DISASTER RECOVERY

School Districts in Socially Vulnerable Communities Faced Heightened Challenges after Recent Natural Disasters
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What GAO Found

Most school districts that received key federal disaster recovery grants following 2017-2019 presidentially-declared major disasters had elevated proportions of students from certain socially vulnerable groups, according to GAO’s analysis of federal data. Research shows that socially vulnerable groups—including children who are low income, minorities, English learners, or living with disabilities—are particularly susceptible to the adverse effects of disasters. School districts serving high proportions of children in these groups may need more recovery assistance compared to districts with less vulnerable student populations. The Federal Emergency Management Agency’s (FEMA) Public Assistance program and the Department of Education’s Immediate Aid to Restart School Operations (Restart) program may provide such assistance. GAO found that 57 percent of school districts receiving these key grants for 2017-2019 disasters served a higher than average proportion of students in two or more of these socially vulnerable groups, compared to 38 percent of all school districts nationwide.

Officials from five selected school districts in socially vulnerable communities described heightened challenges recovering from recent natural disasters. These challenges generally fell into four areas of recovery: emotional, academic, financial, and physical (see figure). For instance, officials said the disasters caused significant emotional trauma to students due to stressors including extended housing instability, food insecurity, parental job loss, and social disconnection. To address these needs, districts worked to obtain additional mental health and support services. But officials cited frequent challenges in doing so. For instance, officials in two rural districts said their communities lacked sufficient qualified mental health providers.

Key Aspects of School Recovery from a Natural Disaster or Emergency

Through its Restart grant program, Education helped support a range of school recovery efforts after 2017-2019 natural disasters, awarding nearly $940 million in six states and three U.S. territories. School districts used funds to make physical repairs, acquire portable classrooms, and provide mental health and academic services to students, among other things. Education also worked proactively to help applicants with urgent recovery needs, such as by advancing a portion of anticipated grant funding early to help jumpstart recovery projects. Through such efforts, the Restart program played a key role in helping schools resume operations and meet students’ needs following disasters.
Abbreviations

CCD       Common Core of Data
CDC       Centers for Disease Control and Prevention
COVID-19  Coronavirus Disease 2019
FEMA      Federal Emergency Management Agency
FRPL      free or reduced-price lunch
PA        FEMA’s Public Assistance program
Restart   Immediate Aid to Restart School Operations

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January 18, 2022

Congressional Committees

Since 2017, over 300 presidentially-declared major disasters have occurred across all 50 states and all U.S. territories, according to the Federal Emergency Management Agency (FEMA). Many natural disasters have had devastating effects on K-12 schools and the communities in which they are located—especially socially vulnerable communities for whom disaster recovery is more challenging. We have found that school districts affected by natural disasters have faced a range of recovery challenges, including trauma and mental health issues among students and staff, lost instructional time, staff burnout, and financial strain.

The Additional Supplemental Appropriations for Disaster Relief Act of 2019 included provisions for GAO to audit issues related to presidentially-declared major disasters that occurred in 2018. This report describes (1) the extent to which school districts that recently received key federal disaster recovery grants served students from selected socially vulnerable groups; (2) how selected K-12 school districts in socially vulnerable communities have experienced recovery from recent natural disasters; and (3) the extent to which the Department of Education’s

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1Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, the President may declare that a major disaster exists in response to a Governor’s or Tribal Chief Executive’s request if the disaster is of such severity and magnitude that effective response is beyond the capabilities of the state, tribal, or territorial government and federal assistance is necessary. 42 U.S.C. § 5170. For the purposes of this report, the term U.S. territories refers to American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and the U.S. Virgin Islands.

2Social vulnerability refers to the susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood. High levels of social vulnerability (including poverty, limited English proficiency, disability, and minority status) within a community generally signify a greater need for continued recovery support. See Federal Emergency Management Agency, National Risk Index Primer (Nov. 2020) and Centers for Disease Control and Prevention, CDC SVI 2018 Documentation (Jan. 31, 2020).


Immediate Aid to Restart School Operations (Restart) grant program supports disaster recovery in K-12 schools. This work builds on our October 2020 report, which examined how the Coronavirus Disease 2019 (COVID-19) pandemic affected school districts recovering from natural disasters, including their use of Education’s disaster recovery grants.

To address the first research question, we identified the percentage of U.S. public school districts in counties that experienced presidentially-declared major disasters in calendar years 2017 through 2019 using FEMA disaster declaration data and school district data from Education’s Common Core of Data (CCD). We also analyzed administrative data to determine which of these districts received funding from FEMA’s Public Assistance (PA) program and Education’s Restart grant program, two key federal disaster recovery programs available to assist school districts.

We first used data matching techniques to identify PA grant recipients that were school districts. We then compared characteristics of recipient districts with those of the broader K-12 universe using data from the CCD. We focused on four selected characteristics associated with social vulnerability: (1) free or reduced-price lunch eligibility, (2) racial or ethnic

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5In this report, we generally refer to state and territory educational agencies as states. We refer to local educational agencies as school districts.

6See GAO-21-62R.

7Our review also includes school districts in locations other than counties (e.g., territorial municipalities) that experienced presidentially-declared major disasters during this time period. (We refer to all such locations as counties in this report.) Our review focused on natural disasters and did not include other incident types, such as biological disasters including the COVID-19 pandemic.

