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# Roadmap to Recovery

*Recovery Tour: Orleans and St. Bernard Parishes*

*Aug. 13, 2008*



**FEMA**

Louisiana Transitional Recovery Office

**Progress through Partnership**  
*Rebuilding Communities, Reuniting Families*

# Progress through Partnership

## *Rebuilding Communities, Reuniting Families*

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.

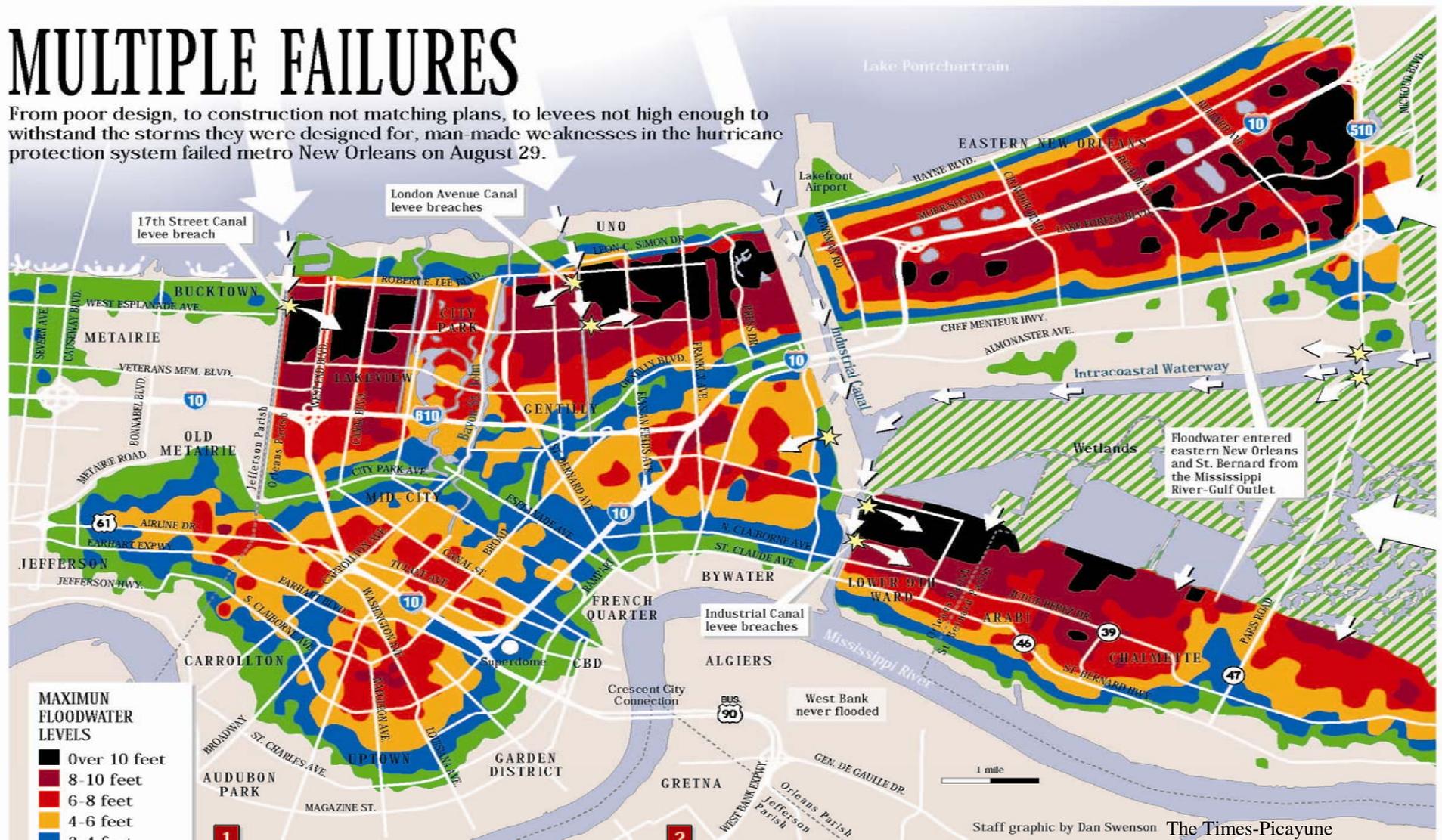
This booklet highlights a few of the many accomplishments our partnership has produced in the three years since the devastation created by hurricanes Katrina and Rita. We have worked together to aggressively implement innovative solutions to overcome recovery obstacles. The stops in this booklet serve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



**Roadmap to Recovery**

# MULTIPLE FAILURES

From poor design, to construction not matching plans, to levees not high enough to withstand the storms they were designed for, man-made weaknesses in the hurricane protection system failed metro New Orleans on August 29.



