR in all instances.

The Action Plan consists primarily of the Mitigation Needs Assessment, an analysis of the specific conditions in the State which present a weakness in the disaster recovery cycle. These mitigation needs are placed in context with “Community Lifelines,” those critical service systems that when damaged present a major obstacle to full recovery. The Mitigation Needs Assessment explains what risks are present in MID areas affected by Hurricanes Matthew and Florence, which Community Lifeline(s) face the greatest risks, and further develops a foundation to determine which programs would be most effective in mitigating that risk.

The Mitigation Needs Assessment is followed by a review of the long-term planning and risk mitigation considerations, to ensure that the forward-looking aspect of the CDBG-MIT allocation is not lost on temporary solutions to permanent problems. A review of how CDBG- MIT funds may be leveraged with other funds, how the natural infrastructure plays a role in the mitigation plan, how costs will be controlled, and NCORR's plans to minimize displacement and ensure accessibility are then reviewed in context with the Assessment.

NCORR's description of programs supported by CDBG-MIT funds is included in Section 10.0, including a description of the Strategic Buyout Program, the Public Housing Restoration Fund, and the Infrastructure Recovery Program. NCORR's approach to ensure that its proposed programs equitably treat protected classes and historically underserved groups is included in Section 10.6. In this part, NCORR reviews the historical context for discriminatory behavior in federally funded programs and assesses the demographic data and unique characteristics of storm-impacted counties. This data is also provided for those Disaster Risk Reduction Areas (DRRA) that have been formally identified and approved by the counties as the locations for NCORR's Strategic Buyout Program.

The result of the analysis is that NCORR's DRRAs are representative of the vulnerable populations of the recovering communities, significantly more diverse than state demographics, and more likely to serve LMI and protected groups. Providing the buyout program in these areas will work to counter the systemic issues identified in the historical context review.

Furthermore, during the process of amending this action plan, NCORR found that an ongoing need to address impacts to affordable housing for renters and critical infrastructure after Hurricane Matthew and Florence presented an opportunity to diversify the strategic investment of mitigation funds to support long term recovery and mitigation of current and future risks by adding the Public Housing Restoration Fund and the Infrastructure Recovery Program.

After completing the Mitigation Needs Assessment in 2019, NCORR engaged the public and community stakeholders to share a preliminary approach to the use of funds during a public hearing held during the public comment period for the initial Action Plan. A 2022 virtual public meeting built upon the outreach efforts made in 2019 when five separate public engagements were held in Robeson, Edgecombe, Craven, Carteret, and Wayne Counties. As in 2019, NCORR sought feedback on the use of funds allocated. After submitting the Action Plan for public comment in early November 2019, NCORR again held public hearings in Wayne County and Carteret County to review the draft plan. Separately, impacted jurisdictions were provided a stakeholder survey and asked for similar feedback about the community's mitigation needs.

The Community Advisory Committee (CAC) has met to review a previous amendment to this plan and intends to review future amendments.

In final consideration of the data available from the Mitigation Needs Assessment, ongoing disaster recovery needs, community and stakeholder input, regulatory requirements, and an analysis of its programs and funding sources, NCORR has determined that a strategic revision to the use of CDBG-MIT funds to add mitigation program activities was warranted for meaningful investment in long-term hazard mitigation. By weaving in the Public Housing Restoration Fund and the Infrastructure Recovery Program in SAPA 4 and the Affordable Housing Development Fund and Code Enforcement Compliance and Support Program in SAPA 5, NCORR took a comprehensive approach to mitigation and furthered its commitment to addressing the risks associated with long term recovery in a holistic way. A previous allocation of CDBG-MIT funds for planning activities will continue to allow for excellent plan design, coordination with local and regional entities in plan development, and sufficient public outreach and engagement to drive a plan responsive to the needs of impacted communities.

A summary of proposed allocations is found below:

Table 2 - CDBG-MIT Allocations (SAPA 6)

Program	SAPA 5 Total	SAPA 6 Total	% of Total Allocation	$ to LMI	% to LMI	$ to HUD-defined MID areas	% to HUD-defined MID areas
Administrative Costs	$10,134,300	$10,134,300	5%	$0	0%	$5,067,150	50%
Planning Costs	$15,201,450	$11,329,171	6%	$0	0%	$5,664,586	50%
Residential Property Elevation Fund	-	$44,174,078	22%	$22,087,039	50%	$22,087,039	50%
Strategic Buyout	$58,103,334	$35,103,334	17%	$17,551,667	50%	$17,551,667	50%
Public Housing Restoration	$36,246,916	$24,245,117	12%	$24,245,117	100%	$21,532,212	89%
Infrastructure Recovery	$26,000,000	$24,500,000	12%	$24,500,000	100%	$23,140,000	94%
Affordable Housing Development Fund	$47,500,000	$43,700,000	22%	$43,700,000	100%	$43,700,000	100%
Homeownership Assistance Program	$4,400,000	$4,400,000	2%	$3,080,000	70%	$4,400,000	100%
Housing Counseling – Homeownership Assistance Program	$100,000	$100,000	<1%	$70,000	70%	$100,000	100%
Code Enforcement and Compliance Support Program	$5,000,000	$5,000,000	2%	$4,000,000	80%	$3,500,000	70%
Total	**$202,686,000**	**$202,686,000**	**100%**	**$139,233,823**	**69%**	**$146,742,654**	**72%**

Table 2 shows the increase in the Residential Property Elevation Fund. This fund is used to pay for the cost of rehabilitating, reconstructing, or replacing an MHU as well as the elevation of that repaired or replaced unit in accordance with the elevation requirements outlined in this Action Plan (See Section 5.2.1). Because this activity mirrors the current elevation services provided by the CDBG-DR funded Homeowner Recovery Program (HRP), additional guidance on eligible costs for this activity are also found in the current Homeowner Recovery Program Manual.

This activity was established to differentiate properties mitigated against future flood loss from participants in the CDBG-DR funded Homeowner Recovery Program that are not elevated. NCORR will identify projects to reallocate to the Residential Property Elevation Fund and focus on enhancing its outcome tracking for these CDBG-MIT funded elevation projects. The intent is to learn more about the efficacy of elevated property and incorporate any lessons learned from these projects to improve the mitigation process in potential future implementations of a property elevation activity.

4.0 Mitigation Needs Assessment

4.1 Background

According to HUD guidance in the Notices, CDBG-MIT funds represent a unique and significant opportunity for grantees to use this assistance in areas impacted by recent disasters to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses. HUD guidance further specifies that CDBG-MIT funds are closely aligned with FEMA funds for a similar purpose, such as the Hazard Mitigation Grant Program (HMGP). To align closely with FEMA guidance and best practices, as well as the CDBG-MIT specific requirements, the State has reviewed the resources required by HUD in the Notice:

- The Federal Emergency Management Agency Local Mitigation Planning Handbook
    - https://www.fema.gov/sites/default/files/documents/fema_local-mitigation- planning-handbook_052023.pdf
- The Department of Homeland Security Office of Infrastructure Protection Fact Sheet
    - https://www.cisa.gov/sites/default/files/publications/ip-fact-sheet-508.pdf
- The National Association of Counties, Improving Lifelines: Protecting Critical Infrastructure for Resilient Communities
    - https://www.naco.org/sites/default/files/documents/NACo_ResilientCounties_Lifelines_Nov2014.pdf
- The U.S. Department of Housing and Urban Development CPD Mapping Tool
    - https://egis.hud.gov/cpdmaps/

Other resources were supplied by HUD, such as the National Interagency Coordination Center (NICC) for coordinating the mobilization of resources for wildland fire and the U.S. Forest Service's resources around wildland fire. An analysis of wildfire risk was conducted as a part of the Mitigation Needs Assessment (see Section 4.2 and further subsections), and these resources were also reviewed insofar as they were applicable to the most urgent mitigation needs facing the MID areas.

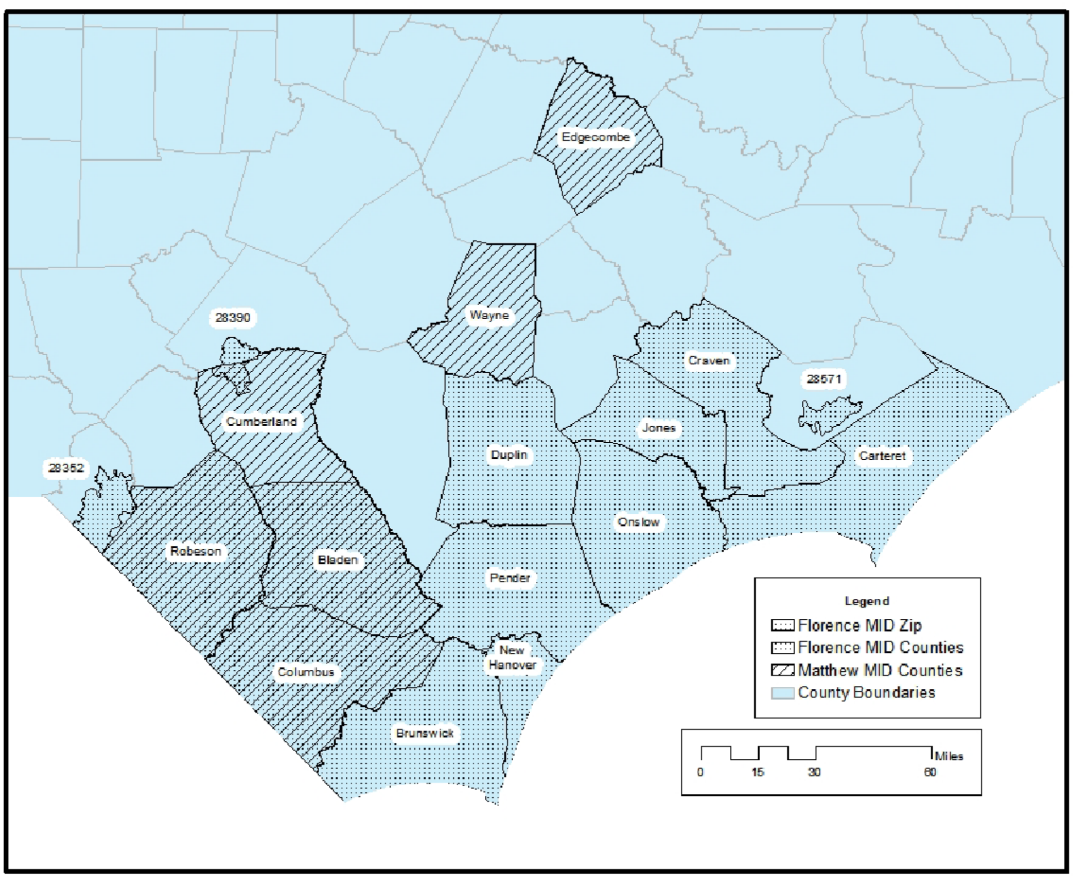
The $202.68 million in CDBG-MIT funds allocated in the Main Notice and the 2021 MIT Notice permit the State of North Carolina to use the CDBG–MIT funds for the same activities, consistent with the requirements of the CDBG–MIT grant, in the most impacted and distressed areas related to both Hurricanes Matthew and Florence. The HUD-identified MID areas are listed and mapped below:

Table 3 - MID Areas, Hurricanes Matthew and Florence

Hurricane Matthew (DR-4285)	Hurricane Florence (DR-4393)	
Bladen*	Robeson*	New Hanover
Columbus*	Brunswick	Onslow
Cumberland*	Carteret	Pender
Edgecombe	Columbus*	Bladen (Zip Code 28433)*
Robeson*	Craven	Pamlico (Zip Code 28571)
Wayne	Duplin	Scotland (Zip Code 28352)
	Jones	Cumberland (Zip Code 28390)*

*Indicates a county declared a MID area for both disasters. Note that Zip Code 28390 is partially shared between both disasters.

Figure 1 - Map of MID Areas, Hurricanes Matthew and Florence



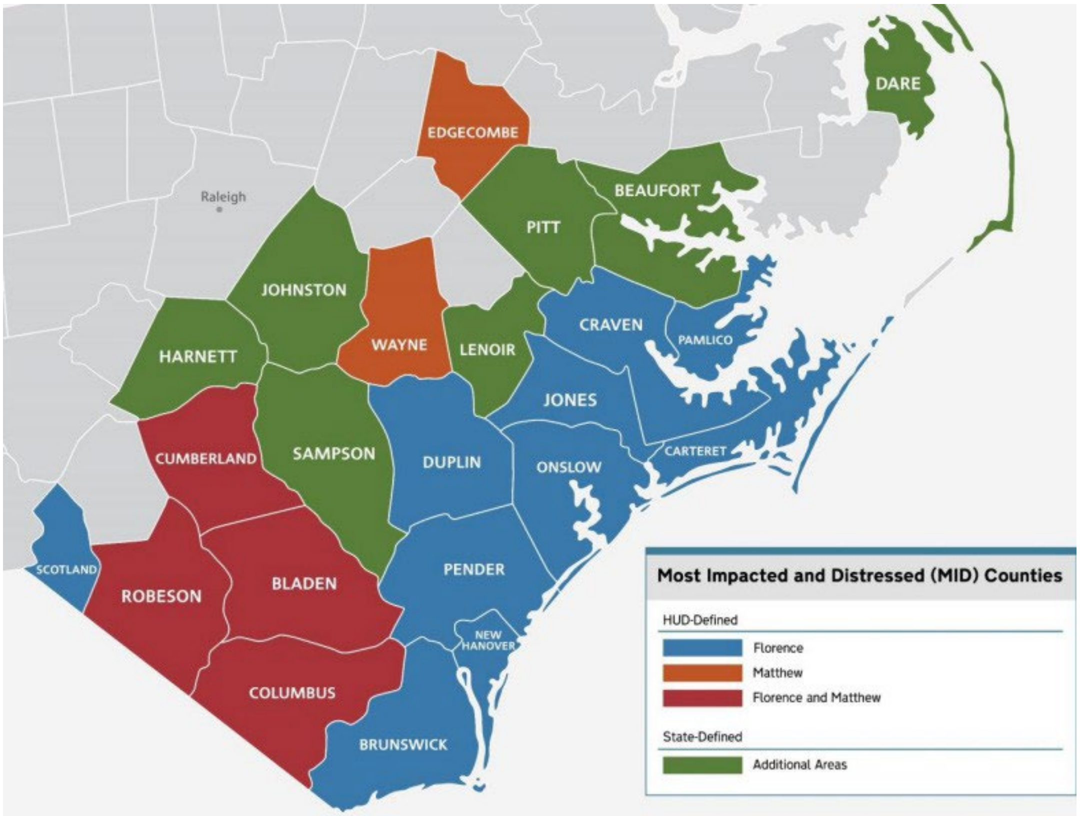
Where data was not available at the zip code level, the county level data for that zip code (28433 in Bladen County, 28571 in Pamlico County, 28352 in Scotland County, and 28390 in Cumberland County) was used instead. In accordance with HUD guidance, NCORR considers expenditures within the county where the MID zip code is located to comply with the MID expenditure requirement.

Although the allocation is specific to hurricane recovery, the Notice requires that the application of CDBG-MIT funding assess many types of risks, based on a risk-based Mitigation Needs Assessment. The foundation of the Mitigation Needs Assessment is the State of North Carolina's Hazard Mitigation Plan (HMP) drafted by North Carolina Emergency Management (NCEM), a branch of the North Carolina Department of Public Safety (NCDPS). The HMP is a federally-mandated plan that identifies hazards that could potentially affect North Carolina and identifies actions to reduce the loss of life and property from a disaster across the state. The plan is required to have the following components as mandated in the Disaster Mitigation Act of 2000: Planning Process, Risk Assessment, Mitigation Strategies, Coordination of Local Plans; Plan Maintenance; and Plan Adoption and Assurances. All of the requirements for each section are further defined in the 44 CFR §201.4[1], the Federal Emergency Management Agency (FEMA) State Plan Review Guide, and the FEMA State Plan Review Tool.

The State of North Carolina benefits from an Enhanced Hazard Mitigation Plan. An enhanced status is a designation from FEMA given to State or Tribal governments that demonstrate that they have developed a comprehensive mitigation program and can manage increased funding to achieve its mitigation goals. The amount of HMGP funding available to the Grantee is based on the estimated total Federal assistance, subject to the formula that FEMA provides for disaster recovery under Presidential major disaster declarations. The formula provides for up to 15% for HMGP for states with Standard Mitigation Plans and up to 20% for HMGP to states with an Enhanced Mitigation Plan. As of December 31, 2020, North Carolina was one of only 14 States that have a designated Enhanced Plan.[2]

The Mitigation Needs Assessment will therefore consider the State's Enhanced HMP as it relates to the Most Impacted and Distressed (MID) areas affected by both Hurricane's Matthew and Florence. While the Mitigation Needs Assessment acknowledges the many hazards faced by the people and property in the State of North Carolina, the focus will remain on risks which can be mitigated with the resources available and only in those areas determined by HUD or by the State to be MID areas.

Figure 2 - Map of Both HUD-Defined and State-Defined MID Areas, Hurricanes Matthew and Florence



In the Mitigation Needs Assessment, the terms disaster, hazard, and risk are used commonly and frequently interchangeably. For the purpose of this Assessment, FEMA defines a hazard as something that is potentially dangerous or harmful, often the root cause of an unwanted outcome. Natural hazards are defined as those which are related to weather patterns and/or physical characteristics of an area, and finally, risk is defined as the potential for an unwanted outcome resulting from an incident, event, or occurrence, as determined by its likelihood and the associated consequences.[3]

Generally, a hazard cannot be removed from the environment – floods and hurricanes will continue to happen regardless of human intervention and planning – however, the risk posed by the hazard is addressed by limiting the exposure of human value by either reducing the probability of loss or the magnitude of the loss. Mitigation in this context therefore refers to any action taken to reduce risk.

NCORR sought the input of all stakeholders in the MID counties in the generation of this assessment and its update. Stakeholders included the representative group of local governments, councils of government, and citizens. Public hearings were held at venues spread throughout the MID counties in 2019 and held virtually in 2021 in consideration of additional funding received by NCORR. A public meeting of the Citizens Advisory Committee to discuss proposed changes is also a part of the substantial amendment process. Public hearing notifications are widely publicized and also through reaching out to local houses of worship and civic groups. Meetings with local officials and citizens is an ongoing activity. Each proposed CDBG-MIT activity is vetted through the lens of fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies that will be promulgated through the implementation of MIT funded projects.

Climate disasters are becoming the new norm and studies indicate that the poorest one-third of the counties in the United States are the most vulnerable to socioeconomic threats from natural catastrophes and climate change.[4] Best practices and formative guidance were derived from the Environmental Protection Agency (EPA) *Regional Resilience Toolkit.*[5]

4.2 Method

Guidance issued in the Main Notice specifies how to approach the Mitigation Needs Assessment. In addition to the mitigation needs identified in the State's Enhanced HMP, the characteristics and impacts of current and future hazards identified through the recovery of Hurricane Matthew and Hurricane Florence are also a major factor in assessing the mitigation need. However, focusing on past events alone provides an incomplete understanding of the true risk to the State of North Carolina and its people created by hazard conditions.

The Mitigation Needs Assessment seeks to combine the institutional knowledge contained in the HMP, lessons learned from previous disaster recovery efforts (specifically Hurricane Matthew and Florence recovery efforts), and the local knowledge from citizens and stakeholders in disaster-impacted areas. These three sources are the primary source of hazard, risk, and mitigation information for the Mitigation Needs Assessment.

For each of the three primary sources contributing to the Mitigation Needs Assessment, the risks are quantitatively assessed according to their potential impacts on seven critical service areas, also known as the Community Lifelines, identified in V.A.2.a.(1). of the Main Notice:

1. Safety and Security
2. Communications
3. Food, Water, Sheltering
4. Transportation
5. Health and Medical
6. Hazardous Material (Management)
7. Energy (Power and Fuel)

The outcome of the process is the comparison of relative risk to the seven critical service areas by hazard type to inform a mitigation approach using CDBG-MIT funds in the most effective way possible. An important product of this exercise is a risk assessment that assigns values to risks for the purpose informing priorities, developing, or comparing courses of action, and informing decision making in the CDBG-MIT context. After assessing the risks to the Community Lifelines, appropriate mitigation approaches are reviewed.

The Mitigation Needs Assessment is a snapshot in time of the current mitigation needs, and subject to change as shifting priorities and risks are discovered by the State. As new risks are identified, or as previously identified risks are sufficiently mitigated, the State will update the Assessment as needed. Changes to the Mitigation Needs Assessment which result in the addition of a CDBG-MIT defined Covered Project, a change in program benefit or eligibility criteria, the addition or deletion of an activity, or the allocation or reallocation of $15 million or more will result in a substantial amendment to the Action Plan.

If NCORR does add a Covered Project, the amendment will include the following:

- **Project Description and Eligibility**: How the project meets criteria for a mitigation activity, a description of total project costs above $100 million with at least $50 million coming from CDBG funds (and any other funding sources); and eligible CDBG activity.
- **Mitigation Needs Assessment**: Description of how the project aligns with needs identified in the Mitigation Needs Assessment
- **National Objective and Additional Mitigation-Specific Criteria**: The amendment will describe how NCORR will monitor long term efficacy of the project, including operation and maintenance costs, maintaining documentation of impact/outcomes related to risk reduction, and how the project will reflect changing environmental conditions by using different risk management tools or other sources of funding.
- **Benefit Cost Analysis:** Description of Benefit Cost Analysis with a BCA that is more than 1.0.

4.3 State Enhanced Hazard Mitigation Plan

The HMP identifies many hazards for the State of North Carolina. The HMP divides the identified hazards between natural hazards and technological hazards. Further sub-classifications include manmade hazards, public health hazards, and agricultural hazards.

The hazards in the HMP were identified by a working group of subject matter experts (SMEs) from across state agencies, academia, and the private sector. For the 2018 update of the HMP, previous versions of the list of potential hazards were reviewed and discussed in detail in coordination with the Emergency Management Accreditation Program (EMAP) working group which is made up of representatives from each branch of NCEM. It was then presented to the Risk Management Coordinating Council as the official list of hazards pending any additional input and/or comments. No additional input or comments were received, therefore it was deemed to be the official list to include in the HMP.[6] For the 2023 update, the list of hazards included in the 2018 plan continued as the base list of hazards. The hazard listing was approved by the RMCC and reviewed internally with NCEM staff. Based on these reviews the hazard listing remains the same with the addition of the following hazards: civil disturbance and food emergency. Two additional subhazards were added to the assessment: foreign animal disease as a subhazard of infectious disease and sea level rise as a subhazard of flooding.[7]

Table 4 - HMP Identified Hazards

Natural Hazards	Technological Hazards
Flooding	Hazardous Substances
Hurricanes and Costal Hazards	Hazardous Materials
Severe Winter Weather	Hazardous Chemicals
Excessive Heat	Oil Spill
Earthquakes	Radiological Emergency - Fixed Nuclear Facilities
Wildfires	Terrorism
Dam Failures	Chemical
Drought	Biological
Tornadoes/Thunderstorms	Radiological
Geological	Nuclear
Landslides/Rock Fall	Explosive
Sinkholes/Coastal Erosion	Cyber
Infectious Disease	Electromagnetic Pulse
	Civil Disturbance
	Food Emergency

These identified hazards are applicable to the entire state. NCORR understands that the hazards present in non-impacted areas of the state, such as earthquakes and geological hazards, pose significant threat to life and property where they are more commonplace. However, with the limited funds available, and consistent with HUD guidance, the analysis of risks in the Mitigation Needs Assessment will primarily focus on the geographic extent of the MID areas for Hurricane Matthew and Florence, and further focus on mitigating the principal hazards present or worsened by the disaster events.

The HMP goes on to catalog each hazard to include a description, extent (as defined by FEMA), location, hazard history, changing future conditions, impact, future probability, and Emergency Operation Plan reference. The Mitigation Needs Assessment will not reiterate all sections of the HMP for all hazards, but the full Plan is available at https://www.ncdps.gov/20230125-2023-nc-shmp-final-publicpdf/open.

The HMP is informed by 29 regional plans. The MID areas fall within eight of these plan areas. The breakdown of regional HMPs, their approval dates, expiration dates, and participating MID area is below.

Table 5 - Regional HMP and MID Areas

Plan	Plan Approved	Plan Expiration	Participating MID
Pamlico Sound Regional HMP	6/16/2020	6/15/2025	Carteret
			Craven
			Pamlico
Southeastern NC Regional HMP	4/26/2016	4/18/2026	Brunswick
			New Hanover
			Onslow
			Pender
Bladen-Columbus-Robeson Regional HMP	10/7/2020	10/06/2025	Bladen
			Columbus
			Robeson
Neuse River Basin Regional Multi-Jurisdictional HMP	9/18/2020	9/17/2025	Jones
			Wayne
Cumberland-Hoke Regional HMP	6/28/2016	6/27/2026	Cumberland
Nash-Edgecombe-Wilson Regional HMP	11/6/2020	11/05/2025	Edgecombe
Pee Dee Lumber Regional HMP	3/23/2018	3/22/2023	Scotland
Sampson-Duplin Regional HMP	6/16/2020	6/15/2025	Duplin

The regional plans for MID areas are currently up to date. The Pee Dee Lumber Regional HMP is currently in the process of being updated.

To first determine the applicability of the hazard to the Mitigation Needs Assessment, the risk is assessed using the probability method reviewed at the end of Section 4.2 and the severity method in Section 4.3.5.

The HMP was updated in 2023. NCORR has reviewed the updated HMP and amended this Mitigation Needs Assessment to conform with the 2023 HMP. Additional data and other updates are added alongside their older counterparts. References citing the HMP have been updated to the appropriate page in the 2023 HMP.

4.3.1 Definitions

To align with the HMP, this Mitigation Needs Assessment will adopt the definitions found in the HMP for the disasters specified in Section 4.3.

4.3.1.1 Flooding

The HMP defines flooding as a localized hazard that generally results from excessive precipitation. Floods are generally considered to fall in one of two categories: flash floods, which are the product of heavy localized precipitation that occurs within a short period of time at a given location; and general floods, caused by precipitation that occurs during a longer period of time over a particular river basin.

In addition to the two flood categories, there are three types of flooding based on the flood conditions and environment. Riverine flooding is a function of precipitation levels and water runoff volumes within the watershed of the stream or river. Coastal flooding is typically a result of storm surge, wind-driven waves, and heavy rainfall. These conditions are produced by tropical systems during the summer and fall, and nor'easters and other large coastal storms during the winter and spring. Generally, it is difficult to discuss coastal flooding separate from coastal hazards, such as hurricanes, and so often these hazards are discussed together. Finally, urban flooding occurs where there has been development within stream floodplains or in coastal areas where there are high levels of development. Urban flooding is worsened by the development of impermeable surfaces such as roadways, pavement, and buildings.

Flooding is the most common environmental hazard to affect the United Sates, due to the widespread geographical distribution of river valleys and coastal areas, and the attraction of human settlements in these areas. Most recent presidential declarations concerning major disaster have been associated with flash floods and general flooding.[8] Both the Hurricane Matthew and Hurricane Florence allocations are associated with flooding, as well as Hurricanes and Coastal Storms (to be discussed later).

According to the North Carolina Floodplain Mapping Program, the amount of land in the floodplain in North Carolina accounts for about 18.2% of the total land area in the state. The North Carolina Floodplain Mapping Program is currently in the process of developing and updating digital flood hazard data for the State’s 100 counties.

4.3.1.2 Hurricanes and Coastal Hazards

Hurricanes are cyclonic storms that originate in tropical ocean waters poleward of about 5 degrees latitude. Hurricanes are heat engines, fueled by the release of latent heat that results from the condensation of warm water. Their formation requires several elements, including: a low-pressure disturbance; sufficiently warm sea surface temperature; rotational force caused by the spinning of the earth; and the absence of wind shear in the lowest 50,000 feet of the atmosphere. Hurricanes can produce an array of hazardous weather conditions, including storm surge, high winds, torrential rain, and tornadoes.

Hurricanes have the greatest potential to inflict damage as they move from the ocean and cross the coastline. The crossing of the center of the storm’s eye is called landfall. Because hurricanes derive their strength from warm ocean waters, hurricanes are generally subject to deterioration once they make landfall. The forward momentum of a hurricane can vary from just a few miles per hour to up to 40 mph. This forward motion (combined with a counterclockwise surface flow) makes the hurricane’s right-front quadrant the location of its most potentially damaging winds.[9]

4.3.1.3 Severe Winter Weather

The winter storms that typically impact North Carolina generally form in the Gulf of Mexico or off the southeast Atlantic Coast. The entire state has a likelihood of experiencing severe winter weather. The threat varies by location and by type of storm. Coastal areas typically face their greatest weather threat from nor'easters and other severe winter coastal storms. These storms can contain strong waves and result in extensive beach erosion and flooding. Freezing rain and ice storms typically occur once every several years at coastal locations and severe snowstorms have been recorded occasionally in coastal areas.[10]

4.3.1.4 Excessive Heat

Excessive heat is a dangerous and deadly occurrence in North Carolina. According to the National Weather Service, heat is one of the leading weather-related causes of loss of life in the United States.[11] The Centers for Disease Control and Prevention indicates that 618 people in the United States are killed by extreme heat every year.[12] Also, according to the CDC, that number represents more deaths than hurricanes, lightning, tornadoes, earthquakes and floods combined.[13] The CDC defines extreme heat as "summertime temperatures that are much hotter and/or humid than average."[14]

4.3.1.5 Earthquakes

An earthquake is a vibration or shaking of Earth's surface due to an underground release of energy. They can be caused by various conditions, such as sudden movements along geological faults or volcanic activity. Earthquake magnitudes, or severity, are recorded on the Richter scale with seismographs. Some may be so small that they are virtually unnoticed, while others can destroy entire cities. Seismology, the study of earthquakes, helps scientists understand what areas are more prone to experiencing earthquakes, such as along the Ring of Fire; however, earthquakes are generally unpredictable.

Earthquakes in NC are fairly frequent but large seismic events are rare.[15] Since 1735, North Carolina has experienced 24 earthquakes that caused at least architectural damage. Of these 24 earthquakes, only eight have originated from within NC. From historical data, scientists from the U.S. Geological Survey (USGS) and several university research centers have produced maps that project the expected ground motion for various return periods. Until 2020, the epicenter for the last recorded damaging event that affected the state was in Virginia in 2011.[16] However, on August 9, 2020, a 5.1 magnitude earthquake originated from Sparta, NC. This was the second strongest earthquake since the 5.2 magnitude earthquake in 1926 and the 5.5 in 1916,[17] which also originated from within NC.

4.3.1.6 Wildfires

A wildfire is an uncontrolled burning of grasslands, brush, or woodlands. The potential for wildfire depends upon surface fuel characteristics, recent climate conditions, current meteorological conditions, and fire behavior. Hot, dry summers and dry vegetation increase susceptibility to fire in the fall—a particularly dangerous time of year for wildfire.

Southern forest landscapes have had a long history of wildfire. Wildfires have taken place as a natural process for many thousands of years, playing an important role in the ecological integrity of our natural environment. Human settlement has significantly influenced changes in the spatial and temporal pattern of wildfire occurrence, as well as the risks associated with them for human life and property.[18]

4.3.1.7 Dam Failures

Dams store water in reservoirs during times of excess flow, so that water can be released from the reservoir during other times, when natural flows are inadequate to meet the needs of water users.[19] Dams can pose risks to communities if not designed, operated, and maintained properly. In the event of a dam failure, the energy of the water stored behind even a small dam is capable of causing loss of life and considerable property damage if there are people located downstream from the dam. Many dam failures have resulted because of an inability to safely pass flood flows. Failures caused by hydrologic conditions can range from sudden (with complete breaching or collapse), to gradual (with progressive erosion and partial breaching). The most common modes of failure associated with hydrologic conditions include overtopping, the erosion of earth spillways, and overstressing the dam or its structural components.[20]

Like all built structures, dams deteriorate. Lack of maintenance causes dams to be more susceptible to failure. Often, the corrugated piping used in dam construction has a shorter life span than the dam itself, involving expensive replacement to avoid potential dam weakening. According to the 2023 HMP, more than 900 dam incidents (including 307 dam failures) have occurred in the United States since 2000, according to data collected in joint efforts by the Department of Homeland Security (DHS) and the Association of State Dam Safety Officials (ASDSO), which collects and archives information on dam performance as reported by state and federal regulatory agencies and dam owners.[21] Dam incidents are events (such as large floods, earthquakes, or inspections) that alert dam safety engineers to deficiencies that threaten the safety of a dam. Due to limited state staff, many incidents are not reported, and therefore the actual number of incidents is likely to be much higher.

Communities continue to develop along the state's rivers, many in potential dam-failure inundation zones. Further exacerbating the potential risk to citizens is the disrepair of many dams and the lack of sound plans to help guide necessary repairs and warning systems to alert the public in the event of a dam failure.[22]

4.3.1.8 Drought

Drought refers to an extended period of deficient rainfall relative to the statistical mean established for a region. Drought can be defined according to meteorological, hydrological, and agricultural criteria. Meteorological drought uses long-term precipitation data to measure present precipitation levels against departures from normal precipitation levels. Hydrological drought is defined by surface and subsurface water supply deficiencies based on stream flow, lake, reservoir, and ground water levels. Agricultural drought occurs when there is insufficient soil moisture to satisfy the water budget of a specific crop, leading to destroyed or underdeveloped crops with greatly depleted yields.

A drought is a prolonged period of less than normal precipitation such that the lack of water causes a serious hydrologic imbalance. Common effects of drought include crop failure, water supply shortages, and fish and wildlife mortality. High temperatures, high winds, and low humidity can worsen drought conditions and make areas more susceptible to wildfire. Human demands and actions have the ability to hasten or mitigate drought-related impacts on local communities.[23]

4.3.1.9 Tornadoes/Thunderstorms

A tornado is a violently rotating column of air in contact with the ground and extending from the base of a thunderstorm. A condensation funnel does not need to reach to the ground for a tornado to be present; a debris cloud beneath a thunderstorm is all that is needed to confirm the presence of a tornado, even in the total absence of a condensation funnel.

It is spawned by a thunderstorm (or sometimes as a result of a hurricane) and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. The damage from a tornado is a result of the high wind velocity and wind-blown debris.

Thunderstorms can produce a variety of accompanying hazards including wind, hail, and lightning. Although thunderstorms generally affect a small area, they are very dangerous and may cause substantial property damage.[24]

4.3.1.10 Geological Hazards

The HMP divides Geological Hazards into several subcategories – Landslides, sinkholes, and coastal erosion. A landslide is a downward movement of earth or rock from, driven by gravity. Landslides can be triggered by natural or man-made circumstances, such as heavy rains, earthquakes, rapid snow melt, erosion, or construction.

A sinkhole is an area of ground that has no natural external surface drainage--when it rains, all of the water stays inside the sinkhole and typically drains into the subsurface. Sinkholes can vary from a few feet to hundreds of acres and from less than one to more than 100 feet deep. Some are shaped like shallow bowls or saucers whereas others have vertical walls. Sinkholes are common where the rock below the land surface is limestone, carbonate rock, salt beds, or rocks that can naturally be dissolved by groundwater circulating through them. As the rock dissolves, spaces and caverns develop underground. Sinkholes are dramatic because the land usually stays intact for a while until the underground spaces just get too big. If there is not enough support for the land above the spaces, then a sudden collapse of the land surface can occur.

Coastal or beach erosion is the wearing away of the beach and dune sediments due to winds, tidal currents, or wave action. Erosion is typically event-driven and tends to happen during periods of strong winds, high tides and waves, such as a storm; however, continued erosion wears away the coastal profile and can create imbalance on shorelines. An eroding beach may lose feet of sand per year. Erosion clearly affects the environment, but it also is problematic for homes and businesses that are constructed on or near beaches. Severe erosion can cause extreme property loss or damages. Many beaches rely on sandbags placed in front of homes and dunes to protect them from falling into the ocean.[25]

4.3.1.11 Hazardous Substance

The HMP defines a hazardous substance as any element, chemical, substance, compound, mixture, agent, solution or substance that an accidental or deliberate release of may cause disease or harm to human health and the environment. Hazardous substances may have one or more of the following intrinsic properties: explosiveness, flammability, ability to oxidize (or accelerate a fire), human toxicity, or corrosiveness. Hazardous materials are found in many different forms and quantities that can potentially cause property damage, injuries, long-lasting health effects, and death. Many of these materials are used and stored on a daily basis in homes and businesses, and transported through major highways, waterways, pipelines, and railways. Each hazard has a different threshold level and can be naturally occurring, which creates many risks in the event of an emergency.

Hazardous material (HAZMAT) incidents consist of solid, liquid and/or gaseous contaminants that can occur at fixed facilities or mobile sources. Many HAZMAT emergencies result from accidents or negligent behavior, but some may be purposefully designed, such as a terror attack. These incidents can be acute or long-lasting and can cause fires or explosions, potentially affecting vast populations of people and wildlife.[26]

4.3.1.12 Radiological Emergency – Fixed Nuclear Facility

A nuclear and radiation accident is defined by the International Atomic Energy Agency as “an event that has led to significant consequences to people, the environment or the facility. Often, this type of incident results from damage to the reactor core of a nuclear power plant, which can release radioactivity into the environment. The degree of exposure from nuclear accidents has varied from serious to catastrophic.[27]

4.3.1.13 Terrorism

Terrorism is defined in the United States by the Code of Federal Regulations is “the unlawful use of force or violence against persons or property to intimidate or coerce a government, civilian population, or any segment thereof, in furtherance of political or social objectives.” Terrorist acts may include assassinations, kidnappings, hijackings, bombings, small arms attacks, vehicle ramming attacks, edged weapon attacks, incendiary attacks, cyber-attacks (computer based), and the use of chemical, biological, nuclear and radiological weapons. Historically the main categories of weapons of mass destruction (WMDs) used in terror attacks are Chemical, Biological, Radiological, Nuclear, and Explosive (collectively referred to as CBRNE).[28]

4.3.1.14 Other Hazards

The HMP includes other hazards, such as cyber hazards, electromagnetic pulses, infectious diseases, civil disturbances, and food emergencies. These hazards either indirectly affect the built environment or are not well mitigated using the conventional mitigation techniques used by the HMGP. To greater align with FEMA HMGP, these hazards are not included in the Mitigation Needs Assessment. Greater detail on these hazards remains available in the HMP.

4.3.2 Highly Likely Hazards

The HMP includes maps and analysis of future probability based on past events. The HMP divides hazards into three broad groups of probability – Highly Likely, Likely, and Unlikely to occur. Each of these categories is defined below in context with the MID area. Note that the HMP description of probability is qualitative, primarily based on historical hazard data.

