



ReBUILD NC

February 7, 2020

Hurricane Florence CDBG-DR Action Plan

State of North Carolina

For CDBG-DR Funds
(Public Law 115-254, Public Law 116-20)



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Revision History

Version	Date	Description
1.0	February 7, 2020	Initial Action Plan

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1.0 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.

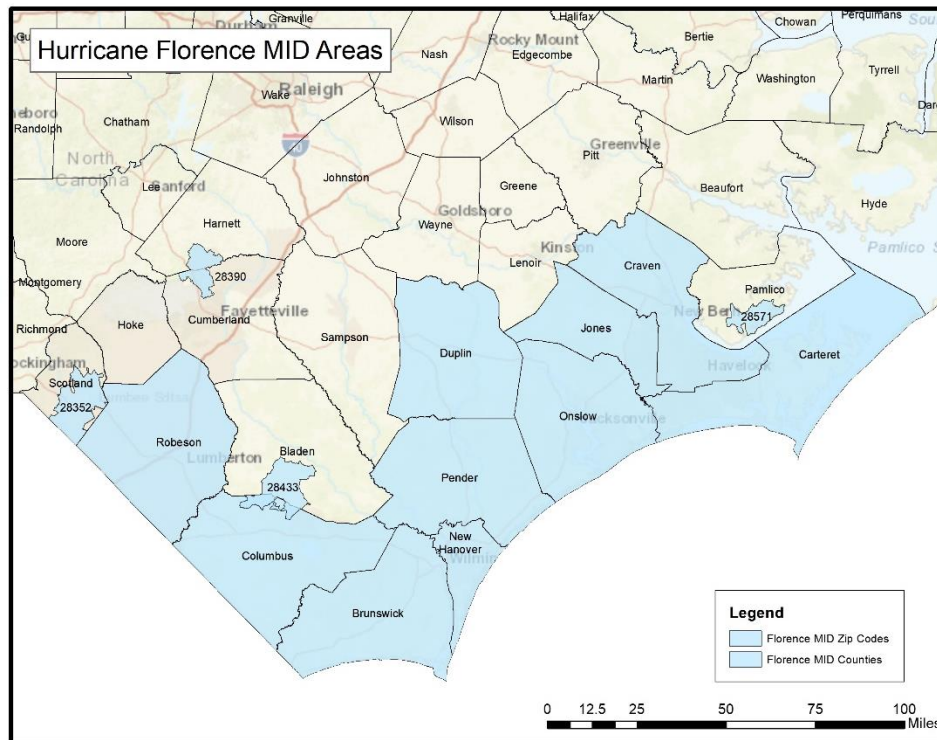
Generally, programs offered through Hurricane Florence recovery are similar in approach and consistent with those offered through the Hurricane Matthew recovery. This strategy allows NCORR to rapidly deliver recovery programming while capitalizing on lessons learned. NCORR will work to use already established 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.

According to 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 operations in counties with a MID

zip code (Bladen, Scotland, Cumberland, and Pamlico Counties) will also meet the MID expenditure criteria. A special condition for the State of North Carolina allows funds spent in Hurricane Matthew-determined MID areas (Bladen County, Columbus County, Cumberland County, Edgecombe County, Robeson County, and Wayne County) to also count toward the 80 percent requirement of expenditure of funds in MID areas.

Hurricane Florence MID areas



NCORR's primary focus is housing recovery for both homeowners and renters across the Hurricane Florence impacted area. \$325 million is allocated directly to homeowners seeking to rehabilitate or reconstruct damaged homes or replace damaged modular home units. A combination of programs, including an Affordable Housing Development Fund, a Small Rental Repair Program, and a Public Housing Development Fund address renter needs with a total of over \$108 million allocated. These funds will build new, affordable rental housing through a variety of approaches, will fund the repair of existing rental stock, will rehabilitate or relocate vulnerable public housing units, and will also provide down payment assistance to storm-impacted low- and moderate-income (LMI) renters to help them purchase a home.

Other programs will assist in the buyout of vulnerable property (\$32 million allocated), the repair of housing-related infrastructure such as water and wastewater, drainage, and other public facilities (\$21 million allocated), and two new programs meant to help support housing recovery – a \$5.4 million Construction Trades Training Program, developed to train LMI individuals in valuable construction trades, and a \$5.4 million Code Enforcement Support

Program which will help local jurisdictions handle the increased strain put on code enforcement offices while significant construction begins statewide to address the disaster recovery.

The remaining grant funds will be spent on planning costs, which help NCORR and other stakeholders develop plans related to disaster recovery and resilience (\$16 million allocated) and administrative costs, capped at 5 percent of the total grant funds (\$27 million allocated).

Hurricane Florence CDBG-DR Programs

Program	Total	% of Total Allocation	\$ to LMI	% to LMI	\$ to HUD-defined MID areas	% to HUD-defined MID areas
Administrative Costs	\$27,132,200	5%	\$0	0%	\$21,705,760	80%
Planning Costs	\$16,279,320	3%	\$0	0%	\$13,023,456	80%
Homeowner Recovery Program	\$325,586,400	60%	\$227,910,480	70%	\$260,469,120	80%
Buyout Program	\$32,558,640	6%	\$22,791,048	70%	\$26,046,912	80%
Affordable Housing Development Fund	\$59,690,840	11%	\$59,690,840	100%	\$47,752,672	80%
Small Rental Repair Program	\$32,558,640	6%	\$32,558,640	100%	\$26,046,912	80%
Public Housing Restoration Fund	\$16,279,320	3%	\$16,279,320	100%	\$13,023,456	80%
Infrastructure Recovery Program	\$21,705,760	4%	\$15,194,032	70%	\$17,364,608	80%
Construction Trades Training Program	\$5,426,440	1%	\$5,426,440	100%	\$4,341,152	80%
Code Enforcement Support Program	\$5,426,440	1%	\$3,798,508	70%	\$4,341,152	80%
Total	\$542,644,000	100%	\$383,649,308	70%	\$434,115,200	80%

The development of programs is supported by an analysis of the unmet recovery need found in Part 3.0 below. Part 5.0 and Part 6.0 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 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.

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2.0 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.

2.1.1 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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3.0 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 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.

3.1 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		Rainfall Total		Rainfall Total	
Elizabethtown NC	35.93"	Pink Hill NC	18.31"	Chapel Hill NC	9.18"
Swansboro NC	34.00"	Chadbourn NC	18.23"	Wilson NC	8.75"
Gurganus NC	30.38"	Wallace NC	18.08"	Clayton NC	8.57"
Hoffman Forest NC	29.62"	Clinton NC	17.85"	Fairview NC	7.86"
Hampstead NC	29.52"	Trent Woods NC	17.28"	Concord NC	7.62"
Sunny Point NC	27.44"	New Bern NC	16.65"	Aho NC	7.29"
Oak Island NC	26.98"	Stedman NC	16.38"	Garner NC	7.12"
Wilmington NC	26.58"	Cameron NC	16.36"	Greensboro NC	6.99"
Whiteville NC	25.91"	Pine Knoll Shores NC	16.32"	Raleigh NC	6.98"
Jacksonville NC	25.28"	Fayetteville NC	15.27"	Williamston NC	6.93"
Newport NC (NWS Office)	25.20"	Roseboro NC	15.15"	Washington NC	6.71"
Mount Olive NC	25.04"	Linden NC	15.11"	Rocky Mount NC	6.33"
Bolivia NC	23.33"	Goldsboro NC	14.39"	Charlotte NC	6.13"
Wilmington (ILM) NC	23.02"	Rockingham NC	14.37"	Boone NC	6.07"
Emerald Isle NC	23.66"	Raeford NC	14.32"	Gastonia NC	6.06"
Maysville NC	23.14"	Grantsboro NC	14.11"	Rocky Mount NC	6.33"
Lumberton NC	22.76"	Burgaw NC	13.60"	Lawsonville NC	5.70"
Yaupon Beach NC	22.07"	Fort Bragg NC	13.29"	Cape Hatteras NC	5.59"
Supply NC	21.92"	Greenville NC	11.66"	Tarboro NC	5.16"
Cedar Point NC	21.96"	Snow Hill NC	11.50"	North Wilkesboro NC	5.00"
Croatan NC	21.70"	Pittsboro NC	11.40"	Winston-Salem NC	4.85"
Morehead City NC	21.20"	Burnsville NC	11.26"	Yadkinville NC	4.59"
Back Island NC	20.87"	Ashboro NC	10.67"	Edenton NC	4.49"
Hope Mills NC	20.54"	Sparta NC	10.20"	Yanceyville NC	4.15"
Dunn NC	20.41"	Barrett NC	9.97"	Roanoke Rapids NC	3.92"
Sandy Run NC	19.92"	Durham NC	9.58"	Hickory NC	3.72"
Kinston NC	18.88"	Apex NC	9.52"	Asheville NC	3.29"
		Ocracoke NC	9.29"	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

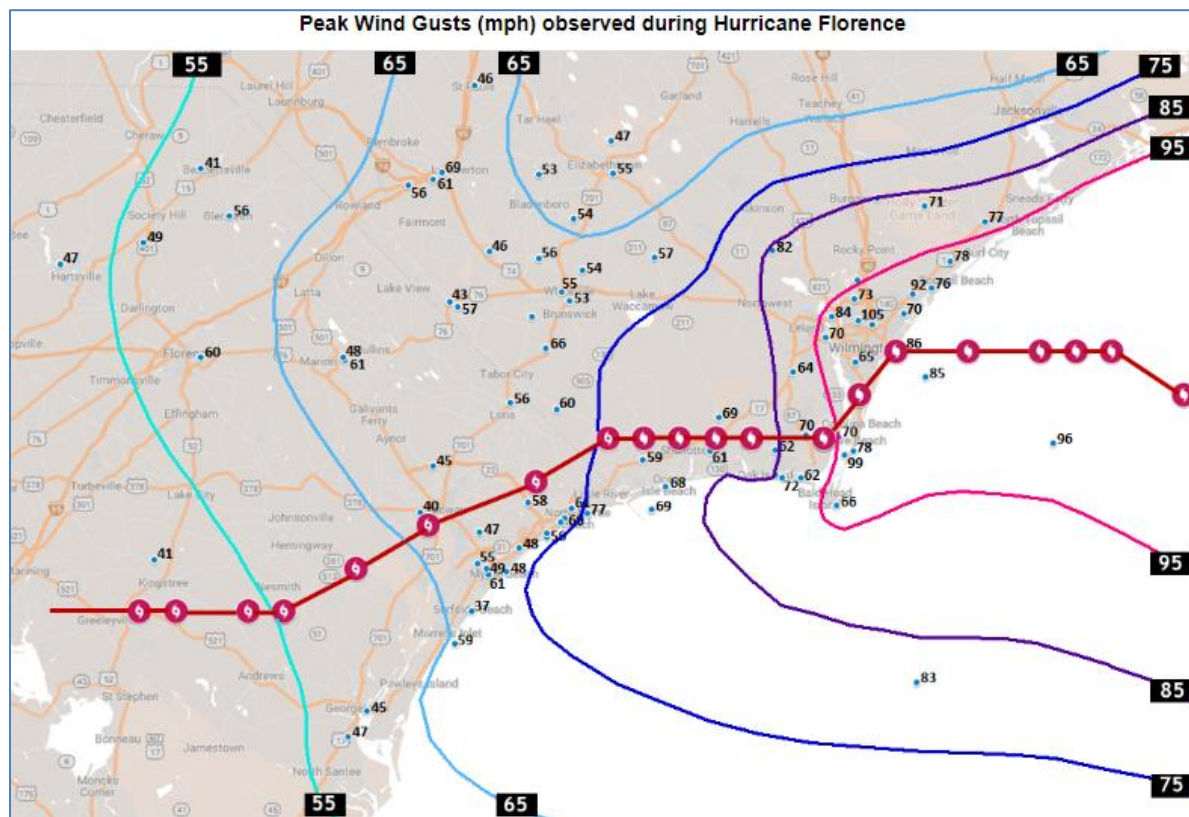
² National Weather Service. *Hurricane Florence: September 14, 2018*. <https://www.weather.gov/ilm/HurricaneFlorence>.

