

TxDOT DISASTER & EMERGENCY PREPAREDNESS, RESPONSE & RECOVERY

Hurricane & Tropical Storm Harvey (Harvey)



Senate Interim Charge

“Review and recommend options to expedite debris removal, including cutting unnecessary regulation and streamlining the process.”



TxDOT Disaster & Emergency Preparedness, Response & Recovery

- The importance of safe and reliable transportation systems is heightened before, during and immediately after emergency situations. In a disaster situation, providing safe transportation systems is a critical function of the state, making evacuation, search and rescue, mass care and other essential response activities possible.
- TxDOT with its skilled workforce, engineering capabilities and presence in every county of the state is uniquely positioned to take on special duties during emergency operations.



TxDOT Disaster & Emergency Preparedness, Response & Recovery

TxDOT's Emergency Operations Center (EOC) oversees TxDOT's preparation for and response to emergencies and closely coordinates with:

- Texas Division of Emergency Management;
- State Operations Center (SOC);
- Federal Emergency Management Agency (FEMA);
- other state agencies;
- local governments; and
- all TxDOT divisions and 25 geographical districts.



Disaster & Emergency - Preparedness

In collaboration with the State Operations Center, TxDOT's Hurricane Response & Re-Entry Plan was activated before Hurricane Harvey made landfall, and TxDOT's EOC was activated on August 24, 2017.



Disaster & Emergency - Preparedness

TxDOT mobilized its personnel and equipment to staging areas in the San Antonio and Bryan, Texas. By pre-staging both equipment and personnel, TxDOT expedited its entrance to the impacted areas as soon as it was safe for crews to enter.



Disaster & Emergency - Preparedness

TxDOT provides safe transportation for public evacuation and for emergency services personnel to appropriately prepare for a severe weather event.



Disaster & Emergency - Preparedness

TxDOT evacuation operations are triggered by the local authorities.



Disaster & Emergency - Preparedness & Response

An essential component of TxDOT's successful emergency preparedness and response operations is effective public communication.

- Drivetexas.org;
- TxDOT Travel Information phone line (800) 452-9292;
- Media communications; and
- Dynamic message signs.

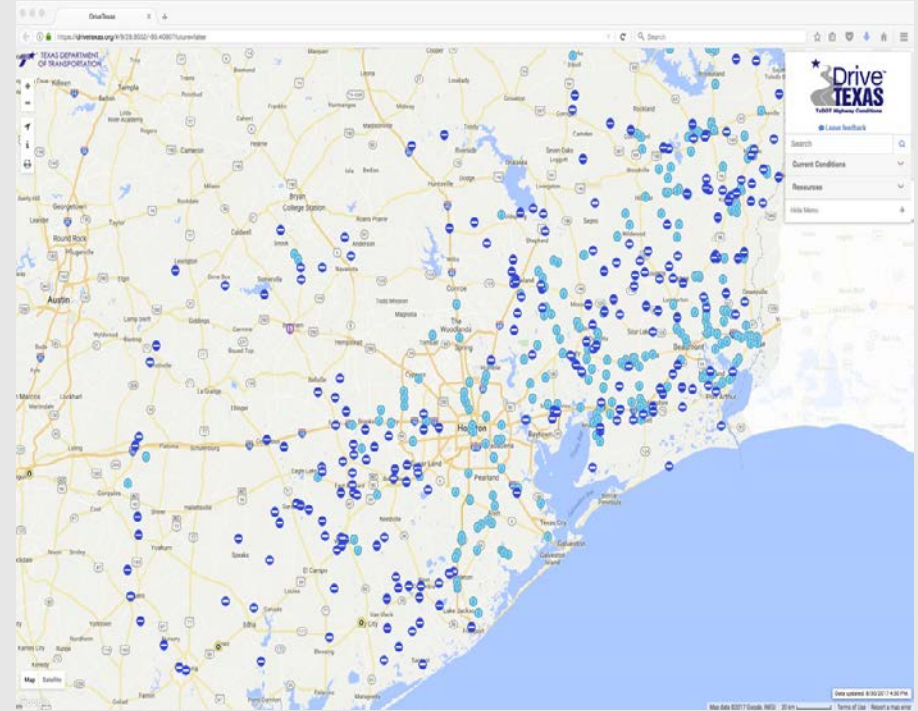
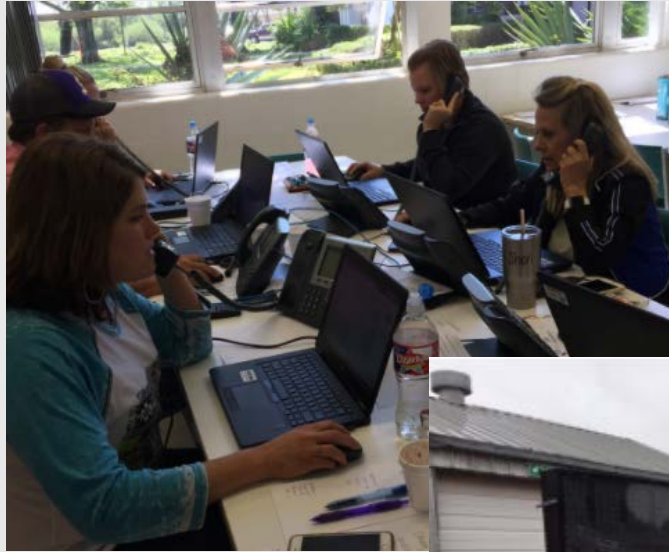


