Mission: Strengthening Homes & Safeguarding Families

• Volunteer committee formed in 1992

• Formalized in 1998 by six organizations to provide consumers and contractors with information on better building

• Shared goal - establish a public value for strong, safe and sustainable homes

• Today - nation’s leading consumer advocate for disaster safety awareness and education with more than 120 partners
Legacy Partners

- **Legacy Partners** provide unwavering support for the mission of strengthening homes and safeguarding families.

- **All Partners** uphold core values of Integrity, Innovation, and Collaboration.
Partners in Prevention
Essential Elements for Strong, Safe & Resilient Communities

• Strong, well-enforced **Codes & Standards**

• **Consumers & Leaders** who understand, value & demand stronger, safer buildings

• **Higher Education** that includes building codes & mitigation

• **Incentives** (Insurance, Real Estate, Tax)

• **Innovators** in all sectors

• **Research** – Building, Social Science & more
Strategy for Disaster Resilience

Leadership
Partnership
Outreach
Education
Leading the Resilience Dialogue

- Building Code Commentary – 2014
- [www.flash.org/building-codes.pdf](http://www.flash.org/building-codes.pdf)
- Case studies tell the story of code challenges and best practices across the U.S.
  – Texas spotlight
- Next paper – June 2015
The Florida League of Mayors, in partnership with the Federal Alliance for Safe Homes (FLASH), presents a Florida League of Mayors Roundtable titled “The Florida Resilience Symposium.”

This symposium is designed to help mayors understand and learn how to be leaders in disaster safety, before and after a disaster strikes.

Learn the latest information on resiliency, how it impacts your city, and how you can involve citizens in protecting their properties and lives.
Tale of Two Homes: Superstorm Sandy

October 29, 2013

- Video features footage of Union Beach, NJ home and neighborhood during wind and storm surge event
- Family survived in elevated concrete home next door that was built in 2006 to current building codes and standards
- Demonstration rebuild project - 2015

[Image: YouTube.com/stronghomes]
StormStruck: A Tale of Two Homes

- 4-D “Edu-tainment” experience in Epcot opening August 2008
- Added “Flood Wall” in 2009
- National Weatherpersons’ Day
- #1 INNOVENTIONS since 2008 (5 million+ visitors)
- 10,000+ kiosk generated postcards sent each month
- 150+ VIP events/tours
- Leading social psychologists/risk communication research
- New stormstruck.org site
StormStruck: A Tale of Two Homes
Reaching New Audiences

• Brings cornerstone message to a new, critical audience and any who game

• Introduces concept that “how we build” is more important than “aesthetics” and that resilience is purposeful

• Download on iTunes to participate in the soft launch
Last House Standing

- Free versions for iPhone, iPad & Google Play (post-launch)
- Beta testing with target audience successful
- 2.0 Planning Underway
Collaboration is Key …

• If Disaster Strikes … Will You Be Covered?
  – The Actuarial Foundation
• TADD Awareness Campaign
  – National Weather Service
State Focus - Texas

- Diverse public (FEMA) and private (insurance industry) coalition formed to advance cause of codes and better building
  - Architects, Code Officials, Engineers, FEMA, NWS, Floodplain managers, Insurance Industry, Manufacturers, Public Counsel, Retailers, TDI, TX Legislators

- Analysis products blend WX and Code Analysis to draw attention to opportunities in TX

- Model programs and legislation spinoff
  - Hurricane Tax Holiday Passed
    - Senate Bill 904

- [www.texasstatecollaborative.org](http://www.texasstatecollaborative.org)
Know Your Weather Risks

Top Three Hazards for Southeast Texas: Hurricanes, Flash Floods and Lightning

Hurricanes
Galveston was the site of the greatest natural disaster in our nation’s history in terms of loss of life with around 8,000 people killed by the 1900 Hurricane. Hurricanes and tropical storms remain the greatest threat to Southeast Texas and the Upper Texas Coast. Hurricanes Carla (1961), Alicia (1983) and Ike (2008) also inflicted tremendous damage on the region from the storm surge flooding, high winds, heavy rains and tornadoes.

Although Hurricane Ike was a Category 3 storm with respect to Intensity, its size was remarkable, with tropical storm force winds stretching a total of 425 miles from the northwest to southeast as it approached the Upper Texas coast. By comparison, Ike brought hurricane force winds to the eastern two-thirds of Southeast Texas. For residents, Ike will forever be remembered for its significant storm surge.

Flash Floods
In Southeast Texas, it is not unusual to measure rainfall in feet rather than inches. For example, Tropical Storm Allison produced greater than three feet of rain over a 3-day period over portions of the Houston area with record flooding and damages of near $11 billion. By comparison, Hurricane Alicia, the last major hurricane to strike the Upper Texas Coast, caused $2 billion damage and 21 fatalities. In addition to tropical storms and hurricanes, slow moving thunderstorms can also generate rain amounts of 6 to 12 inches, producing flash flooding especially in urban areas in and around Houston.

