Section 1: Recovery Assessment

Parish Overview

On August 28, 2005, the day before Hurricane Katrina made landfall, the City of New Orleans was home to approximately 465,000 residents. It was (and still is) world renowned for its festivals, music, culture, history, and architecture. The thriving tourism industry attracted over 10 million visitors to the City’s 38,000 hotel rooms and produced over 80,000 jobs in the hospitality and leisure industries. Its strategic location near the mouth of the Mississippi River enabled it to be one of the nation’s most successful port operations. The Port of New Orleans accommodated an average of 2,000 vessels per year and supported over 160,000 jobs in the metropolitan region.

Pre-Katrina, New Orleans’ economy was generally growing but at a slow pace. Energy (oil and gas), has had a strong presence in New Orleans since the advent of offshore drilling in the 1940s and 1950s. Despite job loss through consolidation and relocation, a critical mass of well-paying, energy-related jobs remained in the region. Likewise, the New Orleans metropolitan area was also home to a growing health care sector with around 80,000 individuals employed in the health care and medical education sectors. The Tulane School of Medicine and the Louisiana State University Health Sciences Center (LSUHSC), both located in New Orleans, were major contributors to the economic strength of these sectors. These sectors provided well-paying jobs that helped reduce the growing gap between household incomes (and other socio-economic statistics) in New Orleans and the rest of the nation.

In spite of New Orleans’ successes, local leaders and residents faced some significant challenges prior to the storm. New Orleans’ steady population decline since the 1960s had taken a toll on the City and its tax base; see Figure 1.1. According to the 2000 Census, New Orleans had 26,840 vacant or abandoned housing units – 12.5% of the City’s housing stock. Census data also showed that New Orleans had more families in poverty, a lower median household income, and fewer homeowners than the national average; see Table 1.1.

Table 1.1 New Orleans Versus Nationwide Statistics

<table>
<thead>
<tr>
<th></th>
<th>New Orleans</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Household Income (1999)</td>
<td>$27,133</td>
<td>$41,994</td>
</tr>
<tr>
<td>Families in Poverty</td>
<td>23.5%</td>
<td>9.2%</td>
</tr>
<tr>
<td>High School graduate or higher</td>
<td>74.7%</td>
<td>80.4%</td>
</tr>
<tr>
<td>Bachelors degree or higher</td>
<td>25.8%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Homeownership rate</td>
<td>47.0%</td>
<td>66.0%</td>
</tr>
</tbody>
</table>

Figure 1.1 Population Decline in New Orleans, 1960 to 2005


Notes:
Many of the City’s agencies did not have the capital to sustain their basic needs. Pre-Katrina, the New Orleans Sewerage and Water Board (S&WB) estimated that the water supply system needed $2.8 billion in repairs and the wastewater system evaluation and repairs would cost $977 million. The Orleans Parish School Board struggled to maintain and provide basic operations and services, as schools received failing grades\(^5\) and facilities fell into worsening condition.

New Orleans is both a river city and a coastal city. The original settlement of the City occurred adjacent to the Mississippi River on some of the highest ground, or the “sliver by the river.” The City is often described as a bowl, rimmed by man-made levees with an interior ranging from a few feet above sea level to as much as 10 feet below sea level. Both Lake Pontchartrain to the north and Lake Borgne to the east connect to the Gulf of Mexico.

Topography and the evolution of flood protection techniques have dominated the City’s settlement pattern. Development spread first along the highest ground to the east and west of the French Quarter along the river. Next, wetlands were drained and pumps installed to allow development to progress northward towards Lake Pontchartrain. In the last 50 years, development crossed the Industrial Canal to form New Orleans East. Similarly, on the west bank, development spread south and east from Algiers Point.

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\(^5\) Greater New Orleans Community Data Center, http://www.gnocdc.org/orleans/education/html, 47% of Orleans Parish Schools were rated “academically unacceptable” and 26.5% were rated as “academic warning” in the 2003-2004 school year.
Most of the City of New Orleans and parts of adjacent parishes reside within five separate bowls, or drainage basins; see Figure 1.2. These basins include:

1. The original city, extending from the river to the lake and from the Industrial Canal to the 17th Street Canal
2. New Orleans East, from the Industrial Canal to Irish Bayou and from the Intracoastal Waterway to Lake Pontchartrain
3. The Lower 9th Ward shares a large drainage basin with St. Bernard Parish
4. Upper Algiers shares a drainage basin with Gretna and Harvey
5. Lower Coast Algiers shares a drainage basin with Belle Chasse.

All these basins are largely a creation of the U.S. Army Corps of Engineers (USACE) which, after the widespread flooding caused by Hurricane Betsy in 1965, was charged with developing the Lake Pontchartrain and Vicinity Hurricane Protection Plan. The fact that the basins cross municipal and parish boundaries is an indication of the regional approach to flood protection that the USACE took. As we saw with Katrina, flooding does not respect neighborhoods or other political boundaries.

City Planning Areas

In 1980, the City Planning Commission divided the City into 13 planning districts and 73 distinct neighborhoods. The Planning Districts are shown on Figure 1.3, and the neighborhoods which they encompass are listed in Table 1.2. The Planning District boundaries have been used by the City Planning Commission and Unified New Orleans Plan in the recovery planning process.

