Addresses the repair cost and revenue implications of damage to educational facilities (excludes UNC system)

1. Summary

The following is documentation of the methodology used to estimate education impacts due to Hurricane Florence.

Over 1,000 public k-12 schools, 36 community colleges, and five UNC institutions are located within the 44 FEMA-designated disaster counties in North Carolina affected by Hurricane Florence. Based on preliminary reporting, substantial damage was sustained to structures across these educational sectors, leading to delays at many institutions in resuming operations. Seven school districts were closed for 20 school days or more, and, excluding charter schools, 60 public schools across three school districts remain closed as of October 22, 2018. The preliminary economic impact across the education sector is estimated at $302.7 million. This estimate will change as additional survey data on infrastructure becomes available later this fall. Of the overall estimated impact, we expect $265.4 million to be covered by Federal, Private, and State sources of funding, resulting in an unmet education impact of $37.3 million.

<table>
<thead>
<tr>
<th>Category</th>
<th>Direct</th>
<th>Indirect/Induced</th>
<th>Total Impact</th>
<th>Expected Funding</th>
<th>Appropriated</th>
<th>Unmet Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public K-12 Schools – Operational</td>
<td>$2.0</td>
<td>$14.2</td>
<td>$16.2</td>
<td>$0.0</td>
<td>$2.0</td>
<td>-</td>
</tr>
<tr>
<td>Public K-12 Schools – Capital</td>
<td>$267.0</td>
<td>$0.0</td>
<td>$267.0</td>
<td>$26.3</td>
<td>$144.2</td>
<td>-</td>
</tr>
<tr>
<td>Community Colleges - Operational</td>
<td>$0.5</td>
<td>$8.7</td>
<td>$9.2</td>
<td>$1.1</td>
<td>$0.3</td>
<td>-</td>
</tr>
<tr>
<td>Community Colleges – Capital</td>
<td>$4.9</td>
<td>$0.0</td>
<td>$4.9</td>
<td>$0.0</td>
<td>$2.7</td>
<td>-</td>
</tr>
<tr>
<td>UNC System</td>
<td>$0.3</td>
<td>$5.1</td>
<td>$5.4</td>
<td>$0.8</td>
<td>$0.0</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$274.7</strong></td>
<td><strong>$28.0</strong></td>
<td><strong>$302.7</strong></td>
<td><strong>$28.2</strong></td>
<td><strong>$149.2</strong></td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>Resiliency efforts</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$0.0</td>
<td>-</td>
</tr>
<tr>
<td>State appropriations</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>$88.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$274.7</strong></td>
<td><strong>$28.0</strong></td>
<td><strong>$302.7</strong></td>
<td><strong>$28.2</strong></td>
<td><strong>$149.2</strong></td>
<td><strong>$88.0</strong></td>
</tr>
</tbody>
</table>

10 Forty-four counties are eligible to apply for FEMA’s Public Assistance program.
**2. Scope**

Structures in scope for education estimates include:

- Public universities (damage to university facilities is not included here; it is included with state buildings data in the Infrastructure section)
- Public K-12 schools and Charter schools
- Community colleges, including lost revenue and facilities (locally-owned)
- Private schools and universities

For reference, the number of educational institutions by sector operating in the 44 affected counties is included in the following table. Numbers of potentially affected students for UNC and independent colleges and universities includes students from the FEMA-designated counties who may be enrolled at institutions across the state.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number of Institutions in FEMA Counties</th>
<th>Number of Students from FEMA Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12 Schools (46 Local Education Agencies)</td>
<td>1001</td>
<td>577,516</td>
</tr>
<tr>
<td>Charter Schools</td>
<td>51</td>
<td>25,590</td>
</tr>
<tr>
<td>Community Colleges</td>
<td>36</td>
<td>155,790</td>
</tr>
<tr>
<td>UNC Institutions</td>
<td>5</td>
<td>54,441</td>
</tr>
<tr>
<td>Independent Colleges &amp; Universities</td>
<td>5</td>
<td>9,433</td>
</tr>
</tbody>
</table>

