What Happened?

Catastrophic failures in the levee system, caused by design and/or construction errors under the responsibility of the U.S. Army Corps of Engineers, occurred at the London Avenue, Industrial, and 17th Street canals.

Without these failures, flooding would have been minimal and short.
What Happened?
Deep Flooding Over a Large Area
What Happened?
Long Duration of Flooding
What Happened?

This is the largest disaster in national memory.
Imagine if it happened in Washington, DC.
Washington, DC area

Flooded Area of New Orleans

White House

US Capitol

22 Miles

15 Miles
What Happened?

Imagine if it happened in Philadelphia.
What Happened?

80% of the City of New Orleans was flooded.

243,180 people lived in houses with over 4 feet of flood water; this is 50% of the city’s population.

203,236 jobs were lost in New Orleans after the hurricane.

Source: GCR
# Changes In New Orleans Population

(Lack of housing is the biggest constraint to return.)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Katrina Population</td>
<td>485,000</td>
</tr>
<tr>
<td>September 1, 2005 Estimate</td>
<td>75,000</td>
</tr>
<tr>
<td>January 2006 Forecast</td>
<td>144,000</td>
</tr>
<tr>
<td>January 2006 Estimate</td>
<td>181,000</td>
</tr>
<tr>
<td>September 2006 Forecast</td>
<td>181,000</td>
</tr>
<tr>
<td>September 2008 Forecast</td>
<td>247,000</td>
</tr>
</tbody>
</table>

Wallace Roberts & Todd, LLC – Master Planner
What Is New Orleans’ Importance?

National Economic Importance
New Orleans is the center of a metropolitan area with hundreds of billions of dollars in real estate assets, educational and medical research centers, petrochemical, fishery, and other industries.

International Trade Importance
The Port of New Orleans is the fifth largest port in the United States and, with the South Louisiana Port, the 4th largest in the world.

International Historic and Cultural Importance
19 National Register Districts with 38,000 properties (as many as 25,000 damaged). Renowned music, culture, creative and culinary arts are international tourism magnets.
## What Will Rebuilding Cost?

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimated Cost</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavily flooded/damaged home acquisition</td>
<td>$4 billion</td>
<td>CDBG, FEMA HMGP</td>
</tr>
<tr>
<td>Demolition and site remediation</td>
<td>$700 million</td>
<td>FEMA Public Assistance (Category A Debris Removal), CDBG</td>
</tr>
<tr>
<td>Public infrastructure/transit (including airport line, but not Baton Rouge or Gulf Coast)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 1 (airport plus Uptown to New Orleans East)</td>
<td>$1 billion</td>
<td>US DOT (FHWA, FTA), FEMA Public Assistance, CDBG</td>
</tr>
<tr>
<td>Future city-wide system</td>
<td>$3.8 billion</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>$4.8 billion</td>
<td></td>
</tr>
<tr>
<td>Damaged public buildings</td>
<td>$413 million</td>
<td>FEMA Public Assistance</td>
</tr>
<tr>
<td>CCRC operations ($1 Million/year for ten years)</td>
<td>$10 million</td>
<td>Other</td>
</tr>
<tr>
<td>Reconstruction/long term recovery planning</td>
<td>$5 million</td>
<td>FEMA, US EDA</td>
</tr>
<tr>
<td>Parks and open space</td>
<td>to be determined</td>
<td>FEMA (HMGP, Individual Assistance Program), US DOT (FHWA Transportation Enhancement Program)</td>
</tr>
</tbody>
</table>

SOURCE

ESTIMATED COST
Recovery Planning and Funding

Peter Werwath
Enterprise Community Partners
The Big Questions

1. How much damage occurred?
2. How much uninsured damage?
3. Where to rebuild?
4. To what new standards?
5. With what redevelopment vision & strategies?
6. With what priorities?
7. With how much federal money?
8. Who implements the funding programs?
9. Who decides?
Key Players in Planning

