

Governor's Task Force on Evacuation, Transportation, and Logistics

RICK PERRY Governor 5805 N. Lamar Blvd. P.O. Box 4087 Austin, Texas 78773-0220 Phone: (512) 424-2138 Fax: (512) 424-2444

JACK E. LITTLE Task Force Chairman

Gordon Bethune
Member
Theron Bowman, Ph.D.
Member
Carlos Cascos
Member
Trey Henderson
Member

Russell Henk Member William King Member Carol Lewis, Ph.D. Member Erle Nye Member

Jerry Patterson Member Karen Sexton, RN, Ph.D. Member Michael Trevino Member Robert Walker Member Wade Upton Member

February 14, 2006

Rick Perry Governor Capitol Building 100 Congress Avenue Austin, Texas 78711

Dear Governor Perry:

The Task Force is pleased to submit to your office our final report. All members were honored to serve your appointment on this tremendously challenging and rewarding task. From the start, we established a robust schedule requiring short-notice travel, coordination and actions. The schedule complimented our desire to capture fresh, accurate, and detailed information covering the entire spectrum of activities associated with the preparation, evacuation, and sheltering operations conducted during Hurricane Rita. The team remained mindful that many jurisdictions and citizens were still recovering from damages and losses caused by the catastrophic events. We owe a debt of gratitude and wish to express our appreciation to all who appeared before the Task Force to share their personal experiences and recommendations. We also wish to recognize the judges, mayors, and their staffs in Houston, Corpus Christi, South Padre Island, Fort Worth, San Antonio, and Beaumont for graciously agreeing to host the public hearings. Their services, support, and participation contributed substantially to our efforts to produce this final product.

The Task Force's objectives were clearly defined by your office. We were asked to:

- · Document lessons learned from the Hurricane Rita evacuation,
- Reinforce the positive lessons,
- Identify key challenges,
- Document the Task Force's findings, and
- Make recommendations on how to improve evacuation plans and evacuation execution to better protect Texans in the event of future emergencies.

The Task Force scheduled, publicized, and held public hearings in the six metropolitan areas selected based on their location and active involvement in Hurricane Rita evacuation and sheltering operations. We heard open testimony from 97 citizens representing a wide cross-section of stakeholders including

evacuees, local and state officials, school officials, charitable organizations, relief workers, hospitals, medical personnel, and individuals with special needs and their caregivers. The Task Force also received 13 additional written submissions for the record from citizens who were unable to attend the proceedings. In all, testimony spanned 670 pages of transcript.

The Task Force over the past few weeks has been deeply immersed, sifting and assimilating this valuable material. We have distilled this material down to 21 significant recommendations which we believe if implemented, will greatly improve the state's ability to respond in future emergencies. After extensive discussion the Task Force has reached a consensus view, and we now submit our final report to your office.

Respectfully,

Jack E. Little Chairman

Enclosure: Task Force on Evacuation, Transportation, and Logistics, Final Report to the Governor,

February 14, 2006

pel E. Tiril

TASK FORCE ON EVACUATION, TRANSPORTATION AND LOGISTICS Final Report to the Governor

February 14, 2006

INTRODUCTION

Two catastrophic hurricanes – Katrina and Rita – made landfall along the U.S. Gulf Coast in late summer 2005. These back-to-back natural disasters were an unprecedented test of emergency preparation and response in Texas. Our evacuation and sheltering plans were extensively tested and stretched during the two emergencies.

Texas can be proud of the well-executed, coordinated response of state and local officials, non-profit organizations, the private sector, and citizens during this trying period. Despite our many successes, Texas must remain focused on becoming even better prepared for future disasters.

THE TASK FORCE

In October 2005, Governor Rick Perry, in cooperation with Harris County Judge Robert Eckels and Houston Mayor Bill White, appointed a 14-member Task Force on Evacuation, Transportation and Logistics. Governor Perry clearly defined the Task Force's purpose:

"Hurricane Rita highlighted the tremendous challenges associated with evacuating a major American city, as well as strengths and weaknesses in state, local and private evacuation plans. While we achieved the ultimate goal of moving millions of people to safety in a matter of hours, we can and we must do better the next time we are faced with an emergency."

