

Hurricane Helene Recovery

Summary of Preliminary Damage
and Needs Assessment

Governor Roy Cooper

October 23, 2024

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Overview

Category Summaries & State Funding Recommendations

Helene brought record rainfall, flooding, and destruction to western North Carolina

30+

Inches of local rainfall

1.4K

Landslides

1,000-year

Flood

96

North Carolina casualties

900K

Homes and businesses without power

39

FEMA disaster-declared counties

Helene survivors in western North Carolina will require a range of support

55%

of population experiencing housing cost burden

500K+

people over 18 living with disabilities

1.4M

people enrolled in Medicaid

12%

of population is without health insurance

12%

of population is below the poverty line

18%

of population is above the age of 65



The nature of the damage and the affected region have created complexities in assessing Helene's full impact



Impaired access



Difficulty of communication



Disparate nature of communities

Helene's impacts are severe and long-lasting, and recovery is likely to be costly

Widespread home losses

- **158K households** applying for federal assistance within two weeks of disaster declaration
- **92.5% of homes** with FEMA-verified flood damage did not have flood insurance

Catastrophic disruption to lifeline infrastructure

- **Electric infrastructure serving 2M households** impacted
- Losses to **163 water and sewer systems** and **400 hazardous waste facilities**
- At least **6,000 miles of roads** and **1,000+ bridges and culverts** damaged

Recovery challenges

- **Significantly higher construction costs** since COVID-19, exacerbated by competition for labor and materials for disaster recovery across the Southeast
- **Loss of income** from truncated peak tourist season and multi-year damage to economic assets

We must resolve to rebuild stronger, safer and smarter

\$6 saved per **\$1** invested
In mitigation through the public sector

\$11 saved per **\$1** invested
In adopting the latest building codes

\$4 saved per **\$1** invested
In surpassing design code minimums

Leading recoveries – characterized in part by an ability to move capital quickly and flexibly – outperform peers by 13% in GDP growth in the 5 years after a disaster

Sourced from “Bounce Back Better: Four Keys to Disaster Resilience in U.S. Communities,” Harvard Kennedy School

Preliminary damage and needs estimates are \$53.6B, which will require significant investment

\$53.6B

Total estimated
damage and needs

=

\$41.1B

Estimated
direct cost

+

\$7.6B

Estimated
indirect cost

+

\$4.8B

Strengthening
and mitigation

Other comparable
estimates

Moody's Analytics

\$38–\$58B

CoreLogic

\$30.5–\$47.5B

Significant federal and state investment will be required to address unmet needs in western North Carolina

Financial impact and recovery funding summary, \$B

Total damage and needs	\$53.6	
	—	
Expected private and other funding	\$6.3	12%
	—	
Expected federal funding	\$13.6	25%
	—	
State funded to-date	\$0.3	6%
	=	
Unfunded damage and needs	\$33.4	62%