To determine whether the hazard was present in the MID areas, the spatial data included in the HMP was visually reviewed to determine overlap with the impacted areas. In consideration of future changing conditions, the hazard probability is re-assessed based on anticipated changes in climate, sea level rise, and other environmental and social factors. The Mitigation Needs Assessment adopts the three hazard probability categories, but does not necessarily match the categories in the HMP in every instance.

Table 6 - Hazard probability, MID areas

Probability	Hazard
Highly Likely	Flooding
	Hurricanes and Coastal Hazards
	Tornadoes/Thunderstorms
Likely	Hazardous Substances
	Excessive Heat
	Wildfires
	Drought
Unlikely	Severe Winter Weather
	Earthquakes
	Dam Failures
	Geological Hazards
	Radiological Emergencies
	Terrorism

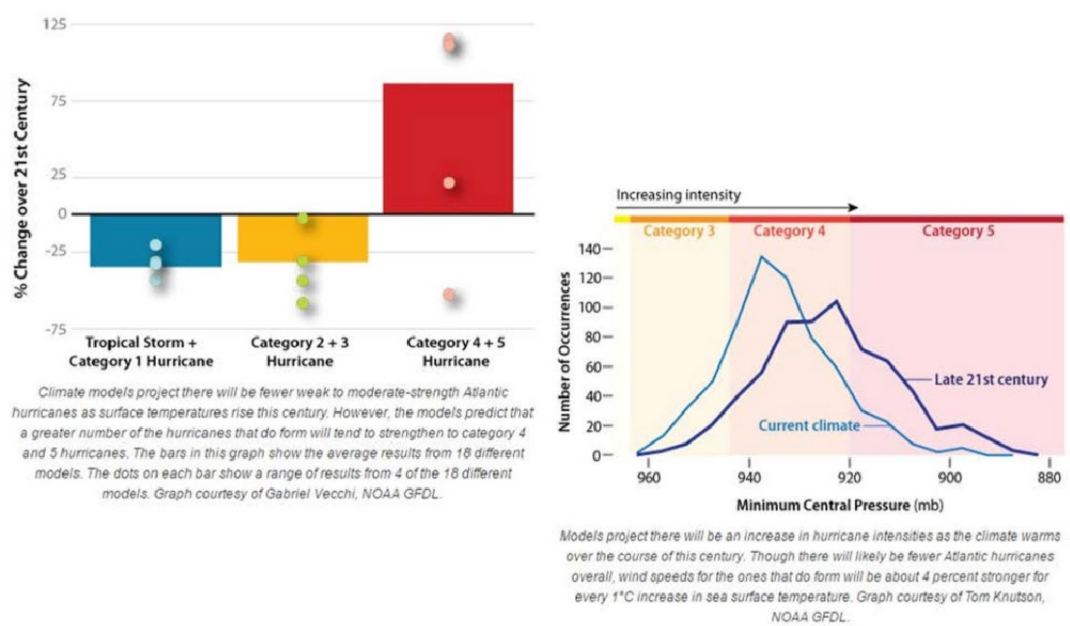
Source: State of North Carolina. Hazard Mitigation Plan, Section 3. Risk and Vulnerability Assessment. 2018. https://www.ncdps.gov/documents/enhanced-hazard-mitigation-plan

The first group of hazards are those that are determined to be Highly Likely. Hazards that are determined to be Highly Likely are defined in the HMP as having a 66.7% to 100% chance of disaster occurrence within a given year. The Highly Likely hazards within the MID areas are flooding, hurricanes and coastal hazards, and tornadoes, and thunderstorms. The 2018 HMP rated flooding and tornadoes/thunderstorms as Highly Likely events, while hurricanes and coastal hazards were described as Likely. The 2023 HMP lists flooding and thunderstorms as Highly Likely hazards, while tornadoes and hurricanes were listed as Likely hazards.[29]

In the Mitigation Needs Assessment, hurricanes and coastal hazards are elevated to Highly Likely for the following reasons. First, at the time of completion of the 2018 HMP, Hurricane Florence had not yet struck North Carolina. With two major storms making landfall in less than two years, and with Hurricane Dorian in 2019, and Hurricane Isaias in 2020, it is evident that hurricanes and coastal hazards warrant additional attention and scrutiny in this Mitigation Needs Assessment. After reviewing the 2023 HMP, NCORR determined that flooding, hurricanes and coastal hazards, tornadoes, and thunderstorms remain Highly Likely in the MID areas.

Additionally, the HMP indicates that changing climate and weather conditions may increase the number and frequency of future hurricane events that impact the State. According to the U.S. Government Accountability Office, national storm losses from changing frequency and intensity of storms are projected to increase anywhere from $4-6 billion in the near future. National Oceanic and Atmospheric Administration (NOAA) reports support that weather extremes will likely cause more frequent, stronger storms in the future due to rising surface temperatures.[30]

Figure 3 - NOAA Climate Models Projection for Future Hurricanes



Source: National Oceanic and Atmospheric Administration GFDL

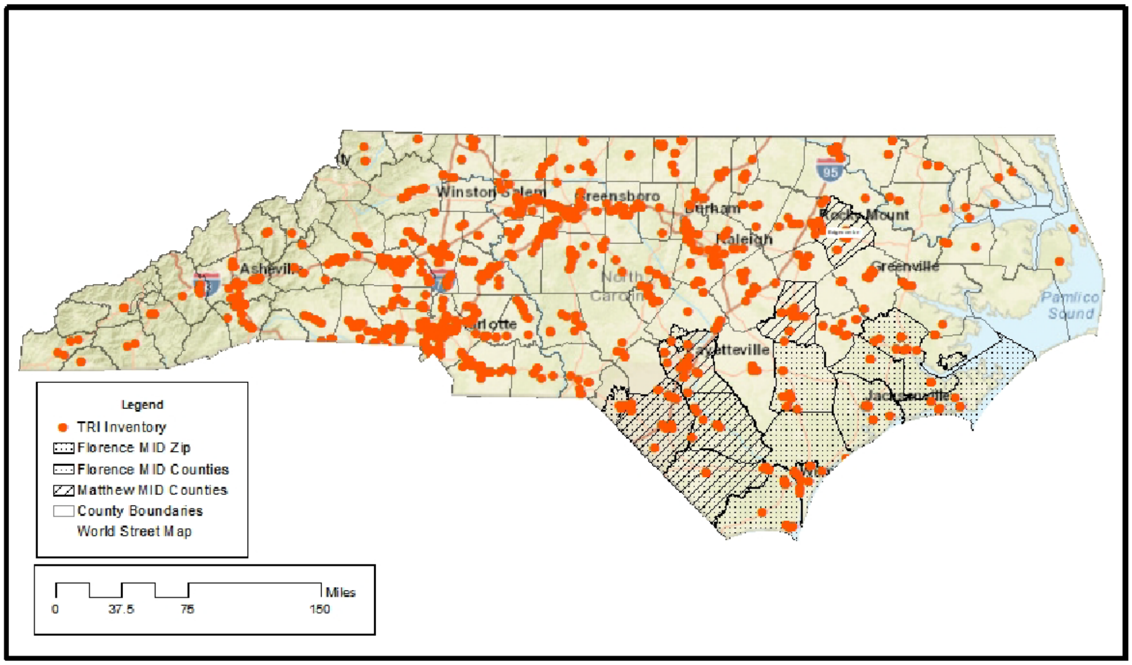
4.3.3 Likely Hazards

Likely hazards are those that have a 33.4% to 66.6% chance of disaster occurrence in a given year. The Likely hazards in the MID areas are hazardous materials, excessive heat, wildfires, and drought.

The probability of a hazardous material related incident statewide is considered Highly Likely in both the 2018 and 2023 HMP. It’s important to note that a hazardous material incident may be minor, but the incidence rate is still comparatively high compared to other more serious disasters. Hazardous Materials disasters are more closely tied with infrastructure development such as roads and bridges where shipments of hazardous materials occur. The majority of fixed HAZMAT locations, cataloged in the Toxic Release Inventory (TRI) maintained by the Environmental Protection Agency

(EPA), are located in central and western North Carolina, removed from the MID areas. Therefore, the probability associated with a hazardous materials incident in the MID areas is reduced to Likely rather than Highly Likely.

Figure 4 - Concentration of TRI Sites, NC



Source: United States Environmental Protection Agency. *TRI Factsheet: State - North Carolina*. 2019. TRI Factsheet for North Carolina | TRI Explorer | US EPA

The next three Likely hazards, excessive heat, wildfire, and drought, are related to climate. The 2018 HMP included excessive heat and drought in the Unlikely hazard category, while the 2023 HMP lists excessive heat in the Likely category and drought in the Unlikely category. Research from NASA suggests that future droughts and heat waves (periods of abnormally hot weather lasting days to weeks) everywhere are projected to become more intense, while cold waves become less intense. Summer temperatures are projected to continue rising, and a reduction of soil moisture, which exacerbates heat waves, is projected for much of the western and central U.S. in summer. By the end of this century, what have been once-in-20-year extreme heat days (one-day events) are projected to occur every two or three years over most of the nation.[31] After reviewing the 2023 HMP, and in consideration of changing future conditions, NCORR concurs with the HMP's categorization of excessive heat as Likely and has elevated drought to the Likely category in the MID areas.

Wildfires are considered to be Likely in the HMP, and the Mitigation Needs Assessment adopts this classification. This is further corroborated by the number of wildfires during unusual dry periods in the Hurricane Matthew and Florence MID areas. The changing climate conditions leading to increased drought and excessive heat have the same worsening effect on wildfires in the MID areas, which are already more prone to wildfire events.

Table 7 - Wildfires in NC, 1998-2017

County	Wildfires, 1998 - 2017
Bladen*	2
Brunswick*	4
McDowell	2
New Hanover*	2
Pender*	6
Robeson*	2
Rutherford	2
Swain	2
Other (Statewide)	10
*MID Area	

Source: NOAA: National Centers for Environmental Information. Wildfires by County, Total from 1998 to 2017. https://www.ncdc.noaa.gov/sotc/fire/201713

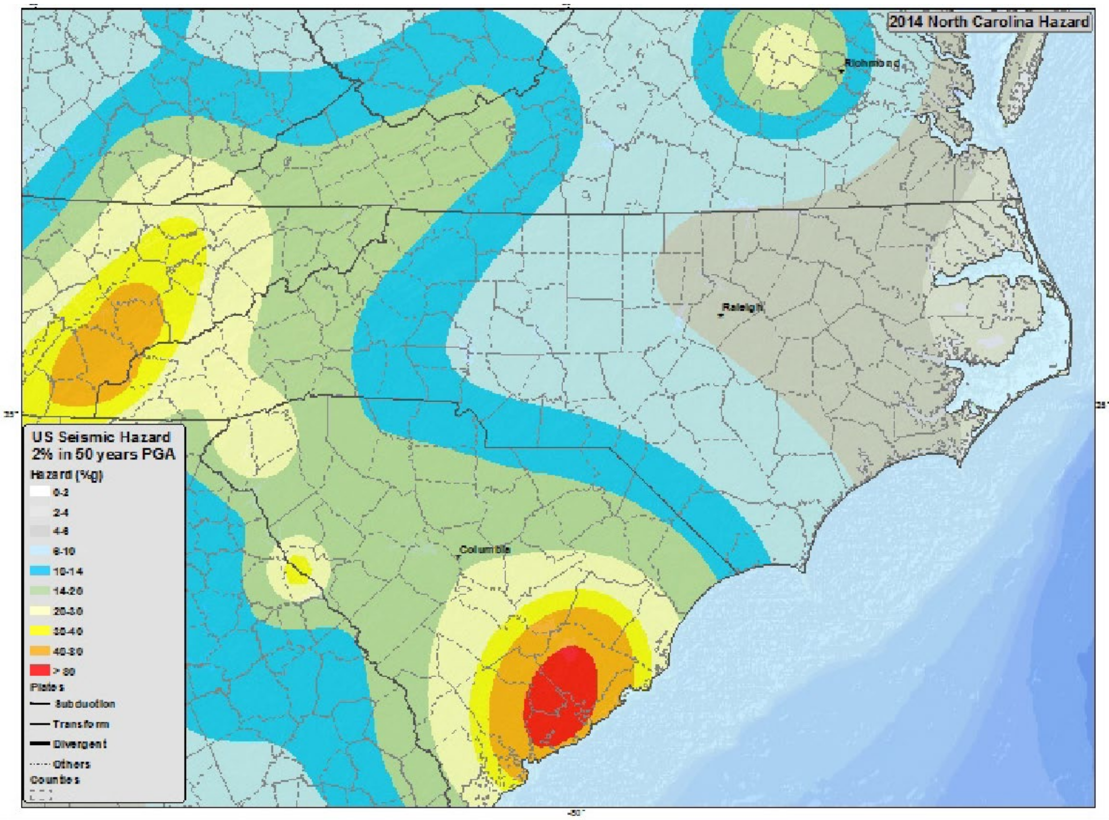
4.3.4 Unlikely Hazards

Many hazards are present statewide that do not manifest regularly in the MID areas. These hazards are determined to be Unlikely for the MID areas, with a chance of a disaster from these hazards between 1% and 33.3% in a given year. Unlikely hazards include severe winter weather, earthquakes, dam failures, geological hazards, radiological emergencies, infectious disease, and terrorism (including cyber-crime and electromagnetic pulses).

Severe winter weather is categorized by the HMP as a Likely hazard statewide. However, since 1996, many of the MID counties (Brunswick County, Columbus County, Robeson County, New Hanover County, Pender County, and Bladen County) experienced fewer than 10 winter weather events. Severe winter weather is more significant in the western area of the state, such as Avery and Mitchell Counties.[32] Compounded with the climatological considerations discussed for excessive heat, drought, and wildfire in Section 4.3.3, continued severe winter weather events in the MID areas is considered Unlikely.

The propensity for earthquakes is concentrated in the western area of the State. A low-risk earthquake hazard exists in the MID areas, and the time horizon for earthquake hazards is extremely long compared to other hazards statewide. In a 50-year time horizon, there is a 2% chance of an earthquake reaching 8-10% gravity for a portion of the MID area. An earthquake of that intensity would have moderate to strong perceived shaking and very light to light damage. Adjacent areas are slightly more risk prone, and the more northeastern areas are significantly less risk-prone.

Figure 5 - Earthquake hazard, statewide



Source: United States Geologic Survey. *Information by Region – North Carolina*. 2014 Seismic Hazard Map

Dam failure is a complex issue facing the aging dams in place throughout North Carolina. There are more than 5,600 dams in North Carolina. According to the 2018 HMP, 1,445 of those dams were considered high hazard dams that could present a risk to public safety and property if a dam failure were to occur. That figure was raised to 1,567 in the 2023 HMP. High hazard dams are up from 874 in 1998, indicating that dam failure is a worsening issue for the State.[33] Currently, the greatest number of high hazard dams are found outside of the MID areas in Wake, Mecklenburg, Guilford, Forsyth, and Moore Counties.[34] According to the 2018 HMP, a total of 103 high hazard dams were located in the MID areas, accounting for 7.12% of all high hazard dams in the State. The 2023 HMP lowers this number to 94 high hazard dams located in MID areas, or 6.00% of all high hazard dams in the state.

Table 8 - High Hazard Dams, MID areas (2018)

MID Area	# of High Hazard Dams	MID Area	# of High Hazard Dams
Cumberland	54	Edgecombe	2
Wayne	15	New Hanover	2
Duplin	7	Robeson	2
Columbus	5	Carteret	1
Brunswick	4	Craven	1
Bladen	3	Jones	1
Onslow	3	Total	103
Scotland	3	Rest of State	1,342
		Grand Total	**1,445**

Table 9 - High Hazard Dams, MID areas (2023)

MID Area	# of High Hazard Dams	MID Area	# of High Hazard Dams
Cumberland	39	Carteret	1
Wayne	16	Pamlico	1
Duplin	9	Craven	1
Scotland	6	Bladen	1
Brunswick	6	Pender	1
Robeson	4	Jones	1
Columbus	3	Total	94
Onslow	3	Rest of State	1,473
Edgecombe	2	**Grand Total**	**1,567**

Geological hazards are present statewide, but landslides and sinkholes are predominately located outside of the MID areas. Coastal erosion, however, is worth noting in the MID areas as natural processes are exacerbated by sea level rise, potentially worsening or adding unpredictability to the coast of the State. Although the conditions for coastal erosion may be changing, the timescale for a coastal erosion event remains of such significant length that a disaster occurring from coastal erosion remains highly unlikely. According to the HMP, Carteret and New Hanover counties may be more susceptible to coastal erosion compared to other MID areas.[35]

The remaining unlikely hazards, radiological emergencies and terrorism, are more closely tied with population than environmental factors. There is only one nuclear facility within the MID area, the Brunswick Nuclear Plant in Southport, North Carolina, on the Cape Fear River. If there were a nuclear emergency, the areas surrounding this plant would be exposed to potentially dangerous radiation levels. However, the State has no history of major radiological emergencies. While the increasing population near the Brunswick Nuclear Plant may increase the *severity* of a radiological emergency, it does not affect the probability of such an emergency.

Terrorism is most tied to population centers. It is difficult to anticipate a terrorist attack, but there is no particular expectation of increased terrorism in the MID areas, and these areas share the same classification as the rest of the state as a highly unlikely disaster.

4.3.5 Severity

The severity of a potential disaster is the amount of damage dealt to people and property during a potential disaster event. While probability assessments seek to answer "how often", severity assessments seek to answer "how much." A Highly Unlikely disaster may cause significant damage, and therefore warrant as much consideration for a mitigation activity as a more frequently occurring, but generally less destructive event.

The assessment of severity divides the hazards identified above into four main categories: Very Severe, Severe, Mild, and Unknown Severity, or Lacking Quantitative Data. The quantitative breaks in severity are defined below.

- **Very Severe.** Very Severe hazards are those that present serious risk to life and property. Very Severe hazards are those that cause greater than $500,000 of damage an occurrence on average and/or have great potential to kill or injure.

- **Severe.** Severe hazards are those that present a risk to life and property. Severe hazards are those that cause between $75,000 and $499,000 an occurrence and/or have potential to injure and possibly kill.

- **Mild Severity.** Mild hazards are those that generally present a lower risk to life and property. These hazards may cause less than $75,000 of damage an occurrence and/or present limited risks to life and property.

- **Unknown Severity or Lacking Quantitative Data.** Hazards of unknown severity may not have occurred in the past (although the probability of occurrence is generally known) or are too varying in intensity to accurately predict damage. These hazards are not dismissed outright, but the historical data and other data available in the HMP is not sufficient to quantify the risk to life and property.

Primarily using the 2018 and 2023 HMPs as references, severity ratings for each hazard reviewed in Sections 4.3.2 through 4.3.4 are listed below:

Table 10 - Estimated Hazard Severity

Severity	Hazard
Very Severe	Hurricanes and Coastal Hazards
	Flooding
Severe	Tornadoes/Thunderstorms
	Wildfires
Mild Severity	Severe Winter Weather
	Excessive Heat
Unknown Severity or Lacking Quantitative Data	Drought
	Earthquakes
	Geological Hazards
	Dam Failures
	Hazardous Substances
	Radiological Emergencies
	Terrorism

Source: State of North Carolina. *Hazard Mitigation Plan*. 2023 https://www.ncdps.gov/documents/enhanced-hazard-mitigation-plan

4.3.6 Previous Events

The most reliable measure of severity is the amount of damage (including fatalities and injuries, if applicable) inflicted by previous disaster events. Often severity is conflated with the *intensity* of the event. Intensity is a measure of the strength of a storm, such as the category rating used for hurricanes, 1 through 5 in the Saffir-Simpson Hurricane Wind Scale. The Mitigation Needs Assessment seeks to reframe severity as impact rather than the natural severity of the disaster. For instance, a Category 1 hurricane may have a greater impact than a Category 5 hurricane, in the appropriate conditions.

The HMP identifies past disasters from 1996 through 2021. Hurricane Florence in 2018 was a presidentially declared disaster that resulted in the allocation of CDBG-DR funds. In addition, some or all of the HUD designated MID counties were also impacted by the following FEMA declared disasters since 2017: Tropical Storm Michael (2018); Hurricane Dorian (2019); Severe Storms, Tornadoes, and Flooding (2020); Hurricane Isaias (2020) and Tropical Storm Eta (2020). The 2023 HMP confirms the impact of Michael, Dorian, Isaias, Eta, and the severe storms, tornadoes, and flooding of 2020.

4.3.7 Very Severe Impacts

The most severe disaster expected in the MID areas are hurricanes and coastal hazards and flooding.

Hurricanes and coastal hazards present the most severe impacts expressed in past events for the MID areas. The HMP includes coastal hazards from 1993 for a total of 18 hurricanes or tropical storms with impacts to the State. The inclusion of Hurricanes Florence, Dorian, and Isaias and other disasters brings this total to 24. Hurricane Florence (which resulted in CDBG-DR and CDBG-MIT funding), and Hurricanes Dorian and Isaias (that did not receive a CDBG-DR or CDBG-MIT allocation), bring this total to 21 hurricanes impacting HUD MID areas since 1993. Seven of these declared disasters have occurred from 2016-2020.

The total cost of coastal events to North Carolina is catastrophic. The major disaster declarations for Hurricane Matthew and Hurricane Florence combined for nearly $29 billion in damage statewide.[36] The majority of that damage is concentrated in the MID areas identified in this Action Plan. Through 19 storms, the damage has exceeded $32 billion and accounted for 117 fatalities.

Table 11 - Coastal Hazard Impacts, (1993-2020)

Event	Year	Fatalities	Property and Crop Damage (2017 dollars)
Emily	1993	0	$ 85,400,000
Gordon	1994	0	$ 832,722
Felix	1995	1	$ 1,619,473
Bertha	1996	1	$ 490,700,000
Fran	1996	13	$ 1,927,000,000
Bonnie	1998	1	$ 498,000,000
Dennis	1999	0	$ 4,562,900
Floyd	1999	13	$ 6,600,000,000
Irene	1999	1	$ 45,923
Isabel	2003	2	$ 641,000,000
Alex	2004	0	$ 9,800,000
Charley	2004	3	$ 29,190,000
Ivan	2004	8	$ 17,500,000
Ophelia	2005	0	$ 78,400,000
Earl	2010	0	$ 3,350,000
Irene	2011	6	$ 201,400,000
Arthur	2014	0	$ 698,500

Event	Year	Fatalities	Property and Crop Damage (2017 dollars)
Matthew	2016	28	$ 4,800,000,000
Florence	2018	40	$ 17,000,000,000
Michael	2019	0	$ 8,670,000
Dorian	2019	0	$ 7,130,000
Isaias	2020	2	$ 12,155,000
Eta	2020	9	$ 20,400,000
Total	-	**134**	$ 32,437,854,518

Using Table 11, the average fatalities per event is greater than five and the average expected loss is $1.4 billion, a staggering amount of damage per occurrence. An analysis of both annualized and per-occurrence average where available indicates that hurricanes and coastal hazards are the most potentially devastating hazard facing the MID area and even Statewide.

For flood hazards, the MID areas experienced a total of 841 flood events and subsequently suffered 26 fatalities, 4 injuries, and over $594 million in property and crop damage from flooding.[37] Floods in the MID areas tend to be more costly and more fatal than the rest of the State, as the MID areas account for 25% of the total cost of flooding statewide and 26% of the fatalities, despite accounting for less than 20% of all flood events statewide.

Table 12 - Flood Severity, Fatalities and Damage, MID Areas (1996-2017)

County	# of events (1996-2017)	Fatalities	Injuries	Property and Crop Damage (2017 dollars)
New Hanover	136	-	2	$ 5,475,278
Brunswick	75	-	-	$ 4,950,971
Pender	74	-	-	$ 1,311,278
Cumberland	50	2	-	$ 88,434,863
Bladen	41	2	-	$ 19,927,883
Carteret	39	-	-	$ 18,416
Edgecombe	35	8	-	$ 91,659,926
Onslow	35	-	-	$ 9,687,065
Wayne	32	4	-	$ 149,949,487
Columbus	30	1	-	$ 62,234,960
Craven	27	1	-	$ 1,254,914
Duplin	26	-	-	$ 1,340,859

County	# of events (1996-2017)	Fatalities	Injuries	Property and Crop Damage (2017 dollars)
Robeson	19	-	-	$ 4,892,669
Scotland	17	-	-	$ 3,085,147
Jones	15	-	-	$ 4,357,391
Pamlico	12	-	-	$ 11,319
Total in MID	**663**	**18**	**2**	**$ 448,592,426**
Remainder of the State	**2,700**	**54**	**26**	**$ 1,214,872,328**

Table 13 - Flood Severity, Fatalities and Damage, MID Areas (1996-2021)

County	# of events (1996-2021)	Fatalities	Injuries	Property and Crop Damage (2017 dollars)
New Hanover	164	-	2	$ 7,424,000
Brunswick	101	-	-	$ 5,303,000
Pender	85	1	-	$ 6,420,000
Cumberland	60	2	-	$ 150,664,000
Bladen	50	2	1	$ 15,210,000
Carteret	54	-	-	$ 16,000
Edgecombe	41	8	-	$ 109,130,000
Onslow	46	-	-	$ 8,230,000
Wayne	41	4	-	$ 196,740,000
Columbus	45	1	1	$ 42,977,000
Craven	33	1	-	$ 1,102,000
Duplin	37	3	-	$ 1,175,000
Robeson	32	2	-	$ 4,917,000
Scotland	20	2	-	$ 38,410,000
Jones	18	-	-	$ 6,500,000
Pamlico	14	-	-	$ 10,000
Total in MID	**841**	**26**	**4**	**$ 594,228,000**
Remainder of the State	**3,547**	**75**	**27**	**$ 1,743,051,060**

The average damage per occurrence for a flood event in the MID areas is $706,573. The greatest historical damage has been experienced in Wayne, Edgecombe, and Cumberland Counties.

The MID areas also have a high concentration of Repetitive Loss (RL) and Severe Repetitive Loss (SRL) property. A Repetitive Loss (RL) property is any insurable building for which two or more claims of more than $1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP. There are over 122,000 RL properties nationwide. A Severe Repetitive Loss (SRL) Property is a building which has had flood-related damage resulting in a flood insurance claim four or more times, with the amount of each claim exceeding $5,000 and the cumulative amount is greater than $20,000, or when two separate flood insurance claims have exceeded the reported value of the property.

Approximately 47% of all RL property and 41% of all SRL property is located within the MID counties. The counties with the highest concentration of RL and SRL properties are coastal counties such as New Hanover, Carteret, Pamlico, Craven, Brunswick, and Onslow. New Hanover has nearly double the second greatest county's total of RL properties with 1,305 compared to Pamlico County's 733.

Figure 6 - RL/SRL Property in MID Counties

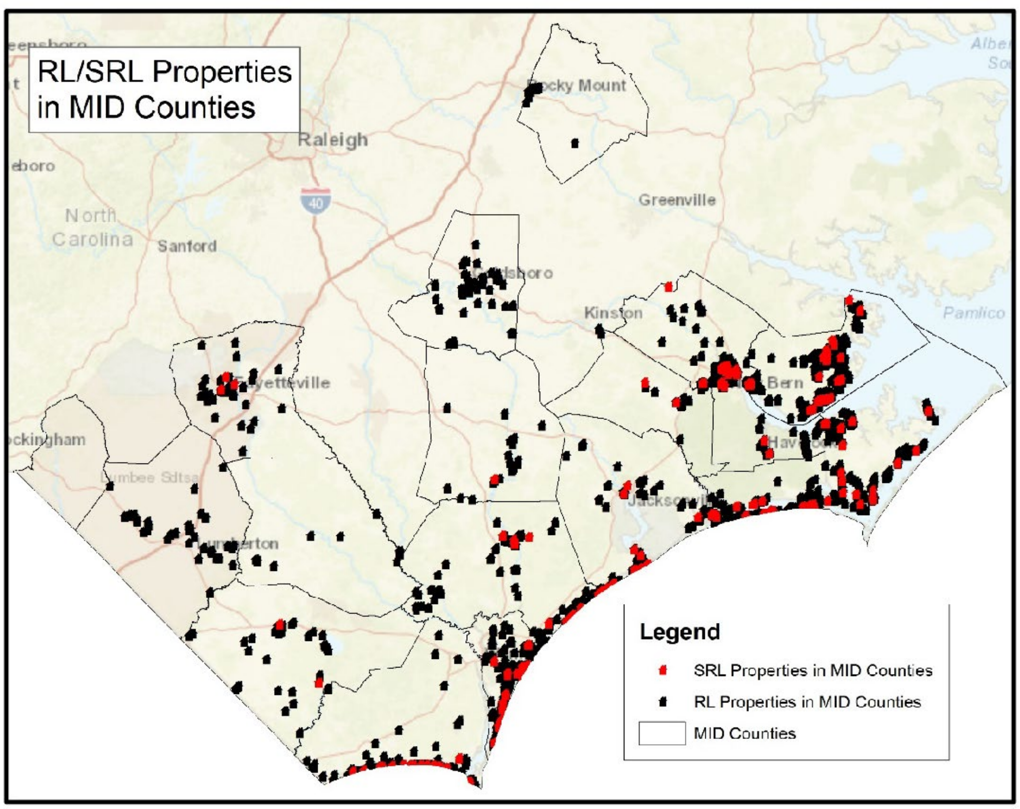


Table 14 - RL/SRL Property in MID Counties, by County

County	RL Property	SRL Property
New Hanover	1,305	54
Pamlico	733	25
Carteret	725	45
Craven	653	44
Onslow	574	27
Brunswick	557	21
Pender	420	29
Wayne	61	-
Robeson	53	-
Columbus	47	2
Cumberland	43	3
Duplin	29	1
Jones	17	2
Bladen	15	-
Edgecombe	15	-
Beaufort	1	-
Total in MID	**5,248**	**253**
Grand Total	**11,159**	**611**
Total outside of MID	**5,911**	**358**
Percent in MID	**47%**	**41%**

The total risk to properties and buildings in floodplains and floodways is extreme in the MID areas. First, an analysis of parcel data for the MID counties show that there are over 80,000 parcels located in a 100-year, 500-year floodzone or floodway. Further there are over 52,000 parcels with structures that are at risk of flood damage from being in the floodzone or floodway. It is important to note that, based on this data, the coastal areas of Brunswick and Carteret have the most properties at risk. Further, NCORR recognizes that storm and flood damage is not limited to flood zone and floodway areas so even these figures underestimate the threat of future flood and storm damage to all of the MID counties.

Table 15 - Properties in Flood Zones/Floodways in HUD MID Areas

County	Properties w/ Structures in Flood Zone	Properties w/ Structures in Floodway	Total Parcels with Flood Risk*
Bladen	181	-	429
Brunswick	10,286	14	15,674
Carteret	12,046	-	18,594
Columbus	480	17	1,331
Craven	4,717	6	7,876
Cumberland*	2,385	81	4,071
Duplin	90	3	558
Edgecombe	611	12	1,126
Jones	191	18	435
New Hanover	6,796	18	8,621
Onslow	3,524	2	4,891
Pamlico	2,510	-	4,785
Pender	3,455	284	5,497
Robeson	2,151	107	4,270
Scotland	29	-	115
Wayne	2,085	282	2,538
TOTAL	**51,537**	**844**	**80,811**

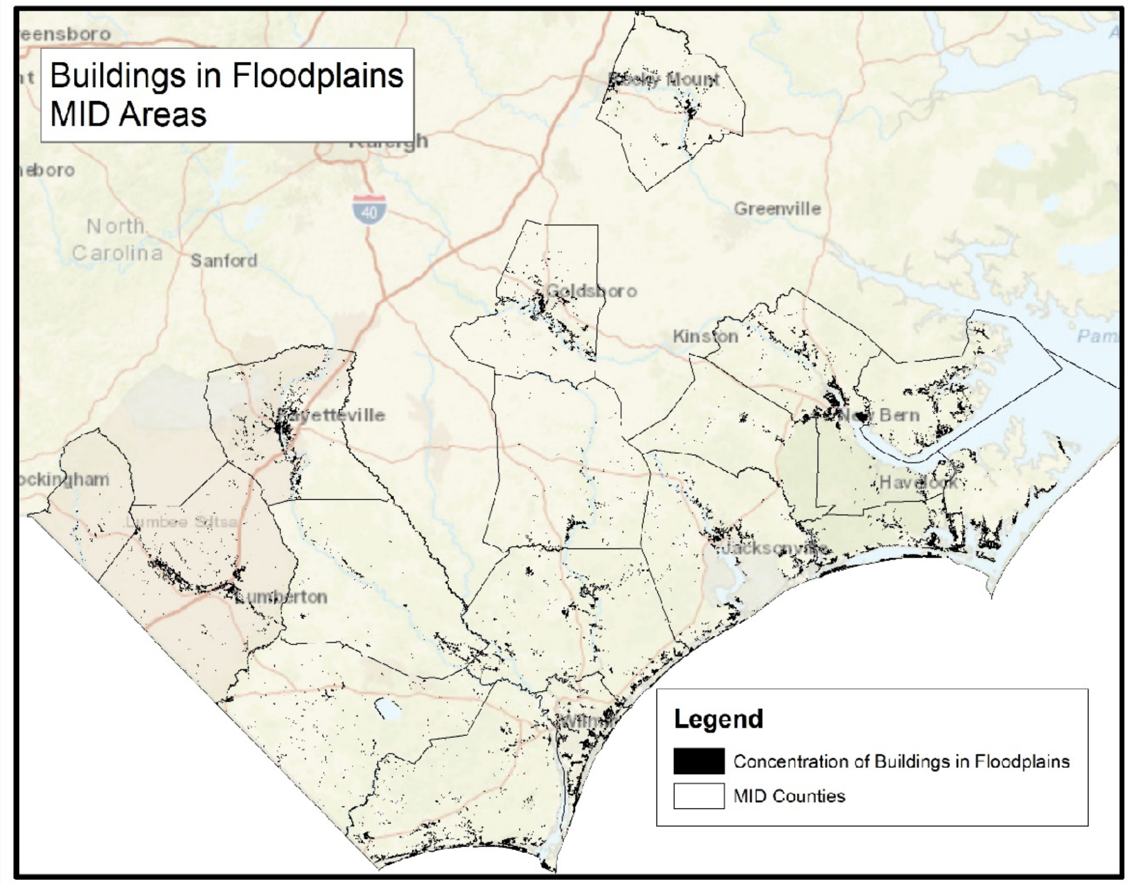
Source: https://fris.nc.gov/fris/Download.aspx?ST=NC# and https://www.nconemap.gov/

According to NCEM data, there are more than 133,000 buildings located within the 100-year or 500-year floodplain within the MID areas. The total value of these structures is nearly $41 billion and is considered at risk of flood losses.

Table 16 - Value of buildings in floodplain, MID areas

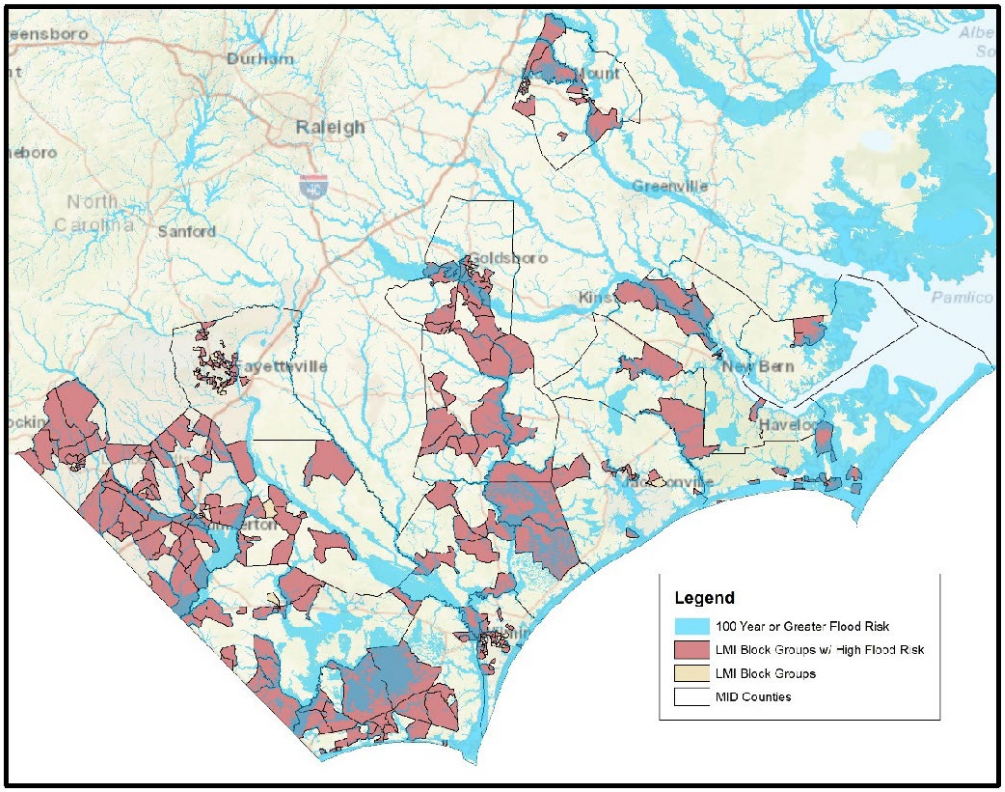
Buildings in Floodplain	Total Value
133,803	$ 40,972,883,854

Figure 7 - Buildings in Floodplains, MID Areas



In addition to at-risk buildings, a significant amount of the population in the MID areas is located in block groups that are intersected by the 100-year floodplain. Of the 1,055 block groups which comprise or border the MID areas, 362 of those block groups have a low- and moderate-income (LMI) population greater than 51% of the total population of the block group. This is known as an LMI block group. Of those 362 LMI block groups, 304 of them contain a portion of the 100-year floodplain.