The Task Force was asked to:

- Document lessons learned from the Hurricane Rita evacuation,
- Reinforce the positive lessons,
- Identify key challenges,
- Document the Task Force's findings, and
- Make recommendations on how to improve evacuation plans and evacuation execution to better protect Texans in the event of future emergencies.

This report describes the important work of the Task Force and outlines their final recommendations for improving evacuations in Texas.

Task Force members include Gordon Bethune of Houston, Dr. Theron Bowman of Arlington, Carlos Cascos of Brownsville, Trey Henderson of Lufkin, Russell Henk of San Antonio, William King of Houston, Dr. Carol Lewis of Houston, Jack Little (Chairman) of Houston, Erle Nye of Dallas, Commissioner Jerry Patterson of Austin, Karen Sexton, RN, Ph.D. of Galveston, Michael Trevino of Houston, Wade Upton of San Antonio and Robert Walker of Freeport.

BACKGROUND

On Aug. 29, 2005, Hurricane Katrina struck the U.S. Gulf Coast near New Orleans, Louisiana, causing widespread flooding and devastating loss of life and property. In the days that followed, an estimated 400,000 evacuees sought shelter in Texas, stretching the capacity of shelters and relief workers in communities across our state. This became known as the "first wave" of evacuees.

Three weeks later on Sept. 20, Hurricane Rita entered the Gulf of Mexico. As Texas communities continued to care for hundreds of thousands of Hurricane Katrina evacuees, residents along the Texas Gulf Coast began early-stage preparations for another mass evacuation. Over the next several days, the projected path of Rita turned squarely toward Galveston, and a mandatory evacuation was ordered by the Mayor of Galveston.

By Sept. 21, Rita became a Category 5 hurricane – the most intense hurricane on record in the Gulf of Mexico – on a projected path that had shifted toward the Houston metroplex. With Hurricane Katrina fresh in the minds of all Americans, Houston-area residents began to voluntarily evacuate in record numbers. This began the "second wave" of evacuees.

By Thursday, Sept. 22 Texans hit the roadways leading to Austin, San Antonio and Dallas. Severe congestion ensued and contra-flow lanes were eventually opened. Fuel shortages complicated the flow of the evacuation, and motorists grappled with a lack of water, medical necessities, and relief stations. Despite the clear difficulties of the Houston-area evacuation, all roadways in the hurricane impact zone were cleared of motorists 12 hours before Rita made landfall.

Hurricane Rita made landfall near Port Arthur on Sept. 24 after another change in her projected path. The Southeast Texas region, including Lufkin and nearby communities, sustained significant flooding and destruction. Citizens began to flee the Beaumont-Port Arthur area, starting what was known as the "third wave" of evacuees. This wave of evacuations was complicated by the masses that had fled Houston earlier and were already using shelters, medical facilities and other relief resources.

In the weeks and months that have followed Hurricanes Katrina and Rita, local, state, and federal emergency response personnel have worked with faith-based and community groups to begin the response and recovery process. Hurricane Katrina evacuees are slowly but steadily transitioning to long-term stability; meanwhile, the Southeast Texas community continues to rebuild and get stronger each day.

These extraordinary events provided Texas with an unprecedented opportunity to study and improve the way our state plans for and executes urban evacuations in the event of an emergency. The three waves of evacuees associated with Hurricanes Katrina and Rita highlighted the tremendous challenges associated with evacuating a major city, as well as the strengths and weaknesses of state, local and private evacuation plans.

EXECUTIVE SUMMARY

THE FACT-FINDING PROCESS

The Task Force held public hearings across Texas to gather input from a wide variety of stakeholders, including evacuees, local and state officials, school officials, charitable organizations, relief workers, hospitals, medical personnel, individuals with special needs and their caregivers.

Hearings were held in the Houston-Galveston area, Corpus Christi, Rio Grande Valley, the Dallas-Ft. Worth area, San Antonio and the Beaumont-Port Arthur area. A complete set of stenographic minutes was taken at each hearing, and testimony received from the public in other forms – including email – was incorporated into this permanent record. Following each hearing, the Task Force gathered to review testimony and seek additional information when necessary. State agency officials participated in the Task Force meetings to share their insights from experiences during the evacuation.

The executive summary and final recommendations of this report are the result of this broad and participatory process.

