

Progress through Partnership

Rebuilding Communities, Reuniting Families



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FEMA's Louisiana Transitional Recovery Office has been working closely with the Louisiana Recovery Authority, the Governor's Office of Homeland Security and Emergency Preparedness and all local officials to accelerate the recovery of Louisiana. A full recovery depends on maintaining a constant line of communication and a shared dedication of rebuilding our state. FEMA remains resolute in ensuring that Louisiana gets all of the eligible recovery dollars needed to build back safer, smarter and stronger.

This booklet highlights a few of the many accomplishments our partnership has produced in the three years since the devastation created by hurricanes Katrina and Rita. We have worked together to aggressively implement innovative solutions to overcome recovery obstacles. The content in this booklet serves as evidence of our success and that recovery is moving along steadily.

Our collaboration has facilitated progress, and we at FEMA are looking forward to working side by side with our partners until Louis iana has fully recovered.



Judin

Jim Stark
Acting Associate Deputy Administrator, Gulf Coast Recovery Office
& Director, Louisiana Transitional Recovery Office

Snapshot of FEMA Funding for Hurricanes Katrina and Rita

FEMA Individual Assistance ▶ Providing a Helping Hand

Assistance provided to Louisiana residents:

• Housing Assistance \$4.16 billion (Home repairs and temporary housing)

• Other Needs Assistance \$1.6 billion

(Expenses such as personal property replacement, vehicle repair or replacement and medical/dental expenses)

Disaster Unemployment Assistance \$331.8 million

Crisis Counseling Services \$96.6 million

• U.S. Small Business Administration low-interest disaster loans:

For homeowners and renters
For business owners
\$5.3 billion
\$1.58 billion

FEMA Public Assistance ▶ Helping Communities Recover

Funding approved for local governments, state agencies and eligible non-profits:

• Total Public Assistance made available to state \$6.91 billion

• Debris removal and emergency protective measures \$3.19 billion (59.9 million cubic yards of debris removed)

• Repair and restoration of public buildings, roads and utilities \$3.63 billion (32,622 repair/rebuilding projects funded to date)

• Administrative and State Management Costs \$90 million

• State Public Assistance Payout to local governments \$3.56 billion

FEMA Mitigation Program > Rebuilding Safer, Smarter, Stronger

• Estimated total FEMA funding for Hazard Mitigation Grant Projects \$1.47 billion

• National Flood Insurance Program claims paid \$13.5 billion (\$70,000 average claim paid)

• Hazard Mitigation Grant Program funds approved \$246.9 million (Money for projects to reduce or prevent future disaster damages)

FEMA Assistance by Parish ▶ State of Louisiana

Sector Breakouts

Public Safety

(Obligated: \$724.8 million; State payout: \$428.5 million)

 First responders and critical infrastructure like police and fire stations suffered a devastating blow during hurricanes Katrina and Rita. FEMA funds have been used to rebuild the state's criminal justice system, including facilities and emergency work performed by the sheriff, police and fire departments.

De bris/Demolition

(Obligated: \$1.2 billion; State payout: \$832.8 million)

• 54.4 million cubic yards (the equivalent of filling the Superdome almost 11 times) of right-of-way, private property, demolition and marine DEBRIS was removed after hurricanes Katrina and Rita. 167,000 cubic yards of debris, 85,000 cubic yards of trees, 48 vehicles and 1,100 vessels have been removed from LA'S WATERWAYS.



(Obligated: \$521.6 million; State payout: \$276.2 million)

- The hurricanes damaged 141 Louisiana hospitals and forced 30 to close.
- Dozens of temporary and permanent hospitals are functioning today because of FEMA funding helping hospitals across Louisiana return to their pre-disaster function and capacity.

Edu cation

(Obligated: \$2.3 billion; State payout: \$778.1 million)

- A total of 875 schools were affected by Hurricane Katrina. Of these schools, 40 were completely destroyed. In addition to the physical devastation, thousands of Louisiana students were displaced as a direct result.
- Recent state enrollment numbers have increased to more than 800,000 K-12 students due in part to FEMA funding, which has helped restore schools throughout the state.

Housing

(\$6.1 billion for housing needs, necessary expenses and disaster unemployment assistance)

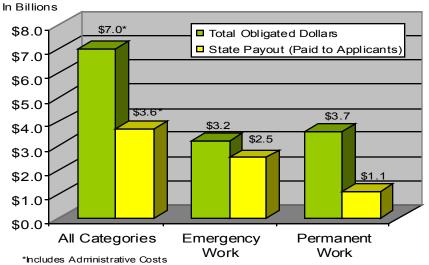
• FEMA provided temporary housing for 91,788 FAMILIES. Nearly 88 percent have moved on to safer, permanent or more functional housing.

Hazard Mitigation

(\$247 million)

- There is a potential \$1.47 billion in funding that FEMA has set aside for hazard mitigation projects in Louisiana.
- Of the 180 projects submitted to FEMA by the state, 158 have been approved and 22 are in review.
- So far, \$96.9 million in HMCP funding has been granted to the state to elevate nearly 3,000 homes. This funding works in tandem with LA's Road Home Program.

Public Assistance Funding



FEMA Assistance by Parish ▶ Orleans Parish

Sector Breakouts

Public Safety

(Obligated: \$408.4 million; State payout: \$213.4 million)

- Funding for immediate needs and initial response and recovery operations at the EMERGENCY OPERATIONS CENTER:
 \$21.2 million
- Assessments of 13,000 city blocks for LOCAL STREET REPAIRS: \$40 million
- Temporary animal control facility for the LOUISIANA SPCA: \$144,000

Debris/Demolition

(Obligated: \$74.2 million; State payout: \$27.6 million)

• Removal of right-of-way, private property, demolition and marine DEBRIS: 15.9 million cubic yards

Health Care

(Obligated: \$142.4 million; State payout: \$79.9 million)

- Stabilization of TULANE MEDICAL SCHOOL, which reopened in spring 2006: \$5.2 million
- Floodproofing and elevation of LSU LION'S EYE CLINIC'S critical facilities and equipment: \$8.2 million
- Reconfiguration of TOURO HOSPITAL'S electrical circuitry to provide backup power during failure: \$2.9 million
- Repairing and flood proofing of CHATEAU DE NOT RE DAME NURSING HOME: \$4.2 million

Edu cation

(Obligated: \$834.2 million; State payout: \$299.9 million)

- Providing temporary facilities and permanent structures for the RECOVERY SCHOOL DISTRICT, including comprehensive repairs or
 replacement to five schools under the Quick-Start initiative. Construction is underway at Langston Hughes and Andrew Wilson Elementary
 Schools; groundbreakings at Lake Area Middle School and LB Landry High School in late summer 2008; demolition at Fannie C. Williams
 Middle School in October: \$501.1 million
- Elevation of mechanical and electrical components for TULANE UNIVERSITY: \$728,080

Housing

(\$2.9 billion for housing needs and necessary expenses)

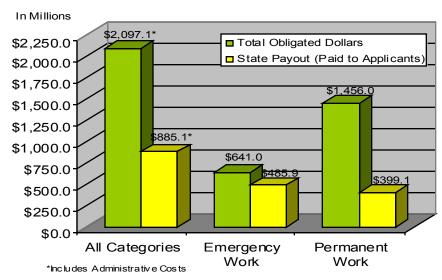
• Temporary housing provided for 23,304 FAMILIES. More than 85 percent have moved on to safer, permanent or more functional housing.

