Evacuation Planning in Texas: Before and After Hurricane Rita

In late September 2005, as Hurricane Rita tore through the Gulf of Mexico, millions of residents of coastal communities, the Houston area, and Southeast Texas evacuated their homes with fresh memories of the devastation caused just weeks earlier by Hurricane Katrina. Although the storm did not wreak the havoc that its predecessor did to the east, the damage caused not only by heavy winds and floodwaters but also by the evacuation itself contributed to more than 100 deaths in Texas.

Gov. Rick Perry, Harris County Judge Robert Eckels, and Houston Mayor Bill White subsequently established a 14-member Task Force on Evacuation, Transportation, and Logistics, which traveled the state to host six meetings last fall. The panel is expected to submit its findings to the governor in mid-February, focusing its report on fuel availability, communication and coordination, special-needs evacuation, and general transportation and mobility issues.

The task force is the second group the governor has assembled to examine the state’s evacuation readiness. On March 17, 2005, the Texas Office of Homeland Security released to the governor “Texas Hurricane Preparedness,” a report containing 18 recommendations for the executive and legislative branches of state government. Both the Office of Homeland Security’s report and the forthcoming governor’s task force report focus on the same general areas: planning and coordination, traffic and mobility, and other issues such as special-needs evacuation and public awareness.

The Transition to Call Centers: A Status Report

In January 2006, the state of Texas began implementing a new system that ultimately will shift eligibility determination services for health and human services (HHS) programs, including Medicaid, the Children’s Health Insurance Program (CHIP), cash assistance, and food stamps, from brick-and-mortar offices to a system largely based on call centers. This will implement a significant component of the HHS reorganization enacted by the 78th Legislature in 2003 in HB 2292 by Wohlgemuth. These sweeping changes included consolidating and reorganizing HHS agencies, revising Medicaid policies, and tightening eligibility for CHIP.

The establishment of call centers for eligibility determination has been one of the most contentious changes to the HHS system. The Health and Human Services Commission (HHSC) says that call centers will streamline the eligibility process for a variety of services, leading to improved efficiency, client access, and cost savings. Advocates for state employees and beneficiaries of HHS programs, however, say that the price for the potential savings is too high. They point to a loss of state jobs with benefits that may disproportionately affect certain areas of the state and the possibility that the new electronic system will be difficult for applicants to access and navigate. In addition, they charge that any savings will come from clients’ inability to access services, not true efficiency.
greater than 120 miles per hour. The storm provided the first opportunity for local officials to use the mandatory evacuation authority granted in HB 3111 by Corte, enacted by the 79th Legislature during its 2005 regular session. This statute authorizes county judges or mayors of municipalities to order, rather than merely recommend, a full or partial evacuation within their jurisdictions if the officials deem it necessary to preserve life or prevent another disaster. This was one of the 18 recommendations contained in last year’s state Office of Homeland Security report.

As Hurricane Rita approached, an estimated 3.7 million people evacuated the Houston area and Texas coast between Corpus Christi and Beaumont. Preliminary data from the Texas Department of State Health Services indicate that 118 deaths are connected to Hurricane Rita. The state has yet to determine if the storm itself, the evacuation, or other mitigating factors were responsible for the deaths. News reports have linked at least 60 of those fatalities to the evacuation, including 23 residents of a Bellaire assisted-living facility who perished in a bus fire.

“Probably the biggest failure of the whole process was communication – people not having their expectations met,” Harris County Judge Eckels said during the task force’s first hearing in October. “And if people know they’re going to be in a 20-hour drive, they can prepare for a 20-hour drive. If they think it’s going to be four or five, they don’t … prepare for it with gasoline and water or food.” Several local officials reported that many residents gave up on evacuating and simply returned home to brave the storm rather than risk being stranded in traffic when the storm hit.

Steps taken. In addition to the first use of mandatory evacuation authority, state and local officials were able to employ additional recommendations from the state Office of Homeland Security report issued last spring.

