Petroleum Shortage Planning Workshop

2017 Hurricane Season Response State of Texas

Chuck Phinney

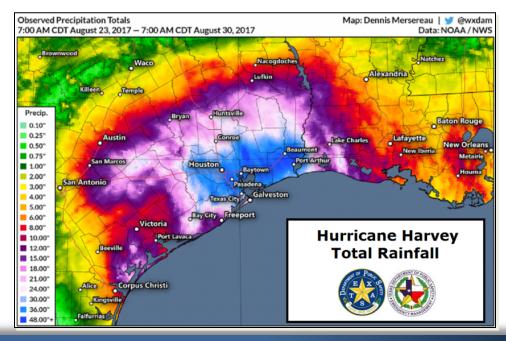
State Coordinator, Preparedness

Texas Division of Emergency Management



Hurricane Harvey
 RADAR GIF

Hurricane	Duration	Rainfall	Debris	30 Day Costs	Total Costs
Ike (2008)	2	16"	5 mil cubic yards	\$15 million	\$4.9 billion
Rita (2005)	2	16"	8.6 mil cubic yards	\$32.9 million	\$580 million
Harvey (2017)	7	60"+	19 mil cubic yards	\$300 million	\$18.5 billion (projected cost)



Search and Rescue

- 21,433 personnel
- 35,424 rescues

Military Support

17,415 personnel deployed

Transportation

650 buses used

Sheltering

- 258 shelters opened at peak
- 42,399 peak population
- 71,000 max shelter capacity



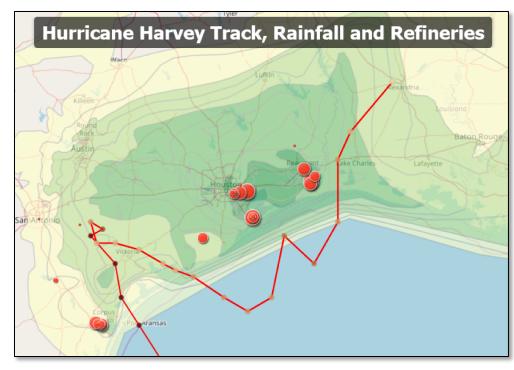
- Presidential Disaster Declaration for 53 Counties
- Governor's Disaster Proclamation for 60 Counties
- Population Impacted
 - 8,861,831 (excludes sheltering jurisdictions)
- Estimated agency expenses
 - \$437,296,894
- Total Texas State Operations
 Center Staff Hours
 - **56,699**



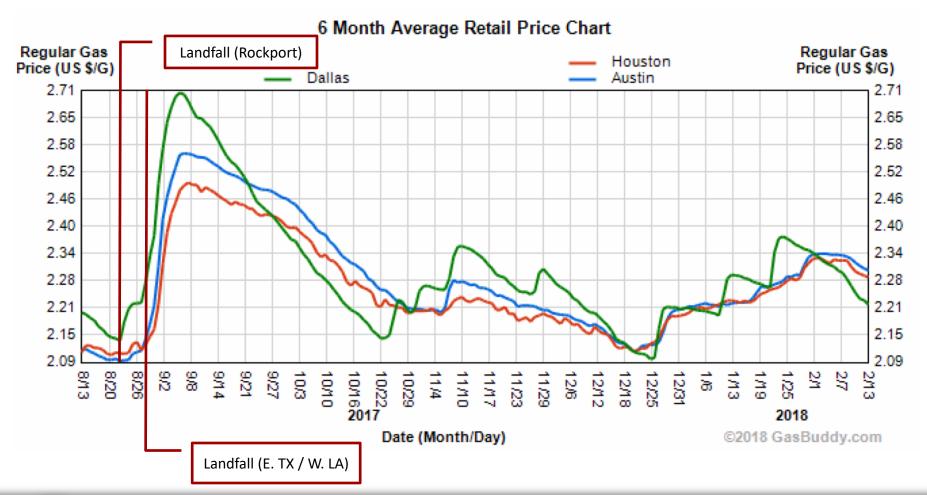
Storms Impact of Fuel

Major Impacts to Oil and Fuel

- Shutdowns initiated to gulf coast petrochemical facilities
- Decrease of 2.2 million
 b/cd due to shutdowns and degraded operations
- Colonial Pipeline impacted
- Additional strain due to evacuations