Hazard Mitigation

(Total HMGP funding: \$4.77 million; 4 traditional grants: \$4.47 million)

- Assistance to the community for ELEVATING flood-prone homes or businesses: \$2 million
- New or updated hazard mitigation plans for the SEWERAGE & WATER BOARD, UNIVERSITY OF NEW ORLEANS, AUDUBON PARK, PORT OF NEW ORLEANS and AVIATION BOARD: \$309,120

Public Assistance Funding



FEMA Assistance by Parish ▶ St. Bernard Parish

Sector Breakouts

Public Safety

(Obligated: \$102.8 million; State payout: \$86.6 million)

- Temporary facilities, reconstruction of the permanent building and replacement of contents for the GOVERNMENT COMPLEX BUILDING: \$4.5 million
- Facility repairs and replacement of FIRE STATIONS and essential equipment throughout the parish: \$5.6 million
- Repairs to the ST. BERNARD PARISH 9-1-1 CENTER are nearly complete. This strategic communications center is expected to open August 2008: \$1.1 million

Debris/Demolition

(Obligated: \$388.6 million; State payout: \$247.9 million)

• Removal of right-of-way, private property, demolition and marine DEBRIS: 5.6 million cubic yards

In Millions 1.121.8 \$1,200.0 ■ Total Obligated Dollars \$1,100.0 ☐ State Payout (Paid to Applicants) \$1,000.0 \$900.0 \$800.0 \$654.6 5592.4* \$700.0 \$600.0 \$451.5 \$467.2 \$500.0 \$400.0 \$300.0 \$140.9 \$200.0 \$100.0 \$0.0 All Categories Emergency Permanent Work Work *Includes Administrative Costs

Public Assistance Funding

Health Care

(Obligated: \$948,818)

- Replacement of the one-story, wind and flood damaged ALCOHOL AND DRUG ABUSE CLINIC: \$384,600
- Newly built ST. BERNARD COUNCIL ON AGING, expected to open December 2008: \$2.7 million

Education

(Obligated: \$374.7 million; State payout: \$162.9 million)

- Construction of JOE DAVIES and W. SMITH ELEMENT ARY SCHOOLS, scheduled to reopen for the 2008-09 school year: \$55 million
- Elevation of mechanical and electrical equipment to safeguard ST. BERNARD HIGH SCHOOL against future flooding: \$381,240

Housing

(\$368.0 million for housing needs and necessary expenses)

• Temporary housing provided for 9,207 FAMILIES. More than 86 percent have moved on to safer, permanent, or more functional housing.

Hazard Mitigation

(Total HMGP funding: \$8.4 million; 2 traditional grants: \$8.4 million)

• ACQUISITION of 60 flood-prone homes from willing owners to return the properties to open space.

FEMA Assistance by Parish ▶ Plaquemines Parish

Sector Breakouts

Public Safety

(Obligated: \$70.2 million; State payout: \$20.7 million)

- Design and construction of the PLAQUEMINES PARISH SHERIFF DEPARTMENT'S permanent 800-bed jail facility: \$18 million
- Repairs and reconstruction of 11 PLAQUEMINES PARISH FIRE STATIONS two are complete, four are under construction and five are in design: \$9.8 million
- Elevation of DALCOUR WATER PLANT'S mechanical components and shutters added to windows: \$56,780

De bris/Demolition

(Obligated: \$91.0 million; State payout: \$55.6 million)

• Removal of right-of-way, private property, demolition and marine DEBRIS: 3.8 million cubic yards

\$489.2* In Millions \$500.0 ■ Total Obligated Dollars □ State Payout (Paid to Applicants) \$450.0 \$400.0 \$312.3 \$350.0 \$300.0 \$250.0 \$176.9 \$200.0 \$129.3* \$102.2 \$150.0 \$100.0 \$27.1 \$50.0 \$0.0

Emergency

Work

Permanent

Work

All Categories

*Includes Administrative Costs

Public Assistance Funding

Health Care

(Obligated: \$17.0 million; State payout: \$1.0 million)

- Replacement of the storm-damaged BELLE CHASSE HEALTH DEPARTMENT BUILDING and contents: \$729,153
- Demolition, elevation and construction of PLAQUEMINES MEDICAL CENTER, a vital facility to Plaquemines Parish and offshore interests: \$16.3 million

Education

(Obligated: \$197.5 million; State payout: \$33.3 million)

- Rebuilding of the former Buras High School into SOUTHPLAQUEMINES HIGH SCHOOL: \$30 million
- Repairs to the BOOTHVILLE/VENICE SCHOOL, which now serves more than 200 students in pre-kindergarten through sixth grade: \$8 million

Housing

(\$134.6 million for housing needs and necessary expenses)

• Temporary housing provided for 4,662 FAMILIES. More than 78 percent have moved onto safer, permanent or more functional housing.

Hazard Mitigation

(Total HMGP funding: \$544,537; 3 traditional grants: \$432,037)

- RETROFITTING of buildings to minimize damage from high winds, flooding, earthquakes and other hazards: \$190,257
- Updated hazard mitigation plan for PLAQUEMINES PARISH GOVERNMENT: \$112,500

FEMA Assistance by Parish > St. Tammany Parish

Sector Breakouts

Public Safety

(Obligated: \$5.6 million; State payout: \$4.7 million)

- Compensation for first responders' overtime work and purchase of essential supplies for A.J. CHAMPAGNE FIRE STATION: \$318,000
- Elevation of SLIDELL SEWER SYSTEM'S electric motor control centers: \$57,536

De bris/Demolition

(Obligated: \$230.2 million; State payout: \$188.7 million)

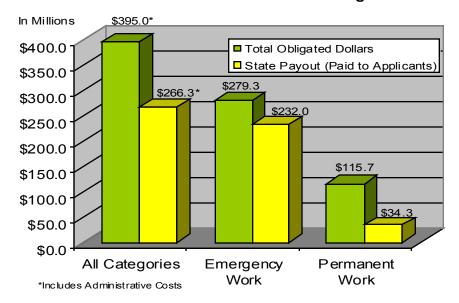
• Removal of right-of-way, private property, demolition and marine DEBRIS: 10 million cubic yards

Health Care

(Obligated: \$5.7 million; State payout: \$3.7 million)

- Grants for public immunizations and repairs to SLIDELL MEMORIAL HOSPITAL: \$4.7 million
- Elevation of SLIDELL MENTAL HEALTH CLINIC'S essential HVAC components to protect against future flooding: \$64,024

Public Assistance Funding



Education

(Obligated: \$104.1 million; State payout: \$36.8 million)

- Replacement and consolidation project including classrooms, a gymnasium and administration facilities at SALMEN HIGH SCHOOL: \$40.7 million
- Replacement of the gymnasium and two classroom buildings at OUR LADY OF LOURDES SCHOOL: \$14.9 million

Housing

(\$408.1 million for housing needs and necessary expenses)

• Temporary housing provided for 11,108 FAMILIES. More than 87 percent have moved on to safer, permanent or more functional housing.

Hazard Mitigation

(Total HMGP funding: \$6.6 million; 14 traditional grants: \$6.47 million)

- ELEVATION of 38 flood prone structures: \$3.2 million
- Updated or amended hazard mitigation plans for COVINGTON, SLIDELL, MANDEVILLE and ST. TAMMANY PARISH GOVERNMENT: \$450,000

FEMA Assistance by Parish ▶ Jefferson Parish

Sector Breakouts

Public Safety

(Obligated: \$21.1 million; State payout: \$13.5 million)

• Removal and replacement of GRAND ISLE FIRE STATION: \$2.2 million

Debris/Demolition

(Obligated: \$104.1 million; State payout: \$92.5 million)

• Removal of right-of-way, private property, demolition and marine DEBRIS: 6.8 million cubic yards

Health Care

(Obligated: \$19.2 million; State payout: \$10.6 million)

• Repairs to EAST JEFFERSON GENERAL HOSPITAL, including roof and parking garage repairs and replacement of interior furnishings and hospital supplies: \$5.5 million

Education

(Obligated: \$96.4 million; State payout: \$27.3 million)

- Construction of a new school campus for WOODMERE ELEMENT ARY SCHOOL: \$10.4 million
- Recovery and digitization of approximately 14 million damaged JEFFERSON PARISH SCHOOL SYSTEM documents, including personnel files, student records, medical information and minutes: \$2.4 million
- Enhancement of JOHN CLANCY ELEMENTARY'S DRAINAGE through regrading and plumbing: \$18,025

Housing

(\$1.2 billion for housing needs and necessary expenses)

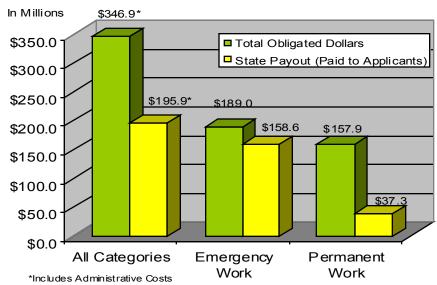
• Temporary housing provided for 19,758 FAMILIES. More than 90 percent have moved on to safer, permanent or more functional housing.