The Governor’s Division of Emergency Management (GDEM) has set up five regional evacuation plans and published brochures detailing the relative flood risk for residents in certain areas and what they should take with them when they evacuate. The state also has set up several command structures to organize evacuation and emergency response, but it has not fully implemented a recommendation to set up a facility and group of people that would comprise a Regional Unified Command structure to prepare for and conduct hurricane evacuations along the coast. Also, according to the GDEM, Incident Management Teams have been in place for nearly a year. These groups of highly trained first responders, generally firefighters, can be mobilized quickly to assist with emergency response in disaster areas.

Funding for a statewide radio system that would allow officials across disciplines and jurisdictions to communicate during an emergency is expected to be available early in 2006 but has been held up largely because of an administrative reorganization. Officials still believe the state is on schedule to meet the goal of statewide Level 4 interoperability by the end of the year. Level 4 attainment, according to the Texas Radio Communications Interoperability Plan, exists when firefighters, emergency medical personnel, and law enforcement officers at all levels can have immediate radio communications with each other anywhere in the state using their own equipment on designated channels. Prior to the plan’s release, 21 of 24 regional councils of government were operating at Level 3, meaning that only radios on the same frequency band (VHF, for example) can communicate with each other. That problem with interoperability is alleviated at Level 4, at which point one frequency can be sent and received along multiple frequency bands. Once local jurisdictions receive funding, it will be up to them to determine whether they need to purchase new equipment or simply reprogram existing equipment.

Next steps. Evacuation prior to Hurricane Rita highlighted a number of shortcomings in exit routes for residents. Essential needs, such as food and restrooms, were scarce along some evacuation routes, and unattainable on highways along which local officials prohibited motorists from exiting. Residents fleeing the Beaumont area had no access to bathroom facilities en route to the host cities of Lufkin, Nacogdoches, and Tyler, according to Beaumont Fire Chief Mickey Bertrand. Along with others testifying before the task force, he recommended pre-staging portable toilets along the evacuation routes and making them easily accessible to evacuating residents.

Finding qualified bus drivers also was a problem in some areas. Because of confusion associated with mandatory evacuation orders, some bus drivers left in private vehicles with their families. Other municipalities, recognizing the potential problem, allowed bus drivers to take their families with them on the bus. With the extended
travel times required to evacuate some areas, the idea of having multiple drivers on each bus also was raised with the task force. School districts, which normally enjoy sovereign immunity that protects their employees from litigation, also pushed to extend that shield to transportation activities so that their bus drivers would not be prosecuted for problems encountered during an emergency evacuation.

Some local officials successfully arranged staggered evacuations by ordering people in large, unwieldy vehicles, such as trailers and motor homes, to leave first. Because those vehicles typically move slower than regular traffic and are more susceptible to jackknifing in heavy winds, officials in those communities found that staggered evacuations ran more smoothly.

Other coordination concerns focused on whether additional entities should be involved in regional and statewide evacuation plans. Many school districts were left out of evacuation planning, and animal shelters also recommended developing contingency plans for people who will not evacuate without their pets or, at a minimum, ensuring the safety of their animals.

One recommendation from the Homeland Security report has yet to be implemented due to a lack of funding. The Texas Department of Transportation (TxDOT) was tasked with purchasing and installing real-time traffic counters along evacuation routes. After discussions with the GDEM, TxDOT settled on plans to install additional Intelligent Transportation System (ITS) sites along hurricane evacuation routes. ITS, currently in use in Austin, Houston, and San Antonio, utilizes closed-circuit television cameras and vehicle counters that can be monitored and managed remotely. While the system cannot count the number of evacuees, it can count vehicles and determine their rates of speed to alert officials of traffic clogs along evacuation routes.

TxDOT has identified 82 sites along those routes where it would install the units, but does not have the $23 million needed to purchase and install the units. The department has sent a request to the Texas Office of Homeland Security in an effort to obtain full or partial funding. TxDOT estimates that it would take 18 to 24 months to install the equipment once funding is secured, meaning that the units would not be functional until the 2007 hurricane season at the earliest.