**3. Methodology**

**K-12 Public Schools**

*Damage to Facilities and Equipment* – Damage to public school facilities and equipment was estimated by generating an average cost per impacted school using preliminary damage assessments reported by 13 Local Education Agencies (LEAs) in FEMA-designated counties. This average cost per school was then multiplied by the number of schools in the most affected FEMA-designated counties that had yet to report damages. Based on this modeling, our preliminary estimate of damages to public school facilities and equipment is $267 million. These estimates are subject to revision as damage assessments and insurance filings proceed. The Department of Public Instruction (DPI) is currently conducting a statewide survey of all LEAs and Charter schools regarding damage to facilities and equipment and storm clean-up costs. This survey, combined with claims data received by the North Carolina Public School Insurance Fund, will be used to produce more complete estimates of
facility damage in coming weeks. Insurance and FEMA’s Public Assistance Program will cover many of the costs, but the state and local share of funding will be significant.

- The NC Public School Insurance Fund insures 85 LEAs, including 42 of the 52 LEAs located in FEMA-Public Assistance-eligible-designated counties. Only 17 LEAs have submitted claims to the Public School Insurance Fund to date, totaling $35.7 million.
- Thirteen LEAs have reported damage estimates of $177 million, including damages of $125.0 million in Onslow County alone. Of that amount, Onslow estimates they need $51.0 million to re-open the school system.

- **School Nutrition Programs** – Impacted schools suffered losses of food and equipment used to provide meals under the School Nutrition programs. Eight LEAs reported initial assessments of losses in excess of $2.0 million as of October 5. This figure is expected to rise as program officials assess the damage.

- **The North Carolina Education Lottery (NCEL)** - NCEL compared lost sales from daily games during a 14-day window surrounding Hurricane Florence with the average activity from comparable 14-day windows from the previous two months to assess the initial impact of the storm. NCEL estimates a net loss in revenue to education of $2.1 million resulting from the storm; however, there are sufficient funds in the Lottery Reserve to offset this revenue loss for FY 2018-19. Total estimated loss of lottery revenue of $9.0 million is included in the Government section, so it is not included in the education section.

- **Estimated Lost Revenue** - Lost revenue from school meals not served and reimbursed by the federal government under the school nutrition programs is estimated at $14.2 million as of October 5, 2018. The Department of Public Instruction likely experienced additional lost revenue and this number will rise as data becomes available.

**Community College System**

- **Estimated Lost Tuition Revenue** - The NC Community College System Office developed an estimate of potential lost tuition revenue based on the severity of hurricane damage in disaster-declared counties. The System used the length of college closures post-storm as a proxy for impact, dividing affected colleges into 3 categories based on when courses resumed. Colleges with the longest closures were weighted more heavily in a formula that utilized an estimated effect on enrollment multiplied by an estimated amount of lost tuition revenue per full-time equivalent student. This formula resulted in an estimated loss of $8.7 million in tuition receipts.

- **Damage to Facilities and Equipment** - The NC Community College System Office surveyed campuses regarding damage to facilities and equipment and storm clean-up costs. As of October 10, 2018, all colleges that sustained
damage had provided estimates of costs for repair and replacement of damaged facilities and equipment. Preliminary damage estimates total $5.4 million ($4.9 million to facilities and $0.5 million to equipment), with 21 of 58 colleges across the state reporting damage. Seven colleges in disaster-declared counties account for approximately 80% of the estimated monetary loss. These estimates are subject to revision as damage assessments and insurance filings proceed.

**UNC System**

- *Estimated Lost Revenue* - OSBM surveyed UNC constituent institutions regarding lost fee revenue due to storm-related disruption. Six institutions, including three of the five located in disaster-declared counties, reported an estimated loss of $5.1 million in various revenues. Of that, $3.3 million was at UNC-Wilmington. The estimated lost revenues primarily consisted of fees deposited in institutional trust funds, including health care, housing, dining, and receipts related to canceled events.

- *Estimated Storm Prep Costs* - 11 universities reported storm preparation costs of approximately $0.3 million.

- *Damage to Facilities and Storm Clean-Up* - Damage to UNC facilities and storm clean-up costs are reported separately in the state buildings and infrastructure data.

**NC Independent Colleges and Universities**

- *Estimated Lost Revenue* - No estimate of potential lost revenue has been obtained from private colleges. The NC Independent Colleges and Universities association has made a general request for financial aid assistance for students hailing from disaster-declared counties to both aid their continued enrollment and mitigate operational losses at private institutions.