Hazard Mitigation

(Total HMGP funding: \$36.2 million; 10 traditional grants: \$36 million)

- RECONSTRUCTION of 20 flood-prone residential structures: \$3.7 million
- Updated hazard mitigation plans for the CITY OF HARAHAN and JEFFERSON PARISH GOVERNMENT: \$225,000

Public Assistance Funding





FEMA Individual Assistance

Providing a Helping Hand







(Top) FEMA Individual Assistance can assist with renting property when a home is too damaged to live in, like the home of this New Orkans resident. (Middle) Disaster Recovery specialists provide information at a Disaster Recovery Center. (Bottom) A travel trailer provides temporary living space while the home is being repaired.

Source: FEMA Photos

Perhaps the greatest toll of a disaster is on people. Lives and property often are impacted or lost. For more than 30 years, the United States government has been making a difference for people affected by disasters by helping to rebuild communities and providing individual assistance to citizens.

Within hours of a disaster, voluntary agencies such as the American Red Cross, The Salvation Army and others provide immediate aid and comfort to disaster-affected citizens by helping with emergency needs such as food and shelter.

When the president declares a disaster to help individuals, FEMA begins providing a myriad of assistance to eligible citizens. FEMA help can include: small grants to repair a home so that it's livable; government-provided temporary housing until a permanent home can be restored or replaced; financial help with serious disaster-related needs not covered by other programs; disaster unemployment assistance to help with lost income and federally-funded crisis mental health counseling.

Additionally, the U.S. Small Business Administration can provide low-interest federal disaster loans to homeowners, renters, businesses of all sizes and private nonprofit organizations to repair or replace property damaged or destroyed by the disaster. Small businesses also may apply for help to meet working capital needs.

The following pages explain the many facets of FEMA's Individual Assistance program.

Individuals and Households Program Total: \$6.1 billion	FEMA's Individuals and Households Program helps assists homeowners and renters affected by a presidentially-declared disaster with housing needs and necessary expenses. Assistance available under the program can include: temporary housing, minimal home repair, other needs assistance, disaster unemployment assistance and crisis counseling. Homeowners, renters and business owners may also be eligible for low-interest loans to aid in recovery.				
Temporary Housing Total: 91,791 travel trailers and mobile homes	FEMA provides grant money to eligible homeowners and renters who have been displaced from their homes as a result of a disaster. These funds are used to obtain alternate housing on a temporary basis until permanent housing that is safe, sanitary and functional can be found. In some instances, when rental properties are not available, FEMA may provide disaster survivors with a temporary housing unit such as a travel trailer or mobile home.				
Home Repair and Home Replacement Total: \$458.2 million	Minimal home repairs not already covered by insurance may be eligible for FEMA funding. Homeowners may receive grants to pay for repairs to make the home safe, sanitary and functional.				
	Home replacement funds are available to eligible homeowners whose primary residences were damaged by disaster but not covered by insurance. These funds are applied toward replacing or rebuilding the primary residence.				
Other Needs Assistance Total: \$1.6 billion	Disaster survivors who are in need of basic items may receive Other Needs Assistance. Eligible individuals may receive a grant for essential personal items not covered by other types of assistance or insurance. These items could include damaged or destroyed personal property (clothing, appliances and essential furnishings for primary living areas) and disaster-related medical, dental, funeral or transportation costs.				
Disaster Unemployment Assistance Total: \$331.8 million	Individuals forced out of employment due to a disaster can apply for help to replace lost income. Disaster unemployment assistance offers weekly income compensation to those who are self-employed, farmers or others not covered by regular unemployment insurance programs.				
Crisis Counseling Total: \$96.6 million	In the aftermath of a disaster, storm victims often struggle with anxiety, depression and despair. FEMA provides funds to the state to offer crisis counseling services to those experiencing psychological distress because of the disaster. Face of FEMA: Clark H. Galloway, II Having served as an Air Force disaster preparedness (FEMA) flight chief and information technology program manager, Clark Galloway is perfectly suited for his position of Planning and Support Group Supervisor. He creates and manages FEMA databases				



and oversees a staff that generates more than 45

different reports each week. Galloway maintains that the achievements of his section are the result of team effort. He cites his greatest achievement as that of helping devastated people get back on their feet. He is in the process of building an enormous computer program that will allow many databases to talk to each other—the first of its kind in FEMA.

Housing Victims of the Storms

In the wake of hurricanes Katrina and Rita, there was an urgent need for temporary housing. The effort to meet that need was unprecedented and the largest endeavor of its kind in United State history. During the early weeks following the disasters, FEMA created and implemented a hotel/motel subsidy program in partnership with the American Red Cross that relocated thousands of families out of shelters into more private and hospitable living conditions.

During the second phase of its disaster housing strategy, FEMA undertook the challenge of transitioning families from hotels and motels to more suitable short-term housing. More than 572,000 Louisiana households were provided with rental assistance funds to help them lease apartments or houses. A critical housing shortage continued, and temporary disaster housing units—travel trailers and mobile homes—were brought into accommodate more than 91,000 Louisiana households. While the majority of these units (72,033) were placed on private sites, FEMA also contracted to have "group" sites built to house multiple families who did not have a viable alternative location. In total, there have been 9,019 units in 111 group parks. FEMA also placed another 7,556 temporary housing units at various commercial sites, such as existing mobile home parks and RV parks.

FEMA gradually closed group sites as families moved back into their repaired homes or found other long-term housing. Resources to facilitate the transition have included funding for relocation expenses, caseworkers to provide one-on-one assistance and rental resources staff to find available rentals. As of June 2008, FEMA had closed nearly all of its group sites and reduced the number of units at all Louisiana sites from a high of over 91,000 to less than 12,700. Currently, 12,557 households continue to receive FEMA-funded rental assistance.

FEMA's emergency housing program, which includes temporary housing in travel trailers and mobile homes and monetary assistance to help with rent, is typically limited to 18 months. Due to the scope of the devastation, however, the program was extended for an additional two years to March 2009.





(Top) Some displaced residents lived in group sites where multiple units were placed and infrastructure installed.

(Bottom) In many cases, travel trailers or mobile homes were located on a person's property near their home that was being repaired.

Source: FEMA Photos





(Top) Travel trailers line up to house residents returning to the Sisters of the Holy Family neighborhood.

(Bottom) After the site was restored to open space, a volunteer group replaced playground equipment that Katrina had destroyed.

Source: FEMA Photos

Restoring Housing Sites

After hurricanes Katrina and Rita, FEMA contracted with certain property owners to use their land for sites to station multiple travel trailers and mobile homes to house hurricane victims. Open space locations throughout Louisiana were used, including parks, playgrounds, ball fields and parking lots, for what FEMA terms "group" sites. As FEMA has relocated residents to more permanent housing and the sites were no longer needed, FEMA, with the property owner's consent, returned the site to its previous usage and condition

Sisters of the Holy Family

In January 2006, FEMA leased property from the Sisters of the Holy Family to build a small temporary trailer park. Prior to Hurricane Katrina, the site served two purposes: a parking lot for a convent and a playground. The playground equipment was destroyed by Hurricane Katrina. After two years of use, the group site closed as all 15 families living there had returned to their repaired homes or were assisted with renting homes and apartments. As part of the restoration, new playground equipment was installed with the help of a voluntary agency and now greets children from the surrounding neighborhood.

University of New Orleans (UNO) student housing

The UNO trailer site was created to house approximately 500 school faculty, students and their immediate families. FEMA installed a trailer park with the infrastructure required to sustain it on a UNO soccer field. Fire hydrants, dumpsters, much of the fencing and lights were installed to support the trailer park. These and other additions, such as roads, some light poles and the underground water and sewer system, will remain. By the summer of 2008, the trailer park will revert back to its original use and become the site of several lighted soccer fields that include water and sewer infrastructure.