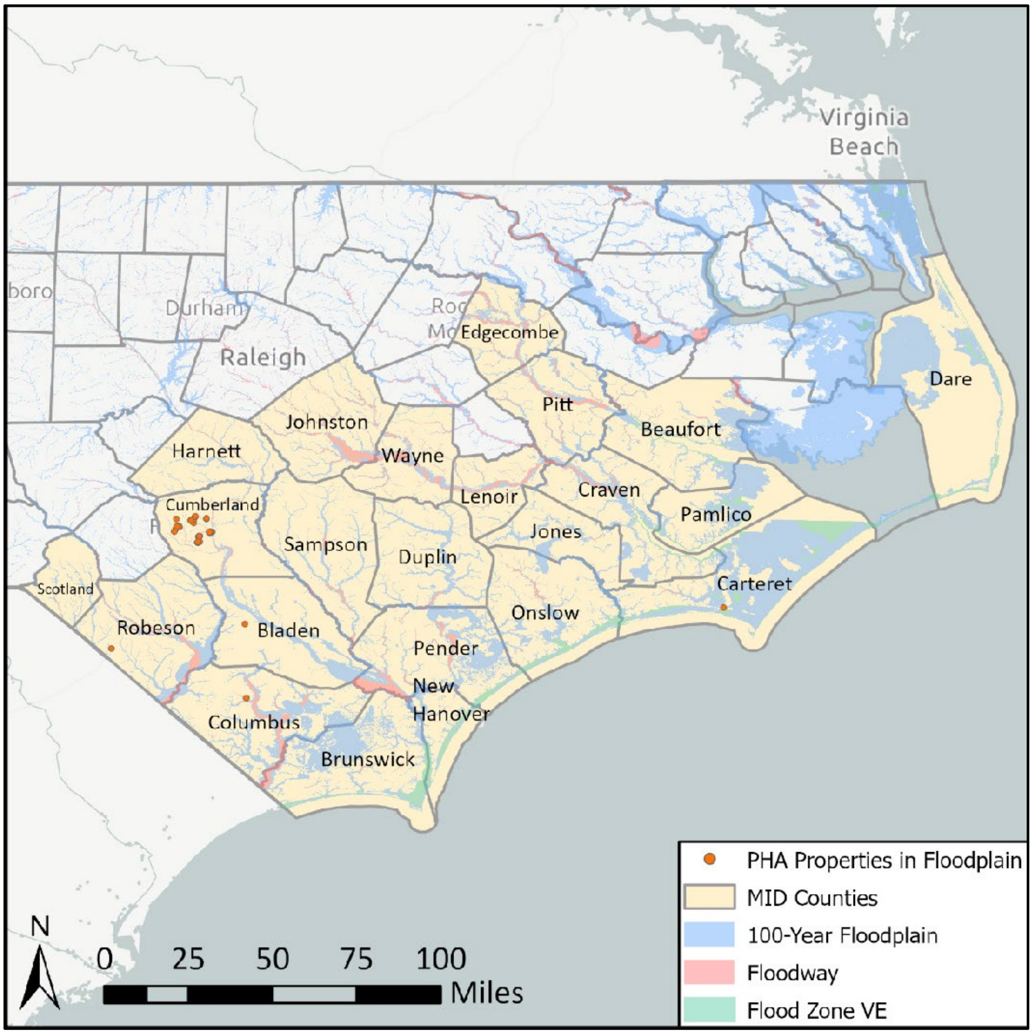
Figure 8 - LMI Block Groups and the 100-year Floodplain



Although it is not clear how the population of the block groups is organized within the block group in relation to the floodplain, 261,035 individuals live within block groups that are intersected by the 100-year floodplain. Based on the spatial distribution of the floodplains and the LMI population of the MID areas, it is evident that a significant portion of the LMI population is located within the 100-year floodplain.

Additionally, there are a number of Public Housing Authority developments located within the 100-year floodplain in MID counties, demonstrating a need for mitigation of flood risk for residents of public housing. A 2022 analysis of HUD's "Public Housing Developments" and data on floodways and 100-year floodplains yielded at least 87 public housing developments (562 units) at risk of flooding in the MID counties, with a noticeable cluster in the Fayetteville area in Cumberland County.

Figure 9 – Public Housing Developments located in a 100-year floodplain or floodway, MID areas



4.3.8 Severe Impacts

Two hazard types comprise the Severe category, Tornadoes and Thunderstorms and Wildfires.

Tornadoes are extremely damaging statewide and becoming more prevalent. There were total of 1,542 tornados in NC between 1950 -2021.[38] For tornadoes, a total of 498 events have been recorded from 1950 - 2021 in the MID areas, while from 1996 through 2022 a total of 2,580 severe thunderstorms have been recorded. The average expected loss per event in MID areas, expressed in 2017 dollars for tornadoes and thunderstorms combined, is $182,738.

Table 17 - Tornadoes by MID County (1950-2016)

County	Events by Fujita Scale (F-Rating), 1950-2016					Total Events	Fatalities	Injuries	Damage
	0	1	2	3	4				
Bladen	8	6	6	1		21	5	8	$485,523
Brunswick	16	8	1			25			$2,114,000
Carteret	37	23	6			66		11	$24,968,233
Columbus	10	9	4	2		25	8	40	$15,999,620
Craven	21	7	3	1		32		48	$28,933,635
Cumberland	7	7	4	3	2	23	5	168	$99,079,510
Duplin	9	12	13	2	1	37		86	$90,248,666
Edgecombe	1	3		3		7		8	$2,844,846
Jones	10	2	4	1		17	1	13	$29,474,562
New Hanover	8	10				18		7	$3,938,265
Onslow	28	11	4	1		44	3	53	$23,649,127
Pamlico	9	2	2	1		14	1	45	$26,160,194
Pender	17	10	4			31	3	31	$6,321,900
Robeson	16	18	7		3	44	6	334	$22,278,431
Scotland	2	3	1	2	3	11		24	$19,342,737
Wayne	13	8	3	1	1	26	4	159	$125,913,490
Total in MID	**212**	**139**	**62**	**18**	**10**	**441**	**36**	**1,035**	**$521,752,739**
Statewide	**555**	**515**	**232**	**58**	**29**	**1,389**	**127**	**2,577**	**$3,000,368,872**
Remainder of the State	**343**	**376**	**170**	**40**	**19**	**948**	**91**	**1,542**	**$2,478,616,133**

Source: North Carolina Hazard Mitigation Plan, 2018, Table 3-21, pg. 3-93

Table 18 - Tornadoes by MID County (1950-2021)

County	Events by Fujita Scale (F-Rating), 1950-2021					Total Events	Fatalities	Injuries	Damage
	0	**1**	**2**	**3**	**4**				
Bladen	11	6	6	1		24	5	8	$505,523
Brunswick	16	8	1			25	3	11	$2,114,000
Carteret	40	29	8			77		11	$24,968,233
Columbus	13	12	4	2		31	8	40	$16,710,643
Craven	25	8	3	1		37		48	$28,933,635
Cumberland	7	7	4	3	2	23	5	169	$99,079,510
Duplin	9	13	13	2	1	38		86	$90,248,666
Edgecombe	1	4		3		8		8	$2,901,074
Jones	12	2	4	1		19	1	13	$29,474,562
New Hanover	17	14				31		8	$4,865,127
Onslow	28	12	4	1		45	3	59	$23,649,127
Pamlico	10	4	2	1		17	1	45	$26,160,194
Pender	24	14	4			42	3	31	$6,668,554
Robeson	16	18	16		3	43	6	334	$22,278,431
Scotland	2	3	1	2	3	11		24	$19,342,737
Wayne	14	8	3	11	1	27	4	159	$126,082,175
Total in MID	**245**	**162**	**63**	**18**	**10**	**498**	**39**	**1,054**	**$523,982,191**
Statewide	**633**	**584**	**237**	**59**	**29**	**1,542**	**132**	**2,618**	**$3,110,538,446**
Remainder of the State	**388**	**422**	**174**	**41**	**19**	**1,044**	**93**	**1,564**	**$2,586,556,255**

Source: North Carolina Hazard Mitigation Plan, 2023, Table 3-35, pg. 3-111

The damage losses from Tornadoes in MID areas are 16.85% of the total statewide losses, despite the MIDs accounting for 32.3% of all tornadoes statewide. While the cause is unclear based on the data, it does indicate that MID areas are not as vulnerable to tornado damage as other areas of the State. In contrast, 40% of tornado-related injuries occur in MID counties, indicating that the risk to life is greater than the risk to property in a tornado event in the MID areas.

Table 19 - Severe Thunderstorms by MID County (1996-2017)

County	Thunderstorm Events (1996-2017)	Fatalities	Injuries	Damage
Bladen	234	-	6	$2,684,680
Brunswick	130	-	1	$809,879
Carteret	139	-	1	$2,141,410
Columbus	214	-	7	$9,609,388
Craven	179	-	2	$367,027
Cumberland	229	-	8	$1,749,515
Duplin	198	-	6	$1,449,497
Edgecombe	118	-	1	$1,494,863
Jones	65	-	3	$145,531
New Hanover	133	-	5	$2,430,684
Onslow	169	-	-	$398,613
Pamlico	35	-	-	$95,863
Pender	125	-	7	$3,584,115
Robeson	309	-	8	$5,483,568
Scotland	96	-	4	$851,930
Wayne	207	1	9	$5,187,599
Total in MID	**2,580**	**1**	**68**	**$38,484,162**
Statewide	**14,845**	**31**	**226**	**$103,170,357**
Remainder of the State	**12,265**	**30**	**158**	**$64,686,195**

Source: NCHMP, 2018, Table 3-22, p. 3-100

Table 20 - Severe Thunderstorms by MID County (1996-2022)

County	Thunderstorm Events (1996-2022)	Fatalities	Injuries	Damage
Bladen	234	-	6	$2,684,680
Brunswick	130	-	1	$809,879
Carteret	139	-	1	$2,141,410
Columbus	214	-	7	$9,609,388
Craven	179	-	2	$367,027
Cumberland	229	-	8	$1,749,515
Duplin	198	-	6	$1,449,497
Edgecombe	118	-	1	$1,494,863
Jones	65	-	3	$145,531
New Hanover	133	-	5	$2,430,684
Onslow	169	-	-	$398,613
Pamlico	35	-	-	$95,863
Pender	125	-	7	$3,584,115
Robeson	309	-	8	$5,483,568
Scotland	96	-	4	$851,930
Wayne	207	1	9	$5,187,599
Total in MID	**2,580**	**1**	**68**	**$38,484,162**
Statewide	**14,844**	**33**	**296**	**$118,975,828**
Remainder of the State	**12,264**	**32**	**228**	**$80,491,666**

Source: NCHMP, 2023, Table 3-25, p. 3-117

Severe thunderstorms are not as pronounced in the MID areas, accounting for only 17.38% of storms statewide. However again injuries appear more common in the MID areas from severe storms, as MID areas account for 23% of thunderstorm-related injuries. Thunderstorm damage is also disproportionate in the MID counties, with 32.35% of statewide damages within the MID areas.

Fifty percent of wildfire incidents in the state occur within the MID counties. Damage as a percentage of incidents is approximately in line with the proportion of incidents in the MID areas, at 56.75% of damages caused by wildfire in the MID counties. The average cost of a wildfire incident is $200,147 upon review of the 16 wildfire events in the MID areas. The outlier for wildfire incidents is Brunswick County, with a total of 4 major events since 1998 with a property and crop damage total of $2.6 million.

4.3.9 Mild Impacts

Mild hazards are those with minimal past damage or typically pose a lesser threat to life. The mild hazards in the MID areas include Severe Winter Weather and Excessive Heat.

Severe Winter Weather poses little threat to the MID areas, with New Hanover, Craven, Duplin, Scotland, and Jones counties not registering property or crop damage of any kind from winter weather. Only 5.3% of all winter weather events in North Carolina occur in the MID areas, accounting for 5.4% of total damage from winter weather for the State. Worth noting, and similar to thunderstorms and tornadoes, is that the fatality and injury rate is higher in the MID areas than elsewhere in the state. Despite low damage per occurrence ($53,732 per occurrence, on average), 34 fatalities and 177 injuries are attributed to winter weather in the MID areas since 1996, approximately 26% of the state total.

Table 21 - Severe Winter Weather in the MID Counties (1996-2017)

County	Severe Winter Weather Events (1996-2017)	Fatalities	Injuries	Property and Crop Damage
New Hanover	6	-	-	-
Brunswick	9	-	-	$201,211
Pender	23	2	-	$2,001,571
Cumberland	33	1	-	$10,283
Bladen	26	-	-	$4,604,380
Carteret	21	4	4	$334,011
Edgecombe	41	-	-	$23,807
Onslow	26	1	35	$222,211
Wayne	31	-	-	$10,283
Columbus	18	-	-	$7,845,330
Craven	27	-	-	-
Duplin	30	1	5	-
Robeson	27	-	-	$5,947,616
Scotland	31	-	-	-
Jones	25	-	-	-
Pamlico	21	-	2	$23,596
Total in MID	**395**	**9**	**46**	**$21,224,299**
Statewide	**7,500**	**34**	**177**	**$395,455,789**
Remainder of the State	**7,105**	**25**	**131**	**$374,231,490**

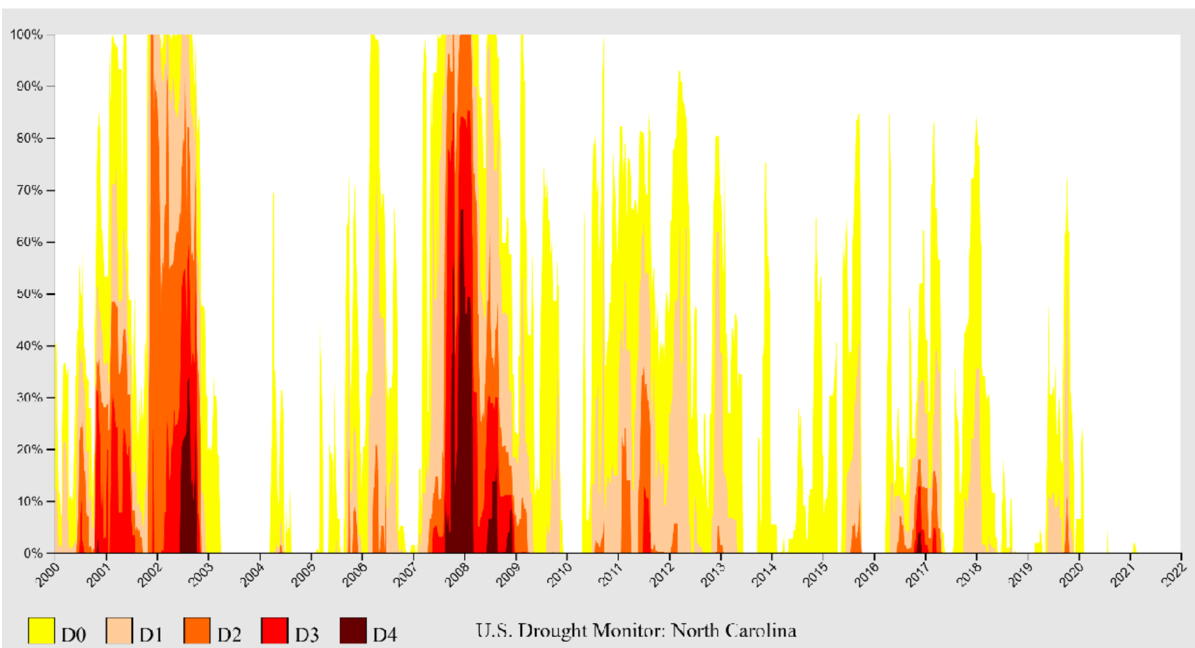
Excessive heat is not associated with direct damage costs but can be deadly. Thirty-four excessive heat events since 1996 have killed 16 people and injured another 15. While 27% of excessive heat events have impacted the MID counties, 88% of injuries and 31% of fatalities statewide have come from the MID areas.

4.3.10 Unknown Severity

Hazards with unknown severity may occur so infrequently to not have a meaningful estimate of average damage caused by an event, may occur over long-time horizons and therefore are difficult to directly tie damage to, or are variable in scope and impact by their nature and therefore cannot be accurately estimated. The hazards with unknown severity include drought, hazardous substances, earthquakes, dam failures, geological hazards, radiological emergencies, and terrorism.

Drought does not directly contribute to property damage but can significantly impact crop production over a long time horizon. Therefore, it is difficult to measure specific losses attributed to drought. The United States Drought Monitor began measuring drought by duration in 2000 nationwide. Since then, North Carolina has had multiple droughts, with the longest lasting from January 4, 2000 and ending on December 17, 2002. The most intense drought occurred the week of December 25, 2007 where 66.2% of the landmass of North Carolina was affected.[39]

Figure 10 - Drought in North Carolina from 2000 - Present



Source*: National Integrated Drought Information System,* 2021, https://www.drought.gov/states/north-carolina

Longer droughts affect crop production, may worsen the risk of wildfire, and generally reduce quality of life.

Earthquakes occur infrequently within the MID areas and seldom with enough damage potential to create an average damage per occurrence. However, earthquake losses have been annualized in the

HMP.

Table 22 - Annualized Earthquake Losses, MID Areas

County	Annualized Losses
Bladen	$178,792
Brunswick	$409,578
Carteret	$70,584
Columbus	$411,353
Craven	$93,615
Cumberland	$1,409,515
Duplin	$257,214
Edgecombe	$61,166
Jones	$12,803
New Hanover	$831,871
Onslow	$231,484
Pamlico	$8,172
Pender	$98,802
Robeson	$1,153,622
Scotland	$295,103
Wayne	$374,682
Total in MID	**$5,898,354**
Statewide	**$36,593,359**

Annualized losses are difficult to use to assess the severity of a single disaster, therefore the severity of earthquakes is not as well defined in this Mitigation Needs Assessment.

Geological hazards vary in severity, and similar to droughts, present hazards over long time horizons with often imperceptible changes, particularly when assessing geological hazards associated with coastal erosion. The threat of sinkholes and coastal erosion, the most pressing geological hazards in the MID areas, is best described by the buildings at risk of loss within coastal erosion zones. The 2018 HMP prepared an analysis of buildings within 50 yards of an active sinkhole or within 50 yards of a costal erosion area. The 2023 HMP contains the same analysis. The total value of the buildings at risk within 50 yards of an active sinkhole in the MID areas is $946 million. The majority of those buildings and the majority of the value of all buildings at risk of sinkholes are in New Hanover County, with 1,311 buildings worth $617 million alone. The total value of buildings at risk of eroding shoreline is $80 million, generally concentrated in New Hanover, Onslow, and Brunswick counties.

Table 23 - Buildings at Risk of Sinkholes or Coastal Erosion, MID Areas

County	# of Buildings within 50 yards of a sinkhole	Value of buildings at risk	# of buildings within 50 yards of eroding shoreline	Value of buildings at risk
Brunswick	1,693	$ 274,060,857	101	$ 16,954,506
Carteret	-	$ -	23	$ 5,855,243
Jones	4	$ 466,228	-	$ -
New Hanover	1,223	$ 617,106,193	39	$ 30,862,658
Onslow	1,311	$ 50,397,642	130	$ 21,965,739
Pender	97	$ 4,325,222	52	$ 4,569,816
Total	**4,328**	**$ 946,356,142**	**345**	**$ 80,207,962**

Dam failure is considered in the HMP but annualized losses statewide are negligible. Therefore, the risk of dam failure is minimal in the MID areas, which also contain relatively few high-risk dams. Similarly, hazardous substances, radiological emergencies, and terrorism hazards are not annualized and are not summarized at the county level in the HMP to draw a conclusion about the relative severity of these events. In some instances, such as radiological emergencies, no such hazard has manifested as a disaster event in State history and therefore the severity is considered minimal.

4.3.11 Multi-Hazard Interface

In some instances, a disaster occurrence will increase the risk of disaster and worsen an existing hazard. This interaction between hazards is known as the Multi-hazard Interface. The Multi- hazard approach is well known in wildfire-prone wildland-urban interface (WUI) areas which face natural hazards from wildfires, drought, and mudslides caused by flooding which must all be accounted for in a hazard mitigation plan.[40]

While wildfire hazard is generally not as serious as coastal hazards and flooding, it must be acknowledged that addressing some hazards while ignoring others may cause externalities in community vulnerability that could degrade the overall safety of the community. The following hazards may have “ripple effects” on other hazards and worsen the risk posed by these hazards under disaster conditions.

Table 24 - Multi-Hazard Interface

Disaster Condition	Increased Risk
Hurricanes and Coastal Hazards	Flooding
	Tornadoes/Thunderstorms
	Dam Failures
	Geological Hazards (Coastal Erosion)
	Hazardous Substances
Flooding	Dam Failures
	Geological Hazards (Coastal Erosion)
	Hazardous Substances
Excessive Heat	Drought
	Wildfires
Drought	Wildfires
Wildfires	Hazardous Substances

Hurricanes and Coastal Hazards present the greatest potential for increasing hazard conditions by worsening flood, severe weather, the potential for dam failures, coastal erosion, and potentially causing the release and spread of hazardous substances such as oil. Flooding has similar effects but is generally more localized and does not carry the same extreme weather externality. Excessive heat, drought, and wildfires are all interconnected systems with potentially cascading effects.

When planning to mitigate risks to hazards, an effective plan will account for potential changes to the environment that could worsen other hazards. To combat these changes the State will strongly favor mitigation measures which address multiple hazards and acknowledge multi-hazard interfaces.

4.3.12 Current and Changing Conditions

A flaw in the HMP approach is that an assessment of hazard and risk rely on historical data and do not directly consider the longer-term implications of a changing climate and sea level rise. These environmental conditions must also be taken in context with changing social conditions. The population of North Carolina has increased by 10% from 2010 to 2019, increasing the statewide population to almost 10.5 million, making NC the fourth fastest growing state in the US. However, the population changes within the MID counties have varied from county to county and varies widely. While strong population increases are evident in coastal counties like Brunswick, Carteret, New Hanover, Onslow, and Pender, the inland counties like Bladen, Columbus, Edgecombe, Jones, Pamlico, Robeson, and Scotland have seen a decrease in population (Craven County also had a modest decrease in population although partly coastal). The population in Wayne and Duplin counties has stayed relatively constant with a 0.2% and 0.1% increase respectively, with Cumberland experiencing a modest 2.5% increase.[41]

Table 25 - Population Change in MID Counties

County	Population 2010	Population 2019	% Change in Population 2010-2019
Bladen	35,181	32,722	-7%
Brunswick	108,069	142,820	32.2%
Carteret	66,700	69,473	4.2%
Columbus	57,992	55,508	-4.3%
Craven	104,171	102,139	-2%
Cumberland	327,197	335,509	2.5%
Duplin	58,666	58,741	.1%
Edgecombe	56,619	51,472	-9.1%
Jones	10,143	9,419	-7.1%
New Hanover	203,284	234,473	15.3%
Onslow	186,892	197,938	5.9%
Pamlico	13,109	12,726	-2.9%
Pender	52,415	63,060	20.3%
Robeson	134,493	130,625	-2.9%
Scotland	36,062	34,823	-3.4%
Wayne	122,886	123,131	.2%

Source: *Annual Estimate of Residential Population for Counties in NC,* US Census Bureau, April 1, 2010 to July 1, 2019, March 2020

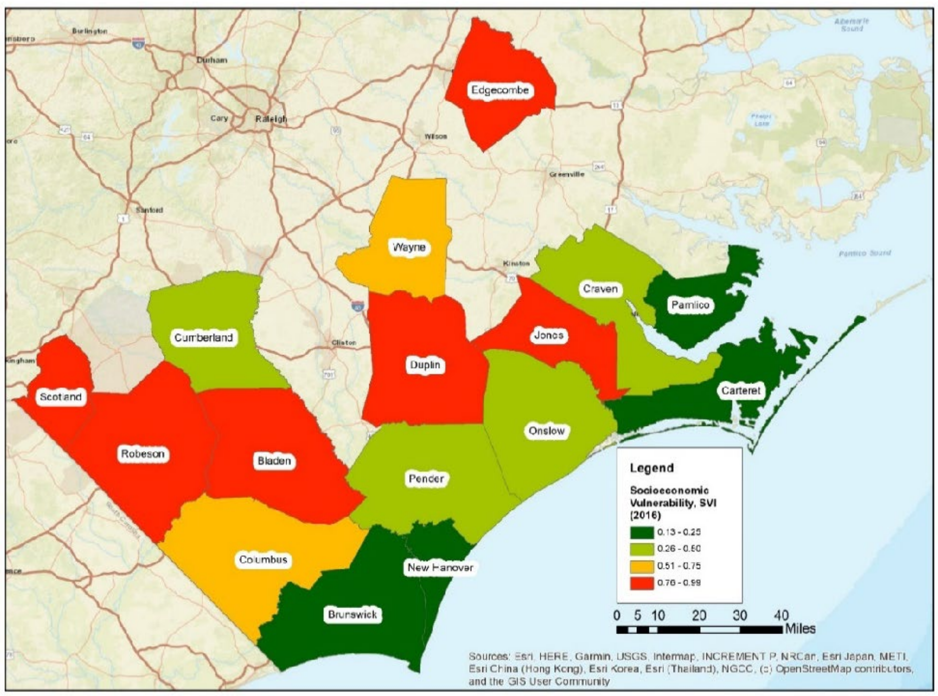
Population changes are important to consider because with increasing population, an increase in disaster losses may also be expected due to more individuals living in hazardous areas – in this context, coastal areas - and more property, such as housing stock and commercial property at risk of destruction. Conversely counties with a decreasing population may face challenges in sufficient planning and reduced access to resources to meet their needs, including a dwindling tax base and a reduction in critical services such as police, fire, and rescue. Effective mitigation planning takes these factors into account as well as the nature of the hazard while selecting the best course of action to mitigate risks specific to the community.

In addition to population changes, social vulnerability is an important factor in assessing hazard vulnerability. The Center for Disease Control (CDC) defines social vulnerability as the resilience of communities when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks. CDC's Social Vulnerability Index uses 15 U.S. census variables at tract level to help local officials identify communities that may need support in preparing for hazards; or recovering from disaster. The Geospatial Research, Analysis, and Services Program (GRASP) created and maintains CDC's Social Vulnerability Index (SVI).[42]

One of these SVI indices is a measure of socioeconomic status. The socioeconomic SVI is driven by census data on poverty level, employment, total income, and education level. The SVI is set on a scale from 0 to 1, with numbers closer to 1 indicating reduced resiliency and therefore greater susceptibility to hazard.

As of 2018, a significant portion of the MID areas had a high SVI. Spatially, a "belt" of high SVI counties are north and west of the coastal areas, with coastal counties such as Brunswick, New Hanover, Carteret, and Pamlico having the strongest SVI in the MID areas in 2018 data. In selecting appropriate mitigation measures, the SVI – and other vulnerability information – must be considered.

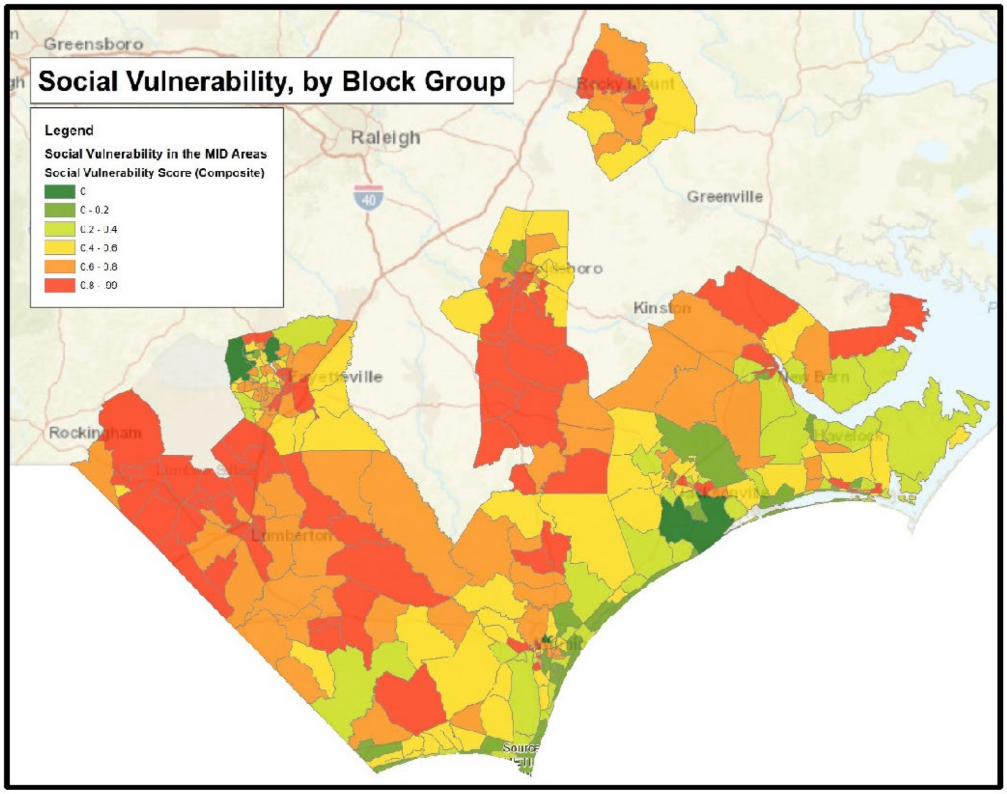
Figure 11 - Socioeconomic Social Vulnerability Index, MID areas, 2018



A closer look at the geographic patterns of social vulnerability from 2018 revealed specific pockets of vulnerability in certain counties. Northwest Robeson County, Southeast Scotland County, central Bladen County, and West Duplin County emerge as serious social vulnerability areas. An area of social vulnerability is evident in West and central Edgecombe County as well. Finally, north Pamlico County also faces significant social vulnerability issues.

A review of the block group patterns and social vulnerability in 2018 indicated a significant shift in vulnerability from eastern, coastal North Carolina which are relatively less vulnerable to a more vulnerable population found inland. These vulnerabilities also appear in the current CDBG-DR applicant pool for recovery services provided by NCORR, which aligns strongly with the geographic distribution of vulnerable areas.

Figure 12 - Social Vulnerability by Block Group (2018 data)



Updated SVI data from 2020 reveals similar patterns at the county level, with additions to the "High" social vulnerability category among some of the inland MIDs including Cumberland County, Wayne County, and Sampson County, and increased social vulnerability in Craven County and Pamlico County.

The impacts of the COVID-19 pandemic also led to rising housing costs, and increased cost burden especially on low-income renters. According to HUD's CPD Mapping Tool, 29.4% of North Carolina households experience cost burden (paying more than 30% of the household's income on housing costs) and 12.6% experience severe cost burden (paying more than 50% of the household's income on housing costs). Just 6.4% of renter units in North Carolina are affordable to those with 30% HUD Area Median Family Income (HAMFI), and 23.3% of renter units are affordable to those with 40% HAMFI.[43]

4.3.13 Environmental Justice

Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.[44] Inclusion, equity, and authentic engagement require the active and comprehensive participation of these audiences. Executive Order 12898 requires that all federal agencies adopt environmental justice strategies to protect the health of people living in communities overburdened by pollution. HUD programs are required to consider how federally assisted projects may have disproportionately high and adverse human health or environmental effects on minority and low-income populations. The Environmental Protection Agency (EPA) states that environmental justice will be achieved when all persons have the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

EPA published the Regional Resilience Toolkit,[45] a guide that provides a planning process that integrates environmental justice in building regional resilience plans for State and local governments. The toolkit includes a five-step process for resilience planning with stakeholders.

1. **Engage**. Engage stakeholders and build trust.
2. **Assess**. Conduct a vulnerability assessment, including problem statements, hazard scenarios, and maps.
3. **Act.** Prioritize feasible, impactful strategies with stakeholder buy in and develop a long- term plan.
4. **Fund.** Engage funders, decision makers, and make a case for the funding of specific projects.
5. **Measure.** Return to the process and make the plan a living document, complete with metrics, timelines, and performance criteria.

NCORR's mitigation planning efforts mirror the basic steps in the EPA process. In developing the baseline Mitigation Needs Assessment and Mitigation Action Plan, NCORR implemented the EPA strategies to engage stakeholders in assessing risks and defining items for action included in the plan. Since the development of the initial Action Plan, community input has been obtained in the identification of buyout DRRAs identified for DRRA Phase I, providing all area citizens with an opportunity to be involved in the planning process. The majority of DRRA Phase I counties are located in Hurricane Matthew MID areas. Specifically, NCORR engaged local communities about the buyout program in Columbus, Cumberland, Edgecombe, Jones, Robeson, and Wayne counties.

NCORR is currently in the process of scheduling meetings with local governments in the Phase II areas, comprised of counties impacted by Hurricane Florence or dually impacted by both hurricanes, including state MID areas. Now that there are no COVID- 19 restrictions, DRRA planning and implementation is progressing. NCORR will continue to perform outreach to communities and is scheduling community and local government meetings to review potential DRRAs. In addition, broad community input has been solicited by holding two sets of public hearings; one set of hearings were held in 2019, and one virtual hearing was held in June 2021 to meet the requirements of 86 FR 561 (which allocates additional MIT funds to the State) to obtain public input into action plan development. The Community Development team at NCORR maintains regular contact with community stakeholders representing the Infrastructure Recovery Program and the Public Housing Restoration Fund, and Community Development representatives were actively engaged in the substantial amendment of this action plan in 2022.

NCORR is also committed to continued planning through the State's Recovery Support Function Groups to ensure that the planning process has been faithful to the original objectives of inclusion and equal access – and if not, that the plan is corrected with stakeholder input to better address recovery and resilience topics. NCORR commits to the inclusion of under- represented, minority, and low-income populations in its mitigation planning process, DRRA identification process, and ultimate execution, as well as in the identification and selection of applicants to the Public Housing Restoration Fund and the project selection process for the Infrastructure Recovery Program.

4.4 Threat to Community Lifelines

In November 2014, the National Association of Counties (NACo) published "Improving Lifelines: Protecting Critical Infrastructure for Resilient Counties." NACo defines lifelines as programs and services provided to the public, including the infrastructure systems vital to counties to operate, which are vital to the county and sometimes extend to an entire region. These lifelines ensure the public health, safety, and economic security. Lifelines differ from "life support" systems, which include emergency services and public health.[46]

There are four main factors that define lifelines:

- They provide necessary services and goods that support nearly every home, business, and county agency;
- Lifelines deliver services that are commonplace in everyday life, but disruption of the service has the potential to develop life-threatening situations;
- They involve complex physical and electronic networks that are interconnected within and across multiple sectors; and
- A disruption of one lifeline has the potential to effect or disrupt other lifelines in a cascading effect.

The four major lifelines as defined by NACo are energy, water, transportation, and communications.

In February 2019, FEMA released the Community Lifelines Implementation Toolkit which further homes in on seven Community Lifelines: 1) safety and security, 2) communications, 3) food, water, sheltering, 4) transportation, 5) health and medical, 6) hazardous materials management, and 7) energy.[47]

In the Implementation Toolkit, the focus is on activating lifelines for support during incident response. The Notice instead challenges the State to consider the Community Lifelines as an element of mitigation and resilience planning. The components of the Community Lifelines are indicated below:

Table 26 - Community Lifeline Components

Community Lifelines	Component	Community Lifelines	Component
Safety and Security	Law Enforcement/Security	Energy	Power (Grid)
	Search and Rescue		Temporary Power
	Fire Services		Fuel
	Government Service	Communications	Infrastructure
	Responder Safety		Alerts, Warnings, Messages
	Imminent Hazard Mitigation		911 and Dispatch
Food, Water, Sheltering	Evacuations		Responder Communications
	Food/Potable Water		Financial Services
	Shelter	Transportation	Highway/Roadway
	Durable Goods		Mass Transit
	Water Infrastructure		Railway
	Agriculture		Aviation
Health and Medical	Medical Care		Maritime
	Patient Movement		Pipeline
	Public Health	Hazardous Material	Facilities
	Fatality Management		Hazardous Debris, Pollutants, Contaminants
	Health Care Supply Chain		

The Mitigation Needs Assessment seeks to quantitatively assess the significant potential impacts and risks of hazards affecting the Community Lifelines. It is the expressed intent of HUD that CDBG-MIT funded activities that ensure that these critical areas are made more resilient and are able to reliably function during future disasters, can reduce the risk of loss of life, injury, and property damage and accelerate recovery following a disaster.

To quantitatively assess the damage previously dealt to each lifeline, FEMA Public Assistance (PA) project costs and FEMA Individual Assistance (IA) FEMA Verified Loss (FVL) for both Hurricanes Matthew and Florence were reviewed in the MID areas. The damage was categorized according to the impacted Community Lifeline. The result is a total damage breakdown using these funding sources as a proxy for damage across each lifeline. FEMA Hazard Mitigation Grant Program (HMGP) projects for residential mitigation (elevation, reconstruction, and acquisition) and infrastructure were not included, as HMGP projects largely intersect the purpose and nature of CDBG-MIT funds in the sense that they seek to reduce future losses.

The approach is to identify the most heavily impacted Community Lifelines and focus CDBG-MIT funds on those lifelines to provide long-lasting or permanent interventions to break the cycle of repeated Federal investment to serve the same vulnerable lifelines.

Table 27 - Damage to Lifelines, FEMA PA and IA, MID Areas

Event	Damage Verification Source	Safety and Security	Food, Water, Sheltering	Health and Medical	Energy
Hurricane Matthew	Public Assistance	$56,068,699	$40,151,959	$1,000,402	$6,164,177
	Individual Assistance		$47,978,514		
Hurricane Florence	Public Assistance	$118,211,811	$698,147	$1,106,425	$4,247,591
	Individual Assistance		$188,408,439		
Total		**$174,280,510**	**$277,237,059**	**$2,106,827**	**$10,411,768**

Event	Damage Verification Source	Communications	Transportation	Hazardous Materials Management	Total
Hurricane Matthew	Public Assistance	$313,580	$111,721,533	$39,594	$215,459,943
	Individual Assistance				$47,978,514
Hurricane Florence	Public Assistance	$4,472	$479,128	$125,691	$124,873,264
	Individual Assistance				$188,408,439
Total		**$318,052**	**$112,200,661**	**$165,284**	**$576,720,160**

To better inform the analysis, and to pinpoint needs across each lifeline, a deeper analysis is warranted.

4.4.1 Safety and Security

The Safety and Security lifeline is focused on immediate damage prevention, law enforcement, fire services, rescue operations, and government services. The FEMA PA Category B projects, "Emergency Protective Measures," is a suitable measure of the immediate pre-disaster needs of impacted communities. These emergency measures and public services account for approximately 30% of the FEMA documented damage to lifelines. Continued public services and the reduction of downtime in critical needs is a significant focus of mitigation funds.

4.4.2 Food, Water, Sheltering

Food, Water, and Sheltering are critical needs post-disaster and the primary focus of some FEMA PA projects related to water infrastructure such as water and sewer as well as FEMA IA documented damage. The FEMA IA estimate is based on applicants with FEMA Verified Loss (FVL) greater than $0 to real property in the MID areas. Based on the assessment of damage to each lifeline, the Food, Water, Sheltering lifeline accounted for the greatest extent of damages with 48% of FEMA documented damages to lifelines.