OVERVIEW: FIVE FOCUS AREAS

Five broad areas of focus emerged from the testimony at the Task Force public hearings:

- 1. Command, Control and Communication,
- 2. Evacuation of People with Special Needs,
- 3. Fuel Availability,
- 4. Flow of Traffic, and
- Public Awareness.

The Task Force divided into four work groups. The work groups met with officials from appropriate state agencies to discuss and better understand the complex issues underlying each focus area. These five focus areas formed the framework for the Task Force's final recommendations.

I. COMMAND, CONTROL AND COMMUNICATIONS

Gubernatorial Authority to Order Mandatory Evacuations

The speed and direction of a hurricane are unpredictable, and this irregularity poses a major challenge to public officials who must determine when to order an evacuation. In order for an evacuation to be orderly, days of advance planning must precede it, and a central authority must coordinate the many jurisdictions involved.

The Task Force recommends that the Governor have the authority to order mandatory evacuations. The Governor's Division of Emergency Management (GDEM) has state-of-the-art technology to produce sophisticated wind and surge models, which are an essential tool for advanced evacuation planning and timing. The State Operations Center brings together the State-level emergency management personnel and the Texas Department of Public Safety (DPS), the optimal central authority for coordinating and managing a multi-jurisdictional evacuation.

Regional Unified Command Structure and an Incident Commander

An organized command structure can help minimize miscommunication and missteps when multiple jurisdictions must work cooperatively. The March 17, 2005 Report to the Governor on Texas Hurricane Preparedness identifies the Regional Unified Command (RUC) structure as an essential tool to plan for and conduct hurricane evacuations along the Texas Gulf Coast. The RUC is part of the National Incident Management System (NIMS), the nationally accepted framework for planning for and responding to hazards. NIMS allows local officials to share a game plan and resources when responding to an emergency. Governor Perry ordered statewide adoption of NIMS in February 2005. The Task Force recommends that the RUC structure be further enhanced and strengthened throughout Texas.

As part of the RUC, the Task Force also recommends that a single Field Incident Commander (FIC) be appointed during future hurricane evacuations. This Field Incident Commander would be the single point of authority to coordinate all parties involved in a multi-jurisdictional evacuation, including local governments, law enforcement and fire officials, traffic managers, non-profit organizations, and special needs caregivers. It is recommended that the Executive Board of the Regional Council of Government appoint the Field Incident Commander. The designated FIC should be appointed for no less than 1 year and be given the authority to execute all preparedness and implementation actions. The Task Force further recommends that it is imperative that the FIC be appointed as soon as possible but no later than April 1, 2006, and annually thereafter on that date.

The Role of School Districts

Independent School Districts play an integral role in evacuations. School buses and trained drivers provide a readily available transportation fleet for people in the potential impact zones. The State must take steps to ensure that school bus drivers are available when called upon during an evacuation. During Hurricane Rita, many drivers were concerned that if they were called to work during a mass evacuation, their immediate families would be left behind. One way to ensure the availability of school bus drivers is for school districts to inform drivers ahead of time that their immediate families can ride with them on their bus to safe areas and shelters. Private transportation companies can use this same strategy to ensure their drivers are available.

In addition to transportation, education facilities often serve as shelters along evacuation routes. School districts should feel comfortable making their facilities available for sheltering or logistics during an emergency. State and local government should work with school districts to

mitigate their concerns about cost, legal liability, disrupted teaching schedules and loss of teaching days – and this should happen well in advance of a hurricane evacuation. Exercises

Testimony at all public hearings emphasized the need for planning ahead of a crisis. To that end, the Task Force recommends an annual statewide hurricane evacuation exercise to improve coordination and readiness at all levels.

II. SPECIAL NEEDS

The most compelling images and stories from the Hurricane Rita evacuation involved efforts to get Texans with special needs out of the potential hurricane impact zone. The Task Force defined people with special needs as "those who cannot take care of themselves during an evacuation." The special needs population includes the elderly, individuals with physical and/or mental disabilities and their caregivers. The special needs population also includes the homeless, those without transportation, and many other segments of the population with unique needs. These vulnerable Texans deserve special plans and procedures to ensure their safety during an evacuation.