### Traffic and mobility

The most obvious problem with the evacuation from Hurricane Rita was the heavy backlog of traffic leading away from the coast while highway lanes heading toward the storm were virtually empty. Gov. Perry eventually ordered that all lanes on Interstate 10 and Interstate 45 move traffic in one direction away from the storm, a tactic known as “contraflow.”

Issues beyond the scope of the task force

The task force’s charge does not extend beyond its four major issue areas – fuel availability, communication and coordination, special-needs evacuation, and general transportation and mobility concerns – but additional issues that came into play as a result of the evacuation were raised at the task force hearings. The concern outside the task force’s domain mentioned most frequently was reimbursement of local governments and school districts that evacuated but were not hit by the storm and therefore were ineligible for Federal Emergency Management Agency (FEMA) funding. “Evacuation is the best protective measure we can take, yet with the threat of increasingly active hurricane seasons on the horizon, local jurisdictions are faced with eating the evacuation cost if the storm doesn’t cause significant damage,” Cameron County Judge Gilberto Hinojosa told the task force at its November 15 meeting. “While we cannot afford not to evacuate, the cost of successive evacuations is beyond our means.”

Issues related to Hurricane Katrina and its after effects also are outside the scope of the task force. The influx of new residents already has impacted Texas, adding more students to school district rolls and tightening housing and employment markets. Several speakers before the task force urged the state to develop new plans to cope with the needs of future evacuees arriving in Texas to escape storms or other disasters.
Mayor White of Houston expressed concern that the employment of contraflow “was not in state plans and took almost 12 hours to implement by the relevant agencies.” Employing contraflow had been considered only in the plans for evacuating Interstate 37 between Corpus Christi and San Antonio. Plans to utilize contraflow on busier highways, such as Interstate 10 in Houston, originally were ruled out because of the logistical problems and manpower needed to employ such a tactic. Additionally, studies conducted prior to the 2004 hurricane season indicated that the expected traffic surge could be handled on existing roads. Those forecasts, however, did not take into account that many more people would feel compelled to evacuate after witnessing the devastation caused by Hurricane Katrina less than a month earlier, especially the problems faced by residents of New Orleans and other stricken areas who had failed to leave early enough. TxDOT estimates that in converting the contraflow lanes, it had to barricade 130 entrance and exit ramps to prevent head-on collisions, and many of those ramps had to be guarded by police or other officials to ensure drivers did not circumvent the barriers.

The need for fuel was exacerbated by long waits on the evacuation routes during which many cars ran out of gas. Making matters worse, plans to use National Guard trucks to refuel stranded vehicles failed because the trucks were equipped with nozzles that could refuel jets but not cars. In addition, many evacuation routes in rural areas, such as those in Jasper County and roads between Rio Grande City and Laredo, have very few gas stations. And once power went out at some stations, their fuel pumps became inoperable.

The staggered evacuation system also encountered serious problems due to the unprecedented number of evacuees. Residents of low-lying areas likely to be hit by flooding from a storm surge or subject to being cut off by rising water were first in line to leave, but this system broke down as residents in higher elevations – fearful of a Category 5 hurricane – fled before many low-lying residents had evacuated.

**Steps taken.** The 2005 state Office of Homeland Security report identified eight evacuation routes in need of improvements to better move people out of harm’s way. Three of those improvements have been completed, including placing a wind gauge on the causeway bridge connecting South Padre Island with the mainland, improving several culverts to address flooding concerns along FM 510 in Cameron County, and installing new signs in Goliad County that can be used to inform drivers of available shelter during an evacuation.

TxDOT also has scheduled work on road improvements in Galveston County aimed at eliminating choke points on SH 146. The department expects to complete the project by mid-year at an estimated cost of $18 million. Also underway are improvements on SH 361 from Port Aransas to Padre Island. TxDOT’s Corpus Christi district has allotted $10 million in its three-year plan for the project’s first phase. Although the district’s Metropolitan Planning Organization has designated the second phase of the project as a priority, the district has not yet identified a source to fund the $42 million segment.