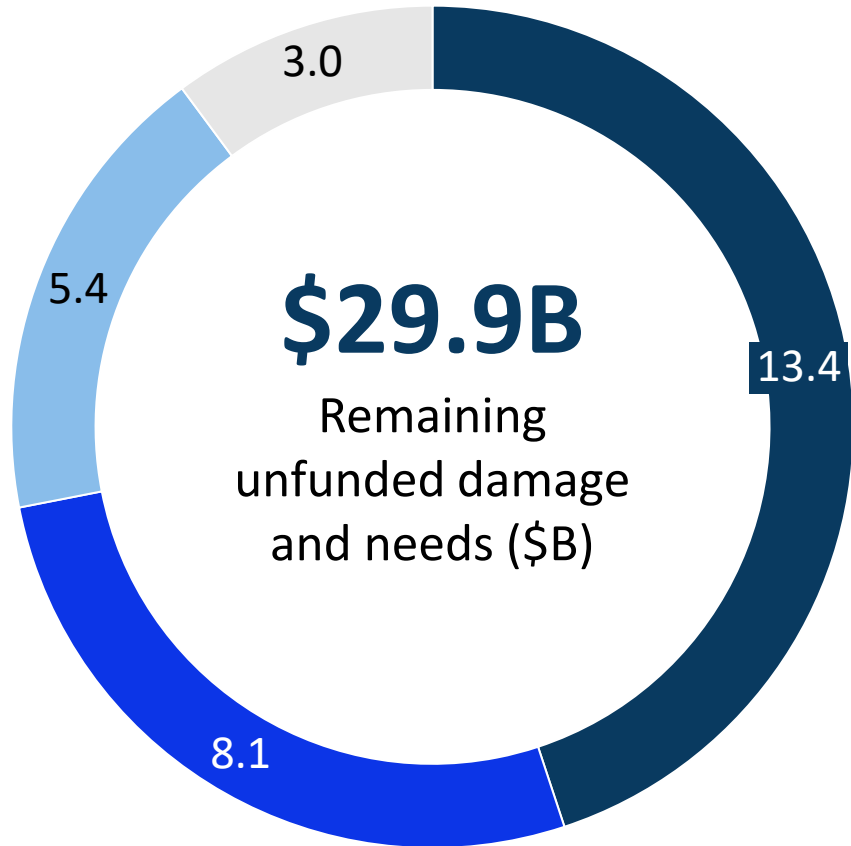
\$3.9B

Governor's funding recommendation

12%

Share of unfunded damage and needs covered by Governor's recommendation

In particular, we anticipate major unfunded damage and needs in economic recovery, housing, and transportation



Economy

Western North Carolina is losing out on **peak tourist season**, and businesses will feel long-lasting effects of this storm. **Additional investment is needed to prevent an economic spiral**

Housing

Large-scale housing needs **will only be partially covered** by private insurance, FEMA IA, and CDBG-DR

Transportation

Costs are likely to be partially covered by federal DOT. But a **significant state match will be required, and additional funding will be needed** (e.g., for private roads)

Other categories

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Overview

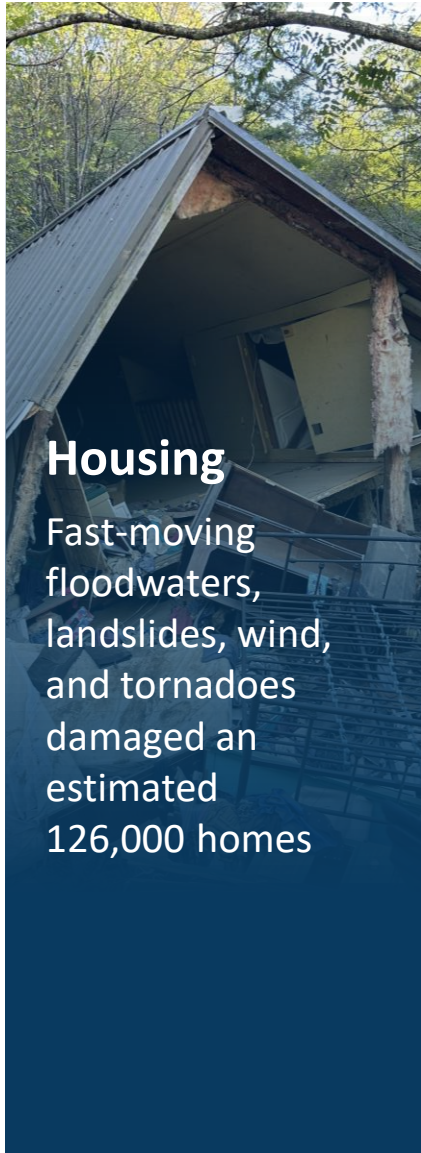
Category Summaries & State Funding Recommendations

We assessed damage and needs in nine categories; five account for 94% of the estimated total



