



Role of Public Works in a Disaster

And the Public Works Response Team

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Role of Public Works in a Disaster

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Guidance Position Statement

Public Works Professionals as Emergency Responders

Background and Rationale

It has always been a difficult challenge to focus attention on the important role that public works fulfills until a significant disaster, hazard or terrorism event occurs. This challenge has been especially true since the attacks in September of 2001. The fact remains that the recovery efforts at the World Trade Center were directed by and carried out by City of New York construction engineering, and sanitation personnel, and numerous private public works contractors.



Role of Public Works in a Disaster

Following the 2001 terrorist attacks, the President, Congress and the Department of Homeland Security (DHS) recognized the crucial first response role in the Homeland Security Act of 2002 and Homeland Security Presidential Directive 8. The President and DHS acknowledged that to combat emerging threats all disciplines must work together during prevention, preparedness, response and recovery operations.



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Homeland Security Presidential Directive / HSPD-8

(d) The term "first responder" refers to those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations.

Public Law 107–296 107th Congress: An Act To establish the Department of Homeland Security, and for other purposes. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, SECTION 1. SHORT TITLE; TABLE OF CONTENTS. (a) SHORT TITLE.—This Act may be cited as the “Homeland Security Act of 2002”.
SEC. 2. DEFINITIONS.

(6) The term “emergency response providers” includes Federal, State, and local emergency public safety, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities.



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Role of Public Works in a Disaster

Regardless of public works recognition as first responders at the federal level, it has been an uphill battle at the state, tribal and local levels.

For example, when Hurricane Katrina broke in August of 2005 and caused catastrophic flooding throughout New Orleans, Louisiana, public works labored around the clock to clear debris, mend broken levees, and reactivate pumping and drainage systems. Despite their tireless efforts, public works was not openly identified as key first responders.

Similarly, little was known about the response and recovery operations of public works amidst the wildfires plaguing California in October of 2007 until APWA reminded the State government of these efforts.



Role of Public Works in a Disaster

The ongoing task is to continue integrating the public works team into emergency response operations. Interagency coordination, communication and collaboration are vital to achieve the most effective, efficient response possible.

Disasters of any type and size can significantly affect the nation, its citizens, and communities.

Disruption of public services, property and job loss, and death and injury are often the devastating outcomes.

Emergencies are dynamic, and every disaster brings forth new challenges and provides valuable lessons that, if implemented, can greatly improve community preparedness and response capabilities.

Sponsor

Emergency Management Committee

3-4-10



Emergency Management Cycle



Emergency Management Cycle



Preparedness Phase

- Includes plans or preparations made to save lives and to help response and rescue operations.
- Evacuation plans and stocking food and water are both examples of preparedness.
- Preparedness activities take place **before** an emergency occurs.



Emergency Support Functions (ESF)

ESF	Title
1	Transportation
2	Communications
3	Public Works and Engineering
4	Firefighting
5	Emergency Management
6	Mass Care, Housing and Human Services
7	Logistics Management and Resource Support

ESF	Title
8	Public Health and Medical
9	Search and Rescue
10	Hazardous Materials Response
11	Agriculture and Natural Resources
12	Energy
13	Public Safety and Security
14	Long-Term Community Recovery
15	External Affairs

- Consolidate multiple agencies that perform similar functions into a single cohesive unit.



Public Works Preparedness

- Identifying lifelines
- Performing risk assessments
- Conducting vulnerability assessments
- Identifying roles and responsibilities
- Evaluating available resources
- Considering communication needs
- Determining technical support capabilities