³ North Carolina Office of State Budget and Management. *Building Communities Stronger and Smarter*

Based on Preliminary Damage and Needs Assessment.

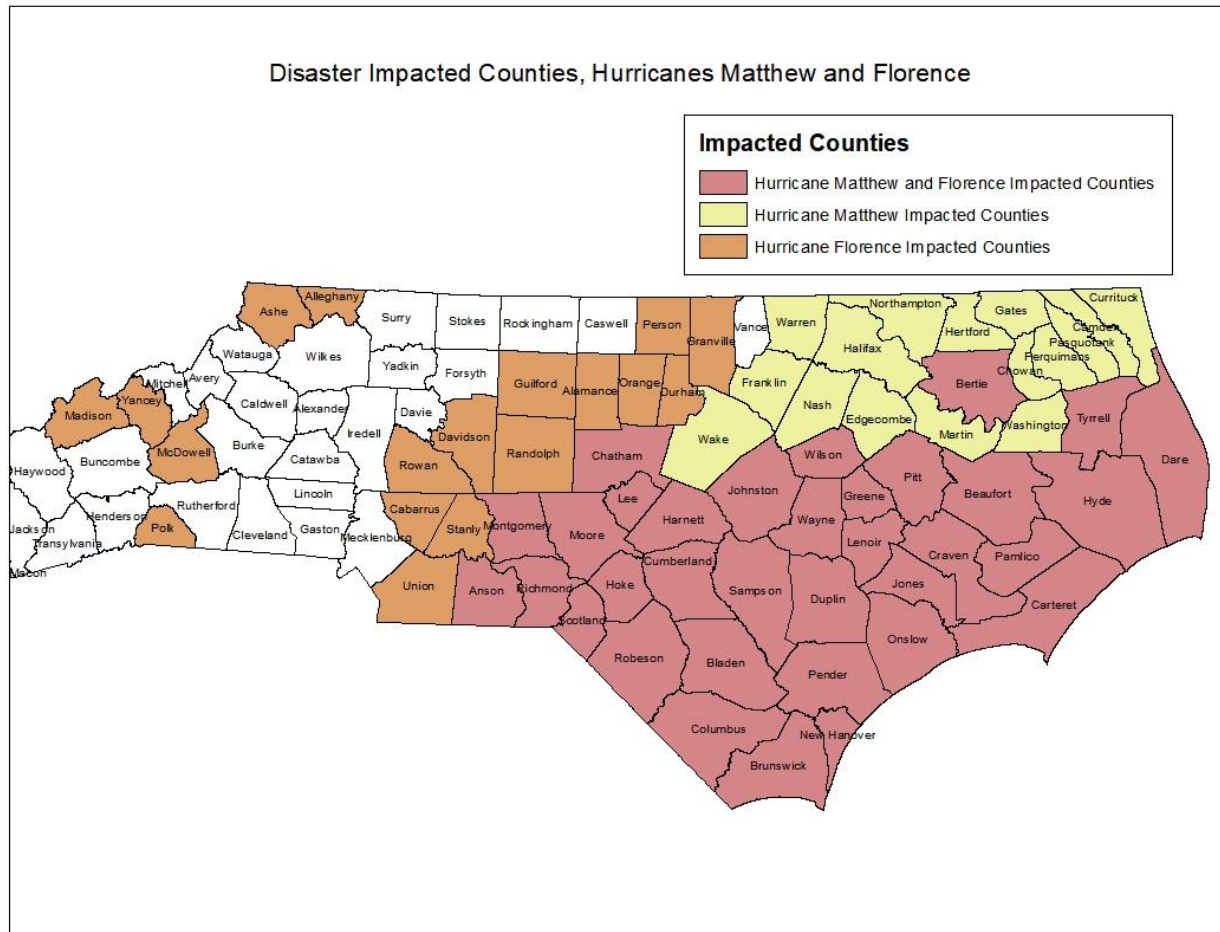
https://files.nc.gov/ncosbm/documents/files/Florence_Report_Full_rev20181016v10.pdf

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)

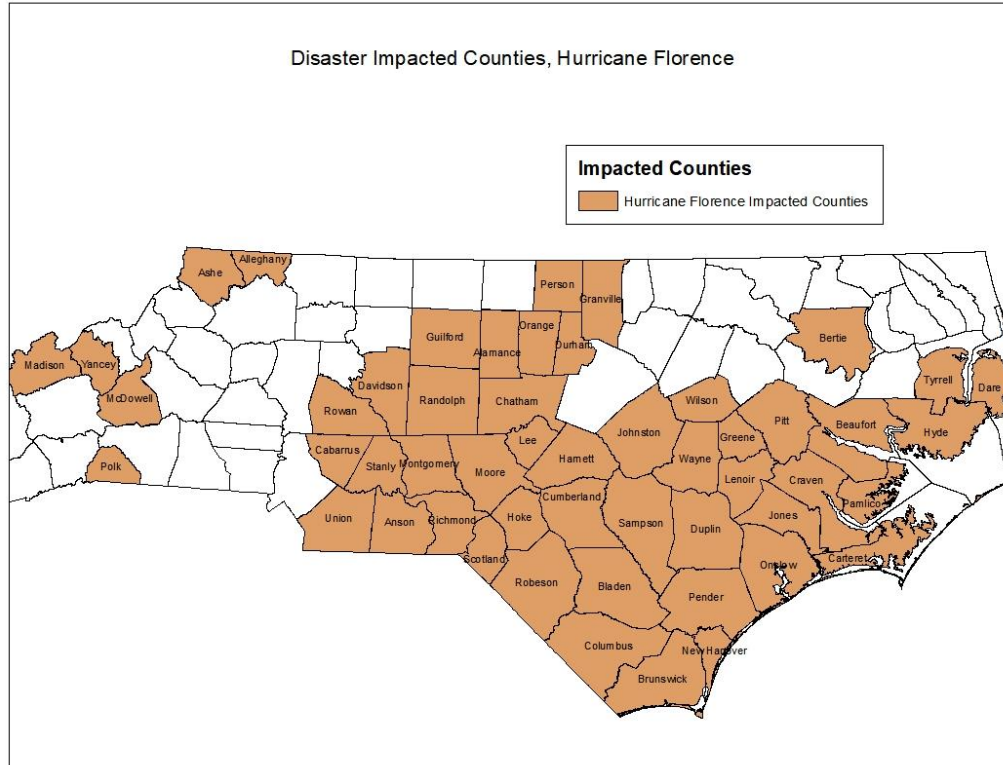
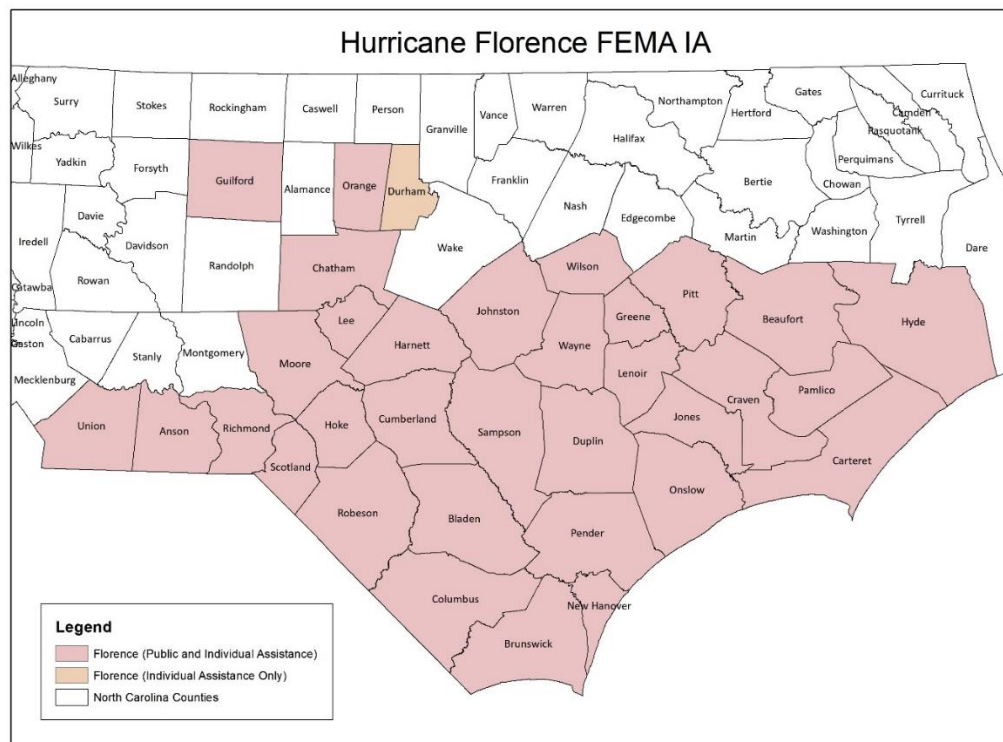


Figure 5 - Hurricane Florence Impacted Counties (FEMA IA)



3.2 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.

3.2.1 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							
DAMAGE FLOOD DEPTH LEVEL		All Flood Hazards		Surge Flooding		Riverine Flooding	
		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

3.2.2 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

3.2.3 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 NCDOT, 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

3.2.4 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.

3.2.5 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.

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.