## MAXIMUM FLOODWATER LEVELS

- Over 10 feet
- 8-10 feet
- 6-8 feet
- 4-6 feet
- 2-4 feet
- 0-2 feet
- Not available

## OTHER KEYS

- ★ Levee breach
- Storm surge/water flow
- Levees topped with concrete floodwalls
- Earthen levees

Note: Maximum water levels at specific points may vary greatly as topography can change drastically, for example from any given street to any given house foundation.  
Sources: C&C Technologies Survey Services, www.mapper.ctctech.com/Foodmap.php, LSU Hurricane Center

**1 EARLY MORNING, MONDAY**

A towering storm surge ahead of Katrina channeled down the MR-GO, gaining speed and height as it made its way into St. Bernard Parish and the Lower 9th Ward. The earthen levees that line the MR-GO were overtopped by a surge far higher than was anticipated for a Category 3 storm, while the concrete walls along the Industrial Canal were breached.

**2 MID-MORNING, MONDAY**

At two points along the London Avenue Canal and one point along the 17th Street Canal, concrete walls atop earthen berms were simply pushed aside by the pressure of the water backing into the canals from Lake Pontchartrain. Evidence suggests that too-shallow pilings were driven into soft, peaty soils, allowing water to undermine the levees from below.

# Snapshot of FEMA Funding for Hurricanes Katrina and Rita

## FEMA Individual Assistance ► Providing a Helping Hand

### Assistance provided to Louisiana residents:

- Housing Assistance Total Individuals and Households Program **\$6.1 billion**
  - 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 **\$5.3 billion**
  - For business owners **\$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)*

## Roadmap to Recovery

# Roadmap to Recovery



## Orleans Parish

Louisiana Superdome  
1500 Sugar Bowl Dr., New Orleans 70112



## Orleans Parish, Lower 9th Ward

St. Margaret's Daughters Nursing Home  
6220 Chartres St., New Orleans 70115



## Martin Luther King, Jr. School

1617 Caffin Ave., New Orleans 70117



## Jackson Barracks

6400 St. Claude Ave., New Orleans 70117



## St. Bernard Parish

St. Bernard Parish Government Complex and  
St. Bernard Parish Fire Department  
8201 W. Judge Perez Dr., Chalmette 70043