Fuel Price In Response

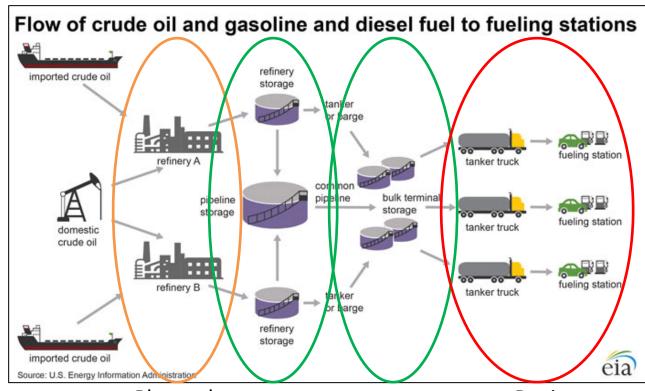




Supply Chain

Issues During Harvey

- Unprecedented storm behavior
- Retail supply issue (panic)
- Retail supply delay of 72 hours
- Fragmented supply chain vs unified supply chain



Planned Shutdowns

Panic Buying

Public Information vs. Social Media

Public Information

Railroad Commissioner Ryan Sitton: There is no fuel shortage

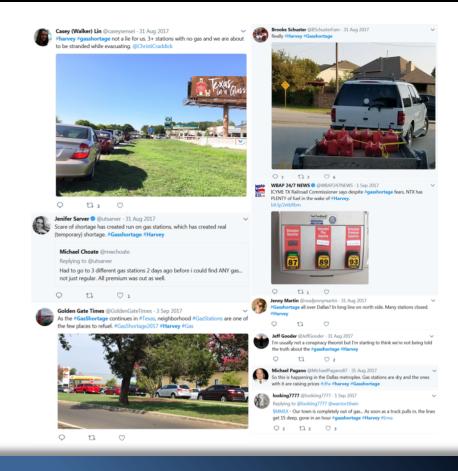
Long lines formed at Texas gas stations Thursday as some prices started to spike — but officials say Hurricane Harvey hasn't led to a shortage of fuel.

Gov. Abbott: There is plenty of gasoline in Texas

Texas Gov. Greg Abbott said Friday that there is plenty of gasoline in Texas, but the state is taking action to increase supply.



Social Media



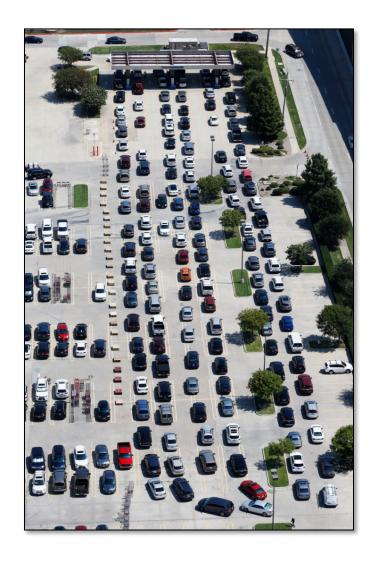


Texas Department of Public Safety

Impacts

Public

- Reduced fuel supply
- Potential for price gouging



Impacts

Emergency Management

- Time invested by EM community addressing a nonissue
- Fuel availability for responders



Photo by Joe Raedle/Getty Images

Key Actions Taken

Government Action

- International Fuel Tax
 Agreement (IFTA) waiver
- Texas Administrative Code
 30.334 Storage Tank
 Rules waiver
- EPA No Action Assurance (NAA) letters for Texas fuel distribution
- Public Information

Private Sector Action

- Magellan refined products pipeline reversal (OK - TX)
- Increased fuel shipments (from out of state)
- Other supporting business activities

2017 Hurricane Season

Lessons Learned

- Oil and Gas representatives in the State Emergency Operations Center
- Identification of waivers that can support petroleum supply chain
- Importance of pre-disaster responder fuel contracts
- Proactive communication across old, new and social media platforms

Thank You!