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

Preliminary Estimates, All Categories		
Category	Item	Cost Estimate
Housing	Residential (single family, multi-family, rental residences, and supportive housing)	\$ 4,820,000,000
Infrastructure	Gas and electric	\$ 691,000,000
Infrastructure	Water, sewer, and stormwater management systems	\$ 88,000,000
Infrastructure	State bridges and roads	\$ 260,000,000
Infrastructure	Public transportation	\$ 1,700,000

Preliminary Estimates, All Categories		
Infrastructure	Rail and rolling stock	\$ 1,100,000
Infrastructure	Ports	\$ 54,000,000
Infrastructure	Aviation	\$ 4,000,000
Infrastructure	Local roads	\$ 5,460,000
Infrastructure	Private roads	\$ 4,360,000
Economic Impacts	Commercial real estate and equipment	\$ 1,080,000,000
Economic Impacts	Economic losses	\$ 2,700,000,000
Agriculture	Crops and livestock	\$ 2,031,900,000
Agriculture	Cooperatives and growers' association	\$ 9,700,000
Agriculture	Emergency livestock disposal	\$ 20,000,000
Agriculture	Agricultural buildings & equipment	\$ 61,800,000
Agriculture	Agricultural infrastructure	\$ 55,900,000
Agriculture	Commercial fishing and aquaculture	\$ 33,300,000
Agriculture	Forestry	\$ 84,900,000
Agriculture	Stream restoration and stream debris removal (agriculture)	\$ 57,500,000
Environmental	Hazardous waste/waste management	\$ 3,000,000
Environmental	Dredging	\$ 89,800,000
Environmental	Beach renourishment	\$ 287,900,000
Environmental	Dams, dikes, and levees	\$ 29,200,000
Public Facilities	Local Government Buildings	\$ 143,500,000
Public Facilities	State Government Buildings	\$ 180,400,000
Public Facilities	State Attractions	\$ 4,500,000
Public Facilities	State Owned Timber	\$ 11,400,000
Public Facilities	Public K-12 Schools	\$ 267,000,000
Public Facilities	Community Colleges	\$ 4,900,000
Public Facilities	UNC System	\$ 300,000
Health Care	Health Care Facilities	\$ 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.

3.3 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.

3.3.1 Housing Resilience Needs

To prepare repaired or reconstructed homes for the impacts of Climate Change, it is necessary to apply green building construction or rehabilitation techniques to disaster impacted homeowners or renters. 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 decreased 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 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.

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>.

3.3.2 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 the NCDEQ reports on climate change impacts as well as the recommendations put forth by the newly established 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.

3.4 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.

3.4.1 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.

3.4.2 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 four regional NC Resilient Redevelopment Plans.
- 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.

3.4.3 Analysis of FEMA Inspection Data

FEMA IA claims and inspection data was 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.

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 was 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%

3.4.4 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.

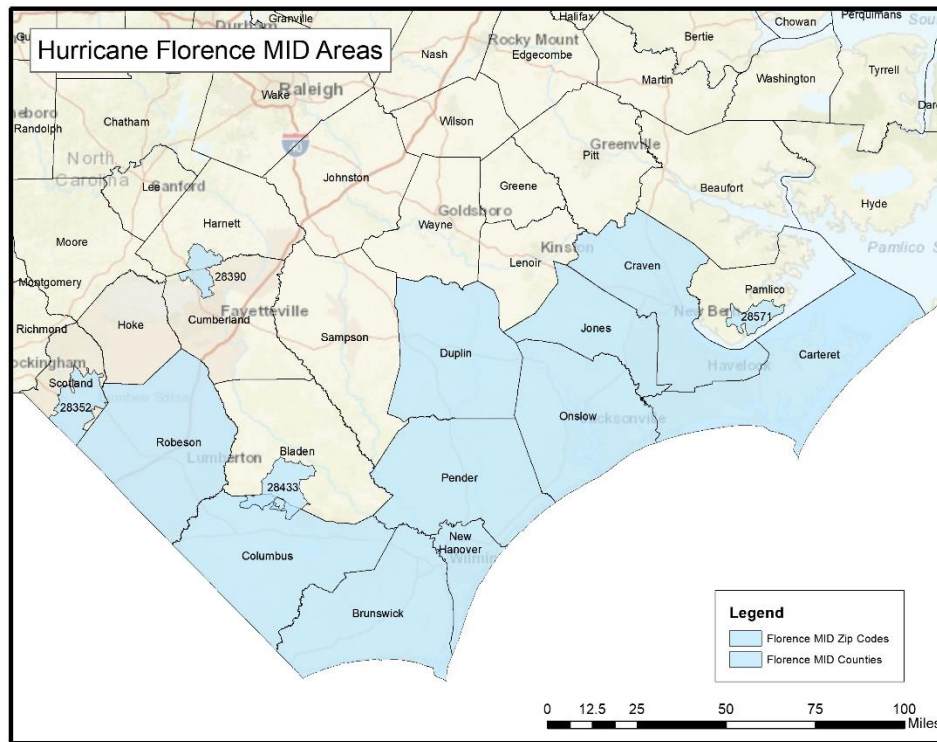
3.5 HUD Designated Most Impacted and Distressed Areas (MID)

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).

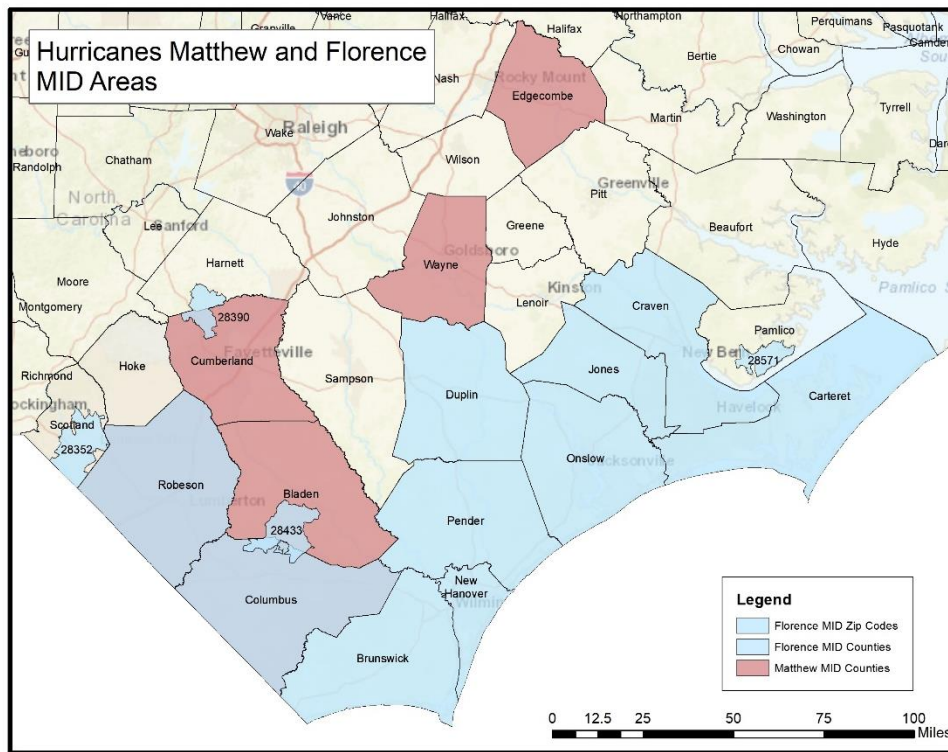
Figure 7 - HUD Designated MID areas



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 versa⁷. 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. 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

3.5.1 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 properties in the MID counties and identified 979 properties that were substantially damaged. In a parallel effort, impacted communities conducted similar inspections, 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.

Table 14 - FEMA 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%
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.

3.6 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

⁸ U.S. Census Bureau. *American Community Survey*. <https://www.census.gov/programs-surveys/acs>.

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%
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%

3.6.1 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.

3.6.2 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.

3.6.3 Race

Race must be considered when looking at individual communities when understanding specific needs, historical context, identity, and aspirations. According to the ACS, while 69 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.

3.6.4 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 4.7 below.

3.7 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 estimates⁹, 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%
New Hanover County	Yes	94,235	206,370	45.66%

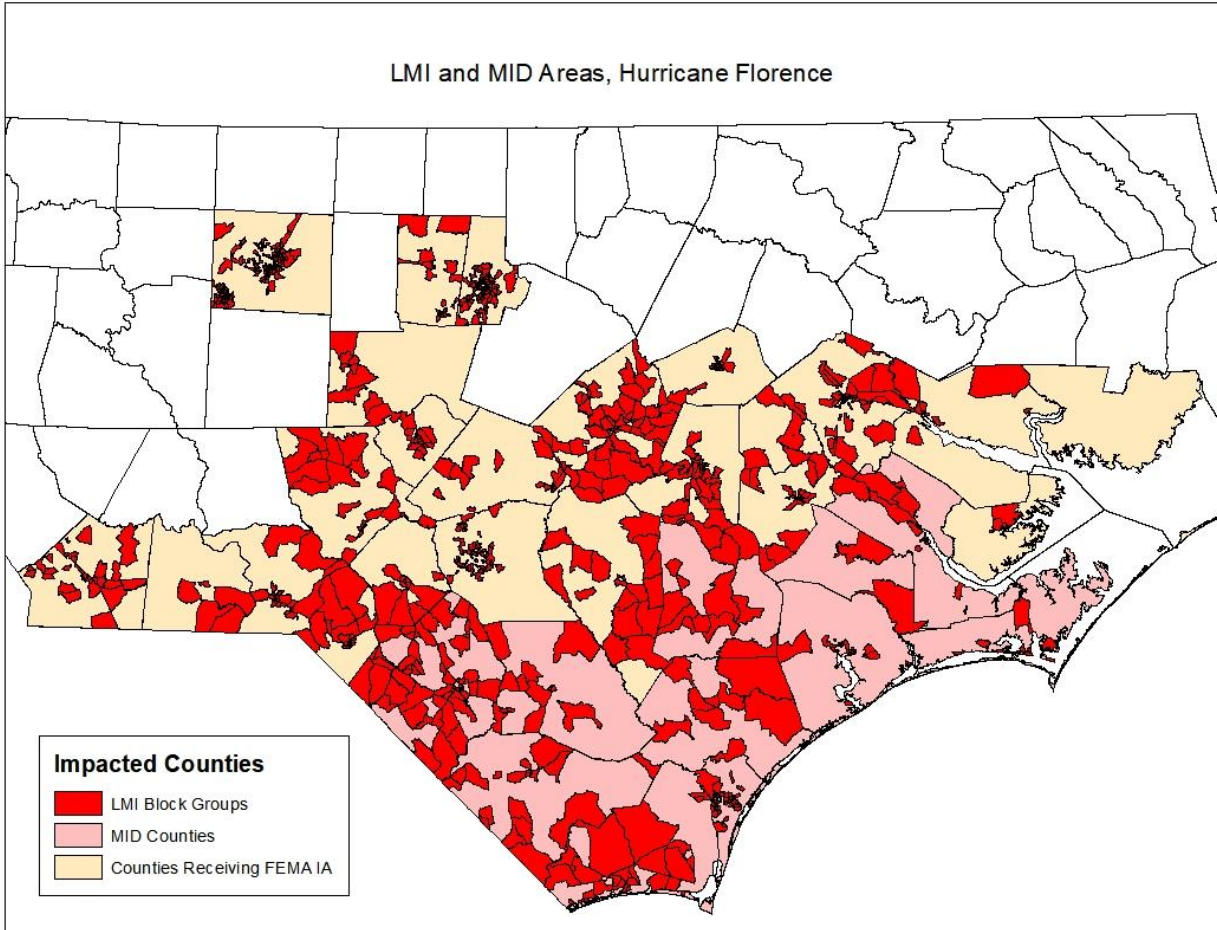
⁹ U.S. Census Bureau. *ACS 5-Year 2011-2015 Low- and Moderate-Income Summary Data*.
<https://www.hudexchange.info/programs/acs-low-mod-summary-data/>

County	MID Area	LMI Population	Total Population	% LMI
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 9 - LMI Block Groups, FEMA IA Counties and MID Counties, Hurricane Florence



3.8 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. 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.