Emergency Management Cycle



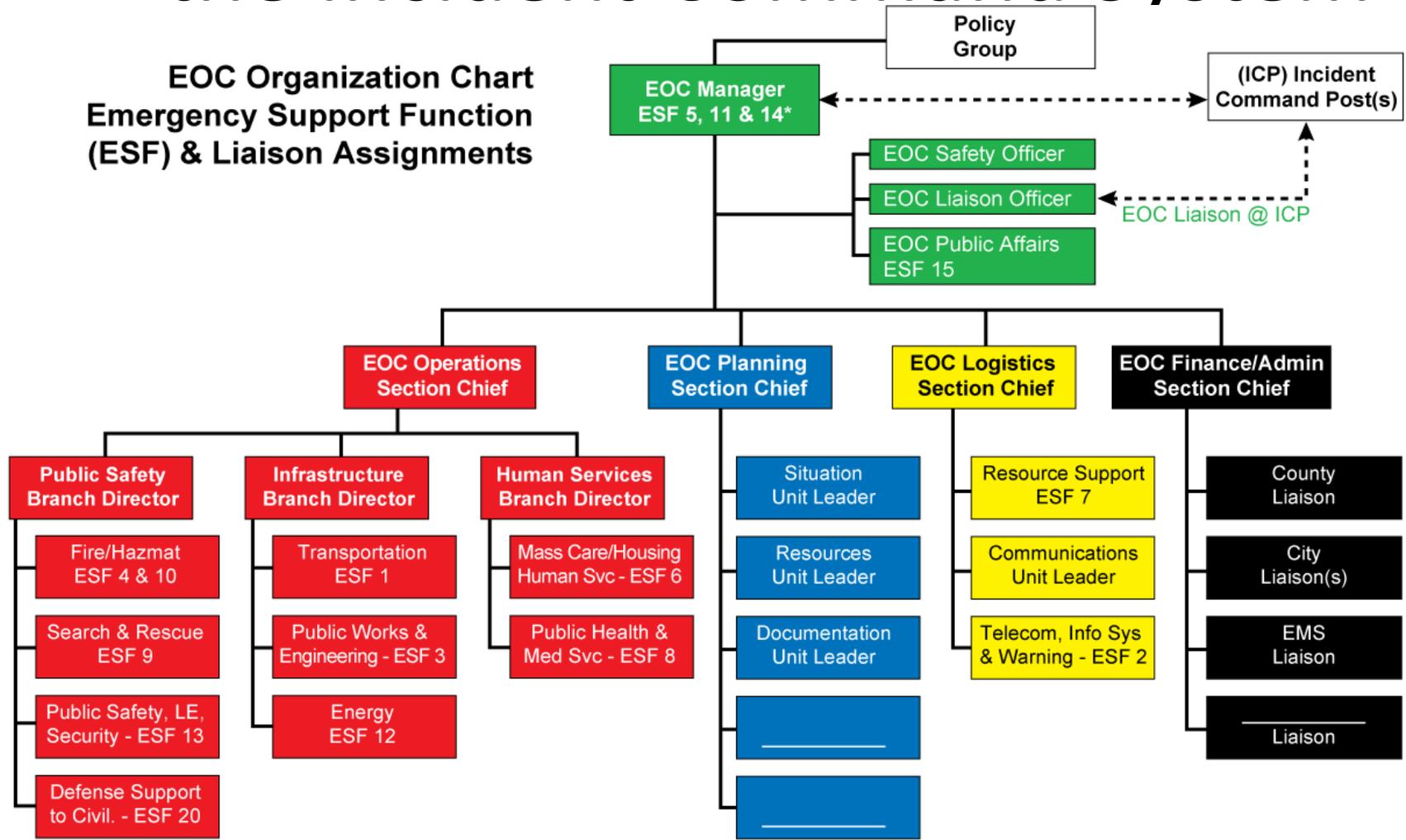
Response Phase

- Includes actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action.
- Seeking shelter from a tornado or turning off gas valves in an earthquake are both response activities.
- Response activities take place **during** an emergency.



Emergency Support Functions within the Incident Command System

**EOC Organization Chart
Emergency Support Function (ESF) & Liaison Assignments**



Public Works Response

- Assess damage
- Secure utilities, facilities and lifelines
- Open roads and maintain safe travel routes
- Manage environmental and safety hazards
- Manage resources
- Assist in restoration prioritization



Public Works Response

- Clear debris from roadways and make repairs to reopen transportation arteries.
- Make expedient repairs to essential public facilities to restore operations or protect them from further damage.
- Remove debris from public property and manage debris disposal operations for public and private property.
- Assist in controlling public access to hazardous areas.



Public Works Response

- For slowly developing emergency situations, take actions to protect government facilities, equipment, and supplies prior to the onset of hazardous conditions.
- Provide heavy equipment support for search and rescue operations.
- Conduct damage-assessment surveys of public facilities, roads, bridges, and other infrastructure.
- Inspect damaged structures.