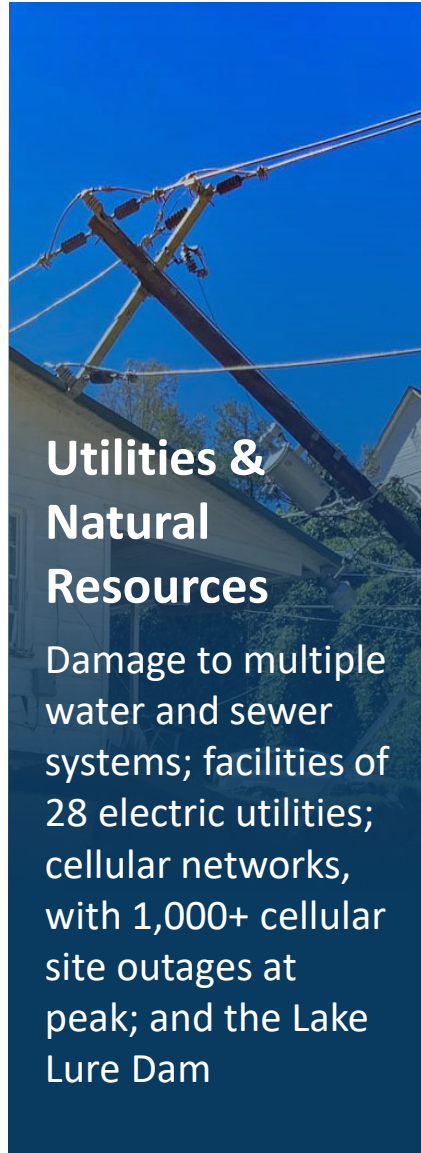
Economy

Communities affected have 115K business establishments and 384K “mom and pop” businesses



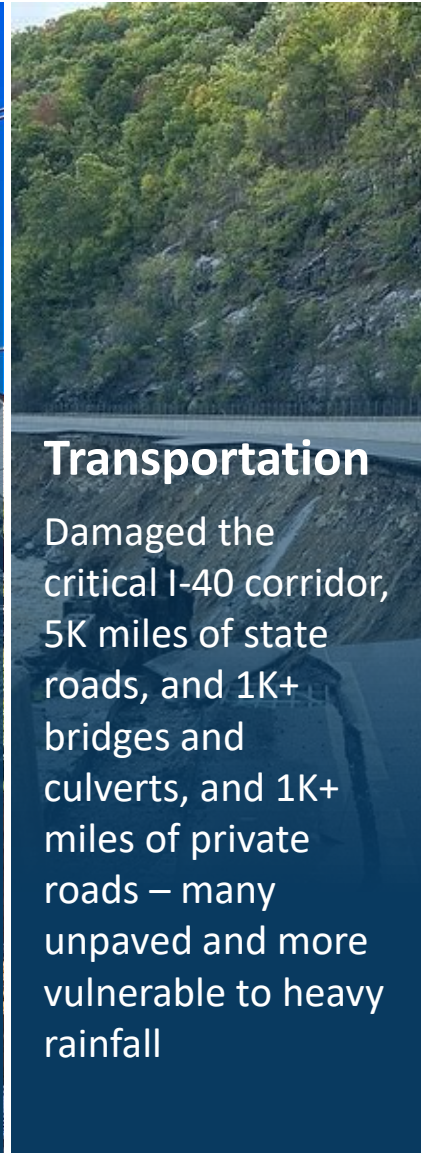
Housing

Fast-moving floodwaters, landslides, wind, and tornadoes damaged an estimated 126,000 homes