New Orleans recreational parks system

In one of the largest trailer park installation arrangements with the city of New Orleans, FEMA installed temporary housing group sites at 14 New Orleans Recreational Department (NORD) locations. FEMA realizes that the restoration of the city's parks is an important morale boost, so after almost three years of use, the agency is now in the process of restoring each of the sites by removing the infrastructure used for travel trailers and putting sod in place. Once this has occurred, FEMA will maintain the sites for four weeks. In addition, FEMA is providing the city of New Orleans, through the Governor's Office of Homeland Security and Emergency Preparedness, with approximately \$15 million in Public Assistance funds to rebuild and restore other public parks across the city.

Personal Stories of Recovery



Ms.Ingraham's newly rebuilt home sits on in her hometown of Port Sulphus.

Source: FEMA photos

Hurricane Katrina wreaked havoc on **ERRICA INGRAHAM**'s home in Plaquemines Parish, leaving her and her three children displaced and without their possessions. The powerful storm, which unleashed its fury on most of the homes in the parish, forced Ms. Ingraham's family and other residents from that community out of the area.

More than a year after Ms. Ingraham fled her home, she and her children moved back to their devastated hometown of Port Sulphur. Sheltered in a FEMA travel trailer, Ms. Ingraham embarked on the daunting task of rebuilding her home with the support of various agencies and organizations. The Committee for Plaquemines Recovery, American Red Cross and The Salvation Army all contributed financially toward that end.

With volunteer labor furnished by Mennonite Disaster Services, construction of Ms. Ingraham's new house began in January 2007. Seven months later, she was able to move into her home.

"That was the greatest thing ever!" said Ingraham, who became a caseworker for a voluntary agency shortly after returning home. "Anybody who needs help needs to reach out. The help is here through different volunteer organizations in the parish. Stop by, ask questions."



Ms. Cosey observes a celebration of the completion of her home.

Source: FEMA photos

At 98, **ROSE COSEY** confronted the obliterating effects of Hurricane Katrina on her home with great fortitude and powerful determination.

She knew she wanted to rebuild her beloved house, which was built by her late husband 47 years ago. However, she did not have the means. She did not have homeowners or flood insurance on her New Orleans East home either, but she did have a steadfast faith.

"Jesus told me to go about my business and return home," she recalls.

Soon, a beacon of light shone on the horizon. FEMA provided Ms. Cosey the maximum amount of funds that can be granted to an eligible applicant to replace a home. A group of nonprofit organizations from throughout the country also supported Ms. Cosey. Elijah Christian Ministries, American Red Cross, Hope Center, Inc., S.O.W.N. Realty, Operation Nehemiah, The Salvation Army, Mennonite Disaster Service of Akron and Lutheran Disaster Response of Chicago pitched in with resources for house gutting efforts, mold

remediation and a pressure washing job. Several home improvement retailers donated building materials to rebuild Ms. Cosey's ravaged home and FEMA granted her funds to help replace her personal property.

Today, Ms. Cosey enjoys her days in her new home. There, she celebrated her 100th birthday last December.



A volunteer visits with an evacuee at a shelter.

Source: American Red Cross photo

The Power of Voluntary Agencies

Countless voluntary, nonprofit and faith-based agencies such as American Red Cross, The Salvation Army and United Methodists regularly assist disaster victims with resources and services in a variety of ways. This assistance can be with emergency short-term needs such as food, clothing and shelter, as well as longer-term recovery issues such as replacing personal property, helping to rebuild damaged dwellings and helping to make the move to a new permanent residence. FEMA coordinates with these voluntary agencies so that victims' needs are met when FEMA funds are not legally eligible and without duplicating efforts or resources.

Following hurricanes Katrina and Rita, many other groups, including local non-profit and voluntary agencies, came together to help their communities' residents. Many partnered with existing national and local agencies or formed separate coalitions to satisfy specific needs of their neighbors in South Louisiana.



A volunteer paints a renovated house. Source: FEMA photo

Louisiana Voluntary Agency Partners

Tonya Gatt, Rebuild Coordinator, United Way Crescent Alliance Recovery Effort (CARE)

CARE is a Long-Term Recovery Organization operating in Orleans Parish. This voluntary agency is involved in rebuilding and repairing homes, fostering a case management program, educating about preparedness planning, advocating for ongoing recovery efforts, facilitating volunteer programs and other activities. As a result of their efforts, 112 homes have been rebuilt, 146 homes have been repaired and four new constructions are in process.

Tonya Gatt, Rebuild Coordinator for CARE, talks of the volunteer groups from around the country that have come back year after year to help her help others. "They appear to develop a heart for service, not only here in Louisiana, but also in their own communities, I call them 'repeat offenders,'" said Gatt, with appreciation.

Bruce LePoint, Volunteer Coordinator, Committee for Plaquemines Recovery

The Committee for Plaquemines Recovery (CPR) was established to provide Long-Term Recovery Committees with a venue to come together to coordinate rebuilding efforts after Hurricane Katrina. From October 2007 to January 2008, Volunteer Coordinator Bruce LePoint kept busy recruiting volunteers to assist with their work.

The goal was to build 34 homes—17 homes in 2008 and 17 more in 2009.

"T wo families have already been moved into homes and we should complete 12 more houses by the end of the year," LePoint explained.

Dale Kimball, Station Manager, Southeast Louisiana District Disaster Recovery Center of the United Methodist Church
The Southeast Louisiana District Disaster Recovery Center of the United Methodist Church became involved in disaster response efforts in September 2005. The Ministry set up storm recovery centers on New Orleans' north and south shores and provided food, clothing and water to disaster victims. Ministry volunteers also gutted houses and cut trees. In January 2007, the organization shifted its focus from response to recovery and began concentrating on repairing and rebuilding homes, providing case management and funds for utility bills and meeting other critical needs.



FEMA Public Assistance

Helping Communities Recover

Total federal funds approved: \$6.91 billion

Funding by sector:

• Health Care and Research

Temporary and permanent hospitals are some of the buildings funded with the \$521.6 million provided for health care and research.

• Education

\$2.3 billion will help repair or replace school facilities throughout the state for thousands of students.

• Public Safety: Police, Fire, Criminal Justice, Marine Debris
\$724.8 million will be used to rebuild the state's public safety and criminal justice systems. Approximately 167,000 cubic yards of debris and 1,100 vessels have been removed from Louisiana's waterways.





(Top) School children waitfor class outside a temporary classroom provided by FEMA in Cameron, La.

(Bottom) FEMA's Mobile Emergency Medical Unit sits next to the old hospital in Port Sulphur, La.

Source: FEMA Photos







FEMA Public Assistance funds helped pay for: (Top) repairs to the New Orleans Museum of Art,

(Middle) the Martin Luther King Jr. Charter School in the Lower Ninth Ward and (Bottom) debris removal.

Source: FEMA Photos

One of the most critical areas of disaster recovery is restoring the foundation on which local and state governments exist. Often, that means clearing debris; helping with emergency protective measures; restoring public infrastructure such as roads, bridges, utilities and parks; and re-establishing government functions, buildings and equipment.

Through its Public Assistance program, FEMA provides grants to states, communities, tribal governments and certain nonprofit organizations to help them recover from the effects of major disasters, such as floods, earthquakes, tornadoes and hurricanes, as declared by the president.

The grants reimburse approved costs associated with emergency work as well as repairing or replacing eligible, disaster-damaged infrastructure and public facilities. FEMA works with state and local governments to assess damages and identify needs in order to return the infrastructure and public facilities to the function and capacity they were in at the time of the disaster. FEMA funds are appropriated by Congress and are subject to compliance with certain environmental and historic preservation requirements. These funds cannot be duplicated by other monies, such as grants, donations or insurance proceeds.

Once project costs are approved, FEMA awards grants to the state which, in turn, manages and disburses those funds to eligible state and local entities for a percentage of their eligible project costs. Normally, FEMA funding represents 75 percent of eligible project costs. However, because of the catastrophic impact of hurricanes Katrina and Rita, the federal funding share was raised to 100 percent for these storms.