3.9 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.

3.9.1 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.

3.9.2 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.

3.9.3 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.

3.9.4 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.

3.9.5 Construction Activity and Capacity

The State of the Cities Data System¹³ 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.

3.10 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.

3.10.1 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 18 - 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

County	Major-Low	Major-High	Severe	Total
Duplin	232	294	221	747
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 19 - 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 20 - 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 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 21 - 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
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

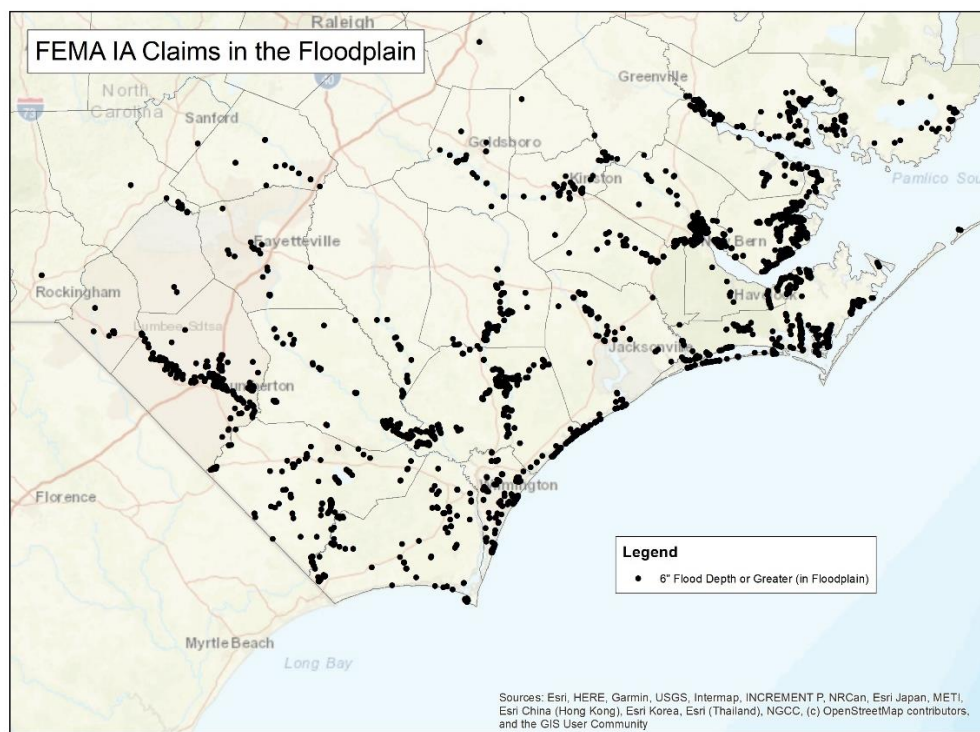
County	Total Owner	Total Renter	Grand Total
Onslow	\$ 29,698,791	\$ 20,766,144	\$ 50,464,935
Brunswick	\$ 26,350,306	\$ 5,200,771	\$ 31,551,077
Columbus	\$ 24,557,382	\$ 8,034,708	\$ 32,592,090
Pamlico	\$ 20,985,488	\$ 2,228,128	\$ 23,213,616
Jones	\$ 22,831,452	\$ 4,353,281	\$ 27,184,733
Bladen	\$ 15,149,418	\$ 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
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

County	Total Owner	Total Renter	Grand Total
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 10 - FEMA IA Claims in the Floodplain



3.10.2 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.

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 22 - 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.

3.10.3 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 23 - 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

3.10.4 LMI Owner-Occupied Households

HUD requires that NCORR 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 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. This is before considering the elevation costs as calculated in Part 3.10.1 above.

3.10.5 Renter Occupied Households

Renter occupied households have obstacles to recovery that are different than 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.

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 as calculated in Part 3.10.1 above.

3.10.6 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.

3.11 Analysis of Infrastructure Unmet Need

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.

The primary method by which unmet needs are assessed for infrastructure impacts from the storm are through the FEMA 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 24 - 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.¹⁴

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 25 - 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

¹⁴ Federal Emergency Management Agency. *Public Assistance Fact Sheet*. https://www.fema.gov/media-library-data/1534520705607-3c8e6422a44db5de4885b516b183b7ce/PublicAssistanceFactSheetJune2017_Updated2018.pdf.

FEMA PA Categories	Total Approximate Cost	Total Approximate Federal Share	Total Approximate Non-Federal Share
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.

Table 26 - 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 27 - 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

FEMA PA Category	Bladen	Brunswick	Carteret	Columbus	Craven	Duplin
<i>Total</i>	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 an MID county. However, 74 percent of the total approximate cost of all PA projects in categories C – G occurred in MID counties.

Table 28 - 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

3.11.1 FEMA Hazard Mitigation

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 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 29 - 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

County	MID	Approximate Cost	Federal Share	Non-Federal Share
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 \$282 million, corresponding to a combination of the non-federal share of both FEMA PA projects and proposed HMGP projects.

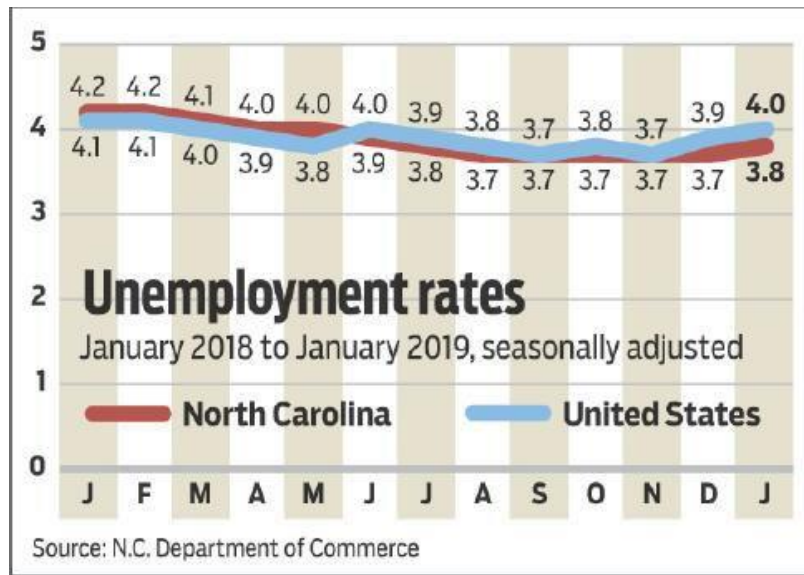
As stated above, it is expected that State resources are available to fund the recovery need for infrastructure. The recovery needs assessment considers that the project cost for infrastructure recovery is typically for repair only. CDBG-DR funds may be expended to complete upgrades for greater resiliency 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 unmet recovery need for infrastructure at \$138.3 million.

3.12 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 2019.¹⁵

¹⁵ 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

Figure 11 - 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.¹⁶

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.

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.

¹⁶ 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

DUA tracks the county of residence for each applicant that submits an application. 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, NCDOL data was used to calculate the average wage for 27 weeks of missed work.¹⁷ 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 30 - 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
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

¹⁷ 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
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 31 - 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
Harnett	8	\$ 200,914	\$ 217,900
Hyde	2	\$ 87,545	\$ 75,000
Orange	3	\$ 72,723	\$ 75,000
Hoke	4	\$ 56,441	\$ 41,800

Counties	Approved SBA Applications	Total Verified Loss	Total SBA Loans
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.

3.13 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.

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.¹⁸ 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.¹⁹

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-

¹⁸ North Carolina Department of Agriculture and Consumer Services. *Total agricultural losses estimated at over \$1.1 billion.* <https://www.ncagr.gov/paffairs/release/2018/aglosseswithcrops.htm>.

¹⁹ North Carolina Department of Agriculture and Consumer Services. *Agricultural Disaster Program Payment Calculations.* <https://www.ncagr.gov/agriculturaldisasterprogram/Payments.htm>.

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.²⁰ 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 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 32 - Agricultural Unmet Needs and Assurances 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.

²⁰ United States Department of Agriculture, *Noninsured Crop Disaster Assistance Program for 2015 and Subsequent Years*. https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2017/nap_for_2015_and_subsequent_years_oct2017.pdf.

3.14 Unmet Needs 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.

The following figure provides a summary of unmet recovery needs remaining after Hurricane Florence using HUD's unmet recovery needs methodology as outlined in the Notice and detailed above. Generally, HUD's evaluation of the unmet recovery need is in alignment with the analysis conducted by NCORR.

Table 33 - Summary of Unmet Need

Category	Data Source	Total Impact	Resources Available	Unmet Need (Total Impact less Available Resources)	% of Total Unmet Need
Housing	FEMA IA	\$737,780,523	\$269,244,319	\$468,536,204	59%
	Elevation Need	\$313,950,000	N/A	\$313,950,000	
	Public Housing	\$112,234,056	N/A	\$112,234,056	
Infrastructure	FEMA PA	\$128,965,179	N/A	\$128,965,179	9%
	FEMA HMGP	\$9,421,987	N/A	\$9,421,987	
Economic	SBA	\$436,260,499	\$115,284,300	\$320,976,199	21%
Agriculture	NCDACS	\$1,136,100,000	\$976,779,250	\$159,320,750	11%
Total	-	\$2,874,712,244	\$1,361,307,869	\$1,513,404,375	100%

The Federal Register Notice allocated \$542,644,000 in CDBG-DR funding. The total unmet needs are \$1.513 billion, more than \$970 million 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.