Emergency Management Cycle



Recovery Phase

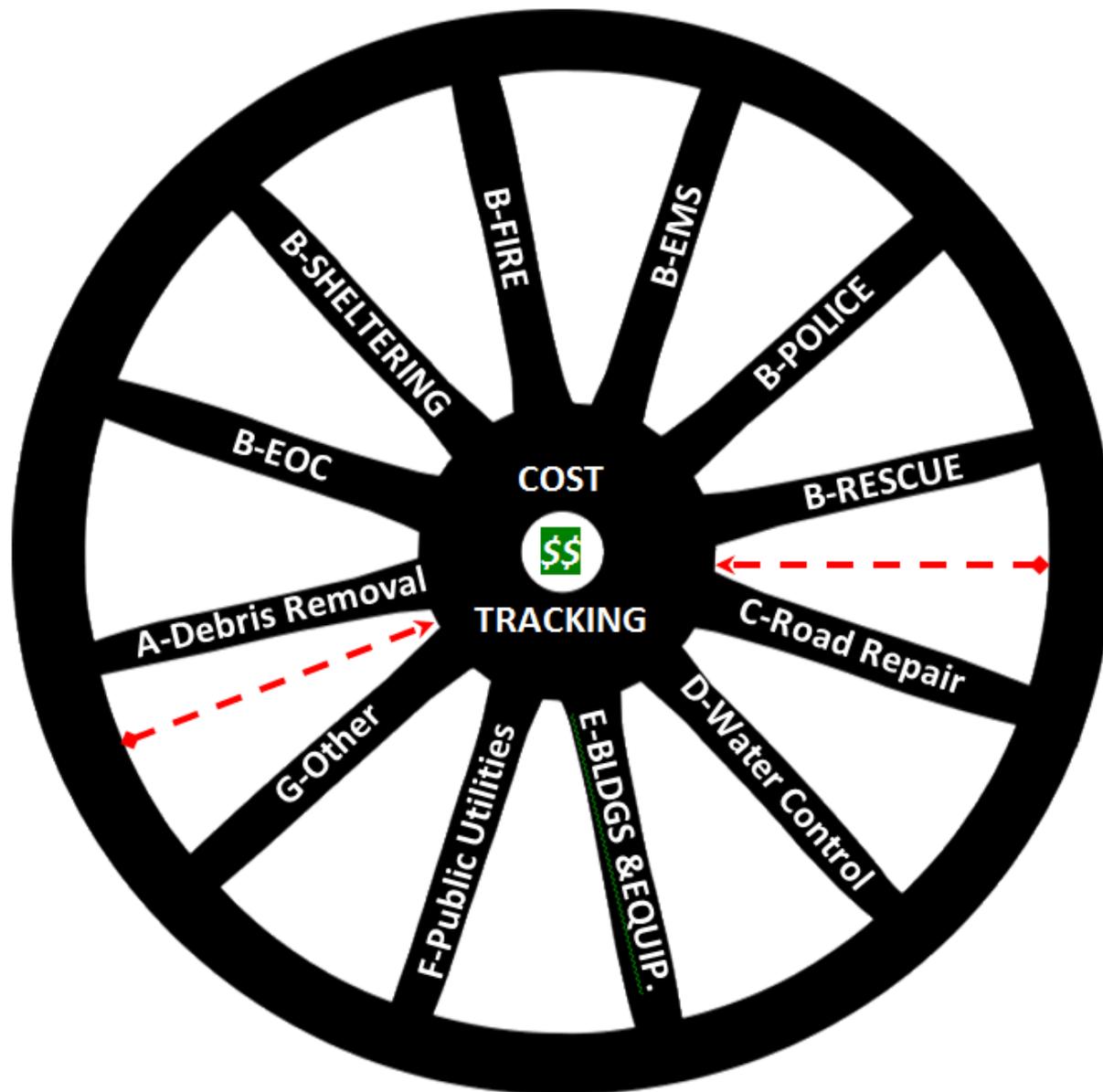
- Includes actions taken to return to a normal or even safer situation following an emergency
- May include getting financial assistance
- Effective recovery activities start during the response



Public Works Recovery

- Public Works takes lead role
- Restoration of services
- Long-term debris management
- Inspection services
- Facility reconstruction
- Documentation Upkeep





The Disaster Financial Wheel of Success

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Overview of the PA Program Process

A complete cycle of the PA Program process consists of:

- A preliminary damage assessment.
- A Governor's request.
- A Declaration.
- An applicants' briefing.
- Request for Public Assistance.
- Kickoff meeting.
- Project formulation.
- Project review:
 - Small projects.
 - Large projects.
- Project funding.
- Program Closeout.

