



GOVERNOR'S  
COMMISSION  
FOR  
DISASTER  
RECOVERY  
AND RENEWAL

PRELIMINARY REPORT

MARCH 26, 2009

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## GOVERNOR'S COMMISSION FOR DISASTER RECOVERY AND RENEWAL

March 26, 2009

The Honorable Rick Perry  
Governor of Texas  
P.O. Box 12428  
Austin, Texas 78711

Dear Governor Perry:

The 2008 hurricane season was the costliest in Texas history. In less than eight weeks, three hurricanes and a major tropical storm battered our state. Hurricane Ike produced the most devastating storm surge to hit Texas since the Galveston Hurricane of 1900. Hurricane Ike, which caused more than \$50 billion in losses, will likely prove to be the second most costly disaster in U.S. history, behind only Hurricane Katrina.

After these disasters, you created the Commission for Disaster Recovery and Renewal. You charged the Commission with assisting our local communities with three sweeping tasks: recover from the 2008 storms, renew our communities, and reduce the impact of future disasters.

Since then, the Commission has held four public hearings, where individuals and officials from Beaumont to Brownsville have described how local communities are dealing with recovery. The Commission has seen firsthand the severe and catastrophic damage that still exists in places like Galveston County.

The tremendous losses from these storms present many challenges. With the state legislature in session and another hurricane season on the horizon, we must act now. The Commission has chosen to examine what it perceives to be the largest barriers to effective recovery and some vulnerabilities to future disasters. The Commission has developed equally large solutions to diminish, or eliminate, these barriers to recovery and vulnerabilities to future storms.

We are pleased to present this preliminary report to you. The Commission believes that the recommendations in this report, if implemented quickly, can help our citizens with recovery from our recent disasters, as well as those we will face in the future.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Eckels".

Robert Eckels  
Chair

# COMMISSION MEMBERS

## MEMBERS

ROBERT ECKELS, CHAIR, of Houston is an attorney with Fulbright and Jaworski L.L.P. and former County Judge of Harris County.

RON ACOSTA of Pearland is regional vice president of Wal-Mart Stores, Inc.

LONNIE ARRINGTON of Beaumont is president and owner of Fabricon International, Inc.

SID BOUSE of Port Bolivar is a Registered Professional Land Surveyor with Coastal Surveying of Texas.

HON. BROWN CLAYBAR is mayor of the City of Orange and president of Claybar Funeral Home.

IRMA DIAZ-GONZALEZ of Houston is president of the Employment and Training Centers Inc. and chair-elect of the Houston Hispanic Chamber of Commerce.

JOE DOMINO of Beaumont is president and CEO of Entergy Texas.

DEBBIE HASTINGS of Hutto is vice president for environmental affairs of the Texas Oil & Gas Association.

TREY HENDERSON III of Lufkin is owner of Angelina Hardwood Sales Company.

GARY HOCKSTRA of Lake Jackson is vice president and site director for Dow Texas Operations.

JO ANN HOWARD of Austin is president of H2O Partners, Inc.

JERRY KANE of Corpus Christi is president and CEO of Sam Kane Beef Processors, Inc.

MARY KELLY of Austin is an attorney and vice president of rivers and deltas at the Environmental Defense Fund.

BILL KING of Houston is an attorney at Bracewell & Giuliani LLP and president of Southwest Airport Services Inc.

TOM KORNEGAY of Houston is executive director of the Port of Houston Authority and a registered engineer.

DAVID LAKEY of Austin is a medical doctor and commissioner of the Texas Department of State Health Services.

DAVID LOPEZ of Houston is president and CEO of the Harris County Hospital District.

ROSS MARGRAVES, JR. of Houston is an attorney with Winstead PC.

KEVAN MCCRAE of Houston is safety, health and environment manager of ExxonMobil Pipeline Company.

SCOTT MCCLELLAND of Houston is president of the Houston Division of H-E-B.

TRACYE MCDANIEL of Houston is executive vice president and COO of the Greater Houston Partnership.

ALLAN POLUNSKY of San Antonio is an attorney and chair of the Texas Public Safety Commission.

PENNY REDINGTON of Austin is executive director of the Texas Association of Regional Councils and former County Judge of Ellis County.

DEAN ROBINSON is an agent with State Farm Insurance and former mayor of Silsbee.

REGINA ROGERS of Beaumont is an attorney and a member of the Harris County Hospital District.

