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# FISCAL IMPACT OF HURRICANE HARVEY ON STATE AGENCIES

The 2017 hurricane season was one of the most active in U.S. history, causing widespread damage to both public and private property, livelihoods, and critical infrastructure. Hurricane Harvey made landfall on August 25, 2017, as a Category 4 hurricane near Rockport. As it stalled over parts of southern Texas, Harvey produced flooding that temporarily closed ports, airports, and roads, preventing access to the disaster-stricken area. Twenty-four hospitals were evacuated, 61 communities lost drinking water capability, 23 ports were closed, and more than 781 roads became impassible. Nearly 780,000 Texans were evacuated from their homes.

The early aftermath of Hurricane Harvey left more than 18 inches of standing floodwater in nearly 80,000 homes, with more than five feet of floodwater in almost 30.0 percent of those homes. Eighty percent of households affected by Hurricane Harvey did not have flood insurance. Initial estimates projected that approximately 32,500 households would need direct housing assistance. At the storm's peak, community partners in Texas sheltered approximately 42,400 survivors, and approximately 1,400 survivors remained in shelters 30 days after Harvey made landfall.

The cost of Hurricane Harvey likely will play a significant role in budget and policy decisions during the Eighty-sixth Legislature, 2019. The National Centers for Environmental Information estimated Hurricane Harvey's total cost at \$125.0 billion in damages, second only to Hurricane Katrina in 2005.

This overview examines Hurricane Harvey's fiscal impact on state agencies.

## FACTS AND FINDINGS

- ◆ More than 70 state agencies and institutions of higher education responded to Hurricane Harvey by providing financial assistance, goods, and services including evacuation assistance, debris removal, shelter, food, and clothing.
- ◆ The fiscal impact to state agencies has reached an estimated \$3.3 billion in All Funds, including \$377.5 million in General Revenue Funds, \$5.3 million in General Revenue–Dedicated Funds, \$246.9 million in Other Funds, and \$2.7 billion in Federal Funds.

- ◆ Federal Funds received by state agencies total \$2.3 billion as revenues.
- ◆ Of the \$3.3 billion in All Funds, a reported \$1.7 billion was passed through to local entities and individuals through various federal programs for Public Assistance, Direct Housing, Other Needs Assistance, Disaster Supplemental Nutrition Assistance, and Dislocated Worker grants.
- ◆ Institutions of higher education reported \$96.8 million in actual expenditures including \$86.9 million in Other Funds, such as institutional funds.
- ◆ The U.S. Department of Housing and Urban Development awarded an estimated \$5.0 billion in Community Development Block Grant–Disaster Recovery grants to Texas in November 2017, which will help pay for housing infrastructure, public facilities, and business needs in areas affected by Hurricane Harvey.

## DISCUSSION

State and federal agencies performed approximately 122,331 rescues and evacuations throughout Texas in the days after Hurricane Harvey's landfall. Another 5,249 rescues targeted pets and animals. State agencies spent more than \$321.5 million for Harvey relief. On February 13, 2018, the Governor announced that Texas would receive \$1.0 billion in hazard mitigation funding from the Federal Emergency Management Agency (FEMA) for Texas cities and counties affected by the hurricane. This amount was in addition to Texas' share of the \$90.0 billion relief package that the U.S. Congress approved for states hit by hurricanes, wildfires, and other disasters.

More than 300 voluntary organizations worked to support Hurricane Harvey survivors, including Texas and national Voluntary Organizations Active in Disasters and locally based groups. Volunteers removed debris from homes, supported shelters, provided food, distributed supplies, provided emotional and spiritual support, repaired and rebuilt housing, and provided crisis support. The Salvation Army deployed 4,457 volunteers who worked more than 40,714 hours providing food, donations, and shelter services.

**STATE RESPONSE**

The Governor has the responsibility to declare a state emergency or disaster. However, multiple state agencies coordinate disaster preparation, response, and recovery. The Trusteed Programs within the Office of the Governor provided financial disaster assistance to state agencies and local governments. These awards were generally treated as short-term repayable grants.