Another recommendation rests with the city of Port Arthur after the Texas Transportation Commission approved a $14 million pass-through toll agreement in August 2005. The city will contract out the work to expedite the widening of FM 365 in Jefferson County. TxDOT estimates the project will be completed in two to three years.

After finding more effective alternatives, TxDOT has opted not to implement the task force’s recommendation to raise the bridge over Mustang Creek on US 59 in Wharton County. And a recommendation to reopen SH 87 from High Island to Sea Rim State Park in Jefferson County has been mired in an environmental dispute between the state and the U.S. Fish and Wildlife Service because the proposed project would affect federally protected marshland.

**Next steps.** The task force is expected to develop a plan to adopt contraflow into the evacuation plans and is working with TxDOT and the Department of Public Safety to find a workable option. In addition to the extra manpower needed to erect and enforce barricades, the Rita evacuation highlighted a number of other difficulties with contraflow. Many motorists were not allowed to exit the highways despite a variety of needs, ranging from medical assistance to picking up relatives or children from day-care. Additionally, fuel and other urgent supplies would need to be positioned prior to employing contraflow or else efforts to supply aid to areas nearer the coast would slow evacuation efforts.
Other mobility concerns focused on evacuation routes and host cities for citizens fleeing coastal communities. Under a mandatory evacuation, residents are ordered to use only identified major highways, but some speakers before the panel urged the use of FM and RM roads to ease congestion. In the Rio Grande Valley, changes to the evacuation plan were recommended to address problems based on lack of access to interstate highways in that region and the length of time it takes to evacuate to destinations as far away as San Antonio.

As for fuel availability, one speaker suggested creating incentives for gas stations to obtain power generators by giving those stations priority when emergency fuel supplies reach an affected region. TxDOT also has formed a work group to ensure fuel is available along evacuation routes and currently is identifying service stations that have the capacity to handle large numbers of vehicles without creating more traffic on the roads. The task force is expected to address ways to find a more efficient way to ensure fuel is available to evacuating motorists.

Other issues

Special needs. The evacuation of elderly, disabled, and infirm residents revealed problems in communities across the coast. Nursing homes not licensed by the state, for example, are not required to have emergency evacuation plans. In other cases, arrangements made by nursing homes to shelter or transport their residents away from danger were compromised when state and federal officials took beds or vehicles the nursing homes had planned to use. Additionally, several bus and private ambulance companies contracted by nursing homes did not fulfill their duties to transport residents, either because they were double-booked or because their drivers already had evacuated.

Because many elderly or disabled citizens do not live in specialized facilities, some counties are following a recommendation from the 2005 state Office of Homeland Security report to build a database of the names and addresses of residents who need special assistance during evacuations. That recommendation, however, has not been followed completely in most coastal communities, chiefly due to privacy concerns connected with gathering residents’ personal information. The Florida Legislature has enacted legislation requiring all counties to maintain a special-needs registry that allows people voluntarily and confidentially to sign up if they need assistance in an emergency. Residents also can authorize emergency personnel to enter their homes for search-and-rescue operations during an emergency. The program is available to special-needs residents as well as those who do not have access to transportation.

According to Chairman Jack Little, the task force plans to address deficiencies in nursing home evacuation plans. More fundamental issues also were identified, such as the need for a clear definition of what constitutes a special-needs resident. Questions also arose about the wisdom of moving critically ill or injured patients from hospitals. Although some hospitals are strong enough to withstand a hurricane, there is no statewide standard as to whether they should be required to evacuate.

Public awareness. The 2005 Homeland Security report recommended that GDEM take the lead in developing public awareness campaigns aimed at informing the general public, especially special-needs populations, about evacuation procedures and hurricane threats. According to GDEM, at least 40,000 pamphlets showing evacuation zones and transportation routes were printed and distributed last year and posted on the agency’s Web site.