## Chalmette High School

1100 E. Judge Perez Dr., Chalmette 70043



## Orleans Parish

### New Orleans City Park

1 Palm Dr. New Orleans 70124



## Orleans Parish Criminal Justice Complex

2700 Tulane Ave., New Orleans 70119

### Orleans Parish Criminal Sheriff's Office

2800 Gravier St., New Orleans 70043

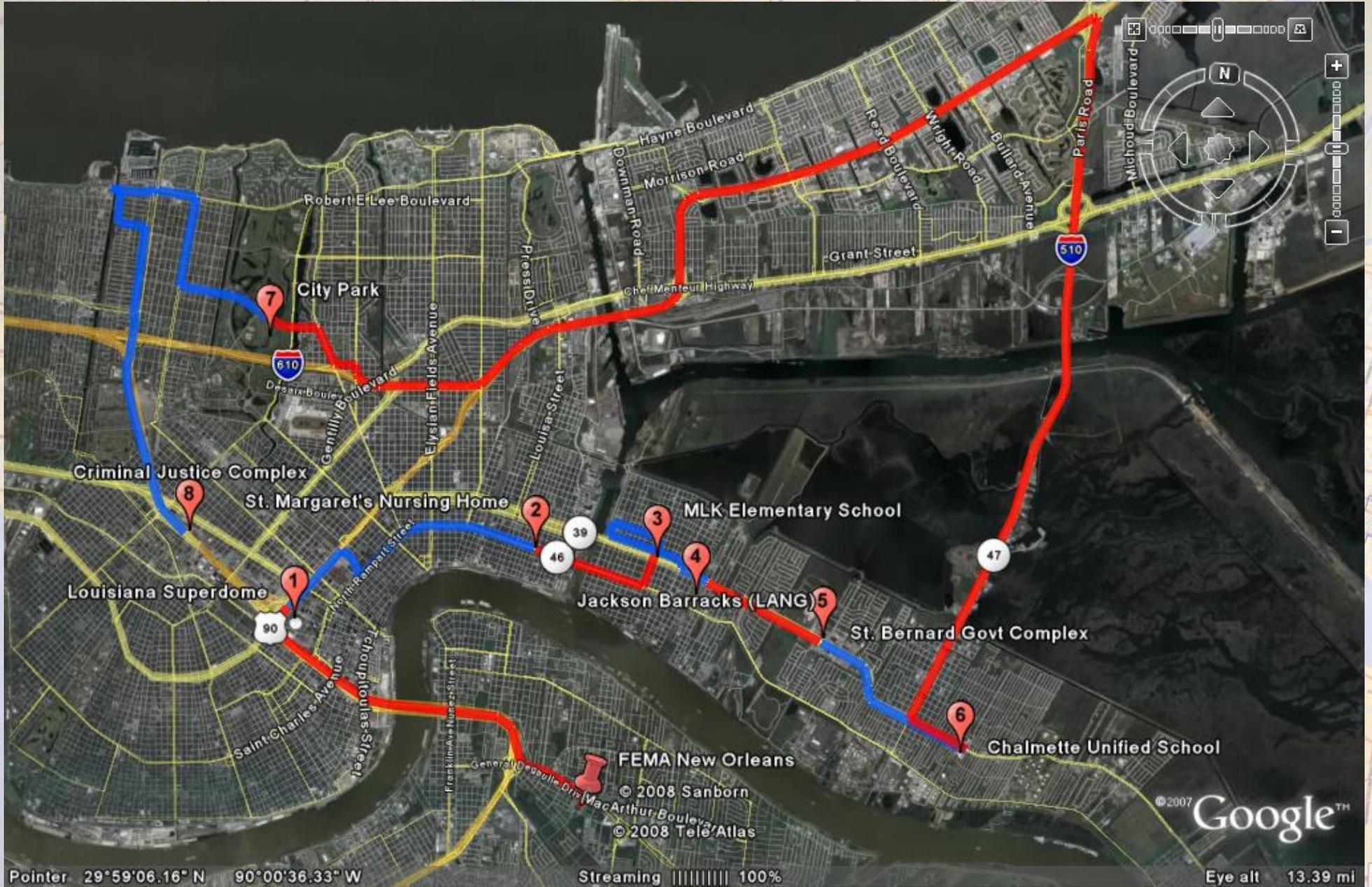


*The image of the Superdome surrounded by floodwaters while serving as a "Refuge of Last Resort" by Hurricane Katrina victims was a symbol of the hurricane's devastation. The facility reopened in the fall of 2006 for the Saints football season, becoming an economic engine for the area and serving as a symbol of the dedicated rebuilding efforts continuing in Louisiana.*

*All publication photos by FEMA photographers*

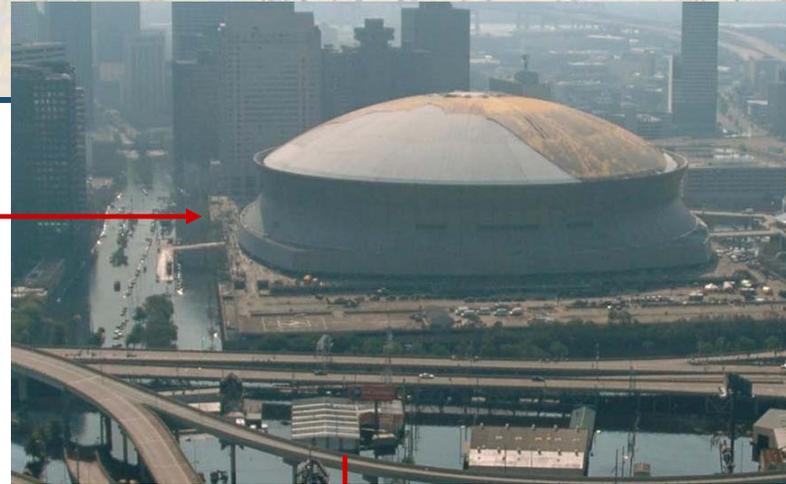
**Roadmap to Recovery**

# Roadmap to Recovery Tour



Roadmap to Recovery

# Louisiana Superdome



On Sept. 25, 2006, the Louisiana Superdome reopened for the first Saints home football game since the facility closed after being damaged by Hurricane Katrina and serving as the “Refuge of Last Resort” for stranded victims.