The original neighborhood boundaries were created to coincide with census tracts,
which are often used to better understand the demographics of an area and plan for its needs. However, residents of neighborhoods often define their boundaries based on street networks, impediments, and nodes. Even though the City still officially recognizes the 73 neighborhoods for planning purposes, many more neighborhood groups have emerged and been distinctly identified and involved as part of the UNOP and other recovery planning processes.

Figure 1.3 Map of Planning Districts and Neighborhoods

Table 1.2: Planning Districts and Associated Neighborhoods in New Orleans

<table>
<thead>
<tr>
<th>Planning District</th>
<th>Neighborhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 1</td>
<td>Central Business District, Vieux Carre, Warehouse District</td>
</tr>
<tr>
<td>District 2</td>
<td>East Riverside, Garden District, Irish Channel, St. Thomas Area – Lower Garden District, Central City – Magnolia, St. Thomas Project, Milan, Touro</td>
</tr>
<tr>
<td>District 3</td>
<td>Black Pearl, Broadmoor, East Carrollton, Ferret, Hollygrove, Uptown, West Riverside, Marlyville – Fontainebleau, Leonidas – West Carrollton, Audubon – University, Country Club – Dixon A</td>
</tr>
<tr>
<td>District 5</td>
<td>City Park, Lakeshore, Lakeview, Lake Vista, Lakewood, Parkview, Country Club Gardens</td>
</tr>
<tr>
<td>District 6</td>
<td>Dillard, Filmore, Gentilly Terrace, Gentilly Woods, Lake Terrace – Lake Oaks, Milneburg, Pontchartrain Park, St. Anthony</td>
</tr>
<tr>
<td>District 7</td>
<td>Bywater, Marigny, St. Claude, St. Roch, Desire Project, Desire Area, Florida Housing Development, Florida Area</td>
</tr>
<tr>
<td>District 8</td>
<td>Holy Cross and Lower Ninth Ward</td>
</tr>
<tr>
<td>District 9</td>
<td>Edgelake – Little Woods, Pines Village, Plum Orchard, Read Boulevard East, Read Boulevard West A, Read Boulevard West B – West Lake Forest, Viavant – Venetian Isles</td>
</tr>
<tr>
<td>District 10</td>
<td>Village de L’Est, Viavant – Venetian Isles</td>
</tr>
<tr>
<td>District 11</td>
<td>Viavant – Venetian Isles</td>
</tr>
<tr>
<td>District 12</td>
<td>Algiers Point, Algiers Naval Station, Behrman, Fischer Project, Tall Timbers – Brechtel, Algiers Whitney, McDonogh, Aurora – Walnut Bend – Huntlee Village, River Park – Cut Off – Lower Coast</td>
</tr>
<tr>
<td>District 13</td>
<td>River Park – Cut Off – Lower Coast</td>
</tr>
</tbody>
</table>

Source: City of New Orleans, New Orleans Regional Planning Commission (NORPC) & GCR & Associates, Inc.
Hurricane Katrina’s Impacts

Hurricane Katrina’s eye first made landfall in Buras, Louisiana around 6 a.m. on the morning of August 29, causing substantial wind and surge damage. The first storm surge was between 21 and 28 feet high and inundated much of New Orleans’ neighboring Plaquemines Parish. The eye then came ashore again about 30 miles northeast of the City, near Slidell, Louisiana, as a Category 3 hurricane. While wind-related damages were extensive, it was the surge and flooding which caused New Orleans’ catastrophic-level of loss.

In the eastern region of the City, much of the flooding was caused by levee overtopping as well as levee and floodwall failures, caused by the intense pressure of storm surge heights. The Mississippi River Gulf Outlet (MR-GO) funneled water from Lake Borgne inwards towards the Industrial Canal, overtopping and breaching levees in New Orleans East. Floodwalls on both sides of the Industrial Canal were first overtopped and then breached. One mile of floodwall protecting New Orleans East from Lake Pontchartrain was overtopped, adding to the already severe flooding in that area.

In the central portion of the City, most of the flooding was caused by failures in the series of drainage canals leading up to Lake Pontchartrain. Breaches occurred in several canals: first on the east side of the London Avenue Canal (flooding Gentilly), then on the east side of the 17th Street Canal (flooding Lakeview), and finally on the west side of the London Avenue Canal. Surge from Lake Pontchartrain also overtopped a section of embankment (lower than the surrounding floodwalls) and flooded City Park.

Studies performed prior to Hurricane Katrina highlighted the vulnerabilities of the hurricane protection system to a storm of this size. In the days prior to landfall, the City and State implemented a successful contra-flow system for residents with automobiles, and estimates show that over 80% of the City’s population evacuated successfully. The Louisiana Superdome was designated a ‘shelter of last resort’, and transportation was provided to those in need of safe harbor in the hours prior to the hurricane’s landfall. Flooding continued until midday on September 1, 2005, when flood levels began to equalize with the surrounding lake levels. In all, roughly 80% of the streets of the City were inundated, impacting 77% of the City’s population. The depth of flooding varied most notably by elevation; see Figure 1.4.