As of July 2008, FEM A Public Assistance has provided grants totaling **\$6.91 billion** to the state of Louisiana for eligible projects and emergency response actions associated with recovery from hurricanes Katrina and Rita. Of the total grant monies, the state has disbursed approximately **\$3.56 billion** to local communities and state agencies.

Sector: Health Care Project: Louisiana State University (LSU) Interim Hospital



BEFORE: Located in New Orleans' Central Business District near the Louisiana Superdome, many of LSU's medical buildings were severely damaged by floodwaters. Source: FEMA Photos



AFTER: FEMA assisted LSU with establishing a temporary hospital facility while final decisions are made about the future of the Medical Center of Louisiana at New Orleans. Source: FEMA Photos

Establishing the LSU Interim Hospital was the most effective way to restore the New Orleans' public health care system after Hurricane Katrina. The Interim Hospital serves patients with a 238-bed medical-surgical unit, emergency room and a Level 1 Trauma Center. It will operate until the state reopens its permanent facility, perhaps as early as 2012.

Prior to the storm, the Medical Center of Louisiana at New Orleans (MCLNO) was the primary medical center and teaching hospital for the greater New Orleans area and beyond. MCLNO served as a referral hospital for patients with serious illnesses and housed the region's only Level 1 Trauma Center. It also was the primary provider for the region's uninsured, underinsured and indigent residents, which earned the facility the label of "Charity" Hospital. The extensive damage caused by Hurricane Katrina crippled what had been a strong and steady provider of critical health care services. Buildings of MCLNO were battered by destructive winds and floodwaters, which filled the basements of the Charity and University Hospital towers. LSU evacuated patients and staff by air and boat while medical personnel remained behind to provide emergency care to rescue and response teams.

The brackish water that remained for weeks in the flooded buildings severely damaged temperature and humidity controls, electrical systems and diagnostic and treatment equipment. Though the buildings were left standing, thorough inspection revealed that the destruction was extensive. Still, the need to temporarily re-establish referral and level 1 trauma capabilities in the area was critical. With a \$60 million grant from FEMA, three of the complex's main buildings were reconfigured into an interim hospital. In April of 2006, level 1 trauma care resumed, and in-patient treatment followed in November. Future plans call for the LSU Interim Hospitalto treat patients at a capacity of 347 beds.

Total committed funds from FEMA Public Assistance for this project: \$60 million

Sector: Health Care

Project: St. Margaret's Daughters Nursing Home



BEFORE: The hurricane caused damage to the Bywater Hospital building, which is located in a neighborhood near the nursing home. Source: FEMA Photos



AFTER: Debris was removed and renovations were done to the Bywater Hospital to serve as St. Margaret's temporary facility. Source: FEMA Photos

Like much of New Orleans, the St. Margaret's Daughters Nursing Home took a beating. Hurricane-force winds and floodwaters wreaked havoc on the sprawling facility in the historic Holy Cross neighborhood, located in the city's Lower Ninth Ward. Morethan 6 feet of brackish water lingered inside the nursing home for more than two weeks after the storm, severely damaging the structure, electrical system, mechanical and medical equipment and contents. In the end, the storm's effects rendered St. Margaret's main building and three wings uninhabitable.

St. Margaret's was determined to reopen as quickly as possible. Since 1931, St. Margaret's has been providing a variety of services for elderly residents of Orleans and St. Bernard parishes. Pre-storm, St. Margaret's was hometo 95 seniors and licensed to care for 116.

Severe damage to public infrastructure, as well as redevelopment uncertainties in the Lower Ninth Ward, meant that returning to St. Margaret's original site was not a quick or feasible short-term option. So the charity turned to FEMA for help to re-establish its services. The agency provided \$5.59 million for a temporary facility. FEMA funded another \$3.7 million to perform necessary code upgrades to renovate the old Bywater hospital into a functional nursing home, to replace destroyed contents from its original facility and to reimburse additional emergency costs.

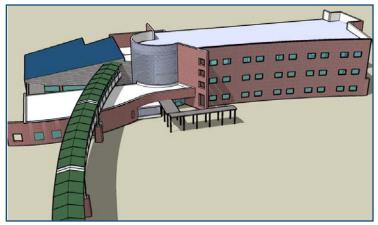
The current facility, which opened in September 2007, provides nursing home services on three floors. Plans are to open the remaining floor as an assisted-living unit at a later date. FEMA also has committed more than \$6.64 million for St. Margaret's new permanent facility, contents and replacement of a vehicle.

Total committed funds from FEMA Public Assistance for this project: \$15.93 million

Sector: Education Project: Chalmette High School and Lacoste Elementary



BEFORE: Construction has already begun on the expansion across from Chalmette High School as these workers install pilings and a foundation. Source: FEMA Photos



AFTER: Renderings show the future design of Chalmette High School's skywalk and cultural center expansion. Source: St. Bernard Parish School Board

In St. Bernard Parish, a multi-million dollar, state-of-the art expansion is under construction across the street from the re-opened Chalmette High School, which suffered extensive storm-related damages.

Students will benefit from an athletic complex, classrooms, cafeteria and a cultural arts center at the expansion. A skywalk will link the new building, which is located at the former site of Lacoste Elementary School, across Judge Perez Drive to Chalmette High School.

The athletic complex will include swimming, basketball and wrestling facilities. Each floor of the three-story classroom building will be equipped with science and computer labs, which will help reduce class sizes and provide more individual attention to students. The cultural arts center will include a 400-seat auditorium, library, dance studio and music rooms.

FEMA worked with the St. Bernard Parish School Board to create a federal funding solution for the expansion. The result allowed the school board flexibility in receiving FEMA funds to redevelop the Lacoste Elementary site. FEMA also expedited the Environmental and Historic Preservation review processes through its Alternative Arrangements process. As a result, FEMA approved federal funding sooner, thereby allowing construction to commence more quickly. Construction is expected to be completed by fall 2009.

"We look at this as the comerstone of the rebuilding process of our school system," St. Bernard Parish School Board Superintendent Doris Voitier said. "It hink this will really be a vision of hope for the community. It will be a signal of recovery for the people of St. Bernard Parish."

Total committed funds from FEMA Public Assistance for this project: \$53.7 million

Sector: Public Safety

FIRE STATION NO.

BEFORE: This station, #6 in Meraux, La. is an example of the destruction sustained by St. Bernard Parish's fire department. Station 6 is in the design phase for renovations and expected to be completed by 2009. Source: FEMA Photos

Project: St. Bernard Parish Fire Department



AFTER: Renovations at Station 1 in Arabi are near completion even as the firefighters continue to use the temporary trailer that sits next to the building. Source: FEMA Photos

FEMA and the state have developed a comprehensive plan that will rebuild or repair all damaged fire stations in St. Bernard Parish by next year. This plan will restore the St. Bernard Parish Fire Department to its pre-storm capacity. These restorations provide assurances to parish residents that fully operational fire protection and first response services will safeguard their communities.

All 10 stations of the St. Bernard Fire Department suffered storm-related damages; some were completely destroyed. Currently, they are operating out of FEMA funded temporary facilities until repairs of permanent facilities are completed. Under the guidance of new parish leadership, rebuilding and recovery is moving forward for the Fire Department. Repairs have begun on three stations: Station 1 in Arabi, Station 3 in Chalmette and Station 10 in Verret. The remaining seven stations are in design phases.

FEMA has not only provided funding for repairs to St. Bernard's fire stations but also for the purchase of new firetrucks and other essential firefighting apparatuses. In total, FEMA has provided \$5 million to rebuild or repair St. Bernard fire stations and \$555,000 for damaged contents.

Total committed funds from FEMA Public Assistance for this project: \$5.64 million

Sector: Public Safety

BEFORE: This warehouse once served as an inmate training facility and storage area for materials and supplies for the Orleans Sheriff's Office. Source: FEMA Photos

Project: Orleans Parish Criminal Sheriff's Office



AFTER: The remains of the old warehouse site were removed in May 2008 in preparation for the construction of a new main kitchen for the sheriff's complex. Source: FEMA Photos

Located in downtown New Orleans near the Superdome, the Orleans Parish Criminal Sheriff's Office (OPCSO) houses the Parish Prison Sheriff's Offices, House of Detention, Orleans Parish Prison and Templeman III, IV and V Prisons. The prison buildings sustained extensive damage from Hurricane Katrina's winds and subsequent floodwaters, including 4 to 5 feet of standing water remaining in the building for more than two weeks.