• Bring New Orleans Back Commission
  – Concept land use and financial plan; supported by Urban Land Institute

• Louisiana Recovery Authority
  – Federal assistance plan, supported by Enterprise and other consultants; incorporates most of BNOB plan

• Louisiana Speaks
  – Regional planning and design prototypes

• Grassroots neighborhood-level planning
  – Neighborhood Planning Council just formed
Shared Visions

• First priority: financial assistance to homeowners, to repair and rebuild

• Restoration of homeowner equity

• Incentives for very affordable and mixed-income rental development
Open Questions

• What infrastructure can and should be rebuilt right away?
  – Schools, public facilities, public transportation
• “No-build” areas vs. “right of return”
• How can owners come back and rebuild without enough temporary housing?
• How much small business assistance, and in what form?
• How much help to universities, hospitals, etc.?
Rule 1: Follow the Money

• Congress voted $11.5B in CDBG recovery funding—considering $4.2B more
  – Plus FEMA hazard mitigation funds
  – Plus housing tax credits for upwards of 30,000 rental units

• HUD requires action plan from states
  – Both LA and MS presenting plans in phases
  – What is not in the plan won’t get funded

• State of LA will be grantee
  – Likely to implement the program through contractors, not local governments
Need for Workforce Housing Assistance Is Significant

- 51% of all rental unit damage from hurricanes Katrina, Rita and Wilma occurred in Louisiana—more than Alabama, Florida, Mississippi, and Texas combined.

- Rental units were a major source of housing in Orleans Parish, with over 53% of the population living in rental units:
  - 1/3 of units were single family homes
  - 1/3 of units were located in structures with two to four units
  - 1/3 were located in traditional multifamily housing.

### Orleans Parish Pre-Katrina Rental Units, by Type

<table>
<thead>
<tr>
<th></th>
<th>Pre-Katrina Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>33,000</td>
</tr>
<tr>
<td>Doubles</td>
<td>19,000</td>
</tr>
<tr>
<td>3-4</td>
<td>15,400</td>
</tr>
<tr>
<td>5+</td>
<td>29,000</td>
</tr>
<tr>
<td>Misc.</td>
<td>4,000</td>
</tr>
<tr>
<td>Total Occupied</td>
<td>100,400</td>
</tr>
<tr>
<td>Total Damaged</td>
<td>70,000</td>
</tr>
</tbody>
</table>
Options for Dealing With a Damaged Home

**Repair**
LA Contributes Up To Pre-Storm Value; Affordable Loan Covers Any Gap

**Sell**
LA Offers 60% of Pre-Storm Value to those who Choose Not to Repair, Rebuild or Relocate in LA

**Rebuild**
LA Contributes Pre-Storm Value to Cost of An Equivalent House on Same Property; Affordable Loan Covers Any Gap

**Buyout/Relocate**
LA Contributes 100% of Pre-Storm Value to Cost of An Equivalent House In Designated Area; Affordable Loans for gaps

In all cases, assistance will be capped at $150,000, and will be decreased by insurance and FEMA repair aid. The assistance (based on total needs) will further be reduced if the original property should have carried insurance and did not.
Action Plan for New Orleans: The New American City

January 11, 2006

Bring New Orleans Back Commission
Urban Planning Committee
Vision

New Orleans will be a sustainable, environmentally safe, socially equitable community with a vibrant economy.

Its neighborhoods will be planned with its citizens and connect to jobs and the region. Each will preserve and celebrate its heritage of culture, landscape, and architecture.
What is the City-Wide Framework for Reconstruction?

- Flood and Stormwater Protection Plan
- Transit and Transportation Plan
- Parks and Open Space Plan
- Neighborhood Rebuilding Plan
Flood and Stormwater Protection Plan

• Comprehensive system with multiple lines of defense to protect the city:
  - Perimeter levees
  - Pumping and gates
  - Internal levees with separate pumps
  - Coastal wetland restoration
• City-wide, high speed, light rail transit network connects neighborhoods to downtown and other employment centers.