The activities involved with each of these steps will be explained on the following screens.



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Emergency Management Cycle



Mitigation Phase

- Includes any activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies.
- Buying flood and fire insurance for your home is a mitigation activity.
- Mitigation activities take place **before** and **after** emergencies.



Public Works Mitigation

- Services, personnel and equipment gaps
- Lifelines or infrastructure
- Building safety
- Public awareness
- Redevelopment and reconstruction
- After-action review





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What is the Public Works Response Team?



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PWRT Overview

Mission

The Public Works Response Team (PWRT) supports local jurisdictions in their response to a catastrophic event by providing critical public works services as needed to facilitate recovery.

Purpose

When a catastrophic event occurs and the citizens of Texas have their daily lives and local economy disrupted, an immediate and integrated public works response provides for quicker recovery of critical services and infrastructure.



PWRT Overview

- State asset established in 2007
- The operationally ready response teams are recruited from local jurisdictions
- Coordinated with other State Agencies
- Memorandums of Understanding



What can the Public Works Response Team do?



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Team Composition

- Administrative
- Bridge Engineering
- Communications
- Dam / Levee Engineering
- Debris Clearance
- Electric Power Systems
- Electrician
- Environmental / Hazardous Materials
- Fleet Management
- Heavy Equipment
- Highways / Roads Engineering
- Inspector
- Natural Gas
- Parks & Recreation
- Public Works Resource Team POC
- Solid Waste
- Storm Water Drainage
- Structural Building Codes
- Traffic Signals
- Transportation Systems
- Wastewater
- Water
- Other



Response Support

- Debris Removal
- Traffic Control and Signage
- Enhance local capabilities





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Operational Support

- Public works resources
- Information collection
- Support local jurisdictions





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Planning Support

- Re-entry
- Recovery of essential services
- Local capabilities





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Deployments

- Hurricane Dolly - 2008
- Hurricane Ike - 2008
- South Texas Wildfires - 2007, 2008, 2009
- Cameron County Flood – 2008
- Starr County Flood – 2007, 2008
- Hurricane Alex - 2010
- Webb County Flood - 2010
- Bastrop Complex Fire – 2011
- McAllen Hail Storm – 2012
- Hidalgo County Irrigation District 2 – 2012
- West Fertilizer Plant Explosion – 2013
- Memorial Day Floods 2015



Participation

- North Central Texas Council of Governments (NCTCOG) Public Works Emergency Response Team (PWERT)
- Building Officials Association of Texas (BOAT)
- City of McAllen
- Texas Water/Wastewater Agency Response Network (TXWARN)
- Texas Military Department (TMD)
- Structural Engineers Association of Texas (SEAoT)
- AIA Dallas Chapter



How to request assistance from the Public Works Response Team?