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4.0 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.

4.1 Elevation Requirements

NCORR will establish project-by-project reasonableness requirements when comparing elevation to other mitigation measures, such as buyout and acquisition (in NCORR developed and community approved areas) or demolition and reconstruction of the structure. The method for determining cost reasonableness for elevation assistance is outlined in the ReBuild NC Single Family Housing 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.

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. 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.

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.

4.2 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, but carrying flood insurance outside of SFHA's is not a requirement.

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.

4.3 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.

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.

The following policies will apply to housing recovery programs, including Reconstruction, Rehabilitation, MHU Replacement, Buyout, and in some instances Small Rental Recovery or 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 exception in V.B.2 (iii) authorized in the DRRRA 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 SBA 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 information received from the third party (SBA, FEMA, etc.) indicates that the applicant received an offer for the subsidized loan and NCORR is unable to determine from that available information that the applicant declined the loan. In that case, 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 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 a subsidized loan must be included in the DOB calculation of the total assistance unless another exception applies.

For canceled loans, NCORR will send the Affidavit of Declined or Canceled Subsidized Loan to SBA (or other 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 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 declined loans, awards with 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. As part of the DOB analysis, NCORR will exclude disbursed loan amounts as non-duplicative provided the funds were provided for a different purpose or were provided for the same purpose as the recovery program's activities, but for a different, allowable use.

NCORR will evaluate loans remaining open for non-duplicative activities. In cases where the undisbursed loan amount is for potentially duplicative activities, NCORR will notify the lender (SBA or other) 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 will re-verify all DOB at project close-out.

4.4 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 Housing Quality Standards (HQS). 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.

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/>.

4.4.1 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.

4.4.2 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.

4.4.3 Cost Verification

At all times, construction costs must remain reasonable and consistent with market costs at the time and place of construction. NCORR uses the service of a third-party construction management firm to assist in determining 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.

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.

When funding residential rehabilitation, an alternative recovery approach may be used if such an approach were to be found more cost effective than rehabilitation. For instance, reconstruction may be more cost effective than rehabilitation or property buyout may be more cost effective than either method. 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/>.

4.4.4 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 does not anticipate the creation of program income in the expenditure of CDBG-DR funds. If program income is generated through the course of CDBG-DR administration, the Action Plan will be updated to reflect a plan for managing 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.

4.4.5 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.

4.5 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 take into account 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 4.1 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.

4.5.1 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

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

all instances, NCORR will defer to engineering and design experts to ensure that high wind hazards are addressed.

4.5.2 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.²³ 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.²⁴

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.

4.5.3 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.

4.6 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.

²³ 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>

²⁴ National Oceanic and Atmospheric Administration. *FAQ – Tide Predictions and Data*. <https://tidesandcurrents.noaa.gov/faq2.html>

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 market²⁵. 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.

To assist in capacity issues with local municipalities, NCORR will review the needs of deteriorating areas and coordinate code enforcement assistance where necessary. This program is permitted under HCDA 105(a)(3) and not considered a public service, although it does contribute to the recovery need and is not a housing or infrastructure construction type of program. A recent agreement between the North Carolina Office of State Budget and Management (OSBM) and the North Carolina Department of Insurance (NCDOI) for \$300,000 to help augment code inspectors in counties is a 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. To address the need, NCDOI originally requested \$21 million in code enforcement support from FEMA but that initiative was ultimately not funded. NCORR will work with the impacted municipalities to assist in code enforcement support where it is most needed.

4.7 Minimizing Displacement and Ensuring Accessibility

NCORR has an active Uniform Relocation Assistance Plan (URA) plan and process in place if URA were to be triggered by an NCORR activity. URA is federally mandated and NCORR has increased its capacity to administer URA requirements.

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

²⁵ GroundBreak Carolinas, LLC. *North Carolina Construction Outlook*. <https://groundbreakcarolinas.com/north-carolina-construction-outlook/>

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.

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. 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 composition members. 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 a certain set-aside of fully compliant 504/ADA units of varying sizes to accommodate eligible applicants. Along with single family programs, the multifamily rental programs will be required to have an architect's/engineer's 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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5.0 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 3.0 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.

5.1 Connection between Unmet Recovery Need and Programming

A detailed list of funded programs is included below. 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.

5.2 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 (\$27,132,200) for administrative costs

associated with the recovery activities described below. Another three percent of funds 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 (\$16,279,320). The remaining \$499,232,480 will be allocated to multiple activities defined in Part 6.0 below.

Considering the greatest outstanding need and in accordance with HUD guidance to primarily address housing recovery, \$325.5 million is allocated to a suite of programs to benefit homeowners (the *Homeowner Recovery Program*). Another \$32.5 million is allocated to continue the comprehensive buyout effort previously funded by the state through CDBG-DR and CDBG-MIT allocations for Hurricane Matthew (the *Buyout Program*).

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 proposes multiple programs to address the unique conditions of renters across the State. These allocations include \$59.6 million for the *Affordable Housing Development Fund*, \$32.5 million for the *Small Rental Repair Program*, and \$16.2 million for the *Public Housing Restoration Fund*. Within the Affordable Housing Development Fund, multiple initiatives will be funded, including large-scale multi-family ownership and rental stock creation, site-by-site creation of one-to-four unit dwellings, and a down payment assistance program to assist impacted renters ready to purchase a home. The Small Rental Repair Program will focus on repairing existing rental stock, and allowing for existing owner-occupied stock to convert to small rental housing stock in certain circumstances. The Public Housing Restoration Fund will focus on long-term, sustainable recovery of disaster impacted Public Housing Authorities (PHAs). Generally, all three allocations will fall under the affordable housing development initiative and policies and guidance for these programs will be enshrined in the NCORR Affordable Housing Program Policies.

To assist in housing recovery, NCORR will fund additional programs that supplement the housing need. \$21.7 million is allocated to the *Infrastructure Recovery Program*. The Infrastructure Recovery Program will focus on infrastructure repairs, improvements, or new infrastructure necessary to complete housing recovery objectives. Two other programs are established to augment the strained capacity of contractors and builders as well as code enforcement professionals in impacted areas; \$5.4 million is allocated to a *Construction Trades Training Program* and \$5.4 million is allocated to a *Code Enforcement Support 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 34 - CDBG-DR Allocations

Program	Total	% of Total Allocation	\$ to LMI	% to LMI	\$ to HUD-defined MID areas	% to HUD-defined MID areas
Administrative Costs	\$27,132,200	5%	\$0	0%	\$21,705,760	80%
Planning Costs	\$16,279,320	3%	\$0	0%	\$13,023,456	80%
Homeowner Recovery Program	\$325,586,400	60%	\$227,910,480	70%	\$260,469,120	80%
Buyout Program	\$32,558,640	6%	\$22,791,048	70%	\$26,046,912	80%
Affordable Housing Development Fund	\$59,690,840	11%	\$59,690,840	100%	\$47,752,672	80%
Small Rental Repair Program	\$32,558,640	6%	\$32,558,640	100%	\$26,046,912	80%
Public Housing Restoration Fund	\$16,279,320	3%	\$16,279,320	100%	\$13,023,456	80%
Infrastructure Recovery Program	\$21,705,760	4%	\$15,194,032	70%	\$17,364,608	80%
Construction Trades Training Program	\$5,426,440	1%	\$5,426,440	100%	\$4,341,152	80%
Code Enforcement Support Program	\$5,426,440	1%	\$3,798,508	70%	\$4,341,152	80%
Total	\$542,644,000	100%	\$383,649,308	70%	\$434,115,200	80%

5.3 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.

5.4 LMI Priority

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.

Therefore, 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, homeowner recovery, buyout activities, infrastructure recovery, and code enforcement support will also be delivered to maximize LMI individual and household benefit.

NCORR may consider expanding the Down Payment Assistance track of the Affordable Housing Development Fund to individuals that do not meet the LMI objective, if expansion of the track better addresses renter recovery needs. NCORR recognizes that LMI individuals and households may not be suited to down payment assistance for a variety of reasons, where as individuals earning less than 120 percent of area median income may be more readily suited to take advantage of down payment assistance. In consideration of expansion of the program to serve those below 120 percent area median income, NCORR will continue to ensure that no less than 70 percent of all allocated funds are directed toward LMI individuals and households.

5.4.1 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. Previously, NCORR has subgranted funds to the North Carolina Housing Finance Authority (NCHFA) to administer multi-family housing programs. NCORR has expanded its implementation of affordable housing programs to ensure that vulnerable populations are served in the recovery process. NCORR is considering individuals with access and functional

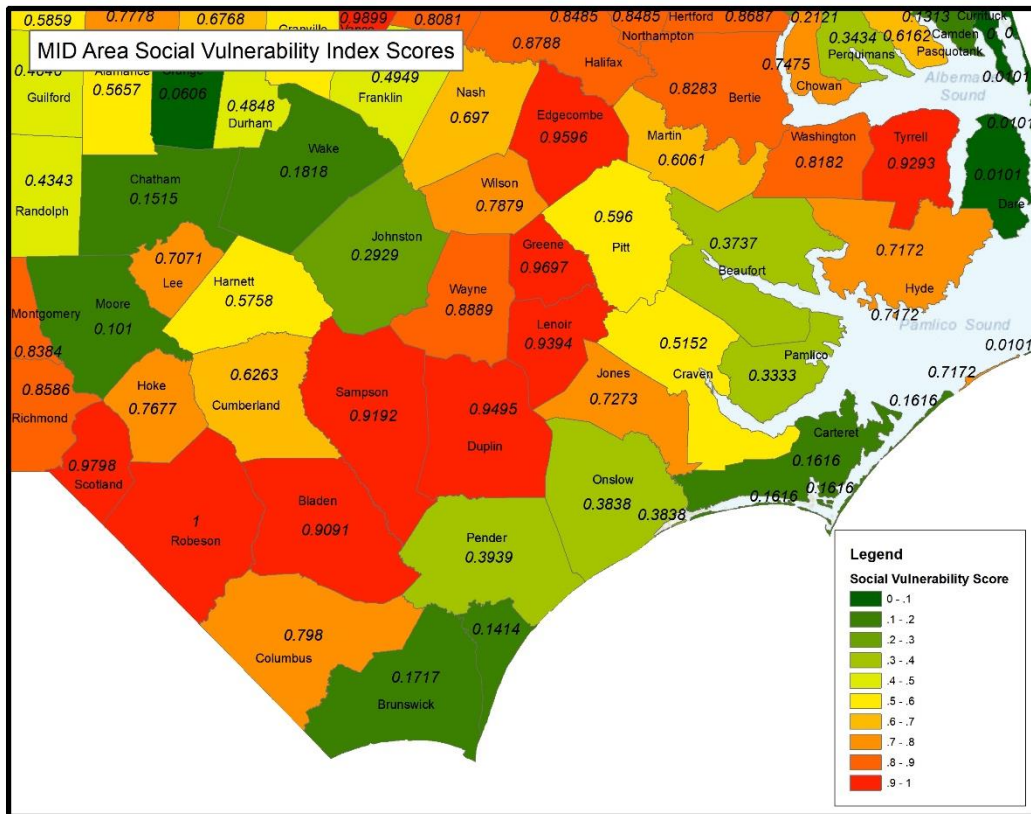
needs that will require assistance with accessing and/or receiving CDBG-DR disaster resources. These individuals may be children, senior citizens, persons with disabilities, from diverse cultures, transportation disadvantaged, homeless, having chronic medical disorders, and/or with limited English speaking, reading, having comprehension capacity, or altogether be non-English speaking.