Exercise and evaluation. GDEM scheduled and ran traffic management tests in each of the five hurricane evacuation regions in June 2005. These tests focused on ensuring that all emergency officials knew their roles and properly coordinated with one another. The tests were not designed as logistical examinations of road capacity. A statewide evacuation exercise is scheduled for early May 2006.

– by Joel Eskovitz
(HHS, from page 1)

(For background information on the shift to eligibility determination call centers and some of the controversy surrounding this policy decision, see “Health and Human Services Reorganization: Consolidation, Call Centers, and Councils,” HRO Interim News Number 78-5, May 26, 2004.)

Consolidating eligibility determination. HHS agencies administer a wide range of programs, including state health insurance programs such as Medicaid and CHIP, cash assistance through Temporary Assistance to Needy Families (TANF), food stamps, and institutional and community-care services for the elderly and disabled. A principal duty for each HHS agency is determining whether applicants meet the eligibility criteria to receive services.

Prior to HB 2292, the Legislature had authorized some movement away from “in-person” requirements for eligibility determination, and some programs, such as CHIP, already have adopted mail-in, phone, or online applications. HB 2292 requires HHSC to establish, if cost effective, a maximum of four eligibility-determination call centers located in Texas. After conducting a business case analysis and concluding that using call centers would be cost effective, the commission in February 2005 awarded the contract to implement call centers to Illinois-based Accenture LLP, which has formed a private consortium, Texas Access Alliance, to operate the call centers. Some observers, including state employee groups, have expressed concern over the state’s contract with Accenture, including the circumstances under which the contract was awarded and the termination of similar contracts in Florida, Kansas, Colorado, and Ontario, Canada due to financial and performance issues. HHS officials have expressed confidence that the Texas contract is being executed as planned.

Rolling out call centers in 2006. The transition to call centers is being phased in by region and by program during 2006. As of January 1, two call centers had been opened in Midland and Austin. Two more call centers are scheduled to be opened later this year, in San Antonio in April and in Athens this summer. An integral element to the call center model is the Texas Integrated Eligibility Redesign

Figure 1: Projected rollout schedule for HHS call centers

1. January 2006: Austin area (TIERS pilot)
2. April 2006: San Antonio and Hill Country
3. May 2006: Midland, Tyler, and east/west rural area
4. June 2006: Houston area
5. July 2006: North Central and Southeast Central area
6. August 2006: Dallas/Fort Worth area
7. September 2006: El Paso, Panhandle, and north border
8. October 2006: Rio Grande Valley

Source: Texas Health and Human Services Commission
System (TIERS), a Web-based eligibility determination system that stores client data for all programs and is being rolled out along with integrated eligibility. Prior to the new year, the Austin and Midland call centers were handling only CHIP applications but since have begun accepting children’s Medicaid applications. At the end of January, the Austin call center began offering the full range of services to Austin area clients. Other areas of the state will make the transition to the call center model in 2006 (see Fig. 1 on page 6).

When fully operational, the call centers will provide live assistance to those calling the 211 number from 8 a.m. to 8 p.m., Monday through Friday. Operators will be able to answer calls in English, Spanish, and Vietnamese, with access to “language lines” interpreters for other languages. Special lines will cater to the deaf and hearing impaired. An automated phone system will allow applicants to track their applications.

Critics who have tested the new system say it does not work as envisioned. Instead of easy access with one phone call, they have found that the system often hangs up on applicants and can be difficult to navigate. HHSC reports that the new system is working well overall and that the details are being refined based on clients’ experience.

While eligibility determination by phone for all programs was envisioned through HB 2292, food stamps will not yet make the transition completely. The application requirements for that program, established and funded by the U.S. Department of Agriculture, include a valid signature from clients applying for food stamps only. HHSC is working with the federal agency to resolve that issue, but clients who call in to request eligibility determination will be sent an application by mail, fax, or online. The federal agency also is monitoring clients’ ability to access services under the new system.