The State endeavors to use CDBG-MIT funds to address the threat to the Food, Water, and Sheltering Community Lifeline through buyout initiatives as well as the Public Housing Restoration Fund and the Infrastructure Recovery Program. Other resources are available to address facets of the complimentary Community Lifelines, but the CDBG National Objectives and existing program structure established for CDBG-DR funds provide an existing framework to best address this lifeline.

4.4.3 Health and Medical

Health and Medical lifelines include medical care, fatality management, and the health care supply chain. Primarily, CDBG-MIT funds can fortify the Health and Medical lifeline by easing patient movement and providing for public health improvements through the implementation of a variety of programs or projects. There are few FEMA PA projects directly associated with the Health and Medical lifeline, however the Health and Medical lifeline is greatly benefited by the auxiliary benefits through improvements in infrastructure.

4.4.4 Energy

The Energy lifeline is comprised of power delivery, both permanent and temporary, and the supply of fuel. Many FEMA PA projects are associated with the installation of generators for temporary power and the hardening of power grids.

In “Improving Lifelines,” power delivery is one of the major lifelines considered and there are multiple opportunities presented for counties, such as smart grids, emergency backup power, and updated building codes which may be provided by other funding sources.

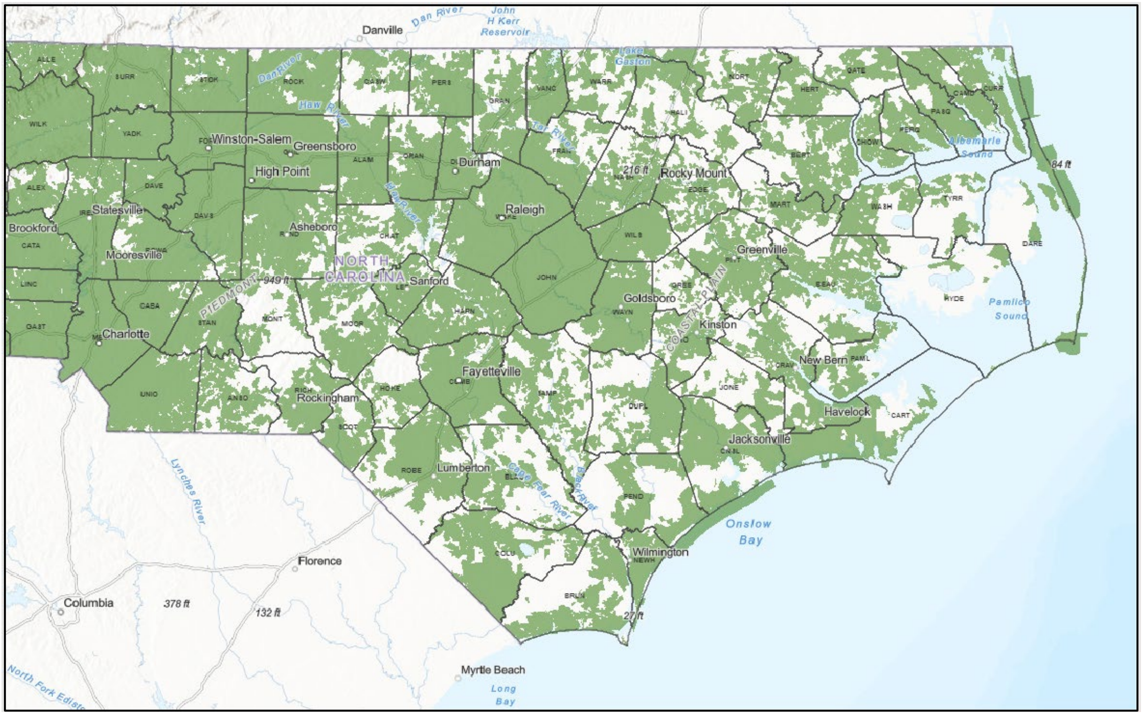
4.4.5 Communications

The Communications lifeline closely aligns with a State priority to improve access to high-speed internet Statewide. On March 14, 2019, Governor Roy Cooper signed Executive Order No. 91, “Establishing the Task Force on Connecting North Carolina, Promoting Expansion of Access to High-Speed Internet and Removing Barriers to Broadband Infrastructure Installation.”

The Communications lifeline is critical in every phase of disaster. Communications in pre- disaster help educate and inform vulnerable individuals about their risk and also helps them prepare for disaster. During disaster, timely communication can directly save lives and property. Post-disaster, communications are necessary to simplify accessing recovery resources and staying in touch with vital information throughout the recovery process.

The relative damage and repair to communications infrastructure is limited in the FEMA PA projects pool. This may be an indicator that there is little communications infrastructure existing in the MID areas. The map below demonstrates the lack of broadband infrastructure in MID counties, including Robeson, Columbus, Brunswick, Pender, Duplin, Edgecombe, Onslow, Jones, Craven, and Pamlico. Generally, southeast North Carolina has insufficient broadband access.[48]

Figure 13 - Broadband Service Areas Greater than or Equal to 25mbs Download, 3 Mbps Upload (2019)



4.4.6 Transportation

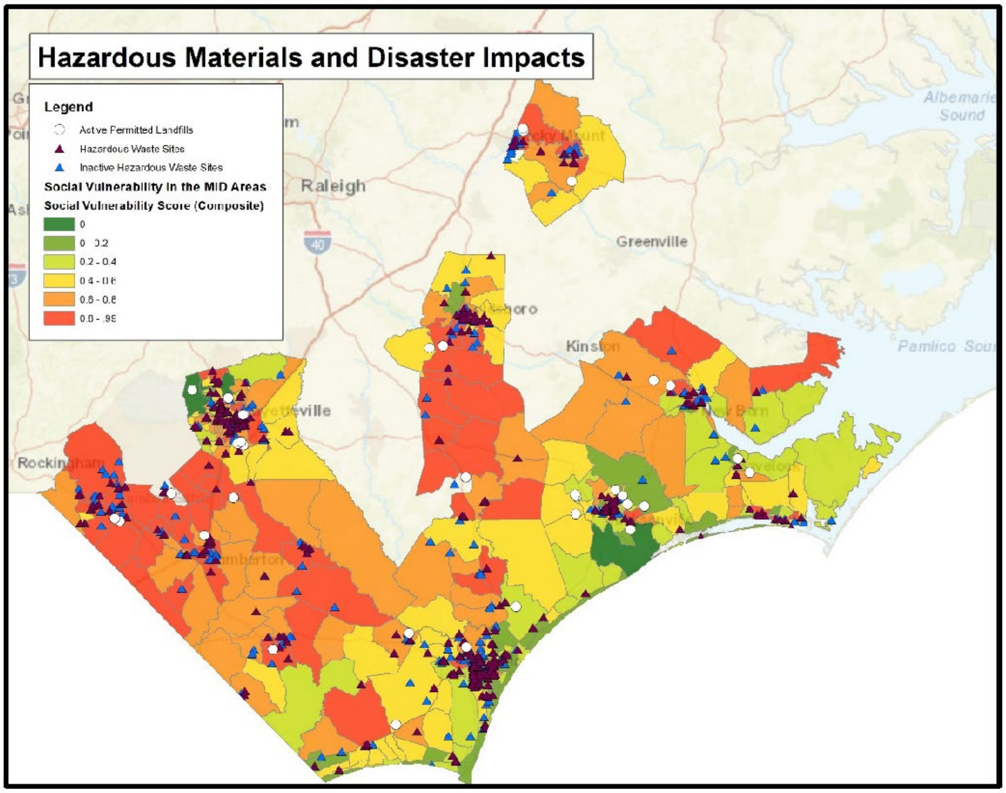
The Transportation lifeline has the some of the greatest potential for intersection between other lifelines. For instance, improved infrastructure helps the safety and security lifeline by providing access to rescue during a disaster event. A significant amount of FEMA PA funds have been dedicated to restoring damaged transportation infrastructure. Nearly 20% of FEMA PA funds address a transportation infrastructure need.

4.4.7 Hazardous Materials Management

Hazardous Materials management intersects with many other Community Lifelines, specifically Transportation, Safety and Security, and Food, Water, and Sheltering. Previous analysis of the risk of hazardous materials exposure in the MID areas has been conducted in this Assessment to ensure that a hazardous materials scenario is not overlooked. One way hazardous materials management is provided for is through funding hazardous materials abatement, such as lead and asbestos removal, during rehabilitation or reconstruction of damaged property through CDBG-DR funded programs. Generally, CDBG-MIT funds will indirectly augment the Hazardous Materials Management lifeline.

Hazardous materials may pose greater threat to vulnerable, minority, and low-income communities, as historically hazardous waste sites have been located adjacent to communities with these characteristics. NCORR has assessed the location of hazardous waste sites in comparison to vulnerable communities. The data assessment includes active and inactive hazardous waste contamination sites as well as active permitted landfills. The location of these areas was mapped and compared to the social vulnerability index (SVI) score for the most impacted area. More information on SVI is found in Section 4.3.12.

Figure 14 - Hazardous Materials Location and Vulnerable Areas (2019)



Certain areas appear at greater risk of a hazardous materials management lifeline exposure, such as Scotland County, Edgecombe County, and parts of Cumberland and Robeson County where the SVI score is relatively high and there are significant concentrations of hazardous materials. Other areas had significant hazardous materials exposure risk but were relatively higher on the SVI scale, and therefore may have the tools and resources to address hazardous materials management issues as they arise. Hazardous materials management is extremely localized, often taking place in the literal backyard of the impacted and recovering population. Therefore, interventions in this lifeline are often more site-dependent and will need to be delivered with significant care for the impacted individuals' unique circumstances.

In consideration of the increased risk of high SVI areas with hazardous materials concerns, NCORR considers the unique needs of these communities, including the need for community education on hazards and risk, making sure opportunities for these vulnerable communities to be heard are presented throughout the planning and implementation process, and continuing to develop plans and data collection exercises that continue to contribute to equitable treatment for vulnerable communities.

In the implementation of the Strategic Buyout and Public Housing Restoration Fund programs, NCORR will assess the potential impacts and seek to discourage relocating buyout applicants or reconstructing public housing units in areas of increased risk.

4.5 Risk Assessment

The risk assessment summarizes the vulnerability of the MID areas in context with the Community Lifelines. The Local Mitigation Handbook recommends implementing problem statements to quickly summarize the risks to the impacted community. These problem statements are intended to break down the major issues into a sentence or short paragraph.[49] After a review of the hazards, risks, and Community Lifeline vulnerability, the following problem statements have been defined for the MID areas:

- Hurricanes, coastal hazards, and flood hazards are the greatest risk to the MID areas and account for the largest amount of damage and loss of life in the MID areas.
- Hurricanes, coastal hazards, flood hazards, and other weather-related natural hazards are expected to increase in probability and severity due to changes in climate and sea level rise.
- Losses to the Food, Water, and Sheltering Community Lifeline are the most critical mitigation need based on an analysis of FEMA-documented damage.
- Mitigating losses to the Safety and Security, Transportation, and Energy Community Lifelines are the next most pressing needs, in descending order.

These problem statements inform the cardinal direction of the CDBG-MIT funded activities and drive the nature of the public and stakeholder engagement.

The Risk Assessment drives toward solutions that primarily address impacts from coastal hazards and flooding. However, the work done to categorize all hazards is foundational to the understanding of the area. NCORR will work toward considering all risks in program and project implementation, so that other risks in impacted communities are not ignored or worsened by a course of action intended to limit losses from coastal hazards and floods. Additionally, the work done on this risk assessment may be useful in using CDBG funding sources to address non-flood and non-coastal hazard risks in the future.

Table 28 - Hazards by Threat to Community Lifeline

Hazard	Safety and Security	Food, Water, Sheltering	Health and Medical	Energy
Flooding	Extreme Threat	Extreme Threat	Extreme Threat	Extreme Threat
Hurricanes and Coastal Hazards	Extreme Threat	Extreme Threat	Extreme Threat	Extreme Threat
Tornadoes/Thunderstorms	High Threat	High Threat	High Threat	High Threat
Hazardous Substances	High Threat	High Threat	High Threat	Moderate Threat
Excessive Heat	Moderate Threat	Moderate Threat	High Threat	Low Threat
Wildfires	Moderate Threat	Moderate Threat	Moderate Threat	Low Threat
Drought	Moderate Threat	High Threat	High Threat	Low Threat
Severe Winter Weather	Low Threat	Low Threat	Low Threat	Low Threat
Earthquakes	Low Threat	Low Threat	Low Threat	Low Threat
Dam Failures	Low Threat	Low Threat	Low Threat	Low Threat
Geological Hazards	Low Threat	Moderate Threat	Low Threat	Low Threat
Radiological Emergencies	Very Low Threat	Very Low Threat	Very Low Threat	Very Low Threat
Terrorism	Very Low Threat	Very Low Threat	Very Low Threat	Very Low Threat

Hazard	Communications	Transportation	Hazardous Material Management	Combined Threat
Flooding	Extreme Threat	Extreme Threat	Extreme Threat	Extreme Threat
Hurricanes and Coastal Hazards	Extreme Threat	Extreme Threat	Extreme Threat	Extreme Threat
Tornadoes/Thunderstorms	High Threat	Moderate Threat	Moderate Threat	High Threat
Hazardous Substances	Moderate Threat	Moderate Threat	High Threat	High Threat
Excessive Heat	Low Threat	Low Threat	Low Threat	Moderate Threat
Wildfires	Low Threat	Low Threat	Moderate Threat	Moderate Threat
Drought	Low Threat	Low Threat	Low Threat	Moderate Threat
Severe Winter Weather	Low Threat	Low Threat	Low Threat	Low Threat
Earthquakes	Low Threat	Low Threat	Low Threat	Low Threat
Dam Failures	Low Threat	Low Threat	Low Threat	Low Threat
Geological Hazards	Low Threat	Moderate Threat	Low Threat	Low Threat
Radiological Emergencies	Very Low Threat	Very Low Threat	Very Low Threat	Very Low Threat
Terrorism	Very Low Threat	Very Low Threat	Very Low Threat	Very Low Threat

4.6 CDBG-DR Considerations

The primary focus of CDBG-MIT funding is a forward looking, risk-based approach to implementing projects designed to reduce future losses from disaster. Conversely, CDBG-DR is a responsive funding source intended to repair, restore, and rehabilitate communities after a disaster.

During program design for CDBG-MIT, it became apparent that lessons learned and data gathered while implementing CDBG-DR programs would be a major consideration for CDBG- MIT programming. In this instance, the unmet housing recovery need for Hurricane Matthew and Hurricane Florence informs programming for CDBG-MIT.

4.6.1 Buyout

A spatial analysis of areas with high concentrations of homeowners interested in HMGP acquisition, repetitive loss and severe repetitive loss property, and/or areas with homeowners likely to meet the Low/Mod Housing (LMH) and Low/Mod Housing Incentive (LMHI) indicates that more than 2,200 owner-occupied properties are strong candidates for buyout activity in both Hurricane Matthew and Hurricane Florence MID areas. As buyout areas are finalized, they will be located at www.rebuild.nc.gov/homeowners-and-landlords/strategic-buyout-program. Community stakeholder and resident engagement continues to develop to inform the final buyout program demand.

Table 29 - Identified Buyout Need Summary

Buyout Zone Phase	Approximate properties in *identified* buyout zones	Approximate properties in *potential* buyout zones	Approximate Buyout Need
Phase I	1,473	N/A	$ 146,576,900
Phase II	N/A	3,000	$ 390,000,000
Total	**1,473**	**3,000**	**$ 536,576,900**

This estimate does consider the buyout of vacant land, small rental property, multi-family residential property, or commercial property, which could greatly increase the funds required to execute the buyout objective.

4.6.2 Buyout Process and Philosophy

NCORR seeks to be as transparent as possible in sharing information on the selection of areas for concentrated, strategic buyout. Buyout zones, or Disaster Risk Reduction Areas (DRRAs), are developed using spatial (map) data from multiple sources, including NCDPS, NCEM, NCDEQ, impacted counties and cities, and U.S. Census data. Buyout areas are determined using the following methodology.

First, NCORR conducted a review of and gathered spatial data for county-level flood zones, low- and moderate-income ReBuild NC CDBG-DR applicants, repetitive loss properties, and Hazard Mitigation Grant Program acquisitions and applications for acquisition. After that analysis, NCORR identified spatial concentrations, or "hot spots", for these data factors. Where 100-year floodplain data was not available, but other factors were present such as repetitive loss or HMGP acquisition interest, U.S. Geological Survey (USGS) flood inundation data for Hurricane Matthew and Hurricane Florence were added to see where storm impacts may have occurred outside of the floodplain.

In identified hot spots, street-level satellite imagery was used to identify neighborhood features that would make a potential buyout program difficult to administer or unlikely to have community buy-in. These features include nearby schools, active commercial corridors, "main street" features, hospitals, and other community amenities.

In the remaining areas, parcel level data was reviewed to determine the zoning and ownership characteristics of the parcels, and to match parcels with repetitive loss, HMGP acquisition applicants, and other data. Finally, where possible, NCORR focused on census blocks where the population was more than 40% LMI. These LMI areas provide the greatest potential for meeting the LMI national objective (described in greater detail in Section 10.6) and create a buyout program that is intended to be equitable to LMI individuals and households, and provide LMI individuals a greater level of assistance and more options for both their property mitigation and storm recovery.

DRRA maps are shared with the local governments and citizens. Final maps, once confirmed, will be provided to the government partners and citizens, which broadly indicate where DRRAs are located.

Buyout DRRAs have been established in the counties shown in Table 30 based on the need in these areas. CDBG-MIT funds were used for buyouts in these MID counties.

Table 30 - Buyout Need by DRRA, Phase I Finalized DRRA

County	Area	Buyout Need* (Parcel Level)
Columbus	Whiteville	113
Cumberland	Fayetteville	32
Edgecombe	Tarboro, Pinetops, Princeville	592
Jones	Pollocksville	17
Robeson	Lumberton	381
Wayne	Goldsboro, Seven Springs	375
Total		**1,510**

4.6.3 Housing Development

The original Action Plan included an assessment of the affordable housing need created by the buyout effort. This analysis was re-introduced to in SAPA 5 in support of the affordable housing reallocation. Additional details can be found below.

Considered in the buyout context, the need for additional housing development is evident. As property owners voluntarily participate in buyout programs, there is a growing need for affordable housing solutions that can address the relocation needs of buyout participants while also helping to mitigate for future disasters in the area.

With the use of CDBG-MIT funds, there is an opportunity to develop housing that responds to the new housing need created by potential property buyouts and the increased interest in relocation from community members not participating in a formal buyout. Unlike traditional CDBG-DR programs which repair or reconstruct in place, housing development in the CDBG-MIT context will be focused on resilient, green design for buildable properties located outside of the

100-year floodplain, which will also help the local housing stock mitigate damage caused by future hazards. As buyout is focused neighborhood-by-neighborhood, a community-based approach to housing development is preferred so that the parts of a community which elect to participate in the buyout program may ideally relocate together. To the greatest extent feasible and practicable, housing development would look to create innovative, clustered development to meet that housing need in a manner that is also resilient and responsive to potential future hazards.

In assessing a cost to execute this activity, the HOME Investment Partnerships Program maximum per-unit subsidy was used as the baseline for such initial analysis. While a potential housing project will not be based on HOME requirements, these limits were a starting point for estimating the potential cost of program activities. As such, the initial estimated cost was based on a three bedroom replacement house, at $130,002 per unit as set forth in 88 FR 20900 published April 7, 2023.

Using the 3,000 originally identified properties potentially requiring replacement housing due to the buyout program need and overall interest in relocation, and with an understanding that buyout is voluntary and will therefore not reach full participation within that population, and additionally accounting for other housing solutions provided during buyout, such as buyout program incentives rather than direct replacement housing, the following matrix was developed to estimate the potential cost of the affordable housing need relative to the mitigation needs assessment.

Table 31 - Additional Need for Affordable Housing in Context with Buyout

Buyout w/ Affordable Housing Need	Units Needed	Estimated Cost of Affordable Housing
10% Participation	300	$ 39,000,600
20% Participation	600	$ 78,001,200
30% Participation	900	$ 117,001,800

Construction costs for the development of affordable housing units will be based on the actual cost of construction. However, using the matrix as a benchmark allows NCORR to estimate the minimum allocation needed to support the mitigation goals of a housing development strategy.

Similar to the buyout process, stakeholder and community input and environmental justice will also be crucial components of the proposed development of additional affordable housing. NCORR stands in support of recovering local communities and their changing needs after disaster and will seek to develop affordable housing that is ultimately responsive to the needs of the clientele to be served.

4.6.4 Homeownership Assistance Program

The Homeownership Assistance Program was initially funded under NCORR's Hurricane Florence CDBG-DR program and has been reallocated to CDBG-MIT in order better facilitate coordination with the Strategic Buyout and Housing Counseling – Homeownership Assistance Programs, and to realign the program with NCORR's long-term mitigation goals. This activity may allow for up to $20,000 towards a down payment for eligible applicants and up to $30,000 for applicants that are first generation homebuyers, plus up to 5% in reasonable and customary closing costs incurred by first time buyers to move to areas that would be more resilient to potential future hazards.

Housing counseling service providers will assume a major role in assisting potential participants in this program, and the administration of the program will be in close coordination with the Housing Counseling – Homeownership Assistance Program and the housing counseling element of the Strategic Buyout Program.

4.6.5 Housing Counseling – Homeownership Assistance Program

Previously, NCORR's Housing Counseling was funded through the Hurricane Florence CDBG-DR grant. The program has been reallocated to CDBG-MIT and realigned to coordinate with the Affordable Housing Development Fund. While the Strategic Buyout Program includes a housing counseling component, the addition of the Affordable Housing Development Fund and Homeownership Assistance Program to NCORR's mitigation activities necessitates a separate allocation for housing counseling to work directly with beneficiaries of the Homeownership Assistance Program because prepurchase homebuyer education is a mandatory requirement for participation and additional housing counseling services can be provided to program participants as needed.

The intent of the Housing Counseling – Homeownership Assistance Program is to bridge the gap between other CDBG-MIT funded services and the complex and personal decisions made by participants of those programs on housing affordability and long term individual resilient and mitigation needs. Specific services may include homeowner education, renter counseling, home buyer education, financial literacy, credit rehabilitation, debt management, and budgeting, homeless counseling, avoiding fraud and scams, applying for public and private resources, foreclosure prevention strategies, and relocation counseling amongst other services tailored to fit the beneficiary's needs.

4.6.6 Public Housing Restoration

Needs analysis conducted after Hurricane Florence identified Cumberland County, Onslow County, and Pitt County as areas of significant concern for rental housing availability based on the number of total housing units available and the percentage of these units occupied by renters versus the overall renter housing need (see the Florence CDBG-DR Action Plan for more detail).

In a 2017 survey of Public Housing Authorities, including Greenville Housing Authority, Pembroke Housing Authority, Lumberton Housing Authority, Rocky Mount Housing Authority, and Wilmington Housing Authority, NCORR found that there were still significant repairs that needed to be made including approximately $5,200,000 in Lumberton alone. This represents part of a need that could be more fully addressed using mitigation funding. Mitigation funding made it possible to offer a second round of funding to MID county PHAs through an open application process. This led to several additional projects being funded in highly impacted areas such as Wilmington, Lumberton, Fayetteville, and Princeville. These project locations align closely with prior analysis conducted with regard to public housing unmet needs following Hurricanes Florence and Matthew.

4.6.7 Infrastructure Recovery

Prior analysis of infrastructure impacts from Hurricane Matthew using FEMA PA data demonstrated that there was significant damage to roads and bridges (Transportation Lifeline), Water Control Facilities (Food, Water and Sheltering Lifeline), Public Buildings and Public Utilities, and Parks, Recreational, and Other Facilities. Therefore, the analysis conducted for the Hurricane Matthew Action Plan aligns with the primary risks and hazards identified in the State Hazard Mitigation Plan and this Action Plan, particularly in the areas of water-related infrastructure and transportation, as well as safety and security. A reanalysis of FEMA PA data in November 2022 affirmed the significant unmet need for recovery after Hurricane Matthew in the Transportation Community Lifeline category, as well as to the Food, Water, and Sheltering Community Lifeline category.

Table 32 - Infrastructure Unmet Need Analysis from Hurricane Matthew

Community Lifeline Category	Damage Category	Estimated Total Loss (Need)	Federal Obligations (FEMA PA Federal Share Obligated)	Estimated Unmet Need (Estimated Total Loss less Federal Obligations)
Transportation	C - Roads and Bridges	$119,754,373	$89,815,780	**$29,938,593**
Food, Water, and Sheltering	F - Public Utilities	$48,799,869	$36,599,902	**$12,199,967**
Food, Water, and Sheltering	D - Water Control Facilities	$23,105,468	$17,329,101	**$5,776,367**

Source(s): FEMA Public Assistance (PA) data as of 11/8/2022

NCORR is prioritizing infrastructure recovery needs from Hurricane Matthew and will explore support for recovery needs demonstrated from Hurricane Florence in future amendments if needed.

4.6.8 Code Enforcement and Compliance Support Program (CECSP)

To assist local municipalities with capacity issues in completing rebuilding related tasks, NCORR will review the needs of deteriorating areas and coordinate code enforcement assistance where necessary. A recent agreement between the North Carolina Office of State Budget and Management (OSBM) and the North Carolina Department of Insurance (NCDOI) to help augment code inspector staffing in MID counties has been a positive first step in addressing this capacity need. Code enforcement faces some of the same challenges as the housing market; a lack of qualified staff and an aging workforce. The challenge this poses for ensuring knowledge transfer and understanding when looking at building code reviews and enforcement is significant, which has led to the reallocation of funding from the CDBG-DR Florence Action Plan to the CDBG-MIT Action Plan. According to information provided by NCDOI, there are over 151 inspectors aged 60 and over currently operating in the recovering areas, likely to be unable to keep up with significant current and potential increases in inspection demand in the impacted counties. As NCORR anticipates recovering several thousand housing units and constructing multiple multi-family and larger infrastructure projects, the need for significant capacity increase in this aging workforce is evident. Moreover, increasing the availability of inspection staff by having State support at the local level aligns this program with one of the key mitigation goals of joining federal, state and local resources to be more cohesive in its efforts to reduce and respond to future risks and hazards in the impacted areas. Failure to augment the code enforcement workforce could lead to substantial delay in project start dates, reduce timely inspections, and ultimately slow the completion of recovery and mitigation projects, thus leaving those projects and areas vulnerable to potential damage from future storms.

Of significant concern are certain most impacted areas, such as Pamlico and Jones Counties, which have a relatively small number of qualified inspectors to address the MID area. Other areas, such as Craven and Robeson, have a more significant code inspector presence but are two of the hardest hit counties in the State and may be easily overwhelmed with the current construction needs in those recovering areas and if additional inspection capacity is needed for future storms.

Table 33 – Number of Inspectors by County

County	Number of Inspectors	County	Number of Inspectors
New Hanover	**84**	Sampson	13
Onslow	**81**	Hertford	12
Brunswick	**79**	**Bladen**	**8**
Cumberland	**73**	**Duplin**	**8**
Pitt	61	Currituck	7
Johnston	60	Chowan	5
Wilson	53	Greene	5
Carteret	**52**	Perquimans	4
Wayne	46	Gates	3
Dare	43	Northampton	3
Craven	**28**	**Pamlico**	**3**
Beaufort	27	Tyrrell	3
Lenoir	27	Bertie	2
Robeson	**24**	Camden	2
Pender	**23**	Hyde	2
Nash	21	Warren	2
Columbus	**17**	**Jones**	**1**
Halifax	17	Washington	1
Pasquotank	17	**Grand Total**	**998**
Martin	13		

Additionally, permitting needs are expected to increase drastically in the MID areas post-storm due to an influx of federally funded construction. An average increase of 114% across all MID areas is expected, based on an analysis of 2018 permits pulled by county compared to the expected CDBG-DR MID expenditure. This analysis assumes that funds are expended equally across all MID areas and that the permitted construction cost is relatively unchanged in 2018 compared to post-storm conditions.

Table 34 – Expected Increase in Permitting, Post-Florence by County

County	Permits, 2018	Permits, Post-Florence (Estimated)	Delta
Bladen County	60	175	291.4%
Brunswick County	4,528	4,602	101.6%
Carteret County	732	808	110.3%
Columbus County	54	270	499.5%
Craven County	477	590	123.7%
Cumberland County	1,138	1,247	109.6%
Duplin County	104	220	211.2%
Jones County	22	219	995.4%
New Hanover County	2,614	2,667	102.0%
Onslow County	2,045	2,182	106.7%
Pamlico County	74	155	209.8%
Pender County	612	925	151.2%
Robeson County	201	301	149.7%
Scotland County	40	153	383.1%
Total	**12,701**	**14,514**	**114.3%**

This analysis further underscores the need for additional code enforcement support in MID areas, particularly in Jones County and Columbus County, which are already seeing lower code enforcement staff than other MID areas and may have their permitting needs increase 5 – 10 times what is currently needed in order to accommodate increased construction activity funded with federal dollars.

4.6.9 Residential Property Elevation Fund

In the implementation of its CDBG-DR funded Homeowner Recovery Program, a significant number of storm-damaged homeowner occupied property was elevated or is needing to be elevated. Property elevations includes those that are substantially damaged or substantially repaired in the 100-year floodplain as well as those that received flood impacts but were located outside of the 100-year floodplain and wished to mitigate against future flood losses. The total completed and anticipated elevation projects are below.

Table 35 - Completed and Anticipated Elevation Projects

Completed	Units	Total Anticipated Cost
MH Replacement & Elevation	24	$ 4,051,521.06

Reconstruction & Elevation	75	$ 22,426,207.29
In Progress	Units	Total Anticipated Cost
MH Replacement & Elevation	65	$ 10,972,869.54
Reconstruction & Elevation	127	$ 37,975,044.34
Grand Total	**291**	**$ 75,425,642.23**

In reflection of the volume of elevation projects, NCORR intends to leverage the CDBG-MIT funds to differentiate these mitigated properties from other participants in the CDBG-DR Homeowner Recovery Program. NCORR will identify both complete and incomplete elevation projects to fund with CDBG-MIT funds rather than CDBG-DR funds. As the anticipated cost of all elevation projects is greater than CDBG-MIT funds available, only a portion of the elevation projects will be allocated to CDBG-MIT.

4.7 Assessing Priorities

In Section 5 of the HMP, the State outlines 27 actions to reduce risk. The CDBG-MIT funded activities in this Action Plan align with certain items on the HMP action priority list. Based on the CDBG-MIT level of funding and NCORR's mitigation priorities, there is significant overlap between state priorities, the assessment of the data for community needs, and the CDBG eligible activities of planning, buyout, property elevation, affordable public housing, and infrastructure recovery.

The HMP action items that most align with CDBG-MIT activities include:

- **NC-2.** Acquire, elevate, provide structural retrofits, and otherwise leverage resources to protect or mitigate risk to people and personal property such as residences and businesses.
- **NC-3.** Training local governments, state agencies, and other organizations on emergency management and mitigation.
- **NC-6.** Work with local communities to promote changes in local policies, regulations, and activities such as land use, building codes, regional planning, improving storm drainage systems, and supporting the Community Rating System (CRS).
- **NC-14.** Provide useful data, studies, and other products that can help local communities better understand their risks.

NCORR recognizes that additional State priorities exist in the HMP, but to focus on the MID area risk reduction needs, these specific priorities are considered to be most strongly associated with CDBG-MIT funded interventions. While NC-2 is most directly related to the buyout program, property elevations, and the Public Housing Restoration Fund programming being proposed for CDBG-MIT, NCORR's planning efforts and buyout efforts that engage the community and local governments indirectly support items NC-3, 6 and 14. The Infrastructure Recovery Program most closely aligns with NC-6 as does the Code Enforcement Compliance and Support Program. For each CDBG-MIT activity defined below (See Section 6.0), the direct connection to the HMP action item is indicated.

4.7.1 North Carolina Consolidated Plan

The State of North Carolina completed its Consolidated Plan for 2021-2025, as required by 24 CFR Part 91, in September of 2021. Several agencies contribute to the Consolidated Plan, including the North Carolina Department of Commerce (DOC) for the administration of CDBG funds; The North Carolina Department of Health and Human Services (DHHS) for the administration of Housing Opportunities for Persons with AIDS (HOPWA) funds and Emergency Solutions Grants (ESG); and The North Carolina Housing Finance Agency (NCHFA) for the administration of HOME Investment Partnership funds and Housing Trust Funds (HTF).

While the CDBG-MIT notices indicate that the CDBG-MIT Action Plan does not require complete consistency with the Consolidated Plan for a period of time, NCORR has reviewed the 2021- 2025 Consolidated Plan to ensure that the objectives, goals, programs, and projects included within this Action Plan do not conflict with Consolidated Plan objectives and support Consolidated Plan outcomes within the scope of the CDBG-MIT framework. While the Consolidated Plan goals do not directly address mitigation efforts, the Plan clearly takes disaster recovery and flood risk into consideration as on page 70, the Plan notes, "According to analysis by the NYU Furman Center, 281,881 units (6% of all units) are located in the floodplains of North Carolina. Of those units, 70,665 are occupied by renter households and 4,936 are subsidized rental housing units. The estimated poverty rate in the flood plains is 17.7% which is higher than the statewide average of 14%. Thus, it is likely that many low and moderate-income households in North Carolina are vulnerable to climate change."

The Consolidated Plan includes five basic goals, to:

1. Increase housing affordability and availability.
2. Provide a suitable living environment through the provision of public services and public facilities.
3. Expand economic opportunities.
4. Stimulate housing and economic inclusiveness.
5. Respond to needs pertaining to the COVID-19 pandemic.

These goals align with the goals of the CDBG-MIT Action Plan, the SBP, the Public Housing Restoration Fund and Infrastructure Recovery Program, and with NCORR as an organization. The Consolidated Plan also provides the State's commitment to comply with fair housing (including affirmatively furthering fair housing), equal opportunity, and accessibility requirements. The Department of Commerce has published its Analysis of Impediments to Fair Housing Choice, 2021-2025. NCORR shares and adopts the commitments made in the Consolidated Plan in the operation of its CDBG-DR programs, and the commitments made in this Action Plan are not to be construed as a replacement or substitution for those commitments.

5.0 Long-Term Planning and Risk Mitigation Considerations

With the mitigation funds available, NCORR supports driving toward clear, actionable mitigation activities which are supported by a data-driven analysis of the mitigation need. NCORR has reviewed its option within the available funding and has decided to focus its activities on three program areas in addition to planning: buyout, infrastructure, and public housing. NCORR will revisit planning needs as projects and programs develop to ensure that activities undertaken with CDBG-MIT funds engage local, regional, State, and Federal partners to produce a data- driven, comprehensive analysis of the mitigation approaches funded in this Action Plan.

This part of the Action Plan provides an overview of broad planning initiatives across the State, favoring actionable elements of building codes, land use, and flood risk protection that support overall state mitigation efforts.

5.1 Executive Order 80

On October 29, 2018, Governor Roy Cooper signed Executive Order No. 80, "North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy." E.O. 80 requires the following actions specific to NCORR activities:[50]

- **E.O. 80, Part two.** Requires that cabinet agencies shall evaluate the impacts of climate change on their programs and operations and integrate climate change mitigation and adaptation practices into their programs and operations.
- **E.O. 80, Part nine.** Requires that cabinet agencies shall integrate climate adaptation and resiliency planning into their policies, programs, and operations:
    - To support communities and sectors of the economy that are vulnerable to the effects of climate change; and
    - To enhance the agencies' ability to protect human life and health, property, natural and built infrastructure, cultural resources, and other public and private assets of value to North Carolinians.

As NCDPS is a cabinet agency and NCORR is an office operating within NCDPS, the requirements of E.O. 80 apply to NCORR activities. To comply with E.O. 80, the unmet needs analysis must evaluate changes in need based on the requirement to anticipate and respond to climate change in disaster impacted areas. This analysis will inform the Action Plan so that proposed programs contained therein are responsive to this executive order.

To better conform to E.O. 80, a portion of the planning allocation may be used to determine how best to comply with E.O. 80 and how to further the goals of E.O. 80, including agency coordination on E.O. 80 objectives.

5.2 Building Code Standards

In 2018, the North Carolina Department of Insurance's (NCDOI) Engineering and Codes Division developed the 2018 State Building Codes. Those Building Codes include:

- 2018 North Carolina State Administrative Code and Policies
- 2018 North Carolina State General Building Code
- 2018 North Carolina State Existing Building Code
- 2018 North Carolina State Residential Code
- 2018 North Carolina State Mechanical Code
- 2018 North Carolina State Plumbing Code
- 2018 North Carolina State Fuel Gas Code
- 2018 North Carolina State Fire Prevention Code
- 2018 North Carolina State Energy Conservation Code
- 2020 North Carolina State Electrical Code

North Carolina State Building Codes are updated approximately every five years and the current versions were adopted effective January 1, 2019 with the exception of the 2020 North Carolina State Electrical Code which was made effective November 1, 2021. Current state building codes address floodplain construction requirements but are not as stringent as those recommended by American Society of Civil Engineers' ASCE-24 "Flood Resistant Design" guidance. As the lead Federal Agency in flood plain management, FEMA deems ASCE 24 to meet or exceed the minimum National Flood Insurance Program (NFIP) requirements for buildings and structures.

In 2019, NCORR resiliency and planning staff initiated conversations with the North Carolina Department of Emergency Management and Department of Insurance in an effort to align state building codes with ASCE 24 recommendations. No further activities developed from these conversations. The resiliency team, however, has established the North Carolina Resilient Communities Program that helps to address this need, and has been working to align policy for the state's own construction within floodplain areas with the guidelines established in Executive Order No. 266 issued on July 25, 2022.

5.2.1 Vertical Flood Elevation Protection

The Elevation Requirements set in North Carolina State building codes at R322.2.1 "Elevation Requirements" currently require elevation to above the base flood elevation (BFE) within the 100-year floodplain.[51] Earlier iterations of the building code required an additional foot above the base flood elevation within the 100-year floodplain (commonly referred to as a "freeboard" requirement).

NCORR requires that new or substantially improved residential structures are elevated two feet or more above the BFE or interior high-water mark (if outside the floodplain). For new construction and for projects funded with the Residential Property Elevation Fund (established in Substantial

Action Plan Amendment 8), NCORR will remain consistent with this requirement and depending on the facts of the construction may require additional freeboard or other mitigation techniques to ensure that new construction is sufficiently protected. Residential property elevated with Residential Property Elevation Funds may also be elevated if they are located outside of the 100-year floodplain and sustained at least six inches of interior water damage by a major disaster and meet FEMA's definition of substantially damaged or substantially improved upon completion of the activity. Participants that meet these criteria are presented with the option to elevate during their participation in the CDBG-DR funded Homeowner Recovery Program. NCORR commits to ensuring responsible floodplain and wetland management based on the history of flood mitigation efforts and the frequency and intensity of precipitation events.