8For the purposes of this report, we use the term key federal disaster recovery grants to refer to grants issued through FEMA’s PA program and Education’s Restart program. PA is the largest disaster recovery program administered by FEMA, and provides, among other things, financial assistance to help public entities remove debris; take emergency protective measures; and repair, replace, or restore publicly-owned facilities that are damaged by disasters. For the timeframe of our review, Restart was the largest disaster recovery program administered by Education. Restart funds are available specifically to help public and non-public schools reopen and restart school operations following eligible natural disasters.

9Specifically, we matched school district names in Education’s CCD to grantee names in FEMA’s PA recipient dataset to identify school districts that received PA grants directly. We also electronically reviewed PA project names to identify PA grants designated for public schools, but where the primary recipients were other entities. We then manually matched those applicants to the appropriate school district in the CCD. There may be other school districts that have received or benefitted from PA grants.
minority status, (3) English learner status, and (4) disability status. These characteristics are similar to those included in Centers for Disease Control and Prevention’s (CDC) Social Vulnerability Index. Specifically, we assessed whether districts that received grants from FEMA’s PA program, Education’s Restart program, or both had higher proportions of students with these characteristics than the national average. We compared these results to those of all U.S. public school districts nationwide. To assess the reliability of these data, we interviewed agency officials and reviewed related documentation. We determined the data to be sufficiently reliable to identify which school districts were in counties that experienced presidentially-declared major disasters, which districts received key federal disaster grants, and whether districts had higher proportions of students from vulnerable groups than the national average.

To address the second research question, we interviewed state educational agency and emergency management officials in three states (Florida, North Carolina, and Texas) to understand the effects of recent natural disasters on school districts, and any additional recovery challenges faced by districts in socially vulnerable communities. We selected these states because they were affected by 2017-2019 natural disasters, received Restart grants following these disasters, and contributed to a demographically diverse group. We then selected and interviewed officials in five school districts in socially vulnerable communities within these states to gather information about their recovery experiences. We selected these districts based on their county’s social vulnerability scores in the CDC Social Vulnerability Index, as well as recommendations from state education officials. Finally, we reviewed federal resources and academic literature on social vulnerability and K-12 disaster recovery, and interviewed subject matter experts to provide context for our interview findings.

10The CDC’s Social Vulnerability Index uses 15 U.S. Census variables to help local officials identify communities that may need support before, during, or after disasters.

11The national average refers to the proportion of all U.S. public school students with a selected characteristic.

12We also compared results for grant recipients to those of non-recipients, and found results similar to our comparison with all U.S. public school districts.

13We selected school districts in counties with moderate-to-high or high social vulnerability scores.
To address the third research question, we interviewed officials in Education’s Disaster Recovery Unit and other relevant offices. We also interviewed officials from our selected states and school districts that received Restart funding to learn about their experiences applying for and using this program. Additionally, we reviewed Restart summary grant data, state grant reports, and other program documentation to understand the ways states and districts have used Restart funding to support their recovery efforts and any challenges related to program administration. Finally, we reviewed relevant federal laws authorizing and funding the Restart program and agency guidance provided to grantees.

We conducted this performance audit from November 2020 to January 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Disaster Recovery for K-12 Public Schools

After responding to immediate concerns during a disaster, such as saving lives and property, schools begin the recovery process, working to restore the learning environment. Education outlines four fundamental aspects of school recovery after a disaster: (1) emotional, (2) academic, (3) financial, and (4) physical.14

14Department of Education, Guide for Developing High-Quality School Emergency Operations Plans (Washington, D.C.: June 2013). We modified these category titles for the purposes of this report. Specifically, where Education uses the term fiscal, we use financial, and where it uses the term psychological and emotional, we use emotional.
When students cannot attend school following a disaster, the entire community and its ability to recover is negatively affected, according to FEMA. School closures interrupt students’ education, disrupt their routines, and suspend needed school services. Further, parents may be unable to work or participate in community recovery efforts until schools are reopened, stalling the recovery process for families and the community as well. Therefore, the ability of schools to withstand and recover from disasters is critical to community recovery. However, school recovery can be a lengthy, complicated process.

**Social Vulnerability and Natural Disasters**

Government and academic research indicate that natural disasters do not affect all communities equally; rather, certain groups are more vulnerable to disasters than others. Social vulnerability refers to the heightened susceptibility of certain social groups—including children, minorities, English learners, people with disabilities, and those who are poor—to the adverse impacts of natural hazards, including disproportionate death,

15Additionally, FEMA notes that school buildings often serve as designated shelters following disasters.

injury, loss, or disruption of livelihood. Social vulnerability is also cumulative; having more than one vulnerability factor—such as children living in poverty—raises a group’s susceptibility to the adverse impacts of disasters.

A community’s level of social vulnerability influences its ability to prepare for, respond to, recover from, and adapt to environmental hazards. For example, one study of post-Hurricane Ike disaster response and recovery outcomes around Galveston, Texas found that socially vulnerable neighborhoods experienced more negative outcomes, such as later and lower evacuation rates and greater relative levels of damage to homes. It also found that socially vulnerable neighborhoods had more limited insurance coverage. Accordingly, repair and rebuilding activity occurred more slowly and less frequently in these areas.

According to the CDC, high levels of social vulnerability within a community generally signify a greater need for continued disaster recovery support. Likewise, high levels of social vulnerability in a school district may signify a greater need for disaster recovery support. For instance, students in more socially vulnerable districts may need additional services to recover emotionally and academically from a disaster. The districts themselves may also face resource constraints and need additional support to recover financially and physically. Without these additional resources, their recoveries may take longer than school districts with less vulnerable populations.