ROLANDO RUBIANO of Harlingen is a structural engineer and principal with Green, Rubiano and Associates.

KAREN SEXTON of Galveston is interim executive vice president and CEO of the University of Texas Medical Branch.

JEFF SJOSTROM of Galveston is founding president of the Galveston Economic Partnership.

BILL SUMMERS of Alamo is president and CEO of the Rio Grande Valley Partnership.

WADE UPTON of Houston is retired senior vice president of Valero Energy Corporation.

DAN WOLTERMAN of Houston is president and CEO of Memorial Hermann Healthcare System.

ED YOUNG of Houston is senior pastor of Houston's Second Baptist Church.

## ELECTED OFFICIALS

HON. JERRY PATTERSON of Austin is Texas Land Commissioner.

HON. TODD STAPLES of Austin is Texas Commissioner of Agriculture.

HON. C. H. MILLS JR. of Aransas is County Judge of Aransas County.

HON. E. J. KING of Brazoria is County Judge of Brazoria County.

HON. MIKE PFEIFER is County Judge of Calhoun County.

HON. CARLOS CASCOS is County Judge of Cameron County.

HON. JIMMY SYLVIA is County Judge of Chambers County.

HON. JIM YARBROUGH is County Judge of Galveston County.

HON. ED EMMETT is County Judge of Harris County.

HON. J. D. SALINAS III is County Judge of Hidalgo County.

HON. PHIL FITZGERALD is County Judge of Liberty County.

HON. HARRISON STAFFORD is County Judge of Jackson County.

HON. RONALD WALKER is County Judge of Jefferson County.

HON. J. R. GARCIA JR. is County Judge of Kenedy County.

HON. PETE DE LA GARZA is County Judge of Kleberg County.

HON. NATE McDONALD is County Judge of Matagorda County.

HON. SAMUEL NEAL is County Judge of Nueces County.

HON. CARL THIBODEAUX is County Judge of Orange County.

HON. RENE MASCORRO is County Judge of Refugio County.

HON. TERRY SIMPSON is County Judge of San Patricio County.

HON. ELOY VERA is County Judge of Starr County.

HON. DONALD POZZI is County Judge of Victoria County.

HON. ELISEO BARNHART is County Judge of Willacy County.

## COMMISSION STAFF

ELLEN WITT is director of the Division of Disaster Recovery and Renewal within the Office of the Governor.

KATY SELLERS is policy advisor in the Division of Disaster Recovery and Renewal within the Office of the Governor.

# PREFACE

In 2008, Texas suffered a devastating hurricane season, marked by the costliest storm to hit our state: Hurricane Ike. In response to these disasters, Governor Rick Perry issued Executive Order RP 69, creating the Governor's Commission for Disaster Recovery and Renewal. These are the Commission's preliminary findings and recommendations.

## THE WORK OF THE COMMISSION

### The Commission's Charge

The Commission was charged with assisting our local communities with three sweeping tasks: recover from the 2008 storms, reduce the impact of future storms, and renew our communities.

More specifically, the Commission was charged to assist with:

- 1) Recovery—"Work cooperatively with the ongoing Hurricane Ike Recovery and Coordination Effort to document Texas communities' recovery needs and assist in seeking full federal reimbursement for recovery."
- 2) Reducing Impact—"Develop recommendations designed to reduce the impact of natural disasters and build public-private partnerships that improve the state's ability to mitigate, respond to, and recover from disasters."
- 3) Renewal—"Recommend courses of action that will help devastated communities not only rebuild their economic base but also improve the quality of life and economic prosperity of their residents."

Also, the Commission was charged with developing a report containing recommendations that identify:

- 1) critical needs of communities that will assist them in achieving full recovery from the effects of recent disasters;

- 2) processes, protocols and standards to assist in preparing for future disasters; and
- 3) strategies and organizational alignments to build back affected communities better than they were before the disasters.

Governor Perry gave the Commission some guiding principles to aid in executing these charges. Local governments are best equipped to assess their own damage and develop recovery plans tailored to their communities. But these communities need additional resources from an integration of private, public, and non-profit assistance to recover from and to prepare for future disasters.

Governor Perry charged the Commission with presenting a final report by June 30, 2009. With the 81<sup>st</sup> Legislature in session and an upcoming hurricane season, Governor Perry also asked the Commission to develop a preliminary report of findings and recommendations that merit immediate attention.

