Hurricane Florence has smashed into the Carolinas and both states are confronting swollen rivers, flooding and the enormous task of cleaning up in the aftermath of the havoc. Over 130 public schools have been opened as emergency shelters throughout NC and SC. With their ubiquity, location and size, schools are crucial infrastructure for helping communities wait out and recover as quickly as possible from natural disasters.

A 2017 Pew Charitable Trust Report noted that the risk of flooding is widespread, especially the Atlantic Coast, Gulf Coast, Mississippi River corridor and southwestern Arizona. Inland counties in Florida, North Carolina, Louisiana and Virginia. The Pew Report states that 6,353 schools serving 4 million students are located in the 100 most flood-prone counties in the nation.

Designing public school facilities to withstand severe weather conditions needs to be a key part of the federal government’s infrastructure policy going forward. Hurricanes, floods, tornadoes, and wildfires are increasingly a fact of life for public school officials who are responsible for the safety of 55 million students. There were 59 Presidential disaster declarations in 2017 alone.¹ But unfortunately, only $600 million of the $278 billion FEMA spent from 2005-14 went for pre-disaster mitigation, where it would have been most effective.²

“Invest in Resilient Public School Infrastructure,” provides a national overview that offers insights on the impact of natural disasters on our nation’s schools … and why increased federal support is so essential and timely, not just during disasters but all year long.

Key Facts:

- **Most school facilities are not built to withstand natural disasters.** The basic dilemma is that schools built more than 15 years ago were built to meet outdated safety codes and building standards. The average age of school facilities is now 44 years old. According to a 2017 FEMA School Natural Hazard Safety report, “Older school facilities are particularly vulnerable to natural disasters and in most cases school administrators do not have the financial resources to address these vulnerabilities” even though they have “a moral, and in many cases, legal responsibility to make these schools more resilient to disaster.”

- **FEMA has spent billions rebuilding school facilities since Hurricane Katrina--after the fact.** FEMA has spent billions of dollars helping school districts rebuild school facilities. Schools in New Orleans and surrounding parishes received billions of dollars in the aftermath of Katrina. Over the years Louisiana has been the hardest hit state in the nation, with 11 school districts receiving FEMA support to recover from hurricanes and extensive flooding. FEMA aid comes with conditions and can be slow to access.

- **Only a small percentage of FEMA funds are spent on pre-disaster mitigation projects.** Between 2005 and 2014, the federal government spent $277.6 billion on disaster assistance. Of that total sum less than $600 million was allocated to the FEMA pre-disaster mitigation program.³ K-12 schools are eligible for mitigation grants for flood proofing, safe wind retrofits and community-safe room construction, which can hold between 400 to 800 people.⁴ Since 1989, FEMA has funded more than 1,000 K-12 mitigation projects.⁵ A recent study by the National Institute of Building Sciences, entitled Natural Hazard Mitigation Saves: 2017 Interim Report, states that every $1 spent on mitigation at the front end saves $6 in federal disaster relief after a disaster, and every $1 spent on exceeding the existing building code saves $4.
Examples of Questions to Ask School District & State Department of Edu. Officials:

1. Are the schools in your district designed and constructed to withstand and operate in extreme weather events?
2. Are there district and school-level disaster management plans that are shared with the community, first responders, and staff?
3. Has your school district ever received a FEMA mitigation grant?
4. Are there protocols and training for teachers about talking with children about natural disasters?
5. What did the school district do to prepare for this event?
6. Do schools have emergency generators ready to operate, in case of power outages?
7. Which schools are designated as shelters to serve the community? Do they have adequate supplies?
8. Does the school district have a system of tracking the space, equipment, furniture, supplies, and staff time that it had to use in recovery on behalf of its community, so it can be reimbursed by FEMA?
9. Has the district secured its data and information systems with off-site back up to ensure it can quickly access data and information, even if main facilities are inaccessible or damaged?
10. What has your state department of education done to help school districts prepare for natural disasters?
11. Are your local officials supporting federal legislation to include public school facilities in a federal infrastructure bill?