Selected Federal Funding for K-12 Disaster Recovery

Education and FEMA administer grant programs that can help K-12 schools and school districts recover from natural disasters. For instance:

- Education’s Immediate Aid to Restart School Operations (Restart) program is the agency’s largest disaster recovery program to support school recovery from 2017-2019 disasters, providing nearly $940

17FEMA, National Risk Index Primer (2020).
18FEMA, National Risk Index Primer (2020).
20CDC, CDC SVI 2018 Documentation (2020).
million in recovery funds for disasters in this time period.\textsuperscript{21} It assists in reopening schools and restarting operations by providing funding for a range of needs, such as replacing instructional materials, cleaning and making minor repairs to school facilities, hiring specialized staff to address trauma, and renting portable classroom units.\textsuperscript{22} Restart has been funded periodically through emergency supplemental appropriations, most recently for the 2017-2019 disaster seasons.\textsuperscript{23}

- FEMA’s Public Assistance (PA) program is its largest grant program available to state, local, tribal, and territorial governments and other eligible entities for responding to and recovering from presidentially-declared major disasters.\textsuperscript{24} FEMA awarded about $45 billion in total PA funding for response and recovery from 2017-2019 disasters. Additionally, PA is a key source of funding for K-12 school districts recovering from natural disasters.\textsuperscript{25} PA provides, among other things, grants to repair or replace damaged educational facilities, such as

\textsuperscript{21}This figure is based on our analysis of Education grant data. Education also administers other relevant K-12 disaster recovery grant programs: (1) Project School Emergency Response to Violence, which provides funds to restore the learning environment after traumatic events, including natural disasters; (2) Assistance for Homeless Children and Youth, which provides funds to support children and youth who are homeless as a result of a covered disaster or emergency; and (3) Temporary Emergency Impact Aid for Displaced Students, which provides funds to educate students who were displaced due to a covered disaster or emergency.

\textsuperscript{22}Education awards Restart funds to state educational agencies (states), which in turn provide funding or services to local educational agencies (school districts). States must also make assistance available to non-public schools.

\textsuperscript{23}Restart was created in December 2005, following Hurricanes Katrina and Rita, and it provided $750 million in funding to support school recovery from those disasters. Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006, Pub. L. No. 109-148, 119 Stat. 2680 (2005). Congress provided additional funding for Restart in February 2018 to assist states and school districts affected by Hurricanes Harvey, Irma, and Maria, or wildfires in 2017 for which a major disaster or emergency was declared under the Stafford Act. Further Additional Supplemental Appropriations for Disaster Relief Act, 2018, Pub. L. No. 115-123, 132 Stat. 871, 891.

\textsuperscript{24}Other eligible entities include certain types of private non-profits.

\textsuperscript{25}Other sources of FEMA funding may be available to some school districts, such as hazard mitigation grants.
PA also provides funding for costs districts may incur during or immediately following a disaster, such as for emergency protective measures or debris removal. PA covers at least 75 percent of these eligible costs, while states or other applicants must cover the remaining share.

We found that over one-half (54 percent) of public school districts were in counties that experienced presidentially-declared major disasters from 2017 through 2019, based on our analysis of FEMA data (see fig. 2). These school districts included over two-thirds (67 percent) of all students across the country.

26For instance, FEMA PA grants can be used to cover costs of eligible repairs that are not covered by insurance, which may include deductibles.
However, disaster declarations alone are insufficient to establish whether any particular school district was affected by a disaster.\footnote{For instance, school district and county boundaries can differ, and disasters may affect parts of a county that are outside the boundaries of the school district. Other disasters—such as a tornado that touches down in just one neighborhood—may not interrupt school operations or create need for additional school-based services.} Because neither FEMA nor Education gather comprehensive data on the extent to which school districts experience effects of natural disasters, we used federal grants data to identify school districts that received key disaster recovery grants.\footnote{We did not evaluate the extent to which school districts were affected by natural disasters but did not receive such grants.} We found that almost five percent of all public school districts, including 39 of the 100 largest school districts in the country, received grants from FEMA’s PA program, Education’s Restart program, or both—following 2017-2019 natural disasters (see table 1).
Many school districts that received these key disaster grants were concentrated along the East Coast, Gulf of Mexico, and Caribbean. These districts commonly experienced hurricanes. Other school districts were located in the Midwest, West, and Pacific, and experienced disasters including tornados, wildfires, and volcanic eruptions (see fig. 3).

Table 1: Number of Public School Districts That Received Key Federal Disaster Recovery Aid for 2017-2019 Presidentially-Declared Major Disasters

<table>
<thead>
<tr>
<th>Federal disaster recovery grant (administering agency)</th>
<th>Number of school district recipients</th>
<th>Percent of all U.S. public school districts</th>
<th>Percent of all U.S. public school students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Aid to Restart School Operations only (Department of Education)</td>
<td>111</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Public Assistance only (Federal Emergency Management Agency)</td>
<td>578</td>
<td>3.1</td>
<td>9.4</td>
</tr>
<tr>
<td>Received both Immediate Aid to Restart School Operations and Public Assistance</td>
<td>151</td>
<td>0.8</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>840</strong></td>
<td><strong>4.5</strong></td>
<td><strong>18.2</strong></td>
</tr>
</tbody>
</table>

Note: GAO defined key disaster recovery grants as FEMA’s Public Assistance (PA) program and Education’s Immediate Aid to Restart School Operations (Restart) grant program—two federal disaster recovery programs available to school districts that experienced 2017-2019 disasters.