The Department of Public Safety (DPS), Texas Division of Emergency Management (TDEM), is responsible for coordinating the state's emergency management program, which is intended to ensure that state and local government entities implement plans and programs to help prevent or lessen the effects of emergencies and disasters. TDEM also coordinates the efforts of state agencies, local governments, schools, hospitals, and other entities through DPS' State Operations Center located in Austin. Supported by the U.S. Department of Energy (DOE), TDEM helped coordinate the restoration of power to more than 300,000 customers. In a coordinated response, utility companies activated their mutual support networks and assigned more than 10,000 workers, including crews, line workers, and support personnel, from at least 21 sites for response and recovery efforts. DOE coordinated with the U.S. Environmental Protection Agency to issue waivers authorizing supply pipelines to carry more fuel. The U.S. Secretary of Energy authorized the release of 5.3 million barrels of crude oil from the Strategic Petroleum Reserve as a resource. With DPS, TDEM coordinated the provision of more than 3,000 full-time staff to assist with security, search and rescue, and other response-related activities. DPS reported approximately \$958.4 million in hurricane-related expenditures, which includes \$852.1 million in Federal Funds, and 946.3 million passed through to other state agencies, institutions of higher education, and local entities.

The Health and Human Services Commission (HHSC) provided assistance to individuals before, during, and after Hurricane Harvey. HHSC processed and approved more than 280,000 applications for FEMA Other Needs Assistance totaling approximately \$300.0 million. FEMA provided 75.0 percent of the funding.

The Department of State Health Services (DSHS) provided emergency medical service personnel and ambulances to evacuate hospital and nursing home patients. DSHS' medical response functions included assessing public health and medical needs, conducting health surveillance, coordinating the provision of patient care, and providing medical

personnel, and medical and veterinary equipment and supplies. The agency also worked to ensure the safety and security of food, drugs, and medical supplies. DSHS assessed the health and medical infrastructure of affected areas and provided resources necessary to expedite recovery, including staff, supplies, and equipment. Following the hurricane's aftermath, the agency spent approximately \$13.0 million, most of which is expected to be reimbursed by the federal government.

The Texas Department of Criminal Justice (TDCJ) provided approximately 3,000 staff to assist with response and recovery operations. TDCJ evacuated more than 5,000 offenders and 900 parolees and probationers from facilities located in Beaumont, Houston, Richmond, and Rosharon.

The Texas Parks and Wildlife Department (TPWD) responded to the hurricane by providing approximately 500 TPWD officers and conducting water-related rescues. Strike teams from across the state shuttled equipment, cleared debris, gutted buildings, restored facilities, and preformed essential tasks. TPWD's State Parks Division waived fees for more than 8,000 displaced individuals who stayed temporarily in numerous state parks. Of the estimated \$53.0 million in reported expenses and lost revenue, \$32.0 million are attributed to state park infrastructure damages.

The Texas Military Department (TMD) deployed staff to perform search-and-rescue operations in areas affected by hurricanes and other natural disasters. TMD mobilized more than 17,000 Texas Air National Guard, Texas Army National Guard, and Texas State Guard Service members in coordination with Texas Task Force 1 to support evacuations in flooded areas, conduct air and land search and rescue operations, and provide security in conjunction with TDEM.

The Texas Workforce Commission began accepting unemployment insurance claims from affected Texans the day that Hurricane Harvey made landfall. FEMA activated Disaster Unemployment Assistance (DUA) for Texans who lost their jobs due to the storm. The agency processed more than 141,000 disaster unemployment insurance claims and distributed approximately \$21.0 million in federal DUA benefits and an estimated \$175.0 million in Unemployment Insurance benefit payments.

The Texas Commission on Environmental Quality (TCEQ), as directed by the Office of the Governor, transferred \$90.0 million to TDEM to help local governments pay their required local matches for federal debris-removal assistance.