FEMA Public Assistance helped pay for debris removal and temporary and permanent repairs to parking garages, seating, synthetic turf, fixtures, equipment, power plant, and the roof. In addition, FEMA provided mitigation funds. Under the Public Assistance program, mitigation funds can be used for rebuilding in a way that will help prevent future damage from disasters, if cost benefits can be demonstrated. Upgraded materials and improved construction techniques used to replace the 414,000 sq. ft. roofing system (about nine acres) provide greater resistance to hurricane force winds. FEMA provided \$174.5 million in Public Assistance funds, with another \$16.3 million for mitigation measures.

## Roadmap to Recovery

# Lower 9th Ward



When Hurricane Katrina made landfall in Louisiana as a Category 3 storm on Aug. 29, 2005, it unleashed widespread destruction in various communities along the Gulf Coast.

One of the most devastated areas was the Lower 9th Ward in Orleans Parish. The Lower 9th was ravaged by floodwater coming from the neighboring St. Bernard Parish on the east, Industrial Canal on the west, and Intracoastal Waterway on the northeast. The catastrophic flood was the result of a powerful storm surge of more than 10 feet mainly coming from the east. The storm surge and heavy winds forced a barge to breach the Industrial Canal levee, pouring water into Lower 9th homes and in many cases displacing them from their foundations.



Roadmap to Recovery

# Lower 9th Ward



Water depth levels reached from 2 feet in the highest portions of the Lower 9th Ward to more than 10 feet in the lower areas. Today, the Industrial Canal levee in the Lower 9th has been rebuilt higher and stronger by the U.S. Army Corps of Engineers.

While it is common to see empty lots with weeds where houses once existed, there are conspicuous examples of recovery in neighborhoods. Some families have moved into their rebuilt homes or are in the process of repairing them. FEMA has also helped in this ongoing recovery by supporting the restoration of two important Lower 9th damaged institutions. The agency provided the funds to rebuild Martin Luther King Jr. Charter School, which is allowing young residents to focus on learning, and to restore a nearby Bywater temporary facility for St. Margaret's Daughters' Nursing Home, which is providing needed services for area residents, including those from the Lower 9th Ward.



Roadmap to Recovery

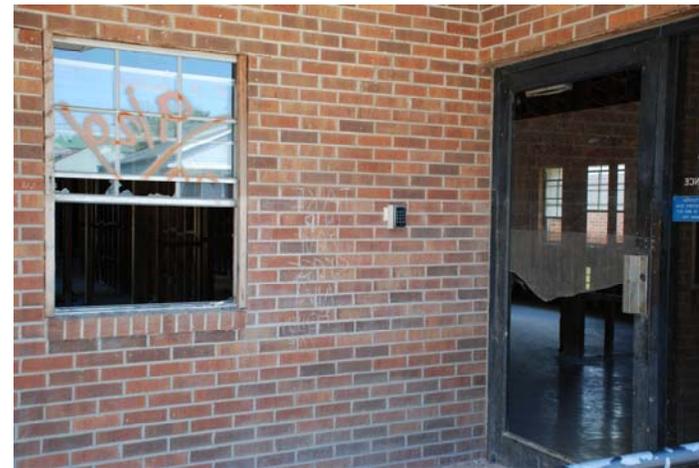
# St. Margaret's Daughters' Nursing Home



St. Margaret's Daughters' Nursing Home in the Lower 9<sup>th</sup> Ward had been providing a variety of services for elderly residents of Orleans and St. Bernard parishes since 1931 until Hurricane Katrina razed through the area.