5.3 Land Use and Zoning Policies

Land use and zoning practices, including adopting zoning regulation and amending zoning text or maps is a legislative policy choice entrusted to local elected officials. According to the University of North Carolina's School of Government "Plans provide a context to consider the long-term impact of individual land use decisions. Planning provides for public participation, coordination of programs and decisions, and the opportunity to set forth the basic policy choices that underlie a rational program of land use regulation. Although not mandated to do so, most populous North Carolina cities and counties have adopted plans."[52]

The University of North Carolina's School of Government identifies several plans typically adopted by the State's local governments:

Comprehensive Plans. Traditionally used by local governments as their principal planning tool, and includes land use, housing, transportation, community facilities, recreation, infrastructure, hazards, and other key community needs over a long-time horizon. Elements of a Comprehensive Plan may also include:

Land Use Plans. Often included in the Comprehensive Plan but sometimes separately maintained, land use plans set land development priorities and future land use for the community.

Neighborhood or Area Plans. These plans are similar to the overall Comprehensive Plan, but apply only to a neighborhood, area, township, or other smaller designation and outlines specific goals and opportunities in those identified areas.

Specialized Plans. Specialized plans include plans for historic district preservation, transportation or mobility plans, hazard mitigation plans, and other plans specific to a special need or purpose for the area.

Functional Plans. Functional Plans look at how government functions, such as transportation, water and sewer services, or parks and recreation, will be carried out in the future.

Strategic Plans. These plans focus on a few key issues, have a shorter time frame (such as two to five years), identify specific implementation responsibility and timeline, and have a regular follow-up on the results. These plans often have strong participation from community groups and leaders.

These plans present opportunities for local areas to incorporate natural hazard mitigation through the adoption of sound land use and zoning practices consistent with known threats to the community. A 2018 survey of local governments conducted by the University of North Carolina found that an increasing number of cities and counties, particularly the more-populous cities and counties, have adopted a comprehensive plan. While 70% of all responding jurisdictions report having adopted a comprehensive plan, over 90% of the cities with populations over ten thousand have adopted a plan (compared with 70% in 1998 and 75% in 2008).

Plan-adoption rates decrease for cities with smaller populations: 79% for cities with populations between one thousand and ten thousand, and only 26% for cities with populations under one thousand. Of the responding counties, 78% report having adopted a comprehensive plan.

However, adopted plans are not always updated regularly. The same 2018 survey found that about half of the adopted plans had been updated within the prior five years, about a quarter were last updated within the past six to ten years, and a quarter were last updated more than ten years prior to the survey. These percentages are about the same for cities and counties and across all population sizes.

Table 36 - Comprehensive Plan Adoption, 2018

Jurisdiction Population	Total Respondents	% Adopting Comprehensive Plan
Municipalities		
Less than 1,000	74	26%
1,000 - 10,000	119	79%
11,000 - 24,000	38	92%
Greater than 25,000	31	94%
Municipality Total	**262**	**68%**
Counties		
Less than 25,000	20	80%
Greater than 25,000	58	78%
County Total	**78**	**78%**
Total Responses	**340**	**70%**

Note: Percentage totals may deviate from 100 due to rounding. Source: UNC School of Government. *Planning and Zoning Law Bulletin Plan-Consistency Statements. p.*7.
https://www.sog.unc.edu/sites/www.sog.unc.edu/files/reports/20180809_PZLB27_2018-11-30_0.pdf

Table 37 – Plan-Update Frequency, State of North Carolina 2018

		Last Plan Update		
Jurisdiction Population	**Total Respondents**	**< 5 Years Ago**	**6 - 10 Years Ago**	**> 10 Years Ago**
Municipalities				
Less than 1,000	19	53%	32%	16%
1,000 - 10,000	92	49%	26%	25%
11,000 - 24,000	34	41%	50%	9%
Greater than 25,000	30	40%	30%	27%
Municipality Total	**175**	**46%**	**32%**	**21%**
Counties				
Less than 25,000	16	44%	25%	31%
Greater than 25,000	45	51%	27%	22%
County Total	**61**	**49%**	**26%**	**25%**
Total Responses	**236**	**47%**	**31%**	**22%**

Note: Percentage totals may deviate from 100 due to rounding. Source: UNC School of Government. *Planning and Zoning Law Bulletin Plan-Consistency Statements. p.7*.
https://www.sog.unc.edu/sites/www.sog.unc.edu/files/reports/20180809_PZLB27_2018-11-30_0.pdf

Even a 2018 plan updated within five years, a reasonable timeframe between plan revisions, was missing key information about the impacts of Hurricanes Matthew and Florence. These storms dramatically reshaped the planning landscape in impacted areas and may have fundamentally shifted community development priorities.

NCORR has planning funds available to assist in the development of some of these objectives, based on the specific needs identified through stakeholder engagement and input from government partners.

5.4 USACE Planning and Flood Mitigation Efforts

Damage from flooding continues to be the biggest threat to the health and safety of North Carolina residents. The CDBG-MIT allocation is directly tied to the impacts of flooding from Hurricanes Matthew and Florence. In addition, as stated in Section 5.2.1, CDBG-DR and MIT funded projects located in the 100-year floodplain require vertical elevation.

To support broader flood reduction efforts, NCORR is involved in several planning efforts. NCORR participates in several of the US Army Corps of Engineers (USACE) feasibility study planning efforts. Three studies are aimed the Tar, Neuse, and Cape Fear River basins.

Discussions on these efforts are around potential flood risk reduction measures (structural, nonstructural, natural and nature-based) under consideration. Sea level rise and beach erosion are also of great concern because it leads to flooding and other negative environmental consequences. NCORR is also involved with USACE study and planning efforts for the South Atlantic Coastal Study and other beach nourishment studies.[53]

5.4.1 High Wind

In addition to this vertical height requirement, NCORR will take into consideration high wind considerations for new or rehabilitated buildings. There are many informational resources available to safeguard against high wind conditions, including *FEMA 543: Risk Management Series Design Guide for Improving Critical Facility Safety from Flooding and High Winds*. FEMA 543 recommends incorporating hazard mitigation measures into all stages and at all levels of critical facility planning and design, for both new construction and the reconstruction and rehabilitation of existing facilities.[54] While the guidelines in FEMA 543 are applicable to critical facilities, they may also be applied to new construction of other buildings and infrastructure. In all instances, NCORR will defer to engineering and design experts to ensure that high wind hazards are addressed.

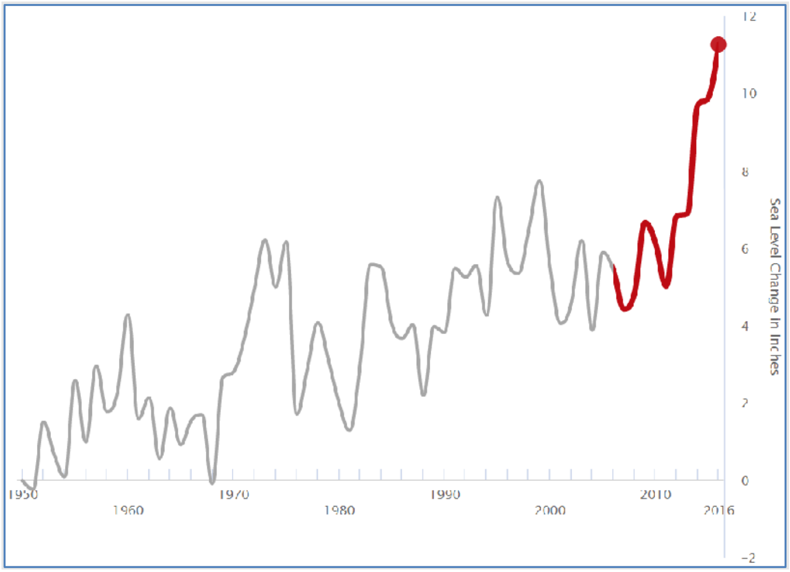
NCORR shall also consider resources and lessons learned from other states in the implementation of their recovery programs. The State of Florida has adopted the *Hurricane Michael FEMA Recovery Advisory (RA) 2 Best Practices for Minimizing Wind and Water Infiltration Damage*[55] as a guiding principle in its recovery programs. This advisory describes specific issues observed in newer residential buildings after Hurricane Michael. The buildings observed were built after the adoption of the first edition of the Florida Building Code (FBC) (March 2002). The advisory provides key points for consideration during rebuilding and mitigation activities. The references cited in the advisory contain additional best practices and guidance for issues commonly observed after storm events. While NCORR does not anticipate executing new construction with its allocation of CDBG-MIT funds, NCORR shall apply the guidance in this document where feasible in the development of new construction funded with CDBG-MIT funds.

5.4.2 Sea Level Rise

In addressing flood mitigation, it is essential to the long-term planning process to also consider the effects of sea level rise on the coastal communities of the State. According to National Oceanic and Atmospheric Administration (NOAA) data, the monthly mean sea level off of the coast of North Carolina has risen almost 1 foot higher than its 1950 level.[56] Sea level rise is of increasing concern to vulnerable coastal areas of the State because sea level rise has been accelerating over the past 10 years and is now rising an average of one inch every two years.

These measurements are conducted with sound methodology and have become increasingly accurate, leading to the conclusion that sea level rise is a significant threat to coastal areas of the State.

Figure 15 - Sea Level Measurement from Wilmington Area Tide Gauge Since 1950



Source: Sea Level Rise.org. North Carolina's Sea Level Is Rising. https://sealevelrise.org/states/north-carolina/

NCORR commits to using the best available data to determine whether structures would be at risk of sea level rise and avoid construction or rehabilitation of structures which may be subject to increased risk due to sea level rise and coastal erosion.

5.5 Local and Regional Planning Coordination

The following entities have been engaged in the development of CDBG-MIT activities and are expected to continue to play a role in CDBG-MIT implementation:

- **North Carolina Department of Public Safety (NCDPS).** As an office within NCDPS, NCORR has the full support of NCDPS.
- **North Carolina Emergency Management (NCEM).** The State Hazard Mitigation Officer (SHMO), Steve McGugan, previously met with NCORR staff to discuss HMGP activities and how CDBG funds can best complement NCEM objectives.
- **North Carolina Department of Transportation (NCDOT).** NCDOT staff have met with NCORR staff to discuss major infrastructure plans which may affect NCORR decision making and long-term mitigation planning.
- **North Carolina Department of Environmental Quality (NCDEQ).** The NCDEQ, along with its Division of Coastal Management (NCDCM) have coordinated with NCORR staff on coastal management and coastal climate resilience initiatives. NCORR will identify opportunities to continue coordination with NCDEQ, including the NC Dam Safety Program, to assess regional or localized hazards from dam safety and help inform the full risk of new development in areas subject to hazards posed by dams.

5.6 Flood Insurance Coverage

To the greatest extent possible, NCORR will take steps to increase the affordability of flood and hazard insurance through its CDBG-DR funded program. The program will increase low- to moderate- income owners and renters' ability to afford flood insurance, a significant expense to low-income property owners. This program will support NCORR's overall mitigation efforts to prepare citizens to manage losses from future storm and flood events. For more details, please see the Hurricane Florence Action Plan. As a component of its Residential Property Elevation Fund, NCORR may also fund the purchase of flood insurance coverage in a similar manner as its CDBG-DR grant.

NCORR encourages the purchase of flood insurance outside of the SFHAs as flooding is a risk in NC in non-flood areas too. SBP provides a flood risk flyer called *Keeping North Carolinians Safe for Future Storm and Flood Events* to citizens and buyout participants about the benefits of flood insurance and the risks of flooding during local meetings and at application. This flyer highlights the facts about flooding risks, including the risk of flash floods and that flooding can occur outside of Special Flood Hazard Areas. All PHAs participating in the Public Housing Restoration Program with a requirement to purchase flood insurance will also be informed of this information per Section 582.

Section 582 of the National Flood Insurance Reform Act of 1994, as amended, (42 U.S.C. 5154a) prohibits flood disaster assistance in certain circumstances. In general, it provides that no Federal disaster relief assistance made available in a flood disaster area may be used to make a payment (including any loan assistance payment) to a person for "repair, replacement, or restoration" for damage to any personal, residential, or commercial property if that person at any time has received Federal flood disaster assistance that was conditioned on the person first having obtained flood insurance under applicable Federal law and the person has subsequently failed to obtain and maintain flood insurance as required under applicable Federal law on such property. This means that CDBG-MIT assistance may not be provided for the repair, replacement, or restoration of a property to a person who has failed to meet this requirement.

Guidance from HUD received on October 27, 2021, clarifies that it is also allowable to provide housing incentive payments, in connection with the buyout, to relocate households outside of a floodplain or to a lower-risk area. Therefore CDBG-MIT funds are able to be used to provide an incentive under the Strategic Buyout Program for eligible households who did not maintain flood insurance when required. Additionally, a waiver provided by HUD that allows flexibility on the one-for-one replacement rule that applies to the Public Housing Restoration Fund will permit NCORR to support alternative reconstruction options for public housing developments that are not suitable for rehabilitation and/or in a floodplain.

Section 582 also imposes a responsibility on NCORR and its subrecipients to inform property owners receiving assistance, that triggers the flood insurance purchase requirement, that they have a statutory responsibility to notify any transferee of the requirement to obtain and maintain flood insurance in writing and to maintain such written notification in the documents evidencing the transfer of the property. If they fail to do so transferring owner may be held liable and obligated to reimburse the Federal Government for the disaster relief assistance provided.[57]

6.0 Mitigation Projects and Leverage

NCORR commits to advancing mitigation programs and activities that advance long term resilience to current and future hazards. NCORR also aligns its CDBG-MIT-funded programs with other planned federal, state, regional, or local capital improvements, where feasible.

Each proposed mitigation activity must define how:

1. It will advance long-term resilience.
2. Align with other planned capital improvements.
3. Promote community-level and regional planning for current and future disaster recovery efforts and additional mitigation investment.

North Carolina maintains an Enhanced Statewide Hazard Mitigation Plan published in February 2018 as well as county Hazard Mitigation Plans updated every five years. Following Hurricane Matthew, North Carolina invested in more detailed planning creating a Hurricane Matthew Resilient Redevelopment Plan (RRP) for each of the 50 disaster declared counties. The RRPs address the County's needs for achieving holistic recovery and redevelopment by analyzing the risks to its assets, identified needs and opportunities, determines the potential costs and benefits of projects, and prioritizes the projects. A majority of those plans listed multiple housing options in their top five priorities – specifically acquisition, buyout, elevation, and relocation to prevent future loss and increased access to affordable housing outside of the SFHA. The needs assessments following Hurricane Florence demonstrated a similar need.

The State of North Carolina has effectively applied multiple funding sources to achieve the State HMP, local HMP, and RRP priorities. Any additional analysis, risk assessment data, or any mitigation activity will be incorporated into future revisions of these plans so that community leaders may return to the HMP and RRP as primary sources of mitigation planning. Additional program details, including leverage for specific mitigation projects, can be found in Section 10 of this plan.

6.1 Strategic Buyout Program

In 2019 and 2020, NCORR worked with the State Hazard Mitigation Officer (SHMO) and the National Flood Insurance Program (NFIP) coordinator to identify Disaster Risk Reduction Areas (DRRAs) that leverage CDBG-DR grant funds with extensive data provided by FEMA-funded HMGP acquisition projects, NFIP claims, and repetitive loss/severe repetitive loss property data. The first Phase I DRRAs incorporate over 1,450 properties from the approved HMGP buyout and elevation list, the repetitive and severe repetitive loss lists, and the over 2,200 applicants that HMGP could not fund both in and out of floodplains and floodways. NCORR negotiated the DRRAs with local authorities often adding to the size of areas based on local expertise and needs. Finally, NCORR held Town Hall type meetings with the residents of the DRRAs before opening the applicant intake process. NCORR was in the process of identifying Phase II DRRAs in response to mitigation needs with local governments and partners as of SAPA 2. Citizen input was obtained through public meetings and a public hearing in 2021.

Other sources of funds primarily of interest to long-term mitigation are funds received for FEMA Public Assistance (PA), FEMA Hazard Mitigation Grant Program (HMGP), Small Business Administration (SBA) Disaster Loans, Department of Transportation (DOT) funds, and U.S. Army Corps of Engineers (USACE) funds.

Given the limited CDBG-MIT funds available to the State, it is difficult to meaningfully interface with the major infrastructure projects that the USACE typically undertakes. Currently, there is no opportunity for CDBG-MIT funds to directly support a USACE project given the level of CDBG-MIT funding and the scope of USACE projects. If new USACE projects are introduced, NCORR will consider whether they would be a vehicle for leverage of CDBG-MIT funds.

However, it is important to note that while not providing direct funding to USACE projects, NCORR is involved in USACE planning. NCORR's effort will be directly impacted by the projects being undertaken by USACE.

The North Carolina Department of Transportation (NCDOT) has been a communicative partner in mitigation planning. NCDOT has shared information on potential future projects to lend context to multiple mitigation approaches, including potential buyout areas and Disaster Risk Reduction Areas (DRRAs). As these projects have not been approved for construction and are in the early planning stages, they do not yet present a leverage opportunity for CDBG-MIT programs. As NCDOT projects develop, NCORR will reassess the viability of a leverage opportunity with NCDOT projects.

Similar to its CDBG-DR activities, NCORR's CDBG-MIT activities perform a duplication of benefits review for all SBP applicants, as well as for Public Housing Restoration Fund and Infrastructure Recovery Program applicants to ensure that there is no provision of additional disaster recovery funds provided to applicants for the same purpose. More information on DOB processes and procedures can be found in the individual program manuals for each program, located at www.rebuild.nc.gov. Additional program details are outlined in Section 10 of this action plan.

6.2 Public Housing Restoration Fund

There are a number Public Housing Authority developments located within the 100-year floodplain in MID counties, demonstrating a clear need for mitigation of flood risk for residents of public housing. A 2022 analysis of HUD's "Public Housing Developments" and data on floodways and 100-year floodplains yielded at least 87 public housing developments (562) units at risk of flooding in the MID counties, with a noticeable cluster in the Fayetteville area in Cumberland County. The Public Housing Restoration Fund may be defined as a mitigation activity because the program provides a way to mitigate current and future risk of flooding for public housing developments located in areas that are at risk of flooding and damage from previously identified Highly Likely hazards across the state for a vulnerable population of low-income renters.

In the original 2017 unmet needs analysis following Hurricane Matthew, the State conducted outreach (via survey) to housing providers in impacted areas to determine the damages, displacement, and unmet needs of subsidized and supportive rental housing. The State contacted PHAs in the most impacted areas, including Greenville Housing Authority, Pembroke Housing Authority, Lumberton Housing Authority, the Housing Authority of the City of Rocky Mount, and

Wilmington Housing Authority. Information was received from four of the five housing authorities. The Lumberton Housing Authority had, by far, the most extensive damage totaling an estimated $8 million, with approximately $5 million in remaining unmet need. There were 264 families who were displaced and living with family members or using housing vouchers, who had yet to move back into their homes due to unrepaired units at the time of the analysis.

As part of SAPA 5 for Matthew, the State identified that in addition to the ongoing need in Robeson County with the City of Lumberton and the Wilson Housing Authority both having additional recovery needs.

As part of SAPA 7 for Matthew, there was an additional need for funds identified by the Wilson Housing Authority during the selection process for the Whitfield Homes Expansion project. The updated public housing need at the time increased to $11,172,422.

The State's initial Action Plan under CDBG-DR for Matthew created the Public Housing Restoration Fund with an allocation totaling $13.4 million across the initial Action Plan and subsequent Substantial Amendments. The funding was reallocated to the CDBG-MIT Action Plan, in consideration of a realignment of longer-term resilience and mitigation activities with the objectives of the CDBG-MIT funds.

In the context of Hurricane Florence, some Public Housing Authorities (PHAs) continued to grapple with the effects of Hurricane Matthew while dealing with Hurricane Florence-specific recovery needs. The total FEMA Public Assistance claims for Hurricane Florence related to Public Housing is over $46 million, this includes significantly dual-impacted areas such as Fayetteville, Laurinburg, and Lumberton.

Under CDBG-DR funding for Hurricane Florence, $16.3 million was previously allocated to the Public Housing Restoration Fund to rehabilitate and/or repair Public Housing Authority (PHA) properties that were damaged. Funds were to be used to address unmet recovery needs after accounting for insurance and other Federal disaster funding, or to make facilities more resilient from future storm events. This includes relocating PHA units out of the floodplain to help protect against future flood insurance losses.

In the latest SAPA, $24,245,117 is allocated to meet the needs of the programs funded through the two rounds of the Public Housing Restoration Fund. The Wilson Townhomes project, the Lumberton PHA Admin Building project, and the Fayetteville Metro Community Building project have all completed construction. Other projects are at different stages of progress.

6.3 Infrastructure Recovery Program

The Infrastructure Recovery Program identifies the need for mitigation activities in connection with the impacted Community Lifelines as a result of Hurricane Matthew and Florence.

The 2022 FEMA public assistance unmet need reanalysis for the Hurricane Matthew Action Plan highlights that 77% or $54,601,512 of the total estimated infrastructure unmet need is related to the following damage categories:

- Category C: Roads and Bridges;
- Category G: Recreational – Other;
- Category F: Public Utilities

The inclusion of the Infrastructure Recovery Program in the CDBG-MIT Action Plan further helps to ensure that the funding is advancing long-term resilience goals, that programming aligns with other planned capital improvements, and that the promotion of community-level and regional planning efforts are integral to NCORR's mitigation efforts and investments.

6.4 Affordable Housing Development Fund

Previously, the Affordable Housing Development Fund has been part of the Hurricane Florence CDBG-DR Action Plan. The program has been reintroduced to the CDBG-MIT Action Plan in order to respond to the affordable housing need exacerbated by the amount of potential buyout contemplated by the Strategic Buyout Program and the ongoing mitigation needs of the housing stock in the MID areas. With the use of CDBG-MIT funds, there is an opportunity to develop housing that responds to the new housing need created by potential property buyouts and aids in mitigating damaged caused by potential future disasters by providing affordable relocation options to low-income community members. Unlike traditional CDBG-DR programs which repair or reconstruct in place, housing development in the CDBG-MIT context will be focused on resilient, green design for buildable properties located outside of the 100-year floodplain. As buyout is focused neighborhood-by-neighborhood, a community-based approach to housing development is preferred so that the parts of a community which elect to buyout may ideally relocate together. Moreover, while the buyout strategy primarily addresses the need of homeowners opting to voluntarily relocate, the housing created through the Affordable Housing Development Fund may also allow renters to have greater options to relocate to safer and more resilient areas. As such, to the extent that is feasible and practicable, housing development would look to create innovative, clustered development to meet that housing need in a manner that is also resilient and responsive to potential future hazards.

The goal of the Affordable Housing Development Fund is to take significant steps to address housing affordability and resilience in vulnerable areas of the State. The CDBG-MIT funded program is only one program in a suite of programs to address such issues. CDBG-DR funds allocated for both Hurricane Matthew and Hurricane Florence continue to include similar programming for multi-family rental housing and other affordable housing development opportunities. CDBG-MIT is different in that it is developed to compliment buyout and further mitigation efforts by creating resilient, affordable housing stock in MID areas. NCORR will work with local partners, including PHAs, local governments, developers, and non-profits to identify the best, most resilient opportunities for housing development in those areas. NCORR anticipates that the housing needs of each impacted area will be unique, and therefore a guiding strategy of the program is to select projects with maximum flexibility and impact to allow creative, innovative, resilient, and neighborhood-sensitive projects to meet the needs of each community.

The State has allocated $43.7 million of CDBG-MIT funding to supplement CDBG-DR housing development efforts, and to better address long-term resilience and mitigation goals.

6.5 Homeownership Assistance Program

The Homeownership Assistance Program was initially funded under NCORR's Florence CDBG-DR program and has been reallocated to CDBG-MIT in order better facilitate coordination with the Strategic Buyout and Housing Counseling – Homeownership Assistance Programs, and to realign the program with NCORR's long-term mitigation goals. This activity allows for up to

$20,000 towards a down payment for eligible applicants and up to $30,000 for applicants that are first generation homebuyers, plus up to 5% in reasonable and customary closing costs incurred by first time buyers to move to areas that would be more resilient to potential future hazards.

Housing counseling service providers will be vital in assisting potential participants in this program, and the administration of the program will be in close coordination with the Housing Counseling – Homeownership Assistance Program and the housing counseling element of the Strategic Buyout Program. The Homeownership Assistance Program, in conjunction with the housing counseling component of the Strategic Buyout Program and the Housing Counseling – Homeownership Assistance Program, supports NCORR's long-term strategy of mitigating damage from future hazards by providing vulnerable communities with resilient housing options. NCORR seeks to strengthen communities and mitigate future damage by providing resilient housing options. The Homeownership Assistance Program will further that goal by removing barriers to access in vulnerable communities.

6.6 Housing Counseling – Homeownership Assistance Program

Previously, NCORR's Housing Counseling – Homeownership Assistance Programming was funded through the Florence CDBG-DR grant. The program has been reallocated to CDBG-MIT and realigned to coordinate, as feasible, with the Homeownership. While the Strategic Buyout Program includes a housing counseling component, the addition of the Homeownership Assistance Program to NCORR's mitigation activities necessitates a separate allocation for Housing Counseling to work directly with beneficiaries of the Homeownership Assistance Program because prepurchase homebuyer education is a mandatory requirement for participation and additional housing counseling services can be provided program participants as needed.

The intent of the Housing Counseling – Homeownership Assistance Program is to bridge the gap between other CDBG-MIT funded services and the complex and personal decisions made by participants of those programs on housing affordability and suitability specific to their individual resilient and mitigation needs. Housing Counseling, in conjunction with the housing counseling component of the Strategic Buyout Program and the Homeownership Assistance Program, supports NCORR's long-term strategy of mitigating damage from future hazards by providing vulnerable communities with resilient housing options. By providing communities with counseling services alongside homeownership programming, NCORR can ensure that as many residents as possible have access to affordable, resilient housing options ahead of future hazards.

6.7 Code Enforcement Compliance and Support Program

Most recently, the Code Enforcement Compliance and Support Program (CECSP) had been part of the Hurricane Florence CDBG-DR Action Plan. Due to the ongoing relationship between NCORR and the Department of Insurance, the coordination and partnership of NCORR funding and DOI expertise on activities in the MID areas made the reallocation of program funding a more natural fit under MIT guidelines. The objective of the Code Enforcement Compliance and Support Program is to provide a deep well of experienced State Code Enforcement Inspection staff available to local municipalities with limited inspection capacity to help address the current and future volume of inspection needs in MID areas. The ability to bring experienced and skilled State Code Enforcement Inspection staff to augment capacity at the local level in heavily damaged MID counties will also allow those communities to more effectively enforce code enforcement standards and ultimately be better prepared to mitigate the impacts of potential future storms in the area. The knowledge transfer and efficacy of State-supported code inspection completions not only improves local staff's ability to complete other portions of the permitting and code enforcement process but allows for the increase in the overall number of up-to-code homes able to move through the rebuilding and construction process.

Given the alignment mentioned above and the ongoing support of property reallocations and the further development of affordable housing under CDBG-MIT, NCORR has chosen to move the CECSP Program to the CDBG-MIT funding source to better realign with current and long- term mitigation priorities. Local code enforcement capacity continues to face challenges in the MID areas that will only increase with a surge of mitigation activities or if another major disaster was to impact said areas. By providing funding support to local inspection efforts, the CECSP will be able to increase the overall number of code enforcement inspections occurring in the impacted municipalities and provide immediate additional capacity to reduce delays and personnel shortfalls exacerbated by the COVID-19 pandemic.

Lastly, as previously noted, providing this additional support allows the State to better comply with the risk reduction needs in MID areas. Specifically, NC-6, which focuses on the need to work with local communities to promote changes in local policies, regulations, and activities, such as land use and building codes.

6.8 Residential Property Elevation Fund

The Residential Property Elevation Fund is established in the CDBG-MIT grant to provide a new funding source for NCORR's completed and ongoing structural property elevations for those households participating in the Homeowner Recovery Program. The scope of work and outcome of a residential property elevation is significantly different than a non-mitigated structure and warrants the use of CDBG-MIT funds as an alternative to the CDBG-DR grant.

The elevation of personal property is a major hazard mitigation in the State's Enhanced Hazard Mitigation Plan and is specifically indicated in NC-2 of the plan. Additionally, funding homeowner recovery efforts with CDBG-MIT funds aligns with the mitigation need assessment to assist property owners through various means to mitigate their personal risk in the event of a future disaster and expands the homeowner mitigation offerings beyond Strategic Buyout alone. NCORR will monitor the success of its mitigated property into the future and can more easily do so with a lengthier grant period of performance than the six years commonly required of the CDBG-DR grant. NCORR will identify crucial lessons learned in structural property mitigation in the development of its future elevation programs, if such an opportunity arises.

7.0 Natural Infrastructure

Beyond the specific methods needed to assess and compare grey infrastructure against natural infrastructure options relative to their utility to mitigate risk, a framework is required that would provide guidance to North Carolina on how to consider natural infrastructure solutions in its envisioned CDBG-MIT projects. NCORR is focused on how municipalities are advancing adaptation to climate change through the management of natural infrastructure assets that provide municipal and ecosystem services. Such focus provides effective solutions for minimizing coastal flooding, erosion, and runoff, as do man-made systems that mimic natural processes—known as natural infrastructure. Across North Carolina, aging water infrastructure is creating challenges for water management. Combined sewer systems are pumping toxins into estuaries, bays, lakes and other water bodies and overflowing during extreme precipitation events into urban and residential areas. At the same time, coastal communities are being heavily damaged from extreme storm events and sea level rise. Experts agree that natural infrastructure such as healthy wetlands can provide many of the same benefits of traditional man-made infrastructure at a much lower investment and maintenance cost. Natural infrastructure approaches include forest, floodplain and wetland protection, watershed restoration, wetland restoration, permeable pavement and driveways; green roofs; and natural areas incorporated into city designs, and conservation easements. A natural infrastructure approach represents a successful and cost-efficient way to protect riverine and coastal communities. While there is much to be done in the way of design and restoration in coastal communities, this plan, due the preponderance of MID counties and communities and their locations, will focus on upstream rather than coastal natural infrastructure.

Ordinances and codes are the regulatory mechanisms available to local governments for land use and natural resource management. Though local governments in North Carolina have no preexisting grants of power, the General Assembly has made both general grants of power to cities and counties and specific grants of power to regulate other activities under certain special circumstances. Cities and counties are generally allowed to “by ordinance define, regulate, prohibit, or abate acts, omissions, or conditions detrimental to the health, safety, or welfare of its citizens and the peace and dignity of the county; and may define and abate nuisances.” Other grants of authority are made to address specific issues, including the environmental impacts of development, and are found in other statutes.

Many of the resources discussed here are written as separate ordinances but could also be modified to work in a unified ordinance framework. Some of the ordinances are written as overlay ordinances, which are used to establish additional development requirements in specific areas of a community, such as environmentally sensitive areas. The additional requirements are superimposed over, or “overlay”, the base regulations already in place.

Many local governments in North Carolina are already required to adopt stormwater regulatory programs due to the urbanizing nature of the community or its location near sensitive resources (e.g., impaired waters, coastal locations). As part of these regulatory programs, NCDEQ collaborated with the University of North Carolina School of Government to develop several model stormwater ordinances that local governments can look to for guidance.

The Phase II Stormwater Model Ordinance was developed to meet requirements under the federal Clean Water Act for cities and towns that operate municipal separate storm sewer systems (MS4s) located in urbanized areas and serving a population of fewer than 100,000. The language includes performance standards that address quality, as well as the magnitude and rate of runoff.

The Model Tree Protection Ordinance provides communities with guidance for retaining trees. Tree protection ordinances can mitigate some of the impact of development while also ensuring community benefits, such as increased property values, stormwater runoff management, cooling, and air quality. The model ordinance sets out a framework for local governments and stakeholders to follow in deciding how to protect trees in their communities.

Multiple opportunities exist to capitalize on natural infrastructure amelioration and restoration. For Buyout undertakings, this would include conversion of DRRA properties into seasonal floodplains that have had structures demolished and are landscaped riparian buffer zones containing marginal native species returned to units of government/local government for permanent deed restrictions preventing re-development. These seasonal floodplains will serve to impound and filter both storm and floodwaters.[58]

For Infrastructure projects funded by the Infrastructure Recovery Program, funding can be used to restore natural resource systems and use green infrastructure technologies to meet HUD's recommendations for subrecipients to incorporate natural resiliency measures into infrastructure projects. Examples of projects that may be developed include, but are not limited to, restoring, developing, and/or enhancing natural barrier dune systems; creating wetland habitats to act as storm surge barriers; enhancing and replacing near shore and riverine vegetation and forest canopies that were lost or impacted by Hurricane Matthew; creating living shorelines and riverbanks; and restoring man-made or natural beach or riverine environments.

The Public Housing Restoration Fund aims to undertake resiliency interventions that include, among others, nature-based stormwater management features, nature-based coastal protection features, and resilient retrofits.

8.0 Cost Verification and Construction Standards

NCORR acknowledges the emphasis in the Notice to institute green building design standards, specifically when executing new construction, or rehabilitation or replacement of substantially damaged residential buildings, and will follow the guidance located in 84 FR 4844 concerning green building design. Rather than be limited by a single green building design technique, NCORR will require that new construction meet the best fit for new construction from many possible approaches. For all new or replaced residential buildings, the project scope will incorporate Green Building materials to the extent feasible according to specific project scope. Materials must meet established industry-recognized standard that have achieved certification under at least one of the following programs:

- ENERGY STAR (Certified Homes or Multifamily High-Rise).
- Enterprise Green Communities.
- LEED (New Construction, Homes, Midrise, Existing Buildings Operations and Maintenance, or Neighborhood Development).
- ICC-700 National Green Building Standard,
- EPA Indoor AirPlus (ENERGY STAR a prerequisite).
- Any other equivalent comprehensive green building program.

For each project subject to the above, the specific green building technique or approach used will be recorded. NCORR will implement and monitor construction results to ensure the safety of residents and the quality of homes assisted through the program. All new housing created in whole or in part with CDGB-DR funds will comply with current HUD Decent, Safe, and Sanitary (DSS) standards. Rehabilitation of non-substantially damaged structures must comply with the HUD CPD Green Building Retrofit Checklist available at https://www.hudexchange.info/resource/3684/guidance-on-the-cpd-green-building-checklist/, to the extent that the items on the checklist are applicable to the rehabilitation. NCORR will consult FEMA P-798, Natural Hazards and Sustainability for Residential Buildings, to align green building practices with the increased sustainability and resiliency.

Any applicable new housing developed with CDBG-MIT funds will comply with accessibility standards set at 24 CFR Part 40. NCORR will utilize the UFAS Accessibility Checklist as a minimum standard for structures with five or more units to assist in the compliance of Section 504 of the Rehabilitation Act. The checklist will be used when reviewing the design of all newly constructed residential structures (other than privately owned residential structures). The Fair Housing Act (including the seven basic design and construction requirements set in the Fair Housing Act)[59] also applies to buildings with four or more units. Titles II and III of the Americans with Disabilities Act also applies to public housing.

8.1 Cost Verification

At all times, construction costs, including demolition costs, must remain reasonable and consistent with market costs at the time and place of construction/demolition. NCORR follows the policies set in its Procurement Manual to perform an independent cost analysis for applicable procured activities and a cost principles analysis and budget certification for awards to assist in determining that costs are reasonable and necessary.

NCORR will review projects and test for compliance with financial standards and procedures including procurement practices and adherence to cost reasonableness for all operating costs and grant-funded activities. All program expenditures will be evaluated to ensure they are:

- Necessary and reasonable.
- Allocable according to the CDBG contract.
- Authorized or not prohibited under state/local laws and regulations.
- Conform to limitations or exclusions (laws, terms, conditions of award, etc.).
- Consistent with policies, regulations, and procedures.
- Adequately documented.
- Compliant with all Cross Cutting Federal Requirement including Uniform Administrative Requirements at 2 CFR 200. Per 2 CFR § 200.317, Subrecipients utilizing Program funds must follow all procurement guidelines contained in 2 CFR §§ 200.318-327.

8.2 Timely Expenditure of Funds and Reprogramming

NCORR has adopted procedures to ensure the timely expenditure of funds, track expenditures in each month, monitor expenditures of recipients, reprogram funds in a timely manner, and project expenditures over time. NCORR or its subrecipients of funding must be able to report expenditures for each approved activity. A record of the account balances is maintained for each approved activity that accounts for expenses accrued as well as obligations that have been incurred but not yet been paid out. As part of those controls, the system of record (Salesforce) includes the submission of Requests for Payment to track expenditures against pre-established activity budgets as well as for retention of records related to expenditures. Monthly expenditures are recorded in Salesforce as well as through the reporting mechanisms established by the Business Systems and Reporting team. The Business Systems and Reporting team also ensures that actual and projected expenditures of funds are reported in the Disaster Recover Grant Reporting system (DRGR) quarterly performance report (QPR). The use of these systems will ensure that contracts and bills are paid timely.

Technical assistance and training are provided by NCORR to Subrecipients to ensure that they understand their roles and responsibilities to comply with all federal and state requirements in the Subrecipient Agreements (SRA). Included in these responsibilities is the proper and timely submission of invoices. NCORR establishes strict timelines and milestones within each of the SRA agreements entered into with subrecipients, contractors, consultants, and recipients of funds. These requirements and milestones will be specifically outlined in each agreement and will be designed to be specific to categories of funding. All grantees are required to expend all funds within a certain timeframe as outlined in the Public Law and Federal Register Notices that govern the obligation of funds.

At times, it may be necessary for NCORR to reprogram grant funds. Funds may need to be reprogrammed for many reasons, including but not limited to:

- The Activity did not expend all funds awarded.
- The grant time period expired.
- Projects or programs were completed under budget and funds were remaining.
- A grant agreement expired, with no amendment necessary.
- A projected award is unable to be contracted.
- A project is determined to be ineligible.
- Slow or untimely project start date.
- An additional mitigation need is identified.

NCORR will review the use of funds quarterly as a part of the quarterly expenditure reports and may use those reports as a foundation to approach reallocation. Alternatively, changes in program design which necessitate a substantial Action Plan amendment may present an opportunity for NCORR to expediently reprogram funds. Through the grant cycle, subrecipients and contractors may request additional funds. These requests for funds will be evaluated as they are received. If the facts and circumstances of the request warrant additional funds, and additional funds are available, NCORR may reprogram funds at that time. Any funds reprogrammed which exceed the threshold criteria for a substantial Action Plan amendment will be formalized through the substantial Action Plan amendment process.