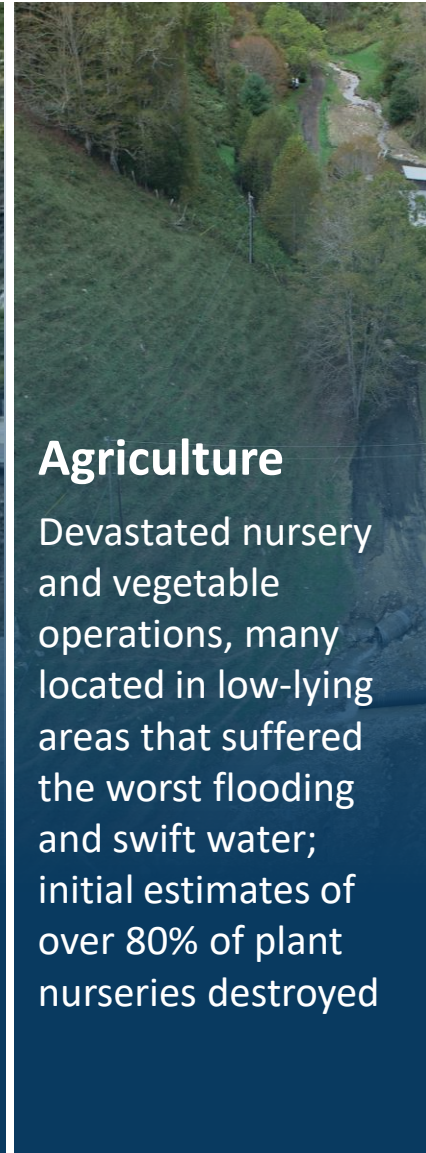
Utilities & Natural Resources

Damage to multiple water and sewer systems; facilities of 28 electric utilities; cellular networks, with 1,000+ cellular site outages at peak; and the Lake Lure Dam



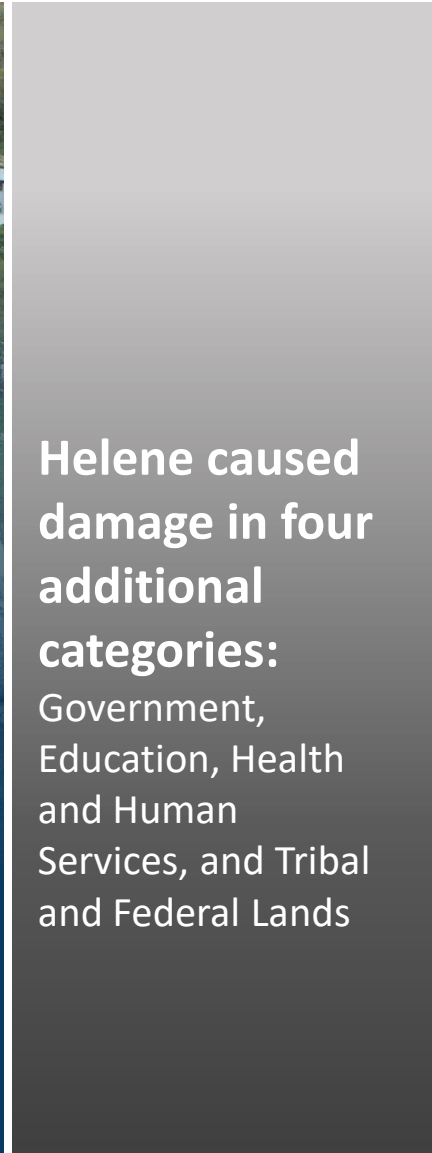
Transportation

Damaged the critical I-40 corridor, 5K miles of state roads, and 1K+ bridges and culverts, and 1K+ miles of private roads – many unpaved and more vulnerable to heavy rainfall



Agriculture

Devastated nursery and vegetable operations, many located in low-lying areas that suffered the worst flooding and swift water; initial estimates of over 80% of plant nurseries destroyed



Helene caused damage in four additional categories:

Government, Education, Health and Human Services, and Tribal and Federal Lands

Economy

\$15.9 billion

Estimated cost of damages, strengthening, and mitigation

“ *I’m watching my income evaporate, and it’s adding to my traumatization*

—Lake Lure business owner



500K+

Businesses in 39 disaster-declared counties



45%

North Carolina
GDP in declared
counties

Economy

Proposed State Funding

Program	Recommended total funding (\$M)
Helene Business Recovery Grant program	475
Local infrastructure grants	70
Golden LEAF MountainBizWorks	50
Bringing Tourists Back to Western NC	20
ReToolWNC	15
State Match for FEMA PA	14
Carolina Small Business Development Fund	6
Total	650