• Light rail transit creates value and is a catalyst for reconstruction and new development.

• Rail transit links city to the airport, Baton Rouge, and the Gulf Coast.

• New roads will be designed with the wide median (neutral ground) model for pedestrians, bicycles, transit, and open space.
Parks and Open Space Plan

- Parks in every neighborhood.
- Multi-functional parks and open spaces connect neighborhoods and employment.
- Use canal edges and covered canals as open space amenities.
- Parks are part of internal stormwater management system.
Rebuilding Neighborhoods Plan
The Neighborhood Center Model

• Neighborhoods are the centers of activity and daily life.

• Neighborhoods require sufficient population to support the equitable and efficient provision of public facilities and services.

• Every neighborhood must have:
  – Basic infrastructure: roads, drainage, utilities, services
  – Public schools
  – Cultural and community facilities
  – Places of worship
  – Health facilities
  – Park and open space within an easy walk
  – Convenience retail
  – Access to public transit
Illustration of the Neighborhood Center Model

- Canal Park and City-Wide System
- Mixed-Use Subcenter with Elementary School and Neighborhood Park
- Neighborhood Greenways
- New Housing
- Environmental Center and Wetland Park
- Central Park with Recreation Fields
- Neighborhood High School with Library, Cultural and Community Center
- Medium Density Housing on Central Park
- Mixed-Use Community Commercial Boulevard
- Transit-Oriented Mixed-Use Center with Retail and Services
- Light Rail Transit on Neutral Ground connecting to CBD and City
New Orleans has many unique neighborhoods. Therefore, these guidelines are intended for use by the neighborhood planning teams for general guidance only.

- Neighborhood population - 5,000 to 10,000.
- Commitment to return - 50% of neighborhood residents.
- Reasonably efficient delivery of public infrastructure, services and utilities.
- One to two K-8 public schools and a shared public high school supported by approximately 11,000 people.
- Places of worship.
- Reasonable access to convenience retail, health, cultural, and community facilities.
- Park and open space.
- Connection to the city by convenient public transit.
- Contiguous relationship with at least two other neighborhoods.
- If there is undeveloped land, the neighborhood planning teams will make recommendations on its use.
Opportunities for Neighborhood Rebuilding

• Immediate Opportunity Areas
• Neighborhood Planning Areas
• Infill Development Areas
• Targeted Development Areas
Neighborhood Planning Process
Neighborhood Planning Process

- Neighborhood planning process will be conducted in all neighborhoods.
  - Form neighborhood planning teams for each Neighborhood Planning District. Teams will include:
    - Neighborhood residents
    - Planner/urban designer
    - Historic preservation expert
    - City Council representative
    - City Planning Commission representative
    - Environmental/public health consultant
    - Mitigation planner
    - Finance expert
    - Administrative/technology support
    - Community outreach
  - Reach out to displaced residents by a variety of means (meetings, internet, and others).
Neighborhood Planning Process

• Neighborhood plans will be guided by:
  - Neighborhood center model
  - Residents committed to return
  - Population needed to support facilities and services
  - Structural and environmental safety
  - Neighborhood history and culture

• Neighborhood plans will address:
  - Land use and density/intensity
  - Public facilities and services
  - Phasing
  - Property acquisition plan
  - Development guideline controls
Planning to Rebuild

• Create the new planning/rebuilding entity.
• Prepare a city-wide facilities and services plan based on its capacity to provide and maintain them.
• Prepare neighborhood plans coordinated with city plan.
• Coordinate horizontally and vertically:
  – FEMA
  – USACE
  – State: LRA
  – City: Mayor, City Council, City Planning Commission, Bring New Orleans Back Commission
  – Citizens
  – Civic and faith-based organizations
  – Institutions
  – Foundations