- *Damage to Facilities and Storm Clean-Up* - No data has been collected regarding damage to private college facilities. Known damage was sustained to at least three institutions, but no damage estimates could be obtained.

4. **Assumptions**

- School property is insured at the same level as State government property (approximately 54% of replacement value).

5. **Primary data sources**

- Division of Emergency Management
- Department of Public Instruction
- North Carolina Education Lottery
- NC Community College System Office
- UNC System Office
• Individual UNC and Community College system institutions
• State Education Assistance Authority
• NC Independent Colleges and Universities association
• Southeast Education Alliance

6. Potential Sources of Funding for Unmet Impact

Federal:
• Federal Emergency Management Agency – Based on FEMA estimates as of October 5, 2018, the state is expected to receive $554.0 million in Public Assistance funds from FEMA with a state match of $185.0 million for a total of $739.0 million. Based on allocations from Hurricane Matthew, we anticipate that $35.1 million of those funds will be for education projects, resulting in a state match need of $8.8 million to match the $26.3 million of federal funds.
• Department of Education – in 2018 US Congress appropriated $2.5 billion to the US Department of Education for the Immediate Aid to Restart School Operations (RESTART) and Emergency Impact Aid for Displaced Students programs in response to Hurricanes Harvey, Irma, and Maria and 2017 California wildfires. Texas received a total of $263.0 million from these programs to assist with Hurricane Harvey recovery. If supplemental appropriations are made in response to 2018 disasters, it is estimated that North Carolina may receive $60.0 million from the Temporary Emergency Aid for Displaced Students program and $40.0 million from the RESTART program.
• Department of Education – Federal Supplemental Education Opportunity Grants (FSEOG). Approximately $2.0 million of unused FSEOG funds have been reallocated to date to NC public and private post-secondary education institutions in disaster-declared counties to assist students with financial need. To date, $1.1M have been allocated to community colleges and $0.8M to universities.
• Federal Communications Commission (FCC) – Emergency E-rate. The FCC provided funding following Hurricane Harvey to assist schools in Directly and Indirectly Impacted areas restore services and replace damaged equipment and to help schools which incurred additional costs due to serving displaced students. This federal funding option needs to be pursued further.

Private:
• FEMA National Flood Insurance Program – Water damages would be covered based on the structures that have coverage through NFIP; estimates are still pending.
• Private insurance – A potential $144.2 million may be available for property damages to K-12 schools from private insurance, based on preliminary modeling. However, estimates are still pending that will show the total amount across educational sectors that could potentially be covered by private insurance companies for covered damages.

Other:
• **Local Governments** – Additional funds may be provided by counties and municipalities; however, estimates are still pending. Capital facilities for K-12 public schools and community colleges are largely owned and maintained by local governments.

7. **State Funding Recommendations for Unmet Impact**

*Rebuilding - $74 million*

**State Match for FEMA Public Assistance Funds - $9.0 million**

Provides funding for the state share of FEMA funding for public assistance. Allocations are estimated based on proportions from Hurricane Matthew. Public assistance projects for educational operations and facilities could potentially include emergency protective measures and debris removal, infrastructure and equipment repair and replacement, cost-effective hazard mitigation to protect the facilities from future damage, and temporary facilities.

**Flexible Emergency Funding for Public School Capital – $25.0 million**

Allocates $25.0 million from the Education Lottery Fund to provide emergency funding for schools to address damages to facilities caused by Hurricane Florence and allow them to reopen. Seven LEAs remain closed as of October 8.

**Flexible Emergency Funding for Public School Operations – $25.0 million**

Provides $25.0 million in flexible funding for LEAs to address operational needs related to the storm, including transportation, mental health needs, and the North Carolina Virtual Public School (NCVPS).

• **Transportation** - LEAs receive funding for school bus fuel through DPI’s Transportation Allotment, which provides a block grant to each district to provide to- and from-school transportation for students in grades K-12. Longer bus routes caused by storm damage, displaced students, and federal McKinney-Vento Homeless Education Assistance Act requirements may increase fuel costs for impacted districts. OSBM estimates that additional funds of up to $2.0 million may be necessary.