Most School Districts That Received Key Federal Disaster Recovery Grants Had Elevated Proportions of Students from Selected Socially Vulnerable Groups

Using Education data, we identified elevated rates of social vulnerability among school districts that received key disaster recovery grants in the aftermath of 2017-2019 natural disasters. First, we found that a higher proportion of districts that received these grants had above average rates of students from selected socially vulnerable groups, compared to all school districts nationwide. For example, nearly two-thirds of these districts had higher proportions of students eligible for free or reduced-price lunch than the national average of 52 percent among all U.S. public school students. Less than one-half of all public school districts had proportions of these students above the national average (see fig. 4).
Figure 4: School Districts with Higher than Average Proportions of Free or Reduced-Price Lunch (FRPL) Eligible Students, by Receipt of Key Disaster Recovery Grants, 2017-2019

Note: For GAO’s review, disaster recovery grant recipients include districts that received FEMA Public Assistance grants, Education’s Immediate Aid to Restart School Operations grants, or both following 2017-2019 presidentially-declared major disasters. GAO assessed the proportion of all U.S. public school students that were eligible for free or reduced price-lunch, using Education’s Common Core of Data for the 2017-2018 school year. This characteristic is associated with social vulnerability, or susceptibility to the adverse effects of natural hazards. GAO then identified the percent of (1) all public school districts and (2) disaster recovery grant recipients with higher than average proportions of students with this characteristic.

Figure 5 shows the results of a similar analysis for students in other selected socially vulnerable groups.
Figure 5: School Districts with Higher than Average Proportions of Students in Selected Socially Vulnerable Groups, by Receipt of Key Disaster Recovery Grants, 2017-2019

Note: For GAO’s review, disaster recovery grant recipients include districts that received FEMA Public Assistance grants, Education’s Immediate Aid to Restart School Operations grants, or both following 2017-2019 presidentially-declared major disasters. GAO assessed the proportion of all U.S. public school students that were racial and ethnic minorities, English learners, or students with disabilities.
disabilities, using Education’s Common Core of Data for the 2017-2018 school year, as these characteristics are associated with social vulnerability, or susceptibility to the adverse effects of natural hazards. GAO then identified the percent of (1) all public school districts and (2) disaster recovery grant recipients with higher than average proportions of students with each of these three characteristics.

Further, 57 percent of these districts were above the national average for two or more of these characteristics, compared to 38 percent of districts nationwide (see fig. 6).

![Figure 6: Percent of School Districts with Higher than Average Proportions of Students from Selected Socially Vulnerable Groups, by Receipt of Key Disaster Recovery Grant Aid, 2017-2019](image)

Note: GAO assessed the proportion of all U.S. public school students that were (1) eligible for free or reduced-price lunch (52 percent); (2) racial and ethnic minorities (52 percent); (3) English learners (10 percent); and (4) students with disabilities (14 percent) using Education’s Common Core of Data for the 2017-2018 school year. These characteristics are associated with social vulnerability, or heightened susceptibility to the adverse effects of natural hazards. GAO then identified the percent of (1) all public school districts and (2) disaster recovery grant recipients with higher proportions of students than the national average in two, three, or all four of these categories. For GAO’s review, disaster recovery grant recipients include districts that received FEMA Public Assistance grants and/or Education Immediate Aid to Restart School Operations grants following 2017-2019 presidially-declared major disasters. Percentages may not add up due to rounding.

Officials in our five selected districts in socially vulnerable communities described heightened challenges recovering from recent natural disasters. These challenges generally fell into four categories: emotional, academic, financial, and physical. Specifically, officials said that emotionally, the disasters caused significant trauma to students, and accessing necessary services was difficult. Academic recovery generally could not take place until students and staff had begun their emotional recovery. Financial recoveries were often incomplete, requiring significant administrative effort. Finally, officials explained that physical recovery was still ongoing in most cases, and required use of improvised facilities that disrupted the learning process.
Emotional Recovery

| Our school is a constant in the life of our kids; they have a lot going on in their homes—parents losing jobs, crime in their neighborhoods. The school is a safe haven. When our school was destroyed, that was a huge loss. Parents have a lot of instability, but the school is a constant. – School counselor |

Source: GAO-22-104606

Officials from all five selected districts said natural disasters caused trauma for students. Likewise, officials in four selected districts said the disasters caused trauma and burnout for staff. These findings are consistent with a large body of research that links disaster exposure with mental health symptoms associated with posttraumatic stress, depression, and anxiety. In the aftermath of a disaster, students can struggle with a number of stressors, including the loss of their home and belongings, extended housing instability, food insecurity, a parent’s job loss, and disconnection from their social networks, according to officials we interviewed. Moreover, emotional recovery can be a long-term process. For instance, officials from one district noted that 4 years after Hurricane Harvey, many of their students still had significant unmet psychological and emotional needs. Likewise, officials from another selected district said their students were still working through trauma caused by Hurricane Dorian in 2019 and that access to long-term mental health care was very important to their recovery.