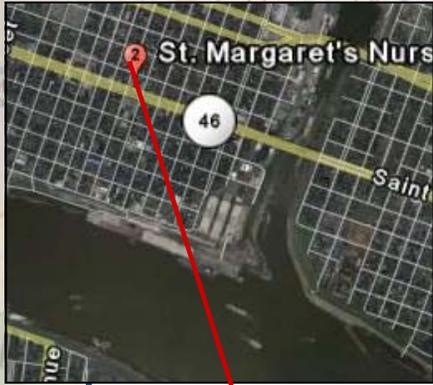
St. Margaret's was home to 95 seniors and licensed to care for 116 until strong winds and floodwaters wreaked havoc on the sprawling facility. More than 6 feet of brackish water lingered inside the nursing home for more than two weeks after the storm, severely damaging the structure, electrical system, mechanical and medical equipment and contents, rendering St. Margaret's main building and three wings uninhabitable.

However, Katrina did not destroy St. Margaret's leaders' desire to continue with their mission. In fact, they were determined to reopen the nursing home as quickly as possible. Thus, they turned to FEMA for help.



**Roadmap to Recovery**

# St. Margaret's Daughters' Nursing Home



St. Margaret's Daughters Nursing Home confronted challenges to reopen in the Lower 9th Ward. Severe damage to public infrastructure and redevelopment uncertainties in that area meant that returning to St. Margaret's original site was not a quick or feasible short-term option.

In light of the hurdles, FEMA provided \$5.59 million for a temporary vacant facility in the nearby Bywater neighborhood to re-establish the nursing home services. FEMA also funded another \$3.8 million to perform necessary code upgrades to renovate the temporary facility, an old Bywater hospital, into a functional nursing home, to replace destroyed contents from St. Margaret's facility and to reimburse additional emergency costs.

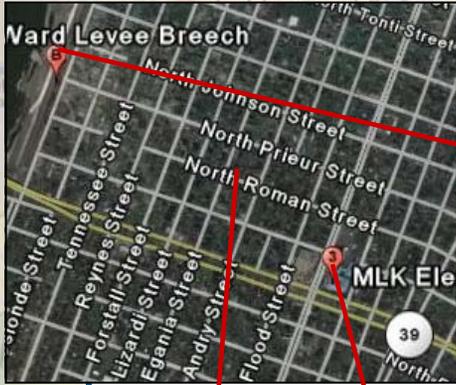
The Bywater St. Margaret's facility, which opened in September 2007, provides nursing home services on three floors to area residents until the organization rebuilds its permanent building in the Lower 9th Ward neighborhood, an effort to which FEMA has committed more than \$6.69 million. In the meantime, plans are to open the remaining floor of the temporary facility as an assisted-living unit at a later date.



Roadmap to Recovery

# Martin Luther King, Jr. Charter School for Science and Technology

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Before Aug. 29, 2005, about 800 students attended kindergarten through eighth grade at Martin Luther King, Jr. School. Built in the mid-1990s, it also housed a 3,000-square-foot branch of the New Orleans Public Library. Hurricane Katrina inundated the school with 12 feet of floodwaters, ruining everything on the first floor.



The school reopened September 2006 at a temporary location at Edgar P. Harney Elementary in Mid-City New Orleans. In November 2006, reconstruction began, funded by \$5.2 million provided through FEMA's Public Assistance program, and by June 2007 the school reopened as the Martin Luther King, Jr. Charter School for Science and Technology – the first school to come back in the Lower 9th Ward. A new-and-improved library, funded with more than \$35,000 in private donations, reopened as well. By the start of the 2007-08 school year, nearly 600 students were enrolled.

## Roadmap to Recovery

# Jackson Barracks, Louisiana Army National Guard

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Hurricane Katrina caused damage to 184 of the 200-plus buildings on the historic Jackson Barracks campus, which houses the Louisiana Army National Guard headquarters. More than 50 of the buildings were so severely damaged they will have to be reconstructed, rather than repaired. Besides the sheer magnitude of the repairs and reconstruction, Jackson Barracks has several archaeological sites, which require careful planning and coordination during the rebuilding with the applicant, historic groups, Native American tribes and regulatory agencies. So far, FEMA has obligated \$60 million towards rebuilding Jackson Barracks.

## Roadmap to Recovery

# St. Bernard Parish



Nearly every building in St. Bernard Parish experienced flood damage. The storm surge destroyed parish levees; up to 12 feet of floodwaters carrying oil and other toxins submerged parish structures. The parish president declared all homes to be unlivable. A tent city was set up in Chalmette for response and recovery workers. Individuals in St. Bernard received more than \$368 million for housing needs and other necessary expenses. St. Bernard has received approximately \$1.2 billion in public assistance funding to rebuild the parish.