NCORR takes into account 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 3.6 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 12 - 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 swath 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. 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 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.

5.4.2 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 35 - 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 **Error! Reference source not found.****Error! Reference source not found..**

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 five year affordability period on units served through the Small Rental Repair Program, which serves one to four unit properties. 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.

5.4.3 Application Status

NCORR is committed to sharing timely and accurate updates with applicants that participate in the homeowner recovery program, buyout program, and other programs which interface with recovering individuals and households directly. Where NCORR charges program operations with a subrecipient, NCORR will ensure that subrecipients also provide for updates to recovering applicants. NCORR will publicize the application start date for recovery programs in a variety of ways to ensure that as many potential applicants as possible apply for programs which best suit their recovery needs. After submitting an application, applicants will be assigned a case manager to see them through the recovery process. Applicants can learn more about the status of their application through the following methods:

- 2-1-1 phone service.
- Phone call directly to the assigned case manager.
- Direct email to the assigned case manager.

For programs which fund projects and not applicants directly, NCORR will maintain consistent communication with subrecipients, contractors, and other entities which receive CDBG-DR funds in support of their projects. Generally, the contract manager and NCORR senior staff will maintain those lines of communication.

5.5 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.²⁶ 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.²⁷ 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 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

²⁶ United States Army Corps of Engineers. *FY19 Additional Supplemental Appropriations Disaster Relief Act, 2019*. https://www.usace.army.mil/Portals/2/docs/civilworks/budget/supplemental/FY19_supp_LDRIP_IN_14Jan2020.jpg?ver=2020-01-14-081623-437.

²⁷ United States Army Corps of Engineers. *FY19 Additional Supplemental Appropriations Disaster Relief Act, 2019*. https://www.usace.army.mil/Portals/2/docs/civilworks/budget/supplemental/FY19_supp_LDRIP_NC-VA_14Jan2020.jpg?ver=2020-01-14-081623-653.

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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6.0 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.

6.1 Homeowner Recovery Program

Homeowner Recovery Program			
Allocation: \$325,586,400	\$ to LMI: \$227,910,480	\$ to MID: \$260,469,120	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: 60%	% to LMI: 70%	% to MID: 80%	National Objective: LMH, UN

6.1.1 Program Description

The Homeowner Recovery Program will provide direct assistance in the form of grants benefitting homeowners that experienced damage to their homes from Hurricane Florence and have remaining recovery needs, after accounting for other benefits received from FEMA, NFIP, private insurance, and charitable organizations. SBA benefits received are applied to the benefits calculation based on HUD guidance set in 84 FR 28836 *Updates to Duplication of Benefit Requirements under the Stafford Act for Community Development Block Grant (CDBG) Disaster Recovery Grantees*. Generally the Homeowner Recovery Program is similar to the existing Homeowner Recovery Program in operation for the recovery of Hurricane Matthew.

The Program includes rehabilitation, repair, and reconstruction activities for single-family homes as well as elevation when necessary and flood insurance subsidies to eligible homeowners. The Homeowner Recovery Program also funds Mobile/Modular Home (MHU) replacement activities. Homeowner Recovery Programs are administered by NCORR. North Carolina citizens who were directly impacted by the disaster and are located in an eligible

county can apply to the Housing Recovery Programs through one application into the program at any of the ReBuild NC Centers listed on the ReBuild NC website. The application allows applicants to list their housing recovery needs in more than one homeowner recovery type of assistance listed above.

Available homeowner assistance is listed below:

6.1.2 Single-Family 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. The method of determining the construction intent (rehabilitation or reconstruction) will be outlined in detail in the *ReBuild NC Single-Family Homeowner Recovery Manual*.

6.1.3 Manufactured Home Repair or Replacement

Single-wide manufactured homes with damages between \$1,000 and \$5,000 may be eligible for assistance with repairs. Double-wide or larger manufactured homes, including manufactured homes with certain permanent building additions are eligible for repair assistance with damages between \$1,000 and \$10,000. Applicants requiring repairs to manufactured homes exceeding \$5,000 for single-wide and \$10,000 for double-wide or larger units may be eligible for replacement.

6.1.4 Reimbursement

Homeowners with a household income equal to or less than 120 percent AMI who expended funds that are not duplicated with other funds received to recover in order to make necessary repairs or purchased a replacement manufactured home may be eligible for a reimbursement grant, if these recovery expenses were incurred within a year of the disaster (from September 14, 2018 through September 14, 2019).

Items eligible for reimbursement, the ReBuild NC review process for eligibility, and homeowner certification forms will be incorporated in the *ReBuild NC Single-Family Homeowner Recovery Manual*.

6.1.5 Elevation Assistance

In addition to assistance for rehabilitation and reconstruction, 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.

Circumstances requiring structural elevation include:

- Properties located within the 100-year floodplain that are considered by ReBuild NC to meet the FEMA definition of “substantially damaged” or will be “substantially improved”; or
- 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; or
- Properties located within the 100-year floodplain that are damaged greater than 50% of the pre-storm tax assessed value; or
- Damaged properties receiving assistance (such as rehabilitation, reconstruction, replacement, or reimbursement) located within a Disaster Risk Reduction Area (DRRA) as formally adopted by the buyout program.
 - DRRA adoption is effective as of the date of agreement with the municipality or organization which receives the buyout property.
 - Applicants which sign the homeowner grant agreement (HOGA) prior to the date of agreement with the municipality or organization which receives the buyout property are not retroactively affected by the DRRA designation.

The option to elevate will be offered to participants in the Homeowner Recovery Program that are located within the 100-year floodplain who did not otherwise meet a condition which required elevation as defined above. ReBuild NC will not elevate slab-on-grade structures. If a slab-on-grade structure is required to be elevated in compliance with the mandatory elevation criteria above, ReBuild NC will offer the option to reconstruct to the applicant.

At a minimum, homes will be elevated to 2' above the Base Flood Elevation (BFE) as required by HUD or at least 2' above the highest level of water that can be documented in the home using FEMA data or height of documented water marks in the home as measured by the Damage Assessor, whichever documented water level is highest or reasonable, in accordance with NCORR policy.

Optional Elevations may be offered to homeowners outside of the 100-year floodplain that:

- Sustained at least 6" of water damage during 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.²⁸

²⁸ Basic rule: If the cost of improvements or the cost to repair the damage exceeds 50 percent of the market value of the building, it must be brought up to current floodplain management standards.

www.fema.gov/pdf/floodplain/nfip_sg_unit_8.pdf

The local jurisdiction, through the code enforcement, permitting and planning, or floodplain management departments, makes determinations on substantial damage or substantial improvement. Further details on elevation are found in the *ReBuild NC Single-Family Homeowner Recovery Manual*.

Applicants outside of an area with a designated BFE will be required to elevate their home at least 2' above the highest level of water that can be documented in the home using FEMA data or height of documented water marks in the home as measured by the Damage Assessor, whichever documented water level is highest. The method of determining elevation assistance and cost reasonableness is outlined in the Elevation Standard Operating Procedure (SOP).

6.1.6 Flood Insurance Subsidies

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 two years, capped at a maximum of \$2,000 of assistance.

6.1.7 Temporary Relocation Assistance (TRA)

NCORR has adopted an Optional Relocation Policy to provide owner-occupants or households with incomes less than 120 percent AMI with Temporary Relocation Assistance (TRA) for those households who are unable to occupy their home during construction activities. Owner-occupants or households making greater than 120 percent AMI may qualify for TRA through a hardship exception. Up to \$12,000 in TRA per applicant is available. 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, when applicable.

Any units occupied and paid for with CDBG-DR funds are subject to inspection.

6.1.8 Maximum Awards

The maximum award granted is dependent on the type of project undertaken by the applicant. NCORR may periodically review these maximum awards and update them to conform to market conditions and changing recovery needs. If award maximums are changed, the Action Plan will be amended with new maximum award amounts. In some instances, specific projects may need to exceed the cap to complete the recovery process. When NCORR must exceed the cap, a rationale for exceeding the program cap will be included in the project file.

The minimum amount of assistance required to participate is \$1,000 for any Homeowner Recovery grant program.

Table 36 - Homeowner Program Maximum Awards

Program	Maximum Awards and Clarifications
Rehabilitation and Reimbursement	Up to \$70,000 per home. Does not include costs for lead abatement, asbestos remediation, elevation assistance, and unforeseen conditions necessitating an approved, reasonable change order.
Reconstruction	Up to \$127 a square foot of the selected house plan.
MHU Repair	Up to \$5,000 for single-wide units and up to \$10,000 for double wide units.
MHU Replacement	Up to \$60,000 for single wide and \$90,000 for double-wide units. ADA compliant units are capped at \$65,000 and \$97,000 for single and double-wide units respectively.
Elevation Assistance	Caps differ based on construction intent (rehabilitation, reconstruction, or MHU replacement), but are capped at a \$/SF amount.
Temporary Relocation Assistance (TRA)	Up to \$12,000.
Flood Insurance Assistance	Up to \$2,000, and a maximum of two years of assistance.

6.1.9 Geographic Eligibility

Damaged homes must be located within one of the FEMA IA disaster-declared counties for Hurricane Florence. Applicants may also be located in Hurricane Matthew MID counties, but must demonstrate a tie-back to Hurricane Florence damage.

6.1.10 Priorities

To the greatest extent possible, NCORR will process applications for assistance that benefit LMI individuals and households. Applicant Service Liaisons (ASLs) will coordinate with case managers and applicants to process applications in a timely manner.