### **Hearings of the Commission**

To carry out this charge, the Commission has held four public hearings, in Galveston, Harlingen, Beaumont, and League City.

The focus of the hearings has been to elicit invited testimony and public comment. The Commission has heard testimony from federal, state, and local officials, private industry, private non-profits, and citizens. Everyone testifying has been affected by the hurricanes of 2008, and in some cases, by previous disasters. Some people have sustained damages to their personal property or businesses. Others spoke on behalf of their constituents or their employees. The Commission also heard from groups who offered business solutions for future disasters or recommendations from previous disaster experience.

Public testimony has been invaluable in gathering firsthand knowledge of the issues that individuals, businesses, and local jurisdictions have been facing. Some of the issues need a local solution while others would benefit from a coordinated local-state partnership. Other problems are a result of federal bureaucracy or a lack of federal monetary assistance.

The recommendations of the Commission are aimed specifically at the issues that were raised repeatedly in the Commission's hearings.

### **The Commission's Preliminary Report**

The tremendous losses from the 2008 hurricane season present a significant number of problems in need of solutions. In this preliminary report, the Commission has chosen to examine what it perceives to be the largest barriers to effective recovery, as well as some of the vulnerabilities to

future storms. And the Commission has developed equally large solutions to diminish or eliminate these barriers and vulnerabilities. The Commission believes that these recommendations, if implemented quickly, can help our citizens with recovery from our recent disasters, as well as those we will face in the future.

## **ACKNOWLEDGEMENTS**

The Commission members would like to thank Governor Perry for giving us the opportunity to serve our state. The Commission members also thank the staff of the Office of the Governor for their work supporting the charges of the Commission. Thank you, also, to the Regional Councils of Government that have arranged the four public hearings to date. And most importantly, thank you to the many citizens, both individually and as representatives of jurisdictions and organizations, who contributed to solutions by testifying before the Commission. The determination of these citizens to recover provides an inspiration to the Commission's continued work.

## BACKGROUND

Before presenting the recommendations of this preliminary report, the Commission first looks back at The Great Storm of 1900 and the historic 2008 hurricane season.

### TEXAS'S RECORD-BREAKING HURRICANES

Texas has a long history of facing record-breaking disasters.

In 1900, the city of Galveston suffered the deadliest natural disaster to strike the United States to date, the hurricane that Galveston locals call “The Great Storm.” Experts estimate that the storm surge of The Great Storm exceeded 15 feet, but more significantly, it claimed the lives of approximately 8,000 citizens, more than 20 percent of Galveston’s population.

In addition to suffering the deadliest natural disaster, Texas has also suffered the greatest number of disasters of any state, by at least one count. Over the past 55 years, Texas has received 83 major disaster declarations, the highest number of any state. Texas has been hit by a hurricane an average of once every 2 1/2 years since The Great Storm.

The 2008 hurricane season brought with it a new set of records for disasters in Texas. In 2008, Texas suffered three hurricanes—Dolly, Gustav, and Ike—and a major tropical storm, Edouard. Hurricane Dolly was the worst storm to hit the Rio Grande Valley since 1967. For the first time in Texas history, a declared disaster existed in every coastal county in Texas at the same time.

### HURRICANE IKE

During the 2008 hurricane season, Texas’s worst blow was the last: Hurricane Ike, the costliest hurricane to ever hit Texas. With damages exceeding \$50 billion, it may prove to be the second costliest hurricane in U.S. history, behind only Hurricane Katrina in 2005.

Hurricane Ike was more than 400 miles wide, creating a devastating storm surge. Yet it was classified as only a Category 2 hurricane on the standardized scale used by the National Weather Service. This report addresses the need for a new rating scale to better communicate to the public the destructive capabilities of hurricanes.

## TEXAS'S HISTORY OF OVERCOMING DISASTERS

If history is any indicator, Texas will always be faced with the potential for disaster, whether it is hurricanes, tropical storms, wildfires, flooding, or tornadoes.

While Texas has certainly suffered historic disaster, our state and our citizens have responded to these disasters with equal force. After The Great Storm, Galveston immediately embarked on two projects as large in scope as the storm itself: raising the elevation of the island and building a seawall. In an era before the widespread use of automobiles, completing these improvements required the strength and the participation of the entire community.

The Commission believes that Texas can respond with equal strength to the devastating 2008 hurricane season. Our communities must recover and renew, and we must do all we can to reduce the damage from future disasters.