TxDOT - Yoakum @TxDOTYoakum · Aug 23

As we prepare for #Harvey, remember you can check DriveTexas.org for road conditions



Disaster & Emergency - Preparedness & Response



- Over 5.1 million site visits to DriveTexas.org
- TxDOT Travel Information phone line received over 163,000 calls

Disaster & Emergency - Response & Recovery

- After a hurricane makes landfall, one of TxDOT's top priorities is to clear roadways of debris for emergency response operations.
- After Harvey, as soon as it was safe for TxDOT personnel to enter the impacted areas, TxDOT crews provided 24-hour, seven-day-a-week support.
 - 4,774 employees have participated
 - 740,866 labor hours



Disaster & Emergency - Response & Recovery

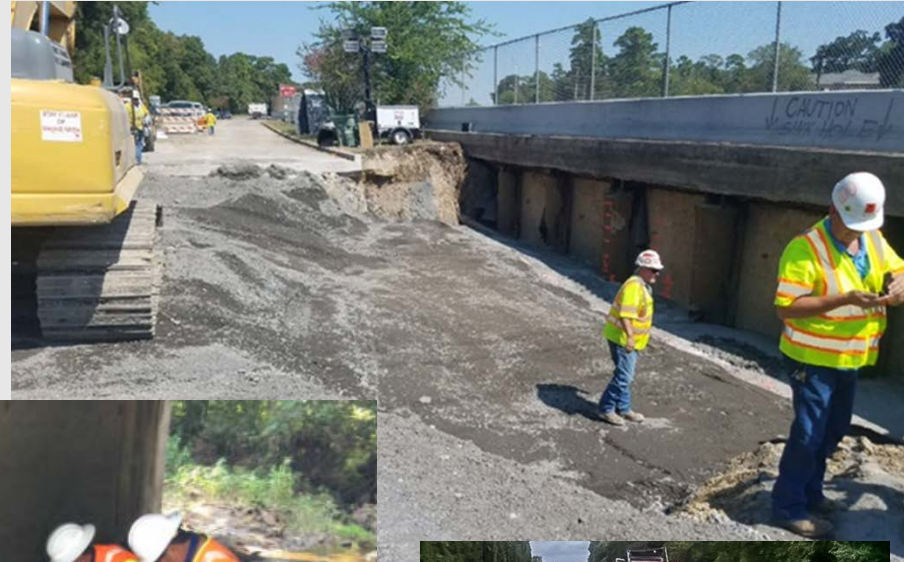
TxDOT's response to Hurricane Harvey included:

- high water rescue support;
- traffic sign and signal repair;
- debris cleanup;
- installation of aqua dams;
- bridge and roadway inspections/repair;
- equipment and resources for local governments; and
- real time roadway updates through the DriveTexas.org website.



Disaster & Emergency - Response & Recovery (Road & Bridge Inspections)

In the immediate aftermath of Harvey, over 500 roadways were closed because of high water and 4,319 on-system bridges (state assets) were impacted. After floodwaters receded, TxDOT and its contractors inspected roads and bridges for damage and made repairs.



Disaster & Emergency - Response & Recovery (Aqua Dams)



Disaster & Emergency - Response & Recovery (Sign and Signal Repair)



Disaster & Emergency - Response & Recovery (Debris Removal)

13,791,107 cubic feet of debris removed as of 10/26/17.