Two experts we interviewed on children and disasters noted that socially vulnerable students can experience heightened emotional recovery challenges compared to their less vulnerable peers. One expert noted that socially vulnerable students may enter into a disaster with higher levels of trauma and adverse childhood experiences, which the trauma of a disaster then compounds. Further, this expert also said that vulnerability is cumulative: the more that risk factors accumulate, the more likely

29 The topics of staff trauma and burnout were not discussed in our interview with the fifth district. Nearly all local officials also cited the recovery challenge of staff burnout during our prior review. See GAO-21-62R.


31 Both FEMA and Education have highlighted social and emotional recovery as a long-term process, and noted that experiences during a disaster can result in emotional trauma for students, staff, and their families. See GAO-21-62R.
children are to experience poor mental or physical health or negative educational outcomes. Another subject matter expert said that low-income families tend to have the hardest time preparing for and responding to disasters, which in turn can lead to greater losses when disaster strikes. For example, officials in one district explained that, because their low-income families generally could not afford insurance, many lost all of their belongings during the hurricane.

Officials in all five selected districts described arranging various supports and services to aid with students’—and in some cases, staff’s—emotional recovery, although officials from almost all selected districts and states said that accessing adequate services was difficult, particularly over the long-term. For example, officials in two districts and two states explained that access to mental health care was difficult because there were few qualified providers in their low-income rural communities. Officials in a large urban district said that their efforts to refer students to outside mental health services were constrained because providers were already at capacity. Additionally, over 100 schools in this district lacked counselors due to funding constraints, which made emotional recovery more challenging. Moreover, officials from two selected districts and one state educational agency noted that accessing longer-term mental health services was especially challenging—for example, after the initial post-disaster outpouring of community support dissipated, or grant funding expired. As one subject matter expert explained, there are frequently

32Similarly, we have previously reported that when children are exposed to chronic stressful events, their neurodevelopment can be disrupted. As a result, a child’s cognitive functioning or ability to cope with negative or disruptive emotions may be impaired, causing long-term harm to their physical, social, and emotional well-being. GAO, Children Affected by Trauma: Selected States Report Various Approaches and Challenges to Supporting Children, GAO-19-388 (Washington, D.C.: Apr. 24, 2019).

33Specifically, officials in four of five selected districts and all three state educational agencies said accessing necessary services was challenging. In our earlier review, we reported similar challenges with accessing services. See GAO-21-62R. Consistent with this finding, in a study of a sample of households in Louisiana and Mississippi that had been displaced or affected greatly by Hurricane Katrina, the authors found that around one-half of parents felt children needed mental health treatment, but were unable to receive it. David M. Abramson et al., “Children as Bellwethers of Recovery: Dysfunctional Systems and the Effects of Parents, Households, and Neighborhoods on Serious Emotional Disturbance in Children after Hurricane Katrina,” Disaster Medicine and Public Health Preparedness, vol. 4 (Aug. 2010).
disconnects between the long-term mental health needs of disaster survivors and the short-term nature support offered to the community.34

Academic Recovery

It is impossible to detach the academic component [of recovery] from the social-emotional. The trauma students have experienced and the changes in where they live and their ability to get to school has an impact on their learning. –Official responsible for student services

Source: GAO-22-104606

The trauma of the natural disaster can follow students into the classroom and affect their ability to focus on academics. Accordingly, officials in four of five districts said educators needed to prioritize emotional recovery before academic recovery could begin. For example, officials in one district noted that helping students and staff cope and assuring that they felt supported was more important than giving homework or focusing on test scores when classes resumed. Officials in another district said that standardized testing requirements should be waived for schools recovering from a disaster, as it exacerbates already heightened stress levels among students and staff.

Academic achievement may be particularly disrupted by disasters in districts with high proportions of socially vulnerable students. For example, a county education official we interviewed for our 2020 report noted that, over the last decade, school districts there had narrowed the gap between White and Hispanic students regarding high school graduation rates and college attendance. However, after natural disasters there, both rates declined for Hispanic students.35 Similarly, two state educational agency officials we interviewed explained that lost instruction time most severely affects the most vulnerable students, including students with disabilities, students who are English learners, and students from low-income families. Echoing this finding, one recent study found that lower income school districts’ academic achievement tended to be

34Similarly, local education officials in our prior review said that funding for services was temporary and did not meet their districts’ needs for long-term mental health support. See GAO-21-62R.

35See GAO-21-62R.
adversely affected by natural disasters, whereas higher income districts did not see extended declines.\textsuperscript{36}

To counter declines in academic achievement in the aftermath of a disaster, officials we interviewed described offering additional academic and supportive services. For example, officials in one state educational agency sought additional Restart funding to help address learning loss from disaster-related school closures and homelessness, noting that the disaster led to greater need for long-term academic supports. Officials in one district discussed connecting students to social services like food, clothing, toiletries, technology, housing and counseling, explaining these basic needs had to be met so students could focus on learning. Officials in another district said they offered their students after-school and summer programs to offset learning losses caused by the disaster, while officials in a third district said they provided Saturday tutorials in the first year after the hurricane to support student achievement.

Financial Recovery

<table>
<thead>
<tr>
<th>Smaller and poorer districts are often just trying to survive and have difficulty documenting their recovery process and maintaining appropriate records, both of which are necessary to receive recovery funding. In contrast, larger districts and those with greater resources have more staff and expertise to navigate the process of applying for and receiving aid. —State educational agency official</th>
</tr>
</thead>
</table>

Officials from all five selected districts described challenges funding their recoveries and told us they experienced shortfalls after accounting for reimbursements from insurance and federal programs.\textsuperscript{37} For example, officials in one district said insurance payments did not come close to covering repair costs for an extensively damaged school building.