## Roadmap to Recovery

# St. Bernard Parish Government Complex

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Hurricane Katrina floodwaters 9 feet high and wind devastated the St. Bernard Government Complex, a two-story main building that housed administrative support services essential to the operations of St. Bernard Parish, such as the parish president's office, Council Chambers, fire department headquarters, resident services, Office of Community Development and Office of Emergency Preparedness.

But FEMA, the state and St. Bernard Parish worked tirelessly to bring the complex back. The result has been a \$4.8 million FEMA grant that covers temporary facilities, costs for the permanent building and contents. Now, various pre-Katrina services are being offered to residents on the second floor of the Complex. One of the recent recovery accomplishments was the reopening of the St. Bernard's Council Chambers in July 2008. The restoration of the first floor of the St. Bernard Government Complex is expected to be completed in October 2008.

## Roadmap to Recovery

# St. Bernard Parish Fire Department



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 Station 10 in Verret, Station 1 in Arabi, and Station 3 in Chalmette. The latter is expected to be completed in October 2008. 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 fire trucks and other essential firefighting apparatuses. In total, FEMA has provided more than \$5.6 million to rebuild or repair St. Bernard fire stations

## Roadmap to Recovery

# Chalmette High School



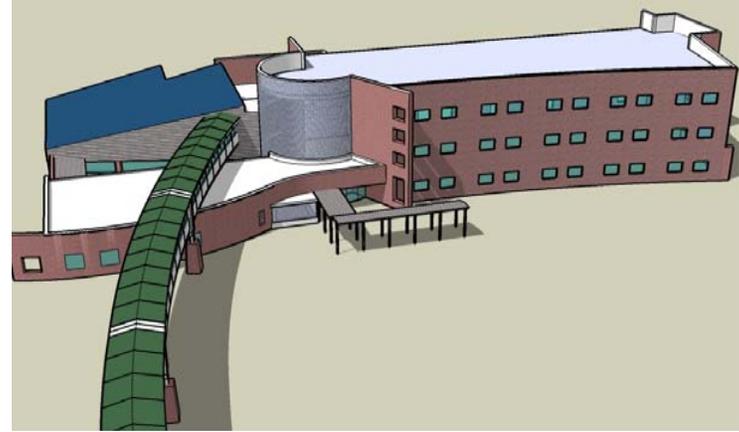
Chalmette High School was the first school to be reopened in St. Bernard Parish following Katrina. FEMA provided the necessary funding to reopen the school as St. Bernard Unified School with temporary facilities in November 2005, which served students from kindergarten through 12th grade. At that time, 334 students were registered. By December 2005, enrollment doubled as students were able to move back into the first floor of the original school's structure. Although repairs are not completed, the school is currently functioning in its original capacity as Chalmette High School. The projected enrollment for the current school year is 1200.

To date, FEMA has obligated a total of \$28.2 million for the repair of Chalmette High School.

## Roadmap to Recovery

## Chalmette High School and Lacoste Elementary

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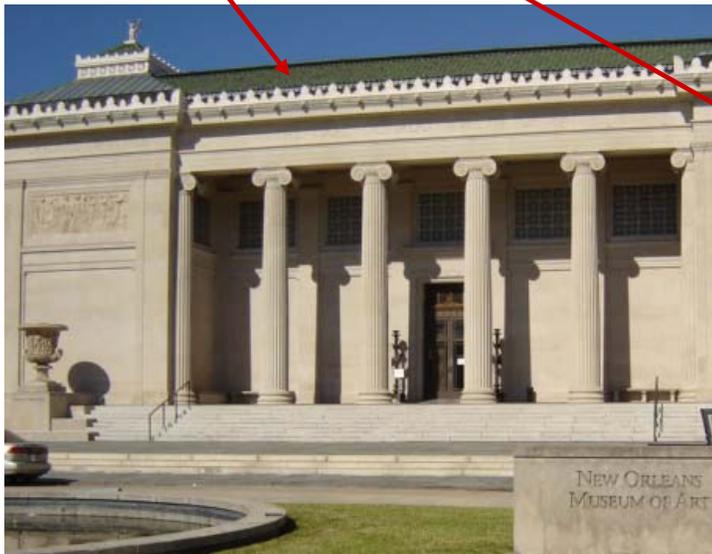
In St. Bernard Parish, a multi-million dollar, state-of-the-art expansion is under construction across the street from the reopened Chalmette High School, which suffered extensive storm-related damages. Students will benefit from an athletic complex, classrooms, cafeteria and a cultural arts center at 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 \$25.7 million in 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.