**FEDERAL SUPPORT**

FEMA coordinates most of the federal government’s natural disaster assistance efforts. The Public Assistance (PA) program is the agency’s largest disaster assistance program, through which FEMA provides supplemental aid to communities and states to facilitate recovery efforts. It provides assistance for debris removal, implementation of emergency protective measures, and permanent restoration of infrastructure. The program is centered on a partnership among FEMA and state and local officials. The federal share of the program typically is 75.0 percent, and state and local agencies provide the remaining 25.0 percent. This ratio is subject to change at the President’s discretion.

Before reimbursement, applicants must submit project work sheets to FEMA for review. This review often requires additional information and documentation before final assistance is determined. After FEMA has approved all project worksheets, the agency processes state payments through TDEM. As a condition of the financial assistance, recipients must obtain and maintain insurance on affected properties. **Figure 1** shows the types of eligible projects for public assistance grants and the state and federal shares for each type.

After a presidential disaster declaration, FEMA awards grants to state and local governments for long-term projects designed to prevent and mitigate future damages. The Hazard Mitigation Grant Program is intended to decrease the loss of life and property due to natural disasters. Types of projects funded by the program include elevating flood-prone structures and retrofitting property to decrease wind, flood, and fire damage. Like most PA grants, FEMA may fund up to 75.0 percent of project grants.

On February 9, 2018, the President signed the federal Bipartisan Budget Act of 2018, which includes a provision amending the federal Stafford Act to codify the following changes to FEMA rules:

- religious institutions that provide service to local communities can be eligible immediately for federal aid during a disaster;
- private nonprofit facilities that do not provide critical services must apply to the U.S. Small Business Administration for disaster loans and either be determined ineligible for such a loan or have obtained such a loan in the maximum amount for which the SBA determines the facility to be ineligible; and

**FIGURE 1  
FEDERAL EMERGENCY MANAGEMENT AGENCY PUBLIC ASSISTANCE GRANTS CALENDAR YEAR 2017**

CATEGORY AND TYPE OF WORK	FEDERAL SHARE	STATE SHARE
A – Debris removal	90.0%	10.0%
B – Emergency protective measures (1)	100.0%	0.0%
C – Roads and bridges	75.0%	25.0%
D – Water control facilities	75.0%	25.0%
E – Buildings and equipment	75.0%	25.0%
F – Utilities	75.0%	25.0%
G – Parks, recreational facilities, and other items	75.0%	25.0%

NOTE: (1) Emergency protective measures are funded at a federal–state ratio of 90.0 percent to 10.0 percent after the first 30 days.  
SOURCES: Legislative Budget Board; Federal Emergency Management Agency.

- new construction is prohibited in coastal high hazard areas.

The U.S. Department of Housing and Urban Development (HUD) distributes and manages the Community Development Block Grants–Disaster Recovery (CDBG–DR) grants to state and local governments. The General Land Office (GLO) is the designated state agency in Texas that manages CDBG–DR grant funding to rebuild infrastructure and housing in affected areas. CDBG–DR grants are based on a formula that accounts for recovery needs not met by other types of federal assistance. These grants are intended primarily to assist low-income residents in presidentially declared disaster areas. Activities funded with CDBG–DR grants include relocating residents; conducting transportation, water, and sewage improvement projects; developing jobs; and purchasing flood-prone property.

In response to Hurricane Harvey, HUD allocated \$57.8 million in CDBG–DR funds to Texas in December 2017. GLO’s State Action Plan allocates 80.0 percent of the award to address unmet needs, with the remaining 20.0 percent allocated to the 33 CDBG–DR-eligible counties.

Texas was awarded \$5,035.2 million in CDBG–DR funds in April 2018 for disasters that occurred during fiscal years 2015 to 2017. These funds are in addition to the \$57.8 million and \$5,024.2 million in CDBG–DR funds previously awarded to the state. HUD’s most recent award of CDBG–DR funds serves two purposes: \$652.2 million to help rebuild severely damaged homes, businesses, and critical

infrastructure; and \$4,297.2 million to support mitigation activities, including elevating homes, buying out property, and hardening structures against wind and water.