NCORR does not anticipate the creation of program income in the expenditure of CDBG-MIT funds. If program income is generated through the course of CDBG-MIT administration, the Action Plan will be updated to reflect a plan for managing program income.

8.3 Broadband

QAP requirements from NCHFA indicate that any substantial rehabilitation or new construction of a building with four or more units planned with CDBG-MIT funds must include installation of broadband infrastructure except where it is infeasible due to location, cost, or structural concerns. NCORR will ensure that these activities are undertaken in planned projects for the Public Housing Restoration Fund, and for any projects that meet the criteria in future amendments to this plan.

8.4 Operation and Maintenance Plans

NCORR has required all infrastructure projects funded through the Infrastructure Recovery Program and projects as part of the Public Housing Restoration Fund to provide NCORR with a plan for operation and maintenance indicating funding from sources other than CDBG-MIT funds. For the Infrastructure Recovery Program, funding from state and local sources will fund the continued maintenance and operation of programs. Public Housing Authorities and communities that are awarded funding through the Public Housing Restoration Fund are required to provide staff and funding for long term operation and maintenance of any projects funded with CDBG-MIT funds.

9.0 Relocation Requirements and Ensuring Accessibility

NCORR is continuing to make every effort to minimize temporary and permanent displacement of persons due to the delivery of the HUD's CDBG-DR and CDBG-MIT programs it administers. Participation in the Strategic Buyout Program is voluntary for property owners (see Section 9.1), and such owners will not be considered "displaced persons" according to 49 CFR 24.2(a)(9).

In rare cases, the Public Housing Restoration Fund may also require temporary relocation during reconstruction, rehabilitation, or new construction. However, program activities aim to avoid relocation whenever possible.

However, when displacement occurs, such as when a rental tenant is permanently displaced due to an owner's voluntary participation in the Strategic Buyout Program or the Public Housing Restoration Fund, NCORR will follow its *URA Policy Manual* requirements and its *Residential Anti-Displacement and Relocation Assistance Plan,* available at www.rebuild.nc.gov/about- us/plans-policies-reports/policies-and-procedures.

Eligible displaced persons will receive all benefits required under the Uniform Relocation Assistance and Real Property Acquisition Act (URA), a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. Because the regulations for CDBG-MIT waive the relocation requirements under Section 104(d), the URA protections under 49 CFR Part 24 apply to eligible persons displaced as a result of the buyout program. In addition, the waiver to Section 414 of the Stafford Act applies, which means that URA protections will apply to eligible persons under the Strategic Buyout Program starting with the program launch date of January 27, 2020, as it was more than one year after the presidentially declare disasters. NCORR will also relies on the HUD Handbook 1378, Tenant Assistance, Relocation and Real Property Acquisition Handbook, in its administration of URA protections.

In accordance with URA regulations, NCORR will provide displaced persons with relocation advisory services and URA benefits including but not limited to the:

- Provision of the required notices including the General Information Notice, Notice of Relocation Eligibility or Notice of Non-Displacement, and 90-Day Notice to Move;
- Reimbursement of eligible expenses associated with moving;
- Housing assistance payments if there is an increase in the cost of housing; and
- Identification of comparable housing. The program will make every effort to identify three comparable units however, displaced residential tenants will not be required to move unless at least one comparable unit has been offered.

9.1 Voluntary Acquisition

NCORR's Strategic Buyout Program is voluntary and NCORR will not utilize the power of eminent domain. While NCORR has no direct authority to perform eminent domain, it could request the Division of Administration to execute eminent domain on its behalf. Although NCORR does not intend to use the State's eminent domain authority, NCORR is indicating how it meets the four-part criteria under 49 CFR 24.101(b)(1)(i-iv):

(i) No specific site or property needs to be acquired, although the Agency may limit its search for alternative sites to a general geographic area. Where an Agency wishes to purchase more than one site within a general geographic area on this basis, all owners are to be treated similarly. (*See* appendix A, § 24.101(b)(1)(i).)

NCORR will be implementing its Strategic Buyout Program within DRRAs identified as being areas at risk for future storm damage. No specific sites or properties are being identified for purchase under the Strategic Buyout Program. The Program will offer to acquire property in DRRAs from eligible owners based on the appraised current Fair Market Value (CMV). The Initial Offer, based on the CMV, will be offered to all eligible applicants; therefore, applicants are being treated equally.

(ii) The property to be acquired is not part of an intended, planned, or designated project area where all or substantially all of the property within the area is to be acquired within specific time limits.

The Strategic Buyout Program is not part of a designated plan or development project that must be acquired within a specific timeframe. There is no specific time limit for the purchase of properties under the Strategic Buyout Program.

(iii) The Agency will not acquire the property if negotiations fail to result in an amicable agreement, and the owner is so informed in writing.

All offers to purchase Buyout participant properties will be made in writing and be based on a current Fair Market Value appraisal of the property. Because the Strategic Buyout Program is voluntary, property owners will be informed in writing that they may reject NCORR's Initial Offer to buy the property or voluntarily withdraw from the Program any time prior to closing. If an owner rejects the Initial Offer or withdraws from the Program, NCORR will not pursue the purchase of the property further.

(iv) The Agency will inform the owner in writing of what it believes to be the market value of the property. (*See* appendix A, § 24.101(b)(1)(iv) and (2)(ii))

NCORR will provide all participants to the Buyout Program with an appraisal indicating the current Fair Market Value of their property upon which any offer amount to buy the property will be made.

9.2 Accessibility, Section 504 Requirements and Limited English Proficiency (LEP)

To ensure accessibility for applicants of all programs funded using CDBG-MIT funds, NCORR has adopted a Section 504/Americans with Disabilities Act (ADA) policy which ensures the full right to reasonable accommodations by all program participants. Under this policy, case managers shall assess the specific needs of each program beneficiary and determine if a 504/ADA modification is required based on the family's needs and circumstances.

Public hearings and meeting are held in accessible sites and buildings. As was evidenced in the first rounds of public hearings in Robeson, Edgecombe, and Craven Counties on October 14 through October 16, 2019, for the input for the first Mitigation Action Plan, each facility hosting the public hearing was fully accessible. Further, the presentations were made simultaneously for individuals with hearing impairment (accommodations included sign language interpretation as well as text projected onto a screen). The transcription was translated into Spanish in real-time and printed materials were also translated into Spanish, which according to NCORR's accepted Language Accessibility Program (LAP), is the largest non-English spoken language in North Carolina. North Carolina qualifies as a safe harbor state in that over 5% of its population speaks another primary language outside of English in the home. The adopted LAP is cognizant of these demographics and offers print material in Spanish and will provide other language translation services as needed.

10.0 Activities and Allocation of Funds

The most significant consideration in developing CDBG-MIT activities and the allocation of funds is the Mitigation Needs Assessment. This assessment, found above, is comprised of an analysis of the State Hazard Mitigation Plan as well as data from the ongoing CDBG-DR funded State recovery. Mitigation activities are also funded in context with threats to Community Lifelines.

Throughout the implementation of the grant, NCORR certifies that it will conduct and carry out the grant in conformity with title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d) and the Fair Housing Act (42 U.S.C. 3601–3619) and implementing regulations, and that it will affirmatively further fair housing. Activities will further comply with environmental requirements at 24 CFR Part 58. Activities concerning lead-based paint will comply with the requirements of 24 CFR part 35, subparts A, B, J, K, and R. NCORR certifies that it will comply with applicable laws in the management and implementation of grant funds, both State and Federal.

10.1 Crosscutting Terms Defined

HUD and other federal crosscutting requirements and standards are applicable to activities proposed in this Action Plan. These requirements and standards and some common definitions of these items are included below.

- **Accessibility and Accessibility Standards.** The Uniform Accessibility Standards Act (UFAS) requires that buildings and facilities designed, constructed, or altered with federal funds be accessible and these standards were developed to define what "accessible" means. UFAS is one of the standards which federal grantee shall use to comply along with Title II of the Americans with Disabilities Act.
- **Affirmatively Furthering Fair Housing (AFFH).** AFFH is a legal requirement that NCORR further the requirements of the Fair Housing Act. The obligation to affirmatively further fair housing has been in the Fair Housing Act since 1968 (for further information see Title VIII of the Civil Rights Act of 1968, 42 U.S.C. 3608 and Executive Order 12892).
- **Community Participation.** The primary goal is to provide citizens where CDBG- funded activities will take place an opportunity to participate in an advisory role in the planning, implementation, and assessment of proposed programs and projects. NCORR commits to hearing from all impacted individuals regardless of race, color, national origin, income, or any other potential social disparity. The MIT requirements include the formation of an active citizen advisory committee during the duration of the MIT grant implementation to provide input.

  Effective Communication. Communication methods include the provision of appropriate auxiliary aids and services, such as interpreters, computer-assisted real time transcription (CART), captioned videos with audible video description, visual alarm devices, a talking thermostat, accessible electronic communications and websites, documents in alternative formats (e.g., Braille, large print), or assistance in reading or completing a form, etc.
- **Environmental Justice.** Environmental justice means ensuring that the environment and human health are protected fairly for all people regardless of race, color, national origin, or

income. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations" (2/94) requires certain federal agencies, including HUD, to consider how federally assisted projects may have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

- **Environmental Review**: In accordance with NEPA and 24 CFR Part 58 and 24 CFR Part 50, as well as 40 CFR Parts 1500 through 1508, an environmental review must be completed on any HUD-funded project. Even if an activity is found to be exempt from environmental review, NCORR must document the exemption and file this documentation in association with other project records.
- **Fair Housing and Equal Opportunity**. NCORR commits to working toward eliminating housing discrimination, promote economic opportunity, and achieve diverse, inclusive communities by leading the nation in the enforcement, administration, development, and public understanding of federal fair housing policies and laws. The laws implemented and enforced by FHEO include the Fair Housing Act, Title VI of the Civil Rights Act of 1964, Section 109 of the Housing and Community Development Act of 1974, Section 504 of the Rehabilitation Act of 1973, Titles II and III of the Americans with Disabilities Act of 1990, The Architectural Barriers Act of 1968, and The Age Discrimination Act of 1975
- **Limited English Proficiency**. Under Title VI of the Civil Rights Act of 1964 and in accordance with Supreme Court precedent in *Lau v. Nichols*, recipients of federal financial assistance are required to take reasonable steps to ensure meaningful access to their programs and activities by limited English proficient (LEP) persons. In accordance with Executive Order 13166, the meaningful access requirement of the Title VI regulations and the four-factor analysis set forth in the Department of Justice (DOJ) LEP Guidance apply to the programs and activities of federal agencies, including HUD. In addition, EO 13166 directs each federal agency that provides financial assistance to non-federal entities to publish guidance on how their recipients can provide meaningful access to LEP individuals and thus comply with Title VI regulations forbidding funding recipients from restricting an individual in any way in the enjoyment of any advantage or privilege enjoyed by others receiving any service, financial aid, or other benefit under the program. The Fair Housing Act prohibits national origin discrimination in both private and federally-assisted housing. For example, a housing provider may not impose less favorable terms or conditions on a group of residents of a certain national origin by taking advantage of their limited ability to read, write, speak or understand English.
- **Low-income Households.** HUD defines a low-income individual or household a one whose income is at or below 80% of the Area Median Income (AMI).
- **Protected Classes.** The seven classes protected under the Federal Fair Housing Act are color, disability, familial status, (i.e., having children under 18 in a household, including pregnant women), national origin, race, religion, and sex. Discrimination is also forbidden based on age (those 40 years of age or older) or genetic information.
- **Reasonable Accommodation.** Reasonable Accommodation is a change, exception, or adjustment to a rule, policy, practice, or service that may be necessary for a person with disabilities to have an equal opportunity to use and enjoy a dwelling, including public and

common use spaces, or to fulfill their program obligations. Please note that the ADA often refers to these types of accommodations as "modifications." Any change in the way things are customarily done that enables a person with disabilities to enjoy housing opportunities or to meet program requirements is a reasonable accommodation. In other words, reasonable accommodations eliminate barriers that prevent persons with disabilities from fully participating in housing opportunities, including both private housing and in federally-assisted programs or activities. Housing providers may not require persons with disabilities to pay extra fees or deposits or place any other special conditions or requirements as a condition of receiving a reasonable accommodation.

10.2 Connection between Mitigation Activities and Identified Risks

In review of the Mitigation Needs Assessment and threats to Community Lifelines, it is critical to add a diversified set of strategic programs to the original allocation proposed for Strategic Buyout Program activities in order to promote the long-term mitigation of risks related to affordable housing and infrastructure. Buyout programs remove vulnerable people and property from harm's way, greatly reducing the expectation of future investment in the recovery of those people and property. Additionally, buyout relieves strain on every Community Lifeline and is in alignment with a major priority of the State's Hazard Mitigation Plan. Similarly, the Residential Property Elevation Fund mitigates the risk of future flood loss by elevating a structure above the base flood elevation (BFE) or high-water mark. These actions reduce the strain on every community lifeline as well. The Public Housing Restoration Fund addresses the unmet housing need of a vulnerable low-income population, with many of the PHA developments participating in the program located in the 100-year floodplain. The program aligns with NC-2 in the state's Hazard Mitigation Plan. Risks and damage to infrastructure were high in previous hurricanes and the threat is projected to increase as the climate shifts, particularly with relation to water-related infrastructure. Addressing infrastructure recovery with CDBG-MIT funds aligns with the intent of the funding source and the state HMP.

In accordance with the Main Notice, the Action Plan must identify how the proposed use of funds: 1) meet the definition of mitigation activities; 2) address the current and future risks as identified in the Mitigation Needs Assessment; 3) will be CDBG-eligible activities under title I of the Housing and Community Development Act (HCDA) or otherwise eligible pursuant to a waiver or alternative requirement; and 4) will meet a national objective. Therefore, for each identified for CDBG-MIT activity identified in this section, NCORR will specify the connection to:

1. The State Enhanced Hazard Mitigation Plan "Action Item".
2. The Community Lifeline weakness addressed through the mitigation activity.
3. The CDBG-eligible activity as set forth in Title I of the Housing and Community Development Act (HCDA) or through specific waiver provided by HUD.
4. The HUD National Objective criteria satisfied through activity execution.

For each allocation, the reference to the HMP Action Item will be the numbered priority stated in the HMP. A detailed list of Action Items is included in Section 4.7. The CDBG-eligible activity is presented as the subsection of the Housing and Community Development Act, or specific waiver.

In addition, every CDBG-MIT activity must meet a National Objective. The HUD National Objective criteria that apply to CDBG-MIT activities include the following:

- **LMI (Low- and moderate-income).** Activities which benefit low- and moderate- income individuals, such as providing an area benefit to an LMI area, establishing benefits to limited clientele, or housing LMI individuals and households.
- **LMH (Low/Mod Housing).** Set by HUD in 80 FR 72102, the **Low/Mod Housing** national objective is met when the buyout program combines the acquisition of properties with another direct benefit—Low- and Moderate-Income housing activity, such as down payment assistance, for example—that results in occupancy and otherwise meets the applicable LMH national objective criteria.
- **LMHI (Low/Mod Housing Incentive).** Set by HUD in 82 FR 36825 to allow for meeting a National Objective when CDBG-MIT funds are used for a housing incentive award, tied to the voluntary buyout or other voluntary acquisition of housing owned by a qualifying LMI household, for which the housing incentive is for the purpose of moving outside of the affected floodplain or to a lower-risk area; or when the housing incentive is for the purpose of providing or improving residential structures that, upon completion, will be occupied by an LMI household.
- **UNM (Urgent Need Mitigation).** Set by HUD in the Notice to allow for certain mitigation activities. To meet the UNM National Objective, NCORR must document that the activity addresses the current and future risks as identified in the Mitigation Needs Assessment of most impacted and distressed areas and will result in a measurable and verifiable reduction in the risk of loss of life and property.

Some CDBG-MIT activities align with the unmet recovery need and have some functional overlap with CDBG-DR activities. Activities where a CDBG-MIT activity is used in combination with CDBG-DR funds already allocated will be indicated in the activity description.

This Action Plan does not modify any Federal standards or other legal requirements. Any effort by the State of North Carolina or its agents to modify such standards or other legal requirements must be preceded by the ordinary procedures to request a waiver from the appropriate Federal authority. As Public Law 115-123 provided “The Secretary of Housing and Urban Development may waive, or specify alternative requirements for, any provision of any statute or regulation that the Secretary administers in connection with the obligation by the Secretary or the use by the recipient of these funds (except for requirements related to fair housing, nondiscrimination, labor standards, and the environment), if the Secretary finds that good cause exists for the waiver or alternative requirement and such waiver or alternative requirement would not be inconsistent with the overall purpose of Title I of the Housing and Community Development Act of 1974.” Notice of proposed waivers must be accompanied by evidence of public comment including, but not limited to, review and input by low-income and minority residents, businesses, and other institutions.

10.3 Allocations and Programming

The total CDBG-MIT allocation set forth in PLs 115-123 and 116-20 is $202,686,000. NCORR will set aside 5% of these funds ($10,134,300) for administrative costs associated with the mitigation activities described below. An additional 6% of the funds ($11,329,171) will be set aside for planning related activities in accordance with Section 10.3.1, including Action Plan development, public outreach, local capacity building, and coordination with local and regional coordinating entities on future planning efforts. $44,174,078 for the Residential Property Elevation Fund, $35,103,334 will be allocated to the Strategic Buyout Program, $24,245,117 to the Public Housing Restoration Fund, $24,500,000 to the Infrastructure Recovery Program, $43,700,000 to the Affordable Housing Development Fund, $4,400,000 to the Homeownership Assistance Program, $100,000 to the Housing Counseling - Housing Development Program, and $5,000,000 to the Code Enforcement and Compliance Support Program

Following re-analysis for the Mitigation Needs Assessment, lessons learned from CDBG-DR, and from community and stakeholder input, these programmatic allocations represent the best use of CDBG-MIT funds.

10.3.1 Planning Funds

Six percent of CDBG-MIT funds ($11,329,171) are allocated to planning activities. In the original Action Plan, NCORR did not fully describe how these funds would be used. Since that time, NCORR has begun coordination with the State Disaster Recovery Task Force's Recovery Support Function (RSF) subcommittees – starting with the Environmental Preservation Recovery Support Function – to identify potential planning opportunities.

NCORR may consider the use of planning funds based on recommendations proposed by the RSF groups and may also consider planning opportunities identified through coordinating state agencies, such as the DOT, DEQ, and NCEM.

NCORR has also established significant internal resources to assist in the identification of suitable plans and planning-related projects, including the internal Resilience Team and the Policy and Community Development Team. These internal teams have identified local communities which would greatly benefit from the use of planning funds as a capacity building strategy in accordance with 24 CFR 570.205(a)(6) and subsections, and planning funds may be used to fund these activities to ensure the long-term success of other CDBG-MIT funded activities.

These teams, as well as other internal NCORR staff, have the expertise necessary to identify plans that align with the CDBG-MIT Action Plan and the State Hazard Mitigation Plan. Specific planning needs were also identified in the creation of the Action Plan and planning priorities are also outlined in the State Hazard Mitigation Plan. The Action Plan will not be amended every time a planning activity is pursued. Instead, NCORR will provide details on ongoing planning activities on its website at www.rebuild.nc.gov.

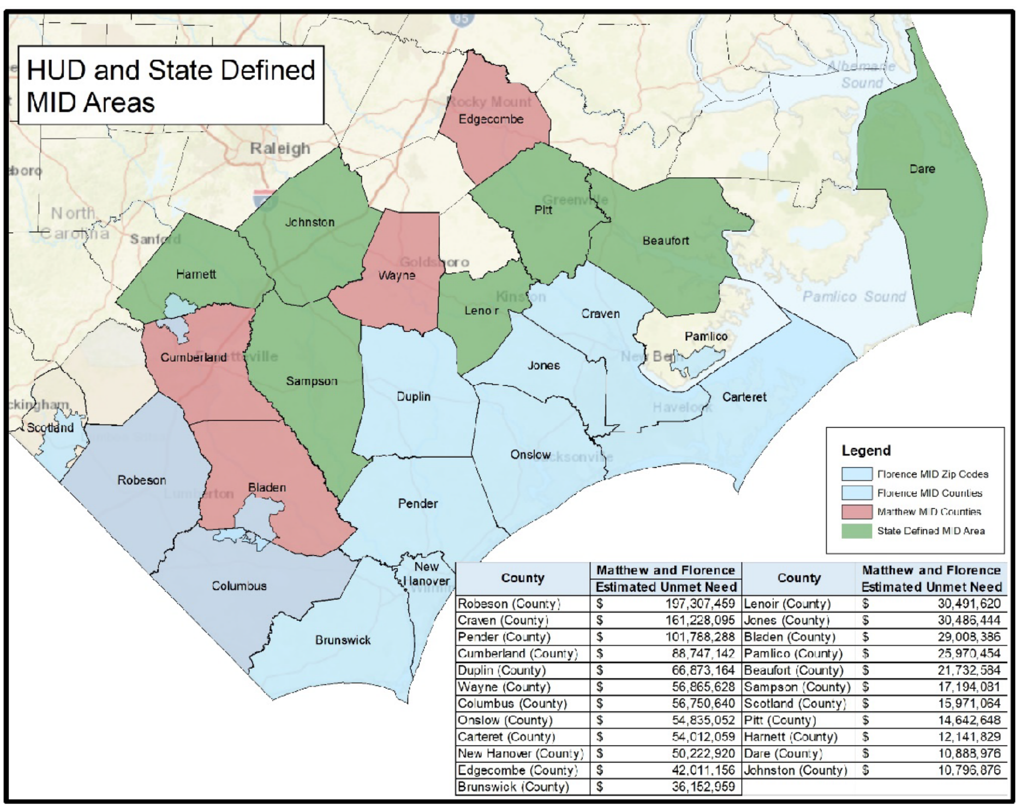
10.4 MID Areas and State-Identified MID Areas

The HUD-designated MID areas are the Hurricane Matthew-established MID counties (Bladen, Columbus, Cumberland, Edgecombe, Robeson, and Wayne Counties) and the additional Hurricane Florence MID areas (Brunswick, Carteret, Craven, Duplin, Jones, New Hanover, Onslow, Pender, Scotland, and Pamlico Counties). CDBG-MIT regulations require that a minimum of 50% of MIT funds be spent in HUD MID areas.

In consideration of the unique recovery and mitigation needs created by the large area of the State that was impacted by both Hurricane Matthew and Hurricane Florence, NCORR conducted an analysis of damage to areas that were impacted by both storms. In adherence with the allocation methodology outlined in Appendix A for both 82 FR 5591 for Hurricane Matthew and 85 FR 4681 for Hurricane Florence, NCORR calculated an estimated unmet need for both events combined. This analysis used the Major-Low, Major-High, and Severe damage categories for both events and multiplied those damage categories by the repair estimation factors included in Appendix A for each respective notice.

Based on the unmet need, seven counties have been added which are considered State- identified MID areas. These counties are Beaufort, Dare, Harnett, Johnston, Lenoir, Pitt, and Sampson. The threshold to be considered a State-identified MID is greater than $10 million in combined losses at the county level for both storm events. These state-identified areas are for recovery and mitigation planning purposes and for a deeper understanding of the hardest hit dual-impacted areas of the State.

Figure 16 – HUD and State-Identified Most Impacted and Distressed Area



County	Matthew and Florence Estimated Unmet Need	County	Matthew and Florence Estimated Unmet Need
Robeson (County)	$ 197,307,459	Lenoir (County)	$ 30,491,620
Craven (County)	$ 161,228,095	Jones (County)	$ 30,486,444
Pender (County)	$ 101,788,288	Bladen (County)	$ 29,008,386
Cumberland (County)	$ 88,747,142	Pamlico (County)	$ 25,970,454
Duplin (County)	$ 66,873,164	Beaufort (County)	$ 21,732,584
Wayne (County)	$ 56,865,628	Sampson (County)	$ 17,194,081
Columbus (County)	$ 56,750,640	Scotland (County)	$ 15,971,064
Onslow (County)	$ 54,835,052	Pitt (County)	$ 14,642,648
Carteret (County)	$ 54,012,059	Harnett (County)	$ 12,141,829
New Hanover (County)	$ 50,222,920	Dare (County)	$ 10,888,976
Edgecombe (County)	$ 42,011,156	Johnston (County)	$ 10,796,876
Brunswick (County)	$ 36,152,959		

Disaster Risk Reduction Areas (defined in Section10.8.1) may be located in HUD-identified or State-identified MIDs. While expenditures in these state-identified MID areas do not meet the 50% expenditure requirement set by HUD, they do satisfy the requirement from HUD which states that grants under the 2018 and 2019 Appropriations Acts in response to Hurricane Florence may be used interchangeably and without limitation for the same activities in the most impacted and distressed areas related to Hurricane Matthew.

Of the funding allocated to the Strategic Buyout Program, NCORR allocates 72% of the funds, to Hurricane Matthew and Florence HUD-designated MID areas based on the mitigation needs assessment and the process for DRRA selection. Twelve of the sixteen HUD-designated MIDs represent the areas with the greatest unmet needs. The remaining CDBG-MIT funds associated with the Strategic Buyout Program are reserved for state-identified MID areas which also received a Presidentially-declared disaster designation for Hurricanes Matthew or Florence. Future reallocations may be made and will be based on an analysis of need. As additional information becomes available, NCORR may support additional MID classification for Hurricane Florence impacted areas and update the allocations and the Mitigation Needs Assessment accordingly. Changes to add support for a new MID area would be included in a substantial amendment to the Action Plan.

10.5 Method of Distribution and Delivery

In previous CDBG implementation and delivery, NCORR has consistently prioritized providing funds to communities that experienced the most significant damage from Hurricanes Matthew and Florence. NCORR continues to provide assistance to each impacted county, with a primary focus on those that were most impacted and distressed.

Previous allocations allowed for counties to enter into a subrecipient agreement (SRA) with NCORR to administer aspects of the grant. In consideration of NCORR’s increased capacity, knowledge, and expertise since CDBG-DR funds were allocated, NCORR will administer the Strategic Buyout Program, utilizing Cooperative Agreements to convey acquired land to counties or other entities so that they may assume operation and maintenance of the acquired parcel(s). CDBG-MIT funds will not be sub granted for operations and maintenance.

In the case of the Public Housing Restoration Fund and Infrastructure Recovery Program, SRAs have been determined to be beneficial to NCORR for the expedient and proficient use of CDBG- MIT funds, as such the method of distributing funds to the subrecipient will be set forth in the SRA. New and updated SRAs will include:

- The threshold of the grant award and the amount to be sub granted.
- The use of the CDBG-MIT funds by responsible organization, activity, and geographic area.
- The CDBG eligibility criteria and national objective, as well as any additional criteria for the subrecipient’s use of funds.

The selection of subrecipients will weigh the following factors, in order of importance:

- Subrecipient alignment with CDBG-MIT objectives and priorities.

- Subrecipient capacity.
- Project/Program feasibility.
- Project/program cost and/or leverage.

Specific terms may be implemented to SRAs depending on the selection criteria reviewed above. Sub-criteria may expand upon these selection criteria in order to fully understand the nature of the proposed project. For more information on subrecipient selection criteria, refer to the Infrastructure Recovery Program manual and the Public Housing Restoration Fund Program manual.

10.6 Vulnerable Populations

A major priority of NCORR is the fair and equitable treatment of the vulnerable populations which are historically neglected during disaster recovery and in the consideration of long-term risk resilience and mitigation measures. The Notice also requires NCORR to assess how the use of CDBG-MIT funds may affect members of protected classes under fair housing and civil rights laws, racially and ethnically concentrated areas, as well as concentrated areas of poverty.

Organizationally, NCORR has sought staff and resources to ensure that vulnerable populations receive equitable and fair treatment. NCORR has a dedicated Resiliency Team, charged with assisting the State Disaster Recovery Taskforce's Housing Recovery Support Function (RSF), a task force that advises NCORR on housing recovery, and which includes several organizations dedicated to serving poor and marginalized households. Key NCORR staff members have also participated in the Racial Equity Institute's Groundwater Approach Training, a nationally recognized program for helping individuals and organizations who want to proactively understand and address racism, both in their organization and in the community.

10.6.1 LMI Priority and DRRA Selection Criteria

NCORR is committed to serving the LMI population of the impacted areas of the State. By waiver in the Notice, the requirement to expend 70% of CDBG funds on activities that benefit low- and moderate-income persons is replaced by a requirement to expend 50% of funds on LMI activities.

Such waiver does not change the need to prioritize the protection of LMI individuals and families. For example, given the known need and impact, the Public Housing Restoration Program aims to expend 100% of its funds to benefit LMI households. Moreover, the Infrastructure Recovery Program intends to retain the 70% funding threshold to benefit LMI persons.

In addition, to the extent that it is feasible, buyout activities will prioritize LMI individuals and households through the designation of DRRAs. However, NCORR will also follow HUD guidance to execute buyouts strategically, when feasible, as a means of acquiring contiguous parcels. To the maximum extent practicable, NCORR will attempt to avoid circumstances in which parcels that could not be acquired through a buyout remain alongside parcels that have been acquired through the grantee's buyout program. This may require executing buyouts that do not serve an LMI individual or household.

As a threshold selection criterion, NCORR identified buyout areas (DRRAs) must be located in areas that have been impacted by the presidentially declared disaster, Hurricane Matthew and/or Florence. Therefore, the area may reasonably be expected to be at risk for future storm and flooding damage. NCORR also applies the following criteria when designating a DRRA as well. These criteria were established to promote the state's objective to increase mitigation efforts while serving the LMI population:

1. **Need to Mitigate Against Future Storm-Related Damage**. DRRAs are selected based on data that indicated that these areas are likely to experience subsequent and repeated storm damage, including flooding. An area located within a FEMA-designated floodway or in zone A, AE, AO, AH, A1 - A30, A99, AR, V, VE or V1 - V30 on an existing or preliminary Flood Insurance Rate Map (FIRM) and/or the existence of flood inundation data (such as satellite imagery or photography), indicates vulnerability to subsequent flooding. While current DRRAs are predominantly located in floodplain areas, HUD regulations also allow for the establishment of DRRAs in areas that are at risk of future storm damage, such as flooding, even if such areas are not located within a floodplain, as shown on a FIRM. The properties within the DRRAs located outside of the floodplain are included to mitigate the risk of future storm damage, and ensure neighborhood, area or block integrity.

2. **LMI Prioritization**. In addition, the Program prioritizes those at-risk areas populated by LMI households. Therefore, all DRRAs will have a population of no less than 40% LMI based on the census data from the American Community Survey (ACS), unless:

   ○ The DRRA is within a census block group that is not lower than 30% LMI, but is adjacent to a block group which is 51% LMI or greater; and/or

   ○ The DRRA is proposed by the local community, in which case it may not be lower than 30% LMI based on data by census block group OR information provided by the local community supports that it is greater than 30% LMI, contrary to census data.

   The Program will monitor expenditures to ensure that they remain in compliance with HUD's LMI threshold requirements and will adjust policy accordingly if the threshold is not being met. This LMI threshold is a starting point for serving lower-income areas and individual determinations are still made project by project. NCORR remains committed to using a majority of its funds to the benefit of LMI individuals and to focus on the unique needs of vulnerable populations as reviewed in Section 10.6.

3. **Additional Criteria.** Additional criteria may be applied when designating a DRRA including the existence of one or more of the following factors: risk of repetitive storm damage; locations where there is or will be other government disaster recovery investment and/or where a prevalence of data indicates the need for mitigation assistance; identification of areas by local governments based on local knowledge and data regarding flooding, calls for assistance due to flooding, and other local considerations when such areas are also generally consistent with the factors listed above, and after review and approval by NCORR.

10.6.2 Assessment of Vulnerable Populations

Of significant concern is long term resiliency and mitigation which may serve vulnerable populations, such as minorities and low-income individuals and households who have historically been discriminated and marginalized by housing policies, lack of public investment, forced into outer, more rural areas due to lack of affordable housing units. Vulnerable populations are also areas that have high concentrations of poverty and minorities, transitional housing, permanent supportive housing, permanent housing serving individuals and families (including subpopulations) that are homeless and at-risk of homelessness, persons with accessibility issues, including transportation and access to healthcare and services that have been cut off due to poor infrastructure such as roads, those persons with Limited English Proficiency and public transportation, and public housing development areas.

NCORR reviewed demographic data from the US Census Bureau and the CDC Social Vulnerability Index. NCORR considers this data when evaluating the needs for vulnerable populations and when considering areas for proposed buyout DRRAs. Additional resources were also reviewed to provide more background and assessment of vulnerable populations including University of North Carolina's Center for Civil Rights' "The State of Exclusion Report (2013)."

10.6.3 Historical Context

Historically, the least fortunate bear the greatest social, economic, health and environmental costs. Studies have demonstrated that low-income people and people of color are more likely to live in or near a floodplain,[60] in industrial areas that spread pollution when threatened by hazards,[61] and in neighborhoods with substandard infrastructure.[62] Low-income individuals are more likely to live in rental housing, may not be able to afford flood or homeowner's insurance, and often hold jobs that make unexpected absences from work due to disaster a serious challenge. For these reasons and many others, vulnerable populations are less likely to be able to insulate themselves from the harm caused by disaster events.

Poverty has historically been a problem for NC. In 2019, 13.6% of North Carolinians lived in poverty which compares unfavorably to the national average of 10.5%.[63] Further, between 2000 and 2016, the number of concentrated poverty neighborhoods, as well as the number of North Carolinians living in those neighborhoods, has nearly tripled. In 2000, there were 37 neighborhoods in North Carolina where the poverty rate was 40% or higher, with 84,493 people (1.1% of total population) living in those communities. In 2016, there were more than 348,000 (3.6% of the total population) North Carolinians living in 109 concentrated poverty neighborhoods.[64] Both Hurricanes Matthew and Florence further exacerbated this problem. Persons in poverty have less resources to use when recovery from a disaster is needed.

Table 38 - Census Tracts by Poverty Rate, State of North Carolina

Year	Census Tracts with 0-19.9% Poverty Rate	Census Tracts with 20-39.9% Poverty Rate	Census Tracts with 40% or More Poverty Rate	TOTAL Census Tracts
2000	1,255	262	37	1,554
% of Total	80.8%	16.9%	2.4%	-
2012-16	1,384	669	109	2,162
% of Total	64.0%	30.9%	5.0%	-

In a prior review of its programming options, NCORR selected buyout as the most significant and meaningful way to create long-term resiliency. However, the past implementation of these programs (specifically property acquisition programs funded through other means) have had a negative effect of discrimination on the population to be served, leading to inequity in post- disaster recovery and long-term negative impacts on impacted neighborhoods. NCORR remains committed to the significance of buyouts as a long-term resiliency strategy, however, it has also augmented its efforts by including additional mitigation activities, such as the Public Housing Restoration Fund and Infrastructure Recovery Program, to provide a comprehensive set of resiliency strategies.

A May 2016 study published in the International Journal of Environmental Research and Public Health reviewed the long-term effects of property acquisition from a 2008 flood disaster recovery effort. The study found that "Inequitable distribution during flood recovery has been found to impact the most socially vulnerable, including minorities, female-headed households, low-income households, and the elderly." The study indicated that African Americans and Latinos incurred greater damage, had longer periods of temporary housing, and were less likely to secure adequate resources from flood insurance and the federal government during recovery. In the areas that were examined by the study, the results indicated that inequalities in the allocation of federal recovery funds may have contributed to the lower recovery rates of Latino and elderly populations.[65]

Similarly, FEMA-funded property acquisition in the HMGP has come under scrutiny for favoring upper income, white homeowners over renters and minority groups. According to 2019 reporting performed by National Public Radio (NPR), it reviewed 40,000 property buyouts funded by FEMA and state and local governments and found that most of them were in neighborhoods that were more than 85% White and non-Hispanic.[66]

These inequalities are examples at a national level, but the conditions in the State of North Carolina are somewhat different. North Carolina's buyouts have disproportionately occurred in low-income, segregated, Black communities. In the past, there has been little financial incentive provided to participants to relocate to safer areas or replace their existing housing. With relatively fewer resources to begin with, these populations were not equipped to recover. It is critical to NCORR to avoid these disparities and develop a buyout program that is equitable, fair, and representative of the people living in the most vulnerable communities in the State.

NCORR's Strategic Buyout Program is aware that buying storm-impacted property at the current fair market value may not provide enough financial resources for a low-income homeowner to buy a subsequent home in a safe area. For that reason, SBP is providing incentives at a level sufficient to make subsequent homeownership possible for low-income program participants. The incentive structure has been developed to ensure that these more vulnerable groups are served and can obtain a safe and affordable housing. The incentive structure is described in the SBP Manual.

10.6.4 Addressing the Needs of Vulnerable Populations

CDBG-MIT funding in general and NCORR as an organization specifically have tools to combat these disparities in the administration of its grant funding. Unlike federal funds provided from sources other than HUD, CDBG-MIT funds require a specific allocation for the benefit of low- and moderate-income individuals. To the greatest extent possible, NCORR focused its efforts on areas that are likely to contain these individuals in the identification of its buyout areas.

NCORR intends to repair or rehabilitate existing housing with MIT funds only in limited cases. NCORR will instead focus on creating new housing opportunities outside of the floodplain and in areas of reduced risk whenever possible and largely through CDBG-DR funded activities. An analysis of the housing need in these areas, will be conducted prior to approval of any new projects to ensure that these vulnerable populations are served. NCORR will favor the selection of housing proposals which include units that that serve vulnerable populations, including transitional housing, permanent supportive housing, permanent housing serving individuals and families that are homeless and at-risk of homelessness. NCORR directly serves the need for public housing developments by funding public housing authorities directly for more resilient public housing stock through the Public Housing Restoration Fund.

NCORR is considering individuals with access and functional needs that will require assistance with accessing and/or receiving CDBG-MIT disaster resources. These individuals may be children, senior citizens, persons with disabilities, from diverse cultures, transportation disadvantaged, homeless, having chronic medical disorders, and/or with limited English speaking, reading, having comprehension capacity, or altogether be non-English speaking.

NCORR will satisfy effective communications, language assistance needs, and reasonable accommodations procedures required of recipients of Federal financial assistance. NCORR will implement HUD guidance to plan for the functional needs of persons with disabilities in the implementation of relocation activities. NCORR will utilize specialized resources to plan for and accommodate the functional needs of people with disabilities and other vulnerable populations, including, but not limited to, public or private social services, transportation accommodations, information, interpreters, translators, I-speak cards, and other services for those persons who may be visually impaired or speech impaired during the Action Plan process free of charge. NCORR is taking care to ensure that individuals can equitably access disaster recovery resources.