Many residents did not evacuate for a variety of reasons, including health or financial reasons, caring for pets, and other personal reasons. Many had to be rescued in the days that followed, while others perished as floodwaters rose too quickly for them to escape. In all, Hurricane Katrina took more than 1,600 lives, over 1,000 of which were in Orleans Parish.
Recovery Overview

The method of flooding, depth of flooding, and flood duration all affected the response efforts as well as the initiation of recovery across the City. On September 5, the first levee breach was sealed and most of the City was “unwatered” by September 9. Hurricane Rita made landfall in south-central Louisiana on September 28, which caused additional flooding in parts of the Lower 9th Ward, Gentilly, and New Orleans East. Former residents of the “dry” areas were the first to return in mid- to late-September. But, it took several weeks to “dewater” parts of the City that flooded a second time, and likewise it has also taken the residents of these former neighborhoods a lot longer to return.

During the first year of recovery, agencies prioritized restoration of water, sewerage, drainage and power. Traffic signals and street lights began to be repaired. Phone service resumed. Homeowners, businesses and renters salvaged what they could and began the arduous task of filing insurance claims, seeking other forms of financial assistance, and reconstructing their lives. This period culminated (most notably in September 2006) with the renovation and grand re-opening of the Louisiana Superdome and the restoration of potable water in the Lower Ninth Ward. But, while an overall degree of normalcy has gradually been achieved in the City, there are still many gaps.

The first major task of the Unified New Orleans Plan process was to assess the level of damage and state of recovery across a number of sectors: Population; Flood Protection; Housing; Economy; Infrastructure and Utilities; Transportation and Transit; Education; Health Care; Public Safety; Environmental Services; Recreation and Library Services; Municipal and Cultural Resources; and Historic Preservation and Urban Design. The assessments were performed at the citywide-level as well as across all 13 Planning Districts. Teams of urban planners and engineers assessed the status of repairs and restoration, examined damage assessment reports, reviewed existing plans and documents, and conducted field work and research, as well as interviews and analysis, in order to depict the physical conditions of recovery across the City. The following sections provide brief summaries of each sector assessment. More detailed assessments are included in the full Citywide Recovery Assessment.

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7 Citywide Recovery Assessment was published as an appendix to Working Paper #2 Available on the UNOP website
Population

In January 2007, New Orleans has about half of its pre-Katrina population of 460,000. While recovery of population in other modern-disaster cities has been relatively quick, none had the widespread destruction or degree of forced and long-term displacement as New Orleans. Demographers note that the longer residents are displaced, the less likely they are to return.

Within the Planning Districts, population return is uneven by District, but has leveled out across most Districts. Those who could return have likely done so, and many homeowners have now made decisions about their property – whether to sell, demolish, or at least gut and hold onto it. District interviews report that displaced residents are not returning for various reasons: lack of adequate information about future conditions, lack of medical care, uncertain public school situation, job loss, fear of crime, and other family members unable to return. Many have also not yet decided what to do or are waiting on Road Home funding.

Hurricane and Flood Protection

At a cost of more than $350 million in the first year of recovery (through August 2006), the U.S. Army Corps of Engineers (the USACE) repaired 220 miles of damaged levees and floodwalls in Basins 1, 2 and 3, completely replacing more than 25 of those 220 total miles. But, Katrina exposed a number of glaring weaknesses in the City’s hurricane levee protection system. These weaknesses will take years to correct and leave the City vulnerable in the interim. Two flaws have been paramount: (1) storm surge was allowed to penetrate deep into the heart of the City through the pumping station outfall canals at 17th Street, London Avenue, and Orleans Avenue; and (2) storm surge was concentrated at the confluence of the MR-GO and the Intracoastal Waterway (GIWW) levee systems, forming a bottleneck that forced the surge up and over the levees, flooding New Orleans East and the Lower Ninth Ward. The Lower Ninth Ward was also the victim of a catastrophic floodwall failure along the Industrial Canal.

To remedy the first problem, the USACE has constructed temporary storm surge gates at the lakefront mouths of the outfall canals as part of a longer-range plan to construct permanent pumping stations at the lakefront. However, while the temporary storm surge gates solve one problem, they reduce the pumping capacity of the canals, causing another problem. When the gates are closed for storm surge protection, the diminished outflow could cause rainwater to back up in the canals and then spill over into nearby low-lying residential neighborhoods. This risk will persist until either temporary pumping capacity is increased or the new pumping stations are constructed, which is planned for completion in 2010.

The second problem – storm surge in the eastern part of the City – is less amenable to such a quick fix. It will take years to plan, design, obtain environmental permits, and then construct engineered systems in the coastal
zone that will retard and redirect future storm surge so that it doesn’t overwhelm the City’s hurricane protection levee system. Until these systems are well underway, the eastern part of the City will continue to be vulnerable to storm surge. The USACE’s full program of improvements is planned for completion in 2010. Until at least that year, all of the City – Eastbank and Westbank will continue to be susceptible to flooding from even moderate storms. Beyond 2010, the eastern part of the City and St. Bernard Parish will continue to be susceptible to storm surge until coastal restoration projects come to fruition, which may take decades.