Local officials should identify and document the special needs population in their jurisdictions. The Task Force recommends that officials maintain a database of citizens with special needs to ensure proper planning and execution of their evacuation. Officials should also document those facilities or residences where medical or handicap vehicles will be required during an evacuation. The privacy of individuals with special needs must be safeguarded.

Nursing homes and specialized healthcare facilities require extra consideration during an evacuation. Under current Texas law, only licensed facilities are required to maintain a written emergency preparedness and response plan; however, the law does not address the quality or currentness of a licensed facility's plan. Unlicensed facilities are not required by law to maintain an evacuation plan. The Task Force recommends that every nursing home and patient health care facility be required to maintain an evacuation plan that is reviewed by an appropriate state or local agency and updated annually.

The availability of medical supplies is another concern during an evacuation. Individuals with special needs and their caregivers must plan ahead so that they have ample medicines and supplies both during the evacuation and when they reach their destination or shelter. During the Hurricane Rita evacuation, many individuals with special needs required treatment along the evacuation route. Future evacuation plans must include emergency medical aid stations and personnel at intervals along major evacuation routes. Evacuation plans should include ways to allow evacuees with critical medical needs to move quickly to medical facilities or stations.

Pets present a unique special need during an evacuation. Pet owners are often unwilling to abandon their pets, which could result in loss of life. Shelters and transportation services should plan and provide for special accommodations for pet owners during an evacuation.

III. FUEL AVAILABILITY

Unexpected fuel shortages along evacuation routes caused hundreds of motorists to be stranded, despite a coordinated effort by state agencies and oil and gas industry partners to refuel gas stations and motorists. Evacuees sometimes were unable to exit the evacuation route to refuel. In many instances, service stations were closed or unable to supply fuel due to power outages or dwindling supplies.

The Task Force recommends that state agencies and the private sector develop a detailed plan to address fuel needs along the major evacuation routes. This fuel plan should be implemented by a fuel coordinator who works from the State Operations Center during an emergency. The Task Force also recommends a public awareness campaign to encourage citizens to maintain adequate fuel in their vehicles during hurricane season. Emergency and law enforcement vehicles, school buses, and other key transportation fleets should also maintain adequate fuel supplies during hurricane activity periods.

IV. TRAFFIC CONTROL

Gridlock was the most visible challenge during the Houston-area evacuation. In the earliest stages of the evacuation, only outbound lanes were used for evacuation traffic flow, while inbound lanes were virtually free of traffic.

In many cases, evacuees could not exit the roadways for fuel, food, medical care or personal hygiene for long periods of time, which caused discomfort and frustration. In some cases, failure to access necessary medical attention became life threatening. Gridlocked highways and lengthy travel times caused an unknown number of evacuees — perhaps thousands — to turn around and return to their homes. If Rita had made a direct hit on the Houston area as projections once predicted, the consequences could have been catastrophic for those evacuees who turned back.

To remedy these problems, the Task Force recommends Texas Department of Transportation (TxDOT) and DPS jointly develop contra-flow traffic plans for evacuation routes. Plans should address when to begin contra-flow, as well as how to remerge traffic to prevent large bottlenecks. TxDOT and DPS should also work with U.S. Customs and Border Patrol to develop plans to ensure a steady – yet secure – flow of traffic at Texas border checkpoints along major evacuation routes. In addition, the State should complete the infrastructure-improvement projects recommended in the March 2005 Report to the Governor on Texas Hurricane Preparedness.

V. PUBLIC AWARENESS

More can be done at the State and local level to raise public awareness about evacuation plans and procedures. A targeted public outreach effort – one that extends beyond public service announcements – should occur throughout the entire period of hurricane risk. This will empower citizens to act efficiently and effectively, and increase the level of personal responsibility during a crisis.

VI. A NOTE ON FUNDING

Municipal and county governments, school boards, and local emergency management personnel cite the cost of planning for and executing evacuations as a major concern. The Task Force urges the Legislature to support funding for evacuations – to include planning, training, equipment and supplies, and other requirements – through the Disaster Contingency Fund authorized under Texas Government Code Chapter 418.073.