\textsuperscript{36}The analysis of 464 public schools in Texas directly affected by Hurricane Ike identified two school academic recovery trajectories, Low-Interrupted and High-Stable. The Low-Interrupted school academic recovery trajectory exhibited increasing academic performance up until Hurricane Ike, but this trajectory was interrupted such that the slope changed dramatically after Hurricane Ike. In contrast, the High-Stable group exhibited a relatively stable slope both pre- and post-hurricane. Higher levels of economically disadvantaged youth within the school was a risk factor for a lowered trajectory. Betty S. Lai et al. “Trajectories of School Recovery after a Natural Disaster: Risk and Protective Factors,” \textit{Risk Hazards Crisis Public Policy}, vol. 10, no. 1 (2019): 32-51.

\textsuperscript{37}We previously reported that California and Florida officials said their districts were still operating in a financial deficit after recent natural disasters, having spent millions of dollars to resume educating students and reopening schools. In some cases, districts lacked necessary funding to make repairs, and in others, their costs were not reimbursed by insurance or state and federal governments. See GAO-21-62R.
providing only $1 million toward the school’s $6 million repair costs, citing depreciation of the property as the reason. In another district, officials said that one elementary school had been deemed a total loss and unsafe to use by structural engineers. Estimated replacement costs were $30 million, but the school was only insured for $10 million. Further, district officials said that FEMA PA funds would cover only a small portion of the shortfall because FEMA estimated the value of damages at just over $1 million and indicated the building could be repaired.

Figure 7: School Facilities Damaged by Hurricane Michael in Florida

School districts located in low-income socially vulnerable communities can face additional financial recovery challenges in a few ways.

- First, state emergency management officials in all three selected states said that finding necessary funds to begin major recovery
projects can be particularly difficult for districts with fewer resources and lower tax bases. Additionally, a finance director in one low-income rural district said the county was not in a financial position to provide them money for repairs. Moreover, the official said they could not afford private insurance, which would have facilitated more rapid recovery.

- Second, some low-income districts experienced declines in student enrollment after families lost their homes or jobs and moved away, according to state emergency management officials. According to these officials, these population declines then resulted in funding declines for the districts as a result of lower property taxes and student enrollment counts, a challenge we also noted in our prior review.\(^{38}\) One study demonstrated this pattern, finding that areas with higher levels of socially vulnerable populations saw significantly higher levels of out-migration after a disaster.\(^{39}\)

- Finally, low-income school districts can be denied funding or receive less funding than needed from FEMA’s PA program to cover outstanding recovery costs due to issues with deferred maintenance, according to officials in all three state emergency management offices. Denials may occur because FEMA provides funding to return a property to its pre-disaster condition, and for damages that resulted from the disaster. Officials from one state explained that districts must adequately document the condition of the building to prove that damage was caused by the disaster rather than neglecting to make an earlier needed repair, such as fixing a leaking roof. Poorer districts and those with fewer resources often do not have sufficient staffing or expertise to maintain the necessary maintenance records, according to these officials.

Officials in all five selected districts said they leveraged multiple funding streams to facilitate their recovery, but that the process of doing so was complex, lengthy, and required significant administrative effort. Officials in two state emergency management offices and one state educational agency said prior disaster experience is necessary to successfully

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\(^{38}\)Local education officials also cited this financial challenge during our prior review. See GAO-21-62R.

navigate the complexities of obtaining and coordinating funding. Accordingly, officials in three districts reported that they hired a consultant to navigate FEMA PA eligibility requirements and application processes. Officials in all five selected districts described how such complex requirements and processes extended their recovery timelines. For example, a finance director in one district with extensive water damage explained that their insurance provider initially indicated that it would cover the cost of muck and mold removal, but then reversed its position. Officials said that after insurance denied the claim, FEMA agreed to cover the costs through its PA program, but did not do so until the issue of what insurance would pay for was fully resolved. Because the district could not afford to hire professionals to restore the buildings without FEMA funding, its campus reopening was delayed, according to officials.

Officials from four of five selected districts said their physical recoveries were still ongoing, in some cases, years after the natural disasters. For example, emergency management officials in one state said some of the schools damaged by a hurricane 4 years earlier had not even broken ground on new facilities, in part, because FEMA had not yet awarded funds for the project. FEMA has acknowledged falling short of its PA award timeliness goals, as we have previously reported. Additionally, officials from two of three state educational agencies said that rural districts and those in low-income areas face challenges finding...
contractors to carry out repairs. Officials in one state explained that contractors often prioritize work in wealthier communities that can pay more for services. Consistent with this feedback, officials in a low-income rural district said that they could not get call backs from repair companies and had to reopen schools with tarps on their roofs, which remained in place for months.

Districts in socially vulnerable communities can experience especially difficult physical recoveries. Education reported that public schools with higher enrollment of low-income students are far more likely to have permanent buildings that are in poor or fair condition compared to other public schools. One subject matter expert also explained that socially vulnerable groups are more likely to attend under-resourced and poorly maintained schools, which in turn are more likely to suffer extensive damage due to disasters, causing extended school closures and student displacements. More broadly, we previously reported that roughly 80 percent of students attending high-poverty high schools are either Black or Hispanic. In a separate report, we also found that high-poverty school districts spend less per capita on capital construction than low-poverty districts. Because such districts frequently lack funding for maintenance and updates, state emergency management agency officials said these districts may be denied FEMA PA funding, as previously described, or be offered insufficient aid to replace the damaged building with a modern one.