District Plans have used data provided by UNOP and the City to identify areas of the Districts that are at low elevations and have flooded repeatedly. In the greatest flood (Katrina) much of the older housing stock (50 years plus) was elevated on piers and withstood flooding to a greater extent than new slab-on-grade structures. The City adopted FEMA’s advisory base flood elevations issued for Orleans Parish in April 2006. All new construction must now comply with FEMA base flood elevation guidelines.

**Housing**

Damage and destruction of the City’s housing stock was substantial; see Figure 1.5. About three out of every four habitable units were either damaged or destroyed, and the City lost almost its entire affordable housing inventory. Most public housing units are slated to remain closed awaiting demolition and eventual redevelopment at lower densities. As of November 2006, there were approximately 11,000 FEMA trailers in the City.

**Figure 1.5. Percent Structural Damage (FEMA Damage Inspections; current as of November 2006)**

Source: FEMA Damage Inspection Reports
Housing repairs and rebuilding are being financed by many sources: private insurance, National Flood Insurance Program claims, loans from the Small Business Administration, private mortgage lenders and banks, and individual resources. The LRA has allocated $4.2 billion to homeowner repairs and another $1.8 billion to mixed income and affordable housing. Both the Road Home’s homeowners and small rental repair programs are still gearing up. Housing recovery is sluggish due to the slow pace of disbursement the State’s Road Home funds to eligible applicants, uncertainty over insurance reimbursements, inability of residents to gut houses, and participants’ indecision due to age, infirmity, and uncertainty about resources. Over the next year, the implementation of the Road Home Program may result in many individual property sales in many neighborhoods. Planning for the re-use of those properties that are voluntarily sold (to the State in exchange for Road Home funds) is important to retaining the neighborhood fabric across the City. Housing repair and rebuilding efforts are limited by shortages of workforce and qualified-contractors. Insert images of housing devastation. The following is a good one:

The District assessments suggest that, despite the levels of building permits granted in neighborhoods across the city, the level of actual rebuilding activity was lower. A number of homes are being elevated by a variety of methods. Modular housing is starting to appear in some areas, and there are concerns about historic preservation and how these structures will blend in with the rest of the neighborhood. The pace of demolitions is increasing but there are still neighborhoods across the City where damaged houses stand largely untouched.

**Economic Development**

Economic recovery has been surprisingly rapid in some economic sectors, such as the Port of New Orleans, but has lagged in other areas, notably health care and related services. Recovery of the City’s two medical schools – Tulane School of Medicine and the LSU Health Sciences Center – provide a vital service to the populace but also are a key source of well-paying and attractive jobs in the City. In tourism, the current shortfall of approximately 8,000 hotel rooms limits both the number of visitors that can be accommodated and the City’s ability to book conventions in the competitive hospitality market.

Most re-opened local businesses are smaller and dependent upon local markets that have not fully recovered. Some “big box” retailers are not returning to the City, as they are regional in nature and have suburban sales volumes offsetting the loss of some stores. Thus, neighborhood and district recovery is more dependent upon the success of small businesses, many of whom lack sufficient capital to remain viable much longer if the rate of population return does not accelerate. An infusion of capital into this sector is needed and the LRA has approved a program to provide low- or no-interest loans and grants to qualified small businesses in hurricane-impacted areas of the State. The issue of temporary housing for

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As reported in the Times Picayune, January 2007.
the labor force at the scale needed to rebuild the local economy has not yet been resolved. Temporary housing is needed, but may be difficult to site in many neighborhoods.

District-level assessments report greatly diminished business activity and a general lack of professional services as well. Grocery stores are slowly returning but have staffing challenges. Businesses that are open have trouble getting and retaining staff as well. Many businesses that have re-opened are family-owned with everyone pitching in to help. Business utility costs and insurance costs have also increased post-Katrina. Many businesses report that they will be unable to continue if tourist traffic does not increase. Crime is also a deterrent to many businesses that report both poor police coverage of their area and slow response times.

Infrastructure and Utilities

Hurricanes’ Katrina and Rita caused extraordinary damage to the City’s physical infrastructure, much of which lies underground and was inundated by the brackish waters of Lake Pontchartrain for several weeks. Underground electric utilities corroded, leaving the City without street lights and traffic signals. Gas lines corroded, requiring replacement of key valve components before services could safely resume. Cable service was similarly disrupted for phone and video/internet lines. Repairs to these critical elements are still ongoing, and some areas do not have a full range of services.

The waste water, drainage and water systems of the City also sustained severe damage. A study released in December 2006, estimates that the total capital needs of the Sewerage & Water Board (S&WB) over the next 25 years is in the range of $5.7 billion9. Pre-Katrina, a significant amount of water was pumped through the City system to offset pressure losses caused by leakage. Katrina-related damage is exacerbating the leakage. Water pressure now fluctuates in several areas, notably in the French Quarter, where restaurants must have a supply of fresh water or close their operation.

Private infrastructure, of course, has similar problems, wherein equipment such as compressors or power supplies was submerged in brackish water and needs to be replaced. Entergy New Orleans is patching together a working grid. The LRA committed over $200 million in CDBG funds to assist Entergy New Orleans with repairs and to offset utility rate increases in the near-term.