Housing

\$14.7 billion

Estimated cost of damages, strengthening, and mitigation

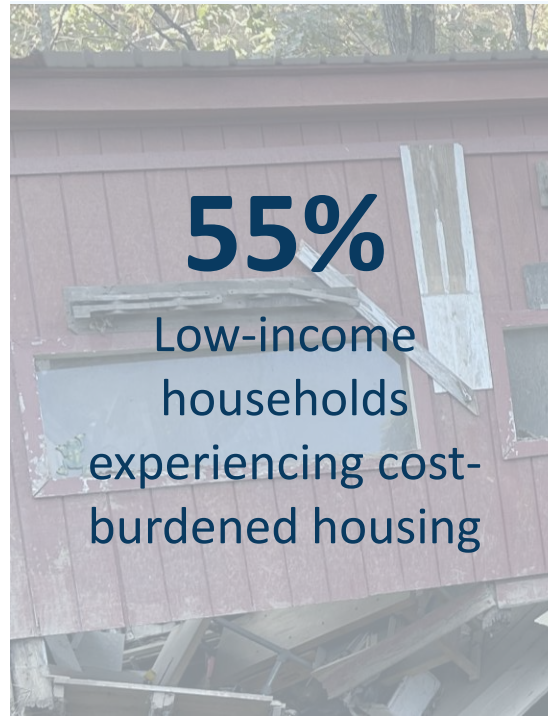
“ *We ended up with 9 feet plus right in this spot, enough to knock buildings off their foundations and roll cars down the road.*

—Newland resident
(WCNC)



92.5%

Households with flood damage that did not have flood insurance



55%

Low-income households experiencing cost-burdened housing

Housing

Proposed State Funding

<u>Program</u>	<u>Recommended total funding (\$M)</u>
Homeowner Recovery Program	325
State Match for FEMA IA	150
Affordable Housing	50
State Acquisition and Relocation Fund (SARF)	50
Rental, Mortgage, and Utility Assistance	25
Back @ Home - Helene	20
State Match for FEMA PA	10
Temporary Weatherization Program Expansion	10
Local Government Capacity	5
Transition to Community Living	2
Disaster Legal Services	1
Historic Tax Credit Bonus	1
Total	650

Utilities & Natural Resources

\$6.7 billion

Estimated cost of damages, strengthening, and mitigation

“ *The damage to the Asheville water system is catastrophic.*

—Ben Woody, Assistant City Manager (*Washington Post*)



163

Water and sewer systems damaged



2M

Households served by impacted electrical utilities

Utilities & Natural Resources

Proposed State Funding

Program	Recommended total funding (\$M)
FEMA Matching Funds	289
Water Infrastructure Resiliency and Interconnections Fund	100
Restoring Local Parks	50
Flood Abatement and Water Quality Protection Measures	50
Mapping and Modeling	45
Dams Repairs and Overtopping Study	10
Stormwater	10
Microgrids	10
Bernard Allen Emergency Drinking Water Fund	5
Grid Resilience and Hardening	4
Brownfields	3
WNC Sustainable Energy Disaster Grant Program	2
FEMA Hazard Mitigation Matching Funds	TBD
Total	578

Transportation

\$9.8 billion

Estimated cost of damages, strengthening, and mitigation

“ *It’s almost impossible to believe that water and wind alone could have torn apart rock and asphalt and the literal ground near where we’re standing.*

—Pete Buttigieg, U.S. Secretary of Transportation
(*Raleigh News & Observer*)



6K

Miles of road damaged



1K+

Bridges and culverts damaged

Transportation

Proposed State Funding

Program	Recommended total funding (\$M)
Private Road and Bridge Repairs and Replacement	46
Public Transportation Affected by Hurricane Helene	5
Improving Airport Resiliency	3
Improving NCDOT Capacity to Assess Weather-related Damage	0.8
State Match for NCDOT Road & Bridge Repairs and Replacement	TBD
Building Smarter and Stronger Resilient Roads	TBD
Local Match for Federal Funding for Municipal Road and Bridge Repairs and Replacement	TBD
Total	55