In light of their generally slow pace of recovery, officials from four of five districts relied on temporary, improvised classrooms and facilities—such as portable classroom units or off-campus buildings—that caused disruptions to the learning process. For example, in one district multiple classes had to share one classroom space, while in another district, a temporary facility lacked adequate Wi-Fi, requiring students and staff to rely on physical materials, according to district officials. A principal in an

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elementary school affected by Hurricane Harvey said that long bus rides to the temporary school and constant building construction were extremely disruptive, making staff and students feel like they were in survival mode for years. Officials in a different district noted that it was difficult for educators to teach in new locations without their typical resources, saying the physical disruption added to their stress.

Figure 8: School Closed Due to Water Damage Caused by Hurricane Harvey in Texas

![Image of water damage]

Source: Houston Independent School District. | GAO-22-104606

Education’s Restart grant program supported a wide range of school recovery efforts following recent natural disasters, and Education officials worked proactively with grantees to resolve challenges as they arose. Education awarded nearly $940 million in Restart funds to support disaster recovery in over 250 school districts across nine states and U.S. territories following 2017-2019 presidentially-declared major disasters (see table 2).
Table 2: Restart Award Amounts by State/U.S. Territory

<table>
<thead>
<tr>
<th>State/territory</th>
<th>Award amounts (in dollars)</th>
<th>School districts receiving funding</th>
<th>Key disasters for which Restart funds were used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rico</td>
<td>589,170,000</td>
<td>1</td>
<td>Hurricanes Irma and Maria (2017)</td>
</tr>
<tr>
<td>Texas</td>
<td>162,576,244</td>
<td>172</td>
<td>Hurricane Harvey (2017), Tropical Storm Imelda(^a) (2019)</td>
</tr>
<tr>
<td>Florida</td>
<td>128,741,500</td>
<td>49</td>
<td>Hurricane Irma (2017), Hurricane Michael (2018)</td>
</tr>
<tr>
<td>California</td>
<td>31,446,029</td>
<td>27</td>
<td>Wildfires (2017, 2018)</td>
</tr>
<tr>
<td>U.S. Virgin Islands</td>
<td>13,100,000</td>
<td>2</td>
<td>Hurricanes Irma and Maria (2017)</td>
</tr>
<tr>
<td>Northern Mariana Islands</td>
<td>9,385,574</td>
<td>1</td>
<td>Super Typhoon Yutu (2018)</td>
</tr>
<tr>
<td>North Carolina</td>
<td>3,395,009</td>
<td>5</td>
<td>Hurricane Dorian(^a) (2019)</td>
</tr>
<tr>
<td>Ohio</td>
<td>587,821</td>
<td>4</td>
<td>Tornadoes and Flooding (2019)</td>
</tr>
<tr>
<td>Mississippi</td>
<td>186,450</td>
<td>1</td>
<td>Tornadoes and Flooding (2019)</td>
</tr>
<tr>
<td><strong>Total: $938,588,627</strong></td>
<td><strong>Total: 262</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO analysis of Department of Education (Education) data and state grant documentation. | GAO-22-104606

Note: Education awards funding through its Immediate Aid to Restart School Operations (Restart) program to state educational agencies (states), which in turn provide funding or services to local educational agencies (school districts). States must also make assistance available to non-public schools. The Puerto Rico Department of Education and the Commonwealth of the Northern Mariana Islands Public School System each serve as the state educational agency and the only local educational agency for each territory. The number of Texas school districts receiving funding does not reflect any additional districts that may have received Restart funding for the first time through additional grants provided for continued recovery from Hurricane Harvey in 2020 and 2021.

\(^a\)Funding was provided for flooding and/or tornadoes stemming from these storms.

In our review of state Restart grant reports, we found that districts used Restart to support a range of recovery efforts tailored to their needs, including

- providing mental health and academic services to students, such as counseling and tutoring;
- repairing school facilities and infrastructure, such as roofs or security systems;\(^45\)
- covering the cost of materials and equipment for facilities projects;
- replacing damaged instructional materials and equipment, such as textbooks and laptops;

\(^45\)Restart funds may not be used for construction or major renovation of schools but may be used for minor remodeling and repair projects, if necessary and reasonable.
• providing transportation to students who were displaced from their homes; and
• hiring, training, and retaining school staff.

Further, officials from our five selected school districts shared examples of the various ways Restart funding supported their recovery efforts. For instance, officials from one district told us they used Restart funding to clean out muck and mold after a school campus experienced severe flooding. They said that having these funds allowed them to save their school building. Officials in another district told us they used Restart funding to lease portable classrooms after a hurricane destroyed one elementary school and damaged several other school facilities. Prior to acquiring the portable classrooms, students from the elementary school had been split up among four temporary sites, with as many as 50 students per classroom. Officials in a third district told us they used Restart funding to ensure each school in the district had one or more mental health professionals after a hurricane devastated the county and left many students homeless. They said Restart funding allowed them to provide better mental health supports for students than they could have imagined. Additionally, these officials told us that Restart funding also allowed them to retain 20 school staff positions across three schools that would have otherwise been cut due to financial challenges following the hurricane. Without these staff, the schools would have been unable to continue providing support services to students, according to district officials.