GLO developed a State Action Plan for the \$57.8 million allocation, which received HUD approved in June 2018. The plan details the proposed use of all funds, including criteria for eligibility and how funds will address long-term recovery and restoration of infrastructure, housing, and economic revitalization in the most distressed areas that GLO identified. The allocation is limited to unmet recovery needs from Hurricane Harvey. HUD identified Aransas, Brazoria, Chambers, Ford Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, San Jacinto, San Patricio, Victoria, and Wharton counties as the most distressed areas. **Figure 2** shows the counties most affected by Hurricane Harvey.

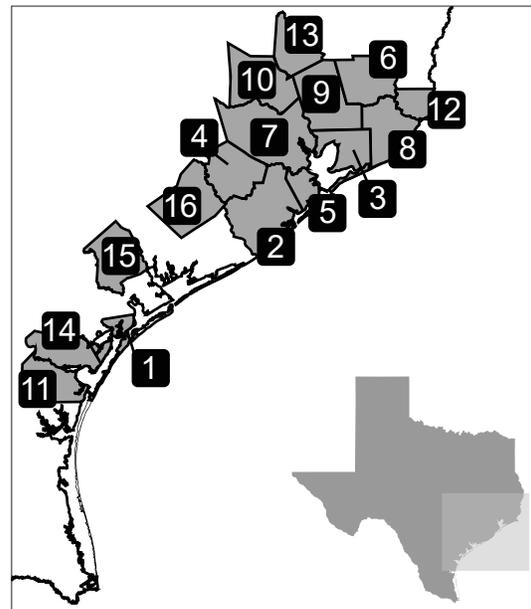
The U.S. Small Business Administration (SBA) coordinated with the Texas Gulf Coast Small Business Development Center to open five business recovery centers for businesses affected by the hurricane. SBA extended the first payment deferment for loans from the standard five months to 11 months. SBA also provided an automatic 12-month deferment of principal and interest payments for eligible business and disaster loans.

**DISASTER-RELATED FUNDING SOURCES**

Texas agencies utilized various federal resources in response to the state’s hurricane needs. The major sources of Federal Funds totaling \$2.3 billion that Texas agencies allocated included the following sources:

- FEMA – Public Assistance Grants, Hazard Mitigation Grants, Fire Management Assistance Grants, Individual and Housing Program (including Other Needs Assistance), and Disaster Unemployment Assistance;
- HUD –CDBG Disaster Recovery;
- U.S. Department of Health and Human Services – Medicaid, Children’s Health Insurance Program, and Temporary Assistance for Needy Families;
- U.S. Department of Agriculture – Supplemental Nutrition Assistance Program and Disaster Supplemental Nutrition Assistance Program;
- U.S. Department of Education – Disaster Assistance for Students;

**FIGURE 2  
TEXAS COUNTIES MOST AFFECTED BY HURRICANE HARVEY, FISCAL YEAR 2018**



**TEXAS COUNTIES**

1	Aransas	9	Liberty
2	Brazoria	10	Montgomery
3	Chambers	11	Nueces
4	Fort Bend	12	Orange
5	Galveston	13	San Jacinto
6	Hardin	14	San Patricio
7	Harris	15	Victoria
8	Jefferson	16	Wharton

SOURCE: General Land Office.

- U.S. Department of Labor – National Dislocated Workers Grants;
- Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies Act, Gulf Coast Ecosystem Restoration Council funds; and
- other federal funding sources, such as Federal Highway Administration, Emergency Relief Program funds.

Other federal funding sources include the Federal Highway Administration, the Emergency Relief Program, the U.S. Army Corps of Engineers (USACE). In July 2018, USACE announced nearly \$5.0 billion in funding for critical flood-mitigation projects, including high-priority projects

identified by the Office of the Governor. In addition, \$16.0 million will fund studies for projects to help make the state more resilient following storms.

