The Year of the Hurricanes

Dealing with the Immediate Needs & Planning a Successful Recovery

National Tornado Summit

February 27, 2018
Disaster Impact Across the United States

**WHY SHOULD YOU CARE?**

In 2016, the United States weathered 23 natural disasters with economic damages exceeding **$48B**. The statistics for the past 10 year include:

- 165 storms impacting 88M people with **$280B** in damages
- 14 floods impacting 11M people with **$36B** in damages
- 3 Wildfires impacting 1M people with **$18B** in damages
- 5 earthquakes, droughts, and landslides with **$22B** in damages

State and Local officials are challenged with the daunting task of not only responding to such events and protecting their citizens, but also building back communities that are stronger while planning for enhanced future resilience.

*Source: www.unisdr.org and www.emdat.be*
Disaster Recovery Challenges Communities Face

**What are the common challenges**

- Underfunded mitigation agencies
- Lack of defined roles & responsibilities
- Lack of strategic community vision
- Lack of political commitment
- Lack of urgency
- Lack of private-sector involvement
- Lack of response readiness
- Uncoordinated responders
- Intense public scrutiny
- Limited funding availability
- Exposure to reputational risk
- Lack of community education
- Undefined communication protocol

- Ineffective local assistance
- Lack of transparency
- Exposure to financial risk
- Lack of a thorough recovery plan
- Burdensome eligibility requirements
- Potential for fraud, waste, and abuse
Harris County, TX (including Houston) covers an area of over 1,700 square miles with a population of 4.7 million. The unincorporated area of Harris County covers over 986 square miles with a population of 2 million residents.
Hurricane Harvey is tied with Hurricane Katrina as the costliest tropical cyclone on record, resulting in at least $125 billion in damage, primarily from catastrophic rainfall.

**Impact of Harvey**

- **Costliest Tropical Cyclone**

  - 63 Lives Lost
  - 200,000 Homes Damaged or Destroyed
  - 1 Trillion Gallons of Rain
  - $80 Billion in Damages
  - 30% of County submerged
Harris County is working diligently with multiple Federal, State, and Local Agencies in providing immediate relief and recovery services to the residents. We are currently focusing on:

**Current Situation**

**Federal Funding**

- **FHWA**
  Over $23 million in ER projects identified and being submitted to the FHWA review

- **FEMA**
  Over $250 million in damage estimates currently being provided for FEMA review

- **Other**
  Communicating with other agencies including USDA, USACE, NRCS, EPA as needed

- **HUD**
  Needs assessment under way
While Harris County is working with multiple Federal, State, and Local Agencies in providing immediate relief and recovery services to the residents, we are focusing on:

**Current Situation**

*What is on the top of our minds*

- Where will impacted residents choose to live temporarily, and will they eventually decide to return to their communities?
- How will damaged/destroyed infrastructure and other public assets be rebuilt in a resilient manner to support full recovery, as well as address future community and economic needs/goals?
- Will businesses, both those directly damaged by the disaster and those indirectly impacted by the event, survive to provide jobs and services in the future – how will economic recovery look?
- How can vulnerable communities rebuild to be more resilient to future unexpected events? How can at-risk populations’ needs in those communities be addressed during the recovery process?
- How can stakeholders manage the financial and reputational risks associated with disaster recovery? How long will it take to achieve full recovery? How do communities fund comprehensive recovery?
- What can Harris County do to be better prepared for long term recovery and unexpected events? Infrastructure and Capital Assets? Homes? Hospitals and Schools? Economically and Socially?
We have started down the path of recovery and are eager to make significant progress for the community as quickly as possible, cognizant of the need to speed recovery efforts while mitigating risks of non-compliance with various grant regulations.
Joplin, Missouri
EF-5 Tornado – May 2011
Joplin, Missouri

‘The Fish’

That the time of the disaster, the City of Joplin had a population of 51,150. The 2011 tornado impacted approximately 1/3 of the City, as shown by below map, in the most densely populated portion of the City – 1,500 people per square mile.
Joplin Tornado
Deadliest Tornado in 70 Years

The Joplin tornado was one of the most deadly, and the 7\textsuperscript{th} costliness, tornado in U.S. history. +17,000 Joplin residents were directly impacted by the disaster, +9,200 residents were left homeless following the event.

- 161 Lives Lost
- +7,500 Homes Damaged or Destroyed, +550 business Damaged or Destroyed
- +$3 Billion in Damages
- +3 Million Cubic Yards of Residential Debris Removed
- 33\% of City's Area Impacted, traveling +13 miles
Recovery Overview
Where we are today

54 projects were selected in the Capital Plan totaling over $137 million with the remainder of the funds allocated to administration, planning, and ADC.

All $158 million has been obligated.

- 96% of the 54 projects identified in the capital plan are in progress.
- 14 projects are substantially complete.
- $36 million is currently in active construction and/or execution phase.
- $100 million of the $158 million received in CDBG-DR grants have been spent to date.

*Activity Delivery Costs
Recovery Timeline
From Start to Finish

Overview of CDBG-DR Timeline through Closeout

<table>
<thead>
<tr>
<th>Year</th>
<th>Housing Projects</th>
<th>Infrastructure Projects</th>
<th>Public Facilities &amp; Services Projects</th>
<th>Economic Development Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overview of the Joplin Capital Plan Allocation Process

City of Joplin
Capital Plan Presentation
June 11, 2015

[Diagram showing workshop results and capital plan allocation process]

[Table showing strategic goals of the vision and project outcomes]
Affordable Housing - JHAP/JHRP

Down-payment Assistance & Rehabilitation Program

**Project Description**

JHAP provided down-payment and closing cost assistance to 580 homes/1,250 residents within 120% median income purchasing homes in the recovery area, resulting in increasing the number of affordable housing opportunities and assisting in the repopulation of the recovery area. JHRP provided funding to Low-Moderate Income (LMI) homeowners to assist in the rehabilitation of homes damaged as a result of the disaster.

**Key Current Activities**

- Complete project closeouts

**Project Owners**

<table>
<thead>
<tr>
<th>Category</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Patty Heagel/Larry Eller</td>
</tr>
<tr>
<td>PwC</td>
<td>Shannon Anasotospolos</td>
</tr>
</tbody>
</table>

**Allocation & Expenses**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable Housing</td>
<td>$17.8 million</td>
</tr>
<tr>
<td>JHAP/JHRP</td>
<td>$17.8 million</td>
</tr>
</tbody>
</table>
Economic Redevelopment - ATTC Phases I&II
Building & Equipment Purchase for Training Facility

Project Description
Post-disaster recovery requires an economic component, and Joplin is committed to supporting a vibrant and resilient local economy. A part of Joplin’s economic strategy is providing workforce training to the unemployed and upgrading the skillsets of the underemployed. The ATTC will address the area’s workforce needs by providing better skilled workers to existing and new companies, and enable local residents (specifically LMI residents) to advance their skills and, consequently, their standard of living.

Key Current Activities
- Finalize RFP for roofing rehabilitation
- Assess additional equipment needs

Project Owners
City  Patty Heagel/ Loni Smith
PwC  Travis Green

Allocation & Expenses
$ 5.9 million
$ 6.5 million
The Department of Housing and Urban Development (HUD) and the Office of Inspector General (OIG) have visited the City 6 times to perform periodic monitoring. These visits have resulted in a total of 3 Exemplary Practices, and no outstanding issues.
Questions?