# FINDINGS AND RECOMMENDATIONS

The following findings and recommendations are aimed at reducing the barriers to effective recovery from our recent disasters and reducing the vulnerabilities to future storms. Some of these recommendations relate to the state's role in recovery, and others relate to the role of the federal government. Some of these recommendations relate to all communities affected by disaster, and some recommendations deal only with catastrophically-damaged communities. The Commission believes the implementation of all of these recommendations will help recover from the 2008 storms, renew our communities, and reduce the impact of future storms.

## GENERAL STATE RECOMMENDATIONS

The Commission focused primarily on state-level recommendations that will benefit all victims of disaster. These recommendations are grounded in the consistent themes in the testimony presented to the Commission. Local jurisdictions are looking for additional tools to help themselves recover. They need enhanced coordination and communication, as well as revolving funds for recovery. The following recommendations attempt to address each of these needs of our local communities.

### **1. Increase coordination and communication at the state level about recovery**

Multiple federal and state agencies administer the disaster recovery process. At the federal level, the Federal Emergency Management Agency (FEMA) administers a number of programs that provide reimbursement and other funding to states, local jurisdictions, private non-profits, individuals, and others. The U.S. Department of Housing and Urban Development administers Community Development Block Grant (CDBG) funds for disaster recovery. The U.S. Department of Agriculture, the U.S. Small Business Administration (SBA), and the U.S. Department of Commerce also administer federal funding for disaster recovery.

These federal agencies allocate most of their funding for disaster recovery to a state agency for distribution. The Governor's Division of Emergency Management is the state agency responsible for emergency management and many disaster recovery duties, including the designation of the State Coordinating Officer for several FEMA and SBA programs. The Texas Office of Rural Community Affairs and the Texas Department of Housing and Community Affairs are responsible for administering CDBG disaster recovery funds for certain housing and infrastructure projects. The Health and Human Services Commission administers Social Service Block Grant funds. All of these and other entities play a vital role in disaster recovery, but the synergy among these

entities can be enhanced. These entities have vital information for victims of disaster, but they generally communicate that information separately. There is no single place where victims can go to easily obtain comprehensive, accurate information. As a result, both individuals and local jurisdictions have difficulty finding the information they need to help themselves in recovery. Moreover, these entities generally administer their funding separately, creating the potential for duplication of efforts and the inability to identify needs that are not addressed. After the brutal hurricane season of 2008, the demands of these entities involved in administering disaster recovery has multiplied.

The Commission recommends that the state allocate additional resources for two main purposes: coordination and communication of disaster recovery resources. Increased coordination among the numerous agencies involved in recovery will help streamline services, assess outstanding needs, and increase the speed and efficiency of disaster recovery.

A centralized communications strategy regarding the recovery process will better deliver critical information to the public and to the state's partners in recovery. This should include information for local jurisdictions, individuals, and businesses. The strategy should include a website and other avenues of communication, so victims can find the information they need and better understand the recovery process. It should also be scalable so that the state can have contracts in place with outside contractors or non-profits to assist with the surge of case management in times of disaster.

## **2. Fund a disaster contingency fund to help local jurisdictions recover**

One of the biggest obstacles local communities face in recovery is the process by which FEMA provides some financial assistance. FEMA's Public Assistance program, a core piece of recovery, provides funding to state and local governments and private non-profits for them to protect the safety of people and property, remove debris after a disaster, and rebuild facilities and infrastructure that are damaged or destroyed. But this program generally operates on a reimbursement basis. Thus, jurisdictions and non-profits must first do the work, and then obtain payment from FEMA.

Even knowing that they will be repaid, many entities simply do not have the cash needed to pay these bills and wait for reimbursement. Many local jurisdictions are paying multi-million dollar invoices for debris removal alone. In fact, the total cost of debris removal from Hurricane Ike will likely exceed \$1 billion.

Furthermore, local jurisdictions are constitutionally prohibited from incurring liabilities without the funds to pay these obligations. Such liabilities place jurisdictions in a constitutional predicament.

This process has undoubtedly slowed recovery for many communities. Local officials hesitate to create large financial obligations for their jurisdictions, especially considering that FEMA could deny their claim for reimbursement. Local jurisdictions have delayed doing important work because of this cash-flow issue.

Local communities need cash to pay these bills while they wait on federal reimbursement. The Commission recommends that the Texas Legislature appropriate dollars to the Governor's disaster contingency fund for local jurisdictions to access on a revolving basis to pay bills while they wait for reimbursement from FEMA.