In July 2018, TCEQ submitted the Texas State Expenditure Plan (SEP) to the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States' (RESTORE) Gulf Coast Ecosystem Restoration Council. The council must approve the SEP to secure RESTORE grant funds in accordance with the RESTORE Act's Spill Impact Component. Approximately \$31.0 million is available to fund activities in an approved Texas SEP. Due to the devastating and long-range effects of Hurricane Harvey, the Governor and the TCEQ Commissioner determined that Texas' SEP will focus on hurricane recovery efforts, ecological improvements, and economic programs for the area. Specific projects will be selected following the council's approval of the SEP.

#### **PUBLIC EDUCATION AND FOUNDATION SCHOOL PROGRAM**

Hurricane Harvey's effect on area school districts include displaced students, damaged facilities, and loss of local property tax revenue. Certain disaster-related costs are statutorily required through the Foundation School Program (FSP), which is the principal vehicle for distributing state aid to school districts to provide educational services, while other disaster-related FSP costs are subject to the discretion of the Legislature.

Preliminary estimates of statutorily required state costs to the FSP total \$685.4 million in the 2018-19 biennium, and \$715.1 million in the 2020-21 biennium. Estimates of discretionary costs total \$1,114.3 million. TEA continues to collect and analyze data to provide options for school district relief through the state's school finance system.

The following statutorily required state costs of \$685.4 million for the 2018–19 biennium includes:

- \$421.9 million in increased state aid for fiscal year 2019 for 12 school districts that voted to reappraise 2017 taxable values to account for property damaged by the hurricane. The Texas Tax Code, Section 23.02, authorizes school districts to reappraise properties affected by an officially declared disaster;
- \$147.0 million in additional funding through the compensatory education allotment, which provides additional weighted FSP funding for economically disadvantaged students. Compensatory education

funding is based on a school district's highest six months of participation in the National School Lunch Program during the previous federal fiscal year. The number of students eligible for the lunch program and, thus, compensatory education funding increased after school districts affected by the hurricane received a waiver from the Texas Department of Agriculture to provide free lunch to all students from August to October 2017. TEA estimates the increased compensatory education costs to the FSP to be \$103.0 million for fiscal year 2018 and \$44.0 million for fiscal year 2019;

- \$86.5 million for a onetime average daily attendance adjustment during school year 2017–18 to hold school districts harmless for hurricane-related decreases in student attendance; and
- \$30.0 million in decreased recapture payments from school districts not subject to recapture whose facilities were damaged by the storm. The Texas Education Code, Section 41.0931, authorizes these districts to decrease their recapture payments by the amount of their unreimbursed disaster remediation costs for two years following the disaster.

The statutorily required state cost for the 2020–21 biennium totals \$715.1 million in increased state aid due to decreased property values during tax year 2018. This analysis does not attempt to quantify the effect of decreased property values that may persist during future tax years.

The following potential costs to the FSP are not statutorily required but are subject to potential actions of the 86<sup>th</sup> Legislature:

- \$1,054.3 million in additional state aid to offset decreased maintenance and operations tax collections. Because state aid within the FSP is calculated based on lagged property values, affected school districts realized decreased property tax collections a year before the state aid was adjusted, potentially causing them financial hardship.
- \$60.0 million in facilities damage remediation costs for school districts not subject to recapture, pursuant to the Texas Education Code, Chapter 42, after accounting for FEMA and insurance payments. The Eighty-sixth Legislature, 2019, could make an appropriation to provide remediation for these school districts, or to districts that already have offset

their recapture payments fully, pursuant to the Texas Education Code, Chapter 41; and

- \$2.0 million for substantial costs that, according to the Texas Education Agency (TEA), Regional Education Service Centers have incurred as they help districts with hurricane-related technical assistance.

**UNMET LOCAL AND STATE NEEDS**

Current estimates for hurricane-related expenditures total approximately \$3.2 billion. Agencies estimate offsetting revenues totaling \$2.5 billion in Federal Funds. Based on current information, the total fiscal impact to the state (i.e., actual and estimated) could reach \$6.3 billion, not including education costs. These costs could be offset by an estimated \$5.5 billion in revenues, of which \$5.3 billion is Federal Funds.

If these estimates are realized, unmet needs could be realized at \$700.0 million, which is 11.0 percent of total hurricane-related expenditures in the state.