6.1.11 Eligible Applicants

All owner-occupants whose primary residence was directly impacted by Hurricane Florence are generally eligible for the track of the Homeowner Recovery Program which best suits their recovery needs. Applicants must comply with the general eligibility requirements, including flood insurance requirements, at Part 4.0 above. Homeowner Reimbursement will be limited to homeowners with incomes up to 120 percent AMI. Flood Insurance Assistance is limited to LMI applicants located in the 100-year floodplain.

6.1.12 Projected Start and End Date

Program intake is expected to open in Q2 2020. The program will conclude in spring 2026, at the conclusion of the grant program, or upon expenditure of all funds.

- Start Date: Q2 2020
- End Date: Q2 2026

6.2 Buyout Program

Buyout Program			
Allocation: \$32,558,640	\$ to LMI: \$22,791,048	\$ to MID: \$26,046,912	CDBG-Eligibility Criteria: HCDA 105(a)(1), 105(a)(2), 105(a)(4), 105(a)(7), 105(a)(11), 105(a)(14)
% of Total Allocation: 6%	% to LMI: 70%	% to MID: 80%	National Objective: LMB, LMHI, UN

6.2.1 Program Description

The Buyout Program has seen significant funding in both the CDBG-DR Matthew grant as well as the CDBG-MIT allocation for Hurricane Matthew. To complete the substantial buyout effort, a portion of funds are allocated to focus on Hurricane Florence impacted areas, particularly in coastal North Carolina. NCORR will allocate \$32 million for ongoing buyout efforts, and will implement the program similarly to the CDBG-DR and CDBG-MIT allocations already dedicated to buyout.

Following an analysis of impacted areas and communication with local municipalities concerning disaster risk, NCORR has identified Disaster Risk Reduction Areas (DRRAs) where buyout is most appropriate. Individuals located in these DRRAs will be invited to apply for participation in the buyout program. Applicants approved for participation in the Buyout Program are eligible to receive an award based on the pre-storm value of their damaged property minus any duplicative assistance. NCORR will also provide incentives consistent with those defined by HUD at 83 FR 5864 and other Notices, which set forth the LMB and LMHI National Objectives. The award or purchase amount, as well as the incentive structure, are set in the *Buyout Program Manual* for both CDBG-DR and CDBG-MIT grants. The program will be administered by NCORR, but participating local jurisdictions or other entities will enter into agreements to receive the buyout property once the buyout is complete.

6.2.2 Maximum Award

The current Federal Housing Association (FHA) loan limits are the ceiling for the purchase price for properties that participate in this program. Incentives to homeowners are available above the purchase price, consistent with guidance on the implementation of the Low/Mod Buyout (LMB) and Low/Mod Housing Incentive (LMHI) National Objectives. The formula for calculation of these incentives will be defined in the NCORR Buyout Program Manual. NCORR commits to providing housing incentives that are necessary and reasonable based on the facts of each buyout activity completed. NCORR will continue to review the cost of buyout property through the life of the program, and if exception criteria for the maximum award is required it will be instituted through Action Plan amendment.

6.2.3 Geographic Eligibility

The Buyout Program will prioritize eligible property owners located in Disaster Risk Reduction Areas (DRRAs), also known as buyout zones. A DRRA is an area of increased hazard risk that is identified by NCCORR through a data analysis, including a review of buyout interest, repetitive loss property clusters, storm damage, floodplain location, and other natural and man-made features. DRRAs are posted on the ReBuild NC website as they are finalized. Applicants located in DRRAs in Hurricane Matthew MID counties are also eligible, but tie-back to Hurricane Florence must be demonstrated.

6.2.4 Priorities

The applicants prioritized for buyout are homeowners and households in owner-occupied property located in a designated buyout zone (DRRA). LMI homeowners and households in floodways will also be considered, once DRRAs are exhausted or if the buyout of these properties aligns with the strategic goals of NCCORR and the local municipality. Nonresidential, rental property, and vacant land in buyout zones (DRRAs) may also be bought out, as a lower priority than single-family residential property. NCCORR may buy out other property not specified herein if it is in the interest of maximizing the total area bought out. Participation in the buyout program will remain completely voluntary.

In review of the proposed buyout areas, the LMI population has been prioritized through the consistent selection and prioritization of DRRAs which are generally LMI as determined through U.S. Census Data or through conversations with local municipalities. NCCORR commits to expending at least 70 percent of the allocation on LMI individuals and households.

6.2.5 Eligible Applicants

Applicants must own damaged properties and/or land and meet the geographic eligibility requirements listed above.

6.2.6 Projected Start and End Date

As the Hurricane Matthew CDBG-DR program is beginning operation currently, this program will begin at the time of grant agreement signing from HUD.

- Start Date: Q2 2020
- End Date: Q2 2026

6.3 Affordable Housing Development Fund

Public Housing Restoration Fund			
Allocation:	\$ to LMI:	\$ to MID:	CDBG-Eligibility Criteria:
\$59,690,840	\$59,690,840	\$47,752,672	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:	% to LMI:	% to MID:	National Objective:
11%	100%	80%	LMH, UN

6.3.1 Program Description

In past allocations, NCORRR has focused on the Small Rental Repair Program and 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 Repair 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 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.

NCORR will solicit projects from 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 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 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 2019 affordable rent limits are available at https://files.hudexchange.info/reports/published/HOME_RentLimits_State_NC_2019.pdf. 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.

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.

A separate track of the Affordable Housing Development Fund is direct down payment assistance to qualified individuals seeking to purchase a home. Initially the track will target LMI renters impacted by the disaster that are ready to purchase a home. The program will explore providing funds in a second round to renters below 120 percent AMI, based on the success of the first round of funding. A specific waiver for down payment assistance is provided for at 83 FR 5861, which permits up to 100 percent of the down payment amount and allows for down payment assistance to applicants earning up to 120 percent AMI.

6.3.2 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.

The maximum award for Down Payment Assistance is 20 percent of the cost of the home or a down payment amount which ensures that the household is not “cost burdened”, whichever amount is greater. Cost burdened households are those that spend 30 percent or more of their income on housing expenses. The program will cap assistance amounts based on household size and a reasonable cost for a home purchase, based on the location of the purchase.

6.3.3 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. Specific tie-back to Hurricane Florence must be demonstrated if the proposed project is located within a Hurricane Matthew declared MID that was not also declared for Hurricane Florence. New construction, rehabilitation, and down payment assistance for home purchases must occur outside of the 100-year floodplain.

6.3.4 Priorities

Prioritization of projects will be based on the highest scoring proposals. Proposal selection criteria will include site location and suitability, proposer capacity, affordability structures - with a preference for projects effectively serving individuals and households earning less than 50 percent AMI, the total cost to construct and the CDBG-DR share of that cost, and project feasibility. Projects or solutions which present innovative approaches to the affordable housing problem after disaster will also be prioritized. Specific prioritization for the selection of projects will be published prior to the launch of applications.

Prioritization for down payment assistance will be for LMI renters impacted by Hurricane Florence. Secondary priorities include storm-impacted renters earning less than 120 percent AMI.

6.3.5 Eligible Applicants

Qualified property management organizations, public, private, or non-profit organizations, and Community Development Housing Organizations (CHDOs)/Community Based Development Organizations (CBDOs) are eligible to apply for affordable housing development funds.

Eligible applicants to the down payment assistance program are renters impacted by Hurricane Florence.

6.3.6 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

6.4 Small Rental Repair Program

Small Rental Repair Program			
Allocation: \$32,558,640	\$ to LMI: \$32,558,640	\$ to MID: \$26,046,912	CDBG-Eligibility Criteria: HCDA 105(a)(4), 105(a)(5), 105(a)(6), 105(a)(11), 105(a)(20), 105(a)(23), 105(a)(25)
% of Total Allocation: 6%	% to LMI: 100%	% to MID: 80%	National Objective: LMB, LMHI, UN

6.4.1 Program Description

The Small Rental Repair Program (SRRP) will provide assistance to landlords whose rental units experienced damage and have not been repaired or reconstructed. The program is reserved for small rental structures, including single family rental units, duplexes, triplexes, and buildings with four or fewer units. The program differs from the Affordable Housing Development Fund in that landlords and owners of rental property will apply for assistance directly, rather than providing proposals for new rental construction. NCORR may provide owner-occupied property an opportunity to convert to small rental property, if owner-occupied property owners apply for assistance and agree to comply with the terms of the Small Rental Repair Program. The program will be administered by NCORR.

6.4.2 Maximum Award

The award limits are a minimum of \$5,000 total and a maximum of \$70,000 per unit. Permissible construction costs greater than the \$70,000 cap include lead and asbestos abatement costs and NCORR-approved construction change orders if necessary and reasonable to complete construction. These additional costs are addressed in a manner consistent with the Single Family Homeowner Program.

6.4.3 Geographic Eligibility

Projects must be located in one of the disaster-declared counties for Hurricane Florence. Projects may also be located in Hurricane Matthew MID counties, if a specific tie-back to Hurricane Florence is demonstrated.

6.4.4 Priorities

The program will prioritize damaged rental units located in MID counties, followed by damaged rental units in non-MID counties.

6.4.5 Eligible Applicants

Owners of rental units with four or fewer units that experienced storm-related damage and have remaining unmet needs. A separate application is required for each property, and an owner may submit a maximum of four applications under this program. Units must be affordable to renters earning 80 percent AMI or less for at least five years. This affordability period will be enforced in a manner consistent with the affordability enforcement requirements at Part 5.4.2 above.

6.4.6 Projected Start and End Date

NCORR will open an application period for the Small Rental Program, coinciding with the rental program operating with funds from the Hurricane Matthew CDBG-DR grant.

- Start Date: Q3 2020
- End Date: Q2 2026

6.5 Public Housing Restoration Fund

Public Housing Restoration Fund			
Allocation: \$16,279,320	\$ to LMI: \$16,279,320	\$ to MID: \$13,023,456	CDBG-Eligibility Criteria: HCDA 105(a)(1), 105(a)(2), 105(a)(4), 105(a)(5), 105(a)(9), 105(a)(14), 105(a)(15), 105(a)(19), 105(a)(25)
% of Total Allocation: 3%	% to LMI: 100%	% to MID: 80%	National Objective: LMH

6.5.1 Program Description

The Public Housing Restoration Fund will be administered by NCORR. Funds from the Program can be used to rehabilitate and/or repair 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.

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 to state-manage the Public Housing Restoration fund or provide grants directly to the PHAs or PHA consortia to implement the projects using program funds through an SRA.

6.5.2 Maximum Award

The maximum award to PHAs is dependent on the actual cost of construction, not to exceed \$3 million in CDBG-DR funding per project. This cap is based on CDBG-DR costs for similar PHA work done under the Hurricane Matthew allocation. If the PHA can document additional need for CDBG-DR funds, NCORR may exercise the right to increase the grant award above \$3 million to the PHA. When the award maximum is exceeded, NCORR will document the rationale for breaking the award cap. Recovering PHAs must demonstrate that they have explored other avenues to recover post-storm, including insurance, FEMA assistance, and other funding sources.