### **3. Encourage local jurisdictions to enter into contingency contracts for disasters**

When disaster strikes, quick action may prevent serious losses from becoming catastrophic. Communities must do what they can to keep intact or to restore the three essentials of housing, infrastructure, and enterprise. To do this will require a surge of assistance, which can come from federal or state agencies or third-party contractors.

The time to enter into such contracts is not after the disaster hits. When disaster comes, local jurisdictions need as many processes in place as possible to continue operation and to immediately begin recovery. A key process that local jurisdictions need in place is one or more contingency contracts to immediately begin recovery from a disaster. When Hurricane Ike hit, jurisdictions with contracts in place were able to quickly begin the clean-up process. A quicker clean-up allows residents to re-enter the jurisdiction sooner, which then allows for a faster recovery.

The State of Texas should consider requiring jurisdictions to have contingency contracts in place in order to obtain funding from state disaster funds.

## **STATE RECOMMENDATIONS FOR CATASTROPHIC DAMAGE**

With Hurricane Ike, a number of jurisdictions on the Gulf Coast experienced catastrophic losses. Communities facing catastrophic damage have tremendous needs. Catastrophic damage is generally characterized by one or more of the following: significant loss of infrastructure, prolonged and significant business interruption, or significant dislocation of residents.

Any one of these events can create a domino effect that leads to further losses. Infrastructure losses will cause residents to leave the community—temporarily or permanently. Dislocation of residents depletes the workforce and reduces customers that are vital to enterprise; this leads to business closures. And the job losses and lost services caused by business closures cause additional residents to leave. Without intervention, the cycle continues and worsens. This cycle causes significant losses in the tax revenue of the affected community, hampering its ability to fund its recovery and to continue providing essential infrastructure and services. These major issues prevent a community from recovering on its own.

Where possible, the State of Texas should take measures to protect against catastrophic damage. But catastrophes will still happen, so the State of Texas needs to pursue processes that will help prevent one major loss from triggering additional losses.

#### **4. Fund part of the local match for jurisdictions with catastrophic damage**

For communities that have suffered catastrophic damage, one of the factors that can stand in the way of an effective recovery is the requirement that communities pay a cost share to receive federal recovery funds. In some communities, the 25% local cost share requirement associated with FEMA programs is more than half of their the post-disaster budgets. For example, the City of Galveston has a post-Ike annual operating budget of \$78 million, and it expects to have at least \$48 million in local matching requirements. The City of Port Arthur has an annual budget of \$49 million, and it has an estimated \$16 million in cost-share payments for critical infrastructure.

Many states already appropriate funds to local communities to assist with their cost-share requirements. The State of Texas should consider contributing part of the non-federal cost share obligations for federal disaster relief on behalf of local jurisdictions with cost-share requirements that make up a large percentage of their budgets. This would help speed up the recovery process and allow local officials to make critical decisions about how best to rebuild.

In smaller disasters, communities have the ability to absorb cost-share expenses within their existing budgets, through adjustments to the local tax rate, or through debt. For catastrophically-impacted communities, the substantial dislocation of population, loss of jobs, and reductions in taxable value make that impossible.

Catastrophically-impacted communities very often find that they are unable to borrow sufficient funds because of the requirement that they demonstrate an ability to repay such debt. Significant loss of jobs, tax base, and population put the ability to repay such debt into question, making the securing of debt much more expensive (at a time when it can be least afforded) or impossible.

#### **5. Provide funding for temporary housing after catastrophic disasters**

The Commission heard from numerous local jurisdictions that cited a lack of temporary housing as a critical barrier to effective recovery. If individual victims cannot live in their communities, the recovery process ceases. People must have a place to live in their community as they begin to return to work, to school, and to rebuilding their communities and their homes.

In the absence of significant changes to the federal temporary housing program, Texas should create a way to provide temporary housing to its citizens after a disaster. The Commission recommends appropriating funds for temporary housing after a catastrophic disaster. These funds should be administered at the state level to pay for temporary housing. Such funds should be coupled with contingency contracts with private entities that can readily create such temporary housing.