Transportation and Transit

Prior to Katrina, the New Orleans street network needed repair. Following voter-approval of a major bond measure in November 2004, the City had allocated $142 million to construct 100 miles of major/collector streets and rehabilitation more than 450 miles of minor streets across the City.

The street network was further damaged by immersion in floodwaters for several weeks following Katrina. Potholes are increasing in number and size since many are caused by the street substructure being undermined by either un-repaired water leakages or the crushing of subsurface drainage pipes. Traffic signalization still needs to be restored in some areas of the City.

Mass transit is only partially recovered. The Regional Transit Authority (RTA) lost 197 of 372 buses, 30 out of 66 street cars, and 24 of 36 lift vans. They also had significant damage to the lines, facilities and equipment. RTA reimbursements from insurance and FEMA are progressing better than many other public and non-profit agencies in the City. But, as of October 2006, usage was only at 65% of pre-storm levels; restructuring of the route system is likely.

Post-Katrina, the volume of port tonnage at the Port of New Orleans is up to near-record levels. Airplane travel is down to about 65% of pre-storm levels. Air travel to and from the Armstrong International Airport is not limited by airport capacity, but the reduced demand for flights into and out of the region is due in part to the City’s reduced hotel rooms and a consequently reduced convention schedule.

Health Care

Prior to Katrina, care for the City’s uninsured population was delivered through the Medical Center Louisiana New Orleans (MCLNO) Charity Hospital and a network of public and private clinics. Those with health insurance or funds to pay for treatment went to private hospitals. This led to long waits for services at Charity and a high level of unused hospital capacity in nearby private hospitals. Primary and preventive health care services were all but lost with the destruction of the Charity Hospital, outpatient clinics, and virtually all other public and private clinics. Over the past year, a task force of state and federal officials aided by the LRA has been deliberating on the future of the State’s medical-delivery system.

Health care has also been slow to recover due to both the loss of facilities and loss of primary care providers (doctors) and essential support personnel (nurses). The few hospitals that are open are located in the southern and western portions of the City. There are a small number of limited-service clinics, but primarily hospitals in both Eastbank and Westbank Jefferson have been able to fill the gap. A shortage of staff medical personnel and support staff has limited hospital bed capacity everywhere.

Education

Even before Katrina, the Orleans school system had struggled both financially and academically. Estimated capital needs before the storm were in excess of $500 million. Just prior to Katrina, the State, through the Recovery School District (RSD), took control of most of the Orleans School District’s facilities. The estimated storm damage to facilities, infrastructure and contents is $600-800 million (80% flooded). Of 126 public schools in the City, only 7 had no damage, and over half had major damage (from 25% to 50% of their estimated replacement value).

At the end of 2006, a total of 54 public schools are open, with 98% capacity and an enrollment of roughly 27,000 students (versus 59,000 before the storm). Nine more schools are undergoing renovation with expectations to be open by the next school year, with an additional 10 sites identified for modular structures. The RSD is putting together a long-term plan which will be presented in March 2007 relating to school repairs and openings beyond next year. Final decisions have not been made about which schools to re-open or keep closed, but school officials are planning for a reduced population that needs fewer schools.

The colleges and universities of the City also suffered substantial physical damage and are operating with considerably reduced enrollments. Public university financial support is predicated on student enrollment and local universities and colleges have suffered large enrollment declines.

Public Safety: Criminal Justice, Police, Fire, and Emergency Medical Services

The flood collapsed the entire criminal justice system. Prisoners were evacuated, and only a partial return to the prison complex has been possible. All courtrooms were shuttered for extended periods. The evidence room and its important contents were destroyed. Police headquarters and the offices of the District Attorney were destroyed. Trials were put on indefinite hold due to a lack of court personnel and the inability to empanel a jury of citizens no longer resident. And most recently, personnel shortages in such critical areas as in the Orleans Indigent Defender Program (OIDP, or ‘Public Defender’) have also been noted as barriers to recovery.

The City’s police force is operating at reduced levels, but an active recruitment campaign is underway. The State National Guard remains in place, at least for the remainder of 2006, although the Governor has called on the City to develop an “exit strategy” for the guard troops within six months.

Within the District assessments, crime is reported to be on the rise. Police response times to calls are reportedly slow and often unpredictable. Looting of vacant structures is less of a problem now, but is still a concern. In some commercial districts, there are reports of criminal activity against pedestrians and motorists, which can inhibit tourism.

Emergency Medical Services (EMS) and fire services suffered substantial losses to trucks and related equipment. Fire protection services are hindered by water pressure and manpower considerations. Firefighters have been reduced in number and a recurring manpower shortage has been the chronic condition post-Katrina. The EMS worked first from the Convention Center, its quarters at Moss Street having been destroyed. It is now in the process of relocating its quarters. Service continues despite the loss of trucks and specialized equipment.

Environmental Services: Sanitation, Recycling, and Soil Remediation

The City’s Department of Sanitation largely operates on a contract basis. A contract with long-time outside vendor Waste Management, Inc. has recently expired and three new solid-waste collection contracts – one vendor services the French Quarter and CBD, while the other two service the rest of the city – have commenced. All recycling efforts have stopped since the recycling center was destroyed in the storm.