Roadmap to Recovery

# New Orleans City Park



Floodwaters damaged more than 100 buildings in New Orleans' beloved City Park, one of the oldest and largest urban parks in the country. Ninety percent of the park was submerged in saltwater, killing grass on golf courses and plants in the botanical garden. A portion of the maintenance building collapsed and nearly every park vehicle and piece of equipment was destroyed. Tad Gormley Stadium was submerged and the New Orleans Museum of Art was damaged by floodwaters and debris. FEMA has approved more than \$27.1 million in Public Assistance funding toward the restoration of several entities in City Park, including \$3.5 million to help pay for restoring the museum's collection. Several corporations and private donors have contributed more than \$44 million for the park's recovery.

## Roadmap to Recovery

# Orleans Parish Criminal Justice Complex



The largest correctional facility in Louisiana, the Orleans Parish Justice Complex houses the parish prison, sheriff's offices, criminal court building, municipal and traffic court building, community corrections center and more. Hurricane Katrina's high winds, flying debris and flooding caused extensive damage to the Complex's buildings, including but not limited to the furnishings, exteriors, and electrical and mechanical systems. To help the parish determine rebuilding priorities, FEMA provided a team of planning and design professionals to partner with city and justice officials to develop a long-term comprehensive plan for the Justice Complex. They balanced the emergency and temporary reconstructive efforts underway with a plan to combine law enforcement, courts and corrections with public safety. FEMA provided an 800-bed temporary prison that has been operating for the last 18 months, and a temporary medical facility was recently added. One facility, Templeman V, is also occupied and operating at capacity housing federal prisoners after temporary repairs were made. A total of \$269.8 million has been obligated for the Justice Complex so far.

## Roadmap to Recovery

# Orleans Parish Criminal Sheriff's Office



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 Sheriff's complex were unrepairable. 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. FEMA has obligated \$166.5 million to the Sheriff's Office.

## Roadmap to Recovery

# Individuals and Households Disaster Assistance Program

FEMA's Individuals and Households Program helps homeowners and renters affected by a disaster with housing needs and necessary expenses. Assistance available can include minimal home repair, temporary housing, other needs assistance, disaster unemployment assistance and crisis counseling. Homeowners, renters and business owners were also eligible for U.S. Small Business Administration low-interest disaster loans.

Because of the severe shortage of housing in Southeast Louisiana after the storms, FEMA utilized travel trailers and mobile homes to house more than 91,000 Louisiana households. The bulk of these units (72,033) were placed on private sites near the residents' homes so they had a place to live close by while making repairs. Another 7,556 temporary housing units were placed at commercial sites, such as existing mobile home parks and RV parks. FEMA also contracted to have group sites built to house multiple families, a total of 9,019 units were placed in 111 group sites statewide.

Of all the parishes in Louisiana, Orleans had the most number of FEMA trailers. Today, however, the parish emits a strong sign of recovery: 85 percent of the 23,304 families that lived in the units have transitioned into more long-term housing solutions. St. Bernard Parish, whose residents' homes were submerged in more than 5 to 12 feet of water, is also on the path to recovery: 86 percent of the 9,207 families that resided in FEMA trailers have moved to more permanent housing.