State facilities housing inmates after the evacuation were stretched to the limits. The inmates displaced from OPCSO, some of whom were serious offenders, were temporarily double bunked in medical units, gymnasiums and other improvised holding areas, creating unsafe conditions for the corrections officers and other inmates. It was crucial for OPCSO to become operational again as quickly as possible to alleviate this burden on these state facilities.

To meet the immediate need to house criminals, an 800-bed, FEMA-funded temporary prison began operations in November 2005. The temporary facility provides dormitory-style space for lower-risk inmates and a temporary medical facility. Templeman V facility, which houses federal prisoners, is also occupied and operating at capacity after emergency repairs were made.

Some buildings within the complex were too damaged to be repaired. Templeman III and IV and a gymnasium are currently being demolished to make way for a new facility to house and provide rehabilitation services for 1,400 inmates. In addition, the Intake Processing Center, main kitchen and Templeman Warehouse are being replaced with state-of-the art facilities. The demolition and reconstruction are part of the Justice Facilities Master Plan.

Total committed funds from FEMA Public Assistance for this project: \$159.2 million

Sector: Public Safety Project: Marine Debris



BEFORE: Teams of local, state and federal officials remove debris from Louisiana's waterways, including boats and other marine vessels. Source: U.S. Coast Guard



AFTER: Recreational and commercial boating has commenced as more waterways are cleared for safe fishing and other activities. Source: FEMA Photos

Hurricanes Katrina and Rita deposited copious amounts of debris—vessels, wreckage, trees and vegetation—into approximately 2,000 miles of Louisiana waterways. The debris has posed threats to public health and safety as well as impeded commercial activity in the fishing industry. Thus, FEMA and the state have partnered with the U.S. Coast Guard to remove all storm-related debris from waterways.



Face of FEMA: Mark Nickleson
As a liaison to the United States
Coast Guard and United States
Army Corps of Engineers,
FEMA's Mark Nickleson works
with team members to make
eligibility determinations.
Using FEMA guidelines and
situational examples, Nickleson

and the marine debris team members work hand-in-hand with state and parish officials to create standards that address waterway concerns. It is Nickleson's ability to define problems, determine the resources needed, develop a plan and execute and complete the plan that lets him embrace the challenges presented by the magnitude of Katrina.

Each stakeholder—local, parish, state and federal—brings its expertise to the table to ensure that marine debris removal is cost effective, beneficial to the parish and its residents and does no harm to marine life or wildlife in the area. Most recently, parish representatives have expressed an interest in taking trees removed from waterways and placing them parallel to the levees to provide additional support as well as to act as a natural habitat for marine life.

In total, FEMA has funded the removal of 167,000 cubic yards of debris from waterways; only 100,000 cubic yards remain. Also, 48 vehicles and 1,100 vessels have been removed. Additional collaborative efforts among the state, parish officials, FEMA, the U.S. Coast Guard and the National Oceanic and Atmospheric Administration have led to the removal of more than 85,000 cubic yards of trees from the waterways. FEMA and its partners are committed to removing the final remnants of storm-related debris so Louisiana waterways can return to their pre-storm conditions.

Total committed funds from FEMA Public Assistance for this project: \$219 million

Protecting America's Treasures through Environmental and Historic Preservation

Disasters touch more than lives and property. Disasters often touch our environment, our history and our culture as well.

This is why Congress has mandated compliance with certain environmental and historic preservation laws, regulations and Presidential Executive Orders before federal funding can be used for a project or action.

As such, FEMA is required to ensure that this compliance is met on everything the agency funds, whether the project or action is establishing temporary housing, removing debris from a neighborhood, demolishing a structure or building something new.

After hurricanes Katrina and Rita, FEMA assembled an Environmental and Historic Preservation review team in Louisiana to study each project and complete a compliance review. The team is staffed by specialists in such fields as biology, environmental sciences, law, archaeology, architecture, engineering, historic preservation, Tribal relations and geography. The state of Louisiana has its own specialists that work in partnership with the FEMA team, Tribal entities and interested local entities.

As a result of the team's work, valuable artifacts have been uncovered, historic structures have been documented and/or saved and environmental issues and concerns are being addressed.



This house is an example of one of New Orleans' many historical properties. Source: FEMA Photos

Environmental and Historical Preservation teams review for compliance of these specific laws and Executive Orders:

- National Environmental Policy Act
- National Historic Preservation Act
- Clean Air Act and Clean Water Act
- Rivers and Harbors Act
- Endangered Species Act
- Fish and Wildlife Coordination Act
- Coastal Barrier Resources Act
- Coastal Zone Management Act
- Archaeological Resources Protection Act
- Resource Conservation and Recovery Act
- Solid Waste Disposal Act
- Presidential Executive Order for Floodplain Management (EO 11988)
- Presidential Executive Order for Wetlands Protection (EO 11990)
- Presidential Executive Order for Environmental Justice (EO 12898)



FEMA Mitigation Program

Rebuilding Safer, Smarter, Stronger



Part of FEMA's mission is to help save lives and properties by providing funding and information that can help reduce or prevent the impact of future disasters. That idea is known as hazard mitigation. The goal is to help individuals and communities recognize the kinds of disasters they may face, to identify what they can do to better protect themselves before disaster strikes and to take action.

Examples of mitigation for a community include writing an emergency response plan; structurally protecting critical facilities such as hospitals, power sources and water supplies; elevating at-risk structures to protect against flooding; and reinforcing buildings to better withstand hurricanes, tornadoes or earthquakes.



Examples of mitigation for individuals include moving from flood-prone areas, elevating a structure or utilities, buying flood insurance, properly storing important documents, reinforcing doors and windows to better resist high winds, building with fire-resistant materials, and securing items such as fuel tanks.

Nationally, FEMA helps protect citizens and communities by:

- Managing the National Flood Insurance Program, which enables homeowners, renters and business
 owners to purchase flood insurance to financially protect their homes, businesses and contents in the
 event of a flood. This insurance is critical because flood damage often occurs but generally is not
 covered by most standard insurance policies.
- Funding a **Hazard Mitigation Grant Program** to help communities take action to mitigate against future disasters. FEMA provides hazard mitigation funding to the states, which in turn award money to worthy projects submitted by local governments on behalf of themselves and their citizens.
- working with states and communities to provide up dated Digital Flood Insurance Rate Maps that show more accurate flood-risk areas, advise local officials on floodplain management, help develop hazard mitigation plans, recommend long-term strategies for protecting people and property and educate citizens about proven mitigation strategies and techniques. These digital flood maps reflect current flood risks that have developed and replace old maps that are up to 25 years old. Planners, local officials, engineers and builders can use the maps to make important decisions about where and how to build new structures and developments. Residents and businesses can use the maps to learn their risk and decide the financial steps they need to take to protect against damage and loss. To view preliminary maps or download the Flood Insurance study, contact the Louisiana Mapping Project Call Center at 1-800-866-3989 or visit www.lamappingproject.com. Louisiana residents may also visit their local community floodplain and zoning official to see the maps and discuss a specific property.



(Top) FEMA Mitigation specialists explain cost effective ways to reduce disaster damages at a mitigation workshop.

(Middle) This home illustrates that elevation reduces flood damage.

(Bottom) A FEMA Mitigation specialist explains flood zones to a local resident. Source: FEMA photos



This elevated home is safer from flooding risks.

Source: FEMA Photos

FEMA's **Hazard Mitigation Grant Program** (HMCP) helps communities rebuild stronger after a disaster has occurred. The program provides grants to communities and state agencies for projects that will reduce or prevent the impact of future disasters, including saving lives and properties. HMGP projects are chosen by the state, approved by FEMA and include such actions as: elevating houses or public buildings to safer levels, creating a redundancy system for critical records and public documents, adding hurricane shutters to a government building or acquiring and removing structures from the floodplain. The amount of program funding is based on a percentage of the federal funds provided to a state during recovery from a presidentially-declared disaster.