Lightning
Sometimes a forgotten danger, lightning is a frequent occurrence around Southeast Texas and frequently causes house fires, power outages and other damage. Since 2000, 15 people have been seriously injured by lightning strikes and at least 9 have been killed. In one tragic case in July 2012, a storm approached a group of men playing a soccer game. It started to rain and the men took shelter under a tree in an attempt to stay dry. Lightning struck the tree, killing two men and injuring the third.

Source: Unless otherwise noted, all information in this document courtesy of the National Weather Service. FLASH would like to thank the various individuals who contributed to this toolkit!

Building Codes Topline Messages

Better Building Codes and Practices Save Lives, Property and Money

- Building codes are a community’s first line of defense against natural disasters, including flash floods, hurricanes, hail, tornadoes, and wildfires. Building codes offer a minimum level of life safety which is why modern, model codes, and beyond-code building practices better protect homes and businesses against natural disasters.
  - Over the last 15 years, Texas has experienced its share of property damage from devastating natural disasters including:

<table>
<thead>
<tr>
<th>By Year</th>
<th>By Cost</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$230 million</td>
<td>Tornado/Hail (Palo Pinto)</td>
</tr>
<tr>
<td>2012</td>
<td>$330 million</td>
<td>Tornado/Hail (Dallas/Ft. Worth)</td>
</tr>
<tr>
<td>2012</td>
<td>$335 million</td>
<td>Hurricane Ike (Galveston)</td>
</tr>
<tr>
<td>2011</td>
<td>$300 million</td>
<td>Hurricane Sandy (Texas)</td>
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<tr>
<td>2016</td>
<td>$150 million</td>
<td>Tornado/Hail (Galveston)</td>
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<tr>
<td>2015</td>
<td>$100 million</td>
<td>Tornado/Hail (Dallas/Ft. Worth)</td>
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<tr>
<td>2014</td>
<td>$50 million</td>
<td>Hurricane Fort Hood (Texas)</td>
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<tr>
<td>2013</td>
<td>$25 million</td>
<td>Tornado/Hail (McAllen)</td>
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<tr>
<td>2012</td>
<td>$225 million</td>
<td>Hurricane Sandy (Texas)</td>
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<tr>
<td>2011</td>
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<td>Tornado/Hail (Galveston)</td>
</tr>
<tr>
<td>2010</td>
<td>$200 million</td>
<td>Tornado/Hail (McAllen)</td>
</tr>
</tbody>
</table>

- Better building codes and mitigation save lives and limit property losses.
  - A 2011 Louisiana State University Hurricane Center study determined that if strong building codes had been in place before Katrina, wind damage would have been reduced by 80 percent and $8 billion in property losses would have been saved.
  - A December 2013 report by the Federal Insurance Office of U.S. Department of the Treasury stated “proper construction techniques and materials can save lives and reduce both insured losses and taxpayer burden.” The report further cited that “effective mitigation strongly enhances the safety of occupants and durability of property.”

- Better building codes and mitigation reduce the burden on taxpayers and local governments tasked with providing first responders and emergency management services.
  - A 2008 study by the National Institute of Building Sciences’ Mitigation Council documented that $1 spent on mitigation for activities ranging from enhanced building codes and public awareness to large scale physical retrofitting and other mitigation construction projects saves society an average of up to $4.

- Better building codes prevent economic disruption to businesses, their employees and the overall community.
  - According to the National Oceanic and Atmospheric Administration, there have been 25 major disasters in the last two years that have caused more than $1 billion in economic losses.
What we’ve learned - Texas

- Good things underway in the cities; however, counties are without legal authority to enforce a code
- Many disbanded their Building Departments when third party inspectors were authorized
- Shortage of quality code inspectors, certification is done via a 60 question/open book test
- Resources severely limited
What we’ve learned - Texas

- Incomplete information regarding codes and regulations persists...counties may have codes, but they have no enforcement

For a long time, “counties could not even have a building code in the state of Texas.” That began to change six years ago, when the Texas Legislature enacted a measure that would allow certain counties to use either the county seat's residential building code or an internationally recognized model code. The change applied to residential projects that began after Sept. 1, 2009.

Harris County, which includes Houston and which some see as one of the more progressive counties in the state, quickly adopted a code after the measure passed.
Texas – We have real opportunities

- Information and trusted sources can drive success
- Coalition is in place and can be leveraged to support post-flood outreach and policy efforts
- Greatest legislative opportunity is to provide counties with enforcement power
- Requires long-term view and constancy with hyper-local focus
- Education to overcome knowledge gaps is essential
Disaster Safety: One Movement, Many Voices

www.flash.org
Facebook.com/federalalliance
Twitter - @LCHenderson & @FederalAlliance
YouTube.com/Stronghomes