Post Katrina, FEMA contractors assisted with flood-related debris removal while Waste Management resumed its normal trash duties, albeit on a greatly reduced scale of one day per week. Unless the deadline is extended, FEMA will no longer reimburse the City for 100% of its debris removal costs. After December 31, 2006, the City will have to cover 10% of the costs, which could be substantial given the large number of structures that have yet to be gutted or demolished.

Given the extensive flooding, most areas of the City were impacted by saltwater as well as chemical pollutants. The U.S. Environmental Protection Agency (US EPA) and the Louisiana Department of Environmental Quality (LA DEQ) conducted water and soil samples after the flood. Samples were taken in every ZIP code and tests conducted to determine what - or if - chemical compounds were present. Lead, petroleum hydrocarbons, and pesticides were among the most common elements identified. The US EPA and LA DEQ have identified areas and sites within the City that have soil contamination and require remediation.
Recreation and Library Services

The Citywide assessment focused on public recreation facilities and did not cover private recreation facilities (but damage to those facilities was substantial as well). Some facilities like the State-owned Louisiana Superdome have already re-opened. City Park is without operating revenue and suffered over $42 million in estimated damages. The Park progresses toward recovery assisted by volunteers and donations. Many neighborhood park and recreation facilities are not open and there is no timetable for resuming service. Residents miss major and minor parks and recreation facilities and see them as a centerpiece of their neighborhood recovery. Insert any picture(s) of closed parks or poorly maintained parks.

Eight of the 12 branches of New Orleans Public Library (NOPL) were severely damaged and their contents destroyed. A grant from a private foundation will enable NOPL to open 7 temporary locations, and bookmobiles have been loaned by several counties. From any perspective, the damage to the public library system, combined with the losses at the public school libraries, greatly impacts the learning resources of the City.

Municipal and Cultural Resources

Over 260 non-profit cultural institutions, such as museums, arts centers, performance halls and other venues were severely damaged or destroyed. Municipal resources, including the Mahalia Jackson Theatre for the Performing Arts, were also damaged. Total employment in the creative economy of the City has been reduced by more than half.

Prior to Katrina, the City had increasing revenue that was used to pay expenses and repay the annual debt service of approximately $39 million. The strength of revenue collections and increases versus expenditures translated into a BBB investment grade rating by Standard & Poor’s. The City’s 2005 Capital Improvement Program (“CIP”) proposed allocating $260 million in new general obligation bonds to improve, upgrade and expand the assets of various city agencies; it was the largest referendum ever approved by City voters. A summary of the proposed uses were: $63 million for streets; $7 million for police, fire, and judicial facilities; $43.5 million for parks and recreation facilities; $0.5 million for libraries and cultural facilities and over $27 million for other public buildings. The plan prioritized the use of proceeds and balanced the investment across a large portfolio of City assets.

Immediately after Katrina, the City had a 50% reduction in sales and property tax receipts as well as anticipated declines in other revenue sources. To address the revenue shortfall, the City took drastic steps including: reduced operating funds for all departments, reduced scheduled expenditures by $55 million, cut the administrative workforce (excluding public safety positions) by 50%, and stopped some major contractual obligations.

According to a post-Katrina damage assessment report compiled by the City and various representatives, dated January 18, 2007, there was a total estimated loss of $1.035 billion attributable to City-owned properties. To start repairs, the City used $33 million of bond reserves issued pre-Katrina to begin repairing and rebuilding the criminal courts, prisons, police, and fire capabilities, and has been working on claims reimbursements from both insurance and FEMA. Despite furloughing more than 3,000 employees and reducing personnel, the City had to use over $84 million of a $120 Community Disaster Loan (CDL I) to sustain 2005 operations and support the beginning of the 2006 operating year. A total of $100 million was reportedly spent just for police, fire, emergency services, and related overtime pay.

In 2006, the City expects to have $300 million in general fund recurring revenue, compared with $479 million in 2004. The City was able to secure an additional CDL II loan of $120 million in July 2006, part of which is expected to support the balance of the 2006 deficit (approximately $17.6 million). The balance of the CDL II is available to be utilized, if
necessary, over the next four years to support operating deficits. The proposed 2007 budget projects revenues of $405 million, or 86% of pre-Katrina 2005 budget of $472 million.

In December 2006, Standard & Poor’s issued its second upgrade for the City since Katrina, raising its outlook on the general obligation debt from “developing” to “stable.” The upgrade reflects the expectation that revenues, coupled with extraordinary grants and loans, will allow for debt repayment over and above operating expenses. S & P continues its “B” rating on the general obligation debt and a “B-” on the limited tax obligation debt which is significantly below investment grade rating minimums of “BBB-”. The City continues to work closely with the Rating Agencies to expedite the continuous review, and hopeful upgrade, of the bonds to investment grade status; but there is no certainty as to the timing of when the upgrade can be achieved.

**Historic Preservation and Urban Design**

In recovery, there is on-going tension between the desire to preserve the unique and valuable heritage of the City’s neighborhoods and the desire to rebuild, renovate, or in some cases demolish damaged houses and also permit the use of modular or other pre-built structures in the rebuilding. More than half of the City’s 20 historic district sufficient significant damage, and affected an estimated 25,000 historic properties. The City and other agencies have limited resources and are challenged to assist. Cooperative preservation and housing rehabilitation efforts are needed. Preservation issues need to be considered at the neighborhood-level, for both neighborhoods with historic structures and those not so designated.