6.5.3 Geographic Eligibility

PHAs must be located within a federally declared disaster area. New construction of units or rehabilitation of units must occur outside of the 100-year floodplain. PHAs may also be located in Hurricane Matthew MID counties, but must demonstrate a tie-back to Hurricane Florence.

6.5.4 Priorities

NCORR will prioritize PHAs with recovery needs within HUD defined MID areas.

6.5.5 Eligible Applicants

NCORR will accept applications from PHAs directly.

6.5.6 Projected Start and End Date

NCORR will open an application period for PHAs after receipt of the grant agreement from HUD. The application period for PHAs is expected to begin in Q3 2020.

- Start Date: Q3 2020
- End Date: Q2 2026

6.6 Infrastructure Recovery Program

Infrastructure Recovery Program			
Allocation: \$21,705,760	\$ to LMI: \$15,194,032	\$ to MID: \$17,364,608	CDBG-Eligibility Criteria: HCDA 105(a)(1), 105(a)(2), 105(a)(4), 105(a)(5), 105(a)(7), 105(a)(9), 105(a)(14), 105(a)(16), 105(a)(19), 105(a)(25)
% of Total Allocation: 4%	% to LMI: 70%	% to MID: 80%	National Objective: LMA, UN

6.6.1 Program Description

Previously implemented in the Hurricane Matthew CDBG-DR funded recovery as the *Community Recovery Program*, the Infrastructure Recovery Program refocuses infrastructure repair and new infrastructure development on 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. Therefore, projects selected for funding must demonstrate the tie to housing recovery or new housing development to be approved for funding. Examples include but are not limited to: roads, schools, drainage improvements, water, sewer, and wastewater treatment facilities, parks, and other public facilities that communities have determined are important publicly owned assets.

CDBG-DR funds may be used to fund improvements to PA or HMGP funded projects, if such improvements improve resiliency, useful life, or otherwise provide a housing recovery benefit or long term housing need not covered by the PA or HMGP portion of the project. While NCORR does not require a formal cost-benefit analysis, a review of costs compared to benefits will be performed as a condition of project selection. This includes an analysis of how multiple sources of funds interface to complete the project.

The Program will be managed and run by NCORR. NCORR will implement the program by providing grants to assist local jurisdictions and not-for-profits to repair and make more resilient storm damaged facilities after factoring in FEMA funding, other federal and/or state funds, private insurance proceeds, and other resources. While the program is expected to be primarily state managed, the State may enter into subrecipient agreements with units of governments or not-for-profit entities in storm impacted areas to implement specific programs if that is determined to be most advantageous for the recovery process.

Applicants must demonstrate that the facility was damaged by Hurricane Florence, that an unmet recovery need remains, that other avenues for funding have been exhausted, and that the facility is critical to restoring, recovering, or building new housing. New infrastructure projects may be considered, if part of a comprehensive plan for additional or improved housing

stock for the impacted jurisdiction. Infrastructure must comply with the elevation requirements described for infrastructure projects at Part 4.1 above.

Funded infrastructure projects must include an analysis of mitigation measures included in the infrastructure repair or new infrastructure, and how those measures align with local, regional, or state mitigation plans. Infrastructure projects must also avoid disproportionate impact on vulnerable populations and should create opportunities to address economic inequities facing recovery communities. These considerations will be part of the application for funds.

6.6.2 Maximum Award

The CDBG-DR share of the project is capped at \$2 million, but eligible, necessary, and reasonable costs above \$2 million may be allowable by NCORR after review. In instances where NCORR agrees to provide CDBG-DR funds above the cap, a rationale for that decision will be included in the project file.

6.6.3 Geographic Eligibility

Projects must be located within Hurricane Florence damaged areas declared for FEMA Public Assistance, even if the proposed project is not covered by PA funds. Projects may also be located in Hurricane Matthew MID counties, but a tie-back to Hurricane Florence must be demonstrated.

6.6.4 Priorities

NCORR will release an application for assistance which details prioritization criteria. Projects located within MID areas, projects which demonstrate adaptable and reliable technologies to guard against premature obsolescence, projects with a substantial amount of other funding available, “shovel ready” projects, projects which provide greater benefit to housing recovery, and projects which favor LMI and/or vulnerable populations will be favored in the scoring criteria.

6.6.5 Eligible Applicants

Local municipalities and not-for-profit organizations with ownership of public facilities may apply for funding. Depending on the nature of the project, NCORR may elect to enter into a contract to execute the recovery project or enter into an SRA with the proposing organization.

6.6.6 Projected Start and End Date

NCORR will open an application period in Q3 2020.

- Start Date: Q3 2020
- End Date: Q2 2026

6.7 Construction Trades Training Program

Construction Trades Training Program			
Allocation: \$5,426,440	\$ to LMI: \$5,426,440	\$ to MID: \$4,341,152	CDBG-Eligibility Criteria: HCDA 105(a)(8), 105(a)(15), 105(a)(21), 105(a)(22)
% of Total Allocation: 1%	% to LMI: 100%	% to MID: 80%	National Objective: LMC

6.7.1 Program Description

Significant and long-lasting construction is expected to take place statewide to coincide with the disaster recovery effort. In addition to a massive geographic extent throughout the State of North Carolina requiring qualified contractors and builders, strain has been placed nationwide on skilled and unskilled laborers participating in construction trades due to multiple major disasters.

To help provide qualified workers to the significant construction need, NCORR establishes the Construction Trades Training Program. The program will fund private sector and non-profit proposers that agree to operate a class, assistanceship, job shadow arrangement, or other educational program that will serve an LMI student or a group of students which together are 51 percent or greater LMI. Classes will cover a variety of topics in the construction industry including trades and non-skilled labor. Class content may cover painting, plumbing, electrical, welding, carpentry, roofing, flooring, HVAC, structural elevation, and other construction jobs typically needed in CDBG-DR funded construction programs. The objective is to train a workforce capable of contributing directly to the housing effort. This program is funded under the eligible criteria of HCDA 105(a)(8) as a public service program, and therefore is limited in scope to new service delivery and cannot exceed more than 15 percent of the total allocation to the State. NCORR will evaluate proposals to ensure that only new service delivery is funded and that federal or state funds existing for similar programs are not displaced by CDBG-DR funds.

6.7.2 Maximum Award

The award is based on the cost to administer a class or program and is paid directly to the selected proposer rather than to a student. Eligible costs include reasonable course tuition, student fees, textbooks, and class materials. In some instances, a stipend to cover travel costs and child care for students may be provided, if included as part of the education package for each student. The maximum award is the full cost of all fees necessary to execute the course of study. Costs will be evaluated as a part of the proposal review process, and at NCORR's discretion, some costs of the proposal may not be funded.

6.7.3 Geographic Eligibility

Classes and training must be held within MID areas for either Hurricane Matthew or Hurricane Florence, or other areas identified by NCORR as areas of concentrated construction, current or planned. NCORR will identify such areas during the application period, and may review proposals received and make a determination if the proposal adequately serves MID areas, even if located outside of a designated MID area.

6.7.4 Priorities

Priority is given to the highest scoring proposals received for execution of the program. Proposers with significant education delivery experience are preferred. Preference will also be given to proposers that clearly define an avenue for program participants to enter the workforce and contribute to the housing recovery directly with contractors and builders working in impacted areas. Participants in the program will have their contact information shared with builders working in nearby areas. The use of trained workers participating in the Construction Trades Training Program may contribute to the Section 3 goals for CDBG-DR funded construction businesses.

6.7.5 Eligible Applicants

Private and public sector applicants may apply to deliver courses, apprenticeships, or other models of delivery. Full participation requirements will be set forth in future guidance on the program. NCORR will coordinate with selected proposers to ensure that program participants receiving the education meet the LMI and other eligibility criteria prior to class or training start date. At its discretion, NCORR may elect to enter a contract agreement or SRA agreement with a proposer or proposers.

6.7.6 Projected Start and End Date

NCORR will advertise the availability of funds for the program in Q3 2020. Additional funds may be made available at later dates depending on the level of participation and outcomes of the first round of participation.

- Start Date: Q3 2020
- End Date: Q2 2026

6.8 Code Enforcement and Compliance Support Program

Code Enforcement and Compliance Support Program			
Allocation: \$5,426,440	\$ to LMI: \$3,798,508	\$ to MID: \$4,341,152	CDBG-Eligibility Criteria: HCDA 105(a)(3), 105(a)(16), 105(a)(19), 105(a)(25)
% of Total Allocation: 1%	% to LMI: 70%	% to MID: 80%	National Objective: LMH, UN

6.8.1 Program Description

To account for increased demand on code enforcement due to increased construction work in recovering areas, NCORR has established a Code Enforcement and Compliance Support Program. 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 specialist funded by CDBG-DR 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.

6.8.2 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.

6.8.3 Geographic Eligibility

Code enforcement support will be available in deteriorated or deteriorating areas which are disaster declared areas for Hurricane Florence, with a preference for MID areas. Code enforcement support will be available in deteriorated or deteriorating areas which are also Hurricane Matthew MID areas, but must demonstrate a tie-back to Hurricane Florence.

6.8.4 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.

6.8.5 Eligible Applicants

Local municipalities with code enforcement capacity issues due to Hurricane Florence recovery. Code enforcement officials funded through this program must meet the certification requirements of the North Carolina Department of Insurance (NCDI).

6.8.6 Projected Start and End Date

The program anticipates beginning operation after significant construction begins for Hurricane Florence Recovery. Therefore, the start date is projected to be Q4 2020.

- Start Date: Q4 2020
- End Date: Q2 2026

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7.0 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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8.0 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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9.0 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 complains, appeals, and the public notice period.

9.1 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.

9.2 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.

9.3 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. For more information on how people with disabilities can access and comment on the Action Plan, dial (800) 735-2962.

9.4 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 administering entity. The appeal will be reviewed by the administering 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.

9.5 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.
- 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.

Upon approval of the State's Action Plan, HUD will provide the State an action plan approval letter, grant terms and conditions, and grant agreement. Upon receipt of the grant agreement, the State will review and begin the process of executing the grant agreement with HUD.

9.5.1 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:

- Electronically to the NCORR CDBG-DR website: <http://rebuild.nc.gov>.
- 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 State estimates that this Action Plan will be submitted to HUD on or before March 10, 2020. Copies of the Final Action Plan will also be available upon request. The State estimates that HUD's review period shall conclude on or before April 24, 2020. Upon approval by HUD, a final version of this Action Plan will be posted on NCORR's website.