TASK FORCE RECOMMENDATIONS

Command, Control, and Communications

 The Legislature should provide the Governor with the explicit authority to order multi-jurisdictional evacuations and/or an evacuation in a single jurisdiction when a disaster is declared. This authority will transfer the responsibility from the local jurisdiction to the Governor.

Evacuations were voluntary in Texas prior to House Bill 3111 of the 79th Legislature, which was signed by Governor Perry in June 2005. Under this law, county judges and mayors now have the authority to order evacuations. By law, the Governor has the authority to recommend evacuations, but not to order mandatory evacuations.

Hurricane Rita affected more than 100 separate jurisdictions along the Texas Coast. There was no central authority to coordinate the timing of evacuation orders or the resulting traffic on evacuation routes.

The Governor should have the authority to order evacuations, and coordinate their execution through the State Operations Center.

2. The Governor should direct the development and implementation of a statewide hurricane evacuation and shelter plan.

In the past, the role of the State has been to support the actions of local government officials during a disaster. However, when a catastrophic hurricane affects numerous jurisdictions, the best way that the State can support local officials is by implementing a unified plan for mass evacuation and sheltering. Any evacuation and shelter plans should expand beyond the primary use of only highway infrastructure and maximize the use of all available transportation assets, such as aircraft, rail, and bus.

The Governor should direct the development and implementation of regional response and evacuation plans.

The Texas Coast is divided into five major hurricane evacuation regions, which have maintained response and evacuation plans for many years. Local jurisdictions are not required to participate in the planning efforts of their hurricane evacuation area.

During catastrophic events that affect many jurisdictions, a cohesive regional evacuation plan is necessary. The Governor's 24 Councils of Government (COGs) are well-organized regions that provide a useful framework for regional planning. COGs should coordinate the development of regional evacuation plans by bringing together hurricane

evacuation areas, state agencies, local governments and private stakeholders. Independent School Districts (ISDs) should play a key role in plan development, particularly as related to transportation and sheltering facilities.

Regional response and evacuation plans must be exercised regularly. In preparation for the 2006 hurricane season, regional plans should be in place by May 1, 2006 and exercised before June 1, 2006.

4. The Governor should direct the immediate implementation of the Regional Unified Command structure throughout the State.

By executive order in November 2004, Governor Perry mandated the statewide adoption of the National Incident Management System (NIMS) to manage incidents at the State and local level in Texas. The NIMS framework includes the Regional Unified Command (RUC) structure, which is used to manage catastrophic events at the regional level.

To implement a Regional Unified Command, local leaders must work together to develop a regional structure for command, control, and communications, and then authorize the FIC during catastrophic events. In the past, local leaders have been encouraged but not required to develop such a structure, which is essential for an effective regional response and evacuation. Local law enforcement agencies or other civil authorities should defer to the Regional Unified Command for roadway management, to include toll roads, inside the boundary of the Regional Unified Command during a multi-jurisdictional evacuation.

5. The Texas Department of Public Safety should assume responsibility for command, control, and communications outside the boundaries of the Regional Unified Command during multi-jurisdictional evacuations, in order to move the entire population of the at risk areas to the major shelter hubs.

If the Governor has the authority to order a multi-jurisdictional evacuation as recommended, a single agency must be responsible for command, control, and communications. The Texas Department of Public Safety should assume this responsibility because it has a 24-hour, statewide communications capability and its mission is to ensure the safety of the public during a catastrophic situation. Further, the State Operations Center is located within DPS headquarters.

The Texas Department of Public Safety should assume authority over designated evacuation route roadways during multi-jurisdictional evacuations outside the boundaries of the Regional Unified Command.

During a mass evacuation, a single law enforcement agency must assume control of traffic flow in order to move large populations and heavy traffic in a highly coordinated manner. Local law enforcement agencies or other civil authorities should defer to the

Department of Public Safety for roadway management outside the boundaries of the Regional Unified Command during a multi-jurisdictional evacuation.

The Governor should direct the creation of at least eight Regional Response Teams (RRTs) to support multi-jurisdictional evacuations.

A Regional Response Team would be a regionally focused Incident Management Team (IMT). An IMT is a group of response and recovery specialists who support local officials during disaster management. These teams provide invaluable assistance to local governments during a crisis.

 All public education facilities (including community colleges and universities) in Texas should make their transportation assets and facilities available to local governments during a disaster for evacuation and sheltering.