• **Students in Crisis Grants** – Provide crisis services and/or training to help students develop healthy responses to trauma and stress in the most heavily impacted disaster-declared areas through the existing Students in Crisis grant program. Analyses of mental health service demand following Hurricane Matthew conducted by Trillium Health Services showed a dramatic increase in demand for services for children, especially children age 13 and under. Extrapolating this data, Trillium predicts a 50-60% surge in demand for children 13 and under and overall increase in demand of 35-45%
for children 18 and under lasting up to eight months. The estimated cost to increase the number of school counselors on a contract basis in the 18 LEAs which missed more than nine days of school to the recommended national ratio of 1:250 students is $12.0 million.

- **Average Daily Membership (ADM)** - The storm disrupted DPI’s student accounting process, which adjusts funding to LEAs and Charter schools based on the first two months’ ADM. A hold harmless for FY 2018-19 only for LEAs and charter schools located in the most heavily impacted disaster-declared counties would provide needed stability for affected schools.

- **North Carolina Virtual Public School (NCVPS)** - The state-funded North Carolina Virtual Public School offers on-line courses for middle and high school students. For students in impacted areas anticipated to be out of school for 20 days or more, enrollment in NCVPS courses may help fill in the educational gap. Extending enrollment deadlines for NCVPS course and reducing or waiving payments for students in disaster-declared areas would allow more students to take advantage of this option.

**Stay-in-School Student Assistance – $10.0 million**

Assists students from disaster-declared counties who may have trouble maintaining enrollment due to disruptions to family income, ability to pay, and other negative storm-related impacts. Funds will assist affected students with paying for tuition, fees, and emergency expenses that impact a student’s ability to remain enrolled. Each system will have flexibility to develop program guidelines and assess need for applicants. Eligible recipients must be NC residents and either have a FEMA-designated county as their primary residence or be attending an eligible post-secondary education institution in a FEMA-designated county. Funds will be allocated as follows, with funding administered by community colleges and by the State Education Assistance Authority for UNC and independent colleges:

- $6.0 million: NC Community College System
- $3.5 million: UNC System
- $0.5 million: NC Independent Colleges and Universities

**Community College Tuition Receipts – $5.0 million**

Offsets an anticipated receipts shortfall at affected community colleges due to enrollment declines caused by Hurricane Florence. Tuition receipts are pooled at the system level, thus a shortfall in receipts will have impacts across all colleges. An anticipated shortfall of approximately $8.7 million is projected based on enrollment declines experienced following Hurricane Matthew.


**School Nutrition Employee Compensation - $6.5 million**

Allocates funds to the Department of Public Instruction for the compensation of school nutrition employees in counties impacted by Hurricane Florence whose
compensation would otherwise have been provided by school meal receipts as part of the National School Lunch Program or School Breakfast Program.

**Capital Recovery Funds – Public School Facilities - $60.0 million**

Allocates funds to the Department of Public Instruction for repair and renovation of facilities damaged by Hurricane Florence for local school administrative units, lab schools, and the Innovative School District.

**Capital Recovery Funds – NC Community College System - $5.0 million**

Allocates fund to the North Carolina Community College System Office for repair and renovation of local community college facilities damaged by Hurricane Florence.

**Budget Stabilization Funds for the NC Community College System - $8.5 million**

Allocates funds to the North Carolina Community College System Office to offset an anticipated receipts shortfall at affected community colleges due to enrollment declines caused by Hurricane Florence.

**Emergency Grants for Affected Postsecondary Students (NCCCS) - $5.0 million**

Allocates funds to the North Carolina Community College System Office (NCCCS) to assist students from disaster-declared counties with paying for tuition, fees, and emergency expenses that impact a student’s ability to remain enrolled.

**Emergency Grants for Affected Postsecondary Students (UNC) - $2.0 million**

Allocates funds to the University of North Carolina (UNC) to assist students from disaster-declared counties with paying for tuition, fees, and emergency expenses that impact a student’s ability to remain enrolled.

**Emergency Grants for Affected Postsecondary Students (NCICU) - $1.0 million**

Allocates funds to the State Educational Assistance Authority for North Carolina Independent Colleges and Universities (NCICU) to assist students from disaster-declared counties with paying for tuition, fees, and emergency expenses that impact a student’s ability to remain enrolled.