The approach to recovering neighborhoods after Hurricane Matthew was to strategically examine where the damage occurred, and then focus its recovery efforts in those areas, paying special attention to the housing types and special needs of these unique communities. The strategy for mitigation and resiliency is similar in that NCORR will approach disaster resilience and climate change adaptation through a cross-sector lens that anticipates how a changing climate, extreme events, ecological degradation, and their cascading effects will impact the needs of North Carolina’s vulnerable populations.

In understanding that families and individuals with social vulnerabilities oftentimes face greater challenges in evacuating during a disaster event, NCORR analyzed FEMA Individual Assistance (IA) applications to determine which neighborhoods withstood the brunt of Hurricane Matthew’s impact, took into account the impact of Hurricane Florence for the same impacted areas, reviewed current CDBG-DR applications for assistance, and then examined the socio- economic and demographic profiles of these neighborhoods to ensure that equitable treatment was sought in every step of the process.

NCORR performed an analysis of vulnerable populations during the development of proposed buyout areas and focused on those proposed areas which would potentially serve the most vulnerable individuals and neighborhoods impacted by Hurricane Matthew. An analysis of the demographic features of those proposed buyout areas is found below.

Table 39 – Active Buyout Area Demographics (Updated November 2020)

Finding	Number	Percent
Census Block Groups above statewide LMI average	10	71%
Census Block Groups above statewide African American average	12	86%
Census Block Groups above statewide Hispanic Average	2	14%
Census Block Groups above statewide Households with individuals over 60	12	86%

NCORR has selected buyout areas specifically to provide an opportunity for long term resilience for historically underserved populations. NCORR believes that the demographic makeup and identity of the proposed buyout areas reflects the most vulnerable communities in harm's way. Compared to the overall state demographic profile:

- 71% of buyout zones contain greater than the state average of LMI individuals and households.
- 86% of buyout zones contain greater than the state average for African American-identifying individuals and households.
- 86% of buyout zones contain greater than the state average for households with individuals over 60 years of age.

NCORR recognizes that not every municipality that coordinates with NCORR on buyout will ultimately elect to participate in a buyout program. However, NCORR commits to continuing to assess each new or alternative buyout zone proposed by participating communities to ensure that the buyout zone works in favor of those community members which have historically not had the same opportunities to recover or benefit from long-term resilience and mitigation.

NCORR is committed to rebuilding damaged communities in a more resilient manner that affirmatively furthers fair housing opportunities to all residents. For this reason, the analysis above identifies which impacted neighborhoods have a disproportionate concentration of minority populations as well as those who may have Limited English Proficiency. As these communities rebuild, the State will focus its planning and outreach efforts to ensure that rebuilding is equitable across all neighborhoods, including making provision for all information available about CDBG-MIT funding and programs in both English and Spanish and having appropriate translation, interpretation, and other services for persons with disabilities free of charge and accessible to the public in accordance with all HUD regulations and program guidelines.

Table 40 – Key Impacted Area Demographic Information

County	MID Area	LMI Population	Total Population	% LMI	Minority	Hispanic	LEP	Persons with Disabilities
Anson County	-	12,005	24,295	49.41%	48.6%	4.3%	4.9%	12.5%
Beaufort County	-	19,205	47,075	40.80%	25.1%	8.0%	6.1%	13.1%
Bertie County		10,039	20,518	48.93%	61.2%	2.2%	3.9%	14.1%
Bladen County	Yes	16,735	34,105	49.07%	42%	7.5%	3.0%	21.6%
Brunswick County	Yes	47,235	115,025	41.06%	17%	4.7%	2.10%	17.2%
Camden County		3,405	10336	32.94%	12%	3.0%	5.2%	9.5%
Carteret County	Yes	26,895	67,125	40.07%	11%	4.2%	1.8%	19.9%
Chatham County	-	28,425	66,565	42.70%	12.7%	12.3%	5.8%	10.3%
Chowan County		5,561	14370	38.70%	34.5%	3.7%	1.0%	10.3%
Columbus County	Yes	24,610	54,415	45.23%	38%	5.0%	2.6%	20.1%
Craven County	Yes	36,490	100,565	36.28%	30%	7.0%	3.6%	17.4%
Cumberland County	Yes	117,930	314,220	37.53%	51%	11.2%	3.2%	14.0%
Currituck County		8,985	25,247	35.59%	5.8%	4.0%	1.0%	11.1%
Dare County		9,891	35,412	27.93%	2.7%	7.3%	2.7%	9.9%
Duplin County	Yes	29,900	58,775	50.87%	36%	21.3%	12.1%	19.0%
Durham County	-	134,820	275,290	48.97%	37.3%	13.7%	8.9%	7.0%
Edgecombe County	Yes	27,870	54,032	51.58%	57.8%	4.8%	1.6%	12.1%
Gates County		4,705	11,601	40.56%	31.2%	2.3%	1.1%	16.0%
Greene County	-	9,090	19,235	47.26%	36.8%	15.5%	7.1%	18.1%
Guilford County	-	205,120	490,610	41.81%	35.1%	8.2%	5.7%	7.5%
Halifax County		25,015	52,300	47.83%	53.7%	3.1%	0.9%	13.9%
Harnett County	-	48,490	121,000	40.07%	22.0%	13.0%	3.5%	10.1%
Hertford County		11,517	24,262	47.47%	61.0%	3.8%	2.0%	15.2%
Hoke County	-	20,520	49,850	41.16%	35.3%	13.6%	5.2%	13.4%
Hyde County	-	1,640	5,005	32.77%	29.0%	9.2%	6.9%	6.8%
Johnston County	-	92,715	176,620	52.49%	16.8%	14.0%	5.5%	10.5%
Jones County	Yes	4,565	10,040	45.47%	34%	4.2%	2.4%	23.8%
Lee County	-	23,400	58,375	40.09%	20.1%	19.5%	8.4%	11.6%
Lenoir County	-	27,790	57,525	48.31%	41.5%	7.5%	4.8%	19.1%
Madison County		10,044	21,347	47.05%	1.5%	2.4%	1.1%	12.2%

County	MID Area	LMI Population	Total Population	% LMI	Minority	Hispanic	LEP	Persons with Disabilities
Martin County		10,034	23,227	43.20%	42.3%	4.2%	1.4%	13.1%
Moore County	-	36,635	90,530	40.47%	12.2%	6.8%	2.5%	10.1%
Nash County		39,429	94,125	41.89%	41.0%	7.1%	2.6%	11.0%
New Hanover County	Yes	94,235	206,370	45.66%	19%	5.3%	2.8%	12.6%
Northampton County		10,407	20,426	50.95%	57.5%	2.3%	0.9%	14.9%
Onslow County	Yes	58,239	170,790	34.10%	26%	11.8%	2.0%	16.9%
Orange County	-	54,145	128,180	42.24%	11.8%	8.6%	6.0%	5.9%
Pamlico County	Yes	4,965	12,350	40.20%	24%	3.6%	.50%	20.8%
Pasquotank County		16,264	39,546	41.22%	36.5%	5.7%	2.1%	10.2%
Pender County	Yes	22,025	53,820	40.92%	23%	6.4%	3.0%	16.7%
Perquimans County		4,804	13,506	35.57%	23.0%	2.6%	1.7%	8.9%
Pitt County	-	75,519	167,660	45.04%	35.7%	6.3%	2.6%	8.9%
Richmond County	-	21,705	44,665	48.60%	32.0%	6.7%	3.4%	13.2%
Robeson County	Yes	70,970	131,455	53.99%	76.6%	8.3%	3.6%	16.6%
Sampson County	-	29,415	62,945	46.73%	26.6%	20.4%	9.8%	13.8%
Scotland County	Yes	17,835	33,675	52.96%	55%	2.8%	.40%	19.5%
Tyrrell County		1,525	4,090	37.29%	38.1%	9.0%	1.9%	15.5%
Union County	-	73,680	211,280	34.87%	12.3%	11.4%	4.9%	6.3%
Wake County		418,841	1,023,811	40.91%	21.0%	10.3%	5.9%	5.8%
Washington County		5,050	12,331	40.96%	48.0%	5.8%	0.4%	16.8%
Wayne County	Yes	52,850	121,450	43.52%	32.3%	12.3%	6.2%	12.2%
Wilson County	-	34,285	80,005	42.85%	40.4%	10.8%	4.7%	11.4%

CDBG-MIT is not the only source of resilience funding available, and the buyout initiative in this Action Plan cannot be considered in a vacuum. Other funds are available to address a host of important issues resulting from Hurricane Matthew and Hurricane Florence, including significant CDBG-DR investment in single-family housing recovery, property elevation, multi- family housing development, and public housing development CDBG-MIT cannot be divorced from the impacts of these funding sources on these other areas of critical need. FEMA funds such as HMGP and PA may also contribute to the other recovery needs of vulnerable communities.

NCORR will follow Fair Housing and Civil Rights laws in the implementation of its programs. NCORR further understands the complexity of housing resilience in racially and ethnically concentrated areas, as well as concentrated areas of poverty. A recurring theme and comment from the community engagement during Action Plan development was the importance of place and home for impacted individuals. NCORR will coordinate CDBG-DR funded activities with its subrecipient NCHFA and other potential subrecipients or partners to determine the best course of action to provide equitable, meaningful housing solutions for all impacted individuals. To best serve vulnerable populations such as transitional housing, permanent supportive housing, permanent housing serving individuals and families (including subpopulations) that are homeless and at-risk of homelessness, and public housing developments, NCORR will engage local Public Housing Authorities (PHAs) to support resilience needs for public housing at the local level.

10.6.5 Application Status

NCORR is committed to sharing timely and accurate updates on applications to the Strategic Buyout Program and those being funded by the Residential Property Elevation Fund.

Applicants can learn more about the status of their application through the following methods:

- 833-ASK-RBNC (833-275-7262).
- Phone call directly to the assigned case manager.
- Direct email to the assigned case manager.

The Residential Property Elevation Fund and the Strategic Buyout Program are the only direct beneficiary programs that use CDBG-MIT funds. For the Public Housing Restoration Fund, Infrastructure Recovery Program and the Code Enforcement Compliance and Support Program, NCORR will coordinate and communicate directly with subrecipients only. NCORR will enter into subrecipient agreements with local governments and private non-profits, or Memorandum of Understanding (MOUs) agreements with State agencies, in order to implement these projects, and the agency will engage with entities who have relevant jurisdictional oversight over the project and project area.

10.7 Residential Property Elevation Fund

10.7.1 Program Description

The Residential Property Elevation Fund is established to pay for the elevation of storm-damaged property two feet above the base flood elevation (BFE) or high-water mark. Given the close alignment of this fund with the property elevation activity in the Homeowner Recovery Program (HRP) manual, the HRP manual should be consulted on specific eligibility, scope, and elevation requirements. The rehabilitation, reconstruction, or replacement of a Manufactured Housing Unit (MHU) is also able to be funded with this activity provided the final elevation height of the unit meets or exceeds the elevation requirement set forth in the Federal Register Notices related to CDBG-MIT funds and the HRP Program Manual. Flood insurance assistance may also be provided from this fund upon successful project completion. Flood insurance assistance may be provided for up to $2,000 or a maximum and a maximum of two years. Flood insurance assistance requirements are also outlined in the HRP manual.

Elevation is mandatory for participating properties that are substantially damaged or will be substantially improved and are currently situated below two feet above the base flood elevation

(BFE). Participants that elect to elevate because they have an interior high water mark but are located outside of the 100-year floodplain may also be eligible to receive funding from the Residential Property Elevation Fund.

At a minimum, homes will be elevated to two feet above the BFE as required by HUD or at least 2 ft. above the interior documented water marks as measured by the assessor, whichever documented water level is highest and reasonable. Local requirements for elevations more than two feet above BFE and the HUD requirement prevail, where required. For MHUs, if the Program elevation standard makes it infeasible to elevate, the HUD elevation requirement prevails. The Program is unable to elevate structures that are situated on leased land unless the permission of the landowner is secured.

10.7.2 Maximum Award

The maximum award for elevation is a reasonable dollar-per-square foot cap based on the unique characteristics of the elevation project and the type of rehabilitation, reconstruction, or MHU replacement that accompanies it.

NCORR will offer the participating homeowner a resilient reconstruction or MHU replacement rather than attempt to rehabilitate and elevate the property. The Fund will provide awards necessary to completely reconstruct damaged property and, in some circumstances, build the property on a new site, including demolition and removal of the original structure. The specific award amount is capped based on the size of the applicant's selected floorplan. Additional funds may be provided above the award cap to address site-specific accessibility needs (i.e. ramps and lifts), environmental issues, resiliency/mitigation measures, elevation requirements, and municipal ordinances, as needed.

For participating MHUs, The Fund will provide awards necessary to replace the damaged MHU, including demolition and removal of the original structure. MHUs may be replaced on a different site in certain situations. ADA compliant units are available for applicants that require those accommodations. Awards cover the cost of the unit as well as delivery, installation, and setup of the selected unit. Environmental remediation and accessibility features such as ramps or lifts are included in the award cost.

If assistance is required to relocate during the scope of work, NCORR has adopted an Optional Relocation Policy to provide households with incomes less than or equal to 120% of Area Median Income (AMI) with temporary relocation assistance while they are unable to occupy their home during construction activities. Households earning greater than 120% AMI may qualify for TRA through a hardship exception. The Fund will pay reasonable costs based on rate schedules developed by NCORR. Uniform Relocation Act (URA) policies and notification requirements will be followed to assist any tenants who are temporarily or permanently displaced due to program activities.

10.7.3 Geographic Eligibility

Fund participants must be located in one of the disaster-declared counties eligible to receive HUD funds for either Hurricanes Matthew or Florence. NCORR anticipates that the majority of participants that are funded with the Residential Property Elevation Fund will be located in the most impacted and distressed (MID) areas for Hurricane Matthew and Florence.

10.7.4 Priorities

Fund priorities are aligned closely with those of the CDBG-DR funded Homeowner Recovery Program. The Fund will predominantly focus on LMI households and be reflective of the effort to engage LMI households in the recovery and mitigation process in the Homeowner Recovery Program intake period.

10.7.5 Eligible Applicants

As the current need for elevation funds is significant in the Homeowner Recovery Program, recipients of these funds must meet the eligibility criteria for the Homeowner Recovery Program, as set forth in that Program Manual, and must be currently participating in the Homeowner Recovery Program to be identified for funding from the Residential Property Elevation Fund.

10.7.6 Projected Start and End Date

The Fund is closely aligned with the Homeowner Recovery Program. NCORR anticipates that much of the elevation work paid with the fund will be complete before the end of calendar year 2025.

- Start Date: Q3 2024
- End Date: Q2 2026

10.8 Strategic Buyout Program

10.8.1 Program Description

The Strategic Buyout Program provided funding for the purchase of eligible properties in Disaster Risk Reduction Areas (DRRA) and a deed restriction on the parcel, restricting future development. The properties purchased under SBP are owned by units of general local government and are maintained in a manner consistent with open space or floodplain management in perpetuity.

10.8.2 CDBG-MIT funds also provided housing counseling effort to assist Strategic Buyout applicants and their tenants in selecting the best subsequent housing option, providing homebuyer, homeownership, renter, and credit enhancement training and counseling, and advising on incentive amounts. Projected Start and End Date

The program is no longer taking applications.

- Start Date: Q1 2020
- End Date: Q3 2025

10.9 Infrastructure Recovery Program

10.9.1 Program Description

The Infrastructure Recovery Program will be managed and run by NCORR. NCORR will implement the program by providing grants to assist to local and county jurisdictions and not- for-profits to repair and make more resilient storm damaged facilities after factoring in FEMA funding, other federal funds, and private insurance proceeds. While the program is expected to be primarily state managed, the State may enter in subrecipient agreements with units of governments or not-for-profit entities in storm impacted areas to implement specific programs. Funding for the community recovery program is expected to be used to cover the nonfederal share or local match for FEMA disaster recovery programs, centered on the PA and HMGP, however a significant portion of the funds may also be used to address recovery and resiliency needs of public facilities that are not covered by FEMA PA and or have been identified through the county recovery and resiliency plans.

Due to the significant unmet need, the State plans to prioritize funding to assist community facilities that serve older adults, children, persons with disabilities, and/or families living in poverty. It will also prioritize funding projects that are located within a substantially damaged, town, cities, or neighborhoods.

The activity will repair, replace, rebuild, make more resilient or improve public facilities that were damaged by Hurricane Matthew and Florence, and engage in public service activities that support community recovery and/or provide funds to cover the local match from other Federal disaster recovery programs primarily FEMA. Examples include, but are not limited to, roads, schools, water and wastewater treatment facilities, parks, and other public facilities that communities have determined are important publicly owned assets.

10.9.2 Maximum Award

Up to $2,000,000 per project. Applicants may request an exception to the maximum award amount.

10.9.3 Geographic Eligibility

MID counties (HUD and State).

10.9.4 Priorities

Eighty percent of program funds are set aside for services within the most impacted counties. Evaluation criteria under this program will primarily focus on LMI benefit and MID requirements, but will also consider other criteria, as listed below. Prioritization criteria are expected to be supported within applications by quantitative assessments and outcomes that show impacts and improvements to LMI, the MID and community lifelines:

- Impact of planning or public service effort within the community (as indicated bypast disasters),
- The project’s ability to reduce risk and loss of life and property during future disasters,
- Projects that improve resilience for underserved communities and vulnerable populations, and
- Leveraging of additional funding sources.

10.9.5 Eligible Applicants

Local, county and state governments, non-profit organizations in a storm eligible county. All applicants in FEMA PA program with a DR-4285 designated project who have been determined to be eligible for funding.

10.9.6 Projected Start and End Date

- Start Date: Q1 2020
- End Date: Q3 2029

10.10 Public Housing Restoration Fund

10.10.1 Program Description

The Public Housing Restoration Fund will be administered by NCORR. Funds from the Program can be used to rehabilitate and/or repair PHA properties that were negatively affected from Hurricanes Matthew and Florence. Funds can also be used to address unmet recovery long term and mitigation needs after accounting for insurance and other Federal disaster funding, to cover the non-Federal share or local match that PHAs must provide to access FEMA PA grant program, or to make facilities more resilient from future storm events. Based on direct communication between NCORR and the PHAs, deeply affordable rental units managed by PHAs in impacted areas experienced severe damage due to Hurricanes Matthew and Florence. NCORR is working directly with the PHAs to assess and determine the total unmet need for each facility. In the event that the unmet need of the PHAs exceeds the total allocation of funds, the program, through its policy and procedures, will document how funding allocations to PHAs were made and what eligible activities will be prioritized. The State also reserves the right for this program to either State-manage the Public Housing Restoration fund or provide grants directly to the PHAs to implement the projects using program funds.

10.10.2 Maximum Award

Award amounts based upon PHA unmet needs.

10.10.3 Geographic Eligibility

Public Housing Authorities must be located or operating in a HUD or State designated MID area.

10.10.4 Priorities

Public Housing Authorities located or operating in a HUD or State defined most impacted county.

10.10.5 Eligible Applicants

Public Housing Authorities.

10.10.6 Projected Start and End Date

- Start Date: Q1 2020
- End Date: Q3 2029

10.11 Affordable Housing Development Fund

10.11.1 Program Description

The Affordable Housing Development Fund seeks to create new housing stock in a way that is more responsive to the needs of the recovering community while mitigating the effects of potential future hazards through resilient design and planning. In some instances, this may be "traditional" multi-family rental units. In other communities, it may be clustered or site-by-site newly created small rental units. The program will primarily consider new construction but may consider rehabilitation of existing units.

Similar to the use of Hurricane Matthew and Hurricane Florence CDBG-DR funds, NCORR may fund projects that have been identified for funding through the applicable tax credit Qualified Allocation Plan (QAP) application process. NCORR may fund projects that are proposed in the MID areas of the state through this process.

Separately, NCORR may solicit projects from local governments, qualified property management organizations, public, private, or non-profit organizations, and Community Development Housing Organizations (CHDOs)/Community Based Development Organizations (CBDOs) to determine the best fit for affordable housing, responsive to the needs of impacted communities. Upon evaluation of proposals, NCORR may subgrant funds using the SRA model or enter into a contract agreement to execute projects, based on the nature of the proposer and the proposal. The QAP process described above will not necessarily follow the selection criteria and prioritization criteria defined in the subsections below. Projects already identified and selected through these processes using CDBG-DR funds will be deemed eligible for consideration for CDBG-MIT funding.

The definition NCORR uses for affordable rent is the same as the HOME Investment Partnership Program definition. These rental limits are updated periodically and are calculated by metro area or county. The affordable rent limits methodology is available at https://www.huduser.gov/portal/datasets/HOME-Rent-limits.html and specific affordable rent limits are updated annually. Units created or rehabilitated using CDBG-MIT funds for rent must not exceed these rent limits, based on the geographic location and bedroom size of the unit.

However, at times NCORR provides match funds for projects or coordinates with developers, partners, or property managers that define affordable rent differently. NCORR may elect to adopt an alternate definition of affordable rent when an alternate rent limit is proposed, in lieu of the definition of above. In those instances, NCORR will document that decision in the project file.

Assistance to facilitate new construction, rehabilitation, or reconstruction of rental units will be provided in the form of loans, unless a compelling reason is presented in the application for an alternative funding arrangement (such as a grant). The loan terms and conditions are dependent on the nature of the project and level of risk, as evaluated by the NCORR appointed selection committee or NCORR designated approver.

10.11.2 Maximum Award

The maximum award of CDBG-MIT funds to affordable housing is based on actual need, not to exceed $10 million in CDBG-MIT funding. As project costs are reviewed, the $10 million cap may be exceeded if a compelling and significant benefit to resiliency or the local affordable housing stock is realized through project execution. When the cap is exceeded, NCORR will document such exceptions and the rationale behind the decision-making process.

10.11.3 Geographic Eligibility

NCORR will evaluate proposals and favor those proposals which are located within MID areas of the State for both Hurricane Matthew and Hurricane Florence. New construction and rehabilitation must occur outside of the 100-year floodplain, or where floodplain designation is peripheral and distinct from the location of any planned development activity for the project.

10.11.4 Priorities

Prioritization of projects will be based on the highest scoring proposals. Proposal selection criteria may include:

- Site location and suitability;
- Proposer capacity;
- Affordability structures, with a preference for projects with units set aside to serve Extremely Low Income and Very Low Income populations;
- Proposals with units and amenities set aside for those with disabilities or for special needs populations;
- The total development cost versus the CDBG-MIT share of that cost;
- Proposal feasibility;
- Proposed development’s Readiness to Proceed;
- Coordination with resiliency and disaster recovery planning and/or design; and
- Proposals or solutions which present innovative and leveraged approaches to the affordable housing problem after disaster.
- Specific prioritization for the selection of projects will be published prior to the launch of applications.

10.11.5 Eligible Applicants

Local governments, qualified property management organizations, public, private, or non-profit organizations, and Community Development Housing Organizations (CHDOs)/Community Based Development Organizations (CBDOs) may be eligible to apply for affordable housing development funds.

Specific applicant eligibility requirements will be published prior to the launch of applications and will be outlined in program manuals as additional funding is made available.

10.11.6 Projected Start and End Date

Dates below consider when the activity began in the CDBG MIT grant.

- Start Date: Q4 2024
- End Date: Q2 2032

10.12 Housing Counseling – Homeownership Assistance Program

Housing Counseling – Homeownership Assistance Program			
Allocation: **$100,000**	$ to LMI: **$70,000**	$ to MID: **$100,000**	% of Total Allocation to MID: **100%**
Primary Community Lifeline Impact: **Food, Water, Sheltering**	Hazard Mitigation Plan Action Item: **NC-3** **NC-6** **NC-14**	National Objective: **LMC, UN**	CDBG-Eligibility Criteria: **HCDA Sec 105(a)(8)**

10.12.1 Program Description

Previously, NCORR's Housing Counseling was funded through the Florence CDBG-DR grant. The program has been reallocated to CDBG-MIT and realigned to coordinate with the Homeownership Assistance Program. Housing Counseling is defined as a public service and is intended to provide independent, expert advice customized to the need of the beneficiary of service from this program to address that beneficiary's housing barriers and to help achieve their housing goals. Housing counseling includes intake, financial and housing affordability analysis, pre-purchase homebuyer education, the development of an action plan for the beneficiary, and follow-up. Housing counseling services comply with 24 CFR § 214, HUD's codification of Housing Counseling – Homeownership Assistance Program requirements and other HUD guidance.

While the allocation to Housing Counseling has decreased compared to the earlier CDBG-DR program, the combined allocation to Housing Counseling and Homeownership Assistance remains the same. These two programs are closely related and work in concert as part of NCORR's long-term mitigation strategy.

The intent of the Housing Counseling – Homeownership Assistance Program is to bridge the gap between other CDBG-MIT funded services and the complex and personal decisions made by applicants to those programs on housing affordability and suitability specific to their individual needs. Specific services may include homebuyer and homeowner education, financial literacy, credit rehabilitation, debt management, and budgeting, avoiding fraud and scams, applying for public and private resources, foreclosure prevention strategies, and relocation counseling amongst other services tailored to fit the beneficiary's needs. NCORR may coordinate with the North Carolina Housing Coalition (NCHC) to coordinate delivery of this service to applicants based on need and in accordance with program policies.

10.12.2 Maximum Award

The intent of the Housing Counseling Fund is to cover the reasonable cost of all housing counseling services identified by a housing counselor for each participant in the activity.

10.12.3 Geographic Eligibility

Beneficiaries are identified by NCORR and/or NCHC for participation based on participation in other CDBG-DR and CDBG-MIT funded services.

10.12.4 Priorities

All individuals or households receiving housing counseling will be screened for the service(s) which best suit their specific needs and circumstances. The activity will prioritize service to LMI households by providing expanded service or more critical service to those households.

10.12.5 Eligible Applicants

Eligible beneficiaries include applicants participating in other CDBG-DR funded programs, including but not limited to, the Homeownership Assistance Program, the Homeowner Recovery Program, and other housing programs.

10.12.6 Projected Start and End Date

NCORR will commence projects using CDBG-MIT funds after approval of SAPA 5 from HUD. The performance period using CDBG-MIT funds is expected to begin in Q2 2024.

- Start Date: Q1 2022
- End Date: Q2 2032

10.13 Homeownership Assistance Program

10.13.1 Program Description

The Homeownership Assistance Program was initially funded under NCORR's Florence CDBG-DR program but has been reallocated to CDBG-MIT in order better facilitate coordination with the Strategic Buyout and Housing Counseling – Homeownership Assistance programs and to realign the program with NCORR's long-term mitigation goals. The Homeownership Assistance Program leverages the waiver of 42 USC § 5305(a)(24)(A) and (D) found in the Federal Register Notices applicable to CDBG-MIT grants. The waivers allow homeownership assistance for households earning up to 120% of the area median income. This activity therefore allows for full coverage of a down payment amount and reasonable closing costs incurred by LMI homebuyers.

Housing counseling service providers will assume a major role in assisting potential participants in this program, and the administration of the program will be in close coordination with the Housing Counseling – Homeownership Assistance Program and the housing counseling element of the Strategic Buyout Program.

10.13.2 Maximum Award

The maximum award for Homeownership Assistance is the lesser of 20% of the cost of the home or $20,000. First-generation homebuyers may receive an enhanced award, not to exceed $30,000. The determination that first generation homebuyers may require additional assistance is supported by the National Fair Housing Alliance (NFHA) and Center for Responsible Lending (CRL) joint report on first generation affordability.[67] Additionally, LMI households may have closing costs covered, up to 5% of the loan amount as long as such costs are reasonable and customary for the market. Closing cost assistance is in addition to the amount granted for down payment assistance and is not a part of the 20% cap for that assistance.

10.13.3 Geographic Eligibility

Applicants must be seeking to relocate to an impacted MID county to be eligible for assistance. Down payment assistance for home purchases must occur outside of the 100-year floodplain.

10.13.4 Priorities

NCORR prioritizes LMI households by setting aside 70% of funds exclusively for Homeownership Assistance for those households. Outreach and messaging will focus on engaging LMI households.

10.13.5 Eligible Applicants

Eligible applicants include first time homebuyers earning less than or equal to 120% of area median income. Prospective applicants must engage with Housing Counseling services to determine what service they may require to proceed with a benefit from this program. These services are provided in accordance with the Housing Counseling – Homeownership Assistance Program defined in Section 10.11. Further eligibility criteria can be found in the policy manual.

10.13.6 Projected Start and End Date

NCORR will commence projects using CDBG-MIT funds after approval of SAPA 5 from HUD. The performance period using CDBG-MIT funds is expected to begin in Q2 2024.

- Start Date: Q1 2022
- End Date: Q2 2032

10.14 Code Enforcement and Compliance Support Program

Code Enforcement and Compliance Support Program			
Allocation: **$5,000,000**	$ to LMI: **$4,000,000**	$ to MID: **$3,500,000**	% of Total Allocation to MID: **70%**
Primary Community Lifeline Impact: **Food, Water, Sheltering**	Hazard Mitigation Plan Action Item: **NC-3** **NC-6** **NC-14**	National Objective: **LMH, UN**	CDBG-Eligibility Criteria: **HCDA 105(a)(3), 105(a)(16), 105(a)(19), 105(a)(25)**

10.14.1 Program Description

Previously, NCORR's Code Enforcement and Compliance Support Program (CECSP) was funded under the Florence CDBG-DR Action Plan. To account for increased demand on code enforcement due to increased construction work associated with Mitigation activities, NCORR has reallocated the CESP to the Mitigation Action Plan. The program identifies deteriorated or deteriorating areas and funds resources necessary to carry out code enforcement activities necessary to complete disaster recovery in those areas.

NCORR defines a deteriorated and deteriorating area as one in which there is a significant concentration of dilapidated, aged, disaster damaged, destroyed or partially destroyed, or otherwise inadequate structures. Local municipalities which request code enforcement support will be reviewed by NCORR to ensure that those areas meet the definition of deteriorated or deteriorating area. Code enforcement specialists funded by MIT funds must contribute to code enforcement tasks specific to disaster recovery within those identified deteriorated or deteriorating area. To provide for code enforcement specialists, NCORR may elect to procure specialists or may agree to reimburse costs associated with code enforcement professionals hired directly by the code enforcement organization for selected municipalities.

10.14.2 Maximum Award

The award amount will reimburse reasonable costs of salary for code enforcement specialists as well as fund the purchase or lease of vehicles, uniforms, and technology solutions if determined to be required to adequately execute code enforcement support responsibilities. The maximum award is the full cost of such service as long as these services demonstrate a tie-back to the disaster recovery in deteriorated or deteriorating areas.

10.14.3 Geographic Eligibility

Code enforcement support will be available in deteriorated or deteriorating areas which are disaster declared areas focused on for MID areas.

10.14.4 Priorities

NCORR will review capacity needs with interested code enforcement entities. Those with the greatest capacity needs will be prioritized above those with lesser capacity needs.

10.14.5 Eligible Applicants

Local municipalities located in MID counties with code enforcement capacity issues due to recovery from Hurricanes Matthew and Florence. Code enforcement officials funded through this program must meet the certification requirements of the North Carolina Department of Insurance (NCDOI).

10.14.6 Projected Start and End Date

As part of the CDBG-DR grant, the program began operation after significant construction started for Hurricane Florence Recovery. With the transition to CDBG-MIT, those efforts are projected to continue under the new grant in Q2 2024.

- Start Date: Q1 2021
- End Date: Q2 2026

11.0 Amendments to the Action Plan

NCORR identifies the following criteria which constitute a substantial amendment:

- A change in program benefit or eligibility criteria.
- The addition or deletion of an activity.
- An allocation or reallocation of $15 million or more.
- The addition of a CDBG-MIT defined "covered project".
    - A covered project is an infrastructure project having a total project cost of a $100 million or more with at least $50 million of CDBG funds regardless of source (CDBG- DR, CDBG National Disaster Resilience (NDR), CDBG Mitigation, or CDBG).

Substantial Action Plan amendments will be provided for public comment for no less than 30 days and can be found online at www.rebuild.nc.gov/about-us/mitigation. When required by a Federal Register Notice, NCORR will also hold a public hearing to obtain public comment and input as required by HUD due to the allocation of $34,619,000 from Public Law 116-20 and as set in 86 FR 565. NCORR will notify HUD, but is not required to seek public comment, when it makes a plan amendment that is not substantial. HUD must be notified at least five business days before the amendment becomes effective. However, every amendment to the action plan (substantial and non-substantial) will be numbered sequentially and posted on the ReBuild NC website above.

Input from the community is a critical component in the amendment process. The Community Advisory Committee (CAC) convenes periodically to review the mitigation needs of the State, particularly when substantial amendments are made to action plans. The purpose of the CAC is to provide increased transparency in the implementation of CDBG-MIT funds, to solicit and respond to public comment and input regarding NCORR's mitigation activities, and to serve as an on-going public forum to continuously inform NCORR's CDBG-MIT programs.

12.0 Schedule of Expenditures and Outcomes

NCORR maintains a schedule of expenditures and outcomes, periodically updated in accordance with its mandatory reporting to HUD. The schedule of expenditures and outcomes is located at www.rebuild.nc.gov/about-us/plans-policies-reports/reporting.

In accordance with the Notice, 50% of funds will be expended within six years and 100% of funds will be expended within 12 years of HUD's grant execution date.

13.0 Community Participation and Public Comment

NCORR values the input of its many impacted citizens and the decision makers and stakeholders that represent the vulnerable communities impacted by Hurricanes Matthew and Florence. As set forth in the Notices, NCORR was required to hold at least one public meeting prior to the completion of the CDBG-MIT initial Action Plan to receive feedback and guidance from citizens and stakeholders to shape project and program design, allocation amounts, and community needs. NCORR was also required to hold a public hearing when the new allocation of $34.6 million in CDBG-MIT funding was announced in January 2021.

The primary driver of community engagement in impacted jurisdictions is to course-correct the plan and to include elements that may have been overlooked at the time it was initially completed. It is difficult to gauge reactions on sometimes divisive issues such as buyout, which has both significant supporters and understandable hesitance. NCORR will continue to work to incorporate feedback into program development to ensure that the CDBG-MIT programs that are funded are correctly meeting the needs of the affected individuals.

NCORR has remained committed to following its Citizen Participation Plan specific to CDBG-MIT funds, available at www.rebuild.nc.gov/about/plans-policies-reports/action-plans. The Citizen Participation Plan includes outreach and engagement strategies for citizen participation, including the use of translation and transcription services in use during Public Hearings. The Citizen Participation Plan was drafted to comply with the requirements set at 24 CFR Part 91.115. All Public Hearing locations are selected to be accessible and held at a reasonable time. Materials are made available for those that requested them in a language and format other than English or Spanish.

13.1 Citizen Advisory Committee

In compliance with the applicable Federal Notice, NCORR has established a Citizen Advisory Committee (CAC) to help address CDBG-MIT activities. As required, the CAC will convene periodically (no less than twice a year) and review the mitigation needs of the State. The purpose of the CAC is to provide increased transparency in the implementation of CDBG-MIT funds, to solicit and respond to public comment and input regarding NCORR's mitigation activities, and to serve as an on-going public forum to continuously inform NCORR's CDBG-MIT programs.

Although COVID-19 restrictions delayed the establishment of the CAC, the CAC held its first organizational meeting in 2022. In addition to its regular meetings, the CAC will have an opportunity to meet, review, and comment on all draft amendments to the CDBG-Mitigation Action Plan. Detailed information on the CAC and public meetings can be found on the ReBuild NC website at www.rebuild.nc.gov/mitigation-cac.

Appendix A: Response to Public Comments (Previous Amendments)

Initial Public Notice and Comment Period

When the initial Action Plan was being developed in 2019, a comment period of at least 45 days as required by HUD was provided for citizens, affected local governments, and other interested parties as an opportunity to comment on the initial draft. The initial public comment period began on November 7, 2019, and ended on December 23, 2019, at 5:00 PM.

Initial Community Engagement and Public Comment - 2019

In order to satisfy its requirements for MIT funding and to be a good steward of federal assistance, NCORR held a series of three (3) Public Hearings prior to the completion of the initial CDBG-MIT Action Plan. This initial engagement period allowed NCORR to make those residing in affected counties aware of the nature of the proposed uses of the MIT funding and to gather additional data on how to best improve program design and deployment. These hearings

were held:

1. October 14, 2019, at the Robeson Community College in Lumberton, NC (Robeson County).
2. October 15, 2019, at the Edgecombe Community College in Tarboro, NC (Edgecombe County).
3. October 16, 2019, at Grover C. Fields Middle School in New Bern, NC (Craven County).

Total attendance at these meetings was 88 in Robeson County, 112 in Edgecombe County, and 73 in Craven County.

At these meetings, NCORR presented four information tables on Buyout, Planning and Resilience Opportunities, Infrastructure, and Affordable Housing. Hearing participants were guided by experts at each table in a discussion and review of options, approaches, and techniques in use nationwide for each activity type and a brief review of the developing approach that NCORR was taking for the use of the CDBG-MIT funds. A sampling of community input by county is detailed below.

Table 41 - Buyout Community Input

Buyout			
If the Buyout Program becomes available for your neighborhood, do you think you might participate in the program?	Robeson	Edgecombe	Craven
Yes	4	13	13
No	3	3	2
I need more information	2	8	6
It would depend on many factors	2	6	4
It would depend on what my neighbors do	2	3	1
It would depend on whether I can find a new home in the same area	1	2	3
Total Engagement	**14**	**35**	**29**

Table 42 - Planning and Resilience Opportunities Community Input

Planning and Resilience Opportunities			
What are the most important planning activities that North Carolina and impacted communities should undertake to mitigate the impact of future disasters?	Robeson	Edgecombe	Craven
Planning studies to identify mitigation opportunities	6	14	10
Changes to local and state zoning and building codes	7	7	3
Resilient construction guidelines	4	7	10
Training and building capacity of local government and nonprofits so they can better assist with mitigation activities	3	10	12
Total Engagement	**20**	**38**	**35**

Table 43 – Infrastructure Community Input

Infrastructure			
Which infrastructure improvements are most important to protect North Carolinians from future disasters?	Robeson	Edgecombe	Craven
Water and wastewater treatment facilities	3	6	3
Electric grids	5	4	5
Natural infrastructure	9	12	9
Transportation	3	7	8
Total Engagement	**20**	**29**	**24**

Table 44 - Affordable Housing Community Input

Affordable Housing			
My community needs more (vote for your top two choices) …	Robeson	Edgecombe	Craven
Affordable, quality homes for sale	11	12	8
Affordable, quality rental units	10	13	12
Housing choices outside of flood zones	11	14	14
Parks and recreational space	5	3	5
Community amenities (such as good schools, stores, etc.)	4	8	4
Total Engagement	**41**	**50**	**43**

In addition to the information tables, the Initial Public Hearing consisted of a brief presentation on CDBG-MIT funding facts and potential uses. At the conclusion of the Public Hearing, participants were permitted to enter a comment for the public record or write in their comments. These public comments, and their responses, are included in the CDBG-MIT Action Plan Appendix A: Response to Public Comments, dated March 5, 2020 and located online at: www.rebuild.nc.gov/about/plans-policies-reports/action-plans.