In the aftermath of hurricanes Katrina and Rita, FEMA has approved \$247 million for 158 hazard mitigation projects in Louisiana. That's just the beginning. In all, HMGP funding for the state in response to the 2005 hurricanes is expected to reach \$1.47 billion.

Largest HMGP Grant to Louisiana to Elevate Homes

In July 2008, FEMA approved the use of more than \$96.9 million in HMCP funding to elevate nearly 3,000 homes devastated by hurricanes Katrina and Rita. This unique grant is one of the largest, single HMCP project obligations and represents successful collaboration with the Governor's Office of Homeland Security and Emergency Preparedness and the Louisiana Recovery Authority to make elevation funds available under the guidance of two programs. The HMCP funding will work in tandem with Louisiana's Road Home program. Applicants of the Road Home program whose actual elevation costs exceed the elevation funding they received under the Road Home may be eligible for additional funds. The state Hazard Mitigation program will award a maximum of \$30,000 in HMCP funds to eligible applicants to elevate their homes to comply with local floodplain ordinances or the Advisory Base Flood Elevation, whichever is higher. This grant to the Office of Community Development is the first in a series, which will eventually reach the goal to elevate or reconstruct more than 20,000 flood-prone structures throughout Louisiana.

HMGP Exemption: Work-In-Progress



Face of FEMA: Chuck Brown
As the Benefit Cost Analys is Lead
for HMGP, Chuck Brown focuses
on providing stronger and safer
structures for Louisiana home
and business owners. He
determines the cost effectiven ess
of HMGP procedures, including
elevating structures for flood

protection, retrofitting to withstand heavy winds and relocating residents to safer properties. These measures help ensure homes and businesses will better endure any future disasters, thereby saving lives and properties.

The vast extent of damaged structures in Louisiana caused by hurricanes Katrina and Rita prompted FEMA to request an exemption to its HMGP rules in order to help property owners who used their own money to build back stronger and safer. Rebuilding with protective measures often is eligible for HMGP funding Normally, however, homeowners seeking these grants first must apply to their local governments and be approved by the state *before* work begins. The unique recovery circumstances prompted FEMA, with consent of the Office of Management and Budget, to give the exemption so that those who had already started work before the grants could be processed would not be penalized for their early initiative. Structures damaged by either hurricane may be eligible for the retroactive funding, provided that they meet all other HMGP requirements. The exemption applies to property owners who have completed or started mitigation work on their property by March 16, 2008, and whose properties are included in an HMGP application proposed by a parish or other eligible applicant and submitted to the Governor's Office of Homeland Security and Emergency Preparedness.

Additional Mitigation Programs

Pilot Reconstruction Program FEMA developed a Pilot Reconstruction Program that uses Hazard Mitigation Grant Program (HMGP) funds to provide mitigation alternatives for areas affected by hurricanes Katrina and Rita when reconstruction makes more economic sense than elevating an existing structure. So far, more than \$21.5 million has been awarded to parishes for the reconstruction of homes severely damaged by the 2005 hurricanes under this pilot effort. Eligible individuals apply through their local government to receive HMGP funds to demolish an existing structure and rebuild one that is elevated and compliant with other local codes on the same site. This type of reconstruction can be a more cost-effective alternative to simply elevating a property, because many older homes require extensive mitigation measures to bring them up to current building code standards.

Planning Grants

To qualify for HMGP funds, the Disaster Mitigation Act of 2000 requires communities to know their risks for all sorts of natural hazards and to show ways to manage those risks in local mitigation plans. In Louisiana, many communities had not yet finished their plans when hurricanes Katrina and Rita struck. Many of those communities were quickly overwhelmed with recovery issues and needed help to complete their hazard mitigation plans. FEMA quickly devised a strategy to help these communities qualify for HMGP funding—estimated to be worth about \$1.5 billion. FEMA teamed about 30 of its employees with contractors representing the state. These teams visited every Louisiana parish from October 2005 until spring 2006 to make sure officials understood the plan requirements. As a result, dozens of plans were approved in record time. The 78 approved plans include one for every parish plus several for municipalities. As a result, parishes, municipalities, nonprofit agencies and other organizations became eligible to apply for HMGP funds, as well as certain other resources.

Mitigation Community Education and Outreach After a disaster, community education and outreach specialists with FEMA's mitigation staff work to spread the word about taking steps to better protect lives and property from another tragedy. In Louisiana, these specialists have touched thousands of citizens through community events, housing fairs, workshops, parish and city town meetings and neighborhood and faith-based organization meetings. Among the more popular venues have been workshops and displays at home improvement stores that inform homeowners about better techniques to reduce or prevent future damage—particularly from flooding and hurricane winds. The Louisiana outreach group has advised 80,000 residents at Disaster Recovery Centers and provided mitigation information to 65,405 people at more than 300 community events and building workshops.



FEMA staff host a public education event while displaying the mitigation house.

Source: FEMA photos



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HGMP funding: \$36.2 million

Jefferson Parish has been awarded \$36.2 million in FEMA Hazard Mitigation Grant Program (HMGP) funding to help pay for projects that will reduce or prevent future disaster damages. Of that, \$18.9 million has been approved to help with the costs of elevating structures; \$20.2 million will pay for a Pilot Reconstruction program that helps rebuild homes with protective measures when it is more cost-effective than mitigating an existing home; and \$225,000 will help develop local mitigation plans. The Jefferson Parish Sheriff's Office has been approved for a \$471,000 HMGP grant to help pay for adding hurricane shutters to the sheriff's office in an effort to reduce the building's vulnerability to wind damage in future events. The retrofit will help ensure this critical facility will remain functional after a storm or hurricane.

Orleans Parish

HMGP funding: **\$4.77 million**

Orleans Parish has been awarded \$2.43 million for the reconstruction of 22 houses through FEMA's HMGP Pilot Reconstruction program and another \$2 million for the elevation of 10 flood prone homes and businesses. In addition, the parish has been awarded planning grants totaling \$309,120 to help the community and various agencies within Orleans Parish prioritize and evaluate the feasibility of mitigation projects soon to be funded under HMGP.

St. Tammany Parish

HMGP funding: **\$6.6 million**

St. Tammany Parish has been awarded \$6.47 million in HMGP funding to help pay for projects that will reduce or prevent future disaster damages. Of that, almost \$3.2 million has been approved to help with the cost of elevating structures to keep them out of harm's way; \$668,230 will pay for a Pilot Reconstruction program that helps rebuild homes with protective measures when it's more cost effective than mitigating an existing home; almost \$2.3 million has been awarded in acquisition grants and \$450,000 to help develop local mitigation plans.

Plaquemines Parish

HMGP funding: **\$544,537**

Plaquemines Parish has been awarded \$544,537 in HMGP funding. Of that, almost \$110,192 has been approved to help with the cost of elevating structures to keep them out of harm's way; \$131,588 will pay for a Pilot Reconstruction program to help rebuild homes with protective measures when it's more cost effective than mitigating an existing home; \$190,257 for retrofitting buildings and \$112,500 to develop local mitigation plans.

St. Bernard Parish

HMGP funding: **\$8.4 million**

St. Bernard Parish has been awarded \$8.4 million in FEMA Hazard Mitigation Grant Program (HMGP) funding to help pay for the acquisition of 60 properties.

*All numbers represent federal share approved as of July 2008.



Building Mitigation Successes

Lessons Learned:

Building stronger and smarter and using proven mitigation construction techniques will reduce damages from future disasters and facilitate faster recovery in hurricane-prone communities.

FEMA encourages homes in flood zones to be built using proven mitigation construction techniques. This home has utilized elevation and the installation of window shutters in its construction for better storm surge and flooding protection.

Source: FEMA Photos

Hurricanes Katrina and Rita damaged or destroyed thousands of homes across the Louisiana Gulf Coast. Amidst the destruction, some houses remained standing with minimal or no damage, even when neighboring structures were destroyed. In large part, this was because the homeowners had chosen to build in a way that would better protect their houses in the event of a hurricane or flood. Often, those choices involved elevating the entire structure above anticipated flood levels. In many cases, homeowners also used proven construction techniques to strengthen their residences against hurricane-force winds.