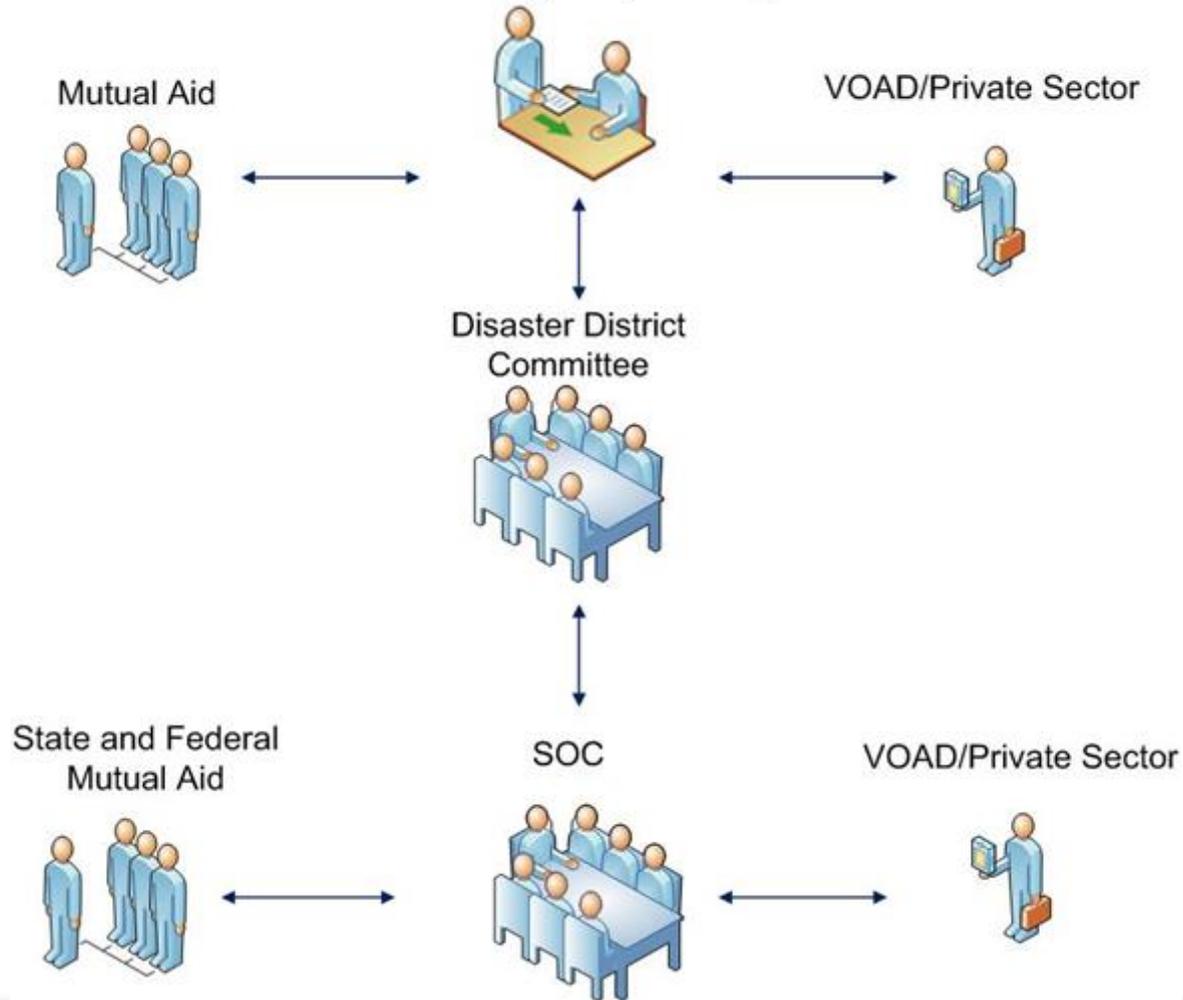


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Texas Disaster Response

Local Emergency Management



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As of
1/11/2017

Texas Disaster Response

- Get to know your local Public Works Director or Road and Bridge Supervisor
- Get to know your local Emergency Manager and District Coordinator (DC)
 - Interactive Map of DCs
(<http://www.dps.texas.gov/dem/DDC/districtMap.htm>)
- Request assistance for your issues including specific, detailed information



Frequently Asked Questions

- By signing up, what am I volunteering for?
 - By signing up, you are volunteering to receive PWRT program updates and training opportunities. Response to an emergency will come in an official request from the State Operations Center, and only if you are available.
- Will I be reimbursed for my deployment expenses?
 - Yes. All members will be reimbursed for deployment expenses and are required to enter into a memorandum of understand with the state prior to deployment.
- How much will it cost my county to request the PWRT?
 - During a declared state disaster, once you request assistance through the DDC it will not cost your county anything.
- Can I sign up to receive the emails without signing a MOU?
 - Yes you can, email Russell Marshall to be added to the email list



In Closing

- Public works professionals play a vital role in all phases of emergency management.
- Public works is one of the first responders on the scene when a disaster strikes.
- Before, during, and after an emergency, public works is the lifeline for the community.
- Be specific when ordering resources



Questions?...



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www.dps.texas.gov/dem/pwrt



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Join!

PUBLIC WORKS RESPONSE TEAM

www.dps.texas.gov/dem/pwrt

When a catastrophic event occurs and the citizens of Texas have their daily lives and local economy disrupted, an immediate and integrated public works response provides for quicker recovery of critical services and infrastructure.



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