TxDOT-Beaumont @TxDOTBeaumont · 2h
Our crews continue to pick up #Harvey debris throughout Southeast Texas

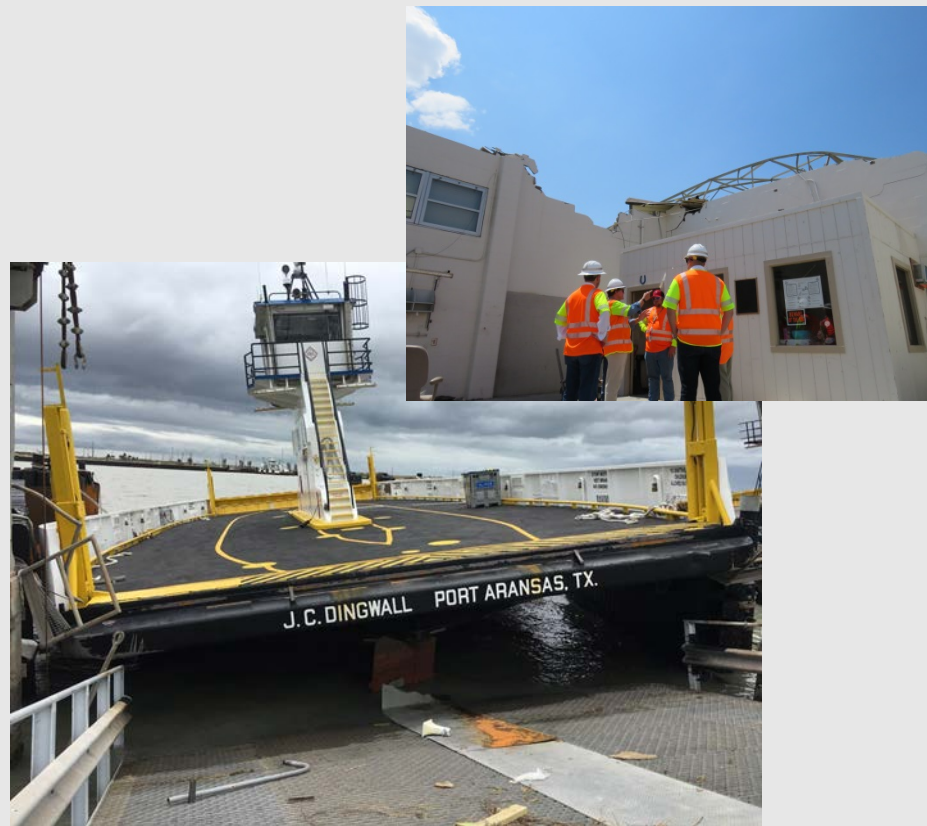


TxDOT CRP PIO @TxDOT_CRP · Sep 18
TxDOT crews from San Antonio, Brownwood, Lufkin, Waco, Pharr assisting Corpus Christi District with Harvey debris removal in Rockport area.



Disaster & Emergency - Recovery (TxDOT Capital Facilities & Equipment)