The public education system in Texas, including the university systems, has a tremendous capability to provide transportation and shelter support during catastrophic events. In the past, both state and local governments have made the assumption that these assets would be made available during a disaster.

In some instances during Hurricane Rita, education system assets were not made available to local governments to support evacuation and sheltering operations. A state-level mandate should require that public education assets be made available to support a disaster response, and that these assets are part of evacuation and sheltering plans and exercises.

The Governor should direct an annual statewide hurricane evacuation exercise to test state and local evacuation and sheltering plans and execution.

Preparations for a catastrophic event with the magnitude of Hurricane Rita require largescale exercises that mirror the magnitude of the event. A statewide exercise that focuses on the entire coast of Texas is necessary to support a successful and efficient evacuation of high-risk major metropolitan areas.

Special Needs

 The Governor should direct the development and implementation of a statewide special needs evacuation and shelter plan.

Currently, the responsibility for identifying, transporting and sheltering special needs citizens is not clearly defined in Texas code or policy. The statewide evacuation and sheltering plan should specifically address how to evacuate and shelter the most vulnerable Texans.

Special needs plans should include procedures for identifying the special needs population, transporting and caring for special needs evacuees, and sheltering plans to ensure their proper care. It is recommended that local jurisdictions be responsible for the identification of special needs citizens and for the coordination of their transportation and sheltering. The State should aid in transportation and sheltering when local jurisdictions request assistance.

There should be a clear and distinct separation of those special needs citizens who live in a special needs facility, such as a nursing home or a specialized institution, and those who do not. Private facilities and institutions should be responsible for the safe and orderly evacuation of citizens in their care.

11. The Governor should direct all licensed and unlicensed special needs facilities to maintain evacuation plans that have been approved by the local jurisdiction and the Regional Unified Command.

The State should take legislative or regulatory actions to identify, license, and regulate facilities that provide services to persons with special needs, and ensure that all special needs facilities maintain evacuation plans. These plans must be updated and verified annually. The State should designate an agency to ensure compliance with this requirement and severely penalize non-compliant facilities.

12. The Governor should direct the development and implementation of a special needs evacuation database for the entire state with priority to the evacuating coastal jurisdictions.

The authority to create and maintain a centralized database of special needs citizens is not clearly defined at this time. The State should undertake legislative or regulatory actions to establish a database and registry of persons with special needs, including the nature of their needs during an evacuation, their locations, and information about their caretakers. Local jurisdictions should be responsible for collecting the required information and providing it to the State. Local jurisdictions shall access to this information.

13. The Governor should direct the development and implementation of a shelter plan for pets.

The State of Texas sheltered more than 200,000 companion animals during Hurricane Rita. This demonstrates the need for a comprehensive plan to address the evacuation and sheltering needs of pet owners. Texans should never face the choice of either evacuating to safety, or remaining with their pet in a hurricane's path.

Fuel Availability

14. The Governor should direct the Texas Department of Transportation (TxDOT) to work with the Texas Oil and Gas Association and other industry partners to develop a plan to address fuel availability along major evacuation routes.

The best way to distribute fuel supplies during a crisis is to leverage the efficiency of the private sector. A special fuel operations function should be established in the State Operations Center during a major evacuation. The fuel function will coordinate the efforts of fuel industry distributors, terminals and truckers to maintain fuel supplies along evacuation routes.

The State Fuel Coordinator, who is located at the SOC, will manage the fuel operations function before and during an evacuation. A team of fuel industry representatives will assist the State Fuel Coordinator.

Representatives from fuel terminals, distributors and truckers should assist the State in developing operational plans for the fuel function. The Independent Liquid Terminals Association (ILTA) should represent terminals, the Texas Petroleum Marketers and Convenience Store Association (TPCA) should represent distributors, and the Texas Tank Truck Carriers Association (TTCA) should represent truckers.

15. The Governor should direct local governments to ensure fuel availability for an evacuation.

State and local government agencies should avoid potential fuel shortages by identifying ways to ensure fuel availability in their evacuation plans. This may include the development of an Emergency Fuel Appendix to state and local emergency management plans. The State should also work with the school districts to develop a plan to increase fuel availability for bus fleets and facilities at 72 hours before an evacuation plan is activated.