Agriculture

\$3.4 billion

Estimated cost of damages, strengthening, and mitigation

“ *Most of the crops are gone. We are going to have some livestock mortality, there is no question about that.*

— NC Agriculture
Commissioner Steve Troxler



18K+

Farms across the impacted region



5-10%

Crops covered by federal insurance

Agriculture

Proposed State Funding

Program	Recommended total funding (\$M)
Helene Agriculture Disaster Farmer Recovery Program	225
Stream Debris Removal and Stabilization	90
Helene Business Recovery Grants: Expanded Farmer Eligibility	25
Agricultural Infrastructure and Stabilization	25
Agricultural Development and Farmland Preservation Trust Fund	25
Other Federal Disaster Program Match Funds	20
Wildfire Risk and Response	12
Total	422

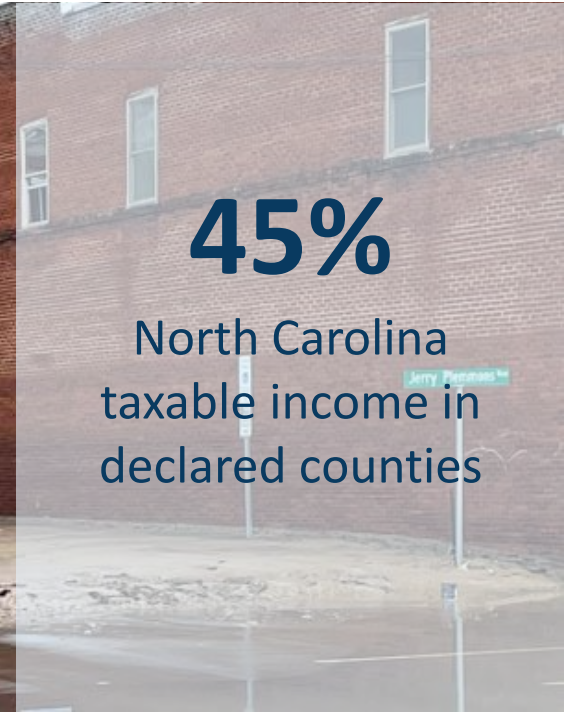
Government & Recovery Ops

\$1.4 billion

Estimated cost of damages, strengthening, and mitigation

“ *13 state parks closed in Western NC after Hurricane Helene*

— Charlotte Observer



45%

North Carolina taxable income in declared counties



300K

Acres of state-owned land



Government & Recovery Ops

Proposed State Funding

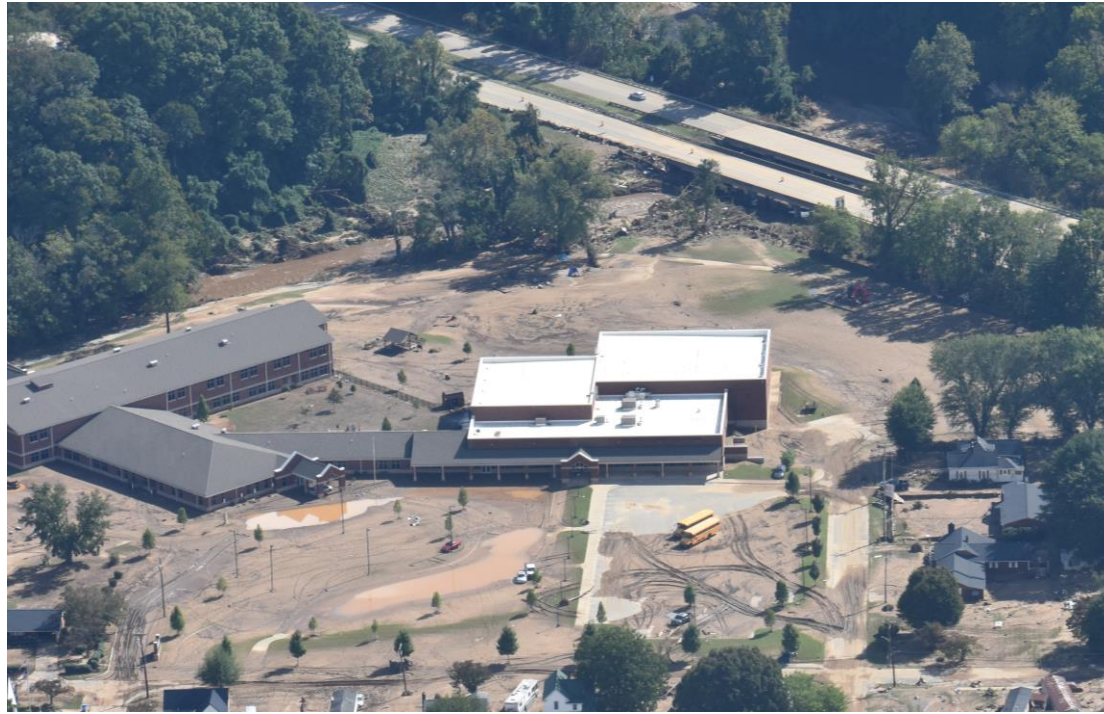
Program	Recommended total funding (\$M)
Match Funds and Cashflow Needs	250
Repair and Renovations of State and Local Facilities	102
State Match for IIJA, CHIPS, and IRA	75
Continuing Operations and Staffing	73
Local Capacity Grants	50
DNCR Grants to Local Organizations for Arts, Historic Preservation, Libraries, and Science Museums	44
Total	594

Education

\$844 million

Estimated cost of damages, strengthening, and mitigation

“ *Some districts warn students will miss up to a month of school, and others say they can't yet determine a timeline for returning to classrooms* — PBS News



1K+

Schools in impacted region



900K+

Students from declared counties



Education

Proposed State Funding

Program	Recommended total funding (\$M)
Capital Needs for K-12 and NCCCS	100
Public School Insurance Fund Solvency	50
Flexible Emergency Funding for Operations	38