Now, as Louisianans are building and rebuilding, the success stories of these forward-thinking homeowners can serve as an example for others that doing the right thing and making smart individual choices can make a difference when disaster strikes.



Proving Elevation Works

Lessons Learned:

A home in Slidell, St. Tammany Parish, suffered only minor damage from hurricanes Katrina and Rita, thanks to the mitigation techniques used in construction. Elevating the home and incorporating hurricane-resistant features added approximately \$12,000 in construction costs but saved the homeowners much more than that. The area experienced flooding up to 15 feet and winds of 100 mph. Hurricane damage to the home was limited to the loss of gutters and an air-conditioning unit.

Mitigation construction techniques work to limit the damages a home sustains during storm surges and floods. This Slidel home suffered only minor damages because mitigation techniques were applied during its construction.

Source: FEMA Photos

The housing development where Everett and Carol Brugier built their home in 2004 is located in an area where local building codes require homes to be elevated 1 foot above the Base Flood Elevation, also known as the 100-year flood level (1 percent chance of water reaching at least this level in any given year). The Brugiers decided to build even higher than that. Their motivation — to provide enough height so that they could park their motor home undemeath the house.

In 2005, when hurricanes Katrina and Rita blew through, the added height saved their main living area keeping it high and dry despite area flood levels of 15 feet. Neighboring houses were not so fortunate, sustaining extensive water damage. Height did not prove to be the only benefit. The Brugiers also made sure their foundation was properly constructed. Wood pilings on 5-foot spacing were driven to a depth of at least 15 feet beforethe slab was poured. Artificial fill was added as a base for the extra-thick concrete slab on which the house was built. The fill is protected from erosion on the canal side of the house by a bulkhead of vinyl panels driven into the ground. Steel reinforcing rods, beginning 24 inches below the slab, were extended to the full height of the concrete-block columns (also concrete filled) that support the house on 2 x 12-inch horizontal beams. Part of the slab area was enclosed with breakaway, non-supporting walls, which provides storage space as well as softens the visual impact of an elevated structure.



Protecting Against Wind and Water

Lessons Learned:

Elevating a structure above the Base Flood Elevation (BFE) protects it from floodwaters. This Plaquemines Parish home is elevated 4 feet above the BFE and escaped damage from Hurricane Katrina floodwaters. Additional mitigation measures strengthened the home to withstand hurricane-force winds.

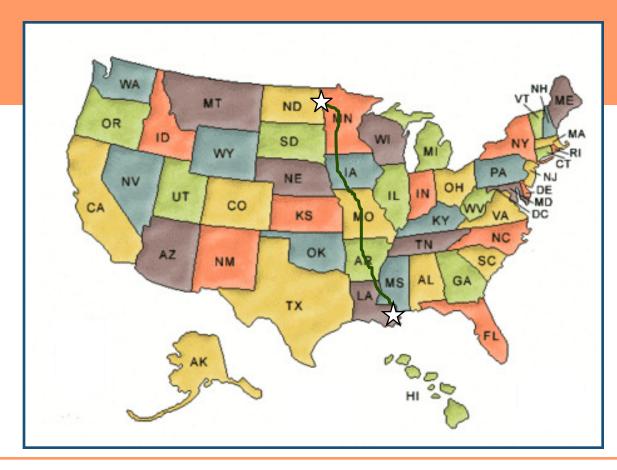
An elevated home like this one is better equipped to withstand floodnaters. Homes should be built above BFE for optimal flood protection.

Source: FEMA Photos

When building their home in Plaquemines Parish, Gayle and Warren Lawrence knew the perils of living on the Gulf Coast. High winds and high water are commonplace, and the area is very prone to hurricane activity.

The Lawrences knew that to live safely and securely in this high-risk area, they would need a well-built house that included wind and flood protection. The couple followed the bylaws of their housing subdivision, which recommended that homeowners build using coastal construction principles, and then they incorporated a few extra hurricane-resistance techniques for added protection.

To guard against floodwater and moisture, several feet of fill were brought in, raising the ground level. Then the house was elevated another 12 feet on concrete walls, putting the home 4 feet above the BFE. To provide better wind and impact resistance, a 7-inch concrete wall with reinforced 5/8-inch steel was poured at the ground level. To provide extra strength, walls in the living area were upgraded using 6-inch studs, instead of standard 4-inch studs. The couple also installed storm shutters and added metal clip anchors to both foundation and roof joints. In this two-story home, the upper-story wall framing was firmly connected to the lower framing. In the end, Hurricane Katrina had put the Lawrence's house to the test. When they returned home after the storm, the couple found only minimal damage. Their building decisions before the storm had paid off.



Connecting Disaster Communities

Grand Forks, N.D./East Grand Forks, Minn. and St. Bernard Parish, La.

Progress through Partnership
Rebuilding Communities, Reuniting Families

Sister Cities of Hope ▶ Connecting Disaster Communities







April 1997: (Top) The Red River of the North flooded the Lincoln Park neighborhood.

(Center) A paddlew heel sculpture in downtown Grand Forks. June 2008: (Bottom) St. Bernard Parish President Craig Taffaro and other officials tour Grand Forks, N.D.

Source: FEMA Photos

Journey to the 'Cities of Hope'

Craig Taffaro, St. Bernard Parish President, has an iron will when it comes to rebuilding St. Bernard Parish. He will stop at nothing, even if it means traveling almost to Canada to find some answers.

In June 2008, just five months into his first term as parish president, Taffaro assembled a delegation of eight parish officials and citizens for a journey to the 'Cities of Hope,' formally known as Grand Forks, North Dakota and East Grand Forks, Minnesota. The goal of the trip was to study the cities' successful recovery from their own catastrophic disaster and to help St. Bernard take advantage of their lessons learned. Grand Forks and neighboring East Grand Forks both suffered in April 1997 when a brutal winter of nearly 100 inches of snow turned to near-record flooding. About 80 percent of Grand Forks (pop. 52,000) was impacted by flooding; its water-logged downtown reduced to ruins when a fire broke out as the swollen Red River of the North continued to rise. All of East Grand Forks (pop. 9,000), which also borders the Red River, was impacted as well.

The recovery for these northern communities was not without challenges, city leaders say. However, federal disaster recovery officials point to the cities as shining examples of what strong leadership, perseverance and faith can do to overcome disaster. Grand Forks and East Grand Forks have rebuilt better and stronger. Both have seen growth in population, housing and economic development. Most of all, recovery officials say, they are beacons of hope for communities who are in the process of recovery or who have yet to face a disaster because of what they have learned through the process.

When Taffaro was told about the cities and the many similarities they shared with St. Bernard Parish, he decided to go see the transformation for himself. So did Jim Stark, FEMA's acting associate deputy administrator for Gulf Coast Recovery, who made the trip to see what lessons he could bring back to other communities throughout the Gulf Coast. The visiting delegation spent three days in Grand Forks and East Grand Forks, touring the communities, studying mitigated building projects and meeting with citizens and local, business and community leaders. All say the trip was invaluable.

"There's something very powerful about visiting a community that has made it through a recovery," Taffaro said. "That, to me, is encouraging." St. Bernard Parish Council Chairperson Polly Boudreaux agreed.

"It's often easier to go through a trial when you have encouragement and you can see folks who have done the same and made it, and hear from them about their difficulties and their triumphs," Boudreaux said. "They didn't sugar coat anything for us. They told us 'you are going to have to make tough decisions, you will have tough years, and you will have to hold the line. But you can make it'"

A special thank you to all the individuals and organizations that have helped make progress through partnership a reality in the past three years. The recovery would not have been possible without the hard work and determination of Louisiana's citizens, volunteers and local, state and federal governments.







The image of the Superdome surrounded by floodnaters and serving as a "Refuge of Last Resort" by Hurricane Katrina victims was a symbol of the hurricane's devastation.

The re-opening of the facility in the fall of 2006 for the Saints football season has become an economic engine for the area and serves as a symbol of the dedicated rebuilding efforts continuing in Louisiana.

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To view this document and additional reports about hurricane recovery efforts in Louisiana and along the Gulf Coast, visit the following websites: www.progressinlouisiana.org and www.fema.gov/gcro