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11 Urban Planning Committee report, Bring New Orleans Back Commission
UNOP Process Overview

The Unified New Orleans Plan (UNOP) was a five-month planning process established by the Mayor, City Council, and City Planning Commission. It was tasked to produce a unified recovery and rebuilding plan for New Orleans by the start of 2007.

The effort to plan New Orleans’ recovery began shortly after Katrina with the work of the Bring New Orleans Back Commission (BNOB), which identified citywide needs and issues that should be addressed on a short-term and long-term basis in order for the City to achieve a “sustainable, environmentally safe, socially equitable community with a vibrant economy.”

Over the course of 2006, thousands of citizens and business owners worked together to define the vision, goals and objectives for the repair, recovery, and rebuilding of their devastated neighborhoods and Planning Districts. Many of these efforts were supported in large part by the City Council’s Neighborhoods Rebuilding Plan (the Lambert Plan). It resulted in a list of recovery projects for the most devastated areas of the City and was submitted to the City Council in October 2006. The needs, vision, and goals of these and many other planning efforts are now being folded into the final phase of the planning for the City – the UNOP process.

12 “Rebuilding New Orleans” report by Mayor C. Ray Nagin and the Bring New Orleans Back Commission
UNOP Citywide and District Scopes of Work and Community Participation

To bring about this unified vision for recovery in New Orleans, the UNOP Citywide and District Planning Teams structured their work to run in parallel in 3 phases: Recovery Assessment, Scenario Development, and Plan Development; see Figure 1.6. The process was designed and implemented based in large part upon the scope and tasks defined in the City Planning Commission’s Neighborhood Planning Guide, adopted on June 13, 2006.

Public input and involvement have been an integral part of the entire UNOP process. Several mechanisms were used to engage as wide a group of residents as possible, including those who have been able to return to the City, as well as the thousands who remain displaced but have a vested interest in the recovery of New Orleans. These efforts include hundreds of neighborhood and focus-group meetings, grass-roots outreach in New Orleans as well as many key cities where displaced residents are living, three newsletters, call-centers and surveys, an extensive website, and three “Community Congresses.” In the second and third “Community Congresses,” displaced residents living around the country were able to participate through web and satellite technology.

Four rounds of District Meetings were held in all 13 planning districts. The first round, held on October 14, 2006, introduced the teams and the planning process. These meetings also gave residents their first opportunity to discuss their views of the needs of their respective Districts. The second round was held on November 11 and 12, 2006, when recovery scenarios were discussed for each district. The third round, held on December 1 and 2, 2006, presented the scenario preferences and initial draft plans to residents for their review and comment. And the final meetings, held between January 6 and 14, 2007, presented the final district plans.

Phase 1: Recovery Assessment

Both the Citywide and District Planning Teams assessed the level of damage and state of recovery across a number of sectors: Population; Flood Protection; Housing; Economy; Infrastructure and Utilities; Transportation and Transit; Education; Health Care; Public Safety; Environmental Services; Recreation and Library Services; Municipal and Cultural Resources; and Historic Preservation and Urban Design. Teams assessed the status of repairs and restoration, examined damage assessment reports, reviewed existing plans and documents, and conducted field work and research, as well as interviews and analysis, in
order to depict the physical conditions of recovery across the City. Also, as part of this phase, UNOP developed a “Recovery Data Atlas” available for the public to view on the UNOP website.

The citywide recovery assessment was presented at the Community Congress I on October 28, 2006, and at the first round of District Meetings. At Community Congress, participants voted on their top priorities for the UNOP process: flood protection and the risk of flooding, affordable housing, quality of public schools, response time for emergency services (Police, Fire, EMS), and access to medical care. This Congress proved the old adage that knowledge is power as 35% of individuals said that they had changed their opinions based on the information provided.

Phase 2: Scenario Development

In this phase, Citywide and District Planning Teams developed statements of the needs, visions, and goals based on the information compiled in the recovery assessment as well as community input. Three scenarios to rebuild the City were then developed, aided by the LRAs’ guiding principles to Rebuild Smarter, Stronger, and Safer. (These scenarios are discussed further in section 2 of the Citywide Plan.) The scenarios were presented to the community at the second round of District Meetings and Community Congress II.

On December 2, 2006, over 2,500 participants gathered for Community Congress II, which took place simultaneously in 21 cities, including New Orleans, Atlanta, Baton Rouge, Dallas, and Houston. In the five largest cities (previously noted), participants were part of an interactive meeting made possible through satellite technology. Participants were given the opportunity to suggest and prioritize action-based solutions in various areas, including flood protection, transportation, neighborhood stability, housing, and community services. From the thousands of ideas and priorities expressed throughout the day, the strongest messages to emerge were:

- Advocate for Category 5 flood protection and wetlands restoration to protect the City from future storms.
- Help residents take personal responsibility for reducing flood risk by setting voluntary standards for rebuilding stronger and more safely, and providing incentives to enable them to reach those standards.
- Empower residents to rebuild stable and safe neighborhoods through financial incentives and the best possible information, rather than mandating where people can live.
- Create housing for low-income families, public housing residents and renters so that everyone can come home to New Orleans who wants to do so.
- Fund the development of low- and moderate-income public housing and link housing to job training and support services.
- Reopen and rebuild public facilities (like schools and healthcare centers) based on repopulation and recovery rates.
- Use temporary and mobile facilities in less populated areas and make sure that a plan is in place to develop permanent facilities as neighborhoods repopulate.
- Where possible, public facilities should be combined under one roof to increase efficiency and lower costs. Schools should serve as multi-use community centers.
- Improve the quality of schools.