State Match for FEMA PA	27
Stay-in-School Student Assistance	26
K-12 Summer Learning Programs	25
Mental Health Services	10
Small Business Center and Technical Support	4
ApprenticeshipNC Support	2
Total	282

Health and Human Services

\$724 million

Estimated cost of damage, strengthening, and mitigation

“*What I expect the next wave to be is primarily medical, where people are beginning to get sick from their circumstance, and they’re going to need a different kind of help*”

— Dr. Raymond Barfield
Palliative care specialist, Mission Hospital



145

Healthcare facilities impacted



55

Childcare centers with damage preventing reopening

Health and Human Services Proposed State Funding



Program

Recommended total funding (\$M)

Food Banks	45
Childcare center disaster relief	36
Mental health support	33
Medicaid	26
Social services surge staffing	20
D-SNAP match funding	18
Supports for individuals with I/DD	18
Local health department support	15
Critical staffing support	9
Child social services support	7
Emergency food assistance	5
Adult social services support	4
Sustainable payments to providers	3
NC Office of Emergency Medical Services (OEMS)	3
Fatality management costs	3
Time-limited public health response & recovery staff	3
Communicable disease prevention and response	2
Emergency prescription assistance program	2
Vital records cost for replacement	1
Assistive technology	0.3

Total

252

Tribal & Federal Lands

TBD

Estimated cost of damages, strengthening, and mitigation due to limited data at this time

“ *In times of crisis, it’s important that we come together and offer our help. This embodies our cultural principle of Gadugi—all of us together, helping one another—* EBCI Principal Chief



16K

Enrolled EBCI members in impacted areas



2M+

Acres of federal land in North Carolina



Western North Carolina needs immediate, flexible funds to support a robust recovery from Helene

\$53.6B

Total estimated
damage and needs

\$3.9B

Governor's funding
recommendation



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