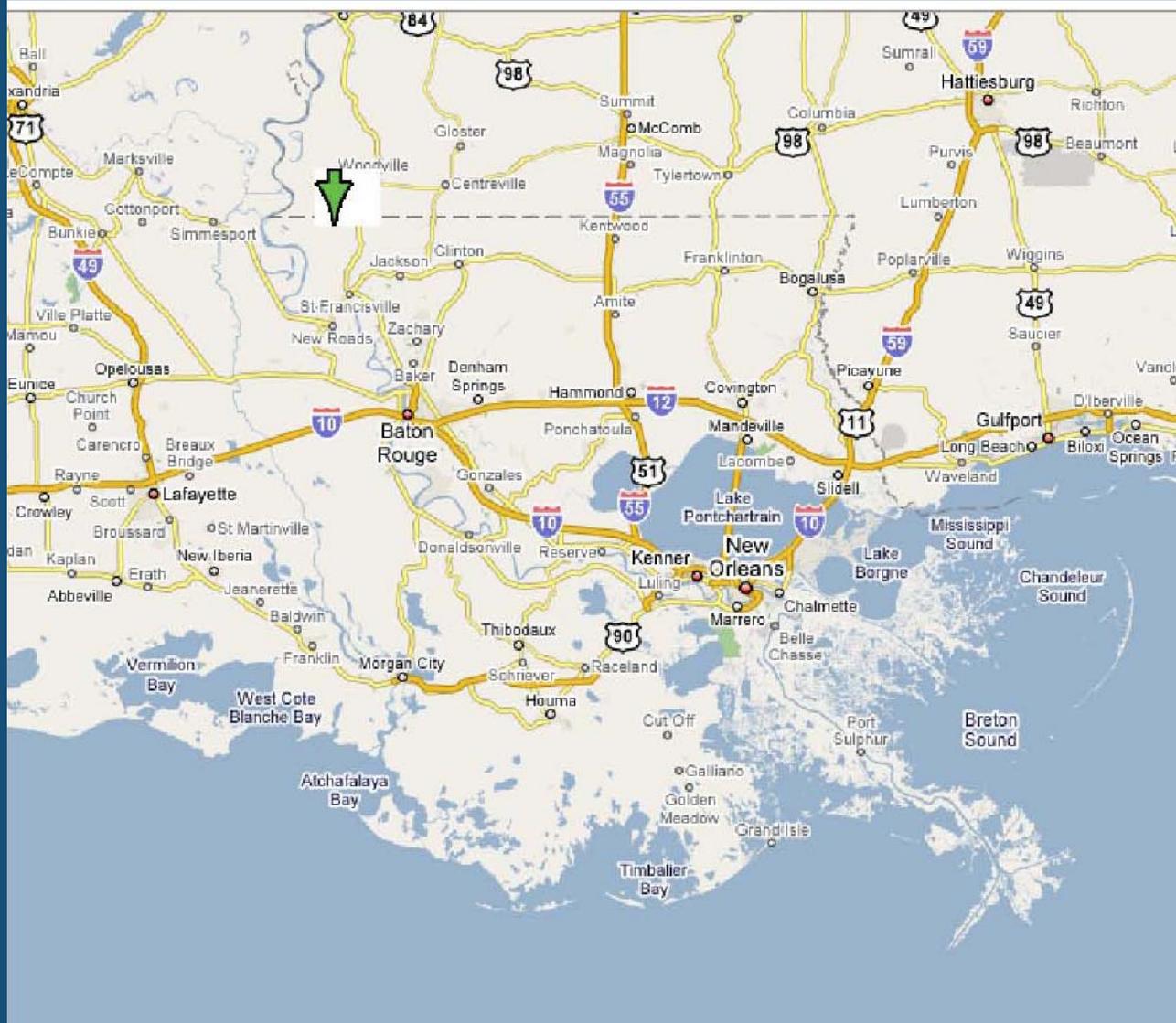
Open space locations were used for group sites, such as parks, playgrounds, ball fields and parking lots. When a site is no longer needed, FEMA returns the site to its previous usage and condition. Often, FEMA offers to leave the added improvements in place as it proves to be more cost efficient and, at the same time, benefits the property owner with an improvement.

In January 2006, FEMA leased property from Sisters of the Holy Family in Orleans Parish to build a temporary trailer park that would house 15 families (*pictured top left*). Prior to Hurricane Katrina, the site served as a parking lot for the nuns who lived at St. John Berchmans Convent and as a playground. The playground equipment was destroyed by Hurricane Katrina and subsequently removed during preparation of the area for its use as a temporary home to a number of travel trailers, or what FEMA calls a group site. Two years after it opened the group site closed, as all of the families living there had returned to their repaired homes or were assisted with renting homes and apartments that had become available. In both the building and deconstruction of the site, special care was taken to preserve several stately oak trees. As part of the restoration to its previous uses, new playground equipment was installed and now greets children from the surrounding neighborhood (*pictured below left*).



## Roadmap to Recovery

# Southeast Louisiana



## Roadmap to Recovery Tour

All data as of July 2008



# FEMA