TxDOT's Rockport maintenance facilities

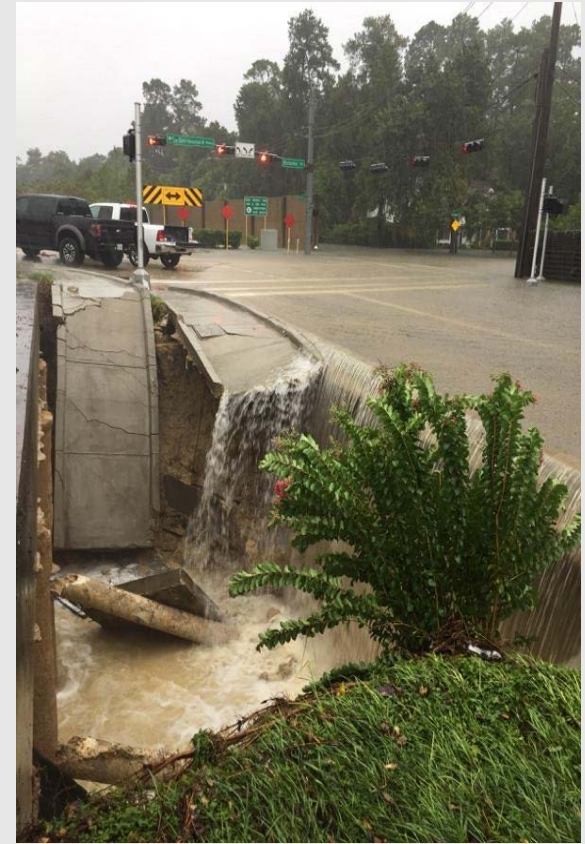


TxDOT's Port Aransas Ferry boat

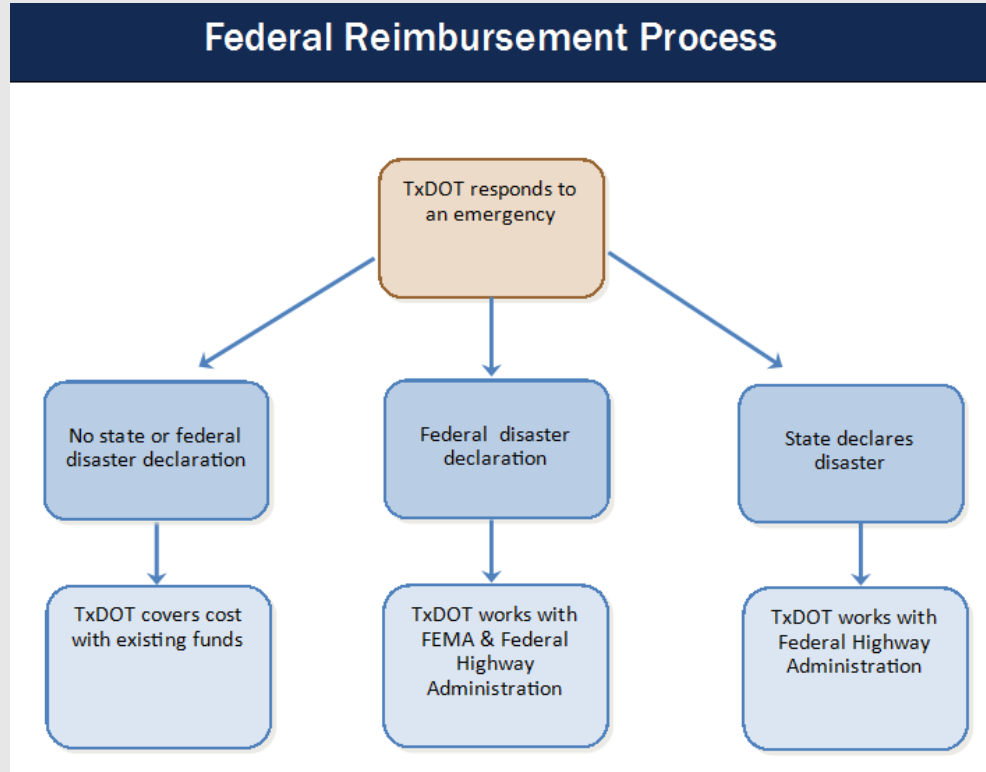
Disaster & Emergency - State Expenditures & Federal Reimbursements

As of 10/26/17 TxDOT's preliminary costs estimates are:

- Response Mobilization - \$48 million
- Roadway Damage - \$110 million
- TxDOT Facilities & Ferry Operations - \$10 million
- Equipment Costs - \$6.2 million



Disaster & Emergency - State Expenditures & Federal Reimbursements



Disaster & Emergency - State Expenditures & Federal Reimbursements

- Federal reimbursement programs for disasters are not designed to cover all TxDOT expenses during emergency or disaster situations.
- Regardless of the availability of federal reimbursement, there may be a need for TxDOT's assistance. TxDOT's decision to respond is not based on the likelihood of its reimbursement. TxDOT's primary focus is to respond to emergencies and to restore roadways back to normal operating conditions.
- TxDOT is working closely with FEMA, FHWA and the Governor's Office on disaster recovery and reimbursement.
 - On August 29, 2017, FHWA announced \$25 million in emergency relief funds for road and bridge repair.
 - September 8, 2017, President Trump signed legislation that provides \$15.25 billion in disaster relief funds, of which \$7.4 billion is for FEMA. FEMA will be reimbursing many transportation-related expenditures.

Disaster & Emergency - TxDOT After Action Review and Future Actions

- TxDOT is currently performing after action reviews of the response to Hurricane Harvey.
 - The Hurricane Response Re-Entry plan will be updated to reflect the lessons learned and to improve TxDOT's response to future hurricanes.
- TxDOT is also evaluating roadways that have repeatedly flooded during rain events to determine if the roadway should be improved to mitigate future flooding.



TxDOT Disaster & Emergency Preparedness, Response & Recovery

- The safety of the traveling public is TxDOT's priority when responding to disasters. Harvey presented a formidable challenge, but TxDOT was prepared to respond. The professionalism and dedication of TxDOT employees was evident throughout Hurricane Harvey. TxDOT staff will continue to respond to this disaster in the weeks and months ahead.