**Reduction in the state workforce.** The shift to call centers will close 99 of about 300 offices and reduce the number of state workers from 5,800 employees to about 2,900 employees. The private contractors operating the new eligibility system will employ 2,500 individuals. The net reduction in total employees will be about 400, but almost half of the workers no longer will be eligible for state benefits. State employees, not private contractors, will make eligibility determinations for applicants. Some critics have warned that because many workers, understanding that their jobs will end, are leaving already, the offices are becoming understaffed before the new system is fully operational.

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**Disputed cost savings from HHS consolidation**

In addition to program changes, HB 2292 also required HHSC to change the way it performs administrative duties by consolidating financial services, human resources, and other functions from disparate agencies and outsourcing some of these duties to private contractors. While the commission has achieved some savings – a reported $15.3 million in general revenue-related funds in fiscal 2004-05 – a recent State Auditor’s Office (SAO) report, *An Audit Report on the Health and Human Services Commission’s Consolidation of Administrative Support Services, September 2005* (SAO- 06-009), is critical of the methodologies and base calculations behind the decision to outsource, contract management practices and the performance measures established to determine the effectiveness of outsourcing. Some of the outsourced functions, such as human services and payroll, produced no cost savings during the previous biennium. A subsequent SAO report in January 2006 (SAO- 06-018) states that HHSC does not appropriately monitor its contracts for human resources and payroll services, particularly in tracking costs and ensuring an adequate level of services. It also recommended that HHSC conduct an analysis of its financial services to ensure that consolidation results in efficient processes.

At a February 1, 2006, Senate Finance Committee hearing on the SAO report, HHSC officials pointed out that much of the cost savings associated with outsourced functions will occur in the later years of the contract after the start-up costs have been absorbed. HHSC said that because the SAO report used retrospective data, it failed to capture the potential savings from the current course of action as money that is spent setting up the system in the early years will pay off in savings in the later years of the contract. Officials also mentioned that some of the cost saving measures in HB 2292 were modified by the 79th Legislature, making original savings estimates less reliable.
While the shift to call centers significantly will reduce the number of state workers involved in eligibility determination, HHSC will not eliminate all state-employed benefit specialist positions and will retain 167 full-service centers. The business case analysis was based on the assumption that no client should have to travel more than 30 miles in rural areas, 15 miles in suburban areas, and five miles in urban areas. The new system also will include 44 satellite offices open on scheduled days as demand requires, traveling units for disabled clients or those in remote areas, and hospital or medical center-based services in the 300 locations already served.

The offices that will close were chosen primarily because they process a low volume of applications or are near other offices. Of the 99 offices scheduled for closure, 87 process fewer than 1,000 applications each month, and 31 are located within 15 miles of another full-service eligibility office. Most of the offices that are scheduled to close also employ few people, and 78 have no more than 10 employees. This compares to early estimates that all brick-and-mortar offices could be closed and the entire system operated through call centers.

**Client access.** The shift to call centers will require applicants to navigate an electronic system that critics have said may be too complex or inaccessible to the population that needs to use it. HHSC has responded to some of these concerns by preserving some of the brick-and-mortar offices so that applicants can access services in person if needed. Also, according to a recent survey conducted by the commission, more than 80 percent of clients polled indicated an interest in applying for services over the phone, outside normal work hours, and with fewer office visits while almost 40 percent reported an interest in applying online.

The new system also is designed to improve access by better utilizing the existing network of community-based organizations (CBOs) and giving CBOs an active role in helping applicants determine what services they may need. In addition, HHSC says that by removing the need for a personal visit, call centers will allow many working people to apply for services without missing work or having to arrange transportation or child care. Critics say that the application forms are detailed, paper-intensive, and often confusing, making it difficult for clients to complete without in-person assistance. Also, they claim that applicants are directed to use 211, the statewide telephone system for social services needs, to seek help with the paper forms, although that system also can be confusing and may be poorly equipped to handle the volume and complexity of calls associated with integrated eligibility.

– by Kelli Soika