In addition, the State should consider establishing procedures to distribute fuel in a prioritized manner during an emergency, so that emergency responders, utility work crews, hospitals, and nursing homes receive fuel first. The State should also develop plans to reimburse schools and other support entities for their evacuation-related fuel costs to help ensure all assets are made available during an evacuation.

Traffic Control

- 16. The Governor should direct the Texas Department of Transportation and the Texas Department of Public Safety to develop contra-flow plans for the following major hurricane evacuation routes:
 - US 69, north out of Beaumont to Lufkin
 - I-10, west out of Houston to San Antonio
 - I-45, north out of Galveston Island
 - I-45, north out of Houston to Dallas
 - US 290, northwest out of Houston to Austin
 - US 59, northeast out of Houston to Nacogdoches
 - I-37, northwest out of Corpus Christi to San Antonio
 - US 281, from Brownsville through McAllen to San Antonio
 - US 83, from Harlingen to the intersection with US 281 in McAllen

Contra-flow must be accomplished before an evacuation begins to ensure that the heavy traffic can flow as smoothly as possible. The planning and execution of contra-flow on evacuation routes should be managed at the State level because the operation will involve many jurisdictions. Mass evacuations also require that regularly spaced comfort, fuel, and medical stations be positioned along all evacuation routes.

17. The Governor's Office should coordinate with the U.S. Customs and Border Patrol to ensure checkpoints on major hurricane evacuation routes do not impede traffic flow during an evacuation.

Currently, the U.S. Customs and Border Patrol (CBP) can only process 10,000 cars in 24 hours through the Sarita and Falurrias checkpoints in the Valley region of Texas. During a major evacuation, an estimated 130,000 vehicles could line-up to pass through these checkpoints.

Texas must work with CBP to develop plans to expedite the flow of traffic through the checkpoints during an evacuation. This could be accomplished by identifying ways to expand the capacity of the normal checkpoint process, or identifying responsible ways to adjust normal checkpoint procedures during a state of emergency. The Border Patrol should also develop traffic plans to better accommodate evacuation traffic at checkpoints.

 The Texas Department of Transportation should immediately upgrade the one-lane section of US Hwy 290 at Brenham.

The one-lane section of U.S. Highway 290 at Brenham caused severe congestion during Hurricane Rita. Regardless of whether or not contra-flow is implemented, this section of roadway will create a severe bottleneck during an evacuation unless it is widened.

19. The Texas Department of Transportation should prioritize the evacuation route infrastructure projects recommended in the March 2005 Report to the Governor on Texas Hurricane Preparedness.

The March 17, 2005 Report to the Governor on Texas Hurricane Preparedness identified several highway projects that, once complete, would address obstructions on evacuation routes. These projects remain a priority and should be funded and executed as soon as possible, especially as the 2006 hurricane season approaches.

Public Awareness

20. Utility companies regulated by the Public Utility Commission which service Texas counties in hurricane evacuation zones should include hurricane evacuation preparedness and public awareness information in monthly billing statements at least twice during the hurricane season each year. Other forms of communication should be developed to inform citizens of the location of their property in relation to hurricane surge zones.

Utility billing statements are a useful tool for targeting critical information for citizens who live in a specific area. Monthly billing statements in evacuation zones can be used to inform Texans about family preparedness, evacuation routes, and shelter hub locations.

Funding Note

The Texas Legislature should activate the Disaster Contingency Fund to support state and local agencies as they plan for and execute evacuations. The fund is provided in accordance with Texas Government Code Chapter 418.073.

This report describes critical steps that state and local officials can take to maximize the safety of Texans during a mass evacuation. These steps include the development of evacuation plans, statewide evacuation exercises, and identifying and cataloguing people with special needs. School districts and local governments with sheltering and transportation capabilities are an integral part of evacuation planning and execution. However, most school districts and local jurisdictions cannot cover evacuation-related costs with their limited budgets. The legislature should address limits to liability for school districts that provide support for evacuations and sheltering.

A lack of funding at the State or local level should not prevent Texas from being optimally prepared to execute an evacuation. The Legislature should fund the Disaster Contingency Fund as soon as possible so that state and local government can begin preparing for the 2006 hurricane season.