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In 2004, the Red Cross shelter located at West Florida High School housed approximately 500 Pensacola residents who
were seeking shelter from Hurricane Ivan. Photo: By U.S. Navy photo by Photographer's Mate 2nd Class Mark A. Ebert [Public domain], via Wikimedia Commons

### Top 15 School Districts that Received the Most Disaster Assistance from FEMA 1999-2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Type of Storm</th>
<th>State</th>
<th>District</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/29/2005</td>
<td>Hurricane</td>
<td>Louisiana</td>
<td>Saint Bernard Parish</td>
<td>$517,837,397</td>
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<td>New Orleans</td>
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<td>Saint Tammany</td>
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<td>9/13/2011</td>
<td>Severe Storm</td>
<td>South Dakota</td>
<td>Owego Apalachin</td>
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<tr>
<td>5/10/2011</td>
<td>Flood</td>
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<td>Minot</td>
<td>$57,223,495</td>
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<tr>
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<td>Hurricane</td>
<td>Missouri</td>
<td>Bay St. Louis</td>
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<td>10/24/2005</td>
<td>Hurricane</td>
<td>Florida</td>
<td>Broward County</td>
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<td>8/14/2016</td>
<td>Flood</td>
<td>Louisiana</td>
<td>E. Baton Rouge</td>
<td>$50,330,818</td>
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<tr>
<td>9/13/2011</td>
<td>Severe Storm</td>
<td>New York</td>
<td>Binghamton</td>
<td>$47,690,779</td>
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<td>Louisiana</td>
<td>Ascension Parish</td>
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<td>11/1/2011</td>
<td>Earthquake</td>
<td>Virginia</td>
<td>Culpeper</td>
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<td>5/10/2011</td>
<td>Flood</td>
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<td>Charleston R-1</td>
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<td>8/9/2012</td>
<td>Flood</td>
<td>Louisiana</td>
<td>Saint John the Baptist</td>
<td>$38,965,034</td>
</tr>
</tbody>
</table>

Source: FEMA Public Assistance Funded Projects Summary - Open Government Initiative

### Additional Sources of Information:

- **A guide by FEMA for Public Schools**: In 2017, FEMA issued a guide book, Safer, Stronger, Smarter: A Guide to improving natural hazard safety. This is a useful guidebook for K-12 school administrators and provides guidelines for addressing a wide range of natural hazards from hurricanes, flooding, tornadoes, wildfires, etc.

- **A training video** on safety and emergency planning for school districts, by the National Council on School Facilities: The K 12 Safety and Emergency Operations Plan

- **The National Commission on Children and Disasters**: 2010 Report to the President and Congress: A comprehensive review of Federal disaster-related laws, regulations, programs, and policies to assess their responsiveness to the needs of children and make recommendations to close critical gaps.

- **Guidance for educators on helping children after a natural disaster**: Information for Families and Educators, offered by the National Association of School Psychologists

- **A policy brief** on the need for federal program to modernize our public schools to be more resilient. Invest in Resilient Public School Infrastructure, by the [Re]Build America’s School Infrastructure Coalition (BASIC)

- **Issue briefs and reports on preparing schools for natural disasters** designing resilient schools to withstand natural disasters, The National Clearinghouse for Educational Facilities (NCEF) www.ncef.org/

### About [Re]Building America's School Infrastructure Coalition (B.A.S.I.C.)

B.A.S.I.C. is gaining political traction through numerous Capitol Hill meetings. Since its inception in December 2017, B.A.S.I.C. has conducted more than 100 congressional visits to key legislators and staff to make the case for schools getting their share of federal infrastructure funds. We believe that the next Congress will make infrastructure legislation a top priority and that there will be significant bipartisan support to pass the legislation if a dedicated revenue stream can be found.
To learn more: Visit B.A.S.I.C.'s website, which includes state-by-state maps showing the:
1) Current investment gaps, state by state;
2) Breakdown of how much of the $100 billion each state would get in funding;
3) Number of jobs a $100 billion investment in school facilities would generate.

Other sources of information are our 2016 State of Our Schools Report, with extensive state data, and our infographic that offers a one-page summary.

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Footnotes:
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