Based upon the input received, scenario preferences were extracted and used to develop recommended projects at both the citywide and district-levels, and it was also used to develop a strategic recovery framework for the final planning stage of the effort (also discussed in section 2 of the Citywide Plan).

Phase 3: Plan Development

In the final phase of the process, the District teams developed a set of District Plans
incorporating all neighborhoods in the City of New Orleans. District Planning Teams collected all the neighborhood plans developed in the City Council’s neighborhood planning process and other neighborhood planning efforts. Neighborhoods that did not have previous plans were also assisted through the UNOP process to assure that their particular needs were addressed as part of their District Plan effort.

The Citywide Team developed a series of strategies and priority recovery projects to hasten the recovery of the City and guide public and private investment decisions. The Citywide Plan is an action-oriented plan, identifying, describing and estimating costs for large-scale infrastructure projects that transcend neighborhoods and planning districts, projects that have Statewide and regional - as well as citywide – significance. Projects identified by the District Planning Teams at the neighborhood and district levels are also incorporated into the Citywide Plan.

The draft Citywide Plan was presented to the community on January 20, 2007 at Community Congress III. Over 1,500 participants gathered for Community Congress III, which took place simultaneously in New Orleans, Atlanta, Dallas, and Houston. It was the public’s collective opportunity to review and give input on the draft Citywide Plan before it is sent to City leaders. The discussion guide used at the Congress summarized draft recommendations from the Citywide Plan and served as the basis for table discussions on key topics of flood protection, neighborhood stabilization, affordable housing, and public services. Participants’ top messages were:

- Category 5 flood protection and wetlands restoration continue to be a top priority.
- There is strong concern that poor governance and lack of accountability will harm the recovery.
- Where will the money come from to finance the UNOP plans?
- There are concerns about equity as well as rising cost of living in the City.
- Liked the Plans offer of incentives to cluster neighborhoods and to manage blight.
- The Road Home program needs to be overhauled.
- Liked schools as community centers and community-based health centers, but want more full service medical facilities.
- Liked having job training tied to public housing programs
- Wanted more information and more opportunities to be involved with the recovery process.

These and many of the other comments raised during the Community Congress are incorporated into the final draft plan.

**UNOP Outcomes**

The anticipated outcomes of the UNOP process include:
- Providing every neighborhood in New Orleans with a recovery plan, as detailed in the District Plans, and identifying infrastructure improvements necessary to implement neighborhood-level recovery
- Justifying the funding and implementation of the recovery projects through the development of a Citywide Plan based on the citizens’ vision for recovery and the desire to rebuild a Smarter, Stronger and Safer New Orleans
- Encouraging the redesign and reconstruction of the regional hurricane flood protection system to reduce the risk of another disaster like Katrina befalling the City
- Providing information to citizens and investors to make personal and business decisions about recovery and rebuilding
- Achieving better long-term financial sustainability for the City, by identifying and featuring opportunities to strengthen the City’s economy, both in the short-term as well
as the long-term.
The final draft Citywide Plan will be submitted to the City Planning Commission for review, which will make a recommendation of approval. The City Council and Mayor will have final approval. When the plan is approved, it will become the City’s official blueprint for recovery. The City may then submit it to the LRA, as well as other public and private entities, to solicit implementation funding for appropriate recovery activities.

**Louisiana Recovery Planning**

At the state level, the Louisiana Recovery Authority (LRA) was created to deal with the double disaster of both Hurricanes Katrina and Rita. Its slogan – “Rebuild Safer, Stronger, Smarter” – captures the essence of what needs to occur in rebuilding New Orleans. The LRA’s Long Term Community Planning Task Force created the “Louisiana Speaks” Planning Process to develop a long-term, sustainable vision for Southern Louisiana. This planning process has a four-pronged approach to achieving its vision. The first prong, Regional Planning, will provide a Regional Vision for Southern Louisiana and recommend alternative ways to accommodate growth and development in a sustainable way. The draft Regional Vision has also been released in January 2007.

The LRA has acknowledged that the comprehensive parish plan resulting from the UNOP process will serve as the strategic guide for the future investment of funds by the LRA and other state and federal agencies to support the continuous rebuilding of communities in Orleans Parish. The Louisiana Speaks and UNOP Citywide and District Planning Teams have worked together to ensure that the recovery framework, scenarios, and projects developed as part of the UNOP process are appropriately linked to the long-term regional planning underway for Southern Louisiana. These regional elements will work in tandem with the UNOP District and Citywide plans to boost the New Orleans economy and help Louisiana as a whole compete more effectively with other states for jobs and investment from around the world. The regional scenarios will be unveiled for public comment in late January 2007.

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