The ways in which states and school districts used Restart funds partly depended on the timing of funding availability and their recovery needs, as described below.

• **Funding up-front costs:** When Restart funding was available quickly following a disaster or before other sources of recovery support, some districts used it to fund up-front costs for pressing recovery needs, according to Education and district officials. One superintendent told us Restart was the first source of recovery funding available after the district was struck by a hurricane, and that the district used it to fund early recovery efforts, including cleaning up school buildings after they experienced flooding.

• **Reimbursement for allowable costs:** States and districts were also able to use Restart funding to reimburse themselves for eligible expenses already incurred, which could be especially important when these funds became available significantly after a district was struck...
by natural disaster, according to Education officials. Officials in one district told us they used Restart funding to reimburse $12 million in costs incurred to lease buses needed to transport students to temporary facilities after their schools were destroyed.

Education officials also proactively worked with applicants to help mitigate challenges related to Restart funding timeframes. The timing of Restart appropriations was not well aligned with the timing of some states' disaster recovery needs, according to officials from Education and some selected districts. For instance, several states experienced disasters a year or more before Restart funds became available to support their recoveries.46 Officials from one district that experienced a disaster in October 2018 and had to wait more than a year before Restart funds were appropriated and available to districts, said that earlier funding would have helped the district provide mental health services to students sooner in their recovery process.

However, Education officials described several strategies they used to help mitigate challenges faced by such states and districts. Specifically:

- Education offered to provide a portion of appropriated grant funds early to help jumpstart recovery projects while grantees were finalizing their application materials. For one grantee that requested this option, Education officials said early funding distribution helped meet key recovery needs, including conducting initial physical repairs and covering the costs of utilities.

- Education also approved grant applications and released full award amounts quickly, recognizing the importance of providing resources in a timely manner to support recovery efforts.47

- Finally, Education worked to find creative alternatives when recovery needs could not be met with Restart funds. In several cases, Education provided recovery funding through a separate, smaller disaster grant program when states and districts had immediate

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46In particular, while Congress provided Restart funding for covered 2017 disasters in February 2018, it did not authorize Education to provide disaster recovery funding for covered 2018-2019 disasters until June of 2019.

47For instance, Education awarded 2019 Restart grants within 2 months of receiving applications.
recovery needs but Restart funding was not yet available.\textsuperscript{48}

Education officials also worked proactively to help address challenges some grantees faced in spending Restart funds within the 2-year timeframe generally required by statute.\textsuperscript{49} Specifically, Education officials worked with states to determine whether they and their districts needed grant extensions and submitted extension requests—generally for 1 year—to the Office of Management and Budget.\textsuperscript{50} The Office of Management and Budget has approved all such requests.

In a time of increasing frequency and severity of natural disasters, Restart has provided key support to help school districts resume their operations and meet student needs. Further, Education has proactively worked to improve districts’ ability to access to these funds when they are needed, even with timing challenges.

We provided a copy of this draft report to Education and the Department of Homeland Security for review and comment. Education told us that they had no comments on the draft report. The Department of Homeland Security provided technical comments, which we addressed as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Education, the Secretary of Homeland Security, and other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

\textsuperscript{48}Education officials told us they directed several states and districts to the Project School Emergency Response to Violence grant program to help fund their recoveries.

\textsuperscript{49}Grantees receiving funds through the Restart program are required to expend funds within 2 years following Education’s obligation of funds unless the Director of the Office of Management and Budget waives this requirement and submits a written justification for such waiver to the Committees on Appropriations of the House of Representatives and the Senate. See Additional Supplemental Appropriations for Disaster Relief Requirements Act of 2017, Pub. L. No. 115-72, § 305, 131 Stat. 1224, 1228 (as amended by Pub. L. No. 115-123, § 21208(a), 132 Stat. at 108).

\textsuperscript{50}A senior Education official said it was particularly challenging for certain types of school districts to expend grant funds within 2 years, such as smaller districts with limited administrative capacity and island districts that faced prolonged shipping timeframes. Additionally, Education officials told us that the COVID-19 pandemic made it difficult for states and school districts to spend their entire Restart grants within this timeframe. Officials in one district told us that it was difficult to spend funds quickly because a lack of housing in the area resulting from a hurricane created hiring challenges.
If you or your staff have any questions about this report, please contact me at (617) 788-0580 or nowickij@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix I.

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Committee on Appropriations
House of Representatives
Appendix I: GAO Contact and Staff Acknowledgments

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In addition to the contact name above, Ellen Phelps Ranen (Assistant Director), Scott Spicer (Assistant Director), Morgan Jones (Analyst-in-Charge), Liam O’Laughlin (Analyst-in-Charge), and Kelsey Kreider made key contributions to this report. Also contributing to this report were Joel Aldape, Aditi Archer, James Bennett, Elizabeth Calderon, Karen Doran, J. Alfredo Gómez, Michael Kniss, Tom James, Avani Locke, Olivia Lopez, Janet Mascia, Jean McSween, John Mingus, Amy Moran Lowe, Layla Moughari, Stacy Ouellette, Michelle Philpott, Brenda Rabinowitz, Miranda Richard, Almeta Spencer, Jeff Tessin, Joe Thompson, John Vocino, and Adam Wendel.
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