During the public comment period of the Action Plan, a second round of Public Hearings were held. These meetings were:

1. December 3, 2019, at the Goldsboro City Council Chambers in Goldsboro, NC (Wayne County).

2. December 5, 2019, at the One Harbor Church in Beaufort, NC (Carteret County).

Total attendance at these second round of Public Hearings was 55 in Wayne County and 12 in Carteret County.

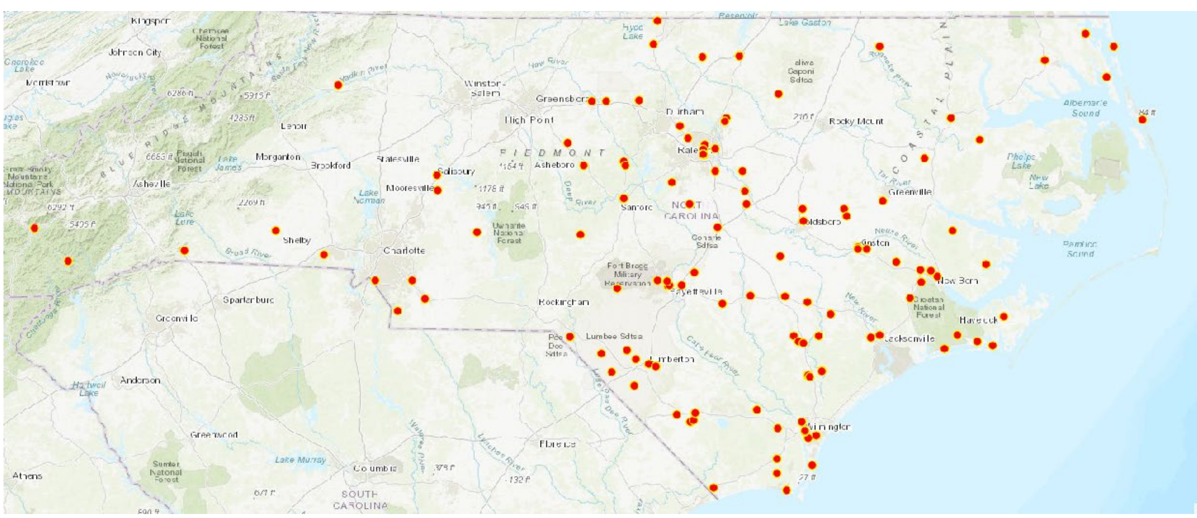
At these meetings, NCORR had copies of the Action Plan available for review in English and in Spanish and delivered a brief presentation on the Action Plan, including a review of CDBG-MIT a review of funding allocations, and details on the different programs selected for funding. At the conclusion of the public hearing, participants were permitted to enter a comment for the public record or write in their comments. These public comments, and their responses, can be also be found in the CDBG-MIT Action Plan Appendix A:Response to Public Comments, dated March 5, 2020 and located online at: https://www.rebuild.nc.gov/about/plans-policies-reports/action-plans.

Additionally, transcriptions of the Public Hearings are available online at www.rebuild.nc.gov/about-us/mitigation.

Initial Impacted Jurisdiction Engagement

Given the massive geographical extent of the impacted area, physical meetings with every impacted jurisdiction were infeasible during development of the initial Action Plan. To coordinate with impacted jurisdictions and stakeholders, NCORR released a survey available from Wednesday, October 9, through Monday, October 21, 2019. The survey was released to a list of 663 critical stakeholders including Public Housing Authorities, planning organizations, town governments, city governments, and county governments. Of the 663 invited participants, 173 responded for a response rate of 26 percent.

Figure 17 - CDBG-MIT Survey Response Locations



In the survey, respondents were asked to describe their hazard vulnerability, mitigation measures that they think would be beneficial for their community, and what mitigation activities they have recently implemented or are currently implementing.

High level notes from the survey include:

- Key words include "Housing", "Community", "Water", "Floods", and "Affordable".
- A geographic range was expressed in the survey results, indicating good participation statewide.
- Generally impacted jurisdictions appear to see the value in many mitigation approaches, including local planning, smart grids, and rainwater collection.
- Affordable Housing was in high demand with 42.77% of respondents ranking it at the highest priority level and another 17.92% ranking it at the second highest priority.
- Buyout was well supported, with 62.43% of respondents ranking it between the third, second, and first highest priority level.

Figure 18 - Impacted Jurisdiction Stakeholder Survey Word Cloud

The stakeholder survey demonstrated the various mitigation needs that exist in the CDBG-MIT areas. With additional funding, NCORR may be able to address these mitigation needs. In the meantime, NCORR endeavors to locate other resources and maximize the leverage of available funds to ensure that specific community needs are addressed.

Subsequent Community Engagement and Public Comment Periods – 2020 – Current

Each subsequent Substantial Action Plan Amendment (SAPA) detailing CDBG-MIT allocation changes and/or activity revisions to date initiated the corresponding Public Comment period to follow. Below is a listing of each SAPA to date, including each period of Public Comment and actions taken to engage critical stakeholders. All Public Comments and responses to date can be found in each specific Amendment's 'Appendix A: Response to Public Comment.

SAPA 1

The public comment period for Substantial Action Plan Amendment 1 began December 7, 2020 and ended January 7, 2021. This public comment period complied with the 30-calendar day public comment period requirement set in 84 FR 45838. In some instances, public comments were shortened to focus on the specific elements of the comment. Where commenters revealed private details or personal information, that information was removed from the public comment to protect the commenter's identity. Comments that were specific to the status of an ongoing CDBG-MIT application for buyout assistance were referred internally for additional review and direct response, and may not be reflected in the response to public comments.

Public Comments and Responses can be found in this Amendment's Appendix A: Response to Public Comments.

SAPA 2

The public comment period for Substantial Action Plan Amendment 2 began May 28, 2021 and concluded June 27, 2021. This public comment period complied with the 30-calendar day requirement for this grant and is consistent with the Citizen Participation Plan (www.rebuild.nc.gov/about/plans-policies-reports/action-plans).

Additionally, special public hearing requirements were set in place by Notice 86 FR 561 due to the increase in CDBG-MIT funding provided to the state. A public hearing was required in addition to the 30-day public comment period. A waiver of public hearing requirements was provided in that Notice and NCORR updated its Citizen Participation Plan (www.rebuild.nc.gov/about/plans-policies-reports/action-plans) to accommodate a virtual public hearing in consideration of the ongoing public health considerations related to the Coronavirus pandemic. The virtual public hearing was held Tuesday, June 22, 2021 in accordance with the guidelines detailed by the waiver. The purpose of this hearing was to obtain public input on the proposed uses of the new allocation of CDBG-MIT funds. Due to COVID restrictions, the public hearing was held virtually by WebEx with an online module as well as a phone in option for those without internet access. The public hearing was available in English, Spanish, and a transcript was provided via WebEx as the hearing proceeded. Meeting materials, including a recording of the virtual hearing, are available at www.rebuild.nc.gov/about-us/mitigation.

SAPA 3

The public comment period for Substantial Action Plan Amendment 3 began December 8, 2021 and ended January 7, 2022. In some instances, public comments were shortened to focus on the specific elements of the comment as they pertain to the action plan. Personal details or private information has been removed from public comments where necessary to protect the identity of the commenter. Comments specific to the status of an individual's application for assistance were referred internally for additional review and direct response and may not be reflected in this response to public comments.

SAPA 4

The public comment period was extended to a 45-day comment period to ensure there was a significant opportunity to receive public comment. The CDBG-Mitigation Substantial Action Plan Amendment 4 public comment period began December 9, 2022 and ended January 23, 2023.

There were public comments that NCORR received as part of the 45-day comment period, but the comments that were received mistakenly referenced CDBG-DR programming and were meant for the Hurricane Matthew and Florence CDBG-DR Action Plans, as such those comments are not reflected in this CDBG-MIT Action Plan public comments section. The Citizen Advisory Committee (CAC) held a virtual public meeting on Tuesday, January 10, 2023. The CAC met to discuss the Substantial Action Plan 4 and provide input on the proposed uses of the newest allocation of CDBG-MIT funds. The CAC presentation was available in English, Spanish and a transcript was provided via WebEx. Meeting materials, including a recording of the virtual hearing, are available at www.rebuild.nc.gov/about-us/mitigation. Information about the 45- day mitigation public comment period and CAC meeting were shared across different stakeholders, advocacy groups, and other local government agencies statewide. There was a total of 83 attendees which included, CAC members, members of the broader public, partner organizations, and members of media organizations. General feedback received during the CAC meeting targeted the importance of NCORR continuing to provide venues for public comment, such as the CAC, and broaden those spaces for discussion for CDBG-DR related program and activities.

SAPA 5

The public comment period for Substantial Action Plan Amendment 5 began on March 15, 2024 and closed April 15, 2024. NCORR engaged the public in accordance with its Citizen Participation Plan and engaged the Citizen Advisory Committee for their input as well. No public comments were received during the public comment period. HUD approved Substantial Action Plan Amendment 5 on July 1, 2024.

SAPA 6

The CDBG-Mitigation Substantial Action Plan Amendment 6 began November 14, 2024 and concluded December 14, 2024. As part of the 30-day comment period, NCORR collected all relevant comments and prepared appropriate responses. Responses are included in the Appendix B: Response to Public Comments.

Response to Citizen Complaints and Appeals

NCORR shall provide a written response to every complaint relative to CDBG-MIT within fifteen

(15) working days of receipt. The State will execute its Appeals Procedures in response to appeals received and will require any subrecipients to adopt a similar process. The process will be tiered whereby applicants will be able to appeal a decision and receive further review from another level.

Additionally, all sub-contractors and local government grantees will be required to develop an Appeals and Complaint Procedure to handle all complaints or appeals from individuals who have applied for or have an interest in CDBG-MIT funding. A written appeal may be filed by program applicants when dissatisfied with program policies, eligibility, level of service or other issue by including the individual facts and circumstances as well as supporting documentation to justify the appeal.

Generally, the appeal should be filed with the administrating entity or sub-contractor. The appeal will be reviewed by the administrating entity with notification to NCORR for the purpose of securing technical assistance. If the appeal is denied or the applicant is dissatisfied with the decision, an appeal can be made to NCORR directly.

In programs that serve individual applicants, applicants may appeal their award determinations or denials that are contingent on Program policies. However, it should be noted that NCORR does not have the authority to grant an appeal of a statutory or HUD-specified CDBG-MIT requirement.

Mitigation Website

In accordance with CDBG-MIT requirements, NCORR has developed and will maintain a comprehensive website regarding all disaster recovery activities assisted with these funds. NCORR will post all Action Plans and amendments on the NCORR's CDBG-MIT website at www.rebuild.nc.gov/about-us/mitigation. The website gives citizens an opportunity to read the plan and its amendments and to submit comments. This website is featured prominently on, and is easily navigable from NCORR's homepage. NCORR will maintain the following information on its website: actions plan, any substantial amendments, all performance reports, citizen participation requirements, and activities/program information that are described in the action plan, including details on contracts and ongoing procurement opportunities and policies, including opportunities for minorities, women and other disadvantaged persons, veteran, and other historically underutilized businesses (HUB). Paper copies of Substantial Action Plan Amendments will be available in both English (including large, 18pt type) and Spanish as needed at applicant service centers. ReBuild NC Center locations are found at the ReBuild NC website at www.rebuild.nc.gov/application-centers. Note that ReBuild NC Centers may not be accessible during certain COVID-19 restrictions.

After approval of the initial Action Plan, HUD provided the State an Action Plan approval letter, grant terms and conditions, and grant agreement. The State executed the grant agreement with HUD.

Substantial Action Plan Amendment 1 was approved by HUD on March 9, 2021. All subsequent amendments to the Action Plan include a 30-day public comment period. After the conclusion of the required comment period, all comments are reviewed and responded to by the State.

The State's consideration on all public comments can be reviewed in Appendix A: Response to Public Comments, once the comment period ends and the comments are received.

More information on public notice and participation are found in the Citizen Participation Plan at www.rebuild.nc.gov/about/plans-policies-reports/action-plans.

Contact Information

Interested parties may make comments or request information regarding the Citizen Participation Planning process by mail, telephone, facsimile transmission, or email to NCORR.

Comments and complaints may be submitted as follows:

- Written comments may be mailed to:
  North Carolina Office of Recovery and Resiliency (NCORR) PO Box 110465
  Durham, NC 27709
- Email comments: publiccomments@rebuild.nc.gov. Please include "CDBG-MIT" in the Subject line.
- By telephone: (984) 833-5350; for those hearing impaired **TDD** 1-800-735-2962
- By Fax transmission: (919) 405-7392

NCORR will post this and all Action Plans and amendments on the State's CDBG-MIT website at www.rebuild.nc.gov/about-us/mitigation to give citizens an opportunity to read the plan and to submit comment(s). Comments are asked to be provided to NCORR via telephone or email at the number or address listed above. At the conclusion of the Public Comment period, all comments will be reviewed and the State will provide responses to the comments. The State's consideration of all public comments will be available in the Amendment's 'Appendix A: Response to Public Comments'. Following submittal by NCORR of the Action Plan or Amendment to HUD, HUD has a review period to consider and approve the Action Plan. Upon approval by HUD, a final version of the Action Plan Amendment is posted on NCORR's website.

Appendix B: End Notes

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Appendix F

Variances identified between Quarterly Performance Reports submitted to HUD and the accounting system.

HUD Quarterly Performance Reports			NCAS/NCFS			Variance	
2019 Total	**$**	**25,850,915.24**	**2019**	**$**	**19,084,980.79**	**2019 Total**	6,765,934.45
Q3 2019		$11,942,538.13	Q3 2019		5,065,858.72	Q3 2019	6,876,679.41
Q4 2019		$13,908,377.11	Q4 2019		14,019,122.07	Q4 2019	(110,744.96)
2020 Total	**$**	**62,163,461.74**	**2020**	**$**	**55,243,122.56**	**2020 Total**	6,920,339.18
Q1 2020		$12,499,627.80	Q1 2020		11,111,338.52	Q1 2020	1,388,289.28
Q2 2020		$16,009,812.05	Q2 2020		13,316,653.92	Q2 2020	2,693,158.13
Q3 2020		$19,487,731.66	Q3 2020		17,013,941.11	Q3 2020	2,473,790.55
Q4 2020		$14,166,290.23	Q4 2020		13,801,189.01	Q4 2020	365,101.22
2021 Total	**$**	**72,550,441.15**	**2021**	**$**	**66,836,595.51**	**2021 Total**	5,713,845.64
Q1 2021		$13,096,035.44	Q1 2021		14,405,140.20	Q1 2021	(1,309,104.76)
Q2 2021		$29,956,264.81	Q2 2021		24,914,380.25	Q2 2021	5,041,884.56
Q3 2021		$9,791,846.58	Q3 2021		11,100,866.95	Q3 2021	(1,309,020.37)
Q4 2021		$19,706,294.32	Q4 2021		16,416,208.11	Q4 2021	3,290,086.21
2022 Total	**$**	**112,254,852.58**	**2022**	**$**	**84,526,261.60**	**2022 Total**	27,728,590.98
Q1 2022		$17,397,460.14	Q1 2022		10,233,461.31	Q1 2022	7,163,998.83
Q2 2022		$27,588,080.31	Q2 2022		22,618,888.24	Q2 2022	4,969,192.07
Q3 2022		$17,943,840.30	Q3 2022		12,676,692.45	Q3 2022	5,267,147.85
Q4 2022		$49,325,471.83	Q4 2022		38,997,219.60	Q4 2022	10,328,252.23
2023 Total	**$**	**190,456,223.63**	**2023**	**$**	**141,145,071.28**	**2023 Total**	49,311,152.35
Q1 2023		$21,121,366.57	Q1 2023		30,738,691.31	Q1 2023	(9,617,324.74)
Q2 2023		$50,203,814.10	Q2 2023		39,190,804.41	Q2 2023	11,013,009.69
Q3 2023		$50,328,692.80	Q3 2023		35,621,053.01	Q3 2023	14,707,639.79
Q4 2023		$68,802,350.16	Q4 2023		35,594,522.55	Q4 2023	33,207,827.61
2024 Total	**$**	**253,277,108.29**	**2024**	**$**	**377,244,384.81**	**2024 Total**	(123,967,276.52)
Q1 2024		$81,234,781.56	Q1 2024		122,871,354.61	Q1 2024	(41,636,573.05)
Q2 2024		$86,949,550.17	Q2 2024		96,637,900.01	Q2 2024	(9,688,349.84)
Q3 2024		$94,043,476.41	Q3 2024		115,969,096.01	Q3 2024	(21,925,619.60)
Q4 2024		($8,950,699.85)	Q4 2024		41,766,034.18	Q4 2024	(50,716,734.03)
Total	**$**	**716,553,002.63**	**Total**	**$**	**744,080,416.55**	**Total**	**(27,527,413.92)**

Appendix G

Administrative and Planning Vendors

Contractor	Description	Total Expenses	Annual Expenses 2020	2021	2022	2023	2024	Thru 4/25
AECOM Technical Services of NC	Construction Management	$ 32,240,511	$ 8,755,192	$ 7,936,404	$ 13,352,770	$ 2,196,145	$ -	$ -
Salesforce as Vertiba, LLC	System of record management services	$ 21,891,821	$ 1,537,965	$ 1,795,649	$ 6,342,371	$ 8,891,531	$ 1,457,333	$ 1,866,973
Hunt, Guillot & Associates, LLC (HGA)	Staff augmentation services	$ 30,587,925	$ 2,673,360	$ 4,274,044	$ 7,817,406	$ 1,258,633	$ 10,241,777	$ 4,322,705
Innovative Emergency Management (IEM) (Matthew)	Project Management	$ 3,990,460	$ 3,873,710	$ 116,750	$ -	$ -	$ -	$ -
Horne, LLP	Disaster Recovery Program Manager	$ 117,811,612	$ 703,508	$ 29,594,768	$ 60,075,093	$ 27,438,244	$ -	$ -
The EI Group	Asbestos testing Services	$ 225,000	$ 75,625	$ 70,625	$ 50,000	$ 28,750	$ -	$ -
Davis 54, LLC	Office space lease	$ 2,944,883	$ 372,845	$ 381,030	$ 736,552	$ 1,454,457	$ -	$ -
Summit Design and Engineering Services	Architectural and Engineering Services	$ 4,228,828	$ -	$ 252,924	$ 1,258,633	$ 996,675	$ 1,190,504	$ 530,093
	Total	**$ 213,921,039**	**$ 17,992,204**	**$ 44,422,194**	**$ 89,632,823**	**$ 42,264,434**	**$ 12,889,613**	**$ 6,719,771**

Source: North Carolina Accounting System/North Carolina Financial System

Appendix H

The vendor payment data presented in this appendix is based on NCORR's unreconciled Salesforce records as of April 2025. This information is provided for context only, as the numbers have not been audited. Readers should interpret these numbers as indicative, not definitive, for the purpose of understanding program scale.

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)	
Vendor	**Total Cost**
Shepherd Response	$ 91,725,108.28
Horne LLP	$ 77,126,669.49
Rescue Construction Solutions Inc.	$ 71,447,977.51
DSW Homes, LLC	$ 49,798,588.35
Timberline Construction Group, LLC	$ 45,881,219.46
Ducky Recovery, LLC	$ 42,492,545.34
Hunt Guillot Associates LLC-PO	$ 39,789,281.86
Stonewater Inc.	$ 31,964,741.59
SLSCO LTD DBA SLSCO Limited Partnership	$ 25,236,994.31
AECOM Technical Services of NC, Inc.	$ 23,574,007.59
Publicis Sapient Salesforce Practice	$ 23,108,901.71
Family Housing Center of NC, LLC	$ 18,090,631.14
Prexaco LLC	$ 17,838,526.56
PODS Enterprises, LLC	$ 14,214,217.74
Innovative Emergency Management Inc.	$ 12,483,258.68
Persons Service Company LLC	$ 8,767,248.64
Excel Contractors LLC	$ 7,869,219.88
Triton Homes LLC	$ 7,583,754.79
CRSC, LLC	$ 7,442,017.70
Thompson Construction Group	$ 6,784,662.44
ESA P Portfolio LLC-Extended Stay Hotels	$ 6,738,321.77
KA Home Improvement	$ 5,822,376.98
Fam-Lock Construction	$ 5,180,880.48
Innovative Builds Inc.	$ 4,773,166.64
Driven Contractors LLC	$ 4,628,970.44
Byrdson Services LLC	$ 4,401,928.38
Team Title LLC	$ 4,401,234.08
Steve Stone Developments LLC	$ 3,935,408.54
DRC Emergency Services LLC	$ 3,861,815.85
Fairfield By Marriot Lumberton	$ 3,807,244.46
Opportunities Industrialization Center, Inc.	$ 3,505,568.60
Summit Design and Engineering Services	$ 3,479,136.75
JD Contractor Service	$ 3,453,212.77
Econolodge (NC700)	$ 3,372,055.54
Lightning Labor Construction Services LLC	$ 3,368,156.95
Fuller Center Disaster ReBuilders	$ 3,269,174.72
Kowen General Contractors Inc.	$ 3,079,613.15
U&L Contractors, LLC	$ 3,018,333.09
Jones County	$ 3,000,000.00

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)	
Vendor	**Total Cost**
Currituck Homes Inc.	$ 2,428,864.92
stayAPT Suites	$ 2,381,208.32
Carahsoft	$ 2,317,818.85
Showcase Government Services Inc.	$ 2,283,358.04
Graham & Company General Contractors LLC	$ 2,188,166.05
G&N Construction and Remodeling LLC	$ 2,124,915.16
CMH Homes Inc.	$ 2,108,873.26
Town of Robbins	$ 2,100,000.00
City of Boiling Spring Lakes	$ 2,000,000.00
Tracco, LLC	$ 1,827,074.56
Staybridge Suites Wilmington	$ 1,795,130.07
Royal Superior Properties LLC	$ 1,732,036.74
Arnell Bobbitt 3% General Contracting LLC	$ 1,620,257.05
Gitto Enterprise Inc.	$ 1,578,411.89
Blackwell Homes / D&B Enterprises	$ 1,545,980.10
Heath and Sons Management Services, LLC	$ 1,533,812.67
Elite Contractors of Lumberton LLC	$ 1,527,809.42
Quality Inn Whiteville (NC692)	$ 1,501,951.15
City Of Fayetteville	$ 1,470,482.75
Two Sons Construction LLC	$ 1,461,197.92
Ward Family Construction	$ 1,430,380.23
NC Housing Coalition	$ 1,414,621.10
Vistabution LLC	$ 1,406,934.58
All American Construction and Restoration Incorporated	$ 1,321,777.56
Department of Public Safety	$ 1,244,345.24
NC Department of Commerce	$ 1,231,395.93
Cherry Bekaert LLP	$ 1,192,142.00
RSM US LLP	$ 1,173,043.20
Holiday Inn Express Williamston	$ 1,129,080.75
Amory Contracting Co.	$ 1,110,730.85
Southern Inn	$ 1,059,534.00
P H Lowery LLC	$ 1,053,283.03
Legacy Homes & Construction LLC	$ 1,038,403.84
Comfort Suites Lumberton	$ 1,037,210.67
Ready Roofing, LLC	$ 989,902.19
Candlewood Suites Greenville	$ 962,857.68
Town of Fair Bluff	$ 913,527.80
Eric K Scott DBA EKSCOTT Construction LLC	$ 851,374.69
First Time Around	$ 812,654.75

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)	
Vendor	Total Cost
Housing Authority of the City of Lumberton	$ 762,340.67
Tetra Tech Inc.	$ 752,156.00
JB Quality Construction, LLC	$ 691,780.87
Quality Inn Warsaw	$ 681,784.06
Jon W Home Sales LLC	$ 644,414.44
NC Housing Finance Authority	$ 638,569.33
K9 Installs Inc.	$ 589,587.46
Steven Stone Mobile Homes	$ 586,744.41
Lady Built Construction	$ 568,523.96
Quality Inn Havelock	$ 547,588.78
Lumber River Quality Builders, LLC	$ 537,571.45
Office of State Budget & Management (OSBM)	$ 534,419.73
Holiday Inn - Pembroke	$ 530,375.09
Kleinfelder	$ 527,400.00
Towneplace Suites by Marriot Wilmington	$ 491,187.76
The Spruill Construction Corporation	$ 464,907.16
Red Carpet Inn Kinston	$ 444,154.10
Quality Inn Goldsboro	$ 431,731.94
Quality Inn Tarboro	$ 428,419.03
Quality Inn Lumberton	$ 426,166.11
Bladen County	$ 415,122.81
Austin Construction / Dewey A. Lewis Enterprises Inc.	$ 404,579.56
Atkinson Inn & Suites	$ 385,307.99
Path Residential Builders LLC	$ 359,972.75
RHD Property Inc.	$ 343,067.27
Fairfield Inn Kinston	$ 337,410.17
Comfort Inn Laurinburg	$ 336,760.84
Spaller & O'Brien LLC	$ 326,148.04
NC Housing Collaborative	$ 324,463.84
Cumberland County	$ 306,071.46
H&C Contracting Inc.	$ 291,863.26
Finesse Builders Inc.	$ 290,434.05
Vogel House and Building Movers LLC DBA Coastal Foundations	$ 277,477.60
Home2Suites Goldsboro	$ 251,937.04
Prevatte's Home Sales Inc.	$ 232,789.77
Woodspring Suites	$ 228,990.10
Surestay Hotel By Best Western Shallotte	$ 227,578.55
Garnet Inn & Suites	$ 224,317.65
GSM Properties LLC	$ 210,490.00

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)		
Vendor		Total Cost
Legal Aid Of NC Incorporated	$	208,528.31
MainStay Suites - Wilmington	$	203,906.06
Lenovo Incorporated	$	203,550.00
HouseSmart Construction 2712	$	199,102.43
Innovation Renovation Inc.	$	195,947.54
NC State University Office of Contracts and Grants	$	175,938.00
Residence Inn Greenville	$	170,068.80
Holiday Inn Rocky Mount	$	166,579.43
Hampton Inn Goldsboro	$	165,723.75
The EI Group, Inc.	$	164,375.00
Holiday Inn Express Leland	$	158,849.71
Horton Contractors, Inc.	$	157,724.87
Abatemaster LLC	$	150,022.98
ESP Associates Inc.	$	144,399.04
Nash County	$	142,752.23
NC Department Of Information Technology	$	140,971.23
Towneplace Suites Goldsboro	$	137,620.75
Holiday Inn - Southport/Bolivia	$	135,328.34
Go Mini's of Eastern NC	$	133,457.32
Eastern Environmental, Inc.	$	118,629.36
Manpower Public Sector Inc.	$	115,884.30
Affordable Suites of America - Fayetteville	$	112,916.72
Holiday Inn Express Havelock	$	109,237.92
Edgecombe County	$	106,914.00
NC Department Of Environment Quality Resources Controllers Office	$	105,003.86
Best Western Goldsboro	$	101,399.74
UNC School of Government	$	100,000.00
National Flood Insurance Program NFIP Direct	$	99,036.00
State Employees Credit Union	$	96,900.00
United Way of North Carolina	$	87,376.69
Renaissance Planning	$	86,950.00
Enviro Assessments East, Inc.	$	86,222.43
North Carolina Inn Inc. DBA The Duplin Inn	$	82,955.86
Carroll Contracting and Building Inc.	$	81,827.23
Quality Inn Rockingham	$	81,538.50
Sleep Inn Wilmington	$	80,977.79
Candlewood Suites Fayetteville	$	80,041.04
1-800-Pack-Rat (6167-Raleigh)	$	78,943.19
Comfort Suites Wilson I-95	$	74,633.36

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)		
Vendor	Total Cost	
Locke-Lane Construction Inc.	$	68,801.41
Wingate By Wyndham	$	68,515.22
Go Mini's of Central NC	$	64,164.53
Holiday Inn Express Suites - Hope Mills	$	63,815.92
Silver Lion LLC	$	62,277.13
Sleep Inn & Suites Mount Olive	$	60,419.36
Robeson County	$	59,975.00
Premier Design Builders Inc.	$	59,949.35
Hampton Inn & Suites Knightdale Raleigh / Knightdale Ventures LLC	$	58,151.88
Horne Moving Systems, Inc.	$	53,107.99
Fedex	$	50,363.94
Super 8 Garysburg/Roanoke Rapids	$	48,950.22
UNC Chapel Hill Office of Sponsored Research	$	43,700.00
Quality Inn Bennettsville	$	41,474.00
Ashley R Henry	$	38,794.62
Jeffery Locklear	$	37,089.00
Satrang Technologies	$	37,082.15
Michael A McKoy	$	33,138.47
Mary P Johnson	$	33,107.18
Candlewood Suites Durham	$	31,425.00
Cathy Locklear	$	31,070.57
Baptist State Convention of NC ; North Carolina Baptist Men	$	29,937.03
A&M Friendly Movers	$	29,743.80
Courtyard By Marriot - New Bern	$	29,416.32
IG Wilmington LLC DBA Barclay Place Apartments	$	29,307.64
APR Restoration and Commercial Development Inc.	$	28,406.85
Mt. Calvary Center for Leadership Development	$	28,000.00
Wilmington Area Rebuilding Ministry Inc.	$	27,014.19
The St. Bernard Project	$	26,500.00
Church Street Apartments LLC	$	25,042.50
Smartsheet	$	23,969.82
Linwood Jr Atkinson	$	23,301.37
Andrew Jay Linkous	$	23,274.20
3rd Day Investment Properties LLC	$	23,096.53
Disability Rights NC	$	22,580.00
Tommy Hobbs	$	22,253.33
Annie Catherine Pridgen Community Development Foundation	$	21,942.00
Fairfield Inn Washington NC	$	21,825.00
Charles Eric Bryant	$	21,797.03

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)	
Vendor	Total Cost
Days Inn Inc.	$ 21,348.60
Wilmington Area Rebuilding Ministry Inc.	$ 21,336.45
SYSTEL Business Equipment	$ 21,074.20
REMAX Real Estate Exchange	$ 20,777.42
D's Affordable Moving & Storage	$ 20,477.09
Holiday Inn - Lumberton	$ 20,319.48
Sierrah Yvonnie Brinker	$ 20,300.00
United Way of Coastal Carolina	$ 20,000.00
Fayetteville Habitat For Humanity	$ 18,750.00
Invitation Homes Operating Partnership LP	$ 18,734.68
Duplin Hotel LLC	$ 17,978.16
Carolina Inn	$ 17,500.08
The Reach Center	$ 17,370.00
HGA TRA	$ 17,341.94
Luzenia Smith	$ 16,868.76
Karole Waddell	$ 16,533.34
Family Care Center/Catawba Valley	$ 16,000.00
Annie Grant	$ 15,657.02
William Ballard	$ 15,580.64
Bordeaux Construction	$ 15,475.00
Phillip L Washington	$ 15,112.76
Tyrese L Jordan	$ 15,080.65
Mather Brothers Moving	$ 14,818.65
MasterWord	$ 14,643.58
SHI	$ 14,579.68
Comfort Inn NC112 Rocky Mount	$ 13,715.93
Sandy North	$ 13,189.00
Mark Haberle	$ 13,123.87
Cynthia G Smith	$ 13,000.00
James Darryl Chavis	$ 12,483.87
Two Men And A Truck - Greenville	$ 12,171.00
Linda Smith	$ 12,007.52
Faith Property Rentals LLC	$ 11,685.48
Joel E Register	$ 11,500.00
Fayetteville Moving & Storage	$ 11,451.13
ABCD Construction	$ 11,154.84
Wayne County	$ 11,144.35
Hogant LLC	$ 11,112.01
1-800-PACK-RAT- WAKE FOREST	$ 11,086.69

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)	
Vendor	**Total Cost**
Jackie R Hogan	$ 10,890.00
Marilyn W Garner	$ 10,427.59
Stacy McCullum	$ 10,409.05
Kenneth R Pervine	$ 10,398.07
John's Moving & Storage	$ 10,232.39
Jesse Hannible	$ 10,112.90
Dillard Goldsboro Alumni and Friends Inc.	$ 10,000.00
Valencia Scott	$ 9,771.42
NC Department of Administration	$ 9,695.84
Daniel Dean Benton	$ 9,681.66
Brian Pittman	$ 9,679.68
Ujima Community Development Corporation, Inc. DBA Ujima CDC, Inc.	$ 9,368.28
Grace Ann Williams	$ 9,193.55
Cedric Blanks	$ 8,950.00
Yolanda McDonald	$ 8,876.00
1-800 Pack Rat LLC Wake Forest Address	$ 8,500.00
Cynthia Marie Davis Moss	$ 8,419.35
Peggy Gilliard	$ 8,251.26
Thorne Realty Inc.	$ 8,012.90
CCI Environmental Services	$ 7,980.00
Hampton Inn - Kinston	$ 7,536.60
KSBR LLC	$ 7,383.00
NC Department of Cultural Resources	$ 7,245.42
Bladen Disaster Recovery Team	$ 7,168.00
Few Moves LLC	$ 7,016.50
Hilton - Greenville	$ 6,998.64
Jean S Porter	$ 6,868.28
Tiffany Square Apartments	$ 6,714.93
Devoria Berry	$ 6,391.29
Adriane Nicole McCallum	$ 6,383.34
Clarion Hotel - Fayetteville	$ 6,368.80
Conrad Ray Wilder DBA Triple "C" Marketing	$ 6,325.00
Jacqueline Smith	$ 6,250.00
Upper Creek Rental LLC	$ 5,870.97
Loreginald Christie	$ 5,784.94
Silverline	$ 5,625.00
Megan Leigh Smith	$ 5,618.87
DPS Enterprise Payments	$ 5,585.78
Presidio Networked Solutions	$ 5,563.80

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)	
Vendor	**Total Cost**
Nasr Ahmed Mohamed	$ 5,215.38
Teresa Lesane	$ 5,133.33
Thelma Elizabeth Hall	$ 5,080.65
Annise Carter	$ 5,073.39
Pembroke Housing Authority	$ 4,937.65
502 Birchfield Apartments LLC	$ 4,846.18
Jeremy Michael Williams	$ 4,780.75
Kathy Rivenbark	$ 4,758.06
Mother Earth Motor Lodge	$ 4,750.00
Appropriate Movers LLC	$ 4,454.32
Newcombe Properties LLC	$ 4,372.32
Emma Bone	$ 4,247.42
Quality Inn Laurinburg	$ 4,128.70
Greenville Convention Center	$ 4,100.00
Anthony Alston	$ 4,040.43
Willscot Mobile Mini	$ 3,739.53
CA North Carolina Holdings Inc.	$ 3,677.90
Douglas Darrell Gerald	$ 3,600.00
Wilmington First Pentecostal Holiness Church	$ 3,413.33
Mark T McCuen	$ 3,310.90
Toshiba Business Solutions USA	$ 3,277.96
Walter Umstead	$ 3,239.58
Rosalind Smith	$ 3,193.55
Selena Michelle Melvin	$ 3,166.67
Craig Fitzgerald Lilly	$ 2,881.95
Country Inn & Suites Goldsboro	$ 2,865.96
APG Media of Eastern North Carolina	$ 2,795.02
Denise M Cox	$ 2,767.74
John L Lee	$ 2,744.00
Walker M Cox	$ 2,739.47
Shashonee Kelly	$ 2,664.84
Mt Pleasant Missionary Baptist Church	$ 2,662.36
Enterprise Rent A Car USA	$ 2,558.77
Just Move It LLC	$ 2,490.00
United Language Group Inc.	$ 2,460.24
Hampton Inn Edenton	$ 2,419.20
Kevin K Jacobs General Contracting, Inc.	$ 2,304.30
Zahara Oshnchild	$ 2,204.22
The McClatchy Company LLC	$ 2,161.08

Appendix H

Payments by Vendor (Per NCORR Records in Salesforce, April 2025)	
Vendor	**Total Cost**
Bray Trailers Inc.	$ 2,125.00
Dywon Pugh	$ 2,112.90
Champion Media LLC	$ 2,097.53
The Landing at Beaver Creek LLC	$ 2,036.77
Jamias Black	$ 2,033.66
Javoni Wright	$ 2,001.61
Cerlisteen Vice	$ 1,887.10
Xactware Solutions	$ 1,854.38
Craven County Disaster Recovery	$ 1,850.00
Tasha Gillespie	$ 1,834.68
Wells Fargo Banks	$ 1,832.81
Huberta Foreman	$ 1,768.49
Cypress Village LLC	$ 1,725.00
Full Circle Interpreting	$ 1,710.00
Shimar Recycling Inc.	$ 1,668.55
Carolinas Captioning Service	$ 1,630.30
Willow Pond	$ 1,566.77
Maxwell Portable Storage Inc.	$ 1,515.00
Quench	$ 1,499.90
WEX Bank	$ 1,498.00
Pisgah Legal Services Inc.	$ 1,320.00
StormSource Software	$ 1,285.37
Catholic Charities of the Diocese of Raleigh	$ 1,200.00
North Carolina Media Group	$ 1,092.98
Lutheran Family Services in the Carolinas	$ 1,035.91
Dell Marketing LP	$ 1,000.00
S&Q Movers	$ 1,000.00
SHRED-IT USA	$ 968.00
Que Pasa Newspaper	$ 780.00
The News and Observer	$ 761.08
Bilingual Communications Inc.	$ 750.00
Paxton Media Group	$ 738.18
News and Record	$ 568.52
Lonika Crumb	$ 500.00
Mac Papers	$ 416.10
Veronica Harris	$ 385.61
Chadbourn Housing LTD Partnership DBA Berry Court	$ 204.39
Carteret Publishing Company	$ 149.10
Stericycle Inc.	$ 121.00
North Carolina Emergency Management	$ 100.00
Kate Albright	$ 67.00
The Fayetteville Observer	$ 26.70
Grand Total	**$ 784,738,663.14**

Ordering Information

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