#### **6. Create a process for business recovery after catastrophic disasters**

In recovery, a key component that is often overlooked is that of the private sector. Business recovery is key to maintaining the integrity of a community. The State of Texas needs to mitigate

financial loss for the businesses impacted by a catastrophic event. Without rebuilding the tax base and the re-creation of available jobs within impacted communities, a continued lack of focus on the private sector will simply lengthen the recovery period for any community impacted by a catastrophic event. Eligible businesses could include small business, industry, fisheries, and agricultural ventures. Other states, like Florida, have implemented business recovery initiatives that utilize FEMA's Hazard Mitigation Grant Program for local grants for business redevelopment.

The state could consider providing funding to disaster-impacted businesses for job retention. These funds could be a combination of local, state, and federal disaster recovery resources. The funds could be allocated as a grant, a revolving loan fund, or additional credits accessible by those affected by a catastrophic event. Such funds can be used as capital for "gap" financing (representing the period between the event and the flow of either insurance, FEMA, or SBA assistance). The state should also consider the current workforce development environment in order to identify job training or employer assistance for those jobs negatively impacted or created as a result of a catastrophic event.

## STATE POLICY-SPECIFIC RECOMMENDATIONS

In addition to the general statewide recommendations proposed above, the Commission also considered a number of issues that are specific to the 2008 storms, to certain types of disasters, or to specific policy areas.

### **7. Continue to improve building codes in coastal areas**

Bolivar Peninsula, part of Galveston County, suffered some of the most catastrophic damage from Hurricane Ike. Unprotected by a seawall or any other significant barrier, the peninsula felt the unmitigated force of a 15- to 19-foot storm surge, which is generally associated with Category 4 or 5 hurricanes. As a result, communities like Crystal Beach and Port Bolivar suffered catastrophic damage, and the town of Gilchrist was razed. Many lives were lost on the peninsula.

In light of this destruction, the State of Texas should look at how it can protect places like the Bolivar Peninsula from future storms. A critical component of protecting communities against future destruction is through building codes. Many of the homes on Bolivar Peninsula that survived had been built to newer Galveston County codes. Because mandating older homes to be built to new codes would be cost prohibitive, they could be grandfathered. The State of Texas should consider developing ways to encourage local communities to adopt building codes that will help minimize damage during hurricanes.

### **8. Restore and renew the University of Texas Medical Branch at Galveston**

Before Hurricane Ike, the University of the Texas Medical Branch at Galveston (UTMB) operated the leading Level I Trauma Center in the nation, based on survival rates. UTMB was

also the third largest hospital in the Houston-Galveston region. A recent pre-Ike study found that direct and indirect spending by UTMB resulted in more than \$1 billion in business volume for Texas in a fiscal year. During that same period, UTMB's direct and indirect impact on household incomes exceeded \$1.1 billion. UTMB remains the largest employer on Galveston Island, with more than 10,000 employees.

After studying several options for rebuilding UTMB, the University of Texas Board of Regents recently passed a resolution that proposes to keep UTMB on Galveston Island. The Commission recommends that the Texas Legislature appropriate the funds needed to effect this proposal. In addition, the Commission recommends that funding include match dollars for FEMA-funded structural protections to the campus, so that UTMB can significantly reduce the impact of future storms.

## **9. Other recommendations and considerations**

The Commission recommends consideration of some additional policy-specific issues.

The legislature should consider requiring proof of flood insurance, if available, for a Texas Windstorm Insurance Association policy.

Hurricane Ike flooded 57 homes in a Jefferson County subdivision because the survey markers used to survey the homesites were inaccurate. As a result of these survey markers, these homes were unknowingly built too low. The legislature should consider funding a study for a statewide flood elevation map. The legislature should also consider funding a program to keep these survey markers accurate. Finally, the legislature should consider paying the local match for FEMA to buy out these Jefferson County properties, as the federal match dollars offered to these homeowners is only 75% of the homes' value.

## **FEDERAL RECOMMENDATIONS**

In examining disaster recovery, the Commission cannot ignore the barriers to effective recovery that exist at the federal level. The State of Texas should petition the federal government to make these needed changes. In the absence of needed federal reform, Texas will be left to shoulder greater responsibility for recovery, placing enormous strains on state, local, and private resources.

## **10. Replace the current hurricane categorization scale**

For many years, the National Weather Service has used the Saffir-Simpson Hurricane Scale to rate hurricanes on a scale of 1 to 5, with Category 1 as the weakest hurricane and Category 5 as the strongest. Wind speed is the determining factor in the scale. But wind speed is not the only indicator of a storm's destructive potential. The size of the storm, which has a direct impact on

the storm surge it creates, is another important indicator of destructive potential.

Citizens make evacuation decisions based on their perceived vulnerability, which is greatly influenced by their past hurricane experience. Many citizens do not evacuate for hurricanes because they have survived previous storms of equal or greater categorization over the years. Unfortunately, these decisions often prove to be life-or-death.

The Saffir-Simpson Hurricane Scale likely resulted in some citizens deciding not to evacuate before Hurricane Ike. Hurricane Ike was a Category 2 storm, which is not even considered a “major hurricane” on this scale. Hurricane Ike was also rated lower than the Category 3 Hurricane Alicia that hit Galveston in 1983. Yet, Hurricane Ike was likely the second most damaging hurricane to strike the U.S. The current scale must be replaced.

Researchers from Hurricane Research Division of the National Oceanic and Atmospheric Administration (NOAA) have recommended a more comprehensive approach to categorizing the damage potential of hurricanes. The approach calculates the “integrated kinetic energy” (IKE) of a hurricane. Ironically, the hurricane with the highest-known IKE rating to date, was, in fact, Hurricane Ike.

The National Weather Service needs to replace the Saffir-Simpson Hurricane Scale with a more accurate measure of hurricane strength and destructive potential.

## **11. Reorganize the Federal Emergency Management Agency (FEMA)**

FEMA has made improvements in its organization since the response to Hurricane Katrina, but the 2008 federal disaster recovery effort leaves significant room for improvement in federal disaster recovery.

Simply stated, the mission of FEMA is to handle emergencies that exceed the capacity of local jurisdictions and states. This requires rapid, informed action. To better address the needs of affected areas, FEMA needs to reduce the layers of bureaucracy and empower its regional staff members.

The following recommendations would allow FEMA to regain an ability to make rapid, informed decisions in response to emergencies. First, the head of FEMA should be a cabinet-level position that reports directly to the President. Second, FEMA should empower its Regional Administrators and Federal Coordinating Officers to make decisions in the field, so decisions will be quicker and better informed. Third, FEMA should create plans for response, unified command, and marshaling private sector resources by region, rather than at the federal level.

FEMA can further increase its ability to respond quickly by allowing the state to provide some of the core competencies that have previously been provided by FEMA. For example, FEMA should shift its focus on first response to a focus on recovery. Texas and many other states have the ability to better coordinate the first response. States that have that capability should take the lead on first response. Also, FEMA’s temporary housing program is broken. Rather than attempt to provide

direct housing solutions to victims, FEMA should provide grant money to states and local jurisdictions, so the state can create temporary housing solutions as it sees fit. In granting more responsibility to states, FEMA should increase its funding to states for disaster management costs.

## **12. Amend the federal law governing disaster recovery**

The primary law governing federal disaster recovery is the Robert T. Stafford Disaster Relief and Emergency Assistance Act. This act provides statutory authority for significant federal disaster recovery activities, especially as they pertain to FEMA programs. The act has several limitations that make it administratively burdensome and a barrier to effective recovery. The following changes to the Stafford Act would allow FEMA to better serve state and local jurisdictions.

First, and most importantly, the act should create a new system of providing federal assistance to jurisdictions that have suffered a catastrophic disaster. The act was not written to allow for effective recovery from catastrophe. For example, many of the funds disbursed through the act require a 25% match from the local jurisdiction. With catastrophic damage, jurisdictions will not likely be able to pay this 25% share. The act should reduce or eliminate the local match requirement for jurisdictions that have suffered catastrophic damages. Funds for catastrophic damage should not be administered on a reimbursement basis. Also, the act should provide extended deadlines for recovery from catastrophic damage. The act should reimburse operating costs of catastrophically-damaged jurisdictions.

Second, the act needs to allow for funding of certain permanent housing. Historically, FEMA has paid above-market rates for temporary housing for disaster victims. The act should be amended to allow states to use federal funds for temporary housing to be used for permanent housing solutions if the permanent solution would be similar in price to the temporary housing solution.

Third, the act needs to better provide for the removal of unsafe structures. Such removal should include removal of houses, foundations, underground utilities, and other on-site improvements.

Fourth, the act needs new provisions for reimbursement of sheltering of evacuees. The act should allow for full federal funding to providers of public shelter and mass care services during a disaster. Emergency sheltering should be reimbursed until temporary housing is made available within a reasonable distance of a person's primary residence.